



**Universal Controller 6.6.x**

**Remote Interfaces**

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# Remote Interfaces



## Command Line Interface (CLI)

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## Command Line Interface (CLI)

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### Introduction

The Universal Controller Command Line Interface (CLI) is implemented as a [set of functions](#) that perform specific actions in a Universal Controller. The results of the actions are written to the CLI standard output.

The CLI command, **uagcmd**, executes a [function](#) according to information specified in its required and optional [Global parameters](#) and [function-specific parameters](#).

### CLI Functions

CLI functions perform specific actions in a Universal Controller.

The CLI command, **uagcmd**, can execute functions on any system that has TCP/IP connectivity to the Universal Message Service (OMS).

The [command line syntax](#) for each execution of **uagcmd** must specify a single CLI function, required / optional [Global parameters](#), and required / optional function-specific parameters. You must use the required Global parameters to connect to [OMS Servers](#) and to log on to a Controller ([User ID](#) and [Password](#)).

(See [Pre-6.2.0.0 CLI Functions](#) for a backward-compatible version of this syntax that can be used for pre-6.2.0.0 CLI functions.)

The following information is provided for each CLI Function:

- Description
- Command line syntax
- Function-specific parameters
- Example

Functions are listed alphabetically, by category, on the following pages:

<b>Agent Functions</b>	<ul style="list-style-type: none"> <li>• Delete Agent</li> <li>• List Agents Status</li> <li>• Resume Agent</li> <li>• Resume Agent Cluster</li> <li>• Resume Agent Cluster Membership</li> <li>• Set Agent Cluster Task Execution Limit</li> <li>• Set Agent Task Execution Limit</li> <li>• Suspend Agent</li> <li>• Suspend Agent Cluster</li> <li>• Suspend Agent Cluster Membership</li> </ul>
<b>Bundle Functions</b>	<ul style="list-style-type: none"> <li>• Schedule Bundle Promotion</li> </ul>
<b>Import and Export Functions</b>	<ul style="list-style-type: none"> <li>• Export Bulk</li> <li>• Export Trigger</li> <li>• Import Bulk</li> <li>• Import Trigger</li> </ul>
<b>OMS Server Functions</b>	<ul style="list-style-type: none"> <li>• List OMS Servers</li> </ul>
<b>Password Functions</b>	<ul style="list-style-type: none"> <li>• Change User Password</li> <li>• Change Credentials Password</li> </ul>
<b>Resource Functions</b>	<ul style="list-style-type: none"> <li>• List Virtual Resources</li> <li>• Update Resource Limit</li> </ul>

<b>Task Functions</b>	<ul style="list-style-type: none"> <li>• Cancel Task</li> <li>• Clear All Dependencies</li> <li>• Clear Virtual Resource Dependencies</li> <li>• Clear Exclusive Dependencies</li> <li>• Clear Time Dependency</li> <li>• Display All Tasks</li> <li>• Display Task Instance Status</li> <li>• Force Finish a Task</li> <li>• Launch a Task</li> <li>• Put Task on Hold</li> <li>• Release a Task from Hold</li> <li>• Rerun a Task</li> <li>• Set Manual Task to Started</li> <li>• Set Manual Task to Success</li> <li>• Set or Modify Wait Time for a Task Instance</li> <li>• Set Task Priority</li> <li>• Skip a Task</li> </ul>
<b>Tasks in Workflow Functions</b>	<ul style="list-style-type: none"> <li>• Clear Predecessor Dependencies</li> <li>• Insert a Task into a Workflow Instance with Dependencies</li> <li>• List Predecessors / Successors of a Task Instance in a Workflow</li> </ul>
<b>Trigger Functions</b>	<ul style="list-style-type: none"> <li>• Disable a Trigger</li> <li>• Enable a Trigger</li> <li>• Launch Trigger Tasks Now</li> <li>• List Triggers Status</li> <li>• Modify Time of a Time Trigger</li> </ul>
<b>Variable Functions</b>	<ul style="list-style-type: none"> <li>• List Variables</li> <li>• Set Variables</li> </ul>

## Command Line Syntax

The following command line syntax is used for issuing the CLI command, **uagcmd**:

```
uagcmd function Global parameters function-specific parameter(s)
```

Command Line Entry	Description
--------------------	-------------



uagcmd	CLI command that executes all CLI functions.
function	CLI function that performs a specific action in a Universal Controller.
Global parameters	CLI parameters (required and optional) available for all functions.
function-specific parameter(s)	CLI parameters (required and optional) specific to one or more functions.

For example:

```
uagcmd ops-task-launch -c config.cfg -x encryptedfile.txt task-type=unix task-name=task01
```

In this example, the required Global Parameters are contained in the `config.cfg` configuration file.



**Note**

For backward-compatibility, you can exclude `uagcmd` from the command line for all pre-6.2.0.0 CLI functions.

## Special Characters Restrictions

The following restrictions apply to the use of special characters in CLI function parameters.

Special Characters	Restrictions	Examples
	Can be used only if enclosed in double quotation marks.	<p>C:\Program Files\Universal\OpsCli\bin&gt;uagcmd.exe ops-task-launch -c c.cfg task-name=A B                      'B' is not recognized as an internal or external command, operable program or batch file.</p> <p>C:\Program Files\Universal\OpsCli\bin&gt;uagcmd.exe ops-task-launch -c c.cfg task-name="A B"                      Task Type parameter not specified, defaulting to ALL.                      Successfully launched the Manual task "A B" with task instance sys_id 14503847946836221302J1Y7WPiV75YF.                      opscmd-complete</p>
~	Cannot be used, even if enclosed in double quotation marks.	<p>C:\Program Files\Universal\OpsCli\bin&gt;uagcmd.exe ops-task-launch -c c.cfg task-name="A~B"                      Parameter CMDVERB contains malformed name/value pair(s).                      opscmd-complete</p>
=	Cannot be used, even if enclosed in double quotation marks; prevents a CLI function from running.	<p>C:\Program Files\Universal\OpsCli\bin&gt;uagcmd.exe ops-task-launch -c c.cfg task-name="A=B"                      uagcmd ops-task-launch usage:                      uagcmd ops-task-launch [options] [command_parameters]</p>

+	Can be used with or without double quotation marks.	<pre>C:\Program Files\Universal\OpsCli\bin&gt;uagcmd.exe ops-task-launch -c c.cfg task-name="A+B" Task Type parameter not specified, defaulting to ALL. Successfully launched the Manual task "A+B" with task instance sys_id 14503847946836441301OS0WDEQOH7Y1. opscmd-complete  C:\Program Files\Universal\OpsCli\bin&gt;uagcmd.exe ops-task-launch -c c.cfg task-name=A+B Task Type parameter not specified, defaulting to ALL. Successfully launched the Manual task "A+B" with task instance sys_id 14503847946836541302LCVCMLXWPSO0. opscmd-complete</pre>
---	---	---

## Restrictions for `task-variables=` Parameter

None of these special characters identified in [Special Characters Restrictions](#) - =, |, +, and ~ - can be use in a `task-variables=` parameter.

### Examples

```
C:\Program Files\Universal\OpsCli\bin>uagcmd.exe ops-task-launch -c c.cfg task-name=AB task-variables={variable1="V=1" variable2=V2}
Valid format for variables: {variable=value}.
opscmd-complete
```

```
C:\Program Files\Universal\OpsCli\bin>uagcmd.exe ops-task-launch -c c.cfg task-name=AB task-variables={variable1="V|1" variable2=V2}
Valid format for variables: {variable=value}.
opscmd-complete
```

```
C:\Program Files\Universal\OpsCli\bin>uagcmd.exe ops-task-launch -c c.cfg task-name=AB task-variables={variable1="V+1" variable2=V2}
Valid format for variables: {variable=value}.
opscmd-complete
```

```
C:\Program Files\Universal\OpsCli\bin>uagcmd.exe ops-task-launch -c c.cfg task-name=AB task-variables={variable1="V~1" variable2=V2}
Parameter CMDVERB contains malformed name/value pair(s).
opscmd-complete
```

## Pre-6.2.0.0 CLI Functions

For backward-compatibility, you can exclude **uagcmd** from the command line for all pre-6.2.0.0 CLI functions:

<b>Agent Functions</b>	<ul style="list-style-type: none"> <li>• List Agents Status</li> <li>• Resume Agent</li> <li>• Resume Agent Cluster</li> <li>• Resume Agent Cluster Membership</li> <li>• Set Agent Cluster Task Execution Limit</li> <li>• Set Agent Task Execution Limit</li> <li>• Suspend Agent</li> <li>• Suspend Agent Cluster</li> <li>• Suspend Agent Cluster Membership</li> </ul>
<b>Import and Export Functions</b>	<ul style="list-style-type: none"> <li>• Export Bulk</li> <li>• Export Trigger</li> <li>• Import Bulk</li> <li>• Import Trigger</li> </ul>
<b>Password Functions</b>	<ul style="list-style-type: none"> <li>• Change User Password</li> <li>• Change Credentials Password</li> </ul>
<b>Resource Functions</b>	<ul style="list-style-type: none"> <li>• Update Resource Limit</li> </ul>
<b>Task Functions</b>	<ul style="list-style-type: none"> <li>• Cancel Task</li> <li>• Display All Tasks</li> <li>• Display Task Instance Status</li> <li>• Force Finish a Task</li> <li>• Launch a Task</li> <li>• Put Task on Hold</li> <li>• Release a Task from Hold</li> <li>• Rerun a Task</li> <li>• Set Manual Task to Started</li> <li>• Set Manual Task to Success</li> <li>• Set Task Priority</li> <li>• Skip a Task</li> </ul>
<b>Trigger Functions</b>	<ul style="list-style-type: none"> <li>• Disable a Trigger</li> <li>• Enable a Trigger</li> <li>• Launch Trigger Tasks Now</li> <li>• List Triggers Status</li> </ul>
<b>Variable Functions</b>	<ul style="list-style-type: none"> <li>• List Variables</li> <li>• Set Variables</li> </ul>


## Return Codes

The following table identifies all return codes that can be returned in response to a function:

Return Code	Description
0	Completed successfully.
1	Configuration error (incorrect command line or configuration file entries).
2	Error processing the request.

## Supported Platforms

For all supported platforms, the CLI is included in the Universal Agent 6.6.x package.

<b>UNIX</b>	<p>The CLI functions are installed in the following directory:</p> <ul style="list-style-type: none"> <li>• /CLI_HOME/bin</li> </ul> <p>Replace CLI_HOME with the directory in which the Agent components are installed.</p>
<b>Windows</b>	<p>The CLI functions are installed in the following directory:</p> <ul style="list-style-type: none"> <li>• DRIVE:\CLI_HOME\bin</li> </ul> <p>Replace:</p> <ul style="list-style-type: none"> <li>• DRIVE with the drive they are installed on. Add the appropriate directory for your O/S to your PATH environment variable in order to execute the functions without specifying their full path name.</li> <li>• CLI_HOME with the directory in which the Agent components are installed.</li> </ul> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> Do not use fully qualified file names (that is, with the .exe extension) in CLI for Windows parameters; an error will occur.</p> </div>
<b>z/OS</b>	<p>The CLI is implemented with a single program, <b>UAGCMDZ</b>. <b>UAGCMDZ</b> with alias <b>OPSCMDZ</b> is installed in the SUNVLOAD library as part of the <a href="#">Universal Agent for z/OS Installation</a> package.</p> <p>See <a href="#">Using the CLI for z/OS</a> for detailed information on using the CLI in a z/OS environment.</p>

## CLI Login

## User Restriction

You can be restricted from logging in to the CLI either of two ways:

1. The system level default for CLI access, specified by the [System Default Command Line Access](#) Universal Controller system property, has been set to **No**, and the [Command Line Access](#) field in the [User Details](#) for your user account is set to **-- System Default --**."
2. The [Command Line Access](#) field in the [User Details](#) for your user account is set to **No**, which overrides the [System Default Command Line Access](#) value.

If either restriction is in place, the following error message will display when you issue a CLI command:

```
User <your user name> not permitted to use the command line interface. Please check with your administrator.
```

To remove the restriction, the system administrator must either:

- Set the System Default Command Line Access property to **Yes** and set the **Command Line access** field on the User Definition screen for your user account to **-- System Default --**.
- Set the **Command Line access** field on the User Definition screen for your user account to **Yes**.

## Password Expiration

While a password is [expired](#), CLI access will be prohibited until the password has been changed.









**Note**

Password expiration is not applicable to LDAP authenticated users.

## Global Parameters

The CLI provides the following Global parameters for use with any CLI function:

Parameter	Required	Optional
CA Certificate List		
Configuration File		
CRL File		
Encrypted File		
Encrypted File Key		
Help		
OMS NFT		
OMS Servers		

Password		
Queue Name		
SSL		
Timeout		
User ID		
Version		

The following information is provided below for each Global parameter:

- Description
- Syntax for [specifying the parameter](#).
- Requirement to use the parameter.
- Default value (if any).
- Example

## Specifying Global Parameters

Three methods are available for specifying Global parameters:

1. Command line switches
2. [Configuration file](#) entries
3. Environment variables



**Note**


Each method is available only for some Global parameters; only a command line switch is available for each Global parameter.

## CA Certificate List

<b>Description</b>	Trusted CA certificate list in PEM format. DDNAME for z/OS and file path for other platforms.
<b>Configuration File Entry</b>	ssl.certstore
<b>Command Line Switch</b>	-a
<b>Environment Variable</b>	n/a
<b>Required</b>	No
<b>Default</b>	(none)

<b>Example</b>	<ul style="list-style-type: none"> <li>• UNIX: /opt/cert/ca.pem</li> <li>• Windows: c:\cert\ca.pem</li> <li>• z/OS: dd:CACERTS</li> </ul>
----------------	---

## Configuration File


<b>Description</b>	<p>Configuration file containing one or more Global parameters. It can include the required <a href="#">User ID</a>, <a href="#">Password</a>, and <a href="#">OMS Servers</a> Global parameters.</p> <p>You also can specify individual Global parameters (required and optional) on the command line.</p> <div style="background-color: #ffffcc; padding: 10px; border: 1px solid #ccc;"> <p> <b>Note</b> A sample CLI configuration file, <a href="#">cmdtools.props</a>, is created during the installation of the CLI (an optionally installed component of Universal Agent). However, you can create a configuration file with any name; it must exist in the directory from where you are issuing the <b>uagcmd</b> command.</p> </div>
<b>Configuration File Entry</b>	n/a
<b>Command Line Switch</b>	-c
<b>Environment Variable</b>	n/a
<b>Required</b>	No
<b>Default</b>	(none)
<b>Example</b>	<pre style="border: 1px solid #ccc; padding: 10px;">security.userid=ops.admin security.password=abc123 network.omsservers=7878@dallas01.acme.com,7878@dallas02.acme.com network.omsnft=yes config.timeout=60</pre>

## CRL File

<b>Description</b>	CRL file in PEM format. DDNAME for z/OS and file path for other platforms.
<b>Configuration File Entry</b>	ssl.crlfile
<b>Command Line Switch</b>	-e
<b>Environment Variable</b>	n/a

<b>Required</b>	No
<b>Default</b>	(none)
<b>Example</b>	<ul style="list-style-type: none"> <li>• UNIX: /opt/cert/crl.pem</li> <li>• Windows: c:\cert\crl.pem</li> <li>• z/OS: dd:CRLFILE</li> </ul>

## Encrypted File

<b>Description</b>	<p>Complete path to a file encrypted with the <a href="#">Universal Encrypt</a> utility that contains encrypted user credentials.</p> <p>This file can be used to store encrypted Controller credentials that would otherwise be specified using the <a href="#">User ID</a> or <a href="#">Password</a> parameters. One or both of these parameters can be encrypted and stored in this file. Any other parameters stored in the encrypted file are ignored.</p> <p>Any values specified by <a href="#">User ID</a> or <a href="#">Password</a> on the command line and/or in the <a href="#">Configuration File</a> will override values stored in this file.</p> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> Universal Encrypt is included in every Agent installation package.</p> </div>
<b>Configuration File Entry</b>	n/a
<b>Command Line Switch</b>	-x
<b>Environment Variable</b>	n/a
<b>Required</b>	No
<b>Default</b>	(none)
<b>Example</b>	

## Encrypted File Key

<b>Description</b>	Optional key that was passed to the <a href="#">Universal Encrypt</a> utility when the encrypted file specified by -x was created.
<b>Configuration File Entry</b>	n/a
<b>Command Line Switch</b>	-k
<b>Environment Variable</b>	n/a
<b>Required</b>	No
<b>Default</b>	(none)



**Example**

--	--

**Help**

<b>Description</b>	Provides help information for any function.
<b>Configuration File Entry</b>	n/a
<b>Command Line Switch</b>	-h   -?
<b>Environment Variable</b>	n/a
<b>Required</b>	No
<b>Default</b>	(none)
<b>Example</b>	-h



**Note**

This parameter is exclusive; do not use it with any other parameter. If you do, only the Help information will be returned.

**OMS NFT**

<b>Description</b>	<p>Specification (yes or no) for whether or not to use NFT (network fault tolerance) for OMS.</p> <p>If NFT is not used:</p> <ul style="list-style-type: none"> <li>• A <b>uagcmd</b> command execution will attempt to connect to each specified [#OMS Servers]. If no connection can be made, <b>uagcmd</b> will fail with a non-zero exit code (2).</li> <li>• If a network error occurs after a connection to an OMS server is made, the <b>uagcmd</b> will fail with a non-zero exit code (2).</li> </ul>
<b>Configuration File Entry</b>	network.omsnft
<b>Command Line Switch</b>	-f
<b>Environment Variable</b>	OMSNFT
<b>Required</b>	No
<b>Default</b>	yes
<b>Example</b>	

**OMS Servers**

<b>Description</b>	Specifies one or more OMS server addresses used for network communication.  The syntax of the value is PORT@HOST[,PORT@HOST...], where: <ul style="list-style-type: none"> <li>• PORT is the TCP port on which the OMS server is listening. The OMS default port is 7878.</li> <li>• HOST is the host name or IP address of the OMS server.</li> </ul> If multiple OMS servers are specified, they must be comma-separated.
<b>Configuration File Entry</b>	network.omsservers
<b>Command Line Switch</b>	-m
<b>Environment Variable</b>	OMSSERVERS
<b>Required</b>	Yes
<b>Default</b>	
<b>Example</b>	network.omsservers=7878@dallas01.acme.com,7878@dallas02.acme.com

## Password

<b>Description</b>	Password that the CLI will use to log into the Controller. Must be a valid password for this user.
<b>Configuration File Entry</b>	security.password
<b>Command Line Switch</b>	-p
<b>Environment Variable</b>	n/a
<b>Required</b>	Yes
<b>Default</b>	(none)
<b>Example</b>	o

## Queue Name

<b>Description</b>	Controller queue name. Must be default for normal set-up.
<b>Configuration File Entry</b>	network.core
<b>Command Line Switch</b>	-n
<b>Environment Variable</b>	HUBNAME
<b>Required</b>	No
<b>Default</b>	ops.controller.queue
<b>Example</b>	queue02

## SSL

<b>Description</b>	Specification (by its inclusion on the command line) for whether or not to enable SSL.
<b>Configuration File Entry</b>	n/a
<b>Command Line Switch</b>	-s
<b>Environment Variable</b>	n/a
<b>Required</b>	No
<b>Default</b>	(none)
<b>Example</b>	-s

## Timeout

<b>Description</b>	Time (in seconds) that the CLI will wait before it reports an error.
<b>Configuration File Entry</b>	config.timeout
<b>Command Line Switch</b>	-o
<b>Environment Variable</b>	n/a
<b>Required</b>	No
<b>Default</b>	60
<b>Example</b>	10

## User ID

<b>Description</b>	User ID that the CLI will use to log into the Controller. Must be a valid user with the appropriate permissions defined in the Controller database using the Controller Security module.
<b>Configuration File Entry</b>	security.userid
<b>Command Line Switch</b>	-u
<b>Environment Variable</b>	n/a
<b>Required</b>	Yes
<b>Default</b>	(none)
<b>Example</b>	ops.admin

## Version

<b>Description</b>	Displays version information for the CLI.
<b>Configuration File Entry</b>	n/a
<b>Command Line Switch</b>	-v
<b>Environment Variable</b>	n/a
<b>Required</b>	No
<b>Default</b>	(none)
<b>Example</b>	-v

**Note**

If this parameter is specified, all other parameters (except [Help](#)) are ignored.

## Function-Specific Parameters

Most functions contain one or more required and/or optional parameters that are specific to one or more functions.

## Modifying Variables

Some function-specific parameters let you modify variables.

Currently, the CLI only supports the modification of [User-Defined Variables](#): global variables, trigger variables, and task/workflow variables.

Modifying a task variable does not impact any existing task instances of that task. When the next task instance is created from the updated task, the new task instance will use the updated variable.

To modify a variable in a task or workflow, you can create a [Set Variable action](#).

## Using the CLI for z/OS

All CLI functions are supported in the z/OS environment. They are managed and executed by the program UAGCMDZ with alias OPSCMDZ, which may execute as either a command processor or a standard z/OS batch job. OPSCMDZ is installed with the z/OS agent in library SUNVLOAD.

## z/OS-Specific Syntax Requirements

The functions and syntax requirements for the z/OS environment are very similar to the other [supported platforms](#) with a few exceptions described below.

## Command Line Options

When `OPSCMDZ` is executed as a batch program, command line parameters are specified with the step PARM keyword.

For example:

```
//STEP01 EXEC PGM=OPSCMDZ,
// PARM='ops-agent-status -c dd:CMDOPTS agent-type=windows'
```

## Configuration File Syntax

If you use the **-c** command line switch for specifying a configuration file on the command line, you must use one of the following formats for the configuration file name:

Format	Syntax	Description
ddname	<code>-c dd:ddname</code>	<i>ddname</i> references a DD statement that exists in your batch JCL.
Data Set Name	<code>-c '// 'dsname' "</code>	<i>dsname</i> is a fully-qualified data set name which may be a partitioned data set with a member name.

## Line Numbers in Configuration File

Do not place line numbers in columns 73-80. The entire 80-byte record is read and processed as input.

## Methods for Issuing CLI Functions in z/OS

Three methods are available for running OPSCMDZ and executing CLI functions:

1. [Using a batch job.](#)
2. [Under a TSO session.](#)
3. [Using a batch TSO Terminal Monitor Program \(TMP\).](#)

In each example where data sets are specified, we use:

<b>UNV.SUNVLOAD</b>	Library containing the CLI programs UAGCMDZ and OPSCMDZ alias.
<b>USER.PARM</b>	Data set containing command options.
<b>USER.REXX</b>	Data set containing user REXX EXECs.

## Running OCLI Functions in a Batch Job

The CLI program OPSCMDZ executes a single function as a JCL batch job step. If multiple functions are to be executed, run each one as an individual job step.

The following example illustrates running OPSCMDZ as a batch job to request the status of all Windows Agents.

```
//jobname JOB (acctg-info),'your name',MSGCLASS=X,MSGLEVEL=(1,1),
//          CLASS=A,NOTIFY=&SYSUID
//*
//STEP01 EXEC PGM=OPSCMDZ,
// PARM='ops-agent-status -c dd:CMDOPTS agent-type=windows'
//STEPLIB DD DISP=SHR,DSN=UNV.SUNVLOAD
//SYSPRINT DD SYSOUT=*
//SYSOUT DD SYSOUT=*
//CMDOPTS DD DSN=USER.PARM(CMDOPTS),DISP=SHR
//CEEDUMP DD SYSOUT=*
```

In this example:

- The step PARM value specifies the CLI function and its options.
- The job step can include only one function.
- The STEPLIB points to the z/OS Agent load library.
- The output will be in SYSPRINT.
- CMDOPTS is a DDNAME that references the location of the function parameters.

## Issuing CLI Functions under TSO

You can also issue CLI functions under a TSO session.

The sample command string below shows a CLI function issued from an ISPF Command Shell prompt:

```
Enter TSO or Workstation functions below:
===> opscmdz ops-agent-status -c "'USER.PARM(CMDOPTS)'" agent-type=windows
```

This function will return data similar to the sample below:

Agentname	AgentType	Status
agent-sys00101	Windows	Active
agent-sys00201	Windows	Offline
opscmd-complete		

## Issuing CLI Functions as a Batch TSO

The following two examples show how to issue a CLI function in a batch TSO.

### Example One

```

//CMDZBAT JOB (acctg-info),'your name',MSGCLASS=X,MSGLEVEL=(1,1),
//          CLASS=A,NOTIFY=&SYSUID,TIME=5
//*
//STEP01 EXEC PGM=IKJEFT01,DYNAMNBR=200,REGION=40M
//STEPLIB DD DISP=SHR,DSN=UNV.SUNVLOAD
//SYSPRINT DD SYSOUT=*
//SYSOUT DD SYSOUT=*
//SYSTSPRT DD SYSOUT=*
//CMDOPTS DD DSN=USER.PARM(CMDOPTS),DISP=SHR
//SYSTSIN DD *
opscmdz ops-agent-status -c dd:CMDOPTS agent-type=windows
/*

```

Output will be in SYSTSPRT.

### Example Two

```

//REXXAGNT JOB (acctg-info),'your name',MSGCLASS=X,MSGLEVEL=(1,1),
//          CLASS=A,NOTIFY=&SYSUID,TIME=5
//*
//STEP01 EXEC PGM=IKJEFT01,DYNAMNBR=200,REGION=40M
//STEPLIB DD DISP=SHR,DSN=UNV.SUNVLOAD
//SYSEXEC DD DSN=USER.REXX,DISP=SHR
//SYSPRINT DD SYSOUT=*
//SYSTSPRT DD SYSOUT=*
//CMDOPTS DD DSN=USER.PARM(CMDOPTS),DISP=SHR
//SYSTSIN DD *
%OUTTRAP1
/*

```

The following REXX EXEC must be located in USER.REXX(OUTTRAP1):

```
/****** REXX *****/
/* Using OUTTRAP to */
/* (1) Obtain z/OS agent status */
/* (2) Test status from the response */
/* (3) Launch a task if the agent status is Active */
/*******/
x = OUTTRAP('OPS.')
opscmdz "ops-agent-status -c dd:CMDOPTS agent-type=z/OS"
SAY 'RC is:' RC
SAY OPS.0 'records were read.'
launch = 'NO'
DO i = 1 to OPS.0 WHILE launch = 'NO'
  IF SUBSTR(OPS.i,61,6) = 'Active' THEN
    DO
      launch = 'YES'
      opscmdz "ops-task-launch -c dd:CMDOPTS task-name=DUMPT"
    END
  END
DO i = 1 to OPS.0
  SAY OPS.i
END
y = OUTTRAP('OFF')
```



## Agent Functions

- Overview
- Delete Agent
- List Agents Status
- Resume Agent
- Resume Agent Cluster
- Resume Agent Cluster Membership
- Set Agent Cluster Task Execution Limit
- Set Agent Task Execution Limit
- Suspend Agent
- Suspend Agent Cluster
- Suspend Agent Cluster Membership

### Overview

The **command line syntax** for each execution of the CLI command, **uagcmd**, must specify a single CLI function, required / optional **Global parameters**, and required / optional function-specific parameters. You must use the required Global parameters to connect to **OMS Servers** and to log on to a Controller (**User ID** and **Password**).

Universal Controller supports the following CLI functions for Agents, which are listed alphabetically on this page.

- Delete Agent
- List Agents Status
- Resume Agent
- Resume Agent Cluster
- Resume Agent Cluster Membership
- Set Agent Cluster Task Execution Limit
- Set Agent Task Execution Limit
- Suspend Agent
- Suspend Agent Cluster
- Suspend Agent Cluster Membership

Syntax, parameters, and examples for each function are provided.

### Delete Agent

<b>Description</b>	Deletes an Agent record.
<b>Syntax</b>	<code>uagcmd ops-delete-agent global parameters {agent-name=name   agent-id=ID}</code>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• agent-name= Required if agent-id= is not specified; Agent name of the Agent to be deleted (agent-name= and agent-id= are mutually exclusive).</li> <li>• agent-id= Required if agent-name= is not specified; Agent ID of the Agent to be deleted (agent-id= and agent-name= are mutually exclusive).</li> </ul>


**Example**

```
uagcmd ops-delete-agent -c config.cfg agent-name=agent A
```

## List Agents Status


<b>Description</b>	Lists the status of one or more Agents.
<b>Syntax</b>	<p>uagcmd <b>ops-agent-status</b> <i>global parameters</i> [agent-name=<i>name</i>] agent-type=<i>type</i> [options=<i>v</i>]</p> <div style="background-color: #ffffcc; padding: 10px; border: 1px solid #ccc;"> <p> <b>Note</b> For backward-compatibility, you can exclude <b>uagcmd</b> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• agent-name= Optional; Name or partial name of one or more Agents. Wildcards are supported.</li> <li>• agent-type= Optional; One of the following (not case sensitive): <b>windows, unix, linux, linux/unix, zos, z/os</b>. (If not specified, status of all Agents are listed.)</li> <li>• options= Optional; <b>v</b> (Return verbose results.)</li> </ul>
<b>Example</b>	<pre>uagcmd ops-agent-status -c config.cfg agent-type=windows</pre>

## Resume Agent


<b>Description</b>	Resumes the ability of the identified Agent to run tasks.
<b>Syntax</b>	<p>uagcmd <b>ops-resume-agent</b> <i>global parameters</i> {agent-name=<i>name</i>   agent-id=<i>id</i>}</p> <div style="background-color: #ffffcc; padding: 10px; border: 1px solid #ccc;"> <p> <b>Note</b> For backward-compatibility, you can exclude <b>uagcmd</b> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>

<b>Parameters</b>	<ul style="list-style-type: none"> <li>agent-name= Required if agent-id= is not specified; Agent name of the Agent whose ability to run tasks is to be resumed (agent-name= and agent-id= are mutually exclusive).</li> <li>agent-id= Required if agent-name= is not specified; Agent ID of the Agent whose ability to run tasks is to be resumed (agent-id= and agent-name= are mutually exclusive).</li> </ul>
<b>Example</b>	<pre>uagcmd ops-resume-agent -c config.cfg agent-name=agent A</pre>

## Resume Agent Cluster


<b>Description</b>	Resumes the ability of the identified Agent Cluster to run tasks.
<b>Syntax</b>	<pre>uagcmd ops-resume-agent-cluster global parameters agent-cluster-name=name</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.                 </div>
<b>Parameter</b>	<ul style="list-style-type: none"> <li>agent-cluster-name= Required; Agent cluster name of the Agent Cluster whose ability to run tasks is to be resumed.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-resume-agent-cluster -c config.cfg agent-cluster-name=cluster A</pre>

## Resume Agent Cluster Membership

<b>Description</b>	Resumes the membership of the identified Agent in the identified Agent Cluster.
<b>Syntax</b>	<pre>uagcmd ops-resume-agent-cluster-membership global parameters {agent-name=name   agent-id=ID} agent-cluster-name=name</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.                 </div>


<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>agent-name=</code> Required if <code>agent-id=</code> is not specified; Agent name of the Agent whose membership in the Agent Cluster is to be resumed (<code>agent-name=</code> and <code>agent-id=</code> are mutually exclusive).</li> <li>• <code>agent-id=</code> Required if <code>agent-name=</code> is not specified; Agent ID of the Agent whose membership in the Agent Cluster is to be resumed (<code>agent-id=</code> and <code>agent-name=</code> are mutually exclusive).</li> <li>• <code>agent-cluster-name=</code> Required; Agent cluster name of the Agent Cluster in whose membership the identified Agent is to be resumed.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-resume-agent-cluster-membership -c config.cfg agent-name=agent A agent-cluster-name=cluster A</pre>

## Set Agent Cluster Task Execution Limit


<b>Description</b>	Specifies whether or not an Agent Cluster has a task execution limit and, if so, sets the task execution limit.
<b>Syntax</b>	<pre>uagcmd ops-set-agent-cluster-task-execution-limit global parameters agent-cluster-name=name limit-type=type limit-amount=number</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all <a href="#">pre-6.2.0.0 CLI functions</a>.</p> </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>agent-cluster-name=</code> Required; Name of the Agent Cluster.</li> <li>• <code>limit-type=</code> Required; Specification for whether or not there is a limit to the number of tasks that can be run at the same time by the Agent Cluster. Allowable values (not case sensitive) are: <b>limited</b>, <b>unlimited</b>.</li> <li>• <code>limit-amount=</code> Required if <code>limit-type=limited</code>; Maximum number of tasks that can be run at the same time by the Agent Cluster.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-set-agent-cluster-task-execution-limit -c config.cfg agent-cluster-name=cluster A limit-type=limit limit-amount=500</pre>

## Set Agent Task Execution Limit


<b>Description</b>	Specifies whether or not an Agent has a task execution limit and, if so, sets the task execution limit.
--------------------	---

<b>Syntax</b>	<pre>uagcmd ops-set-agent-task-execution-limit global parameters {agent-name=name   agent-id=ID} limit-type=type limit-amount=number</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b>                      For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.                 </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>agent-name=</code> Required if <code>agent-id=</code> is not specified; Name of the Agent (<code>agent-name=</code> and <code>agent-id=</code> are mutually exclusive).</li> <li>• <code>agent-id=</code> Required if <code>agent-name=</code> is not specified; ID of the Agent (<code>agent-id=</code> and <code>agent-name=</code> are mutually exclusive).</li> <li>• <code>limit-type=</code> Required; Specification for whether or not there is a limit to the number of tasks that can be run concurrently by the Agent. Allowable values (not case sensitive) are <b>limited</b>, <b>unlimited</b>.</li> <li>• <code>limit-amount=</code> Required if <code>limit-type=limited</code>; Maximum number of tasks that can be run at the same time by the Agent.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-set-agent-task-execution-limit -c config.cfg agent-name=agent A limit-type=limit limit-amount=500</pre>


## Suspend Agent

<b>Description</b>	Suspends the ability of the identified Agent to run tasks.
<b>Syntax</b>	<pre>uagcmd ops-suspend-agent global parameters {agent-name=name   agent-id=ID}</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b>                      For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.                 </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>agent-name=</code> Required if <code>agent-id=</code> is not specified; Agent name of the Agent whose ability to run tasks is to be suspended (<code>agent-name=</code> and <code>agent-id=</code> are mutually exclusive).</li> <li>• <code>agent-id=</code> Required if <code>agent-name=</code> is not specified; Agent ID of the Agent whose ability to run tasks is to be suspended (<code>agent-id=</code> and <code>agent-name=</code> are mutually exclusive).</li> </ul>
<b>Example</b>	<pre>uagcmd ops-suspend-agent -c config.cfg agent-name=agent A</pre>

## Suspend Agent Cluster

<b>Description</b>	Suspends the ability of the identified Agent Cluster to run tasks.
<b>Syntax</b>	<pre>uagcmd ops-suspend-agent-cluster global parameters agent-cluster-name=name</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>
<b>Parameter</b>	<ul style="list-style-type: none"> <li>• <code>agent-cluster-name=</code> Required; Agent cluster name of the Agent Cluster whose ability to run tasks is to be suspended.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-suspend-agent-cluster -c config.cfg agent-cluster-name=cluster A</pre>

## Suspend Agent Cluster Membership

<b>Description</b>	Suspends the membership of the identified Agent in the identified Agent Cluster.
<b>Syntax</b>	<pre>uagcmd ops-suspend-agent-cluster-membership global parameters {agent-name=name   agent-id=ID} agent-cluster-name=name</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>agent-name=</code> Required if <code>agent-id=</code> is not specified; Agent name of the Agent whose membership in the Agent Cluster is to be suspended (<code>agent-name=</code> and <code>agent-id=</code> are mutually exclusive).</li> <li>• <code>agent-id=</code> Required if <code>agent-name=</code> is not specified; Agent ID of the Agent whose membership in the Agent Cluster is to be suspended (<code>agent-id=</code> and <code>agent-name=</code> are mutually exclusive).</li> <li>• <code>agent-cluster-name=</code> Required; Agent cluster name of the Agent Cluster in whose membership the identified Agent is to be suspended.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-suspend-agent-cluster-membership -c config.cfg agent-name=agent A agent-cluster-name=cluster A</pre>



## Bundle Functions

- [Overview](#)
- [Schedule Bundle Promotion](#)

### Overview

The [command line syntax](#) for each execution of the CLI command, **uagcmd**, must specify a single CLI function, required / optional [Global parameters](#), and required / optional function-specific parameters. You must use the required Global parameters to connect to [OMS Servers](#) and to log on to a Controller ([User ID](#) and [Password](#)).

Universal Controller supports the following CLI functions for Bundles, which are listed alphabetically on this page.

- [Schedule Bundle Promotion](#)

Syntax, parameters, and examples for each function are provided.

### Schedule Bundle Promotion

<b>Description</b>	Schedules the promotion of a Bundle.
<b>Syntax</b>	<code>uagcmd ops-promote-bundle global parameters {bundle-id=<i>ID</i>   bundle-name=<i>name</i>} [promotion-target-id=<i>ID</i>   promotion-target-name=<i>name</i>] {[override-user=<i>user</i>] override-password=<i>password</i>} schedule=<i>option</i> {date=<i>date</i> [time=<i>time</i>]} [create-snapshot=<i>option</i>] [notification-option=<i>notification</i>] [allow-unv-templ-changes=<i>option</i>]</code>



**Parameters**

- `bundle-id=`  
Required if `bundle_name=` is not specified; `sys_id` of the bundle to be promoted.
- `bundle-name=`  
Required if `bundle_id=` is not specified; Name of the bundle to be promoted.
- `promotion-target-id=`  
`sys_id` of the promotion target; Optional if specified on the bundle and if `promotion-target-name=` is not specified.
- `promotion-target-name=`  
Name of the promotion target; Optional if specified on the bundle and if `promotion-target-id=` is not specified.
- `override-user=`  
Optional; User ID to override the user ID provided from the Promotion Target record.
- `override-password=`  
Required if `override-user=` is specified; Password of the User ID being used to override the user ID provided from the Promotion Target record.
- `schedule=`  
Required; Specification (not case sensitive) for whether to schedule the promotion (**Yes/Y/true**) or promote the Bundle immediately (**No/N/false**).
- `date=`  
Required if `schedule=Yes/Y/true`; Promotion schedule date in format yyyy-MM-dd.
- `time=`  
Optional if `schedule=Yes/Y/true`; Promotion schedule time in format HH-mm (default is 00:00).
- `create-snapshot=`  
Optional if `schedule=Yes/Y/true`; Specification (**Yes/Y/true** or **No/N/false**; not case sensitive) for whether a Bundle snapshot should be taken and stored with the scheduled promotion. Default is **No/N/false**.
- `notification-option=`  
Optional; Operation (if any) that will cause a [System Notification](#) to be sent when the promotion is done (not case sensitive): **operation\_failure** (default), **operation\_success/failure**, or **operation\_success**.
- `allow-unv-templ-changes=`  
Optional; Specification (not case sensitive) for whether to allow (**Yes/Y/true**) or not allow (**No/N/false**) the Bundle to contain new or changed Universal Templates.

**Example**

```
uagcmd ops-promote-bundle -c config.cfg bundle-name=Bundle A schedule=Yes date=2015-06-12 create-snapshot=Yes
```

## Import and Export Functions

- [Overview](#)
- [Export Bulk](#)
- [Export Trigger](#)
- [Import Bulk](#)
- [Import Trigger](#)

### Overview

The [command line syntax](#) for each execution of the CLI command, **uagcmd**, must specify a single CLI function, required / optional [Global parameters](#), and required / optional function-specific parameters. You must use the required Global parameters to connect to [OMS Servers](#) and to log on to a Controller ([User ID](#) and [Password](#)).

Universal Controller supports the following CLI functions for Imports and Exports, which are listed alphabetically on this page.

- [Export Bulk](#)
- [Export Trigger](#)
- [Import Bulk](#)
- [Import Trigger](#)


Syntax, parameters, and examples for each function are provided.



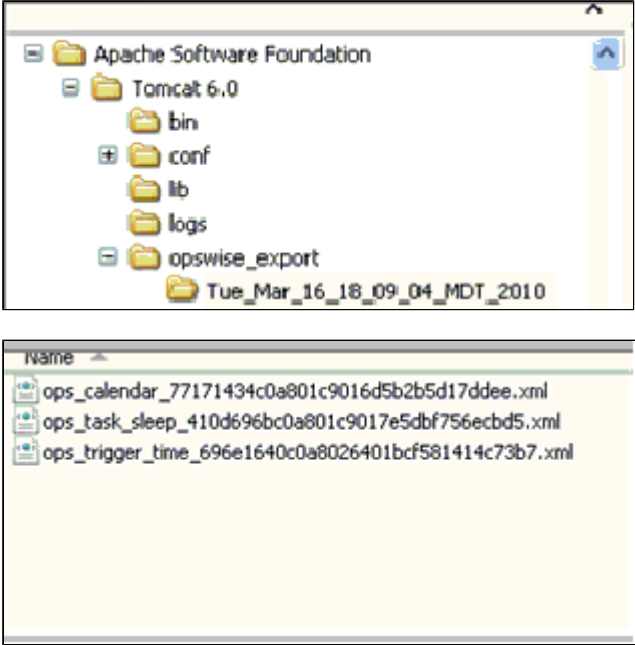

#### **Important!**

It is strongly recommended that you do NOT use the Import and Export functions for modification of Universal Controller records. API functions are available if you need to programmatically update, copy, insert, or otherwise manipulate Universal Controller records.

### Export Bulk



<p><b>Description</b></p>	<p>Performs a bulk export of all records in your Controller database.</p> <p>The location of the export is specified by the <b>Export Path</b> (<code>opswise.export.path</code>) Universal Controller system property.</p> <p>The default directory, where <code>\$CATALINA_HOME</code> is the base Tomcat installation directory, is either:</p> <ul style="list-style-type: none"> <li>• <code>\$CATALINA_HOME/opswise_export</code></li> <li>• <code>\$CATALINA_HOME\opswise_export</code></li> </ul> <p>Each export creates a sub-directory under the specified path in the following format:</p> <p><code>WWW_MMM_DD_HH_MM_SS_TZ_YYYY-BULK_EXPORT</code></p> <ul style="list-style-type: none"> <li>• <b>WWW</b>: 3-Letter Weekday</li> <li>• <b>MMM</b>: 3-Letter Month</li> <li>• <b>DD</b>: Day</li> <li>• <b>HH</b>: Hour</li> <li>• <b>MM</b>: Minute</li> <li>• <b>SS</b>: Second</li> <li>• <b>TZ</b>: Time Zone</li> <li>• <b>YYYY</b>: 4-Digit Year</li> </ul> <div style="background-color: #ffffcc; padding: 10px; border: 1px solid #ccc;"> <p> <b>Note</b> Export Bulk performs a similar function as the <b>Bulk Export Server Operation</b>, but not <b>Bulk Export with Versions</b>.</p> </div>
<p><b>Syntax</b></p>	<p><code>uagcmd ops-export-bulk global parameters</code></p> <div style="background-color: #ffffcc; padding: 10px; border: 1px solid #ccc;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>
<p><b>Example</b></p>	<div style="border: 1px solid #ccc; padding: 10px; background-color: #f0f0f0;"> <pre>uagcmd ops-export-bulk -c config.cfg</pre> </div>

## Export Trigger

<p><b>Description</b></p>	<p>Performs an export of the specified trigger(s) and all the associated record(s). For example, if you export one trigger, the CLI also exports the calendar used in the trigger and all tasks launched by the trigger. The CLI creates a separate XML file for each record type and generates the output directory and file names using a date and timestamp, plus an internal record identifier generated by the Controller.</p> <p>All exported XML definition files will be saved to a timestamped directory under the path defined by the <a href="#">Export Path</a> Universal Controller system property. The following illustrates a sample output directory and exported data:</p> 
<p><b>Syntax</b></p>	<p><code>uagcmd ops-export-trigger global parameters trigger-name=name [trigger-type=type]</code></p> <div style="background-color: #ffffcc; padding: 10px; border: 1px solid #ccc;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>
<p><b>Parameters</b></p>	<ul style="list-style-type: none"> <li>• <code>trigger-name=</code> Required; Name of one or more <a href="#">triggers</a>. <a href="#">Wildcards</a> are supported.</li> <li>• <code>trigger-type=</code> Optional; If you used a wildcard in <code>trigger-name</code>, you can use <code>trigger-type</code> to narrow down the selection to a specific type of trigger. Allowable values are (not case sensitive): <code>cron</code>, <code>time</code>, <code>file_trigger</code>, <code>temporary</code>, <code>task_monitor</code>, <code>manual</code>, <code>application_monitor</code>.</li> </ul>



<b>Example</b>	<p>This example exports all triggers whose name begins with <b>SF</b>:</p> <pre>uagcmd ops-export-trigger -c config.cfg trigger-name=SF*</pre>
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## Import Bulk

<b>Description</b>	<p>Performs a bulk import of records into your Controller database.</p> <p>The location from where records are imported is specified by the <a href="#">System Default CLI Bulk Import Path</a> (<code>opswise.bulk_import.path.default</code>) Universal Controller system property.</p> <p>The default directory, where <code>\$CATALINA_HOME</code> is the base Tomcat installation directory, is either:</p> <ul style="list-style-type: none"> <li>• <code>\$CATALINA_HOME/opswise_import</code></li> <li>• <code>\$CATALINA_HOME\opswise_import</code></li> </ul> <div data-bbox="317 675 1919 781" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The data being imported must have been exported using the <a href="#">Export Bulk</a> command.</p> </div>
<b>Syntax</b>	<pre>uagcmd ops-import-bulk global parameters</pre> <div data-bbox="317 894 1919 1000" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>
<b>Example</b>	<pre>uagcmd ops-import-bulk -c config.cfg</pre>

## Import Trigger

<b>Description</b>	Imports into your Universal Controller database the trigger records in the path specified in the <code>import-file=</code> parameter.
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<b>Syntax</b>	<pre>uagcmd ops-import-trigger global parameters import-file=file</pre> <div data-bbox="317 207 1892 318"> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</div>
<b>Parameter</b>	<ul style="list-style-type: none"><li>• <code>import-file=</code> Required; Path containing one or more XML files that were exported via <code>ops-export-trigger</code> or via the Universal Controller user interface using the <code>Export -&gt; XML</code> feature.</li></ul> <div data-bbox="394 475 1892 581"> <b>Note</b> This is the path on the Controller server where the XML files are stored, not a local path to where the command is run.</div>
<b>Example</b>	<pre>uagcmd ops-import-trigger --c config.cfg import-file=ops\import</pre>

## OMS Server Functions

- [Overview](#)
- [List OMS Servers](#)

### Overview

The [command line syntax](#) for each execution of the CLI command, **uagcmd**, must specify a single CLI function, required / optional [Global parameters](#), and required / optional function-specific parameters. You must use the required Global parameters to connect to [OMS Servers](#) and to log on to a Controller ([User ID](#) and [Password](#)).

Universal Controller supports the following CLI functions for OMS Servers, which are listed alphabetically on this page.

- [List OMS Servers](#)

Syntax, parameters, and examples for each function are provided.

### List OMS Servers

<b>Description</b>	Lists OMS Servers and their status.
<b>Syntax</b>	<code>uagcmd ops-oms-status global parameters server-address=address:[port] [options=v]</code>
<b>Parameter</b>	<ul style="list-style-type: none"> <li>• <code>server-address=</code> Required; Server address or partial server address of one or more OMS servers. <a href="#">Wildcards</a> are supported.</li> <li>• <code>options=</code> Optional; Supports the <b>v</b> (verbose) option, which will toggle the <b>SysId</b> column in the response output.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-oms-status -c config.cfg server-address=lx12-x64:7878</pre>



#### Note

The CLI command response will contain the following information for each matching OMS Server:

- Name - OMS Server name
- Status - OMS Server status
- Session Status - OMS Server sessions status
- Sysid - OMS Server [sys\\_id](#)





## Password Functions

- [Overview](#)
- [Change User Password](#)
- [Change Credentials Password](#)

### Overview



The [command line syntax](#) for each execution of the CLI command, **uagcmd**, must specify a single CLI function, required / optional [Global parameters](#), and required / optional function-specific parameters. You must use the required Global parameters to connect to [OMS Servers](#) and to log on to a Controller ([User ID](#) and [Password](#)).

Universal Controller supports the following CLI functions for Passwords, which are listed alphabetically on this page.

- [Change User Password](#)
- [Change Credentials Password](#)

Syntax, parameters, and examples for each function are provided.

### Change User Password

<b>Description</b>	<p>Changes the password for the specified Universal Controller User account.</p> <div data-bbox="317 867 1587 976" style="background-color: #ffffcc; padding: 10px;">  <b>Note</b>                      The authenticated user must have the <code>ops_admin</code> user role.                 </div>
<b>Syntax</b>	<pre>uagcmd ops-change-user-password global parameters user-id=userid new-password=password</pre> <div data-bbox="317 1084 1587 1193" style="background-color: #ffffcc; padding: 10px;">  <b>Note</b>                      For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.                 </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>user-id=</code> Required; Universal Controller User ID whose password is to be changed.</li> <li>• <code>new-password=</code> Required; The new password that is to be assigned to the specified user.</li> </ul>

**Example**

```
uagcmd ops-change-user-password -c config.cfg user-id=user A new-password=password A
```

## Change Credentials Password

**Description**

Changes the runtime password for the specified Universal Controller credentials resource.



**Note**

The authenticated user must have the **Update Credential** permission.

**Syntax**

```
uagcmd ops-change-credentials-password global parameters credentials-name=name new-runtime-password=password
```



**Note**

For backward-compatibility, you can exclude **uagcmd** from the command line for this function and **all pre-6.2.0.0 CLI functions**.

**Parameters**

- **credentials-name=**  
Required; Name of the Universal Controller credentials resource that is to have its password changed.
- **new-runtime-password=**  
Required; The new runtime password that is to be assigned to the specified credentials resource.

**Example**

```
uagcmd ops-change-credentials-password -c config.cfg credentials-name=Credential A  
new-runtime-password=password A
```

## Resource Functions

- [Overview](#)
- [List Virtual Resources](#)
- [Update Resource Limit](#)

### Overview

The [command line syntax](#) for each execution of the CLI command, **uagcmd**, must specify a single CLI function, required / optional [Global parameters](#), and required / optional function-specific parameters. You must use the required Global parameters to connect to [OMS Servers](#) and to log on to a Controller ([User ID](#) and [Password](#)).

Universal Controller supports the following CLI functions for Resources, which are listed alphabetically on this page.

- [List Virtual Resources](#)
- [Update Resource Limit](#)

Syntax, parameters, and examples for each function are provided.

### List Virtual Resources

<b>Description</b>	Lists all specified virtual resources.
<b>Syntax</b>	<code>uagcmd ops-resource-list global parameters [resource-name=name] [resource-type=type] [options=v]</code>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>resource-name=</code> Optional; Name of virtual resource(s) to be listed. <a href="#">Wildcards</a> are supported.</li> <li>• <code>resource-type=</code> Optional; One of the following (not case sensitive): <b>renewable</b>, <b>boundary</b>, <b>depletable</b>. (If not specified, all types of virtual resources are listed.)</li> <li>• <code>options=</code> Optional; Supports the <b>v</b> (verbose) option, which will toggle the <b>SysId</b> and <b>Used By</b> columns in the response output.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-resource-list -c config.cfg resource-name=Resource A</pre>



**Note**

The CLI command response will contain the following information for each matching virtual resource:

- Name - Virtual Resource name
- Type - Virtual Resource type
- Limit - Virtual Resource limit
- Used - Amount of the virtual resource currently used; applicable only to renewable virtual resources
- SysId - Virtual Resource `sys_id`
- Used By - Task instances currently using the Virtual Resource in the format {  
(task-instance-name:resource-amount),(task-instance-name:resource-amount),...}

## Update Resource Limit

<b>Description</b>	Updates the resource limit for a resource.
<b>Syntax</b>	<pre>uagcmd ops-update-resource-limit global parameters resource-name=name resource-limit=limit</pre> <div data-bbox="317 703 1587 808" style="background-color: #ffffcc; padding: 5px; margin-top: 10px;">  <b>Note</b>                      For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.                 </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>resource-name=</code> Required; Name of resource to update the limit on.</li> <li>• <code>resource-limit=</code> Required; Resource limit (any integer &gt;= 0).</li> </ul>
<b>Example</b>	<pre>uagcmd ops-update-resource-limit -c config.cfgg resource-name=Resource A resource-limit=5</pre>

## Task Functions

- Overview
- Cancel Task
- Clear All Dependencies
- Clear Virtual Resource Dependencies
- Clear Exclusive Dependencies
- Clear Time Dependency
- Display All Tasks
- Display Task Instance Status
- Force Finish a Task
- Launch a Task
- Put Task on Hold
- Release a Task from Hold
- Rerun a Task
- Set Manual Task to Started
- Set Manual Task to Success
- Set or Modify Wait Time for a Task Instance
- Set Task Priority
- Skip a Task

### Overview



The command line syntax for each execution of the CLI command, **uagcmd**, must specify a single CLI function, required / optional [Global parameters](#), and required / optional function-specific parameters. You must use the required Global parameters to connect to [OMS Servers](#) and to log on to a Controller ([User ID](#) and [Password](#)).

Universal Controller supports the following CLI functions for Tasks, which are listed alphabetically on this page.

- Cancel Task
- Clear All Dependencies
- Clear Virtual Resource Dependencies
- Clear Exclusive Dependencies
- Clear Time Dependency
- Display All Tasks
- Display Task Instance Status
- Force Finish a Task
- Launch a Task
- Put Task on Hold
- Release a Task from Hold
- Rerun a Task
- Set Manual Task to Started
- Set Manual Task to Success
- Set or Modify Wait Time for a Task Instance
- Set Task Priority
- Skip a Task

Syntax, parameters, and examples for each function are provided.

## Cancel Task

<b>Description</b>	<p>Cancels the specified task instance.</p> <p>See <a href="#">Cancelling a Task Instance</a> for a description of behavior and restrictions.</p>
<b>Syntax</b>	<pre>uagcmd ops-task-cancel global parameters {task-instance-id=ID   task-instance-name=name} [instance-criteria=criteria] [workflow-instance-name=name]</pre> <div data-bbox="317 391 1919 500" style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>
<b>Parameter</b>	<ul style="list-style-type: none"> <li>• <code>task-instance=</code> Required; An internal Universal Controller identifier</li> </ul> <div data-bbox="394 656 1919 789" style="background-color: #ffe6e6; padding: 10px; margin-top: 10px;"> <p> <b>Deprecated</b> Replaced by <code>task-instance-id=</code> parameter; the command first will check for <code>task-instance=</code>; if it is not specified, the command will check for <code>task-instance-id=</code>.</p> </div> <ul style="list-style-type: none"> <li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; sys_id of the task instance to run the command on.</li> <li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the task instance to run the command on. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• <code>instance-criteria=</code> Optional if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b></li> <li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional; Name of the workflow instance.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-cancel -c config.cfg task-instance-name=Task A</pre>

## Clear All Dependencies

<b>Description</b>	<p>Clears all dependencies of a task instance.</p>
<b>Syntax</b>	<pre>uagcmd ops-task-clear-dependencies global parameters {task-instance-id=ID   task-instance-name=name} [instance-criteria=criteria] [workflow-instance-name=name]</pre>

<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; <code>sys_id</code> of the task instance to run the command on.</li> <li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the task instance to run the command on. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• <code>instance-criteria=</code> Optional, if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b>.</li> <li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional; Name of the workflow instance.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-clear-dependencies -c config.cfg task-instance-name=Task A</pre>

## Clear Virtual Resource Dependencies

<b>Description</b>	Clears all virtual resource dependencies of a task instance.
<b>Syntax</b>	<code>uagcmd ops-task-clear-resources global parameters {task-instance-id=ID   task-instance-name=name} [instance-criteria=criteria] [workflow-instance-name=name] resource-name=name</code>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; <code>sys_id</code> of the task instance to run the command on.</li> <li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the task instance to run the command on. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• <code>instance-criteria=</code> Optional, if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b>.</li> <li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional; Name of the workflow instance.</li> <li>• <code>resource-name=</code> Required; One of the following: <ul style="list-style-type: none"> <li>• Name of the virtual resource dependency to clear.</li> <li>• An asterisk ( <code>*</code> ) to clear all virtual resource dependencies.</li> </ul> </li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-clear-resources -c config.cfg task-instance-name=Task A resource-name=Resource A</pre>

## Clear Exclusive Dependencies


<b>Description</b>	Clears all exclusive dependencies of a task instance.
<b>Syntax</b>	<code>uagcmd ops-task-clear-exclusive global parameters {task-instance-id=<i>ID</i>   task-instance-name=<i>name</i>} [instance-criteria=<i>criteria</i>] [workflow-instance-name=<i>name</i>]</code>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; <code>sys_id</code> of the task instance to run the command on.</li> <li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the task instance to run the command on. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• <code>instance-criteria=</code> Optional, if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b>.</li> <li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional; Name of the workflow instance.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-clear-exclusive -c config.cfg task-instance-name=Task A</pre>

## Clear Time Dependency


<b>Description</b>	Clears the time dependency of a task instance.
<b>Syntax</b>	<code>uagcmd ops-task-clear-timewait global parameters {task-instance-id=<i>ID</i>   task-instance-name=<i>name</i>} [instance-criteria=<i>criteria</i>] [workflow-instance-name=<i>name</i>]</code>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; <code>sys_id</code> of the task instance to run the command on.</li> <li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the task instance to run the command on. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• <code>instance-criteria=</code> Optional, if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b>.</li> <li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional; Name of the workflow instance.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-clear-timewait -c config.cfg task-instance-name=Task A</pre>


## Display All Tasks



<b>Description</b>	Displays all specified tasks.
<b>Syntax</b>	<pre>uagcmd ops-task-list global parameters task-name=name [task-type=type]</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b>  For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions. </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>task-name=</code> Optional; Name or partial name of one or more tasks. <i>Wildcards</i> are supported.</li> <li>• <code>task-type=</code> Optional; One of the following (not case sensitive): <code>application_control</code>, <code>email</code>, <code>email_monitor</code>, <code>file_monitor</code>, <code>ftp</code>, <code>ftp_file_monitor</code>, <code>indesca / universal_command / ucmd</code>, <code>manual</code>, <code>sap</code>, <code>peoplesoft</code>, <code>sql</code>, <code>stored_procedure</code>, <code>system_monitor</code>, <code>task_monitor</code>, <code>timer</code>, <code>unix</code>, <code>variable_monitor</code>, <code>web_service</code>, <code>windows</code>, <code>workflow</code>, <code>zos</code>.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-list -c config.cfg task-name=Task A task-type=timer</pre>

## Display Task Instance Status

<b>Description</b>	Displays the status of all task instance(s) associated with the specified task.
<b>Syntax</b>	<pre>uagcmd ops-task-status global parameters task-instance-name=name [agent-name=name] [task-type=type] [task-status=status] [workflow-instance-id=id]   [workflow-instance-name=name] [workflow-instance-criteria=criteria] [options=v]</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b>  For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions. </div>

<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>task-name=</code> Required; Name or partial name of one or more tasks. <a href="#">Wildcards</a> are supported.</li> </ul> <div style="background-color: #ffe6e6; padding: 10px; margin: 10px 0;"> <p> <b>Deprecated</b> Replaced by <code>task-instance-name=</code> parameter; the command first will check for <code>task-name=</code>; if it is not specified, the command will check for <code>task-instance-name=</code>.</p> </div> <ul style="list-style-type: none"> <li>• <code>task-instance-name=</code> Optional; Name of the task instance(s) to be listed. <a href="#">Wildcards</a> are supported.</li> <li>• <code>agent-name=</code> Optional; Name of the agent the task instance(s) are running on.</li> <li>• <code>task-type=</code> Optional; One of the following (not case sensitive): <b>application_control</b>, <b>email</b>, <b>email_monitor</b>, <b>file_monitor</b>, <b>ftp</b>, <b>ftp_file_monitor</b>, <b>indesca / universal_command / ucmd</b>, <b>manual</b>, <b>sap</b>, <b>peoplesoft</b>, <b>sql</b>, <b>stored_procedure</b>, <b>system_monitor</b>, <b>task_monitor</b>, <b>timer</b>, <b>unix</b>, <b>variable_monitor</b>, <b>web_service</b>, <b>windows</b>, <b>workflow</b>, <b>zos</b>.</li> <li>• <code>task-status=</code> Optional; List of comma-separated <a href="#">task status codes and/or names</a> (not case sensitive): <i>status code or name,status code or name,...,status code or name</i>. An exclamation mark (!) preceding a task status code or name excludes task instances with that status.</li> <li>• <code>workflow-instance-id=</code> For a task instance in a workflow, optional if <code>workflow-instance-name=</code> is not specified; <code>sys_id</code> of the workflow instance.</li> <li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional if <code>workflow-instance-id=</code> is not specified; Name of the workflow instance. (If <code>workflow-instance-criteria=</code> is not specified, the oldest active Workflow instance with the matching name will apply.)</li> <li>• <code>workflow-instance-criteria=</code> Optional, if <code>workflow-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b>.</li> <li>• <code>options=</code> Optional; <b>v</b> (Return verbose results.)</li> </ul>
<b>Example</b>	<pre style="border: 1px solid #ccc; padding: 10px;">uagcmd ops-task-status -c config.cfg task-instance-name=mantask agent-name=managent task-type&gt;manual</pre>

## Task Instance Status Types

The following table describes all possible task instance statuses for all task types.



**Note**

The format of multi-word task status names specified in the [Task Instance Status](#) CLI function differs from the format of task status names used in the Controller [user interface](#). In [Task Instance Status](#), the words are separated by an underscore character; in the user interface, they are separated by a space.


Status Name	Status Code	Task Type	Description
-------------	-------------	-----------	-------------


<b>Action_Required</b>	60	Manual	When a manual task launches, it goes into Action Required status, meaning a user must perform some manual activity. For details, see <a href="#">Manual task</a> .
<b>Cancel_Pending</b>	99	Agent-based	A process running on the Agent needs to be terminated. When the Cancel command is issued, the task instance will go into a Cancel Pending status until the Agent reports back that the process has been cancelled. At that point, the task instance will transition into the Cancelled status.
<b>Cancelled</b>	130	All	The task was cancelled by a user.
<b>Confirmation_Required</b>	125	z/OS	If you make JCL changes and restart a z/OS task, Universal Controller will put the task into Confirmation Required status and prompt you for a confirmation. For detailed processing steps, see <a href="#">Rerunning a z/OS Task</a> .
<b>Defined</b>	0	All	The new task instance has been created (the task has been launched).
<b>Exclusive_Requested</b>	22	All	All tasks with a <a href="#">mutually exclusive task</a> defined go immediately to a status of Exclusive Requested. If the task is available to run exclusively, the task then moves to the next appropriate processing status.
<b>Exclusive_Wait</b>	23	All	The task is <a href="#">mutually exclusive</a> with one or more other tasks, and it is waiting for those tasks to finish before it will run.
<b>Execution_Wait</b>	33	Agent-based	The task must wait to be completed; either the Agent/Agent Cluster running the task has reached its Task Execution Limit, or the ability of the Agent/Agent Cluster to run tasks has been <a href="#">suspended</a> .
<b>Failed</b>	140	All*	The task ran to a failure status.
<b>Finished</b>	190	All	The task was forced by the user to finish. The user may do this in cases where the task had a Cancelled or Failed status, and the user needed to release other task instances depending on the successful completion of this task instance in a workflow. For more information, see <a href="#">Force Finishing a Task</a> .
<b>Held</b>	20	All	The task has been put on hold by a user.
<b>In_Doubt</b>	110	Agent-based	The Agent is "in doubt" about the current status of the task instance. This may occur if an Agent or Agent connection goes down. In this case, the Agent restarts and reviews its data about tasks in progress. If the Agent finds a task still running, it resumes normal monitoring. If the Agent cannot find the task, this usually indicates that the task completed, but the Agent considers the task status to be "in doubt."
<b>Queued</b>	40	Agent-based	The task has been queued on a resource.
<b>Resource_Requested</b>	25	All	All tasks with a <a href="#">virtual resource</a> defined go immediately to a status of Resource Requested. If the resource is available, the task then moves to the next appropriate processing status.
<b>Resource_Wait</b>	30	All	All tasks with a <a href="#">virtual resource</a> defined go immediately to a status of Resource Requested. If the resource is not available, the task goes to a status of Resource Wait. When the resource becomes available, the task moves to the next appropriate processing status
<b>Running</b>	80	All	The task is running. For Agent-based tasks, the Agent has started running the program.
<b>Running/Problems</b>	81	Workflow	One or more tasks within the workflow has one of the following statuses: <ul style="list-style-type: none"> <li>• Cancelled</li> <li>• Confirmation Required</li> <li>• Failure</li> <li>• In Doubt</li> <li>• Running/Problems (for sub-workflows)</li> <li>• Start Failure</li> <li>• Undeliverable</li> </ul>

<b>Skipped</b>	180	All	The task was skipped by a user.
<b>Start Failure</b>	120	All	The task was unable to start.
<b>Started</b>	70	Agent-based , Manual	The task has started. For Agent-based tasks, this means the Agent has received the task.
<b>Submitted</b>	43	z/OS	The task has been submitted to the z/OS Job Entry subsystem and scheduled by the z/OS Job Scheduler.
<b>Success</b>	200	All	The task has completed successfully. Workflows will transition to Success status when all of its tasks have transitioned to Success, Finished, or Skipped status.
<b>Time_Wait</b>	15	All (except Timer)	The task is waiting to start based on a Wait To Start and/or Delay On Start specification.
<b>Undeliverable</b>	35	Agent-based	The Agent is unavailable.
<b>Waiting</b>	10	All	The task has been loaded by a workflow and is waiting on a predecessor.


\* Workflows cannot go to Failed status.

## Force Finish a Task

<b>Description</b>	<p>Force finishes the specified <i>task instance</i>.</p> <p>See <a href="#">Force Finishing a Task Instance</a> for a description of behavior and restrictions.</p>
<b>Syntax</b>	<pre>uagcmd ops-task-forcefinish global parameters {task-instance-id=<i>ID</i>   task-instance-name=<i>name</i>} [instance-criteria=<i>criteria</i>] [workflow-instance-name=<i>name</i>]</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>


<b>Parameter</b>	<ul style="list-style-type: none"> <li>task-instance= Required; An internal Universal Controller identifier</li> </ul> <div style="background-color: #ffe0e0; padding: 10px; margin: 10px 0;">  <b>Deprecated</b>                  Replaced by task-instance-id= parameter; the command first will check for task-instance=; if it is not specified, the command will check for task-instance-id=.             </div> <ul style="list-style-type: none"> <li>.</li> <li>task-instance-id= Required if task-instance-name= is not specified; sys_id of the task instance to run the command on.</li> <li>task-instance-name= Required if task-instance-id= is not specified; Name of the task instance to run the command on. (If instance-criteria= is not specified, the oldest active task instance with the matching name will apply.)</li> <li>instance-criteria= Optional, if task-instance-name= is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b></li> <li>workflow-instance-name= For a task instance in a workflow, optional; Name of the workflow instance.</li> </ul>
<b>Example</b>	<div style="border: 1px solid #ccc; padding: 10px; background-color: #f0f0f0;"> <pre>uagcmd ops-task-forcefinish -c config.cfg task-instance-id=90079020d861e5e40128cbb3cdbl1cf3</pre> </div>


## Launch a Task

<b>Description</b>	Launches the specified task(s).
<b>Syntax</b>	<pre>uagcmd ops-task-launch global parameters [task-type=type] task-name=name {time-zone=Australia/Sydney} [hold=option] [task-variables=variables] [virtual-resource-priority=priority] [virtual-resources=resources]</pre> <div style="background-color: #ffff00; padding: 10px; margin: 10px 0;">  <b>Note</b>                  For backward-compatibility, you can exclude <b>uagcmd</b> from the command line for this function and all pre-6.2.0.0 CLI functions.             </div>


<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>task-type=</code> Optional; One of the following (not case sensitive): <b>timer</b>, <b>windows</b>, <b>unix</b>, <b>zos</b>, <b>file_monitor</b>, <b>manual</b>, <b>email</b>, <b>email_monitor</b>, <b>ftp</b>, <b>sql</b>, <b>ftp_file_monitor</b>, <b>task_monitor</b>, <b>stored_procedure</b>, <b>workflow</b>, <b>sap</b>, <b>peoplesoft</b>, <b>system_monitor</b>, <b>indesca</b> / <b>universal_command</b> / <b>ucmd</b>, <b>web_service</b>, <b>application_control</b>.</li> <li>• <code>task-name=</code> Required; Valid task name. <a href="#">Wildcards</a> are supported.</li> <li>• <code>time-zone=</code> Optional; Time zone in which the task is launched.</li> <li>• <code>hold=</code> Optional; Specification for whether to place the task in <a href="#">Held</a> status when it is launched. Valid values are (not case sensitive): yes/y/true.</li> <li>• <code>task-variables=</code> Optional; Any variables specified in the task that need a value to run properly.</li> <li>• <code>virtual-resource-priority=</code> Optional; Virtual resource priority of the task instance. Valid values are any integer between 1 and 20. Defaults to the virtual resource priority defined in the task Details.</li> <li>• <code>virtual-resources=</code> Optional; Comma-separated list of &lt;resource-name&gt;:&lt;amount&gt; pairs. For example, <b>VR1:10,VR2:20,...,VRN:N</b>. An amount of <b>0</b> indicates the virtual resource should be dropped. Defaults to virtual resources defined in the task Details.</li> </ul> <p>The virtual resource dependencies specified in <code>virtual-resources=</code> are merged with the default virtual resource dependencies.</p> <ul style="list-style-type: none"> <li>• If a default virtual resource dependency already exists for a specified virtual resource amount, the virtual resource dependency is updated.</li> <li>• Any virtual resource specified with an amount of <b>0</b> is dropped from the default virtual resource dependencies; if the virtual resource did not exist as a default dependency, the command will fail.</li> <li>• If a default virtual resource dependency does not already exist for a specified virtual resource amount, the virtual resource dependency is added.</li> </ul>
<b>Example</b>	<p>(All <b>variable=value</b> pairs must be specified within one set of braces.)</p> <div style="border: 1px solid #add8e6; padding: 10px; margin: 10px 0;"> <pre>uagcmd ops-task-launch -c config.cfg task-name=Windows Task A task-variables={variable1=first value variable2=second value}</pre> </div>


## Put Task on Hold

<b>Description</b>	<p>Puts the specified <a href="#">task instance</a> on hold.</p> <p>See <a href="#">Putting a Task Instance on Hold</a> for a description of behavior and restrictions.</p>
<b>Syntax</b>	<pre>uagcmd ops-task-hold global parameters {task-instance-id=ID   task-instance-name=name} [instance-criteria=criteria] [workflow-instance-name=name]</pre> <div style="background-color: #ffffcc; padding: 10px; margin: 10px 0;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>


<p><b>Parameter</b></p>	<ul style="list-style-type: none"> <li>• <code>task-instance=</code> Required; An internal Universal Controller identifier</li> </ul> <div data-bbox="394 256 1919 386" style="background-color: #f8d7da; padding: 10px; border: 1px solid #f5c6cb; margin: 10px 0;"> <p> <b>Deprecated</b> Replaced by <code>task-instance-id=</code> parameter; the command first will check for <code>task-instance=</code>; if it is not specified, the command will check for <code>task-instance-id=</code>.</p> </div> <ul style="list-style-type: none"> <li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; sys_id of the task instance to run the command on.</li> <li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the task instance to run the command on. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• <code>instance-criteria=</code> Optional, if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b></li> <li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional; Name of the workflow instance.</li> </ul>
<p><b>Example</b></p>	<pre style="background-color: #e9ecef; padding: 10px; border: 1px solid #d3d3d3;">uagcmd ops-task-hold -c config.cfg task-instance=90079020d861e5e40128cbb3cdbe1cf3</pre>

## Release a Task from Hold


<p><b>Description</b></p>	<p>Releases the specified <code>task instance</code> from hold.</p> <p>See <a href="#">Releasing a Task Instance from Hold</a> for a description of behavior and restrictions.</p>
<p><b>Syntax</b></p>	<pre>uagcmd ops-task-release global parameters {task-instance-id=ID   task-instance-id=name} [instance-criteria=criteria] [workflow-instance-name] [recursive=option]</pre> <div data-bbox="317 1161 1919 1268" style="background-color: #fff9c4; padding: 10px; border: 1px solid #fff176; margin: 10px 0;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>

<b>Parameter</b>	<ul style="list-style-type: none"> <li>task-instance= Required; An internal Universal Controller identifier</li> </ul> <div style="background-color: #ffe6e6; padding: 10px; margin: 10px 0;">  <b>Deprecated</b>                  Replaced by task-instance-id= parameter; the command first will check for task-instance=; if it is not specified, the command will check for task-instance-id=.             </div> <ul style="list-style-type: none"> <li>.</li> <li>task-instance-id= Required if task-instance-name= is not specified; sys_id of the task instance to run the command on.</li> <li>task-instance-name= Required if task-instance-id= is not specified; Name of the task instance to run the command on. (If instance-criteria= is not specified, the oldest active task instance with the matching name will apply.)</li> <li>instance-criteria= Optional, if task-instance-name= is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b></li> <li>workflow-instance-name= For a task instance in a workflow, optional; Name of the workflow instance.</li> <li>recursive= Optional; Specification (yes or no), if the task instance specified in task-instance-id= or task-instance-name= is a workflow, for whether or not to release the held workflow recursively. (Default is no.) If the task instance is not a workflow, recursive= is ignored.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-release -c config.cfg task-instance-id=90079020d861e5e40128cbb3cdbc1cf3</pre>

## Rerun a Task



<b>Description</b>	<p>Reruns the specified Task instance.</p> <p>See <a href="#">Re-running a Task Instance</a> for a description of behavior and restrictions.</p>
<b>Syntax</b>	<pre>uagcmd ops-task-rerun global parameters {task-instance-id=ID   task-instance-name=name} [instance-criteria=criteria] [workflow-instance-name=name] {[task-status=status [recursive=option]]}</pre> <div style="background-color: #ffffcc; padding: 10px; margin: 10px 0;">  <b>Note</b>                  For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.             </div>




<p><b>Parameter</b></p>	<ul style="list-style-type: none"> <li>• <code>task-instance=</code> Required; An internal Universal Controller identifier</li> </ul> <div data-bbox="394 256 1919 386" style="background-color: #f8d7da; padding: 10px; border: 1px solid #f5c6cb; margin: 10px 0;"> <p> <b>Deprecated</b> Replaced by <code>task-instance-id=</code> parameter; the command first will check for <code>task-instance=</code>; if it is not specified, the command will check for <code>task-instance-id=</code>.</p> </div> <ul style="list-style-type: none"> <li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; <code>sys_id</code> of the task instance to run the command on.</li> <li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the task instance to run the command on. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• <code>instance-criteria=</code> Optional, if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b></li> <li>• <code>workflow-instance-name=</code> Optional; Name of the workflow instance.</li> <li>• <code>task-status=</code> Optional; list of comma-separated status codes or case-insensitive status names (see below). Format: <code>&amp;lt;status-code-or-name&gt;,&lt;status-code-or-name&gt;,...,&lt;status-code-or-name&gt;</code>. Applicable only if matched task instance is workflow type; command will fail otherwise.</li> </ul> <p>All tasks within the matching workflow with a matching status will be queued for re-run. Sub-workflows do not support re-run directly; the <code>recursive=</code> parameter controls whether or not tasks within sub-workflows matching the status will be queued for re-run.</p> <ul style="list-style-type: none"> <li>• Start_Failure (120)</li> <li>• Cancelled (130)</li> <li>• Failed (140)</li> <li>• Finished (190)</li> <li>• Success (200)</li> </ul> <ul style="list-style-type: none"> <li>• <code>recursive=</code> Optional if <code>task-status=</code> is specified; One of the following (not case-sensitive): Yes Y true or No N false (default). Indicates whether or not tasks within sub-workflows will qualify for re-run.</li> </ul>
<p><b>Example</b></p>	<pre style="border: 1px solid #add8e6; padding: 10px;">uagcmd ops-task-rerun -c config.cfg task-instance=8fda93dcd861e5e4005bf48e2cad6206 task-status=140</pre>


## Set Manual Task to Started

<p><b>Description</b></p>	<p>For a Manual task, changes its status from Action Required to Started. This allows you to acknowledge the Manual task and indicate that the manual procedures have been started.</p>
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<b>Syntax</b>	<pre>uagcmd ops-manual-setstarted global parameters {task-instance-id=ID   task-instance-name=name} [instance-criteria=criteria] [workflow-instance-name]</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b>                      For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.                 </div>
<b>Parameter</b>	<ul style="list-style-type: none"> <li>• <code>task-instance=</code> Required; An internal Universal Controller identifier</li> </ul> <div style="background-color: #ffe6e6; padding: 10px; margin-top: 10px;">  <b>Deprecated</b>                      Replaced by <code>task-instance-id=</code> parameter; the command first will check for <code>task-instance=</code>; if it is not specified, the command will check for <code>task-instance-id=</code>.                 </div> <ul style="list-style-type: none"> <li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; sys_id of the task instance to run the command on.</li> <li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the task instance to run the command on. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• <code>instance-criteria=</code> Optional, if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b></li> <li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional; Name of the workflow instance.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-manual-setstarted -c config.cfg task-instance=8fda93dcd861e5e4005bf48e2cad6206</pre>

## Set Manual Task to Success

<b>Description</b>	For a Manual task, sets its status to Success.
<b>Syntax</b>	<pre>uagcmd ops-manual-setcompleted global parameters {task-instance-id=ID   task-instance-name=name} [instance-criteria=criteria] [workflow-instance-name]</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b>                      For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.                 </div>

<b>Parameter</b>	<ul style="list-style-type: none"> <li>task-instance= Required; An internal Universal Controller identifier</li> </ul> <div style="background-color: #ffe6e6; padding: 10px; margin: 10px 0;">  <b>Deprecated</b>                      Replaced by task-instance-id= parameter; the command first will check for task-instance=; if it is not specified, the command will check for task-instance-id=.                 </div> <ul style="list-style-type: none"> <li>.</li> <li>task-instance-id= Required if task-instance-name= is not specified; sys_id of the task instance to run the command on.</li> <li>task-instance-name= Required if task-instance-id= is not specified; Name of the task instance to run the command on. (If instance-criteria= is not specified, the oldest active task instance with the matching name will apply.)</li> <li>instance-criteria= Optional, if task-instance-name= is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b></li> <li>workflow-instance-name= For a task instance in a workflow, optional; Name of the workflow instance.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-manual-setcompleted -c config.cfg task-instance=8fda93dcd861e5e4005bf48e2cad6206</pre>


## Set or Modify Wait Time for a Task Instance

<b>Description</b>	Sets or modifies the Wait time for a task instance that specifies how long it will wait to run after it has become eligible to run.
<b>Syntax</b>	<pre>uagcmd ops-task-set-timewait global parameters {task-instance-id=ID   task-instance-name=name} [instance-criteria=criteria] [workflow-instance-name=name] {wait-type=type [wait-day-constraint=constraint] {wait-time=wait time   wait-duration=duration   wait-seconds=duration in seconds}   delay-type=type {delay-duration=duration   delay-seconds=duration in seconds}}</pre>

<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; <code>sys_id</code> of the task instance.</li> <li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the time task instance. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• <code>instance-criteria=</code> Optional, if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b>.</li> <li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional; Name of the workflow instance. (The most recently created workflow instance with the matching name will apply.)</li> <li>• <code>wait-type=</code> Required if <code>delay-type=</code> is not specified; one of the following (not case sensitive): <b>none</b>, <b>time</b>, <b>relative_time</b>, <b>duration</b>, <b>seconds</b>.</li> <li>• <code>wait-time=</code> Required if <code>wait-type=</code><b>time</b> or <b>relative_time</b>; Wait time in format HH:MM. <a href="#">Variables</a> are supported.</li> <li>• <code>wait-day-constraint=</code> Optional if <code>wait-type=</code><b>time</b> or <b>relative_time</b>; One of the following (not case sensitive): <b>none</b>, <b>same day/same_day</b>, <b>next day/next_day</b>, <b>next business day/next_business_day</b>, <b>sunday</b>, <b>monday</b>, <b>tuesday</b>, <b>wednesday</b>, <b>thursday</b>, <b>friday</b>, <b>saturday</b>.</li> <li>• <code>wait-duration=</code> Required if <code>wait-type=</code><b>duration</b>; Wait duration in format DD:HH:MM:SS.</li> <li>• <code>wait-seconds=</code> Required if <code>wait-type=</code><b>seconds</b>; Wait duration in format SS. <a href="#">Variables</a> are supported.</li> <li>• <code>delay-type=</code> Required if <code>wait-type=</code> is not specified; One of the following (not case sensitive): <b>none</b>, <b>duration</b>, <b>seconds</b>.</li> <li>• <code>delay-duration=</code> Required if <code>delay_type=</code><b>duration</b>; Specific delay duration in format DD:HH:MM:SS.</li> <li>• <code>delay-seconds=</code> Required if <code>delay_type=</code><b>seconds</b>; Specific delay duration in format SS. <a href="#">Variables</a> are supported.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-set-timewait -c config.cfg task-instance-name=Task 5A workflow-instance-name=Workflow A wait-type=time wait-time=18:00</pre>


## Set Task Priority

<b>Description</b>	<p>For Agent-based tasks (Linux/Unix, Universal, Windows, and z/OS), changes the priority on the specified <a href="#">task instance</a>.</p> <p>See <a href="#">Changing the Priority of a Task Instance</a> for a description of behavior and restrictions.</p>
<b>Syntax</b>	<pre>uagcmd ops-task-setpriority global parameters {task-instance-id=ID   task-instance-name=name} [instance-criteria=criteria] [workflow-instance-name] priority=priority</pre>

<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>task-instance=</code> Required; An internal Universal Controller identifier</li> </ul> <div style="background-color: #f8d7da; padding: 10px; margin: 10px 0;"> <p> <b>Deprecated</b> Replaced by <code>task-instance-id=</code> parameter; the command first will check for <code>task-instance=</code>; if it is not specified, the command will check for <code>task-instance-id=</code>.</p> </div> <ul style="list-style-type: none"> <li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; <code>sys_id</code> of the task instance to run the command on.</li> <li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the task instance to run the command on. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• <code>instance-criteria=</code> Optional, if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b></li> <li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional; Name of the workflow instance.</li> <li>• <code>priority=</code> Required; One of the following (not case sensitive): <b>high</b>, <b>medium</b>, <b>low</b>.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-setpriority -c config.cfg task-instance=90079026d861e5e400bba81913a4fdd0 priority=high</pre>

## Skip a Task

<b>Description</b>	<p>Skips the specified <code>task instance</code>.</p> <p>See <a href="#">Skipping a Task Instance</a> for a description of behavior and restrictions.</p>
<b>Syntax</b>	<pre>uagcmd <b>ops-task-skip</b> global parameters {task-instance-id=ID   task-instance-name=name} [instance-criteria=criteria] [workflow-instance-name]</pre>

<b>Parameter</b>	<ul style="list-style-type: none"><li>• <code>task-instance=</code> Required; An internal Universal Controller identifier</li></ul> <div data-bbox="394 256 1919 386" style="background-color: #f8d7da; padding: 10px;"><p> <b>Deprecated</b> Replaced by <code>task-instance-id=</code> parameter; the command first will check for <code>task-instance=</code>; if it is not specified, the command will check for <code>task-instance-id=</code>.</p></div> <ul style="list-style-type: none"><li>• <code>task-instance-id=</code> Required if <code>task-instance-name=</code> is not specified; <code>sys_id</code> of the task instance to run the command on.</li><li>• <code>task-instance-name=</code> Required if <code>task-instance-id=</code> is not specified; Name of the task instance to run the command on. (If <code>instance-criteria=</code> is not specified, the oldest active task instance with the matching name will apply.)</li><li>• <code>instance-criteria=</code> Optional, if <code>task-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b></li><li>• <code>workflow-instance-name=</code> For a task instance in a workflow, optional; Name of the workflow instance.</li></ul>
<b>Example</b>	<pre>uagcmd ops-task-skip -c config.cfg task-instance=90079026d861e5e400bba81913a4fdd0</pre>

## Tasks in Workflow Functions

- [Overview](#)
- [Clear Predecessor Dependencies](#)
- [Insert a Task into a Workflow Instance with Dependencies](#)
- [List Predecessors / Successors of a Task Instance in a Workflow](#)

### Overview

The [command line syntax](#) for each execution of the CLI command, **uagcmd**, must specify a single CLI function, required / optional [Global parameters](#), and required / optional function-specific parameters. You must use the required Global parameters to connect to [OMS Servers](#) and to log on to a Controller ([User ID](#) and [Password](#)).

Universal Controller supports the following CLI functions for Tasks in Workflows, which are listed alphabetically on this page.


- [Clear Predecessor Dependencies](#)
- [Insert a Task into a Workflow Instance with Dependencies](#)
- [List Predecessors / Successors of a Task Instance in a Workflow](#)

Syntax, parameters, and examples for each function are provided.

### Clear Predecessor Dependencies

<b>Description</b>	Clears all predecessor dependencies of a task instance in a Workflow.
<b>Syntax</b>	uagcmd <b>ops-task-clear-predecessors</b> <a href="#">global parameters</a> {task-instance-id= <i>ID</i>   task-instance-name= <i>name</i> } [instance-criteria= <i>criteria</i> ] [workflow-instance-name= <i>name</i> ] predecessor-name= <i>name</i>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• task-instance-id= Required if task-instance-name= is not specified; <a href="#">sys_id</a> of the task instance to run the command on.</li> <li>• task-instance-name= Required if task-instance-id= is not specified; Name of the task instance to run the command on. (If instance-criteria= is not specified, the oldest active task instance with the matching name will apply.)</li> <li>• instance-criteria= Optional if task-instance-name= is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b>.</li> <li>• workflow-instance-name= Optional; Name of the workflow instance.</li> <li>• predecessor-name= Required; One of the following: Name of the predecessor dependency to clear or an asterisk ( * ) to clear all predecessor dependencies.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-clear-predecessors -c config.cfg task-instance-name=Task A predecessor-name=Resource B</pre>

## Insert a Task into a Workflow Instance with Dependencies

<b>Description</b>	Inserts a task into a Workflow instance with dependencies.
<b>Syntax</b>	<pre>uagcmd ops-task-insert global parameters {workflow-instance-id=ID   workflow-instance-name=name} [workflow-instance-criteria=criteria] {task-id=ID   task-name=name} [vertex-x=x-coordinate] [vertex-y=y-coordinate] [alias=task alias] [inherit-trigger-time=option] {predecessors=predecessors list   successors=successors list}</pre>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>workflow-instance-id=</code> Required if <code>workflow-instance-name</code> is not specified; <code>sys_id</code> of the Workflow instance.</li> <li>• <code>workflow-instance-name=</code> Required if <code>workflow-instance-id</code> is not specified; Name of the workflow instance. (If <code>workflow-instance-criteria=</code> is not specified, the oldest active Workflow with the matching name will apply.)</li> <li>• <code>workflow-instance-criteria=</code> Optional, if <code>workflow-instance-name=</code> is specified; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b>.</li> <li>• <code>task-id=</code> Required if <code>task-name</code> is not specified; <code>sys_id</code> of the task to be inserted.</li> <li>• <code>task-name=</code> Required if <code>task-id</code> is not specified; Name of the task to be inserted.</li> <li>• <code>vertex-x</code> Optional; x-coordinate of the task within the workflow.</li> <li>• <code>vertex-y</code> Optional; y-coordinate of the task within the workflow.</li> <li>• <code>alias=</code> Optional; Alias used for the task within the Workflow; specifically, the value of <code>ops_exec_workflow_vertex.name</code>.</li> <li>• <code>inherit-trigger-time=</code> Optional; Specification for whether or not the inserted task will inherit the Trigger Time of the Workflow task instance. One of the following (not case-sensitive): Yes Y true (default) or No N false.</li> <li>• <code>predecessors=</code> Optional; Comma-separated list of predecessor task instances within the workflow.</li> <li>• <code>successors=</code> Optional; Comma-separated list of successor task instances within the workflow.</li> </ul> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> Valid values for <code>predecessors</code> and <code>successors</code>:</p> <ul style="list-style-type: none"> <li>• If both <code>predecessors</code> and <code>successors</code> lists are empty, task will be inserted without dependencies.</li> <li>• If there is a task name in one of the lists that does not exist, the operation will fail with error <b>Cannot find vertex with the name ...</b></li> <li>• If a list contains the task name with multiple occurrences in the workflow, the operation will fail with error <b>Multiple vertices found for the name...</b> (For example, the workflow contains two tasks (<b>Sleep 30</b>, <b>Sleep 30</b>) and you are trying to insert <b>Task ABC</b> with <code>predecessors = Sleep 30</code>).</li> </ul> </div>
<b>Example</b>	<pre>uagcmd ops-task-insert -c config.cfg workflow-instance-name=Workflow A task-name=Task 5A successors=Task 5B,Task 5C</pre>



## List Predecessors / Successors of a Task Instance in a Workflow

<b>Description</b>	Lists predecessors and/or successors of a task instance within a workflow.
<b>Syntax</b>	uagcmd <b>ops-task-dependency-list</b> <i>global parameters</i> workflow-instance-name= <i>name</i> [instance-criteria= <i>criteria</i> ] {task-instance-id= <i>ID</i>   task-instance-name= <i>name</i> } [dependency-type= <i>type</i> ]
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• task-instance-id= Required if task-instance-name= is not specified; <i>sys_id</i> of the task instance whose predecessors and/or successors you want to list.</li> <li>• task-instance-name= Required if task-instance-id= is not specified; Name of the task instance whose predecessors and/or successors you want to list.</li> <li>• dependency-type= Optional; One of the following (not case sensitive): <b>predecessors</b> or <b>successors</b>. If dependency-type= is not specified, all predecessors and successors of the specified task instance are listed.</li> <li>• workflow-instance-name= Required; Name of the workflow instance. (If instance-criteria= is not specified, the oldest active Workflow instance with the matching name will apply.)</li> <li>• instance-criteria= Optional; One of the following (not case-sensitive): <b>oldest_active_instance</b> (default), <b>oldest_instance</b>, <b>newest_active_instance</b>, <b>newest_instance</b>.</li> <li>• options= Optional; v (Return verbose results.)</li> </ul>
<b>Example</b>	<pre>uagcmd ops-task-dependency-list -c config.cfg task-instance-id=14714650784870352570T7OR91KT5QSM</pre>

## Trigger Functions

- [Overview](#)
- [Disable a Trigger](#)
- [Enable a Trigger](#)
- [Launch Trigger Tasks Now](#)
- [List Triggers Status](#)
- [Modify Time of a Time Trigger](#)

### Overview

The [command line syntax](#) for each execution of the CLI command, **uagcmd**, must specify a single CLI function, required / optional [Global parameters](#), and required / optional function-specific parameters. You must use the required Global parameters to connect to [OMS Servers](#) and to log on to a Controller ([User ID](#) and [Password](#)).

Universal Controller supports the following CLI functions for Triggers, which are listed alphabetically on this page.


- [Disable a Trigger](#)
- [Enable a Trigger](#)
- [Launch Trigger Tasks Now](#)
- [List Triggers Status](#)
- [Modify Time of a Time Trigger](#)

Syntax, parameters, and examples for each function are provided.

See [Import and Export Functions](#) for these trigger-related functions:


- [Export a Trigger](#)
- [Import a Trigger](#)

### Disable a Trigger

<b>Description</b>	Disables the specified trigger(s).
<b>Syntax</b>	<pre>uagcmd ops-trigger-disable global parameters trigger-name=name [trigger-type=type]</pre> <div data-bbox="315 1209 1921 1315" style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> For backward-compatibility, you can exclude <b>uagcmd</b> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>


<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>trigger-name=</code> Name or partial name of one or more triggers. <a href="#">Wildcards</a> are supported.</li> <li>• <code>trigger-type=</code> Optional; If you used a wildcard in <code>trigger-name=</code>, you can use <code>trigger-type=</code> to narrow down the selection to a specific type of trigger. One of the following (not case-sensitive): <b>cron</b>, <b>time</b>, <b>manual</b>, <b>temporary</b>, <b>file_trigger</b>, <b>task_monitor</b>, <b>variable_monitor</b>, <b>email_monitor</b>, <b>composite</b>, <b>application_monitor</b>.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-trigger-disable -c config.cfg trigger-name=Trigger A</pre>

## Enable a Trigger

<b>Description</b>	Enables the specified trigger(s).
<b>Syntax</b>	<pre>uagcmd ops-trigger-enable global parameters trigger-name=name [trigger-type=type]</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>trigger-name=</code> Name or partial name of one or more triggers. <a href="#">Wildcards</a> are supported.</li> <li>• <code>trigger-type=</code> Optional; If you used a wildcard in <code>trigger-name=</code>, you can use <code>trigger-type=</code> to narrow down the selection to a specific type of trigger. One of the following (not case-sensitive): <b>cron</b>, <b>time</b>, <b>manual</b>, <b>temporary</b>, <b>file_trigger</b>, <b>task_monitor</b>, <b>variable_monitor</b>, <b>email_monitor</b>, <b>composite</b>, <b>application_monitor</b>.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-trigger-enable -c config.cfg trigger-name=Trigger A</pre>

## Launch Trigger Tasks Now

<b>Description</b>	Marks all conditions as satisfied in the specified trigger(s) and launches its associated tasks.
--------------------	--


<b>Syntax</b>	<pre>uagcmd ops-trigger-now global parameters trigger-name=name [time-zone=US/Pacific] [trigger-type=type] [hold=option] [virtual-resource-priority=integer] [virtual-resources=list] [trigger-variables=variables]</pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b>                  For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.             </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>trigger-name=</code> Required; Name or partial name of one or more triggers. <i>Wildcards</i> are supported.</li> <li>• <code>time-zone=</code> Time zone in which the trigger is run.</li> <li>• <code>trigger-type=</code> Optional; If you used a wildcard in <code>trigger-name=</code>, you can use <code>trigger-type=</code> to narrow down the selection to a specific type of trigger. One of the following (not case-sensitive): <b>cron</b>, <b>time</b>, <b>manual</b>, <b>temporary</b>, <b>file_trigger</b>, <b>task_monitor</b>, <b>variable_monitor</b>, <b>email_monitor</b>, <b>composite</b>, <b>application_monitor</b>.</li> <li>• <code>hold=</code> Optional; Specification for whether to place the task(s) in <b>Held</b> status when it is triggered. Valid values are (not case sensitive): <code>yes/y/true</code>.</li> <li>• <code>virtual-resource-priority=</code> Optional; Virtual resource priority of all task instances specified for the trigger. Valid values are any integer between 1 and 20. Defaults to the virtual resource priority defined in the task Details.</li> <li>• <code>virtual-resources=</code> Optional; Comma-separated list of &lt;resource-name&gt;:&lt;amount&gt; pairs. For example, <b>VR1:10,VR2:20,...,VRN:N</b>. An amount of <b>0</b> indicates the virtual resource should be dropped. Defaults to virtual resources defined in the task Details.</li> </ul> <p>The virtual resource dependencies specified in <code>virtual-resources=</code> are merged with the default virtual resource dependencies.</p> <ul style="list-style-type: none"> <li>• If a default virtual resource dependency already exists for a specified virtual resource amount, the virtual resource dependency is updated.</li> <li>• Any virtual resource specified with an amount of <b>0</b> is dropped from the default virtual resource dependencies; if the virtual resource did not exist as a default dependency, the command will fail.</li> <li>• If a default virtual resource dependency does not already exist for a specified virtual resource amount, the virtual resource dependency is added.</li> </ul> <ul style="list-style-type: none"> <li>• <code>trigger-variables=</code> Optional; Any variables specified in the task(s) being triggered that need a value to run properly.</li> </ul>
<b>Example</b>	<p>All <b>variable=value</b> pairs must be specified within one set of braces:</p> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <pre>uagcmd ops-trigger-now -c config.cfg trigger-name=Trigger A trigger-variables={variable1=first value variable2=second value}</pre> </div>

## List Triggers Status

<b>Description</b>	Lists the status of the specified trigger(s). Possible statuses are <b>Enabled</b> or <b>Disabled</b> .
<b>Syntax</b>	<pre>uagcmd ops-trigger-status global parameters trigger-name=name [trigger-type=type] [trigger-status=status] [options=v]</pre>

<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>trigger-name=</code> Name or partial name of one or more triggers. <a href="#">Wildcards</a> are supported.</li> <li>• <code>trigger-type=</code> Optional; One of the following (not case-sensitive): <b>cron</b>, <b>time</b>, <b>manual</b>, <b>temporary</b>, <b>file_trigger</b>, <b>task_monitor</b>, <b>variable_monitor</b>, <b>email_monitor</b>, <b>composite</b>, <b>application_monitor</b>. (If not specified, statuses for all Trigger types are listed.)</li> <li>• <code>trigger-status=</code> Optional; One of the following (not case sensitive): <b>enabled</b>, <b>disabled</b>.</li> <li>• <code>options=</code> Optional; <b>v</b> (Return verbose results.)</li> </ul>
<b>Example</b>	<pre>uagcmd ops-trigger-status -c config.cfg trigger-name=Trigger A status=disabled</pre>

## Modify Time of a Time Trigger

<b>Description</b>	Modifies the <b>Time</b> field of a <b>Time Trigger</b> with the <b>Time Style</b> field set to <b>time</b> .
<b>Syntax</b>	<pre>uagcmd ops-trigger-set-time global parameters {trigger-id=<i>ID</i>   trigger-name=<i>name</i>} time=<i>time</i></pre> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> For backward-compatibility, you can exclude <code>uagcmd</code> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <code>trigger-id=</code> Required if <code>trigger-name=</code> is not specified; <code>sys_id</code> of the time trigger.</li> <li>• <code>trigger-name=</code> Required if <code>trigger-id=</code> is not specified; Name of the time trigger.</li> <li>• <code>time=</code> Required; New trigger time in format HH:MM.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-trigger-set-time -c config.cfg trigger-name=Trigger A time=15:00</pre>

## Variable Functions

- [Overview](#)
- [List Variables](#)
- [Set Variables](#)

### Overview


The [command line syntax](#) for each execution of the CLI command, **uagcmd**, must specify a single CLI function, required / optional [Global parameters](#), and required / optional function-specific parameters. You must use the required Global parameters to connect to [OMS Servers](#) and to log on to a Controller ([User ID](#) and [Password](#)).

Universal Controller supports the following CLI functions for Variables, which are listed alphabetically on this page.

- [List Variables](#)
- [Set Variables](#)

Syntax, parameters, and examples for each function are provided.



### List Variables

<b>Description</b>	Lists the specified variable(s).
<b>Syntax</b>	<pre>uagcmd ops-variable-list global parameters variable-name=name variable-scope=scope [task-name=name] [trigger-name=name] [options=v]</pre> <div data-bbox="317 915 1919 1019" style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <p><b>Note</b> For backward-compatibility, you can exclude <b>uagcmd</b> from the command line for this function and all pre-6.2.0.0 CLI functions.</p> </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <b>variable-name=</b> Optional; Name or partial name of one or more variables. <a href="#">Wildcards</a> are supported.</li> <li>• <b>variable-scope=</b> Optional; One of the following (not case sensitive): <b>global</b> (default), <b>task</b>, <b>trigger</b>, <b>local</b> (task or trigger). Defines the type of variable being listed. A <b>global</b> variable is created independently by selecting <a href="#">Variables</a> from the Universal Controller user interface navigator. A <b>trigger</b> variable is attached to a trigger; a <b>task</b> variable is attached to a task. A <b>local</b> variable can be either a task or trigger variable.</li> <li>• <b>task-name=</b> Required if <b>variable-scope=task</b>; A single task name.</li> <li>• <b>trigger-name=</b> Required if <b>variable-scope=trigger</b>; A single trigger name.</li> <li>• <b>options=</b> Optional; <b>v</b> (Return verbose results.)</li> </ul>

**Example**

```
uagcmd ops-variable-list -c config.cfg variable-name=abc variable-scope=task task-name=Task A
```

## Set Variables

<b>Description</b>	Sets the specified variable.
<b>Syntax</b>	<p>uagcmd <b>ops-variable-set</b> <i>global parameters</i> variable-name=<i>name</i> variable-scope=<i>scope</i> variable-value=<i>string</i> [variable-description=<i>description</i>] [task-name=<i>name</i>] [trigger-name=<i>name</i>] create=<i>option</i></p> <div data-bbox="315 519 1921 625" style="background-color: #ffffcc; padding: 10px;"> <p> <b>Note</b> For backward-compatibility, you can exclude <b>uagcmd</b> from the command line for this function and <b>all pre-6.2.0.0 CLI functions</b>.</p> </div>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>• variable-name= Required; Name of a specific variable. The name must begin with an alphabetic character and can consist of: alphabetic characters (a-z, A-Z), numbers (0-9), _ (underscore). White spaces are not permitted; names are not case-sensitive.</li> <li>• variable-scope= Optional; One of the following (not case sensitive): <b>global</b> (default), <b>task</b>, <b>trigger</b>. In cases where there may be more than one occurrence of the specified variable, variable-scope= defines which one should be set. A global variable is created independently by selecting <b>Variables</b> from the Universal Controller user interface navigation pane. A trigger variable is attached to a trigger; a task variable is attached to a task.</li> <li>• variable-value= Required; String that will become the value of the specified variable. UTF-8 character set is supported.</li> <li>• variable-description= Optional; Description of the variable.</li> <li>• task-name= Required if variable-scope=<b>task</b>; A single task name.</li> <li>• trigger-name= Required if variable-scope=<b>trigger</b>; A single trigger name.</li> <li>• create= Required; Specification (<b>yes</b> or <b>no</b>) for whether or not a new variable may be created for this request.</li> </ul>
<b>Example</b>	<pre>uagcmd ops-variable-set -c config.cfg variable-name=myvar1 variable-value=mydata1 create=yes</pre> <div data-bbox="315 1331 1921 1437" style="background-color: #ffe6e6; padding: 10px;"> <p> <b>Warning</b> CLI supports modifying only certain types of variables - see <a href="#">Modifying Variables</a>.</p> </div>





## RESTful Web Services API

- [Overview](#)
- [Methods of API Operations](#)
- [Access](#)
- [Returned Messages](#)
- [User Restriction](#)
- [Password Expiration](#)

### Overview

Universal Controller supports a RESTful-based web services API that allows you to perform multiple operations, which are listed alphabetically on the following pages.

Formatting specifications for each web service, including details about field requirements, are provided.

<p><b>Agents</b></p>	<ul style="list-style-type: none"> <li>• <a href="#">Delete an Agent</a></li> <li>• <a href="#">List Agents</a></li> <li>• <a href="#">Modify an Agent</a></li> <li>• <a href="#">Read an Agent</a></li> <li>• <a href="#">Resume an Agent</a></li> <li>• <a href="#">Set Agent Task Execution Limit</a></li> <li>• <a href="#">Suspend an Agent</a></li> </ul>
<p><b>Agent Clusters</b></p>	<ul style="list-style-type: none"> <li>• <a href="#">Create an Agent Cluster</a></li> <li>• <a href="#">Delete an Agent Cluster</a></li> <li>• <a href="#">List Agent Clusters</a></li> <li>• <a href="#">Modify an Agent Cluster</a></li> <li>• <a href="#">Read an Agent Cluster</a></li> <li>• <a href="#">Resume an Agent Cluster</a></li> <li>• <a href="#">Resume an Agent Cluster Membership</a></li> <li>• <a href="#">Return an Agent from an Agent Cluster</a></li> <li>• <a href="#">Set an Agent Cluster Task Execution Limit</a></li> <li>• <a href="#">Suspend an Agent Cluster</a></li> <li>• <a href="#">Suspend an Agent Cluster Membership</a></li> </ul>
<p><b>Bundles</b></p>	<ul style="list-style-type: none"> <li>• <a href="#">Cancel a Scheduled Bundle Promotion</a></li> <li>• <a href="#">Delete a Scheduled Bundle Promotion</a></li> <li>• <a href="#">Schedule Bundle Promotion</a></li> </ul>

<p><b>Business Services</b></p>	<ul style="list-style-type: none"> <li>• Create a Business Service</li> <li>• Delete a Business Service</li> <li>• List Business Services</li> <li>• Modify a Business Service</li> <li>• Read a Business Service</li> </ul>
<p><b>Calendars</b></p>	<ul style="list-style-type: none"> <li>• Add an Existing Custom Day to a Calendar</li> <li>• Create a Calendar</li> <li>• Delete a Calendar</li> <li>• List Calendars</li> <li>• Modify a Calendar</li> <li>• Read a Calendar</li> <li>• Read All Custom Days of a Calendar</li> <li>• Remove a Custom Day from a Calendar</li> </ul>
<p><b>Cluster Nodes</b></p>	<ul style="list-style-type: none"> <li>• List Cluster Nodes</li> <li>• Read Current Cluster Node</li> </ul>
<p><b>Connections</b></p>	<ul style="list-style-type: none"> <li>• Database Connections</li> <li>• Email Connections</li> <li>• Email Templates</li> <li>• PeopleSoft Connections</li> <li>• SAP Connections</li> <li>• SNMP Managers</li> </ul>
<p><b>Credentials</b></p>	<ul style="list-style-type: none"> <li>• Create a Credential</li> <li>• Delete a Credential</li> <li>• List Credentials</li> <li>• Modify a Credential</li> <li>• Read a Credential</li> </ul>
<p><b>Custom Days</b></p>	<ul style="list-style-type: none"> <li>• Create a Custom Day</li> <li>• Delete a Custom Day</li> <li>• List Custom Day Qualifying Dates</li> <li>• List Custom Day Qualifying Periods</li> <li>• List Custom Days</li> <li>• List Local Custom Day Qualifying Dates</li> <li>• List Local Custom Day Qualifying Periods</li> <li>• Modify a Custom Day</li> <li>• Read a Custom Day</li> </ul>

<b>Groups</b>	<ul style="list-style-type: none"> <li>• Create a Group</li> <li>• Delete a Group</li> <li>• List Group</li> <li>• Modify a Group</li> <li>• Read a Group</li> </ul>
<b>OMS Servers</b>	<ul style="list-style-type: none"> <li>• Create an OMS Server</li> <li>• Delete an OMS Server</li> <li>• List OMS Servers</li> <li>• Modify an OMS Server</li> <li>• Read an OMS Server</li> </ul>
<b>Passwords</b>	<ul style="list-style-type: none"> <li>• Change a Universal Controller User Password</li> <li>• Change Runtime Password on Credentials</li> </ul>
<b>Properties</b>	<ul style="list-style-type: none"> <li>• List Properties</li> <li>• Modify a Property</li> <li>• Read a Property</li> </ul>
<b>Reports</b>	<ul style="list-style-type: none"> <li>• Run Report</li> </ul>
<b>Scripts</b>	<ul style="list-style-type: none"> <li>• Create a Script</li> <li>• Delete a Script</li> <li>• List Scripts</li> <li>• Modify a Script</li> <li>• Read a Script</li> </ul>
<b>Server Operations</b>	<ul style="list-style-type: none"> <li>• Export and Import</li> <li>• LDAP</li> </ul>
<b>System</b>	<ul style="list-style-type: none"> <li>• Retrieve System Details</li> </ul>


<p><b>Task Instances</b></p>	<ul style="list-style-type: none"> <li>• Cancel a Task Instance</li> <li>• Clear All Dependencies</li> <li>• Clear Exclusive Dependencies</li> <li>• Clear Predecessor Dependencies</li> <li>• Clear Time Dependency</li> <li>• Clear Virtual Resource Dependencies</li> <li>• Delete a Task Instance</li> <li>• Force Finish a Task Instance</li> <li>• Force Finish/Cancel a Task Instance</li> <li>• Hold a Task Instance</li> <li>• Issue Set Completed Command for a Manual Task Instance</li> <li>• Issue Set Started Command for a Manual Task Instance</li> <li>• List Task Instances</li> <li>• List Task Instance Variables (Show Variables)</li> <li>• Release a Task from Hold</li> <li>• Rerun a Task Instance</li> <li>• Retrieve Task Instance Output</li> <li>• Set or Modify Wait Time/Duration for Task Instance</li> <li>• Set Priority for a Task Instance</li> <li>• Skip a Task Instance</li> <li>• Skip a Task Instance Path</li> <li>• Unskip a Task Instance</li> </ul>
<p><b>Tasks</b></p>	<ul style="list-style-type: none"> <li>• Create a Task</li> <li>• Delete a Task</li> <li>• Launch a Task</li> <li>• List Tasks</li> <li>• Modify a Task</li> <li>• Read a Task</li> </ul>
<p><b>Triggers</b></p>	<ul style="list-style-type: none"> <li>• Assign an Execution User to a Trigger</li> <li>• Create a Trigger</li> <li>• Delete a Trigger</li> <li>• Enable/Disable a Trigger</li> <li>• List Trigger Qualifying Times</li> <li>• List Triggers</li> <li>• Modify a Trigger</li> <li>• Modify Time of Time Trigger</li> <li>• Read a Trigger</li> <li>• Trigger a Task</li> <li>• Unassign an Execution User from a Trigger</li> </ul>
<p><b>Universal Templates</b></p>	<ul style="list-style-type: none"> <li>• Create a Universal Template</li> <li>• Delete a Universal Template</li> <li>• List Universal Templates</li> <li>• Modify a Universal Template</li> <li>• Read a Universal Template</li> </ul>

<b>Users</b>	<ul style="list-style-type: none"> <li>• Create a User</li> <li>• Delete a User</li> <li>• List Users</li> <li>• Modify a User</li> <li>• Read a User</li> </ul>
<b>Variables</b>	<ul style="list-style-type: none"> <li>• Create a Global Variable</li> <li>• Delete a Global Variable</li> <li>• List Variables</li> <li>• Modify a Global Variable</li> <li>• Read a Global Variable</li> <li>• Set Variables</li> </ul>
<b>Virtual Resources</b>	<ul style="list-style-type: none"> <li>• Create a Virtual Resource</li> <li>• Delete a Virtual Resource</li> <li>• List Virtual Resources</li> <li>• Modify a Virtual Resource</li> <li>• Read a Virtual Resource</li> <li>• Set Limit on a Virtual Resource</li> </ul>
<b>Workflow Task Instances</b>	<ul style="list-style-type: none"> <li>• Insert a Task into a Workflow with Dependencies</li> <li>• List Predecessors / Successors of a Task Instance in a Workflow</li> </ul>
<b>Workflow Tasks</b>	<ul style="list-style-type: none"> <li>• Create a Workflow</li> <li>• Modify a Workflow</li> <li>• Read a Workflow</li> <li>• Workflow Tasks and Dependencies</li> </ul>

## Methods of API Operations

Every API operation is performed using one of the following methods.

Method	Description
GET	Retrieves records from the Controller database.
POST	Creates, or performs an action on, a record in the Controller database.

PUT	<p>Modifies a record in the Controller database.</p> <div style="background-color: #ffffcc; padding: 10px; margin: 10px 0;"> <p> <b>Note</b>                      PUT, by itself, actually <i>replaces</i> an existing record with whatever information you include in the PUT operation. If you include only partial record information in a PUT, the record in the database will then contain only that information.</p> <p>In order to <i>modify</i> information in a record and retain all of its unmodified information, you must first GET the record from the database, modify (add/delete/change) information in the record, and then PUT the record back in the database.</p> </div>
DELETE	<p>Deletes a record in the Controller database.</p>

## Access

Access to the Controller requires basic HTTP authentication over HTTPS.

The following methods are used:

- HTTP GET is used for data look up (no data is modified).
- HTTP PUT and POST are used for data modification such as create and update.

## Returned Messages

The following table identifies the status codes (part of the HTTP/1.1 standard) that can be returned.

Status Code	Description
200	Success
400	Bad request data.
401	User does not have authorization (password identification failure).
403	User does not have permission to access Web Services.  Access options are set via: <ul style="list-style-type: none"> <li>• <a href="#">System Default Web Service Access</a> Universal Controller system property.</li> <li>• <a href="#">User Details (Web Service Access field)</a></li> </ul>
404	Resource not found.
500	All other errors.  For <a href="#">List Variables</a> , 500 is returned if the Web Service fails due to invalid parameters. (A status description also is returned.)

Any other failure status codes may be returned by the underlying RESTful services. Most resources (Controller records) are returned as XML.

You can check status codes in the [Audits](#) and the [opswise.log](#) file to determine the cause if their Web Service client is not displaying the error message that comes back with the response.

## User Restriction

You can be restricted from logging in to the RESTful Web Services API either of two ways:

1. The system level default for RESTful Web Services API access, specified by the [System Default Web Service Access](#) Universal Controller system property, has been set to **No**, and the [Web Service Access](#) field in the [User Details](#) for your user account is set to **-- System Default --**.
2. The [Web Service Access](#) field is set to **No**, which overrides the [System Default Web Service Access](#) value.

If either restriction is in place, the following error message will be written to the [Audits](#) table and the [opswise.log](#) file when you attempt to access the RESTful Web Services API:

```
User <your user name> not permitted to use Web Services. Please check with your administrator.
```

To remove the restriction, the system administrator must either:

- Set the System Default Web Service Access property to **Yes** and set the **Web Service access** field on the User Definition screen for your user account to **-- System Default --**.
- Set the **Web Service access** field on the User Definition screen for your user account to **Yes**.

## Password Expiration

While a password is [expired](#), RESTful Web Services API access will be prohibited until the password has been changed.



### Note

Password expiration is not applicable to LDAP authenticated users.

## Agent Web Services

- Overview
- Delete an Agent
- List Agents
- Modify an Agent
- Read an Agent
- Resume an Agent
- Set an Agent Task Execution Limit
- Suspend an Agent

### Overview

Universal Controller supports the following RESTful-based web services for Agent operations, which are listed alphabetically on this page.

- Delete an Agent
- List Agents
- Modify an Agent
- Read an Agent
- Resume an Agent
- Set an Agent Task Execution Limit
- Suspend an Agent

Formatting specifications for each web service, including details about property requirements, are provided.

### Delete an Agent

	Description
URI	<code>http://host_name/opswise/resources/agent</code>
HTTP Method	DELETE
Description	Deletes an Agent.
URI Parameters	See <a href="#">Delete an Agent: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li>• <code>http://localhost:8080/opswise/resources/agent?agentname=test-pc-SS0001</code></li> <li>• <code>http://localhost:8080/opswise/resources/agent?agentid=SS0001</code></li> </ul>
Authentication	HTTP Basic



Example Response	<ul style="list-style-type: none"> <li>• Success: Status 200 /OK Agent deleted successfully</li> <li>• Failure: Status 400 /Bad Request Mutual exclusion violation. Cannot specify agentname and agentid at the same time.</li> </ul>
------------------	---

### Delete an Agent: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
agentid	Unique ID for this Agent, created during installation.		Y (unless agentname is specified)	agentname
agentname	Name used within the Controller to identify this agent.	Maximum 40 alphanumeric.	Y (unless agentid is specified)	agentid

### List Agents

	Description
URI	<a href="http://host_name/opswise/resources/agent/list">http://host_name/opswise/resources/agent/list</a>
HTTP Method	GET
Description	Retrieves information on all <a href="#">agents</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/agent/list">http://localhost:8080/opswise/resources/agent/list</a>
Authentication	HTTP Basic
Produces Content-Type	application/xml, application/json
Example	See <a href="#">List Agents: XML and JSON Examples</a> .
Properties	See <a href="#">List Agents: Properties</a> .

### List Agents: XML and JSON Examples

The following XML and JSON examples are for the List Agents web service.

<b>XML</b>	<b>JSON</b>
------------	-------------

**XML**

```

<agents>
  <agent>
    <hostName>test-pc<
  /hostName>
    <ipAddress>10.253.1.111<
  /ipAddress>
    <name>test-pc-SS0001<
  /name>
    <outputProhibited>>false<
  /outputProhibited>
    <queueName>SS0001<
  /queueName>
    <status>Active</status>
    <suspended>>false<
  /suspended>
    <sysID
>2f5885727ec947df9c03ed7d9ca6464d<
  /sysID>
    <type>Windows</type>
    <version>6.4.3.0</version
>
  </agent>
  <agent>
    <hostName>test2-pc<
  /hostName>
    <ipAddress>10.253.1.112<
  /ipAddress>
    <name>test-pc-SS0002<
  /name>
    <outputProhibited>>false<
  /outputProhibited>
    <queueName>SS0002<
  /queueName>
    <status>Active</status>
    <suspended>>false<
  /suspended>
    <sysID
>2f5885727ec947df9c03ed7d9ca6465e<
  /sysID>
    <type>Windows</type>
    <version>6.4.3.0</version
>
  </agent>
</agents>

```

**JSON**

```

[ {
  "hostName": "test-pc",
  "ipAddress": "10.253.1.111",
  "name": "test-pc-SS0001",
  "outputProhibited": false,
  "queueName": "SS0001",
  "status": "Active",
  "suspended": false,
  "sysID":
"2f5885727ec947df9c03ed7d9ca6464d",
  "type": "Windows",
  "version": "6.4.3.0"
},
{
  "hostName": "test2-pc",
  "ipAddress": "10.253.1.112",
  "name": "test-pc-SS0002",
  "outputProhibited": false,
  "queueName": "SS0002",
  "status": "Active",
  "suspended": false,
  "sysID":
"2f5885727ec947df9c03ed7d9ca6464e",
  "type": "Windows",
  "version": "6.4.3.0"
}
]

```

**List Agents: Properties**

Property	UI Field Name	Description
----------	---------------	-------------

hostName	Host Name	IP address or domain/name of the host machine where the Agent resides.
ipAddress	IP Address	TCP/IP address of the machine where the Agent is running.
name	Agent Name	Name used within the Controller to identify this Agent.
outputProhibited	Retrieve Output Prohibited	Specification (true or false) for whether or not Retrieve Output requests are disallowed from being performed for this Agent.
queueName	Agent Id	Unique ID for this Agent.
status	Status	Status of the Agent.
suspended	Suspended	Indication (true or false) of whether or not the Agent currently is suspended.
sysID	n/a	System ID field in the database for this Agent record.
type	Operating System	Operating system on which the Agent is running.
version	Version	Version number of the Agent program.

## Modify an Agent

	Description
URI	<a href="http://host_name/opswise/resources/agent">http://host_name/opswise/resources/agent</a>
HTTP Method	PUT
Description	<p>Modifies the Agent specified by the <code>sysId</code>.</p> <p>To modify Agent properties without modifying related records, see the <code>excludeRelated</code> property.</p>
Example URI	<a href="http://localhost:8080/opswise/resources/agent">http://localhost:8080/opswise/resources/agent</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Agent: XML and JSON Examples</a> .
Agent Properties	See <a href="#">Agent: Properties</a> .
Email Notification Properties	See <a href="#">Agent: Email Notification Properties</a> .
SNMP Notification Properties	See <a href="#">Agent: SNMP Notification Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the Agent with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> <li>Status 400 /Bad Update Agent failed. A duplicate value has been detected. Agent name must be unique.</li> </ul>

## Read an Agent

	Description
URI	<a href="http://host_name/opswise/resources/agent">http://host_name/opswise/resources/agent</a>
HTTP Method	GET
Description	Retrieves information on a specific Agent.
URI Parameters	See <a href="#">Read an Agent: URI Parameters</a> .
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example URI	<a href="http://localhost:8080/opswise/resources/agent?agentid=SS0001">http://localhost:8080/opswise/resources/agent?agentid=SS0001</a>
Example Response	See <a href="#">Agent: XML and JSON Examples</a> .
Agent Properties	See <a href="#">Agent: Properties</a> .
Email Notification Properties	See <a href="#">Agent: Email Notification Properties</a> .
SNMP Notification Properties	See <a href="#">Agent: SNMP Notification Properties</a> .

### Read an Agent: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
agentid	ID used within the Controller to identify this Agent.	String; URI parameter.	Y (unless agentname is specified)	agentname
agentname	Name used within the Controller to identify this Agent.	String; URI parameter.	Y (unless agentid is specified)	agentid

### Agent: XML and JSON Examples

XML	JSON
<p>XML</p> <pre>&lt;windowsAgent&gt;   &lt;authVersion&gt;2&lt;/authVersion&gt;   &lt;build&gt;120&lt;/build&gt;   &lt;buildDate&gt;20160906121725&lt; /buildDate&gt; &lt;cpu&gt;AMD64 (8 CPU(s))&lt;/cpu&gt; &lt;cpuLoad&gt;10&lt;/cpuLoad&gt; &lt;credentials&gt;cred&lt;/credentials&gt;</pre>	<p>JSON</p> <pre>{   "type": "windowsAgent",   "authVersion": 2,   "build": "100",   "buildDate": "20170824174216",   "cpu": "AMD64 (8 CPU(s))",   "cpuLoad": 5,   "credentials": null,</pre>

```

<currentCount>0</currentCount>
<hbDate>2016-11-19 08:55:45 -0700<
/hbDate>
<hbIntvl>120</hbIntvl>
<hostName>test-pc</hostName>
<ipAddress>10.253.1.77</ipAddress>
<jobs>1</jobs>
<limitAmount>10</limitAmount>
<limitType>Limited</limitType>
<logLevel>Errors</logLevel>
<name>test-pc-SS0001</name>
<notifications>
  <emailNotification>
    <status>Offline,Active</status>
    <sysId
>2b7286b87a7048399fbd95c01a380002<
/sysId>
    <bcc />
    <body />
    <cc />
    <emailConnection>Opwise - Gmail
Account</emailConnection>
    <emailTemplate>Opwise -
Template</emailTemplate>
    <replyTo />
    <subject />
    <to />
  </emailNotification>
  <snmpNotification>
    <status>Offline</status>
    <sysId
>21d992c72be44b159aac91c4ee9f40c6<
/sysId>
    <severity>Minor</severity>
    <snmpManager>SNMP Manager<
/snmpManager>
  </snmpNotification>
</notifications>
<omsServer>localhost:7878<
/omsServer>
<opwiseGroups>
  <opwiseGroup>group1</opwiseGroup>
</opwiseGroups>
<os>Microsoft Windows</os>
<osRelease>Home Edition (Build
9200)</osRelease>
<outputProhibited>false<
/outputProhibited>
<pid>13356</pid>
<queueName>SS0001</queueName>
<startDate>2016-11-15 06:09:42
-0700</startDate>
<status>Offline</status>
<suspended>false</suspended>
<sysId
>2f5885727ec947df9c03ed7d9ca6464d<
/sysId>

```

```


"currentCount": 0,
"hbDate": null,
"hbIntvl": 120,
"hostName": "Mark-4",
"ipAddress": "192.168.1.21",
"jobs": 1,
"limitAmount": 5,
"limitType": "Limited",
"logLevel": "Informational",
"name": "Mark-4 - AGNT001",
"notifications": {
  "emailNotifications": [ {
    "bcc": null,
    "body":
"${ops_system_identifiler}",
    "cc": null,
    "emailConnection":
"ecu-office-365",
    "emailTemplate":
"agent-built-variables",
    "replyTo": null,
    "status": "Offline,\nActive",
    "subject": null,
    "sysId":
"e120f05abd104e2e952c6b9e693891ab",
    "to": "support@stonebranch.com"
  } ],
  "snmpNotifications": [ {
    "severity": "Minor",
    "snmpManager": "test_manager",
    "status": "Offline",
    "sysId":
"fc4f4e8b0dea4b51a77a3c20f7e62b2a"
  } ]
},
"omsServer": "localhost:7878",
"opwiseGroups": [ "Accounting" ],
"os": "Microsoft Windows",
"osRelease": "Home Edition (Build
9200)",
"outputProhibited": false,
"pid": null,
"queueName": "AGNT001",
"startDate": null,
"status": "Offline",
"suspended": false,
"sysId":
"6a363c84d9bd4730bfd6cf43129b4984",

```

```
<version>6.4.3.0</version>
</windowsAgent>
```

```
"version": "6.4.3.0"
}
```

## Agent: Properties

Property	UI Field Name	Description	Specifications
authVersion	Authentication Version	Type of encryption in use for this Agent.	Read only.
build	Build Id	Build ID of the Agent.	Read only.
buildDate	Build Date	Date that the Agent program was last built.	Read only.
cpu	CPU	Information about the CPU on the Agent machine.	Read only.
cpuLoad	CPU Load	Current CPU load on the Agent machine.	Read only; Integer. Expressed as a percentage. For example, 1 means 1% currently utilized.
credentials	Credentials	<a href="#">Credentials</a> under which this Agent runs tasks. These credentials are overridden by any credentials provided in the task definition for any tasks being run by this Agent.	
currentCount	Current Task Count	If <code>limitType</code> is Limited; Current number of tasks currently being run by this Agent.	Read only.
excludeRelated	n/a	For the Modify Agent web service; specification for whether or not to exclude related records from the update, even if they are provided in the request.  <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML, <code>excludeRelated</code> is specified as an attribute in the <code>&lt;agent&gt;</code> element.</p> </div>	Valid values: true/false (default is false).
hbDate	Last Heartbeat	Date and time that the most recent heartbeat was received from the Agent.	Read only.
hbIntvl	Heartbeat Interval	Heartbeat interval (in seconds). The heartbeat is a status message sent from the Agent to the Controller.	Read only; Integer.
hostName	Host Name	Read only; IP address or domain/name of the host machine where the resource resides.	Read only.
ipAddress	IP Address	Read only; TCP/IP address of the machine where the Agent is running.	Read only.
jobs	Jobs Run	Read only; Total number of jobs that have been run through the Controller to this Agent.	Read only; Integer.
limitAmount	Limit Amount	If <code>limitType</code> is Limited; Number of tasks that can be running at the same time by the Agent.	Integer.

limitType	Task Execution Limit	Specification for whether a Limited or Unlimited number of task instances can be run concurrently on the Agent.	Valid values: <ul style="list-style-type: none"> <li>As String = Unlimited, As Value = 1</li> <li>As String = Limited, As Value = 2</li> </ul> Default is Unlimited (1).
outputProhibited	Retrieve Output Prohibited	Specification for whether or not Retrieve Output requests are disallowed from being performed for this Agent.	Read only; Boolean. Valid values: true/false.
logLevel	Log Level	Level of logging that the Agent can perform.	Valid values: <ul style="list-style-type: none"> <li>Sever Error</li> <li>Errors</li> <li>Warnings</li> <li>Informational</li> <li>Debug</li> <li>Trace</li> </ul> Default is Informational.
name	Name	Name used within the Controller to identify this Agent.	
omsServer	OMS Server	Host name of the OMS Server.	Read only.
opwiseGroups	Member of Business Services	One or more <a href="#">Business Services</a> that this Agent belongs to.	Read only.
os	Operating System	Operating system on which the Agent is running.	Read only.
osRelease	Operating System Release	Release information for the operating system on which the Agent is running.	Read only.
pid	PID	Process ID of the Agent.	Read only.
queueName	Agent ID	Unique ID for this Agent, created during installation.	Read only.
startDate	Started Date	Date/timestamp when the Agent was last started.	Read only.
status	Status	Status of the Agent.	Read only. Valid values: <ul style="list-style-type: none"> <li>Offline</li> <li>Active</li> <li>Passive</li> </ul>
suspended	Suspended	Indication that the Agent's ability to run tasks has been suspended.	Read only; Boolean. Valid values: true/false.
sysid	n/a	System ID field in the database for this Agent.	Read only.
version	Version	Version number of the Agent program.	Read only.

## Agent: Email Notification Properties

Property	UI Field Name	Description	Specifications
bcc	Bcc	Email address of the party being sent a blind (hidden) copy of the email, if any.	Use commas to separate multiple recipients. <a href="#">Variables and Functions</a> are supported.
body	Body	Text of the email message.	<a href="#">Variables and Functions</a> are supported. If the <code>emailTemplate</code> contains text in the body, this text is appended.
cc	Cc	Email address of the party being sent a copy of the email, if any.	Use commas to separate multiple recipients. <a href="#">Variables and Functions</a> are supported.
emailConnection	Email Connection	Name of an <a href="#">Email Connection</a> .	If you specify both an <code>emailConnection</code> and an <code>emailTemplate</code> , the Controller uses the <code>emailConnection</code> .
emailTemplate	Email Template	Name of an <a href="#">Email Template</a> .	If you specify both an <code>emailConnection</code> and an <code>emailTemplate</code> , the Controller uses the <code>emailConnection</code> .
replyTo	Reply-To	Email address of the sender of the email.	Use commas to separate multiple recipients. <a href="#">Variables and Functions</a> are supported.
status	Status Options	Comma-separated list of statuses	Valid values: <ul style="list-style-type: none"> <li>• As String = Offline, As Value = 0</li> <li>• As String = Active, As Value = 1</li> </ul>
subject	Subject	Subject line of the email.	<a href="#">Variables and Functions</a> are supported.
sysId	n/a	<code>sys_id</code> used within the Controller to identify this Email Notification.	
to	To	Email address of the recipient.	Use commas to separate multiple recipients <a href="#">Variables and Functions</a> are supported.

## Agent: SNMP Notification Properties

Property	UI Field Name	Description	Specifications
severity	Notification Severity	Severity level of this notification.	Valid values: <ul style="list-style-type: none"> <li>• As String = Normal, As Value = 1</li> <li>• As String = Warning, As Value = 2</li> <li>• As String = Minor, As Value = 3</li> <li>• As String = Major, As Value = 4</li> <li>• As String = Critical, As Value = 5</li> </ul> Default is Normal (1).
snmpManager	SNMP Manager	<a href="#">SNMP Manager</a> that will receive this notification.	



status	Status Options	Comma-separated list of statuses	Valid values: <ul style="list-style-type: none"> <li>As String = Offline, As Value = 0</li> <li>As String = Active, As Value = 1</li> </ul>
sysId	n/a	sys_id used within the Controller to identify this SNMP Notification.	

## Resume an Agent

	Description
URI	<a href="http://host_name/opswise/resources/agent/ops-resume-agent">http://host_name/opswise/resources/agent/ops-resume-agent</a>
HTTP Method	POST
Description	Resumes the specified agent.
Example URI	<a href="http://localhost:8080/opswise/resources/agent/ops-resume-agent">http://localhost:8080/opswise/resources/agent/ops-resume-agent</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Resume an Agent: XML and JSON Examples</a> .
Request Properties	See <a href="#">Resume an Agent: Request Properties</a> .
Example Response	See <a href="#">Resume an Agent: XML and JSON Examples</a> .

## Resume an Agent: XML and JSON Examples

Example	XML	JSON
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<p>Example Request</p>	<p>XML</p> <p><b>By Agent Name</b></p> <pre>&lt;resume-agent&gt;   &lt;agentName&gt;XPS-8300 - AGNT0001&lt;/agentName&gt; &lt;/resume-agent&gt;</pre> <p><b>By Agent ID</b></p> <pre>&lt;resume-agent&gt;   &lt;agentID&gt;AGNT0001&lt;/agentID&gt; &lt;/resume-agent&gt;</pre>	<p>JSON</p> <pre>{   "agentName": "Mark-4 - AGNT001" } or {   "agentID": "AGNT001" }</pre>
<p>Example Response</p>	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;resume_agent&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully resumed agent "XPS-8300 - AGNT0001".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "resume_agent",   "success": true,   "info": "Successfully resumed agent "Mark-4 - AGNT001".",   "errors": "" }</pre>

### Resume an Agent: Request Properties

Properties	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
agentID	Agent ID	Unique ID for this Agent, created during installation.		Y (unless agentName is specified)	agentName
agentName	Agent Name	Name used within the Controller to identify this resource.	Maximum 40 alphanumeric.	Y (unless agentID is specified)	agentID

### Set an Agent Task Execution Limit

	Description
URI	<a href="http://host_name/opswise/resources/agent/ops-set-agent-task-execution-limit">http://host_name/opswise/resources/agent/ops-set-agent-task-execution-limit</a>

HTTP Method	POST
Description	Sets the <a href="#">task execution limit</a> for the specified agent.
Example URI	<a href="http://localhost:8080/opswise/resources/agent/ops-set-agent-task-execution-limit">http://localhost:8080/opswise/resources/agent/ops-set-agent-task-execution-limit</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Set an Agent Task Execution Limit: XML and JSON Examples</a> .
Request Properties	See <a href="#">Set an Agent Task Execution Limit: Request Properties</a> .
Example Response	See <a href="#">Set an Agent Task Execution Limit: XML and JSON Examples</a> .

### Set an Agent Task Execution Limit: XML and JSON Examples

Example	XML	JSON
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<p>Example Request</p>	<p>XML</p> <p><b>By Agent Name</b> <b>Limit Type: Limited</b></p> <pre>&lt;set-agent-task-execution-limit&gt;   &lt;agentName&gt;XPS-8300 - AGNT0001&lt;/agentName&gt;   &lt;limitAmount&gt;10&lt;/limitAmount&gt;   &lt;limitType&gt;Limited&lt;/limitType&gt; &lt;/set-agent-task-execution-limit&gt;</pre> <p><b>By Agent ID</b> <b>Limit Type: Limited</b></p> <pre>&lt;set-agent-task-execution-limit&gt;   &lt;agentID&gt;AGNT0001&lt;/agentID&gt;   &lt;limitAmount&gt;10&lt;/limitAmount&gt;   &lt;limitType&gt;Limited&lt;/limitType&gt; &lt;/set-agent-task-execution-limit&gt;</pre> <p><b>By Agent ID</b> <b>Limit Type: Unlimited</b></p> <pre>&lt;set-agent-task-execution-limit&gt;   &lt;agentID&gt;AGNT0001&lt;/agentID&gt;   &lt;limitType&gt;Unlimited&lt;/limitType&gt; &lt;/set-agent-task-execution-limit&gt;</pre>	<p>JSON</p> <p><b>By Agent Name</b> <b>Limit Type: Limited</b></p> <pre>{   "agentName": "Mark-4 - AGNT001",   "limitAmount": 10,   "limitType": "Limited" }</pre> <p><b>By Agent ID</b> <b>Limit Type: Limited</b></p> <pre>{   "agentID": "AGNT001",   "limitAmount": 10,   "limitType": "Limited" }</pre> <p><b>By Agent ID</b> <b>Limit Type: Unlimited</b></p> <pre>{   "agentID": "AGNT001",   "limitType": "Unlimited" }</pre>
<p>Example Response</p>	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;set_agent_task_execution_limit&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Successfully updated agent "XPS-8300 - AGNT0001" with task limit type: "Limited", amount: "10".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "set_agent_task_execution_limit",   "success": true,   "info": "Successfully updated agent "Mark-4 - AGNT001" with task limit type: "Unlimited".",   "errors": "" }</pre>

### Set an Agent Task Execution Limit: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
agentID	Agent ID	Unique ID for this Agent, created during installation.		Y (unless agentName is specified)	agentName
agentName	Agent Name	Name used within the Controller to identify this resource.	Maximum 40 alphanumerics.	Y (unless agentID is specified)	agentID
limitAmount	Limit Amount	Number of tasks that can be running at the same time by the Agent.		Y (if limitType is Limited (2)).	
limitType	Task Execution Limit	<p>Specification for whether a Limited or Unlimited number of task instances can be run concurrently on the Agent.</p> <p>For purposes of imposing this task execution limit, running task instances are those in any of these statuses: Cancel Pending, Queued, Received, Running, Submitted, and Started.</p>	Valid values: <ul style="list-style-type: none"> <li>As String = Unlimited, As Value = 1</li> <li>As String = Limited, As Value = 2</li> </ul>	Y	

## Suspend an Agent

	Description
URI	<a href="http://host_name/opswise/resources/agent/ops-suspend-agent">http://host_name/opswise/resources/agent/ops-suspend-agent</a>
HTTP Method	POST
Description	Suspends the specified agent.
Example URI	<a href="http://localhost:8080/opswise/resources/agent/ops-suspend-agent">http://localhost:8080/opswise/resources/agent/ops-suspend-agent</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Suspend an Agent: XML and JSON Examples</a> .
Request Properties	See <a href="#">Suspend an Agent: Request Properties</a> , below.

Example Response      See [Suspend an Agent: XML and JSON Examples](#).

### Suspend an Agent: XML and JSON Examples

Example	XML	JSON
Example Request	<p>XML</p> <p><b>By Agent Name</b></p> <pre>&lt;suspend-agent&gt;   &lt;agentName&gt;XPS-8300 - AGNT0001&lt;/agentName&gt; &lt;/suspend-agent&gt;</pre> <p><b>By Agent ID</b></p> <pre>&lt;suspend-agent&gt;   &lt;agentID&gt;AGNT0001&lt;/agentID&gt; &lt;/suspend-agent&gt;</pre>	<p>JSON</p> <p><b>By Agent Name</b></p> <pre>{   "agentName": "Mark-4 - AGNT001" }</pre> <p><b>By Agent ID</b></p> <pre>{   "agentID": "AGNT001" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;suspend_agent&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Successfully suspended agent "XPS-8300 - AGNT0001".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "suspend_agent",   "success": true,   "info": "Successfully suspended agent "Mark-4 - AGNT001".",   "errors": "" }</pre>

### Suspend an Agent: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
agentID	Agent ID	Unique ID for this Agent, created during installation.		Y (unless agentName is specified)	agentName
agentName	Agent Name	Name used within the Controller to identify this resource.	Maximum 40 alphanumeric.	Y (unless agentID is specified)	agentID

## Agent Cluster Web Services

- Overview
- Create an Agent Cluster
- Delete an Agent Cluster
- List Agent Clusters
- Modify an Agent Cluster
- Read an Agent Cluster
- Resolve an Agent Cluster
- Resume an Agent Cluster
- Resume an Agent Cluster Membership
- Return an Agent from an Agent Cluster
- Set an Agent Cluster Task Execution Limit
- Suspend an Agent Cluster
- Suspend an Agent Cluster Membership

### Overview

Universal Controller supports the following RESTful-based web services for Agent Cluster operations, which are listed alphabetically on this page.

- Create an Agent Cluster
- Delete an Agent Cluster
- List Agent Clusters
- Modify an Agent Cluster
- Read an Agent Cluster
- Resolve an Agent Cluster
- Resume an Agent Cluster
- Resume an Agent Cluster Membership
- Return an Agent from an Agent Cluster
- Set an Agent Cluster Task Execution Limit
- Suspend an Agent Cluster
- Suspend an Agent Cluster Membership

Formatting specifications for each web service, including details about property requirements, are provided.

### Create an Agent Cluster


	Description
URI	<a href="http://host_name/opswise/resources/agentcluster">http://host_name/opswise/resources/agentcluster</a>
HTTP Method	POST
Description	Creates a new <a href="#">Agent Cluster</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/agentcluster">http://localhost:8080/opswise/resources/agentcluster</a>
Consumes Content-Type	application/xml, application/json

Produces Content-Type	n/a
Example Request	See <a href="#">Read an Agent Cluster: XML and JSON Examples</a> .
Agent Cluster Properties	See <a href="#">Agent Cluster Properties</a> .
Agent Properties	See <a href="#">Agent Properties</a> .
Agent Cluster: Email Notification Properties	See <a href="#">Agent Cluster Email Notification Properties</a> .
Agent Cluster: SNMP Notification Properties	See <a href="#">Agent Cluster SNMP Notification Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the agent cluster with sysId {sysId}.</li> </ul>

## Agent Cluster Properties

Property	UI Field Name	Description	Specifications	Required
currentCount	Current Task Count	If <code>limitType</code> is Limited (2); Current number of tasks currently being run by the Agents in this agent cluster.	Integer; Read only.	N
distribution	Distribution	Method used to select an Agent in the Agent Cluster.	Valid Values: <ul style="list-style-type: none"> <li>As String = Any, As Value = 1</li> <li>As String = Round Robin, As Value = 2</li> <li>As String = Lowest CPU Utilization, As Value = 3</li> <li>As String = Network Alias, As Value = 4</li> </ul> Default is Any (1).	N
lastAgentUsed	Last Agent Used	Agent that was selected the last time a task was sent to this Agent Cluster.	Read only.	N
lastResolution	Last Resolution	If <code>distribution</code> is Network Alias (4); Last attempted time of Network Alias resolution.	Read only.	N
limitAmount	Limit Amount	If <code>limitType</code> is Limited (2); Number of tasks that can be running at the same time by the Agents in this agent cluster.		N
limitType	Task Execution Limit	Specification for whether a Limited or Unlimited number of task instances can be run concurrently by the Agents in this Agent Cluster.	Valid Values: <ul style="list-style-type: none"> <li>As String = Unlimited, As Value = 1</li> <li>As String = Limited, As Value = 2</li> </ul> Default is Unlimited (1).	N
name	Cluster Name	Name of this Agent Cluster.		Y



networkAlias	Network Alias	If distribution is Network Alias (4); Network alias (or VIP).		N
networkAliasPort	Agent Port	If distribution is Network Alias (4); Network alias (or VIP) port that the Agent's Universal Broker is listening on.		N
opswiseGroups	Member of Business Services	<p>List of Business Services that this Agent Cluster belongs to.</p> <p>Format:</p> <p><b>XML</b></p> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;test&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <p><b>JSON</b></p> <pre>"opswiseGroups": [ "test" ]</pre>		N
resolutionDescription	Resolution Description	If distribution is Network Alias (4); Description of the last attempted resolution.	Read only.	N
resolutionStatus	Resolution Status	If distribution is Network Alias (4); Status of the last resolution of the Network Alias.	Read only.	N
retainSysIds	n/a	<p>Specification for whether or not the Create an Agent Cluster web service will persist the <code>sysId</code> property.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> is included in the request, <code>sysId</code> will be persisted to the database.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> is included in the request, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;agentCluster&gt;</code> element.</p>	Optional; Valid values: true/false (default is true).	N
suspended	Suspended	Indication of whether or not the ability for this cluster of Agents to run tasks has been suspended.	Read only; Boolean; Valid Values: true/false.	N
sysId	n/a	<code>sys_id</code> used within the Controller to identify this Agent Cluster.		N

type	n/a	Type of Agent Cluster.	For List Agent Clusters: Read only; Valid values: <ul style="list-style-type: none"> <li>• Windows</li> <li>• Linux/Unix</li> </ul> For Create/Modify/Read Agent Clusters: Applicable to JSON only; Specifies agent cluster type to create/modify. Valid values: windowsAgentCluster and unixAgentCluster	N
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## Agent Properties

Property	UI Field Name	Description	Specifications	Required
agentName	Agent	Name of an Agent in the Agent Cluster.		Y
membershipSuspended	Membership Suspended	Indication of whether or not the Agent has been temporarily suspended from the Agent Cluster; the Agent will not be available as a selection from the Agent Cluster while it is suspended.	Read only; Boolean; Valid Values: true/false.	N
type	n/a	Type of Agent	Read only; Valid values: <ul style="list-style-type: none"> <li>• Windows</li> <li>• Linux/Unix</li> </ul>	N
sysId	n/a	sys_id used within the Controller to identify the Agent Cluster membership of this Agent.		N

## Agent Cluster: Email Notification Properties

Property	UI Field Name	Description	Specifications
bcc	Bcc	Email address of the party being sent a blind (hidden) copy of the email, if any.	Use commas to separate multiple recipients. <a href="#">Variables and Functions</a> are supported.
body	Body	Text of the email message.	<a href="#">Variables and Functions</a> are supported. If the emailTemplate contains text in the body, this text is appended.
cc	Cc	Email address of the party being sent a copy of the email, if any.	Use commas to separate multiple recipients. <a href="#">Variables and Functions</a> are supported.
emailConnection	Email Connection	Name of an <a href="#">Email Connection</a> .	If you specify both an emailConnection and an emailTemplate, the Controller uses the emailConnection.
emailTemplate	Email Template	Name of an <a href="#">Email Template</a> .	If you specify both an emailConnection and an emailTemplate, the Controller uses the emailConnection.
replyTo	Reply-To	Email address of the sender of the email.	Use commas to separate multiple recipients. <a href="#">Variables and Functions</a> are supported.

state	Notification State	Comma-separated list of Notification states	Valid values: <ul style="list-style-type: none"> <li>As String = Agents Unavailable, As Value = 1</li> <li>As String = Agent Available, As Value = 2</li> <li>As String = Suspended, As Value = 4</li> <li>As String = Resumed, As Value = 8</li> </ul>
subject	Subject	Subject line of the email.	<a href="#">Variables and Functions</a> are supported.
sysId	n/a	sys_id used within the Controller to identify this Email Notification.	
to	To	Email address of the recipient.	Use commas to separate multiple recipients <a href="#">Variables and Functions</a> are supported.

### Agent Cluster: SNMP Notification Properties

Property	UI Field Name	Description	Specifications
severity	Notification Severity	Severity level of this notification.	Valid values: <ul style="list-style-type: none"> <li>As String = Normal, As Value = 1</li> <li>As String = Warning, As Value = 2</li> <li>As String = Minor, As Value = 3</li> <li>As String = Major, As Value = 4</li> <li>As String = Critical, As Value = 5</li> </ul> Default is Normal (1).
snmpManager	SNMP Manager	<a href="#">SNMP Manager</a> that will receive this notification.	
state	Notification State	Comma-separated list of Notification states	Valid values: <ul style="list-style-type: none"> <li>As String = Agents Unavailable, As Value = 1</li> <li>As String = Agent Available, As Value = 2</li> <li>As String = Suspended, As Value = 4</li> <li>As String = Resumed, As Value = 8</li> </ul>
sysId	n/a	sys_id used within the Controller to identify this SNMP Notification.	

### Delete an Agent Cluster

	Description
URI	<a href="http://host_name/opswise/resources/agentcluster">http://host_name/opswise/resources/agentcluster</a>
HTTP Method	DELETE
Description	Deletes a specific <a href="#">Agent Cluster</a> .

URI Parameters	See <a href="#">Delete an Agent Cluster: URI Parameters</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/agentcluster?agentclusterid=35dc94a7a8834d28b51e03b5780cd90c">http://localhost:8080/opswise/resources/agentcluster?agentclusterid=35dc94a7a8834d28b51e03b5780cd90c</a>
Authentication	HTTP Basic
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Agent cluster deleted successfully.</li> <li>• Status 400 /Bad Request Mutual exclusion violation. Cannot specify agentclustername and agentclusterid at the same time.</li> <li>• Status 404 /Not Found A custom day with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>

### Delete an Agent Cluster: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
agentclusterid	Unique ID for this Agent Cluster.		Y (unless agentclustername is specified)	agentclustername
agentclustername	Name used within the Controller to identify this Agent Cluster.		Y (unless agentclusterid is specified)	agentclusterid

### List Agent Clusters

	Description
URI	<a href="http://host_name/opswise/resources/agentcluster/list">http://host_name/opswise/resources/agentcluster/list</a>
HTTP Method	GET
Description	Retrieves information on all Agent Clusters.
Example URI	<a href="http://localhost:8080/opswise/resources/agentcluster/list">http://localhost:8080/opswise/resources/agentcluster/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Response Examples	See <a href="#">List Agent Clusters: XML and JSON Examples</a> .
Agent Cluster Properties	See <a href="#">Agent Cluster Properties</a> .
Agent Properties	See <a href="#">Agent Properties</a> .
Agent Cluster: Email Notification Properties	See <a href="#">Agent Cluster Email Notification Properties</a> .

Agent Cluster: SNMP Notification Properties	<a href="#">See Agent Cluster SNMP Notification Properties.</a>
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## List Agent Clusters: XML and JSON Examples

XML	JSON
<p>XML</p> <pre> &lt;agentClusters&gt;   &lt;agentCluster version="1"&gt;     &lt;agents&gt;       &lt;agent&gt;         &lt;agentName&gt;pc - SS0001&lt;/agentName&gt;         &lt;membershipSuspended&gt; &gt;false&lt;/membershipSuspended&gt;         &lt;sysId&gt; &gt;af1984d3481b4bccb9bea0e4e1d6fbf2&lt;/sysId&gt;         &lt;type&gt;Windows&lt;/type&gt;       &lt;/agent&gt;     &lt;/agents&gt;     &lt;currentCount&gt;0&lt;/currentCount&gt;     &lt;distribution&gt;Network Alias&lt; /distribution&gt;     &lt;lastAgentUsed&gt;sb-qa-123&lt; /lastAgentUsed&gt;     &lt;lastResolution&gt;2018-09-12 09:52:03.410 -0500&lt;/lastResolution&gt;     &lt;limitAmount&gt;5&lt;/limitAmount&gt;     &lt;limitType&gt;Unlimited&lt;/limitType&gt;     &lt;name&gt;Cluster 1&lt;/name&gt;     &lt;networkAlias&gt;qa-123&lt; /networkAlias&gt;     &lt;networkAliasPort /&gt;     &lt;notifications&gt;     &lt;emailNotification&gt;     &lt;sysId&gt;2b7286b87a7048399fbd95c01a380002&lt; /sysId&gt;     &lt;bcc /&gt;     &lt;body /&gt;     &lt;cc /&gt;     &lt;emailConnection&gt;Opwise - Gmail Account&lt; /emailConnection&gt;     &lt;emailTemplate&gt;Opwise - Template&lt; /emailTemplate&gt;     &lt;replyTo /&gt;     &lt;state&gt;Agents Unavailable&lt;[/state #state - email]&amp;gt;     &lt;subject /&gt;     &lt;to /&gt;     &lt;/emailNotification&gt; </pre>	<p>JSON</p> <pre> [   {     "agents": [ {       "agentName": "Mark-4 - AGNT001",       "membershipSuspended": false,       "sysId": "941e558d6f2b4656bdb870e2551fa85e",       "type": "Windows"     } ],     "currentCount": 0,     "distribution": "Network Alias",     "lastAgentUsed": "sb-qa-123",     "lastResolution": "2018-09-12 09:52:03.410 -0500",     "limitAmount": 5,     "limitType": "Unlimited",     "name": "Cluster 1",     "networkAlias": "qa-123",     "networkAliasPort": null,     "notifications": {       "emailNotifications": [ {         "bcc": null,         "body": "\${ops_system_identifler}",         "cc": null,         "emailConnection": "ecu-office-365",         "emailTemplate": "agent-built-variables",         "replyTo": null,         "state": "Agents Unavailable",         "subject": null,         "sysId": "e120f05abd104e2e952c6b9e693891ab",         "to": "support@stonebranch.com"       } ],       "snmpNotifications": [ {         "severity": "Minor",         "snmpManager": "test_manager",         "state": "Agents Unavailable",         "sysId": "fc4f4e8b0dea4b51a77a3c20f7e62b2a"       } ]     }   } ] </pre>

```

<snmpNotification>
  <state>Agents Unavailable</states>
  <sysId>21d992c72be44b159aac91c4ee9f40c6<
/ sysId>
  <severity>Minor</severity>
  <snmpManager>SNMP Manager</snmpManager>
  </snmpNotification>
    </notifications>
    <opswiseGroups />
    <resolutionDescription>Agent in
Use:'sb-qa-123'</resolutionDescription>
    <resolutionStatus>Success<
/ resolutionStatus>
    <suspended>>false</suspended>
    <sysId
>cb5b876aa9fec69f0032b55e0391d693</sysId>
    <type>Windows</type>
  </agentCluster>
  <agentCluster version="1">
    <agents>
      <agent>
        <agentName>pc -
SS0002</agentName>
        <membershipSuspended>
>false</membershipSuspended>
        <sysId
>af1984d3481b4bccb9bea0e4e1d6fbf3</sysId>
        <type>Windows</type>
      </agent>
    </agents>
    <currentCount>0</currentCount>
    <distribution>Network Alias<
/ distribution>
    <lastAgentUsed>sb-qa-123<
/ lastAgentUsed>
    <lastResolution>2018-09-13
10:52:03.410 -0500</lastResolution>
    <limitAmount>5</limitAmount>
    <limitType>Unlimited</limitType>
    <name>Cluster 2</name>
    <networkAlias>qa-123<
/ networkAlias>
    <networkAliasPort />
    <notifications>
      <emailNotification>
        <sysId>2b7286b87a7048399fbd95c01a380002<
/ sysId>
        <bcc />
        <body />
        <cc />
        <emailConnection>Opswise - Gmail Account<
/ emailConnection>
        <emailTemplate>Opswise - Template<
/ emailTemplate>
        <replyTo />
        <state>Agents Unavailable<[/state|#state -
email]&gt;
        <subject />

```

```

  },
  "opswiseGroups": [],
  "resolutionDescription": "Agent in
Use:'sb-qa-123'",
  "resolutionStatus": "Success",
  "suspended": false,
  "sysId":
"35dc94a7a8834d28b51e03b5780cd90c",
  "type": "Windows"
  "version": 1
},
{
  "agents": [ {
    "agentName": "Mark-4 - AGNT002",
    "membershipSuspended": false,
    "sysId":
"941e558d6f2b4656bdb870e2551fa85f",
    "type": "Windows"
  } ],
  "currentCount": 0,
  "distribution": "Network Alias",
  "lastAgentUsed": "sb-qa-123",
  "lastResolution": "2018-09-13
10:52:03.410 -0500",
  "limitAmount": 5,
  "limitType": "Unlimited",
  "name": "Cluster 2",
  "networkAlias": "qa-123",
  "networkAliasPort": null,
  "notifications": {
    "emailNotifications": [ {
      "bcc": null,
      "body":
"${ops_system_identifi er}",
      "cc": null,
      "emailConnection":
"ecu-office-365",
      "emailTemplate":
"agent-built-variables",
      "replyTo": null,
      "state": "Agents Unavailable",
      "subject": null,
      "sysId":
"e120f05abd104e2e952c6b9e693891ab",
      "to": "support@stonebranch.com"
    } ],
    "snmpNotifications": [ {
      "severity": "Minor",
      "snmpManager": "test_manager",
      "state": "Agents Unavailable",
      "sysId":
"fc4f4e8b0dea4b51a77a3c20f7e62b2a"
    } ]
  },
  "opswiseGroups": [],
  "resolutionDescription": "Agent in
Use:'sb-qa-123'",
  "resolutionStatus": "Success",

```

```
<to />
</emailNotification>
<snmpNotification>
  <state>Agents Unavailable</states>
  <sysId>21d992c72be44b159aac91c4ee9f40c6<
/sysId>
  <severity>Minor</severity>
  <snmpManager>SNMP Manager</snmpManager>
</snmpNotification>
  </notifications>
  <opwiseGroups />
  <resolutionDescription>Agent in
Use:'sb-qa-123'</resolutionDescription>
  <resolutionStatus>Success<
/resolutionStatus>
  <suspended>>false</suspended>
  <sysId
>cb5b876aa9fec69f0032b55e0391d694</sysId>
  <type>Windows</type>
```

```
"suspended": false,
"sysId":
"35dc94a7a8834d28b51e03b5780cd90d",
"type": "Windows"
"version": 1
```

```
</agentCluster>
</agentClusters>
```

```
}
]
```

## Modify an Agent Cluster

	Description
URI	<a href="http://host_name/opswise/resources/agentcluster">http://host_name/opswise/resources/agentcluster</a>
HTTP Method	PUT
Description	Modifies the <b>Agent Cluster</b> specified by the <code>sysId</code> .
Example URI	<a href="http://localhost:8080/opswise/resources/agentcluster">http://localhost:8080/opswise/resources/agentcluster</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify an Agent Cluster: XML and JSON Examples</a> .
Agent Cluster Properties	See <a href="#">Agent Cluster Properties</a> .
Agent Properties	See <a href="#">Agent Properties</a> .
Agent Cluster: Email Notification Properties	See <a href="#">Agent Cluster Email Notification Properties</a> .
Agent Cluster: SNMP Notification Properties	See <a href="#">Agent Cluster SNMP Notification Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the agent cluster with sysId {sysId}.</li> </ul>

## Modify an Agent Cluster: XML and JSON Examples

XML	JSON
-----	------



XML	JSON
<pre> &lt;windowsAgentCluster&gt;   &lt;distribution&gt;Any&lt;/distribution&gt;   &lt;limitAmount&gt;5&lt;/limitAmount&gt;   &lt;limitType&gt;Limited&lt;/limitType&gt;   &lt;name&gt;cluster1&lt;/name&gt;   &lt;networkAlias /&gt;   &lt;networkAliasPort /&gt;   &lt;notifications&gt;     &lt;emailNotification&gt;       &lt;sysId&gt;2b7286b87a7048399fbd95c01a380002&lt;     /sysId&gt;       &lt;bcc /&gt;       &lt;body /&gt;       &lt;cc /&gt;       &lt;emailConnection&gt;Opwise - Gmail Account&lt;     /emailConnection&gt;       &lt;emailTemplate&gt;Opwise - Template&lt;     /emailTemplate&gt;       &lt;replyTo /&gt;       &lt;state&gt;Agents Unavailable&lt;[/state #state - email]&amp;gt;       &lt;subject /&gt;       &lt;to /&gt;     &lt;/emailNotification&gt;     &lt;snmpNotification&gt;       &lt;state&gt;Agents Unavailable&lt;/states&gt;       &lt;sysId&gt;21d992c72be44b159aac91c4ee9f40c6&lt;     /sysId&gt;       &lt;severity&gt;Minor&lt;/severity&gt;       &lt;snmpManager&gt;SNMP Manager&lt;/snmpManager&gt;     &lt;/snmpNotification&gt;   &lt;/notifications&gt;   &lt;sysId &gt;35dc94a7a8834d28b51e03b5780cd90c&lt;/sysId&gt; &lt;/windowsAgentCluster&gt;                 </pre>	<pre> {   "type": "windowsAgentCluster",   "distribution": "Any",   "limitAmount": 5,   "limitType": "Unlimited",   "name": "cluster1",   "networkAlias": null,   "networkAliasPort": null,   "notifications": {     "emailNotifications": [ {       "bcc": null,       "body": "\${ops_system_identifier}",       "cc": null,       "emailConnection": "ecu-office-365",       "emailTemplate": "agent-built-variables",       "replyTo": null,       "state": "Agents Unavailable",       "subject": null,       "sysId": "e120f05abd104e2e952c6b9e693891ab",       "to": "support@stonebranch.com"     } ],     "snmpNotifications": [ {       "severity": "Minor",       "snmpManager": "test_manager",       "state": "Agents Unavailable",       "sysId": "fc4f4e8b0dea4b51a77a3c20f7e62b2a"     } ]   },   "sysId": "35dc94a7a8834d28b51e03b5780cd90c", }                 </pre>

## Read an Agent Cluster

	Description
URI	<a href="http://host_name/opwise/resources/agentcluster">http://host_name/opwise/resources/agentcluster</a>
HTTP Method	GET
Description	Retrieves information on a specific Agent cluster.
URI Parameters	See <a href="#">Read an Agent Cluster: URI Parameters</a> .

Example URI	<a href="http://localhost:8080/opswise/resources/agentcluster?agentclustername=cluster1">http://localhost:8080/opswise/resources/agentcluster?agentclustername=cluster1</a>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">Read an Agent Cluster: XML and JSON Examples</a> .
Agent Cluster Properties	See <a href="#">Agent Cluster Properties</a> .
Agent Properties	See <a href="#">Agent Properties</a> .
Agent Cluster: Email Notification Properties	See <a href="#">Agent Cluster Email Notification Properties</a> .
Agent Cluster: SNMP Notification Properties	See <a href="#">Agent Cluster SNMP Notification Properties</a> .

### Read an Agent Cluster: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
agentclusterid	ID used within the Controller to identify this Agent cluster.	String; URI parameter.	Y (unless agentclustername is specified)	agentclustername
agentclustername	Name used within the Controller to identify this Agent cluster.	String; URI parameter.	Y (unless agentclusterid is specified)	agentclusterid

### Read an Agent Cluster: XML and JSON Examples

XML	JSON
<p>XML</p> <pre>&lt;windowsAgentCluster retainsSysIds="true" version="1"&gt;   &lt;agents&gt;     &lt;agent&gt;       &lt;agentName&gt;pc - SS0001&lt; /agentName&gt;       &lt;membershipSuspended&gt;&gt;false&lt; /membershipSuspended&gt;       &lt;sysId &gt;af1984d3481b4bccb9bea0e4e1d6fbf2&lt;/sysId&gt;       &lt;type&gt;Windows&lt;/type&gt;     &lt;/agent&gt;   &lt;/agents&gt;   &lt;currentCount&gt;0&lt;/currentCount&gt;   &lt;distribution&gt;Network Alias&lt; /distribution&gt;   &lt;lastAgentUsed&gt;sb-qa-123&lt;/lastAgentUsed &gt;   &lt;lastResolution&gt;2018-09-12 09:52:03.410</pre>	<p>JSON</p>

```

-0500</lastResolution>
  <limitAmount>5</limitAmount>
  <limitType>Unlimited</limitType>
  <name>Cluster 1</name>
  <networkAlias>qa-123</networkAlias>
  <networkAliasPort />
  <notifications>
  <emailNotification>
  <sysId>2b7286b87a7048399fbd95c01a380002<
/sysId>
  <bcc />
  <body />
  <cc />
  <emailConnection>Opwise - Gmail Account<
/emailConnection>
  <emailTemplate>Opwise - Template<
/emailTemplate>
  <replyTo />
  <state>Agents Unavailable<[/state|#state -
email]&gt;
  <subject />
  <to />
</emailNotification>
<snmpNotification>
  <state>Agents Unavailable</states>
  <sysId>21d992c72be44b159aac91c4ee9f40c6<
/sysId>
  <severity>Minor</severity>
  <snmpManager>SNMP Manager</snmpManager>
</snmpNotification>
  </notifications>
  <opwiseGroups />
  <resolutionDescription>Agent in
Use:'sb-qa-123'</resolutionDescription>
  <resolutionStatus>Success<
/resolutionStatus>
  <suspended>false</suspended>
  <sysId

```

```

{
  "type": "windowsAgentCluster",
  "agents": [ {
    "agentName": "Mark-4 - AGNT001",
    "membershipSuspended": false,
    "sysId":
"941e558d6f2b4656bdb870e2551fa85e",
    "type": "Windows"
  } ],
  "currentCount": 0,
  "distribution": "Network Alias",
  "lastAgentUsed": "sb-qa-123",
  "lastResolution": "2018-09-12
09:52:03.410 -0500",
  "limitAmount": 5,
  "limitType": "Unlimited",
  "name": "Cluster 1",
  "networkAlias": "qa-123",
  "networkAliasPort": null,
  "notifications": {
    "emailNotifications": [ {
      "bcc": null,
      "body":
"${ops_system_identifier}",
      "cc": null,
      "emailConnection":
"ecu-office-365",
      "emailTemplate":
"agent-built-variables",
      "replyTo": null,
      "state": "Agents Unavailable",
      "subject": null,
      "sysId":
"e120f05abd104e2e952c6b9e693891ab",
      "to": "support@stonebranch.com"
    } ],
    "snmpNotifications": [ {
      "severity": "Minor",
      "snmpManager": "test_manager",
      "state": "Agents Unavailable",
      "sysId":
"fc4f4e8b0dea4b51a77a3c20f7e62b2a"
    } ]
  },
  "opwiseGroups": [],
  "resolutionDescription": "Agent in
Use:'sb-qa-123'",
  "resolutionStatus": "Success",
  "retainSysIds": true,
  "suspended": false,
  "sysId":
"35dc94a7a8834d28b51e03b5780cd90c",
  "version": 1
}

```

```
>35dc94a7a8834d28b51e03b5780cd90c</sysId>
</windowsAgentCluster>
```

## Resolve an Agent Cluster

	Description
URI	<a href="http://host_name/opswise/resources/agentcluster/resolve">http://host_name/opswise/resources/agentcluster/resolve</a>
HTTP Method	POST
Description	Resolves the Network Alias for the specified agent cluster.
Example URI	<a href="http://localhost:8080/opswise/resources/agentcluster/resolve">http://localhost:8080/opswise/resources/agentcluster/resolve</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Resolve an Agent Cluster: XML and JSON Examples</a> .
Request Properties	See <a href="#">Resolve an Agent Cluster: Request Properties</a> .
Example Response	See <a href="#">Resolve an Agent Cluster: XML and JSON Examples</a> .

## Resolve an Agent Cluster: XML and JSON Examples

Example	XML	JSON
Example Request	<p>XML</p> <pre>&lt;resolve-agent-cluster&gt;   &lt;agentClusterName&gt;Agent_Cluster_Alias_Production&lt;   /agentClusterName&gt; &lt;/resolve-agent-cluster&gt;</pre>	<p>JSON</p> <pre>{   "agentClusterName":   "Agent_Cluster_Alias_Production" }</pre>

<p>Example Response</p>	<p>▼ XML</p> <pre data-bbox="317 196 1136 415"> &lt;command-response&gt;   &lt;type&gt;resolve_agent_cluster&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully resolved network alias for agent cluster   "Agent_Cluster_Alias_Production".&lt;/info&gt;   &lt;errors&gt;&lt;/errors&gt; &lt;/command-response&gt; </pre>	<p>▼ JSON</p> <pre data-bbox="1241 196 1919 415"> {   "type": "resolve_agent_cluster",   "success": true,   "info": "Successfully resolved agent   cluster\"Agent_Cluster_Alias_Production\".",   "errors": "" } </pre>
-------------------------	---	---

### Resolve an Agent Cluster: Request Properties

Property	UI Field Name	Description	Specifications	Required
agentClusterName	Cluster Name	Name used within the Controller to identify this agent cluster.		Y

### Resume an Agent Cluster

	Description
URI	<a href="http://host_name/opswise/resources/agentcluster/resume">http://host_name/opswise/resources/agentcluster/resume</a>
HTTP Method	POST
Description	Resumes the specified <a href="#">agent cluster</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/agentcluster/resume">http://localhost:8080/opswise/resources/agentcluster/resume</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Resume an Agent Cluster: XML and JSON Examples</a> .
Request Properties	See <a href="#">Resume an Agent Cluster: Request Properties</a> .
Example Response	See <a href="#">Resume an Agent Cluster: XML and JSON Examples</a> .

### Resume an Agent Cluster: XML and JSON Examples

Example	XML	JSON
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<p>Example Request</p>	<p>XML</p> <pre>&lt;resume-agent-cluster&gt;   &lt;agentClusterName&gt;Opswise - Default Windows Cluster&lt; /agentClusterName&gt; &lt;/resume-agent-cluster&gt;</pre>	<p>JSON</p> <pre>{   "agentClusterName": "Opswise - Default Windows Cluster" }</pre>
<p>Example Response</p>	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;resume_agent_cluster&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully resumed agent cluster "Opswise - Default Windows Cluster".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "resume_agent_cluster",   "success": true,   "info": " Successfully resumed agent cluster "Opswise - Default Windows Cluster".",   "errors": "" }</pre>

### Resume an Agent Cluster: Request Properties

Property	UI Field Name	Description	Specifications	Required
agentClusterName	Cluster Name	Name used within the Controller to identify this agent cluster.		Y

### Resume an Agent Cluster Membership

	Description
URI	<a href="http://host_name/opswise/resources/agent/ops-resume-agent-cluster-membership">http://host_name/opswise/resources/agent/ops-resume-agent-cluster-membership</a>
HTTP Method	POST
Description	Resumes the specified <a href="#">agent cluster membership</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/agent/ops-resume-agent-cluster-membership">http://localhost:8080/opswise/resources/agent/ops-resume-agent-cluster-membership</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Resume an Agent Cluster Membership: XML and JSON Examples</a> .
Request Properties	See <a href="#">Resume an Agent Cluster Membership: Request Properties</a> .

Example Response	See <a href="#">Resume an Agent Cluster Membership: XML and JSON Examples.</a>
------------------	--

### Resume an Agent Cluster Membership: XML and JSON Examples

Example	XML	JSON
Example Request	<p>XML</p> <p><b>By Agent Name</b></p> <pre>&lt;resume-agent-cluster-membership&gt;   &lt;agentClusterName&gt;Opwise - Default Windows Cluster&lt;/agentClusterName&gt;   &lt;agentName&gt;XPS-8300 - AGNT0001&lt;/agentName&gt; &lt;/resume-agent-cluster-membership&gt;</pre> <p><b>By Agent ID</b></p> <pre>&lt;resume-agent-cluster-membership&gt;   &lt;agentClusterName&gt;Opwise - Default Windows Cluster&lt;/agentClusterName&gt;   &lt;agentID&gt;AGNT0001&lt;/agentID&gt; &lt;/resume-agent-cluster-membership&gt;</pre>	<p>JSON</p> <p><b>By Agent Name</b></p> <pre>{   "agentClusterName": "Opwise - Default Windows Cluster",   "agentName": "XPS-8300 - AGNT0001" }</pre> <p><b>By Agent ID</b></p> <pre>{   "agentClusterName": "Opwise - Default Windows Cluster",   "agentID": "AGNT0001" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;resume_agent_cluster_membership&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully resumed agent cluster membership.&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "resume_agent_cluster_membership",   "success": true,   "info": " Successfully resumed agent cluster membership.",   "errors": "" }</pre>

### Resume an Agent Cluster Membership: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
agentClusterName	Cluster Name	Name used within the Controller to identify this agent cluster.		Y	

agentID	Agent ID	Defined by the user when installing the Agent; name used within the Controller to identify this resource.	Y (unless agentName is specified)	agentName
agentName	Agent Name	Unique ID for this Agent, created during installation. The name of the communications server message queue. The Controller uses the communications server for communications between the Controller scheduler and Agents.	Y (unless agentId is specified)	agentId

## Return an Agent from an Agent Cluster

	Description
URI	<a href="http://hostName:port/opswise/resources/agentcluster/agent">http://hostName:port/opswise/resources/agentcluster/agent</a>
HTTP Method	GET
Description	Retrieves information on a specific Agent from an Agent Cluster for which a Distribution method of <b>Any</b> or <b>Lowest CPU Utilization</b> is specified.
URI Parameters	See <a href="#">Return an Agent from an Agent Cluster: URI Parameters</a> .
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Request URI	<a href="http://localhost:8080/opswise/resources/agentcluster/agent?agentclustername=testCluster&amp;ignoreexecutionlimit=true">http://localhost:8080/opswise/resources/agentcluster/agent?agentclustername=testCluster&amp;ignoreexecutionlimit=true</a>
Example Response	See <a href="#">Return an Agent from an Agent Cluster: Example Response</a> .

## Return an Agent from an Agent Cluster: URI Parameters

Parameter	Description	Specifications	Required
agentclustername	Name used within the Controller to identify this agent cluster.	Type = String; URI property.	Y
ignoreexecutionlimit	Specification to use or ignore the task execution limit.	Type = Boolean (true/false), Default is false; URI property.	N

## Return an Agent from an Agent Cluster: Example Response

XML Response	JSON Response
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<p>XML Response</p> <pre>&lt;agent&gt;   &lt;hostName&gt;Mark-4&lt;/hostName&gt;   &lt;ipAddress&gt;192.168.1.21&lt;/ipAddress&gt;   &lt;name&gt;Mark-4 - AGNT0002&lt;/name&gt;   &lt;outputProhibited&gt;&gt;false&lt;/outputProhibited&gt;   &lt;queueName&gt;AGNT0002&lt;/queueName&gt;   &lt;status&gt;Active&lt;/status&gt;   &lt;suspended&gt;&gt;false&lt;/suspended&gt;   &lt;sysID&gt;4425b28449574bb181d78e47c02867ac&lt;/sysID&gt;   &lt;type&gt;Windows&lt;/type&gt;   &lt;version&gt;6.4.1.0&lt;/version&gt; &lt;/agent&gt;</pre>	<p>JSON Response</p> <pre>{   "hostName": "Mark-4",   "ipAddress": "192.168.1.21",   "name": "Mark-4 - AGNT0002",   "outputProhibited": false,   "queueName": "AGNT0002",   "status": "Active",   "suspended": false,   "sysID": "b4784b52bf0e453db37dc0c5e9bd441a",   "type": "Windows",   "version": "6.4.1.0" }</pre>
--	--

### Set an Agent Cluster Task Execution Limit

	Description
URI	<a href="http://host_name/opswise/resources/agentcluster/taskexecutionlimit">http://host_name/opswise/resources/agentcluster/taskexecutionlimit</a>
HTTP Method	POST
Description	Sets the <i>task execution limit</i> for the specified agent cluster.
Example URI	<a href="http://localhost:8080/opswise/resources/agentcluster/taskexecutionlimit">http://localhost:8080/opswise/resources/agentcluster/taskexecutionlimit</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Set an Agent Cluster Task Execution Limit: XML and JSON Examples</a> .
Request Properties	See <a href="#">Set an Agent Cluster Task Execution Limit: Request Properties</a> .
Example Response	See <a href="#">Set an Agent Cluster Task Execution Limit: XML and JSON Examples</a> .

### Set an Agent Cluster Task Execution Limit: XML and JSON Examples

Example	XML	JSON
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<p>Example Request</p>	<p>XML</p> <p><b>Limit Type: Limited</b></p> <pre>&lt;set-agent-cluster-task-execution-limit&gt;   &lt;agentClusterName&gt;Opwise - Default Windows Cluster&lt; /agentClusterName&gt;   &lt;limitAmount&gt;15&lt;/limitAmount&gt;   &lt;limitType&gt;Limited&lt;/limitType&gt; &lt;/set-agent-cluster-task-execution-limit&gt;</pre> <p><b>Limit Type: Unlimited</b></p> <pre>&lt;set-agent-cluster-task-execution-limit&gt;   &lt;agentClusterName&gt;Opwise - Default Windows Cluster&lt; /agentClusterName&gt;   &lt;limitType&gt;Unlimited&lt;/limitType&gt; &lt;/set-agent-cluster-task-execution-limit&gt;</pre>	<p>JSON</p> <p><b>Limit Type: Limited</b></p> <pre>{   "agentClusterName": "Opwise - Default Windows Cluster",   "limitAmount": 15,   "limitType": "Limited" }</pre> <p><b>Limit Type: Unlimited</b></p> <pre>{   "agentClusterName": "Opwise - Default Windows Cluster",   "limitType": "Unlimited" }</pre>
<p>Example Response</p>	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;set_agent_cluster_task_execution_limit&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Successfully updated agent cluster"Opwise - Default Windows Cluster" with task limit type: "Limited", amount: "15".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "set_agent_cluster_task_execution_limit",   "success": true,   "info": " Successfully updated agent cluster"Opwise - Default Windows Cluster" with task limit type: "Limited", amount: "15".",   "errors": "" }</pre>

### Set an Agent Cluster Task Execution Limit: Request Properties

Property	UI Field Name	Description	Specifications	Required
agentClusterName	Cluster Name	Name used within the Controller to identify this agent cluster.		Y
limitAmount	Limit Amount	Number of tasks that can be running at the same time by the Agents in this agent cluster.	Set only if limitType is Limited (2).	N

limitType	Task Execution Limit	<p>Specification for whether a Limited or Unlimited number of task instances can be run concurrently by the Agents in this agent cluster.</p> <p>For purposes of imposing this task execution limit, running task instances are those in any of these statuses: Cancel Pending, Queued, Received, Running, Submitted, and Started.</p>	<p>Valid values:</p> <ul style="list-style-type: none"> <li>As String = Unlimited, As Value = 1</li> <li>As String = Limited, As Value = 2</li> </ul>	Y
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## Suspend an Agent Cluster

	Description
URI	<a href="http://host_name/opswise/resources/agentcluster/suspend">http://host_name/opswise/resources/agentcluster/suspend</a>
HTTP Method	POST
Description	Suspends the specified agent cluster.
Example URI	<a href="http://localhost:8080/opswise/resources/agentcluster/suspend">http://localhost:8080/opswise/resources/agentcluster/suspend</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Suspend an Agent Cluster: XML and JSON Examples</a> .
Request Properties	See <a href="#">Suspend an Agent Cluster: Request Properties</a> .
Example Response	See <a href="#">Suspend an Agent Cluster: XML and JSON Examples</a> .

## Suspend an Agent Cluster: XML and JSON Examples

Example	XML	JSON
Example Request	<p>XML</p> <pre data-bbox="323 1183 1064 1349">&lt;suspend-agent-cluster&gt;   &lt;agentClusterName&gt;Opwise - Default Windows Cluster&lt; /agentClusterName&gt; &lt;/suspend-agent-cluster&gt;</pre>	<p>JSON</p> <pre data-bbox="1169 1183 1919 1349">{   "agentClusterName": "Opwise - Default Windows Cluster" }</pre>

Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;suspend_agent_cluster&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully suspended agent cluster "Opwise - Default Windows Cluster".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "suspend_agent_cluster",   "success": true,   "info": " Successfully suspended agent cluster   "Opwise - Default Windows Cluster".",   "errors": "" }</pre>
------------------	--	--

### Suspend an Agent Cluster: Request Properties

Property	UI Field Name	Description	Specifications	Required
agentClusterName	Cluster Name	Name used within the Controller to identify this agent cluster.		Y

### Suspend an Agent Cluster Membership

	Description
URI	<a href="http://host_name/opswise/resources/agent/ops-suspend-agent-cluster-membership">http://host_name/opswise/resources/agent/ops-suspend-agent-cluster-membership</a>
HTTP Method	POST
Description	Suspends the specified <a href="#">agent cluster membership</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/agent/ops-suspend-agent-cluster-membership">http://localhost:8080/opswise/resources/agent/ops-suspend-agent-cluster-membership</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Suspend an Agent Cluster Membership: XML and JSON Examples</a> .
Request Properties	See <a href="#">Suspend an Agent Cluster Membership: Request Properties</a> .
Example Response	See <a href="#">Suspend an Agent Cluster Membership: XML and JSON Examples</a> .

### Suspend an Agent Cluster Membership: XML and JSON Examples

Example	XML	JSON
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<p>Example Request</p>	<p>XML</p> <p><b>By Agent Name</b></p> <pre>&lt;suspend-agent-cluster-membership&gt;   &lt;agentClusterName&gt;Opwise - Default Windows Cluster&lt;/agentClusterName&gt;   &lt;agentName&gt;XPS-8300 - AGNT0001&lt;/agentName&gt; &lt;/suspend-agent-cluster-membership&gt;</pre> <p><b>By Agent ID</b></p> <pre>&lt;suspend-agent-cluster-membership&gt;   &lt;agentClusterName&gt;Opwise - Default Windows Cluster&lt;/agentClusterName&gt;   &lt;agentID&gt;AGNT0001&lt;/agentID&gt; &lt;/suspend-agent-cluster-membership&gt;</pre>	<p>JSON</p> <p><b>By Agent Name</b></p> <pre>{   "agentClusterName": "Opwise - Default Windows Cluster",   "agentName": "XPS-8300 - AGNT0001" }</pre> <p><b>By Agent ID</b></p> <pre>{   "agentClusterName": "Opwise - Default Windows Cluster",   "agentID": "AGNT0001" }</pre>
<p>Example Response</p>	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;suspend_agent_cluster_membership&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Successfully suspended agent cluster membership.&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "suspend_agent_cluster_membership",   "success": true,   "info": " Successfully suspended agent cluster membership.",   "errors": "" }</pre>

### Suspend an Agent Cluster Membership: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
agentClusterName	Cluster Name	Name used within the Controller to identify this agent cluster.		Y	
agentID	Agent ID	Unique ID for this Agent, created during installation.		Y (unless agentName is specified)	agentName
agentName	Agent Name	Name used within the Controller to identify this resource.		Y (unless agentID is specified)	agentID

## Bundle Web Services

- [Overview](#)
- [Cancel a Scheduled Bundle Promotion](#)
- [Delete a Scheduled Bundle Promotion](#)
- [Schedule Bundle Promotion](#)

### Overview

Universal Controller supports the following RESTful-based web services for Bundle operations, which are listed alphabetically on this page.

- [Cancel a Scheduled Bundle Promotion](#)
- [Delete a Scheduled Bundle Promotion](#)
- [Schedule Bundle Promotion](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

### Cancel a Scheduled Bundle Promotion

	Description
URI	<a href="http://host_name/opswise/resources/promotion/schedule/cancel">http://host_name/opswise/resources/promotion/schedule/cancel</a>
HTTP Method	POST
Description	Cancel the scheduled promotion of a Bundle.
URI Parameters	See <a href="#">Cancel a Scheduled Bundle Promotion: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/promotion/schedule/cancel?bundlename=BundleA&amp;date=2018-12-10&amp;time=10:00">http://localhost:8080/opswise/resources/promotion/schedule/cancel?bundlename=BundleA&amp;date=2018-12-10&amp;time=10:00</a></li> <li>• <a href="http://localhost:8080/opswise/resources/promotion/schedule/cancel?bundleid=8fc4fd900804418b84af7b33eb55eb09&amp;date=2019-11-15&amp;time=12:00">http://localhost:8080/opswise/resources/promotion/schedule/cancel?bundleid=8fc4fd900804418b84af7b33eb55eb09&amp;date=2019-11-15&amp;time=12:00</a></li> <li>• <a href="http://localhost:8080/opswise/resources/promotion/schedule/cancel?scheduleid=1899e60df0db4152a4eefa46cf29e7d3">http://localhost:8080/opswise/resources/promotion/schedule/cancel?scheduleid=1899e60df0db4152a4eefa46cf29e7d3</a></li> </ul>
Example Response	See <a href="#">Cancel a Scheduled Bundle Promotion: XML and JSON Examples</a> .

### Cancel a Scheduled Bundle Promotion: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
scheduleid	UUID of the promotion schedule.		N	bundleid and bundleid
bundleid	Name of the bundle.		N	scheduleid and bundleid

bundleid	UUID of the bundle.		N	scheduleid and bundleid
date	Date when the promotion was scheduled. Corresponds to the year, month, and day of the <a href="#">Scheduled Time</a> field in a promotion schedule.	Format: yyyy-MM-dd (For example: 2018-11-14).	Y (If bundleid or bundleid is specified)	
time	Time when the promotion was scheduled. Corresponds to the hour and minutes of the <a href="#">Scheduled Time</a> field in a promotion schedule.	Format: HH:mm (For example: 22:00).	Y (If bundleid or bundleid is specified)	

### Cancel a Scheduled Bundle Promotion: XML and JSON Examples

Examples	XML	JSON
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;schedule_promotion&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;&lt;/info&gt;   &lt;errors&gt;&lt;/errors&gt; &lt;/command-response&gt;</pre> <p>OR</p> <pre>&lt;command-response&gt;   &lt;type&gt;schedule_promotion&lt;/type&gt;   &lt;success&gt;&gt;false&lt;/success&gt;   &lt;info&gt;&lt;/info&gt;   &lt;errors&gt;The promotion schedule can only be cancelled while in a Scheduled status.&lt;/errors&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "schedule_promotion",   "success": true,   "info": "",   "errors": "" }</pre> <p>OR</p> <pre>{   "type": "schedule_promotion",   "success": false,   "info": "",   "errors": "The promotion schedule can only be cancelled while in a Scheduled status." }</pre>

### Delete a Scheduled Bundle Promotion

	Description
URI	<a href="http://host_name/opswise/resources/promotion/schedule">http://host_name/opswise/resources/promotion/schedule</a>
HTTP Method	DELETE
Description	Deleted the scheduled promotion of a Bundle.
URI Parameters	See <a href="#">Delete a Scheduled Bundle Promotion: URI Parameters</a> , below.

Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/promotion/schedule?bundleid=BundleA&amp;date=2018-12-15&amp;time=14:30">http://localhost:8080/opswise/resources/promotion/schedule?bundleid=BundleA&amp;date=2018-12-15&amp;time=14:30</a></li> <li>• <a href="http://localhost:8080/opswise/resources/promotion/schedule?bundleid=8fc4fd900804418b84af7b33eb55eb09&amp;date=2018-12-15&amp;time=17:00">http://localhost:8080/opswise/resources/promotion/schedule?bundleid=8fc4fd900804418b84af7b33eb55eb09&amp;date=2018-12-15&amp;time=17:00</a></li> <li>• <a href="http://localhost:8080/opswise/resources/promotion/schedule?scheduleid=dd1de1b27848435cb852fb8807af6a30">http://localhost:8080/opswise/resources/promotion/schedule?scheduleid=dd1de1b27848435cb852fb8807af6a30</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 Promotion schedule deleted successfully.</li> <li>• Status 400 One of parameters scheduleid, bundleid, or bundleid required.</li> <li>• Status 400 Both date, and time parameters required when bundleid, or bundleid specified.</li> <li>• Status 400 Unable to parse at least one of the date (yyyy-MM-dd) and time (HH:mm) parameters.</li> <li>• Status 403 Operation prohibited due to security constraints.</li> <li>• Status 403 Promotion Schedule cannot be deleted while Running.</li> <li>• Status 404 Unable to find bundle by the bundleid specified.</li> <li>• Status 404 More than one qualifying promotion schedule found.</li> <li>• Status 404 Unable to find qualifying promotion schedule.</li> </ul>

### Delete a Scheduled Bundle Promotion: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
scheduleid	UUID of the promotion schedule.		N	bundleid and bundleid
bundleid	Name of the bundle.		N	scheduleid and bundleid
bundleid	UUID of the bundle.		N	scheduleid and bundleid
date	Date when the promotion was scheduled.  Corresponds to the year, month, and day of the <a href="#">Scheduled Time</a> field in a promotion schedule.	Format: yyyy-MM-dd (For example: 2018-11-14).	Y (If bundleid or bundleid is specified)	
time	Time when the promotion was scheduled.  Corresponds to the hour and minutes of the <a href="#">Scheduled Time</a> field in a promotion schedule.	Format: HH:mm (For example: 22:00).	Y (If bundleid or bundleid is specified)	

### Schedule Bundle Promotion




	Description
URI	<a href="http://host_name/opswise/resources/bundle/promote">http://host_name/opswise/resources/bundle/promote</a>
HTTP Method	POST
Description	Schedules the promotion of a Bundle.
Example URI	<a href="http://localhost:8080/opswise/resources/bundle/promote">http://localhost:8080/opswise/resources/bundle/promote</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Schedule Bundle Promotion: XML and JSON Examples</a> .
Request Properties	See <a href="#">Schedule Bundle Promotion: Properties</a> .
Example Response	See <a href="#">Schedule Bundle Promotion: XML and JSON Examples</a> .

### Schedule Bundle Promotion: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;bundle-promote&gt;   &lt;id&gt;a17c53a4975d4df59ddf4e6f1fb0b111&lt;/id&gt;   &lt;promotionTargetName&gt;testTarget&lt;/promotionTargetName&gt;   &lt;overrideUser&gt;testUser&lt;/overrideUser&gt;   &lt;overridePassword&gt;testPassword&lt;/overridePassword&gt;   &lt;allowUnvTpltChanges&gt;true&lt;/allowUnvTpltChanges&gt;   &lt;schedule&gt;true&lt;/schedule&gt;   &lt;createSnapshot&gt;true&lt;/createSnapshot&gt;   &lt;date&gt;2015-10-31&lt;/date&gt;   &lt;time&gt;22:00&lt;/time&gt;   &lt;notificationOption&gt;operation success&lt; /notificationOption&gt; &lt;/bundle-promote&gt;</pre>	<p>JSON</p> <pre>{   "id": "1bd5a9ae80714523a858633df3c515bf",   "promotionTargetName": "testTarget",   "overrideUser": "testUser",   "overridePassword": "testPassword1",   "allowUnvTpltChanges": true,   "schedule": true,   "createSnapshot": true,   "date": "2018-01-04",   "time": "23:00",   "notificationOption": "operation success" }</pre>

<p>Example Response</p>	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;schedule_promotion&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully scheduled the promotion of bundle "test" to promotion target "testTarget" for 2015-10-31 22:00:00 -0600.&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "schedule_promotion",   "success": true,   "info": "Successfully scheduled the promotion of bundle "abc" to promotion target "testTarget" for 2018-01-04 23:00:00 -0600.",   "errors": "" }</pre>
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### Schedule Bundle Promotion: Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
allowUnvTpltChanges	Allow Universal Template Changes	Allow the promotion to contain new or changed Universal Templates.	Valid values: <ul style="list-style-type: none"> <li>• Yes,Y,true</li> <li>• No,N,false</li> </ul> <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;">  <b>Note</b>              In order to promote Universal Template changes, the user must have the <code>ops_universal_template_admin</code> role or the <code>ops_admin</code> role.           </div>	N	
createSnapshot	Create Snapshot	Schedule the Bundle promotion using the current Bundle records.	Valid values: <ul style="list-style-type: none"> <li>• Yes,Y,true</li> <li>• No,N,false</li> </ul>	N	
date	Date	Date on which to promote the Bundle.		Y (if schedule is Yes,Y,true); format is yyyy-MM-dd.	
id	n/a	32-character sysid of the Bundle to be promoted.		Y (unless name is specified)	name
name	Bundle Name	Name of the Bundle to be promoted.		Y (unless id is specified)	id

notificationOption	System Notification	System Notification to send on success and/or failure of the promotion.	Valid values (not case sensitive): <ul style="list-style-type: none"> <li>• operation Failure (default)</li> <li>• operation success/failure</li> <li>• operation success</li> </ul>	N	
overridePassword	Password	User password to use instead of the default User password for the promotion target.		Y (if overrideUser is specified)	
overrideUser	User	User name to use instead of the default User name for the promotion target.		Y (if overridePassword is specified)	
promotionTargetId	n/a	ID of the Controller cluster node on which to promote the Bundle.	Default is the Default Promotion Target of the specified Bundle.	N	promotionTargetName
promotionTargetName	Promotion Target	Name of the Controller cluster node on which to promote the Bundle.	Default is the Default Promotion Target of the specified Bundle.	N	promotionTargetId
schedule	Schedule	Indication of whether or not to schedule a Bundle promotion.	Valid values <ul style="list-style-type: none"> <li>• Yes,Y,true</li> <li>• No,N,false.</li> </ul>	Y	
time	Time	Time on which to promote the Bundle.	Default is 00:00.	N	



## Business Service Web Services

- [Overview](#)
- [Create a Business Service](#)
- [Delete a Business Service](#)
- [List Business Services](#)
- [Modify a Business Service](#)
- [Read a Business Service](#)

### Overview

Universal Controller supports the following RESTful-based web services for Business Service operations, which are listed alphabetically on this page.

- [Create a Business Service](#)
- [Delete a Business Service](#)
- [List Business Services](#)
- [Modify a Business Service](#)
- [Read a Business Service](#)

Formatting specifications for each web service, including details about property requirements, are provided.

### Create a Business Service

	Description
URI	<a href="http://host_name/opswise/resources/businessservice">http://host_name/opswise/resources/businessservice</a>
HTTP Method	POST
Description	Creates a Business Service.
Example URI	<a href="http://localhost:8080/opswise/resources/businessservice">http://localhost:8080/opswise/resources/businessservice</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create a Business Service: Example Request</a> , below.
Business Service Properties	See <a href="#">Business Service Properties</a> , below.
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the Business Service with sysId {sysId}.</li> </ul>

### Create a Business Service: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre>&lt;businessService retainSysIds="true"&gt;   &lt;description&gt;1&lt;/description&gt;   &lt;name&gt;test&lt;/name&gt;   &lt;sysId &gt;e3a0d7b81f904c8fa4ae55cde6d58665&lt;   /sysId&gt; &lt;/businessService&gt;</pre>	<p>JSON Request</p> <pre>{   "description": 1,   "name": "test",   "retainSysIds": true,   "sysId":   "e3a0d7b81f904c8fa4ae55cde6d58665" }</pre>

## Business Service: Properties

Property	UI Field Name	Description	Specifications	Required
description	Description	User-defined; description of this record.		N
name	Name	Name used within the Controller to identify this Business Service.	Maximum 40 alphanumerics.	Y
retainSysIds	n/a	<p>Specification for whether or not the Create a Business Service web service will persist the <code>sysId</code> property.</p> <ul style="list-style-type: none"> <li>If <code>retainSysIds="true"</code> and <code>sysId</code> is included in the request/response, <code>sysId</code> will be persisted to the database.</li> <li>If <code>retainSysIds="false"</code> and <code>sysId</code> is included in the request/response, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;"> <p><b>Note</b> In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;businessService&gt;</code> element.</p> </div>	Valid values: true/false (default is true).	N
sysId	n/a	System ID field in the database for this Business Service record.	Persisted only if <code>retainSysIds</code> is set to true.	N

## Delete a Business Service

	Description
URI	<a href="http://host_name/opswise/resources/businessservice">http://host_name/opswise/resources/businessservice</a>
HTTP Method	DELETE
Description	Deletes a Business Service.
URI Parameters	See <a href="#">Delete a Business Service: URI Parameters</a> , below.

Example URI	<a href="http://localhost:8080/opswise/resources/businessservice?buserviceid=77171434c0a801c9016d5b2b5d17ddee">http://localhost:8080/opswise/resources/businessservice?buserviceid=77171434c0a801c9016d5b2b5d17ddee</a>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Business Service deleted successfully.</li> <li>• Status 400 /Bad Request Mutual exclusion violation. Cannot specify busservicename and busserviceid at the same time.</li> <li>• Status 404 /Not Found A business service with {name/id} "test" does not exist.</li> </ul>

### Delete a Business Service: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
busserviceid	ID used within the Controller to identify this Business Service.	String; URI parameter.	Y (unless busservicename is specified)	busservicename
busservicename	Name used within the Controller to identify this Business Service.	String; URI parameter.	Y (unless busserviceid is specified)	busserviceid

### List Business Services

	Description
URI	<a href="http://host_name/opswise/resources/businessservice/list">http://host_name/opswise/resources/businessservice/list</a>
HTTP Method	GET
Description	Retrieves information on all Business Services.
Example URI	<a href="http://localhost:8080/opswise/resources/businessservice/list">http://localhost:8080/opswise/resources/businessservice/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Business Services: Example Response</a> , below.
Response Properties	See <a href="#">Business Service Properties</a> .

### List Business Services: Example Response

XML Request	JSON Request
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XML Request	JSON Request
<pre> &lt;businessServices&gt;   &lt;businessService version="1"&gt;     &lt;description /&gt;     &lt;name&gt;bus service 1&lt;/name&gt;     &lt;sysId &gt;639d90bf8b61479191f46b1e524ac916&lt;   /sysId&gt;   &lt;/businessService&gt;   &lt;businessService version="4"&gt;     &lt;description /&gt;     &lt;name&gt;bus service 2&lt;/name&gt;     &lt;sysId &gt;0ff4a7bafa0441a9b1a57b6451344ab6&lt;   /sysId&gt;   &lt;/businessService&gt;   &lt;businessService version="1"&gt;     &lt;description /&gt;     &lt;name&gt;bus service 3&lt;/name&gt;     &lt;sysId &gt;2822fa2848de438c97167bfald7a633c&lt;   /sysId&gt;   &lt;/businessService&gt;   &lt;businessService version="1"&gt;     &lt;description /&gt;     &lt;name&gt;bus service 4&lt;/name&gt;     &lt;sysId &gt;ff4b77d628ae4bc78c78f383bf1265b0&lt;   /sysId&gt;   &lt;/businessService&gt; &lt;/businessServices&gt; </pre>	<pre> [   {     "description": null,     "name": "bus service 1",     "sysId": "639d90bf8b61479191f46b1e524ac916",     "version": 1   },   {     "description" " null,     "name": "bus service 2",     "sysId": "0ff4a7bafa0441a9b1a57b6451344ab6",     "version": 4   },   {     "description": null,     "name": "bus service 3",     "sysId": "2822fa2848de438c97167bfald7a633c",     "version": 1   },   {     "description": null,     "name": "bus service 4",     "sysId": "ff4b77d628ae4bc78c78f383bf1265b0",     "version": 1   } ] </pre>

## Modify a Business Service

	Description
URI	<a href="http://host_name/opswise/resources/businessservice">http://host_name/opswise/resources/businessservice</a>
HTTP Method	PUT
Description	Modifies the Business Service specified by the <code>sysId</code> .
Example URI	<a href="http://localhost:8080/opswise/resources/businessservice">http://localhost:8080/opswise/resources/businessservice</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify a Business Service: Example Request</a> , below.



Business Service Properties	See <a href="#">Business Service Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the business service with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

### Modify a Business Service: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre>&lt;businessService&gt;   &lt;description&gt;1&lt;/description&gt;   &lt;name&gt;test&lt;/name&gt;   &lt;sysId &gt;e3a0d7b81f904c8fa4ae55cde6d58665&lt;   /sysId&gt; &lt;/businessService&gt;</pre>	<p>JSON Request</p> <pre>{   "description": 1,   "name": "test",   "sysId":   "e3a0d7b81f904c8fa4ae55cde6d58665" }</pre>

### Read a Business Service

URI	<a href="http://host_name/opswise/resources/businessservice">http://host_name/opswise/resources/businessservice</a>
HTTP Method	GET
Description	Retrieves information on a specific Business Service.
URI Parameters	See <a href="#">Read a Business Service: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/businessservice?bus servicename=test">http://localhost:8080/opswise/resources/businessservice?bus servicename=test</a></li> <li><a href="http://localhost:8080/opswise/resources/businessservice?bus serviceid=f87848b00a0001037f43e7c81c8ec969">http://localhost:8080/opswise/resources/businessservice?bus serviceid=f87848b00a0001037f43e7c81c8ec969</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">Read a Business Service: Example Response</a> , below.
Business Service Properties	See <a href="#">Business Service Properties</a> .

### Read a Business Service: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
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busserviceid	ID used within the Controller to identify this Business Service.	String; URI parameter.	Y (unless busservicename is specified)	busservicename
busservicename	Name used within the Controller to identify this Business Service.	String; URI parameter.	Y (unless busserviceid is specified)	busserviceid

### Read a Business Service: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre>&lt;businessService retainSysIds="true" version="1"&gt;   &lt;description&gt;1&lt;/description&gt;   &lt;name&gt;test&lt;/name&gt;   &lt;sysId &gt;e3a0d7b81f904c8fa4ae55cde6d58665&lt; /sysId&gt; &lt;/businessService&gt;</pre>	<p>JSON Response</p> <pre>{   "description": 1,   "name": "test",   "retainSysIds": true,   "sysId":   "e3a0d7b81f904c8fa4ae55cde6d58665",   "version": 1 }</pre>

## Calendar Web Services

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- Add an Existing Custom Day to a Calendar
  - Add an Existing Custom Day to a Calendar: URI Parameters
- Create a Calendar
  - Create a Calendar: Example Request
  - Create a Calendar: Calendar Properties
  - Create a Calendar: Custom Day Properties
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- List Calendars
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- List Local Custom Day Qualifying Dates
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- Modify a Calendar
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  - Remove a Custom Day from a Calendar: URI Parameters

### Overview

Universal Controller supports the following RESTful-based web services for Calendar operations, which are listed alphabetically on this page.

- Add an Existing Custom Day to a Calendar
- Create a Calendar
- Delete a Calendar
- List Calendars
- List Local Custom Day Qualifying Dates
- List Local Custom Day Qualifying Periods
- Modify a Calendar
- Read a Calendar
- Read All Custom Days of a Calendar
- Remove a Custom Day from a Calendar

Formatting specifications for each web service, including details about parameter requirements, are provided.


**Note**

You can create and modify a Calendar that contains one or more global Custom Days only if the Custom Day Global Permitted Universal Controller system property is set to **true**.

## Add an Existing Custom Day to a Calendar

	Description
URI	<a href="http://host_name/opwise/resources/calendar/customdays">http://host_name/opwise/resources/calendar/customdays</a>
HTTP Method	POST
Description	Adds the specified Custom Day to the specified Calendar.
URI Parameters	See <a href="#">Add an Existing Custom Day to a Calendar: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opwise/resources/calendar/customdays?calendarname=test&amp;customdayid=sfsdffsf123456dfhkjhk">http://localhost:8080/opwise/resources/calendar/customdays?calendarname=test&amp;customdayid=sfsdffsf123456dfhkjhk</a>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Custom day &lt;customDay&gt; successfully added to the calendar &lt;calendar&gt;.</li> <li>• Status 400 /Bad Request Calendar &lt;calendarName&gt; doesn't exist.</li> <li>• Status 400 /Bad Request Custom Day &lt;customDay&gt; is already in the Calendar &lt;calendarName&gt;.</li> </ul>

## Add an Existing Custom Day to a Calendar: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
calendarid	Unique ID for the Calendar.		Y (unless calendarname is specified)	calendarname
calendarname	Name used within the Controller to identify the Calendar.	Maximum 40 alphanumerics.	Y (unless calendarid is specified)	calendarid
customdayid	Unique ID for the Custom Day.		Y (unless customdayname is specified)	customdayname
customdayname	Name used within the Controller to identify the Custom Day.	Maximum 40 alphanumerics.	Y (unless customdayid is specified)	customdayid

## Create a Calendar

	Description
URI	<a href="http://host_name/opswise/resources/calendar">http://host_name/opswise/resources/calendar</a>
HTTP Method	POST
Description	Creates a new <a href="#">Calendar</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/calendar">http://localhost:8080/opswise/resources/calendar</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create a Calendar: Example Request</a> , below.
Calendar Properties	See <a href="#">Create a Calendar: Calendar Properties</a> .
Custom Day Properties	See <a href="#">Create a Calendar: Custom Day Properties</a> .
Local Custom Day Properties	See <a href="#">Create a Calendar: Local Custom Day Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the calendar with sysId &lt;sysId&gt;.</li> </ul>

### Create a Calendar: Example Request

<a href="#">XML Request</a>	<a href="#">JSON Request</a>
-----------------------------	------------------------------

XML Request

```
<calendar retainSysIds="true">
  <businessDays>Monday, Tuesday, Wednesday, Thursday, Friday<
/businessDays>
  <customDays>
    <customDay>
      <name>Ops - Christmas</name>
      <sysId>daf16d70c0a801650040c4d58a3feebd</sysId>
    >
    </customDay>
    <customDay>
      <name>Ops - Flag Day</name>
      <sysId>daf16d8fc0a801650040c4d54b2432fb</sysId>
    </customDay>
  </customDays>
  <comments>American Calendar</comments>
  <firstDayOfWeek>Sunday</firstDayOfWeek>
  <localCustomDays>
    <localCustomDay>
      <adjustment>None</adjustment>
      <adjustmentAmount>1</adjustmentAmount>
      <adjustmentType>Day</adjustmentType>
      <category>Holiday</category>
      <comments />
      <ctype>Single Date</ctype>
      <date>2017-08-23</date>
      <dateList />
      <day>1</day>
      <dayofweek>Sun</dayofweek>
      <month>Jan</month>
      <name>local custom day</name>
      <observedRules />
      <relfreq>1st</relfreq>
      <sysId>616ec15e7a5e40dbaae421e3688a25e5</sysId>
    >
    </localCustomDay>
  </localCustomDays>
  <name>Opwise - American Calendar</name>
  <opwiseGroups />
  <sysId>da24b953c0a8016501fbcbl8464d8328</sysId>
</calendar>
```

JSON Request

```
{
  "businessDays": {
    "value":
    "Monday, Tuesday, Wednesday, Thursday, Friday"
  },
  "comments": "American Calendar",
  "customDays": [
    {
      "name": "Ops - Christmas",
      "sysId": "daf16d70c0a801650040c4d58a3feebd"
    },
    {
      "name": "Ops - Flag Day",
      "sysId": "daf16d8fc0a801650040c4d54b2432fb"
    }
  ],
  "firstDayOfWeek": "Sunday",
  "localCustomDays": [
    {
      "adjustment": "None",
      "adjustmentAmount": 1,
      "adjustmentType": "Day",
      "category": "Holiday",
      "comments": null,
      "ctype": "Single Date",
      "date": "2017-08-23",
      "dateList": [],
      "day": 1,
      "dayofweek": "Sun",
      "month": "Jan",
      "name": "local custom day",
      "observedRules": [],
      "relfreq": "1st",
      "sysId": "616ec15e7a5e40dbaae421e3688a25e5"
    }
  ],
  "name": "Opwise - American Calendar",
  "opwiseGroups": [],
  "retainSysIds": true,
  "sysId": "da24b953c0a8016501fbcbl8464d8328"
}
```

Create a Calendar: Calendar Properties

Property	UI Field Name	Description	Specifications	Required
----------	---------------	-------------	----------------	----------

businessDays	Business Days	Comma-separated list of days.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• Sunday</li> <li>• Monday</li> <li>• Tuesday</li> <li>• Wednesday</li> <li>• Thursday</li> <li>• Friday</li> <li>• Saturday</li> </ul> <p><b>Optional: useDefaultIfBlank</b> attribute. Boolean; Valid values: true/false.</p> <ul style="list-style-type: none"> <li>• If <b>businessDays</b> is blank or is not specified in the Request, <b>businessDays</b> defaults to Monday,Tuesday,Wednesday,Thursday,Friday. To disable this behavior, set <b>useDefaultIfBlank</b> to false. That is, to set <b>businessDays</b> to blank when a calendar contains "Business Day" Custom Day(s), specify: <code>&lt;businessDays useDefaultIfBlank="false"&gt;&lt;/businessDays&gt;</code>.</li> <li>• If <b>businessDays</b> is blank and the <b>useDefaultIfBlank</b> attribute is not included in the Request (<code>&lt;businessDays /&gt;</code>), <b>businessDays</b> defaults to Monday,Tuesday,Wednesday,Thursday,Friday.</li> <li>• If <b>businessDays</b> is not blank, <b>useDefaultIfBlank</b> is ignored.</li> <li>• If <b>useDefaultIfBlank</b> is set to true (<code>&lt;businessDays useDefaultIfBlank="true"&gt;&lt;/businessDays&gt;</code>), <b>businessDays</b> defaults to Monday,Tuesday,Wednesday,Thursday,Friday.</li> <li>• If <b>useDefaultIfBlank</b> is set to false (<code>&lt;businessDays useDefaultIfBlank="false"&gt;&lt;/businessDays&gt;</code>), <b>business days</b> are not set.</li> </ul> <p>The Read a Calendar web service will return <b>useDefaultIfBlank</b> only if <b>businessDays</b> is empty; <b>useDefaultIfBlank</b> will be set to false.</p>	N
comments	Description	User-defined; description for the calendar.		N
excludeRelated	n/a	Specification for whether or not to exclude related records (Custom Days, Local Custom Days) from an update, even if they are provided in the request.	Valid values: true/false (default is false).	N
firstDayOfWeek	First Day Of Week	Day that is considered the start of the week.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• Sunday</li> <li>• Monday</li> <li>• Tuesday</li> <li>• Wednesday</li> <li>• Thursday</li> <li>• Friday</li> <li>• Saturday</li> </ul>	N
name	Name	Name used within the Controller to identify this calendar.	Maximum 40 alphanumerics.	Y

opswiseGroups	Member of Business Services	<p>List of Business Services:</p> <p><b>XML</b></p> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;test&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <p><b>JSON</b></p> <pre>"opswiseGroups": [   "test" ]</pre>		N
retainSysIds	n/a	<p>Specification for whether or not the Create a Calendar web service will persist the <code>sysId</code> property.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> is included in the request/response, <code>sysId</code> will be persisted to the database.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> is included in the request/response, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;calendar&gt;</code> element.</p>	Valid values: true/false (default is true).	N
sysId	n/a	System ID field in the database for this Calendar record.	Persisted only if <b>retainSysIds is set to true.</b>	N

### Create a Calendar: Custom Day Properties

Property	UI Field Name	Description	Specifications	Required
name	Name	Name used within the Controller to identify this Custom Day.	Maximum 40 alphanumeric.	Y
sysId	n/a	sysId of the Calendar-to-Custom Day relationship.		N

### Create a Calendar: Local Custom Day Properties



Property	UI Field Name	Description	Specifications	Required	MEV
adjustment	Adjustment	If ctype is Relative Repeating Date (1); Adjustment for the repeating date.	Valid values: <ul style="list-style-type: none"> <li>As String = None, As Value = 0</li> <li>As String = Less, As Value = 1</li> <li>As String = Plus, As Value = 2</li> </ul> Default is None (0).	N	
adjustmentAmount	Adjustment Amount	If adjustment is Less (1) or Plus (2); Amount (number of days) of the adjustment to be made.	Default is 1.	N	
adjustmentType	Adjustment Type	If adjustment is Less (1) or Plus (2); Type of day on which to make the adjustment.	Valid values: <ul style="list-style-type: none"> <li>As String = Day, As Value = 1</li> <li>As String = Business Day, As Value = 2</li> </ul> Default is Day (1).	N	
category	Category	Category of this Local Custom Day.	Valid values: <ul style="list-style-type: none"> <li>As String = Day, As Value = 1</li> <li>As String = Business Day, As Value = 2</li> <li>As String = Holiday, As Value = 3</li> <li>As String = Period, As Value = 4</li> </ul> Default is Day (1).	N	
comments	Description	Description of this Local Custom Day.		N	
ctype	Type	Type of this Local Custom Day.	Valid values: <ul style="list-style-type: none"> <li>As String = Single Date, As Value = 0</li> <li>As String = Relative Repeating Date, As Value = 1</li> <li>As String = Absolute Repeating Date, As Value = 2</li> <li>As String = List of Dates, As Value = 3</li> </ul> Default is Single Date (0).	N	
date	Date	Specific date for this Local Custom Day	Format: yyyy-mm-dd.	Y (if ctype = Single Date.)	d

dateList	Dates	Multiple specific dates for this Local Custom Day.	<p><b>XML</b></p> <pre>&lt;dateList&gt;   &lt;date&gt;2017-12-13&lt;/date&gt;   &lt;date&gt;2017-12-14&lt;/date&gt; &lt;/dateList&gt;</pre> <p><b>JSON</b></p> <pre>"dateList": [   "2017-12-13",   "2017-12-14" ],</pre>	Y (if ctype is List of Dates.)	d
day	Day	Day of the month.	Integer; Valid values: 1-31.	Y (if ctype is Absolute Repeating Date)	
dayofweek	Day Of Week	Day of the week.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Sun, As Value = 1</li> <li>• As String = Mon, As Value = 2</li> <li>• As String = Tue, As Value = 3</li> <li>• As String = Wed, As Value = 4</li> <li>• As String = Thu, As Value = 5</li> <li>• As String = Fri, As Value = 6</li> <li>• As String = Sat, As Value = 7</li> </ul> <p>Default is Mon (2).</p>	Y (if ctype is Relative Repeating Date)	

month	Month	<p>Month of the year.</p>	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Jan, As Value = 0</li> <li>• As String = Feb, As Value = 1</li> <li>• As String = Mar, As Value = 2</li> <li>• As String = Apr, As Value = 3</li> <li>• As String = May, As Value = 4</li> <li>• As String = Jun, As Value = 5</li> <li>• As String = Jul, As Value = 6</li> <li>• As String = Aug, As Value = 7</li> <li>• As String = Sep, As Value = 8</li> <li>• As String = Oct, As Value = 9</li> <li>• As String = Nov, As Value = 10</li> <li>• As String = Dec, As Value = 11</li> <li>• As String = ALL, As Value = 12</li> </ul> <p>Default is Jan (0).</p>	<p>Y (if ctype is Relative Repeating Date or Absolute Repeating Date)</p>
name	Name	<p>Name of this Local Custom Day.</p>		<p>Y</p>
observedRules	Observed Rules	<p>If category is Holiday (3) and ctype is Relative Repeating Date (1) or Absolute Repeating Date (2); Rules for when the holiday will be observed.</p> <p><b>XML</b></p> <pre data-bbox="531 764 1234 1138"> &lt;observedRules&gt;   &lt;observedRule&gt;     &lt;actualDayOfWeek&gt;Sat&lt;/actualDayOfWeek&gt;      &lt;observedDayOfWeek&gt;Fri&lt;/observedDayOfWeek&gt;    &lt;/observedRule&gt;   &lt;observedRule&gt;     &lt;actualDayOfWeek&gt;Sun&lt;/actualDayOfWeek&gt;      &lt;observedDayOfWeek&gt;Mon&lt;/observedDayOfWeek&gt;    &lt;/observedRule&gt; &lt;/observedRules&gt; </pre> <p><b>JSON</b></p> <pre data-bbox="531 1235 1234 1455"> "observedRules" : [ {   "actualDayOfWeek" : "Sat",   "observedDayOfWeek" : "Fri" }, {   "actualDayOfWeek" : "Sun",   "observedDayOfWeek" : "Mon" } ] </pre>	<p>Valid day of week values:</p> <ul style="list-style-type: none"> <li>• Sun, Mon, Tue, Wed, Thu, Fri, Sat</li> </ul>	<p>N</p>

relfreq	When	Occurrence of this day in the month.	Valid values: <ul style="list-style-type: none"> <li>• As String = 1st, As Value = 1</li> <li>• As String = 2nd, As Value = 2</li> <li>• As String = 3rd, As Value = 3</li> <li>• As String = 4th, As Value = 4</li> <li>• As String = Last, As Value = 5</li> <li>• As String = Every, As Value = 6</li> </ul> Default is 1st (1).	Y (if ctype is Relative Repeating Date)
sysId	n/a	System ID in the database for this Local Custom Day.	Persisted only if <b>retainSysIds</b> is set to true.	Y (if retainSysIds is true.)

## Delete a Calendar

	Description
URI	<a href="http://host_name/opswise/resources/calendar">http://host_name/opswise/resources/calendar</a>
HTTP Method	DELETE
Description	Deletes the specified <a href="#">Calendar</a> .
URI Parameters	See <a href="#">Delete a Calendar: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/calendar?calendarname=testCalendar">http://localhost:8080/opswise/resources/calendar?calendarname=testCalendar</a></li> <li>• <a href="http://localhost:8080/opswise/resources/calendar?calendarid=f87848b00a0001037f43e7c81c8ec969">http://localhost:8080/opswise/resources/calendar?calendarid=f87848b00a0001037f43e7c81c8ec969</a></li> </ul>
Authentication	HTTP Basic
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Calendar deleted successfully.</li> <li>• Status 404 /Not Found A calendar with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>

### Delete a Calendar: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
calendarid	Unique ID for this Calendar.		Y (unless calendarname is specified)	calendarname

calendarname	Name used within the Controller to identify this Calendar.	Maximum 40 alphanumerics.	Y (unless calendarid is specified)	calendarid
--------------	--	---------------------------	---------------------------------------	------------

## List Calendars

	Description
URI	<a href="http://host_name/opswise/resources/calendar/list">http://host_name/opswise/resources/calendar/list</a>
HTTP Method	GET
Description	Retrieves information on all Calendar.
Example URI	<a href="http://localhost:8080/opswise/resources/calendar/list">http://localhost:8080/opswise/resources/calendar/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Calendars: Example Response</a> , below.
Calendar Properties	See <a href="#">Create a Calendar: Calendar Properties</a> .
Custom Day Properties	See <a href="#">Create a Calendar: Custom Day Properties</a> .
Local Custom Day Properties	See <a href="#">Create a Calendar: Local Custom Day Properties</a> .

## List Calendars: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre>&lt;calendars&gt;   &lt;calendar version="6"&gt;     &lt;businessDays&gt;Monday,Tuesday,Wednesday,Thursday,Friday&lt;/businessDays&gt;   &gt;   &lt;comments&gt;Default System Calendar&lt;/comments&gt;   &lt;customDays&gt;     &lt;customDay&gt;       &lt;name&gt;Ops - Memorial Day&lt;/name&gt;       &lt;sysId&gt;daf16d70c0a801650040c4d58a3feebd&lt;/sysId&gt;     &lt;/customDay&gt;     &lt;customDay&gt;       &lt;name&gt;Ops - Thanksgiving Day USA&lt;/name&gt;     &lt;/customDay&gt;   &lt;/customDays&gt; &lt;/calendars&gt;</pre>	<p>JSON Response</p> <pre>[   {     "businessDays": {       "value": "Monday,Tuesday,Wednesday,Thursday,Friday"     },     "comments": "Default System Calendar",     "customDays": [       {         "name": "Ops - Memorial Day",         "sysId": "daf16d70c0a801650040c4d58a3feebd"       },     ]   }, ]</pre>

```

        <sysId>b355ca6ea2c94aaa9a8895d496396e57</sysId>
    </customDay>
</customDays>
<firstDayOfWeek>Sunday</firstDayOfWeek>
<localCustomDays>
    <localCustomDay>
        <adjustment>None</adjustment>
        <adjustmentAmount>1</adjustmentAmount>
        <adjustmentType>Day</adjustmentType>
        <category>Holiday</category>
        <comments />
        <ctype>Single Date</ctype>
        <date>2017-08-23</date>
        <dateList />
        <day>1</day>
        <dayofweek>Sun</dayofweek>
        <month>Jan</month>
        <name>local custom day</name>
        <relfreq>1st</relfreq>
        <sysId>616ec15e7a5e40dbaae421e3688a25e5</sysId>
    </localCustomDay>
</localCustomDays>
<name>System Default</name>
<opwiseGroups />
<sysId>77171434c0a801c9016d5b2b5d17ddee</sysId>
</calendar>
<calendar version="2">
    <businessDays>Monday,Tuesday,Wednesday,Thursday,Friday</businessDays>
    <comments>American Calendar</comments>
    <customDays />
    <firstDayOfWeek>Sunday</firstDayOfWeek>
    <localCustomDays>
        <localCustomDay>
            <adjustment>None</adjustment>
            <adjustmentAmount>1</adjustmentAmount>
            <adjustmentType>Day</adjustmentType>
            <category>Holiday</category>
            <comments />
            <ctype>Single Date</ctype>
            <date>2017-08-23</date>
            <dateList />
            <day>1</day>
            <dayofweek>Sun</dayofweek>
            <month>Jan</month>
            <name>local custom day</name>
            <relfreq>1st</relfreq>
            <sysId>616ec15e7a5e40dbaae421e3688a25e5</sysId>
        </localCustomDay>
    </localCustomDays>
    <name>Opwise - American Calendar</name>
    <opwiseGroups/>
    <sysId>da24b953c0a8016501fbcbl8464d8328</sysId>

```

```

    {
        "name": "Ops - Thanksgiving Day USA",
        "sysId":
        "b355ca6ea2c94aaa9a8895d496396e57"
    }
],
    "firstDayOfWeek": "Sunday",
    "localCustomDays": [
        {
            "adjustment": "None",
            "adjustmentAmount": 1,
            "adjustmentType": "Day",
            "category": "Holiday",
            "comments": null,
            "ctype": "Single Date",
            "date": "2017-08-23",
            "dateList": ""
            "day": 1,
            "dayofweek": "Sun",
            "month": "Jan",
            "name": "local custom day",
            "relfreq": "1st",
            "sysId":
            "616ec15e7a5e40dbaae421e3688a25e5"
        }
    ],
    "name": "System Default",
    "opwiseGroups": [],
    "sysId":
    "77171434c0a801c9016d5b2b5d17ddee",
    "version": 6
    },
    {
        "businessDays": {
            "value":
            "Monday,Tuesday,Wednesday,Thursday,Friday"
        },
        "comments": "American Calendar",
        "customDays": [],
        "firstDayOfWeek": "Sunday",
        "localCustomDays": [
            {
                "adjustment": "None",
                "adjustmentAmount": 1,
                "adjustmentType": "Day",
                "category": "Holiday",
                "comments": null,
                "ctype": "Single Date",
                "date": "2017-08-23",
                "dateList": null,
                "day": 1,
                "dayofweek": "Sun",
                "month": "Jan",
                "name": "local custom day",
                "relfreq": "1st",
                "sysId":
                "616ec15e7a5e40dbaae421e3688a25e5"
            }
        ]
    }

```

```
</calendar>  
</calendars>
```

```
],  
  "name": "Opwise - American Calendar",  
  "opwiseGroups": [],  
  "sysId":  
  "da24b953c0a8016501fbcb18464d8328",  
  "version": 2
```

```

    }
  ]

```

## List Local Custom Day Qualifying Dates

	Description
URI	<a href="http://host_name/opwise/resources/calendar/localcustomdays/qualifyingdates">http://host_name/opwise/resources/calendar/localcustomdays/qualifyingdates</a>
HTTP Method	GET
Description	Retrieves information on Qualifying Dates for a specific Local Custom Day.
URI Parameters	See <a href="#">List Local Custom Day Qualifying Dates URI Parameters: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opwise/resources/calendar/localcustomdays/qualifyingdates?customdayname=testLocalCustomDay&amp;calendarname=testCalendar">http://localhost:8080/opwise/resources/calendar/localcustomdays/qualifyingdates?customdayname=testLocalCustomDay&amp;calendarname=testCalendar</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Local Custom Day Qualifying Dates: Example Response</a> , below.

### List Local Custom Day Qualifying Dates: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
customdayname	Name used within the Controller to identify this Local Custom Day.	Maximum 40 alphanumerics.	Y	
calendarid	Unique ID for this calendar.		Y (unless calendarname is specified)	calendarname
calendarname	Name used within the Controller to identify this calendar.	Maximum 40 alphanumerics.	Y (unless calendarid is specified)	calendarid

### List Local Custom Day Qualifying Dates: Example Response

<a href="#">XML Response</a>	<a href="#">JSON Response</a>
------------------------------	-------------------------------



**XML Response**

```
<qualifyingDates>
<qualifyingDate>Mon, Jan 1, 2018</qualifyingDate>
<qualifyingDate>Tue, Jan 1, 2019</qualifyingDate>
<qualifyingDate>Wed, Jan 1, 2020</qualifyingDate>
<qualifyingDate>Fri, Jan 1, 2021</qualifyingDate>
<qualifyingDate>Sat, Jan 1, 2022</qualifyingDate>
<qualifyingDate>Sun, Jan 1, 2023</qualifyingDate>
<qualifyingDate>Mon, Jan 1, 2024</qualifyingDate>
<qualifyingDate>Wed, Jan 1, 2025</qualifyingDate>
<qualifyingDate>Thu, Jan 1, 2026</qualifyingDate>
<qualifyingDate>Fri, Jan 1, 2027</qualifyingDate>
<qualifyingDate>Sat, Jan 1, 2028</qualifyingDate>
<qualifyingDate>Mon, Jan 1, 2029</qualifyingDate>
<qualifyingDate>Tue, Jan 1, 2030</qualifyingDate>
<qualifyingDate>Wed, Jan 1, 2031</qualifyingDate>
<qualifyingDate>Thu, Jan 1, 2032</qualifyingDate>
<qualifyingDate>Sat, Jan 1, 2033</qualifyingDate>
<qualifyingDate>Sun, Jan 1, 2034</qualifyingDate>
<qualifyingDate>Mon, Jan 1, 2035</qualifyingDate>
<qualifyingDate>Tue, Jan 1, 2036</qualifyingDate>
<qualifyingDate>Thu, Jan 1, 2037</qualifyingDate>
<qualifyingDate>Fri, Jan 1, 2038</qualifyingDate>
<qualifyingDate>Sat, Jan 1, 2039</qualifyingDate>
<qualifyingDate>Sun, Jan 1, 2040</qualifyingDate>
<qualifyingDate>Tue, Jan 1, 2041</qualifyingDate>
<qualifyingDate>Wed, Jan 1, 2042</qualifyingDate>
<qualifyingDate>Thu, Jan 1, 2043</qualifyingDate>
<qualifyingDate>Fri, Jan 1, 2044</qualifyingDate>
<qualifyingDate>Sun, Jan 1, 2045</qualifyingDate>
<qualifyingDate>Mon, Jan 1, 2046</qualifyingDate>
<qualifyingDate>Tue, Jan 1, 2047</qualifyingDate>
</qualifyingDates>
```

**JSON Response**

```
[
  "Mon, Jan 1, 2018",
  "Tue, Jan 2, 2019",
  "Wed, Jan 1, 2020",
  "Fri, Jan 1, 2021"
]
```

## List Local Custom Day Qualifying Periods

	Description
URI	<a href="http://host_name/opwise/resources/calendar/localcustomdays/qualifyingperiods">http://host_name/opwise/resources/calendar/localcustomdays/qualifyingperiods</a>
HTTP Method	GET
Description	Retrieves information on Qualifying Periods for a specific Local Custom Day.
URI Parameters	See <a href="#">List Local Custom Day Qualifying Periods URI Parameters: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opwise/resources/calendar/localcustomdays/qualifyingperiods?customdayname=testLocalCustomDay&amp;calendarname=testCalendar">http://localhost:8080/opwise/resources/calendar/localcustomdays/qualifyingperiods?customdayname=testLocalCustomDay&amp;calendarname=testCalendar</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a

Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Local Custom Day Qualifying Periods: Example Response</a> , below.

### List Local Custom Day Qualifying Periods: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre>&lt;qualifyingPeriods&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 1, 2017&lt;/startDate&gt;     &lt;endDate&gt;Sat, Jan 6, 2018&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 7, 2018&lt;/startDate&gt;     &lt;endDate&gt;Sat, Jan 5, 2019&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 6, 2019&lt;/startDate&gt;     &lt;endDate&gt;Sat, Jan 4, 2020&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 5, 2020&lt;/startDate&gt;     &lt;endDate&gt;Sat, Jan 2, 2021&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 3, 2021&lt;/startDate&gt;     &lt;endDate&gt;Sat, Jan 1, 2022&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 2, 2022&lt;/startDate&gt;     &lt;endDate&gt;Sat, Dec 31, 2022&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt; &lt;/qualifyingPeriods&gt;</pre>	<p>JSON Response</p> <pre>[   {     "startDate": "Sun, Jan 1, 2017",     "endDate": "Sat, Jan 6, 2018"   },   {     "startDate": "Sun, Jan 7, 2018",     "endDate": "Sat, Jan 5, 2019"   } ]</pre>

### List Custom Day Qualifying Periods: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
customdayname	Name used within the Controller to identify this Local Custom Day.	Maximum 40 alphanumeric.	Y	
calendarid	Unique ID for this calendar.		Y (unless calendarname is specified)	calendarname
calendarname	Name used within the Controller to identify this calendar.	Maximum 40 alphanumeric.	Y (unless calendarid is specified)	calendarid

## Modify a Calendar

	Description
URI	<a href="http://host_name/opswise/resources/calendar">http://host_name/opswise/resources/calendar</a>
HTTP Method	PUT
Description	Modifies the <a href="#">Calendar</a> specified by the <code>sysId</code> . To modify Calendar properties without modifying related records, see the <a href="#">excludeRelated</a> property.
Example URI	<a href="http://localhost:8080/opswise/resources/calendar">http://localhost:8080/opswise/resources/calendar</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify a Calendar: Example Request</a> , below.
Calendar Properties	See <a href="#">Create a Calendar: Calendar Properties</a> .
Custom Day Properties	See <a href="#">Create a Calendar: Custom Day Properties</a> .
Local Custom Day Properties	See <a href="#">Create a Calendar: Local Custom Day Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the calendar with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

### Modify a Calendar: Example Request

The [excludeRelated](#) property is included in the XML as an attribute.

XML Request	JSON Request
-------------	--------------

## XML Request

```

<calendar>
  <businessDays>Monday, Tuesday, Wednesday, Thursday, Friday<
/businessDays>
  <customDays>
    <customDay>
      <name>Ops - Christmas</name>
      <sysId>daf16d70c0a801650040c4d58a3feebd</sysId>
    >
    </customDay>
    <customDay>
      <name>Ops - Flag Day</name>
      <sysId>daf16d8fc0a801650040c4d54b2432fb</sysId>
    </customDay>
  </customDays>
  <comments>American Calendar</comments>
  <firstDayOfWeek>Sunday</firstDayOfWeek>
  <localCustomDays>
    <localCustomDay>
      <adjustment>None</adjustment>
      <adjustmentAmount>1</adjustmentAmount>
      <adjustmentType>Day</adjustmentType>
      <category>Holiday</category>
      <comments />
      <ctype>Single Date</ctype>
      <date>2017-08-23</date>
      <dateList />
      <day>1</day>
      <dayofweek>Sun</dayofweek>
      <month>Jan</month>
      <name>local custom day</name>
      <relfreq>1st</relfreq>
      <sysId>616ec15e7a5e40dbaae421e3688a25e5</sysId>
    >
    </localCustomDay>
  </localCustomDays>
  <name>Opwise - American Calendar</name>
  <opwiseGroups />
  <sysId>da24b953c0a8016501fbc18464d8328</sysId>
</calendar>
    
```

## JSON Request

```

{
  "businessDays": {
    "value":
    "Monday, Tuesday, Wednesday, Thursday, Friday"
  },
  "comments": "American Calendar",
  "customDays": [
    {
      "name": "Ops - Christmas",
      "sysId": "daf16d70c0a801650040c4d58a3feebd"
    },
    {
      "name": "Ops - Flag Day",
      "sysId": "daf16d8fc0a801650040c4d54b2432fb"
    }
  ],
  "firstDayOfWeek": "Sunday",
  "localCustomDays": [
    {
      "adjustment": "None",
      "adjustmentAmount": 1,
      "adjustmentType": "Day",
      "category": "Holiday",
      "comments": null,
      "ctype": "Single Date",
      "date": "2017-08-23",
      "dateList": [],
      "day": 1,
      "dayofweek": "Sun",
      "month": "Jan",
      "name": "local custom day",
      "relfreq": "1st",
      "sysId": "616ec15e7a5e40dbaae421e3688a25e5"
    }
  ],
  "name": "Opwise - American Calendar",
  "opwiseGroups": [],
  "sysId": "da24b953c0a8016501fbc18464d8328"
}
    
```

## Read a Calendar

	Description
URI	<a href="http://host_name/opwise/resources/calendar">http://host_name/opwise/resources/calendar</a>
HTTP Method	GET
Description	Retrieves information on a specific Calendar.

URI Parameters	See <a href="#">Read a Calendar: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/calendar?calendarname=testCalendar">http://localhost:8080/opswise/resources/calendar?calendarname=testCalendar</a></li> <li>• <a href="http://localhost:8080/opswise/resources/calendar?calendarid=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/calendar?calendarid=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Read a Calendar: Example Response</a>, below.)</li> <li>• Status 404 /Not Found A calendar with id "d26265a2c4f345359d9b356f18a462c1" does not exist.</li> </ul>
Calendar Properties	See <a href="#">Create a Calendar: Calendar Properties</a> .
Custom Day Properties	See <a href="#">Create a Calendar: Custom Day Properties</a> .
Local Custom Day Properties	See <a href="#">Create a Calendar: Local Custom Day Properties</a> .

### Read a Calendar: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
calendarid	Unique ID for this Calendar.		Y (unless calendarname is specified)	calendarname
calendarname	Name used within the Controller to identify this Calendar.	Maximum 40 alphanumerics.	Y (unless calendarid is specified)	calendarid

### Read a Calendar: Example Response

<b>XML Response</b>	<b>JSON Response</b>
---------------------	----------------------

XML Response

```
<calendar retainSysIds="true" version="1">
  <businessDays>Monday, Tuesday, Wednesday, Thursday, Friday</businessDays>
  <customDays>
    <customDay>
      <name>Ops - Christmas</name>
      <sysId>daf16d70c0a801650040c4d58a3feebd</sysId>
    </customDay>
    <customDay>
      <name>Ops - Flag Day</name>
      <sysId>daf16d8fc0a801650040c4d54b2432fb</sysId>
    </customDay>
  </customDays>
  <comments>American Calendar</comments>
  <firstDayOfWeek>Sunday</firstDayOfWeek>
  <localCustomDays>
    <localCustomDay>
      <adjustment>None</adjustment>
      <adjustmentAmount>1</adjustmentAmount>
      <adjustmentType>Day</adjustmentType>
      <category>Holiday</category>
      <comments />
      <ctype>Single Date</ctype>
      <date>2017-08-23</date>
      <dateList />
      <day>1</day>
      <dayofweek>Sun</dayofweek>
      <month>Jan</month>
      <name>local custom day</name>
      <relfreq>1st</relfreq>
      <sysId>616ec15e7a5e40dbaae421e3688a25e5</sysId>
    </localCustomDay>
  </localCustomDays>
  <name>Opwise - American Calendar</name>
  <opwiseGroups />
  <sysId>da24b953c0a8016501fbc18464d8328</sysId>
</calendar>
```

JSON Response

```
{
  "businessDays": {
    "value":
    "Monday, Tuesday, Wednesday, Thursday, Friday"
  },
  "comments": "American Calendar",
  "customDays": [
    {
      "name": "Ops - Christmas",
      "sysId": "daf16d70c0a801650040c4d58a3feebd"
    },
    {
      "name": "Ops - Flag Day",
      "sysId": "daf16d8fc0a801650040c4d54b2432fb"
    }
  ],
  "firstDayOfWeek": "Sunday",
  "localCustomDays": [
    {
      "adjustment": "None",
      "adjustmentAmount": 1,
      "adjustmentType": "Day",
      "category": "Holiday",
      "comments": null,
      "ctype": "Single Date",
      "date": "2017-08-23",
      "dateList": [],
      "day": 1,
      "dayofweek": "Sun",
      "month": "Jan",
      "name": "local custom day",
      "relfreq": "1st",
      "sysId": "616ec15e7a5e40dbaae421e3688a25e5"
    }
  ],
  "name": "Opwise - American Calendar",
  "opwiseGroups": [],
  "retainSysIds": true,
  "sysId": "da24b953c0a8016501fbc18464d8328",
  "version": 1
}
```

### Read All Custom Days of a Calendar

	Description
URI	<a href="http://host_name/opwise/resources/calendar/customdays">http://host_name/opwise/resources/calendar/customdays</a>
HTTP Method	GET

Description	Retrieves information on all <b>Custom Days</b> of a specific <b>Calendar</b> .
URI Parameters	See <a href="#">Read All Custom Days of a Calendar: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opwise/resources/calendar/customdays?calendarname=test">http://localhost:8080/opwise/resources/calendar/customdays?calendarname=test</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Read All Custom Days of a Calendar: Example Response</a>, below.)</li> <li>• Status 404 /Not Found A calendar with id "d26265a2c4f345359d9b356f18a462c1" does not exist.</li> </ul>
Response Properties	See <a href="#">Read All Custom Days of a Calendar: Response Properties</a> , below.

### Read All Custom Days of a Calendar: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
calendarid	Unique ID for this Calendar.		Y (unless calendarname is specified)	calendarname
calendarname	Name used within the Controller to identify this Calendar.	Maximum 40 alphanumerics.	Y (unless calendarid is specified)	calendarid

### Read All Custom Days of a Calendar: Example Response

<a href="#">XML Response</a>	<a href="#">JSON Response</a>
------------------------------	-------------------------------

XML Response

```
<customDays>
  <customDay>
    <adjustment>None</adjustment>
    <adjustmentAmount>1</adjustmentAmount>
    <adjustmentType>Day</adjustmentType>
    <category>Holiday</category>
    <comments>New Year's Day - Jan 1st</comments>
    <ctype>Absolute Repeating Date</ctype>
    <date />
    <dateList />
    <day>1</day>
    <dayofweek>Sun</dayofweek>
    <holiday>true</holiday>
    <month>Jan</month>
    <name>Ops - New Year's Day</name>
    <period>>false</period>
    <relfreq>1st</relfreq>
    <sysId>dae77560c0a80165006d8051753b806c</sysId>
  >
  </customDay>
  <customDay>
    <adjustment>None</adjustment>
    <adjustmentAmount>1</adjustmentAmount>
    <adjustmentType>Day</adjustmentType>
    <category>Holiday</category>
    <comments>New Year's Day - Jan 1st</comments>
    <ctype>Absolute Repeating Date</ctype>
    <date />
    <dateList />
    <day>1</day>
    <dayofweek>Sun</dayofweek>
    <holiday>true</holiday>
    <month>Jan</month>
    <name>Ops - New Year's Day</name>
    <period>>false</period>
    <relfreq>1st</relfreq>
    <sysId>dae77560c0a80165006d8051753b806c</sysId>
  </customDay>
</customDays>
```

JSON Response

```
[
  {
    "adjustment": "None",
    "adjustmentAmount": 1,
    "adjustmentType": "Day",
    "category": "Holiday",
    "comments": "New Year's Day - Jan 1st",
    "ctype": "Absolute Repeating Date",
    "date": null,
    "dateList": [ ],
    "day": 1,
    "dayofweek": "Sun",
    "holiday": true,
    "month": "Jan",
    "name": "Ops - New Year's Day",
    "period": false,
    "relfreq": "1st",
    "sysId": "dae77560c0a80165006d8051753b806c"
  },
  {
    "adjustment": "None",
    "adjustmentAmount": 1,
    "adjustmentType": "Day",
    "category": "Holiday",
    "comments": "New Year's Day - Jan 1st",
    "ctype": "Absolute Repeating Date",
    "date": null,
    "dateList": [ ],
    "day": 1,
    "dayofweek": "Sun",
    "holiday": true,
    "month": "Jan",
    "name": "Ops - New Year's Day",
    "period": false,
    "relfreq": "1st",
    "sysId": "dae77560c0a80165006d8051753b806c"
  }
]
```

**Read All Custom Days of a Calendar: Properties**

Property	UI Field Name	Description
adjustment	Adjustment	Adjustment for the repeating date.
adjustmentAmount	Adjustment Amount	Amount (number of days) of the adjustment to be made.
adjustmentType	Adjustment Type	Type of day on which to make the adjustment.



category	Category	Category of this Local Custom Day.
comments	Description	Description of this Custom Day.
ctype	Type	Type of this Custom Day.
date	Date	Specific date for this Custom Day
dateList	Dates	Multiple specific dates for this Custom Day.
day	Day	Day of the month.
dayofweek	Day Of Week	Day of the week.
holiday	Holiday	<b>Deprecated.</b> Indication of whether or not this Custom Day is a holiday.
month	Month	Month of the year.
name	Name	Name of this Custom Day.
period	Period	<b>Deprecated.</b> Indication of whether or not this Custom Day defines a custom period of days.
relfreq	When	Occurrence of this day in the month.
sysId	n/a	System ID in the database for this Custom Day.

## Remove a Custom Day from a Calendar

	Description
URI	<a href="http://host_name/opswise/resources/calendar/customdays">http://host_name/opswise/resources/calendar/customdays</a>
HTTP Method	DELETE
Description	Removes the specified Custom Day from a specific Calendar.
URI Parameters	See <a href="#">Remove a Custom Day from a Calendar: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opswise/resources/calendar/customdays?calendarname=ExampleCalendar&amp;customdayid=977e7539af6e450d924a92e1ad39a256">http://localhost:8080/opswise/resources/calendar/customdays?calendarname=ExampleCalendar&amp;customdayid=977e7539af6e450d924a92e1ad39a256</a>
Authentication	HTTP Basic
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully removed custom day &lt;customDay&gt; from calendar &lt;calendar&gt;.</li> <li>Status 400 /Bad Request Calendar &lt;calendarName&gt; doesn't exist.</li> </ul>

## Remove a Custom Day from a Calendar: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
------	-------------	----------------	----------	-------------------------

calendarid	Unique ID for the Calendar.		Y (unless calendarname is specified)	calendarname
calendarname	Name used within the Controller to identify the Calendar.	Maximum 40 alphanumerics.	Y (unless calendarid is specified)	calendarid
customdayid	Unique ID for the Custom Day.		Y (unless customdayname is specified)	customdayname
customdayname	Name used within the Controller to identify the Custom Day.	Maximum 40 alphanumerics.	Y (unless customdayid is specified)	customdayid

## Cluster Node Web Services

- [Overview](#)
- [List All Cluster Nodes](#)
- [Read Current Cluster Node](#)

### Overview

Universal Controller supports the following RESTful-based web services for [Cluster Nodes](#), which are listed alphabetically on this page.

- [List All Cluster Nodes](#)
- [Read Current Cluster Node](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

### List All Cluster Nodes

	Description
URI	<a href="http://host_name/opswise/resources/clusternode/list">http://host_name/opswise/resources/clusternode/list</a>
HTTP Method	GET
Description	Retrieves information on all <a href="#">Cluster Nodes</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/clusternode/list">http://localhost:8080/opswise/resources/clusternode/list</a>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List All Cluster Nodes: XML and JSON Examples</a> .
Properties	See <a href="#">List All Cluster Nodes: Properties</a> .

### List All Cluster Nodes: XML and JSON Examples

XML	JSON
<p>XML</p> <div style="border: 1px solid #ccc; height: 80px; width: 100%;"></div>	<p>JSON</p>

```

<clusterNodes>
  <clusterNode>
    <buildDate>12-18-2017_0529<
  /buildDate>
    <buildId>build.development<
  /buildId>
    <hostName>asus-pc</hostName>
    <ipAddress>192.168.1.21<
  /ipAddress>
    <nodeId>asus-pc:8501-opwise<
  /nodeId>
    <nodeMode>Active</nodeMode>
    <nodeStart>2017-12-18 18:40:25<
  /nodeStart>
    <nodeTs>2017-12-19 09:55:46<
  /nodeTs>
    <nodeUptime>54920</nodeUptime>
    <nodeUptimeDisplay>15 Hours 15
Minutes 20 Seconds<
  /nodeUptimeDisplay>
    <paused>false</paused>
    <pausedForMaintenance />
    <relId>6.4.3.0</relId>
    <sysId
>3a5385a3f6df47cb8eb7a2e29845d55b<
  /sysId>
  </clusterNode>
  <clusterNode>
    <buildDate>12-18-2017_0629<
  /buildDate>
    <buildId>build.development<
  /buildId>
    <hostName>atut-pc</hostName>
    <ipAddress>192.168.1.22<
  /ipAddress>
    <nodeId>asus-pc:8502-opwise<
  /nodeId>
    <nodeMode>Active</nodeMode>
    <nodeStart>2017-12-18 19:40:25<
  /nodeStart>
    <nodeTs>2017-12-19 10:55:46<
  /nodeTs>
    <nodeUptime>54930</nodeUptime>
    <nodeUptimeDisplay>16 Hours 15
Minutes 20 Seconds<
  /nodeUptimeDisplay>
    <paused>false</paused>
    <pausedForMaintenance />
    <relId>6.4.3.0</relId>
    <sysId
>3a5385a3f6df47cb8eb7a2e29845d55c<
  /sysId>
  </clusterNode>
</clusterNodes>

```

```

[ {
  "buildDate": "12-18-2017_0529",
  "buildId": "build.18",
  "hostName": "Mark-4",
  "ipAddress": "192.168.1.21",
  "nodeId": "Mark-4:8080-opwise6",
  "nodeMode": "Active",
  "nodeStart": "2017-12-18
18:40:25",
  "nodeTs": "2017-12-19 09:55:46",
  "nodeUptime": 54920,
  "nodeUptimeDisplay": "15 Hours 15
Minutes 20 Seconds",
  "paused": false,
  "pausedForMaintenance": null,
  "relId": "6.4.3.0",
  "sysId":
"93ac346868fc4171a514d1d0b02487e1"
},
{
  "buildDate": "12-18-2017_0629",
  "buildId": "build.18",
  "hostName": "Mark-5",
  "ipAddress": "192.168.1.22",
  "nodeId": "Mark-5:8080-opwise6",
  "nodeMode": "Active",
  "nodeStart": "2017-12-18
19:40:25",
  "nodeTs": "2017-12-19 10:55:46",
  "nodeUptime": 54930,
  "nodeUptimeDisplay": "16 Hours 15
Minutes 20 Seconds",
  "paused": false,
  "pausedForMaintenance": null,
  "relId": "6.4.3.0",
  "sysId":
"93ac346868fc4171a514d1d0b02487e2"
}
]

```

## List All Cluster Nodes: Properties

Property	UI Field Name	Description
buildDate	Build Date	Build date for this cluster node.
buildId	Build Id	Build ID for this cluster node.
hostName	Host Name	IP address or domain/name of the host machine where the cluster node resides.
ipAddress	IP Address	IP address of this cluster node.
nodeId	Node Id	URL of the cluster node.
nodeMode	Mode	Current mode of the cluster node.
nodeStart	Start Time	Date and time this cluster node was last started.
nodeTs	Timestamp	Date and time of the last heartbeat of this cluster node.
nodeUptime	n/a	nodeUptimeDisplay (in seconds).
nodeUptimeDisplay	Uptime	Amount of time this cluster node has been running.
paused	Paused	Indication that the Controller has been <a href="#">paused</a> .
pausedForMaintenance	n/a	<b>Deprecated.</b> Indication that the Controller has been <a href="#">paused</a> for maintenance.
relId	Release	Release number for this cluster node.
sysId	n/a	System ID field in the database for this cluster node record.

## Read Current Cluster Node

	Description
URI	<a href="http://host_name/opswise/resources/clusternode/info">http://host_name/opswise/resources/clusternode/info</a>
HTTP Method	GET
Description	Retrieves information on the current Cluster Node.
Example URI	<a href="http://localhost:8080/opswise/resources/clusternode/info">http://localhost:8080/opswise/resources/clusternode/info</a>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Response Example	See <a href="#">Read Current Cluster Node: XML and JSON Examples</a> .
Properties	See <a href="#">List All Cluster Nodes: Properties</a> .

## Read Current Cluster Node: XML and JSON Examples

XML	JSON
<p data-bbox="142 250 216 277">XML</p> <pre data-bbox="178 300 661 1023"> &lt;clusterNode&gt;   &lt;buildDate&gt;12-18-2017_0529&lt; /buildDate&gt;   &lt;buildId&gt;build.development&lt; /buildId&gt;   &lt;hostName&gt;asus-pc&lt;/hostName &gt;   &lt;ipAddress&gt;192.168.1.21&lt; /ipAddress&gt;   &lt;nodeId &gt;asus-pc:8501-opswise&lt;/nodeId&gt;   &lt;nodeMode&gt;Active&lt;/nodeMode&gt;   &lt;nodeStart&gt;2017-12-18 18:40:25&lt;/nodeStart&gt;   &lt;nodeTs&gt;2016-01-20 09:54:20&lt;/nodeTs&gt;   &lt;nodeUptime&gt;55150&lt; /nodeUptime&gt;   &lt;nodeUptimeDisplay&gt;15 Hours 19 Minutes 10 Seconds&lt; /nodeUptimeDisplay&gt;   &lt;paused&gt;&gt;false&lt;/paused&gt;   &lt;pausedForMaintenance /&gt;   &lt;relId&gt;6.4.3.0&lt;/relId&gt;   &lt;sysId &gt;3a5385a3f6df47cb8eb7a2e29845d55b&lt; /sysId&gt; &lt;/clusterNode&gt; </pre>	<p data-bbox="730 250 804 277">JSON</p> <pre data-bbox="766 300 1281 812"> {   "buildDate": "12-18-2017_0529",   "buildId": "build.18",   "hostName": "Mark-4",   "ipAddress": "192.168.1.21",   "nodeId": "Mark-4:8080-opswise6",   "nodeMode": "Active",   "nodeStart": "2017-12-18 18:40:25",   "nodeTs": "2017-12-19 09:55:46",   "nodeUptime": 54920,   "nodeUptimeDisplay": "15 Hours 19 Minutes 10 Seconds",   "paused": false,   "pausedForMaintenance": null,   "relId": "6.4.3.0",   "sysId": "93ac346868fc4171a514d1d0b02487e1" } </pre>

## Connections Web Services

### Overview

Universal Controller supports RESTful-based web services for the following types of Connections:

- [Database Connections](#)
- [Email Templates](#)
- [Email Connections](#)
- [SAP Connections](#)
- [PeopleSoft Connections](#)
- [SNMP Managers](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

## Database Connection Web Services

- [Overview](#)
- [Create a Database Connection](#)
- [Delete a Database Connection](#)
- [List Database Connections](#)
- [Modify a Database Connection](#)
- [Read a Database Connection](#)

### Overview

Universal Controller supports the following RESTful-based web services for Database Connection operations, which are listed alphabetically on this page.

- [Create a Database Connection](#)
- [Delete a Database Connection](#)
- [List Database Connections](#)
- [Modify a Database Connection](#)
- [Read a Database Connection](#)

Formatting specifications for each web service, including details about property requirements, are provided.

### Create a Database Connection

	Description
URI	<a href="http://host_name/opswise/resources/databaseconnection">http://host_name/opswise/resources/databaseconnection</a>
HTTP Method	POST
Description	Creates an <a href="#">Database Connection</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/databaseconnection">http://localhost:8080/opswise/resources/databaseconnection</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create a Database Connection: Example Request</a> , below.
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the Database Connection with sysId {sysId}.</li> <li>• Status 400 /Bad Request Create Database Connection failed. A duplicate value has been detected. Name must be unique.</li> </ul>
Database Connection Properties	See <a href="#">Database Connection Properties</a> , below.

### Create a Database Connection: Example Request



XML Request	JSON Request
<p>XML Request</p> <pre>&lt;databaseConnection retainSysIds="true"&gt;   &lt;credentials /&gt;   &lt;dbDescription /&gt;   &lt;dbDriver&gt;com.mysql.jdbc.Driver&lt; /dbDriver&gt;   &lt;dbMaxRows /&gt;   &lt;dbType&gt;My SQL&lt;/dbType&gt;   &lt;dbUrl &gt;jdbc:mysql://localhost:3306/opswise&lt; /dbUrl&gt;   &lt;name&gt;Database Connection 1&lt;/name&gt;   &lt;opswiseGroups /&gt;   &lt;sysId &gt;62701879a6264107bb757a952bcc65cc&lt; /sysId&gt; &lt;/databaseConnection&gt;</pre>	<p>JSON Request</p> <pre>{   "credentials": null,   "dbDescription": null,   "dbDriver": "com.mysql.jdbc.Driver",   "dbMaxRows": null,   "dbType": "My SQL",   "dbUrl": "jdbc:mysql://localhost:3306/opswise",   "name": "Database Connection 1",   "opswiseGroups": null,   "retainSysIds": true,   "sysId": "62701879a6264107bb757a952bcc65cc" }</pre>

### Database Connection Properties

Property	UI Field Name	Description	Specifications	Required
credentials	Credentials	Credentials for this Database Connection.		N
dbDescription	Description	Description of this record.		N
dbDriver	Driver	Name of the JDBC driver.		Y
dbMaxRows	Maximum Rows	If necessary, specifies a limit to the number of rows you want returned by the SQL statement.		N
dbType	Database Type	Type of Database.	Valid Values: <ul style="list-style-type: none"> <li>As String = MySQL (or My SQL), As Value = 1</li> <li>As String = MS SQL Server, As Value = 2</li> <li>As String = Oracle, As Value = 3</li> <li>As String = DB2, As Value = 4</li> <li>As String = Sybase SQL Anywhere, As Value = 5</li> <li>As String = Other, As Value = 6</li> </ul> Default is MySQL (1).	Y
dbUrl	Connection URL	URL of the database.		Y

name	Connection Name	Name used within the Controller to identify this Database Connection.		Y
opswiseGroups	Member of Business Services	Business Services that this record belongs to. <b>XML</b> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;group1&lt;/opswiseGroup&gt;   &lt;opswiseGroup&gt;group2&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <b>JSON</b> <pre>"opswiseGroups": ["group1","group2"]</pre>		N
retainSysIds	n/a	Specification for whether or not the Create a Database Connection web service will persist the <code>sysId</code> property. <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> is included in the request/response, <code>sysId</code> will be persisted to the database.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> is included in the request/response, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <div style="background-color: #ffffcc; padding: 5px;"> <p><b>Note</b>                          In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;databaseConnection&gt;</code> element.</p> </div>	Valid values: true/false (default is true).	N
sysId	n/a	System ID field in the database for this Database Connection record.	Persisted only if <code>retainSysIds</code> is set to true.	N

## Delete a Database Connection

	Description
URI	<a href="http://host_name/opswise/resources/databaseconnection">http://host_name/opswise/resources/databaseconnection</a>
HTTP Method	DELETE
Description	Deletes a Database Connection.
URI Parameters	See <a href="#">Delete a Database Connection: URI Parameters</a> , below.

Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/databaseconnection?connectionname=Test4">http://localhost:8080/opswise/resources/databaseconnection?connectionname=Test4</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Database Connection deleted successfully.</li> <li>Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>connectionname</code> and <code>connectionid</code> at the same time.</li> <li>Status 404 /Not Found a Database Connection with {name/id} "test" does not exist.</li> </ul>

### Delete a Database Connection: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
<code>connectionid</code>	ID used within the Controller to identify this Database Connection.	String; URI parameter.	Y (unless <code>connectionname</code> is specified)	<code>connectionname</code>
<code>connectionname</code>	Name used within the Controller to identify this Database Connection.	String; URI parameter.	Y (unless <code>connectionid</code> is specified)	<code>connectionid</code>

### List Database Connections

	Description
URI	<a href="http://host_name/opswise/resources/databaseconnection/list">http://host_name/opswise/resources/databaseconnection/list</a>
HTTP Method	GET
Description	Retrieves information on all Database Connections.
Example URI	<a href="http://localhost:8080/opswise/resources/databaseconnection/list">http://localhost:8080/opswise/resources/databaseconnection/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Database Connections: Example Response</a> , below.
Database Connection Properties	See <a href="#">Database Connection Properties</a> .

### List Database Connections: Example Response

XML Response	JSON Response
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## XML Response

```

<databaseConnections>
  <databaseConnection version="3">
    <credentials />
    <dbDescription />
    <dbDriver
  >com.mysql.jdbc.Driver</dbDriver>
    <dbMaxRows />
    <dbType>My SQL</dbType>
    <dbUrl
  >jjdbc:mysql://localhost:3306/opswise<
  /dbUrl>
    <name>Database Connection 1<
  /name>
    <opswiseGroups />
    <sysId
  >62701879a6264107bb757a952bcc65cc<
  /sysId>
  </databaseConnection>
  <databaseConnection version="6">
    <credentials />
    <dbDescription />
    <dbDriver
  >com.mysql.jdbc.Driver</dbDriver>
    <dbMaxRows />
    <dbType>My SQL</dbType>
    <dbUrl
  >jdbc:mysql://localhost:3306/opswise<
  /dbUrl>
    <name>Database Connection 2<
  /name>
    <opswiseGroups />
    <sysId
  >3d7a03053ad64de1b21b6849e6deafd9<
  /sysId>
  </databaseConnection>
</databaseConnections>
    
```

## JSON Response

```

[
  {
    "credentials": null,
    "dbDriver": "com.mysql.jdbc.Driver",
    "dbMaxRows": null,
    "dbType": "My SQL",
    "dbUrl":
    "jdbc:mysql://localhost:3306/opswise",
    "dbDescription": null,
    "name": "Database Connection 1",
    "opswiseGroups": null,
    "sysId":
    "62701879a6264107bb757a952bcc65cc",
    "version": 3
  },
  {
    "credentials": null,
    "dbDescription": null,
    "dbDriver": "com.mysql.jdbc.Driver",
    "dbMaxRows": null,
    "dbType": "My SQL",
    "dbUrl":
    "jdbc:mysql://localhost:3306/opswise",
    "name": "Database Connection 2",
    "opswiseGroups": null,
    "sysId":
    "3d7a03053ad64de1b21b6849e6deafd9",
    "version": 6
  }
]
    
```

## Modify a Database Connection

	Description
URI	<a href="http://host_name/opswise/resources/databaseconnection">http://host_name/opswise/resources/databaseconnection</a>
HTTP Method	PUT
Description	Modifies the Database Connection specified by the <code>sysId</code> .
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/databaseconnection">http://localhost:8080/opswise/resources/databaseconnection</a></li> </ul>

Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify a Database Connection: Example Request</a> , below.
Database Connection Properties	See <a href="#">Database Connection Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the Database Connection with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

### Modify a Database Connection: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre>&lt;databaseConnection&gt;   &lt;credentials /&gt;   &lt;dbDescription /&gt;   &lt;dbDriver&gt;com.mysql.jdbc.Driver&lt;/dbDriver&gt;   &lt;dbMaxRows /&gt;   &lt;dbType&gt;My SQL&lt;/dbType&gt;   &lt;dbUrl &gt;jdbc:mysql://localhost:3306/opswise&lt;/dbUrl&gt;   &lt;name&gt;Database Connection 1&lt;/name&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;Accounting&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;sysId&gt;62701879a6264107bb757a952bcc65cc&lt; /sysId&gt; &lt;/databaseConnection&gt;</pre>	<p>JSON Request</p> <pre>{   "credentials": null,   "dbDescription": null,   "dbDriver": "com.mysql.jdbc.Driver",   "dbMaxRows": null,   "dbType": "My SQL",   "dbUrl": "jdbc:mysql://localhost:3306/opswise",   "name": "Database Connection 1",   "opswiseGroups": [ "Accounting" ],   "sysId": "62701879a6264107bb757a952bcc65cc" }</pre>

### Read a Database Connection

URI	<a href="http://host_name/opswise/resources/databaseconnection">http://host_name/opswise/resources/databaseconnection</a>
HTTP Method	GET
Description	Retrieves information on a specific Database Connection.
URI Parameters	See <a href="#">Read a Database Connection: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/databaseconnection?connectionname=Test4">http://localhost:8080/opswise/resources/databaseconnection?connectionname=Test4</a></li> </ul>
Example Response	See <a href="#">Read a Database Connection: Example Response</a> , below.

Database Connection Properties [See Database Connection Properties.](#)

### Read a Database Connection: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
connectionid	ID used within the Controller to identify this Database Connection.	String; URI parameter.	Y (unless connectionname is specified)	connectionname
connectionname	Name used within the Controller to identify this Database Connection.	String; URI parameter.	Y (unless connectionid is specified)	connectionid

### Read a Database Connection: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre>&lt;databaseConnection retainSysIds="true" version="1"&gt;   &lt;credentials /&gt;   &lt;dbDescription /&gt;   &lt;dbDriver&gt;com.mysql.jdbc.Driver&lt;/dbDriver&gt;   &lt;dbMaxRows /&gt;   &lt;dbType&gt;My SQL&lt;/dbType&gt;   &lt;dbUrl&gt;jdbc:mysql://localhost:3306/opswise&lt;/dbUrl&gt;   &lt;name&gt;Database Connection 1&lt;/name&gt;   &lt;opswiseGroups /&gt;   &lt;sysId&gt;62701879a6264107bb757a952bcc65cc&lt;/sysId&gt; &lt;/databaseConnection&gt;</pre>	<p>JSON Response</p> <pre>{   "credentials": null,   "dbDescription": null,   "dbDriver": "com.mysql.jdbc.Driver",   "dbMaxRows": null,   "dbType": "My SQL",   "dbUrl": "jdbc:mysql://localhost:3306/opswise",   "name": "Database Connection 1",   "opswiseGroups": null,   "retainSysIds": true,   "sysId": "62701879a6264107bb757a952bcc65cc",   "version": 1 }</pre>



## Email Connection Web Services

- [Overview](#)
- [Create an Email Connection](#)
- [Delete an Email Connection](#)
- [List Email Connections](#)
- [Modify an Email Connection](#)
- [Read an Email Connection](#)

### Overview

Universal Controller supports the following RESTful-based web services for Email Connection operations, which are listed alphabetically on this page.

- [Create an Email Connection](#)
- [Delete an Email Connection](#)
- [List Email Connections](#)
- [Modify an Email Connection](#)
- [Read an Email Connection](#)

Formatting specifications for each web service, including details about property requirements, are provided.

### Create an Email Connection

	Description
URI	<a href="http://host_name/opswise/resources/emailconnection">http://host_name/opswise/resources/emailconnection</a>
HTTP Method	POST
Description	Creates an <a href="#">Email Connection</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/emailconnection">http://localhost:8080/opswise/resources/emailconnection</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create an Email Connection: Example Request</a> , below.
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the Email Connection with sysId {sysId}.</li> <li>• Status 400 /Bad Request Create Email Connection failed. A duplicate value has been detected. Name must be unique.</li> </ul>
Email Connection Properties	See <a href="#">Email Connection Properties</a> , below.

### Create an Email Connection: Example Request




XML Request	JSON Request
<p>XML Request</p> <pre data-bbox="180 245 695 967"> &lt;emailConnection retainSysIds="true"&gt;   &lt;authentication&gt;true&lt; / authentication&gt;   &lt;defaultPwd&gt;abc1&lt;/defaultPwd&gt;   &lt;defaultUser&gt;user1&lt;/defaultUser&gt;   &lt;description&gt;description&lt; / description&gt;   &lt;emailAddr &gt;jane.doe@stonebranch.com&lt;/emailAddr&gt;   &lt;imap /&gt;   &lt;imapPort /&gt;   &lt;imapSsl&gt;true&lt;/imapSsl&gt;   &lt;imapStarttls&gt;&gt;false&lt; / imapStarttls&gt;   &lt;name&gt;Email Connection 1&lt;/name&gt;   &lt;opswiseGroups /&gt;   &lt;smtp&gt;server1&lt;/smtp&gt;   &lt;smtpPort&gt;4567&lt;/smtpPort&gt;   &lt;smtpSsl&gt;true&lt;/smtpSsl&gt;   &lt;smtpStarttls&gt;&gt;false&lt; / smtpStarttls&gt;   &lt;sysId &gt;62701879a6264107bb757a952bcc65cc&lt; / sysId&gt;   &lt;systemConnection&gt;true&lt; / systemConnection&gt;   &lt;trashFolder /&gt;   &lt;type&gt;Outgoing&lt;/type&gt; &lt;/emailConnection&gt; </pre>	<p>JSON Request</p> <pre data-bbox="800 245 1335 873"> {   "authentication": true,   "defaultPwd": "abc1",   "defaultUser": "user1",   "description": "description",   "emailAddr": "jane.doe@stonebranch.com",   "imap": null,   "imapPort": null,   "imapSsl": true,   "imapStarttls": null,   "name": "Email Connection 1",   "opswiseGroups": null,   "retainSysIds": true,   "smtp": "server1",   "smtpPort": 4567,   "smtpSsl": true,   "smtpStarttls": false,   "systemConnection": true,   "sysId": "62701879a6264107bb757a952bcc65cc",   "trashFolder": null,   "type": "Outgoing" } </pre>

### Email Connection Properties

Property	UI Field Name	Description	Specifications	Required
authentication	Authentication Required	If type = Outgoing; Specification for whether or not defaultUser and password are required.	Boolean; Valid values: true/false. Default is false.	N

defaultPwd	Password	If authentication = true; Password that the Controller will use to connect to the server.	<ul style="list-style-type: none"> <li>• If defaultPwd is omitted in the request, it will be ignored.</li> <li>• If defaultPwd is provided in the request, it will be updated.</li> </ul>	N
defaultUser	User Name	If authentication = true; User name that the Controller will use to connect to the server.		N
description	Description	Description of this record.		N
emailAddr	Email Address	If type = Outgoing; Email address of the sender.		Y
imap	Incoming Mail Server (IMAP)	If type = Incoming; Name or IP address of the incoming email server.		Y
imapPort	IMAP Port	If type = Incoming; Port on the machine where the incoming email server resides.		Y
imapSsl	Enable SSL	If type = Incoming; Specification for whether or not SSL connectivity is enabled for your server.	Boolean; Valid values: true/false. Default is false.	N
imapStarttls	Enable STARTTLS	If type = Incoming; Specification for whether or not the use of the STARTTLS command (if supported by the server) is enabled to switch the connection to a TLS-protected connection before issuing any login commands. (An appropriate trust store must be configured so that the client will trust the server's certificate. )		N
name	Connection Name	Name used within the Controller to identify this Email Connection.		Y
opswiseGroups	Member of Business Services	<p>Business Services that this record belongs to.</p> <p><b>XML</b></p> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;group1&lt;/opswiseGroup&gt;   &lt;opswiseGroup&gt;group2&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <p><b>JSON</b></p> <pre>"opswiseGroups": [ "group1", "group2" ]</pre>		N

smtp	Outgoing Mail Server (SMTP)	If <code>type = Outgoing</code> ; Name or IP address of the outgoing email server.		Y
smtpPort	SMTP Port	If <code>type = Outgoing</code> ; Port on the machine where the outgoing email server resides.		Y
smtpSsl	Enable SSL	If <code>type = Outgoing</code> ; Specification for whether or not SSL connectivity is enabled for your server.	Boolean; Valid values: true/false. Default is false.	N
smtpStarttls	Enable STARTTLS	If <code>type = Outgoing</code> ; Specification for whether or not the use of the STARTTLS command (if supported by the server) is enabled to switch the connection to a TLS-protected connection before issuing any login commands. (An appropriate trust store must be configured so that the client will trust the server's certificate. )		N
sysId	n/a	System ID field in the database for this Email Connection record.	Persisted only if <b>retainSysIds</b> is set to true.	N
systemConnection	Use for System Notifications	If <code>type = Outgoing</code> ; Specification for whether or not this Email Connection is to be used for system notifications.	Boolean; Valid values: true/false. Default is false.	Y
trashFolder	Trash Folder	If <code>type = Incoming</code> ; Folder to use for deleted emails.		N
type	Connection Type	Type of Email Connection.  <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;">  <b>Note:</b> You cannot modify the type after the Email Connection has been created.                 </div>	Valid Values:  <ul style="list-style-type: none"> <li>As String = Outgoing, As Value = 1</li> <li>As String = Incoming, As Value = 2</li> </ul> Default is Outgoing (1)	Y

## Delete an Email Connection

	Description
URI	<a href="http://host_name/opswise/resources/emailconnection">http://host_name/opswise/resources/emailconnection</a>
HTTP Method	DELETE
Description	Deletes an Email Connection.
URI Parameters	See <a href="#">Delete an Email Connection: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/emailconnection?connectionname=Test4">http://localhost:8080/opswise/resources/emailconnection?connectionname=Test4</a></li> </ul>

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Email Connection deleted successfully.</li> <li>• Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>connectionname</code> and <code>connectionid</code> at the same time.</li> <li>• Status 404 /Not Found An Email Connection with {name/id} "test" does not exist.</li> </ul>
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### Delete an Email Connection: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
<code>connectionid</code>	ID used within the Controller to identify this Email Connection.	String; URI parameter.	Y (unless <code>connectionname</code> is specified)	<code>connectionname</code>
<code>connectionname</code>	Name used within the Controller to identify this Email Connection.	String; URI parameter.	Y (unless <code>connectionid</code> is specified)	<code>connectionid</code>

### List Email Connections

	Description
URI	<a href="http://host_name/opswise/resources/emailconnection/list">http://host_name/opswise/resources/emailconnection/list</a>
HTTP Method	GET
Description	Retrieves information on all Email Connections.
Example URI	<a href="http://localhost:8080/opswise/resources/emailconnection/list">http://localhost:8080/opswise/resources/emailconnection/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Email Connections: Example Response</a> , below.
Email Connection Properties	See <a href="#">Email Connection Properties</a> .

### List Email Connections: Example Response

XML Response	JSON Response
<p>XML Response</p> <div style="border: 1px solid #ccc; height: 20px; width: 100%;"></div>	<p>JSON Response</p>

```

<emailConnections>
  <emailConnection version="7">
    <authentication>true<
  /authentication>
    <defaultUser>user1<
  /defaultUser>
    <description>description<
  /description>
    <emailAddr
>jane.doe@stonebranch.com<
  /emailAddr>
    <imap />
    <imapPort />
    <imapSsl>true</imapSsl>
    <imapStarttls>false<
  /imapStarttls>
    <name>Email Connection 1<
  /name>
    <opswiseGroups />
    <smtp>server1</smtp>
    <smtpPort>4567</smtpPort>
    <smtpSsl>true</smtpSsl>
    <smtpStarttls>false<
  /smtpStarttls>
    <sysId
>62701879a6264107bb757a952bcc65cc<
  /sysId>
    <systemConnection>true<
  /systemConnection>
    <trashFolder />
    <type>Outgoing</type>
  </emailConnection>
  <emailConnection version="2">
    <authentication>true<
  /authentication>
    <defaultUser>user1<
  /defaultUser>
    <description>description<
  /description>
    <emailAddr
>john.doe@stonebranch.com<
  /emailAddr>
    <imap />
    <imapPort />
    <imapSsl>true</imapSsl>
    <imapStarttls>false<
  /imapStarttls>
    <name>Email Connection 2<
  /name>
    <opswiseGroups />
    <smtp>server1</smtp>
    <smtpPort>4568</smtpPort>
    <smtpSsl>true</smtpSsl>
    <smtpStarttls>false<
  /smtpStarttls>
    <sysId
>62701879a6264107bb757a952bcc65cc<

```

```

[ {
  "authentication": true,
  "defaultUser": "user1",
  "description": "description",
  "emailAddr":
"jane.doe@stonebranch.com",
  "imap": null,
  "imapPort": null,
  "imapSsl": true,
  "imapStarttls": null,
  "name": "Email Connection 1",
  "opswiseGroups": null,
  "smtp": "server1",
  "smtpPort": 4567,
  "smtpSsl": true,
  "smtpStarttls": false,
  "systemConnection": true,
  "sysId":
"62701879a6264107bb757a952bcc65cc",
  "trashFolder": null,
  "type": "Outgoing",
  "version": 7
},
{
  "authentication": true,
  "defaultUser": "user2",
  "description": "description",
  "emailAddr":
"john.doe@stonebranch.com",
  "imap": null,
  "imapPort": null,
  "imapSsl": true,
  "imapStarttls": null,
  "name": "Email Connection 2",
  "opswiseGroups": null,
  "smtp": "server1",
  "smtpPort": 4568,
  "smtpSsl": true,
  "smtpStarttls": false,
  "systemConnection": true,
  "sysId":
"62701879a6264107bb757a952bcc65cc",
  "trashFolder": null,
  "type": "Outgoing",
  "version": 2
}
]

```

```
/sysId>  
  <systemConnection>true<  
/systemConnection>  
  <trashFolder />  
  <type>Outgoing</type>
```

```
</emailConnection>
<emailConnections>
```

### Modify an Email Connection

	Description
URI	<a href="http://host_name/opswise/resources/emailconnection">http://host_name/opswise/resources/emailconnection</a>
HTTP Method	PUT
Description	Modifies the Email Connection specified by the <code>sysId</code> .
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/emailconnection">http://localhost:8080/opswise/resources/emailconnection</a></li> </ul>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify an Email Connection: Example Request</a> , below.
Email Connection Properties	See <a href="#">Email Connection Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the Email Connection with <code>sysId &lt;sysId&gt;</code> to version <code>&lt;version&gt;</code>.</li> </ul>

### Modify an Email Connection: Example Request

XML Request	JSON Request
-------------	--------------

XML Request	JSON Request
<pre> &lt;emailConnection&gt;   &lt;authentication&gt;true&lt; /authentication&gt;   &lt;defaultPwd&gt;abc1&lt;/defaultPwd&gt;   &lt;defaultUser&gt;user1&lt; /defauItUser&gt;   &lt;description&gt;description&lt; /description&gt;   &lt;emailAddr &gt;jane.doe@stonebranch.com&lt; /emailAddr&gt;   &lt;imap /&gt;   &lt;imapPort /&gt;   &lt;imapSsl&gt;true&lt;/imapSsl&gt;   &lt;imapStarttls&gt;&gt;false&lt; /imapStarttls&gt;   &lt;name&gt;Email Connection 1&lt; /name&gt;   &lt;opwiseGroups /&gt;   &lt;smtp&gt;server1&lt;/smtp&gt;   &lt;smtpPort&gt;4567&lt;/smtpPort&gt;   &lt;smtpSsl&gt;true&lt;/smtpSsl&gt;   &lt;smtpStarttls&gt;&gt;false&lt; /smtpStarttls&gt;   &lt;sysId &gt;62701879a6264107bb757a952bcc65cc&lt; /sysId&gt;   &lt;systemConnection&gt;true&lt; /systemConnection&gt;   &lt;trashFolder /&gt;   &lt;type&gt;Outgoing&lt;/type&gt; &lt;/emailConnection&gt;                 </pre>	<pre> {   "authentication": true,   "defaultPwd": "abc1",   "defaultUser": "user1",   "description": "description",   "emailAddr":   "jane.doe@stonebranch.com",   "imap": null,   "imapPort": null,   "imapSsl": true,   "imapStarttls": null,   "name": "Email Connection 1",   "opwiseGroups": null,   "smtp": "server1",   "smtpPort": 4567,   "smtpSsl": true,   "smtpStarttls": false,   "systemConnection": true,   "sysId":   "62701879a6264107bb757a952bcc65cc",   "trashFolder": null,   "type": "Outgoing" }                 </pre>

## Read an Email Connection

URI	<a href="http://host_name/opwise/resources/emailconnection">http://host_name/opwise/resources/emailconnection</a>
HTTP Method	GET
Description	Retrieves information on a specific Email Connection.
URI Parameters	See <a href="#">Read an Email Connection: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opwise/resources/emailconnection?connectionname=Test4">http://localhost:8080/opwise/resources/emailconnection?connectionname=Test4</a></li> </ul>
Example Response	See <a href="#">Read an Email Connection: Example Response</a> , below.
Email Connection Properties	See <a href="#">Email Connection Properties</a> .



## Read an Email Connection: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
connectionid	ID used within the Controller to identify this Email Connection.	String; URI parameter.	Y (unless connectionname is specified)	connectionname
connectionname	Name used within the Controller to identify this Email Connection.	String; URI parameter.	Y (unless connectionid is specified)	connectionid

## Read an Email Connection: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre>&lt;emailConnection retainSysIds="true" version="1"&gt;   &lt;authentication&gt;true&lt;/authentication&gt;   &lt;defaultUser&gt;user1&lt;/defaultUser&gt;   &lt;description&gt;description&lt;/description&gt;   &lt;emailAddr&gt;jane.doe@stonebranch.com&lt; /emailAddr&gt;   &lt;imap /&gt;   &lt;imapPort /&gt;   &lt;imapSsl&gt;true&lt;/imapSsl&gt;   &lt;imapStarttls&gt;&gt;false&lt;/imapStarttls&gt;   &lt;name&gt;Email Connection 1&lt;/name&gt;   &lt;opswiseGroups /&gt;   &lt;smtp&gt;server1&lt;/smtp&gt;   &lt;smtpPort&gt;4567&lt;/smtpPort&gt;   &lt;smtpSsl&gt;true&lt;/smtpSsl&gt;   &lt;smtpStarttls&gt;&gt;false&lt;/smtpStarttls&gt;   &lt;sysId&gt;62701879a6264107bb757a952bcc65cc&lt; /sysId&gt;   &lt;systemConnection&gt;true&lt;/systemConnection&gt;   &lt;trashFolder /&gt;   &lt;type&gt;Outgoing&lt;/type&gt; &lt;/emailConnection&gt;</pre>	<p>JSON Response</p> <pre>{   "authentication": true,   "defaultUser": "user1",   "description": "description",   "emailAddr":     "jane.doe@stonebranch.com",   "imap": null,   "imapPort": null,   "imapSsl": true,   "imapStarttls": null,   "name": "Email Connection 1",   "opswiseGroups": null,   "retainSysIds": true,   "smtp": "server1",   "smtpPort": 4567,   "smtpSsl": true,   "smtpStarttls": false,   "systemConnection": true,   "sysId":     "62701879a6264107bb757a952bcc65cc",   "trashFolder": null,   "type": "Outgoing",   "version": 1 }</pre>



## Email Template Web Services

- [Overview](#)
- [Create an Email Template](#)
- [Delete an Email Template](#)
- [List Email Templates](#)
- [Modify an Email Template](#)
- [Read an Email Template](#)

### Overview

Universal Controller supports the following RESTful-based web services for Email Template operations, which are listed alphabetically on this page.

- [Create an Email Template](#)
- [Delete an Email Template](#)
- [List Email Template](#)
- [Modify an Email Template](#)
- [Read an Email Template](#)

Formatting specifications for each web service, including details about property requirements, are provided.

### Create an Email Template

	Description
URI	<a href="http://host_name/opswise/resources/emailtemplate">http://host_name/opswise/resources/emailtemplate</a>
HTTP Method	POST
Description	Creates an <a href="#">Email Template</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/emailtemplate">http://localhost:8080/opswise/resources/emailtemplate</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create an Email Template: Example Request</a> , below.
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the Email Template with sysId {sysId}.</li> <li>• Status 400 /Bad Request Create Email Template failed. A duplicate value has been detected. Name must be unique.</li> </ul>
Email Template Properties	See <a href="#">Email Template Properties</a> , below.

### Create an Email Template: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre>&lt;emailTemplate retainSysIds="true"&gt;   &lt;bcc /&gt;   &lt;body&gt;This is the body text.&lt; /body&gt;   &lt;cc /&gt;   &lt;connection&gt;QA #1&lt;/connection&gt;   &lt;description /&gt;   &lt;opswiseGroups /&gt;   &lt;replyTo /&gt;   &lt;subject&gt;SAP Task email&lt; /subject&gt;   &lt;sysId &gt;55b5d2a6176e4c499cbd43b0d4cc6515&lt; /sysId&gt;   &lt;templateName&gt;SAP Task email template&lt;/templateName&gt;   &lt;to&gt;doc@stonebranch.com&lt;/to&gt; &lt;/emailTemplate&gt;</pre>	<p>JSON Request</p> <pre>{   "bcc": null,   "body": "This is the body text.",   "cc": null,   "connection": "QA #1",   "description": null,   "opswiseGroups": null,   "replyTo": null,   "subject": "SAP Task email",   "sysId": "55b5d2a6176e4c499cbd43b0d4cc6515",   "templateName": "SAP Task email template",   "to": "doc@stonebranch.com" }</pre>

### Email Template Properties

Property	UI Field Name	Description	Specifications	Required
connection	Email Connection	Connection used for the Email Template.		Y
description	Description	Description of this record.		N
opswiseGroups	Member of Business Services	Business Services that this record belongs to.		N
replyTo	Reply-To	Email address of the sender.	Use commas to separate multiple recipients.	N
subject	Subject	Subject line of the email.		N
templateName	Template Name	Name used within the Controller to identify this resource.	Maximum = 40 alphanumeric.	Y
bcc	BCC	Email address of the party being sent a blind (hidden) copy of the email, if any.	Use commas to separate multiple recipients.	Y (unless cc or to is specified)
cc	CC	Email address of the party being sent a copy of the email, if any.	Use commas to separate multiple recipients.	Y (unless bcc or to is specified)

to	To	Email address of the recipient.	Use commas to separate multiple recipients.	Y (unless cc or bcc is specified)
sysId	n/a	System ID field in the database for this Email Template record.	Persisted only if <b>retainSysIds</b> is set to true.	N

## Delete an Email Template

	Description
URI	<a href="http://host_name/opswise/resources/emailtemplate">http://host_name/opswise/resources/emailtemplate</a>
HTTP Method	DELETE
Description	Deletes an Email Template.
URI Parameters	See <a href="#">Delete an Email Template: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/emailtemplate?templatename=Test4">http://localhost:8080/opswise/resources/emailtemplate?templatename=Test4</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Email Template deleted successfully.</li> <li>Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>templatename</code> and <code>templateid</code> at the same time.</li> <li>Status 404 /Not Found An Email Template with {name/id} "test" does not exist.</li> </ul>

## Delete an Email Template: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
templateid	ID used within the Controller to identify this Email Template.	String; URI parameter.	Y (unless <code>templatename</code> is specified)	templatename
templatename	Name used within the Controller to identify this Email Template.	String; URI parameter.	Y (unless <code>templateid</code> is specified)	templateid

## List Email Templates

	Description
URI	<a href="http://host_name/opswise/resources/emailtemplate/list">http://host_name/opswise/resources/emailtemplate/list</a>

HTTP Method	GET
Description	Retrieves information on all Email Templates.
Example URI	<a href="http://localhost:8080/opswise/resources/emailtemplate/list">http://localhost:8080/opswise/resources/emailtemplate/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Email Templates: Example Response</a> , below.
Email Template Properties	See <a href="#">Email Template Properties</a> .

**List Email Templates: Example Response**

<a href="#">XML Response</a>	<a href="#">JSON Response</a>
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XML Response

```
<emailTemplates>
  <emailTemplate version="7">
    <bcc />
    <body>This is the body
text.</body>
    <cc />
    <connection>QA #1<
/connection>
    <description />
    <opswiseGroups />
    <replyTo />
    <subject>SAP Task email<
/subject>
    <sysId
>55b5d2a6176e4c499cbd43b0d4cc6515<
/sysId>
    <templateName>SAP Task
email template</templateName>
    <to>doc@stonebranch.com<
/to>
  </emailTemplate>
  <emailTemplate version="2">
    <bcc />
    <body>This is the body
text.</body>
    <cc />
    <connection>QA #2<
/connection>
    <description />
    <opswiseGroups />
    <replyTo />
    <subject>Email Task
email</subject>
    <sysId
>62701879a6264107bb757a952bcc65cc<
/sysId>
    <templateName>Email Task
email template</templateName>
    <to>doc@stonebranch.com<
/to>
  </emailTemplate>
</emailTemplates>
```

JSON Response

```
[ {
  "bcc": null,
  "body": "This is the body text.",
  "cc": null,
  "connection": "QA #1",
  "description": null,
  "opswiseGroups": null,
  "replyTo": null,
  "subject": "SAP Task email",
  "sysId":
"55b5d2a6176e4c499cbd43b0d4cc6515",
  "templateName": "SAP Task email
template",
  "to": "doc@stonebranch.com",
  "version": 7
}
{
  "bcc": null,
  "body": "This is the body text.",
  "cc": null,
  "connection": "QA #2",
  "description": null,
  "opswiseGroups": null,
  "replyTo": null,
  "subject": "Email Task email",
  "sysId":
"62701879a6264107bb757a952bcc65cc",
  "templateName": "Email Task email
template",
  "to": "doc@stonebranch.com",
  "version": 2
}
]
```

### Modify an Email Template

	Description
URI	<a href="http://host_name/opswise/resources/emailtemplate">http://host_name/opswise/resources/emailtemplate</a>
HTTP Method	PUT

Description	Modifies the Email Template specified by the <code>sysId</code> .
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/emailtemplate">http://localhost:8080/opswise/resources/emailtemplate</a></li> </ul>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify an Email Template: Example Request</a> , below.
Email Template Properties	See <a href="#">Email Template Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the Email Template with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

### Modify an Email Template: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre>&lt;emailTemplate&gt;   &lt;bcc /&gt;   &lt;body&gt;This is the body text.&lt; /body&gt;   &lt;cc /&gt;   &lt;connection&gt;QA #1&lt;/connection &gt;   &lt;description /&gt;   &lt;opswiseGroups /&gt;   &lt;replyTo /&gt;   &lt;subject&gt;SAP Task email&lt; /subject&gt;   &lt;sysId &gt;55b5d2a6176e4c499cbd43b0d4cc6515&lt; /sysId&gt;   &lt;templateName&gt;SAP Task email template&lt;/templateName&gt;   &lt;to&gt;doc@stonebranch.com&lt;/to&gt; &lt;/emailTemplate&gt;</pre>	<p>JSON Request</p> <pre>{   "bcc": null,   "body": "This is the body text.",   "cc": null,   "connection": "QA #1",   "description": null,   "opswiseGroups": null,   "replyTo": null,   "subject": "SAP Task email",   "sysId":   "55b5d2a6176e4c499cbd43b0d4cc6515",   "templateName": "SAP Task email template",   "to": "doc@stonebranch.com" }</pre>

### Read an Email Template

URI	<a href="http://host_name/opswise/resources/emailtemplate">http://host_name/opswise/resources/emailtemplate</a>
HTTP Method	GET



Description	Retrieves information on a specific Email Template.
URI Parameters	See <a href="#">Read an Email Template: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/emailtemplate?templatename=Test4">http://localhost:8080/opswise/resources/emailtemplate?templatename=Test4</a></li> </ul>
Example Response	See <a href="#">Read an Email Template: Example Response</a> , below.
Email Template Properties	See <a href="#">Email Template Properties</a> .

### Read an Email Template: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
templateid	ID used within the Controller to identify this Email Template.	String; URI parameter.	Y (unless templatename is specified)	templatename
templatename	Name used within the Controller to identify this Email Template.	String; URI parameter.	Y (unless templateid is specified)	templateid

### Read an Email Template: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre>&lt;emailTemplate retainSysIds="true" version="1"&gt;   &lt;bcc /&gt;   &lt;body&gt;This is the body text.&lt;/body&gt;   &lt;cc /&gt;   &lt;connection&gt;QA #1&lt;/connection&gt;   &lt;description /&gt;   &lt;opswiseGroups /&gt;   &lt;replyTo /&gt;   &lt;subject&gt;SAP Task email&lt;/subject&gt;   &lt;sysId&gt;55b5d2a6176e4c499cbd43b0d4cc6515&lt;   /sysId&gt;   &lt;templateName&gt;SAP Task email template&lt;   /templateName&amp;gt   &lt;to&gt;doc@stonebranch.com&lt;/to&gt; &lt;/emailTemplate&gt;</pre>	<p>JSON Response</p> <pre>{   "bcc": null,   "body": "This is the body text.",   "cc": null,   "connection": "QA #1",   "description": null,   "opswiseGroups": null,   "replyTo": null,   "subject": "SAP Task email",   "sysId":   "55b5d2a6176e4c499cbd43b0d4cc6515",   "templateName": "SAP Task email   template",   "to": "doc@stonebranch.com",   "version": 1 }</pre>



## PeopleSoft Connection Web Services

- [Overview](#)
- [Create a PeopleSoft Connection](#)
- [Delete a PeopleSoft Connection](#)
- [List PeopleSoft Connections](#)
- [Modify a PeopleSoft Connection](#)
- [Read a PeopleSoft Connection](#)

### Overview

Universal Controller supports the following RESTful-based web services for PeopleSoft Connection operations, which are listed alphabetically on this page.

- [Create a PeopleSoft Connection](#)
- [Delete a PeopleSoft Connection](#)
- [List PeopleSoft Connections](#)
- [Modify a PeopleSoft Connection](#)
- [Read a PeopleSoft Connection](#)

Formatting specifications for each web service, including details about property requirements, are provided.

### Create a PeopleSoft Connection

	Description
URI	<a href="http://host_name/opswise/resources/peoplesoftconnection">http://host_name/opswise/resources/peoplesoftconnection</a>
HTTP Method	POST
Description	Creates a <a href="#">PeopleSoft Connection</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/peoplesoftconnection">http://localhost:8080/opswise/resources/peoplesoftconnection</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create a PeopleSoft Connection: Example Request</a> , below.
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the PeopleSoft Connection with sysId {sysId}.</li> <li>• Status 400 /Bad Request Create PeopleSoft Connection failed. A duplicate value has been detected. Name must be unique.</li> </ul>
PeopleSoft Connection Properties	See <a href="#">PeopleSoft Connection Properties</a> , below.


### Create a PeopleSoft Connection: Example Request

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XML Request	JSON Request
<p>XML Request</p> <pre>&lt;peoplesoftConnection retainSysIds="true"&gt;   &lt;credentials&gt;user 1&lt;/credentials&gt;   &lt;description&gt;description&lt;/description&gt; &lt;/peoplesoftConnection&gt; &lt;endpoint&gt;upps.stone.branch:8080&lt;/endpoint&gt; &lt;name&gt;PeopleSoft Connection 1&lt;/name&gt; &lt;opwiseGroups /&gt; &lt;port&gt;8080&lt;/port&gt; &lt;server&gt;upps.stone.branch&lt;/server&gt; &lt;sysId &gt;62701879a6264107bb757a952bcc65cc&lt;/sysId&gt; &lt;/peoplesoftConnection&gt;</pre>	<p>JSON Request</p> <pre>{   "credentials": "user 1",   "description": "description",   "endpoint": "upps.stone.branch:8080",   "name": "PeopleSoft Connection 1",   "opwiseGroups": null,   "port": "8080",   "retainSysIds": true,   "server": "upps.stone.branch",   "sysId": "62701879a6264107bb757a952bcc65cc" }</pre>

**PeopleSoft Connection Properties**

Property	UI Field Name	Description	Specifications	Required
credentials	Credentials	Credentials for the PeopleSoft connection.		N
description	Description	User-defined; description of this record.		N
name	Connection Name	Name used within the Controller to identify this PeopleSoft Connection.		Y
endpoint	Endpoint	Web service endpoint for the PROCESSREQUEST service.		Y
opwiseGroups	Member of Business Services	Business Services that this record belongs to.  <b>XML</b> <pre>&lt;opwiseGroups&gt;   &lt;opwiseGroup&gt;group1&lt;/opwiseGroup&gt;   &lt;opwiseGroup&gt;group2&lt;/opwiseGroup&gt; &lt;/opwiseGroups&gt;</pre> <b>JSON</b> <pre>"opwiseGroups": ["group1","group2"]</pre>		N

port	Port	Port number for the PeopleSoft application server.		N
retainSysIds	n/a	<p>Specification for whether or not the Create a PeopleSoft Connection web service will persist the <code>sysId</code> property.</p> <ul style="list-style-type: none"> <li>If <b>retainSysIds</b>="true" and <code>sysId</code> is included in the request/response, <code>sysId</code> will be persisted to the database.</li> <li>If <b>retainSysIds</b>="false" and <code>sysId</code> is included in the request/response, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;PeopleSoftConnection&gt;</code> element.</p> </div>	Valid values: true/false (default is true).	N
server	Server	Host name of the Name or IP address of the PeopleSoft application server.		Y
sysId	n/a	System ID field in the database for this PeopleSoft Connection record.	Persisted only if <b>retainSysIds</b> is set to true.	N

## Delete a PeopleSoft Connection

	Description
URI	<a href="http://host_name/opswise/resources/peoplesoftconnection">http://host_name/opswise/resources/peoplesoftconnection</a>
HTTP Method	DELETE
Description	Deletes a PeopleSoft Connection.
URI Parameters	See <a href="#">Delete a PeopleSoft Connection: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/peoplesoftconnection?connectionname=Test4">http://localhost:8080/opswise/resources/peoplesoftconnection?connectionname=Test4</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK PeopleSoft Connection deleted successfully.</li> <li>Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>connectionname</code> and <code>connectionid</code> at the same time.</li> <li>Status 404 /Not Found a PeopleSoft Connection with {name/id} "test" does not exist.</li> </ul>

## Delete a PeopleSoft Connection: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
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connectionid	ID used within the Controller to identify this PeopleSoft Connection.	String; URI parameter.	Y (unless connectionname is specified)	connectionname
connectionname	Name used within the Controller to identify this PeopleSoft Connection.	String; URI parameter.	Y (unless connectionid is specified)	connectionid

### List PeopleSoft Connections

	Description
URI	<a href="http://host_name/opwise/resources/peoplesoftconnection/list">http://host_name/opwise/resources/peoplesoftconnection/list</a>
HTTP Method	GET
Description	Retrieves information on all PeopleSoft Connections.
Example URI	<a href="http://localhost:8080/opwise/resources/peoplesoftconnection/list">http://localhost:8080/opwise/resources/peoplesoftconnection/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List PeopleSoft Connections: Example Response</a> , below.
PeopleSoft Connection Properties	See <a href="#">PeopleSoft Connection Properties</a> .

### List PeopleSoft Connections: Example Response

XML Response	JSON Response
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## XML Response

```

<peoplesoftConnections>
  <peoplesoftConnection version="7">
    <credentials>user 1<
  /credentials>
    <description>description<
  /description>
    <endpoint
>upps.stone.branch:8080</endpoint>
    <name>PeopleSoft Connection
  1</name>
    <opswiseGroups />
    <port>8080</port>
    <server>upps.stone.branch<
  /server>
    <sysId
>62701879a6264107bb757a952bcc65cc<
  /sysId>
  </peoplesoftConnection>
  <peoplesoftConnection version="2">
    <credentials>user 2<
  /credentials>
    <description>description<
  /description>
    <endpoint
>upps.stone.branch:8090</endpoint>
    <name>PeopleSoft Connection
  2</name>
    <opswiseGroups />
    <port>8090</port>
    <server>upps.stone.branch<
  /server>
    <sysId
>3d7a03053ad64de1b21b6849e6deafd9<
  /sysId>
  </peoplesoftConnection>
</peoplesoftConnections>
    
```

## JSON Response

```

[ {
  {
    "credentials": "user 1",
    "description": "description",
    "endpoint":
"upps.stone.branch:8080",
    "name": "PeopleSoft Connection
  1",
    "opswiseGroups": null,
    "port": "8080",
    "server": "upps.stone.branch",
    "sysId":
"62701879a6264107bb757a952bcc65cc",
    "version": 7
  },
  {
    "credentials": "user 2",
    "description": "description",
    "endpoint":
"upps.stone.branch:8090",
    "name": "PeopleSoft Connection
  2",
    "opswiseGroups": null,
    "port": "8090",
    "server": "upps.stone.branch",
    "sysId":
"3d7a03053ad64de1b21b6849e6deafd9",
    "version": 2
  }
}
    
```

## Modify a PeopleSoft Connection

	Description
URI	<a href="http://host_name/opswise/resources/peoplesoftconnection">http://host_name/opswise/resources/peoplesoftconnection</a>
HTTP Method	PUT
Description	Modifies the PeopleSoft Connection specified by the <code>sysId</code> .
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/peoplesoftconnection">http://localhost:8080/opswise/resources/peoplesoftconnection</a></li> </ul>

Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify a PeopleSoft Connection: Example Request</a> , below.
PeopleSoft Connection Properties	See <a href="#">PeopleSoft Connection Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the PeopleSoft Connection with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

### Modify a PeopleSoft Connection: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre>&lt;peoplesoftConnection&gt;   &lt;credentials&gt;user 1&lt; /credentials&gt;   &lt;description&gt;description&lt; /description&gt;   &lt;endpoint &gt;upps.stone.branch:8080&lt;/endpoint &gt;   &lt;name&gt;PeopleSoft Connection 1&lt;/name&gt;   &lt;opswiseGroups /&gt;   &lt;port&gt;8080&lt;/port&gt;   &lt;server&gt;upps.stone.branch&lt; /server&gt;   &lt;sysId &gt;62701879a6264107bb757a952bcc65cc&lt; /sysId&gt; &lt;/peoplesoftConnection&gt;</pre>	<p>JSON Request</p> <pre>{   "credentials": "user 1",   "description": "description",   "endpoint": "upps.stone.branch:8080",   "name": "PeopleSoft Connection 1",   "opswiseGroups": null,   "port": "8080",   "server": "upps.stone.branch",   "sysId": "62701879a6264107bb757a952bcc65cc" }</pre>

### Read a PeopleSoft Connection

URI	<a href="http://host_name/opswise/resources/peoplesoftconnection">http://host_name/opswise/resources/peoplesoftconnection</a>
HTTP Method	GET
Description	Retrieves information on a specific PeopleSoft Connection.
URI Parameters	See <a href="#">Read a PeopleSoft Connection: URI Parameters</a> , below.



Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opwise/resources/peoplesoftconnection?connectionname=Test4">http://localhost:8080/opwise/resources/peoplesoftconnection?connectionname=Test4</a></li> </ul>
Example Response	See <a href="#">Read a PeopleSoft Connection: Example Response</a> , below.
PeopleSoft Connection Properties	See <a href="#">PeopleSoft Connection Properties</a> .

### Read a PeopleSoft Connection: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
connectionid	ID used within the Controller to identify this PeopleSoft Connection.	String; URI parameter.	Y (unless connectionname is specified)	connectionname
connectionname	Name used within the Controller to identify this PeopleSoft Connection.	String; URI parameter.	Y (unless connectionid is specified)	connectionid

### Read a PeopleSoft Connection: Example Response

XML Response	JSON Response
<p>XML Request</p> <pre>&lt;peoplesoftConnection retainSysIds="true" version="1"&gt;   &lt;credentials&gt;user 1&lt;/credentials&gt;   &lt;description&gt;description&lt;/description&gt;   &lt;endpoint&gt;upps.stone.branch:8080&lt;/endpoint&gt;   &lt;name&gt;PeopleSoft Connection 1&lt;/name&gt;   &lt;opwiseGroups /&gt;   &lt;port&gt;8080&lt;/port&gt;   &lt;server&gt;upps.stone.branch&lt;/server&gt;   &lt;sysId&gt;62701879a6264107bb757a952bcc65cc&lt;/sysId&gt; &lt;/peoplesoftConnection&gt;</pre>	<p>JSON Response</p> <pre>{   "credentials": "user 1",   "description": "description",   "endpoint": "upps.stone.branch:8080",   "name": "PeopleSoft Connection 1",   "opwiseGroups": null,   "port": "8080",   "retainSysIds": true,   "server": "upps.stone.branch",   "sysId": "62701879a6264107bb757a952bcc65cc",   "version": 1 }</pre>



## SAP Connection Web Services

- [Overview](#)
- [Create an SAP Connection](#)
- [Delete an SAP Connection](#)
- [List SAP Connections](#)
- [Modify an SAP Connection](#)
- [Read an SAP Connection](#)
- [SAP Connection Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for SAP Connection operations, which are listed alphabetically on this page.

- [Create an SAP Connection](#)
- [Delete an SAP Connection](#)
- [List SAP Connections](#)
- [Modify an SAP Connection](#)
- [Read an SAP Connection](#)

Formatting specifications for each web service, including details about property requirements, are provided.

### Create an SAP Connection

	Description
URI	<a href="http://host_name/opswise/resources/sapconnection">http://host_name/opswise/resources/sapconnection</a>
HTTP Method	POST
Description	Creates an SAP Connection.
Example URI	<a href="http://localhost:8080/opswise/resources/sapconnection">http://localhost:8080/opswise/resources/sapconnection</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create an SAP Connection: Example Request</a> , below.
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the SAP Connection with sysId {sysId}.</li> <li>• Status 400 /Bad Request Create SAP Connection failed. A duplicate value has been detected. Name must be unique.</li> </ul>
SAP Connection Properties	See <a href="#">SAP Connection Properties</a> , below.

### Create an SAP Connection: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre data-bbox="180 266 737 1247"> &lt;sapConnection retainSysIds="true"&gt;   &lt;description&gt;description&lt;   /description&gt;   &lt;name&gt;SAP Connection 1&lt;/name&gt;   &lt;opwiseGroups /&gt;   &lt;sapAshost /&gt;   &lt;sapClient /&gt;   &lt;sapConnectionType&gt;Load Balancing&lt;   /sapConnectionType&gt;   &lt;sapGroup&gt;groupa&lt;/sapGroup&gt;   &lt;sapGwhost&gt;ABC&lt;/sapGwhost&gt;   &lt;sapGwserv&gt;test&lt;/sapGwserv&gt;   &lt;sapMshost&gt;server&lt;/sapMshost&gt;   &lt;sapMysapso2   &gt;&gt;D:\ellen\qa\opwise\testdir\new.data&lt;   /sapMysapso2&gt;   &lt;sapR3name&gt;777&lt;/sapR3name&gt;   &lt;sapSaprouter   &gt;/H/192.168.30.17/S/3297/H/155.56.59.11&lt;   /sapSaprouter&gt;   &lt;sapSncLib&gt;/qa/durability_export&lt;   /sapSncLib&gt;   &lt;sapSncMode&gt;Off &lt;/sapSncMode&gt;   &lt;sapSncMyname&gt;my_test_name&lt;   /sapSncMyname&gt;   &lt;sapSncPartnername&gt;partnername&lt;   /sapSncPartnername&gt;   &lt;sapSncQop&gt;Integrity Protection&lt;   /sapSncQop&gt;   &lt;sapSncSso&gt;No&lt;/sapSncSso&gt;   &lt;sapSysnr /&gt;   &lt;sapUseSymbolicNames&gt;Yes&lt;   /sapUseSymbolicNames&gt;   &lt;sapX509cert   &gt;D:\ellen\qa\opwise\testdir\ecu.txt&lt;   /sapX509cert&gt;   &lt;sysId   &gt;1c6a3b42f2704ae8b3f2b62cc5f867c9&lt;   /sysId&gt; &lt;/sapConnection&gt; </pre>	<p>JSON Request</p> <pre data-bbox="842 266 1486 1036"> {   "description": null,   "name": "SAP Connection 1",   "opwiseGroups": [],   "retainSysIds": true,   "sapAshost": null,   "sapClient": null,   "sapConnectionType": "Load Balancing",   "sapGroup": "groupa",   "sapGwhost": "ABC",   "sapGwserv": "test",   "sapMshost": "server",   "sapMysapso2":   "D:\\ellen\\qa\\opwise\\testdir\\new.data",   "sapR3name": "777",   "sapSaprouter":   "/H/192.168.30.17/S/3297/H/155.56.59.11",   "sapSncLib": "/qa/durability_export",   "sapSncMode": "Off",   "sapSncMyname": "my_test_name",   "sapSncPartnername": "partnername",   "sapSncQop": "Integrity Protection",   "sapSncSso": "No",   "sapSysnr": null,   "sapUseSymbolicNames": "Yes",   "sapX509cert":   "D:\\ellen\\qa\\opwise\\testdir\\ecu.txt",   "sysId":   "1c6a3b42f2704ae8b3f2b62cc5f867c9" } </pre>

### Delete an SAP Connection

	Description
URI	http://host_name/opwise/resources/sapconnection

HTTP Method	DELETE
Description	Deletes an SAP Connection.
URI Parameters	See <a href="#">Delete an SAP Connection: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/sapconnection?connectionname=Test4">http://localhost:8080/opswise/resources/sapconnection?connectionname=Test4</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK SAP Connection deleted successfully.</li> <li>Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>connectionname</code> and <code>connectionid</code> at the same time.</li> <li>Status 404 /Not Found An SAP Connection with {name/id} "test" does not exist.</li> </ul>

### Delete an SAP Connection: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
<code>connectionid</code>	ID used within the Controller to identify this SAP Connection.	String; URI parameter.	Y (unless <code>connectionname</code> is specified)	<code>connectionname</code>
<code>connectionname</code>	Name used within the Controller to identify this SAP Connection.	String; URI parameter.	Y (unless <code>connectionid</code> is specified)	<code>connectionid</code>

### List SAP Connections

	Description
URI	<a href="http://host_name/opswise/resources/sapconnection/list">http://host_name/opswise/resources/sapconnection/list</a>
HTTP Method	GET
Description	Retrieves information on all SAP Connections.
Example URI	<a href="http://localhost:8080/opswise/resources/sapconnection/list">http://localhost:8080/opswise/resources/sapconnection/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List SAP Connections: Example Response</a> , below.
SAP Connection Properties	See <a href="#">SAP Connection Properties</a> .

## List SAP Connections: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre> &lt;sapConnections&gt;   &lt;sapConnection version="7"&gt;     &lt;description&gt;description&lt;   /description&gt;     &lt;name&gt;SAP Connection 1&lt;/name&gt;     &lt;opwiseGroups /&gt;     &lt;sapAshost /&gt;     &lt;sapClient /&gt;     &lt;sapConnectionType&gt;Load Balancing&lt;   /sapConnectionType&gt;     &lt;sapGroup&gt;groupa&lt;/sapGroup&gt;     &lt;sapGwhost&gt;ABC&lt;/sapGwhost&gt;     &lt;sapGwserv&gt;test&lt;/sapGwserv&gt;     &lt;sapMshost&gt;server&lt;/sapMshost&gt;     &lt;sapMysapso2 &gt;&gt;D:\ellen\qa\opwise\testdir\new.data&lt;   /sapMysapso2&gt;     &lt;sapR3name&gt;777&lt;/sapR3name&gt;     &lt;sapSaprouter &gt;/H/192.168.30.17/S/3297/H/155.56.59.11&lt;   /sapSaprouter&gt;     &lt;sapSncLib&gt;/qa/durability_export&lt;   /sapSncLib&gt;     &lt;sapSncMode&gt;Off &lt;/sapSncMode&gt;     &lt;sapSncMyname&gt;my_test_name&lt;   /sapSncMyname&gt;     &lt;sapSncPartnername&gt;partnername&lt;   /sapSncPartnername&gt;     &lt;sapSncQop&gt;Integrity Protection&lt;   /sapSncQop&gt;     &lt;sapSncSso&gt;No&lt;/sapSncSso&gt;     &lt;sapSysnr /&gt;     &lt;sapUseSymbolicNames&gt;Yes&lt;   /sapUseSymbolicNames&gt;     &lt;sapX509cert &gt;D:\ellen\qa\opwise\testdir\ecu.txt&lt;   /sapX509cert&gt;     &lt;sysId &gt;1c6a3b42f2704ae8b3f2b62cc5f867c9&lt;   /sysId&gt;     &lt;/sapConnection&gt;     &lt;sapConnection version="2"&gt;     &lt;description&gt;description&lt;   /description&gt;     &lt;name&gt;SAP Connection 1&lt;/name&gt;     &lt;opwiseGroups /&gt;     &lt;sapAshost /&gt; </pre>	<p>JSON Response</p> <pre> [ {   "description": null,   "name": "SAP Connection 1",   "opwiseGroups": [],   "retainSysIds": true,   "sapAshost": null,   "sapClient": null,   "sapConnectionType": "Load Balancing",   "sapGroup": "groupa",   "sapGwhost": "ABC",   "sapGwserv": "test",   "sapMshost": "server",   "sapMysapso2": "D:\\ellen\\qa\\opwise\\testdir\\new.data",   "sapR3name": "777",   "sapSaprouter": "/H/192.168.30.17/S/3297/H/155.56.59.11",   "sapSncLib": "/qa/durability_export",   "sapSncMode": "Off",   "sapSncMyname": "my_test_name",   "sapSncPartnername": "partnername",   "sapSncQop": "Integrity Protection",   "sapSncSso": "No",   "sapSysnr": null,   "sapUseSymbolicNames": "Yes",   "sapX509cert": "D:\\ellen\\qa\\opwise\\testdir\\ecu.txt",   "sysId": "1c6a3b42f2704ae8b3f2b62cc5f867c9"   "version": 7 }, {   "description": null,   "name": "SAP Connection 1",   "opwiseGroups": [],   "retainSysIds": true,   "sapAshost": null,   "sapClient": null,   "sapConnectionType": "Load Balancing",   "sapGroup": "groupa",   "sapGwhost": "ABC",   "sapGwserv": "test",   "sapMshost": "server",   "sapMysapso2": "D:\\ellen\\qa\\opwise\\testdir\\new.data",   "sapR3name": "777",   "sapSaprouter": </pre>

```

<sapClient />
<sapConnectionType>Load Balancing<
/sapConnectionType>
<sapGroup>groupa</sapGroup>
<sapGwhost>ABC</sapGwhost>
<sapGwserv>test</sapGwserv>
<sapMshost>server</sapMshost>
<sapMysapssso2
>>D:\ellen\qa\opswise\testdir\new.data<
/sapMysapssso2>
  <sapR3name>777</sapR3name>
  <sapSaprouter
>/H/192.168.30.17/S/3297/H/155.56.59.11<
/sapSaprouter>
  <sapSncLib>/qa/durability_export<
/sapSncLib>
  <sapSncMode>Off </sapSncMode>
  <sapSncMyname>my_test_name<
/sapSncMyname>
  <sapSncPartnername>partnername<
/sapSncPartnername>
  <sapSncQop>Integrity Protection<
/sapSncQop>
  <sapSncSso>No</sapSncSso>
  <sapSysnr />
  <sapUseSymbolicNames>Yes<
/sapUseSymbolicNames>
  <sapX509cert
>D:\ellen\qa\opswise\testdir\ecu.txt<
/sapX509cert>
  <sysId
>3d7a03053ad64de1b21b6849e6deafd9<
/sysId>

```

```

"/H/192.168.30.17/S/3297/H/155.56.59.11",
"sapSncLib": "/qa/durability_export",
"sapSncMode": "Off",
"sapSncMyname": "my_test_name",
"sapSncPartnername": "partnername",
"sapSncQop": "Integrity Protection",
"sapSncSso": "No",
"sapSysnr": null,
"sapUseSymbolicNames": "Yes",
"sapX509cert":
"D:\\ellen\\qa\\opswise\\testdir\\ecu.txt",
"sysId":
"3d7a03053ad64de1b21b6849e6deafd9"
"version": 2

```

```
</sapConnection>
<sapConnections>
```

```
}
]
```

## Modify an SAP Connection

	Description
URI	<a href="http://host_name/opswise/resources/sapconnection">http://host_name/opswise/resources/sapconnection</a>
HTTP Method	PUT
Description	Modifies the SAP Connection specified by the <code>sysId</code> .
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/sapconnection">http://localhost:8080/opswise/resources/sapconnection</a></li> </ul>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify an SAP Connection: Example Request</a> , below.
SAP Connection Properties	See <a href="#">SAP Connection Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the SAP Connection with <code>sysId &lt;sysId&gt;</code> to version <code>&lt;version&gt;</code>.</li> </ul>

## Modify an SAP Connection: Example Request

XML Request	JSON Request
-------------	--------------



XML Request

```
<sapConnection>
  <description>description<
/description>
  <name>SAP Connection 1</name>
  <opwiseGroups />
  <sapAshost />
  <sapClient />
  <sapConnectionType>Load Balancing<
/sapConnectionType>
  <sapGroup>groupa</sapGroup>
  <sapGwhost>ABC</sapGwhost>
  <sapGwserv>test</sapGwserv>
  <sapMshost>server</sapMshost>
  <sapMysapssso2
>>D:\ellen\qa\opwise\testdir\new.data<
/sapMysapssso2>
  <sapR3name>777</sapR3name>
  <sapSaprouter
>/H/192.168.30.17/S/3297/H/155.56.59.11<
/sapSaprouter>
  <sapSncLib>/qa/durability_export<
/sapSncLib>
  <sapSncMode>Off </sapSncMode>
  <sapSncMyname>my_test_name<
/sapSncMyname>
  <sapSncPartnername>partnername<
/sapSncPartnername>
  <sapSncQop>Integrity Protection<
/sapSncQop>
  <sapSncSso>No</sapSncSso>
  <sapSysnr />
  <sapUseSymbolicNames>Yes<
/sapUseSymbolicNames>
  <sapX509cert
>D:\ellen\qa\opwise\testdir\ecu.txt<
/sapX509cert>
  <sysId
>1c6a3b42f2704ae8b3f2b62cc5f867c9<
/sysId>
</sapConnection>
```

JSON Request

```
{
  "description": null,
  "name": "SAP Connection 1",
  "opwiseGroups": [],
  "retainSysIds": true,
  "sapAshost": null,
  "sapClient": null,
  "sapConnectionType": "Load Balancing",
  "sapGroup": "groupa",
  "sapGwhost": "ABC",
  "sapGwserv": "test",
  "sapMshost": "server",
  "sapMysapssso2":
"D:\\ellen\\qa\\opwise\\testdir\\new.data",
  "sapR3name": "777",
  "sapSaprouter":
"/H/192.168.30.17/S/3297/H/155.56.59.11",
  "sapSncLib": "/qa/durability_export",
  "sapSncMode": "Off",
  "sapSncMyname": "my_test_name",
  "sapSncPartnername": "partnername",
  "sapSncQop": "Integrity Protection",
  "sapSncSso": "No",
  "sapSysnr": null,
  "sapUseSymbolicNames": "Yes",
  "sapX509cert":
"D:\\ellen\\qa\\opwise\\testdir\\ecu.txt",
  "sysId":
"1c6a3b42f2704ae8b3f2b62cc5f867c9"
}
```

Read an SAP Connection

URI	<a href="http://host_name/opwise/resources/sapconnection">http://host_name/opwise/resources/sapconnection</a>
HTTP Method	GET
Description	Retrieves information on a specific SAP Connection.
URI Parameters	See <a href="#">Read an SAP Connection: URI Parameters</a> , below.

Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/sapconnection?connectionname=Test4">http://localhost:8080/opswise/resources/sapconnection?connectionname=Test4</a></li> </ul>
Example Response	See <a href="#">Read an SAP Connection: Example Response</a> , below.
SAP Connection Properties	See <a href="#">SAP Connection Properties</a> .

**Read an SAP Connection: URI Parameters**

Parameter	Description	Specifications	Required	Mutually Exclusive With
connectionid	ID used within the Controller to identify this SAP Connection.	String; URI parameter.	Y (unless connectionname is specified)	connectionname
connectionname	Name used within the Controller to identify this SAP Connection.	String; URI parameter.	Y (unless connectionid is specified)	connectionid

**Read an SAP Connection: Example Response**

<a href="#">XML Response</a>	<a href="#">JSON Response</a>
------------------------------	-------------------------------

XML Response


```
<sapConnection retainSysIds="true" version="1">
  <description>description</description>
  <name>SAP Connection 1</name>
  <opwiseGroups />
  <sapAshost />
  <sapClient />
  <sapConnectionType>Load Balancing<
/sapConnectionType>
  <sapGroup>groupa</sapGroup>
  <sapGwhost>ABC</sapGwhost>
  <sapGwserv>test</sapGwserv>
  <sapMshost>server</sapMshost>
  <sapMysapssso2
>>D:\ellen\qa\opwise\testdir\new.data<
/sapMysapssso2>
  <sapR3name>777</sapR3name>
  <sapSaprouter
>/H/192.168.30.17/S/3297/H/155.56.59.11<
/sapSaprouter>
  <sapSncLib>/qa/durability_export<
/sapSncLib>
  <sapSncMode>Off </sapSncMode>
  <sapSncMyname>my_test_name</sapSncMyname>
  <sapSncPartnername>partnername<
/sapSncPartnername>
  <sapSncQop>Integrity Protection</sapSncQop
>
  <sapSncSso>No</sapSncSso>
  <sapSysnr />
  <sapUseSymbolicNames>Yes<
/sapUseSymbolicNames>
  <sapX509cert
>D:\ellen\qa\opwise\testdir\ecu.txt<
/sapX509cert>
  <sysId>1c6a3b42f2704ae8b3f2b62cc5f867c9<
/sysId>
</sapConnection>
```

JSON Response

```
{
  "description": null,
  "name": "SAP Connection 1",
  "opwiseGroups": [],
  "retainSysIds": true,
  "sapAshost": null,
  "sapClient": null,
  "sapConnectionType": "Load Balancing",
  "sapGroup": "groupa",
  "sapGwhost": "ABC",
  "sapGwserv": "test",
  "sapMshost": "server",
  "sapMysapssso2":
"D:\\ellen\\qa\\opwise\\testdir\\new.data",
  "sapR3name": "777",
  "sapSaprouter":
"/H/192.168.30.17/S/3297/H/155.56.59.11",
  "sapSncLib": "/qa/durability_export",
  "sapSncMode": "Off",
  "sapSncMyname": "my_test_name",
  "sapSncPartnername": "partnername",
  "sapSncQop": "Integrity Protection",
  "sapSncSso": "No",
  "sapSysnr": null,
  "sapUseSymbolicNames": "Yes",
  "sapX509cert":
"D:\\ellen\\qa\\opwise\\testdir\\ecu.txt",
  "sysId":
"1c6a3b42f2704ae8b3f2b62cc5f867c9"
  "version": 1
}
```

SAP Connection Properties

Property	UI Field Name	Description	Specifications	Required
description	Description	Description of this record.		N
name	Connection Name	Name used within the Controller to identify this SAP Connection.		Y

opswiseGroups	Member of Business Services	<p>Business Services that this record belongs to.</p> <p><b>XML</b></p> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;group1&lt;/opswiseGroup&gt;   &lt;opswiseGroup&gt;group2&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <p><b>JSON</b></p> <pre>"opswiseGroups": ["group1", "group2"]</pre>		N
retainSysIds	n/a	<p>Specification for whether or not the Create an SAP Connection web service will persist the <code>sysId</code> property.</p> <ul style="list-style-type: none"> <li>• If <b>retainSysIds</b>="true" and <code>sysId</code> is included in the request/response, <code>sysId</code> will be persisted to the database.</li> <li>• If <b>retainSysIds</b>="false" and <code>sysId</code> is included in the request/response, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;sapConnection&gt;</code> element.</p>	Valid values: true/false (default is true).	N
sapAshost	Application Server	If <code>connectionType</code> = Specific Application Server; Host name of an SAP application server. If the path to the server goes through SAP routers, prefix the host name with the SAP router string.		Y
sapClient	Client	If <code>connectionType</code> = Specific Application Server; SAP Client number.		Y
sapConnectionType	Connection Type	Type of SAP Connection.	<p>Valid Values:</p> <ul style="list-style-type: none"> <li>• As String = Specific Application Server, As Value = 1</li> <li>• As String = Load Balancing, As Value = 2</li> </ul>	Y
sapGroup	Group	If <code>connectionType</code> = Load Balancing; Host name of the message server.		N
sapGwhost	Gateway	If <code>connectionType</code> = Specific Application Server; Host name of the SAP gateway.		N

sapGwserv	Gateway Service	If <code>connectionType</code> = Specific Application Server; Service name of the SAP gateway.		N
sapMshost	Message Server	If <code>connectionType</code> = Load Balancing; Application servers group name.		Y
sapMysapssso2	Single Sign-On Ticket	Path to a file that contains the actual value for the MYSAPSSO2 parameter.		N
sapR3name	System ID	If <code>connectionType</code> = Load Balancing; System ID of the SAP system to which you want to connect.		Y
sapSaprouter	SAProuter	SAProuter parameter.		N
sapSncLib	SNC Library	SNC_LIB parameter; Path to the third-party security library for SNC.		N
sapSncMode	SNC Mode	SNC_MODE parameter; Specification for whether or not SNC is activated.	Valid Values:  <ul style="list-style-type: none"> <li>• As String = Off, As Value = 0</li> <li>• As String = On, As Value = 1</li> </ul>	N
sapSncMyname	SNC My Name	SNC_MYNAME parameter; Token/identifier representing the external RFC program.		N
sapSncPartnername	SNC Partner Name	SNC_PARTNERNAME parameter; Token/identifier representing the back-end system.		N
sapSncQop	SNC Quality of Protection	SNC_QOP parameter.	Valid Values:  <ul style="list-style-type: none"> <li>• As String = Authentication Only, As Value = 1</li> <li>• As String = Integrity Protection, As Value = 2</li> <li>• As String = Privacy Protection, As Value = 3</li> <li>• As String = Default Protection, As Value = 8</li> <li>• As String = Maximum Protection, As Value = 9</li> </ul>	N
sapSncSso	SNC Single Sign-On	SNC_SSO parameter; Specification for whether or not to use single sign-on for SNC.	Valid Values:  <ul style="list-style-type: none"> <li>• As String = No, As Value = 0</li> <li>• As String = Yes, As Value = 1</li> </ul>	N

sapSysnr	System Number	If <code>connectionType = Specific Application Server</code> ; SYSNR parameter.		Y
sapUseSymbolicNames	Use Symbolic Names	If <code>connectionType = Load Balancing</code> ; USE_SYMBOLIC_NAMES parameter; Specification for whether or not to use symbolic service names.	Valid Values: <ul style="list-style-type: none"> <li>As String = Off, As Value = 0</li> <li>As String = On, As Value = 1</li> </ul>	N
sapX509cert	X.509 Certificate	Path to a file that contains the actual value for the X509CERT parameter.		Y
sysId	UUID	System ID field in the database for this SAP Connection record.	Persisted only if <b>retainSysIds</b> is set to true.	N

## SNMP Manager Web Services

- Overview
- Create an SNMP Manager
- Delete an SNMP Manager
- List SNMP Managers
- Modify an SNMP Manager
- Read an SNMP Manager

### Overview

Universal Controller supports the following RESTful-based web services for SNMP Manager operations, which are listed alphabetically on this page.

- [Create an SNMP Manager](#)
- [Delete an SNMP Manager](#)
- [List SNMP Managers](#)
- [Modify an SNMP Manager](#)
- [Read an SNMP Manager](#)

Formatting specifications for each web service, including details about property requirements, are provided.

### Create an SNMP Manager

	Description
URI	<a href="http://host_name/opswise/resources/snmpmanager">http://host_name/opswise/resources/snmpmanager</a>
HTTP Method	POST
Description	Creates an <a href="#">SNMP Manager</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/snmpmanager">http://localhost:8080/opswise/resources/snmpmanager</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create an SNMP Manager: Example Request</a> , below.
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the SNMP Manager with sysId {sysId}.</li> <li>• Status 400 /Bad Request Create SNMP Manager failed. A duplicate value has been detected. Name must be unique.</li> </ul>
SNMP Manager Properties	See <a href="#">SNMP Manager Properties</a> , below.


### Create an SNMP Manager: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre>&lt;snmpManager retainSysIds="true"&gt;   &lt;description&gt;description&lt; /description&gt;   &lt;managerAddress&gt;Junk.com&lt; /managerAddress&gt;   &lt;managerPort&gt;123&lt;/managerPort&gt; &gt;   &lt;name&gt;Test4&lt;/name&gt;   &lt;opswiseGroups /&gt;   &lt;sysId &gt;62701879a6264107bb757a952bcc65cc&lt; /sysId&gt;   &lt;trapCommunity&gt;Test4&lt; /trapCommunity&gt; &lt;/snmpManager&gt;</pre>	<p>JSON Request</p> <pre>{   "description": "description",   "managerAddress": "Junk.com",   "managerPort": 123,   "name": "Test4",   "opswiseGroups": null,   "retainSysIds": true,   "sysId":   "62701879a6264107bb757a952bcc65cc",   "trapCommunity": "public" }</pre>

### SNMP Manager Properties

Property	UI Field Name	Description	Specifications	Required
description	Description	Description of this record.		N
managerAddress	Manager Address	Name or IP address of the SNMP Manager.		Y
managerPort	Manager Port	Port used by the SNMP Manager.		Y
name	Manager Name	Name used within the Controller to identify this SNMP Manager.		Y
opswiseGroups	Member of Business Services	Business Services that this record belongs to.  <b>XML</b> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;group1&lt;/opswiseGroup&gt;   &lt;opswiseGroup&gt;group2&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <b>JSON</b> <pre>"opswiseGroups": ["group1", "group2"]</pre>		N



retainSysIds	n/a	<p>Specification for whether or not the Create an SNMP Manager web service will persist the <code>sysId</code> property.</p> <ul style="list-style-type: none"> <li>If <b>retainSysIds</b>="true" and <code>sysId</code> is included in the request/response, <code>sysId</code> will be persisted to the database.</li> <li>If <b>retainSysIds</b>="false" and <code>sysId</code> is included in the request/response, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;snmpManager&gt;</code> element.</p> </div>	Valid values: true/false (default is true).	N
sysId	n/a	System ID field in the database for this SNMP Manager record.	Persisted only if <b>retainSysIds</b> is set to true.	N
trapCommunity	Trap Community String	Used by the trap receiver to determine which traps to process.	Default is <b>public</b> .	N

## Delete an SNMP Manager

	Description
URI	<a href="http://host_name/opswise/resources/snmpmanager">http://host_name/opswise/resources/snmpmanager</a>
HTTP Method	DELETE
Description	Deletes an SNMP Manager.
URI Parameters	See <a href="#">Delete an SNMP Manager: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/snmpmanager?managername=Test4">http://localhost:8080/opswise/resources/snmpmanager?managername=Test4</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK SNMP Manager deleted successfully.</li> <li>Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>managername</code> and <code>managerid</code> at the same time.</li> <li>Status 404 /Not Found An SNMP Manager with {name/id} "test" does not exist.</li> </ul>

## Delete an SNMP Manager: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
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managerid	ID used within the Controller to identify this SNMP Manager.	String; URI parameter.	Y (unless <code>managername</code> is specified)	managername
managername	Name used within the Controller to identify this SNMP Manager.	String; URI parameter.	Y (unless <code>managerid</code> is specified)	managerid

### List SNMP Managers

	Description
URI	<a href="http://host_name/opswise/resources/snmpmanager/list">http://host_name/opswise/resources/snmpmanager/list</a>
HTTP Method	GET
Description	Retrieves information on all SNMP Managers.
Example URI	<a href="http://localhost:8080/opswise/resources/snmpmanager/list">http://localhost:8080/opswise/resources/snmpmanager/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List SNMP Managers: Example Response</a> , below.
SNMP Manager Properties	See <a href="#">SNMP Manager Properties</a> .

### List SNMP Managers: Example Response

XML Response	JSON Response
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XML Response	JSON Response
<pre> &lt;snmpManagers&gt;   &lt;snmpManager version="7"&gt;     &lt;description&gt;description&lt; /description&gt;     &lt;managerAddress &gt;qa.stone.branch&lt;/managerAddress&gt;     &lt;managerPort&gt;162&lt; /managerPort&gt;     &lt;name&gt;qa.stone.branch1&lt; /name&gt;     &lt;opswiseGroups /&gt;     &lt;sysId &gt;3d7a03053ad64de1b21b6849e6deafd9&lt; /sysId&gt;     &lt;trapCommunity&gt;Test4&lt; /trapCommunity&gt;   &lt;/snmpManager&gt;   &lt;snmpManager version="2"&gt;     &lt;description&gt;description&lt; /description&gt;     &lt;managerAddress &amp;gt;qa.stone.branch&lt;/managerAddress &gt;     &lt;managerPort&gt;162&lt; /managerPort&gt;     &lt;name&gt;qa.stone.branch2&lt; /name&gt;     &lt;opswiseGroups /&gt;     &lt;sysId &gt;94640cb62679407692cb41091e5c73fe&lt; /sysId&gt;     &lt;trapCommunity&gt;Test4&lt; /trapCommunity&gt;   &lt;/snmpManager&gt; &lt;/snmpManagers&gt; </pre>	<pre> [ {   "description": "description",   "managerAddress": "qa.stone.branch",   "managerPort": 162,   "name": "qa.stone.branch1",   "opswiseGroups": null,   "sysId": "3d7a03053ad64de1b21b6849e6deafd9",   "trapCommunity": "public",   "version": 7 }, {   "description": "description",   "managerAddress": "qa.stone.branch",   "managerPort": 162,   "name": "qa.stone.branch",   "opswiseGroups": null,   "sysId": "94640cb62679407692cb41091e5c73fe",   "trapCommunity": "public",   "version": 2 } ] </pre>

### Modify an SNMP Manager

	Description
URI	<a href="http://host_name/opswise/resources/snmpmanager">http://host_name/opswise/resources/snmpmanager</a>
HTTP Method	PUT
Description	Modifies the SNMP Manager specified by the <code>sysId</code> .
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/snmpmanager">http://localhost:8080/opswise/resources/snmpmanager</a></li> </ul>

Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify an SNMP Manager: Example Request</a> , below.
SNMP Manager Properties	See <a href="#">SNMP Manager Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the SNMP Manager with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

### Modify an SNMP Manager: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre>&lt;snmpManager&gt;   &lt;description&gt;description&lt;/description&gt;   &lt;managerAddress&gt;Junk.com&lt;/managerAddress&gt;   &lt;managerPort&gt;123&lt;/managerPort&gt;   &lt;name&gt;Test4&lt;/name&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;Accounting&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;sysId&gt;62701879a6264107bb757a952bcc65cc&lt;   /sysId&gt;   &lt;trapCommunity&gt;Test4&lt;/trapCommunity&gt; &lt;/snmpManager&gt;</pre>	<p>JSON Request</p> <pre>{   "description": "description",   "managerAddress": "Junk.com",   "managerPort": 123,   "name": "Test4",   "opswiseGroups": [ "Accounting" ],   "sysId":   "62701879a6264107bb757a952bcc65cc",   "trapCommunity": "public" }</pre>

### Read an SNMP Manager

URI	<a href="http://host_name/opswise/resources/snmpmanager">http://host_name/opswise/resources/snmpmanager</a>
HTTP Method	GET
Description	Retrieves information on a specific SNMP Manager.
URI Parameters	See <a href="#">Read an SNMP Manager: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/snmpmanager?managername=Test4">http://localhost:8080/opswise/resources/snmpmanager?managername=Test4</a></li> </ul>
Example Response	See <a href="#">Read an SNMP Manager: Example Response</a> , below.
SNMP Manager Properties	See <a href="#">SNMP Manager Properties</a> .

### Read an SNMP Manager: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
managerid	ID used within the Controller to identify this SNMP Manager.	String; URI parameter.	Y (unless managername is specified)	managername
managername	Name used within the Controller to identify this SNMP Manager.	String; URI parameter.	Y (unless managerid is specified)	managerid

### Read an SNMP Manager: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre>&lt;snmpManager retainSysIds="true" version="1"&gt;   &lt;description&gt;description&lt;/description&gt;   &lt;managerAddress&gt;Junk.com&lt;/managerAddress&gt;   &gt;   &lt;managerPort&gt;123&lt;/managerPort&gt;   &lt;name&gt;Test4&lt;/name&gt;   &lt;opswiseGroups /&gt;   &lt;sysId&gt;62701879a6264107bb757a952bcc65cc&lt;   /sysId&gt;   &lt;trapCommunity&gt;Test4&lt;/trapCommunity&gt; &lt;/snmpManager&gt;</pre>	<p>JSON Response</p> <pre>{   "description": "description",   "managerAddress": "Junk.com",   "managerPort": 123,   "name": "Test4",   "opswiseGroups": null,   "sysId":   "62701879a6264107bb757a952bcc65cc",   "trapCommunity": "public",   "version": 1 }</pre>

## Credential Web Services

- [Overview](#)
- [Create a Credential](#)
- [Delete a Credential](#)
- [List Credentials](#)
- [Modify a Credential](#)
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### Overview

Universal Controller supports the following RESTful-based web services for Credential operations, which are listed alphabetically on this page.

- [Create a Credential](#)
- [Delete a Credential](#)
- [List Credentials](#)
- [Modify a Credential](#)
- [Read a Credential](#)

Formatting specifications for each web service, including details about property requirements, are provided.

### Create a Credential


	Description
URI	<a href="http://host_name/opswise/resources/credential">http://host_name/opswise/resources/credential</a>
HTTP Method	POST
Description	Creates a <a href="#">Credential</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/credential">http://localhost:8080/opswise/resources/credential</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create a Credential: Example Request</a> , below.
Properties	See <a href="#">Credential Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the credential with sysId {sysId}.</li> <li>• Status 400 /Bad Request Create credential failed. A duplicate value has been detected. Name must be unique.</li> </ul>

## Create a Credential: Example Request


XML Request	JSON Request
<p>XML Request</p> <pre data-bbox="180 302 659 743">&lt;credential retainSysIds="true"&gt;   &lt;description /&gt;   &lt;name&gt;test&lt;/name&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;bs1&lt;/opswiseGroup&gt;     &lt;opswiseGroup&gt;bs2&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;runtimeKeyLocation /&gt;   &lt;runtimePassPhrase /&gt;   &lt;runtimePassword&gt;test&lt; / runtimePassword&gt;   &lt;runtimeUser&gt;test&lt;/runtimeUser&gt;   &lt;sysId &gt;36208a27bda64312a854985314922953&lt; / sysId&gt;   &lt;type&gt;Standard&lt;/type&gt; &lt;/credential&gt;</pre>	<p>JSON Request</p> <pre data-bbox="768 302 1293 743">{   "description": "Testing",   "name": "test",   "opswiseGroups": [     "bs1",     "bs2"   ],   "retainSysIds": true,   "runtimeKeyLocation": null,   "runtimePassPhrase": null,   "runtimePassword": "test",   "runtimeUser": "test",   "sysId": "6e9791f0d0f541339dad3202e806276f",   "type": "Standard" }</pre>

## Credential Properties

Properties	UI Field Name	Description	Specifications	Required
description	Description	User-defined; description of this record.		N
name	Name	Name used within the Controller to identify this Credential.	Maximum 40 alphanumeric.	Y

opswisewGroups	Member of Business Services	<p>Business Services that this record belongs to.</p> <p>Format:</p> <p><b>XML</b></p> <pre data-bbox="558 282 1514 412">&lt;opswisewGroups&gt;   &lt;opswisewGroup&gt;test&lt;/opswisewGroup&gt; &lt;/opswisewGroups&gt;</pre> <p><b>JSON</b></p> <pre data-bbox="558 513 1514 597">"opswisewGroups": [ "test" ]</pre>		N
retainSysIds	n/a	<p>Specification for whether or not the Create a Credential web service will persist the <code>sysId</code> property.</p> <ul data-bbox="569 691 1545 764" style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> is included in the request, <code>sysId</code> will be persisted to the database.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> is included in the request, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <div data-bbox="558 789 1514 919" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;credential&gt;</code> element.</p> </div>	Optional; Valid values: true/false (default is true).	N
runtimeKeyLocation	Key Location (SFTP only)	<p>Using SFTP requires that you supply a valid credential that specifies the location of the SSL Private key on your Agent. This property provides the location, which must exist on the Agent where you intend to run the SFTP task. Currently, the Controller does not support password authentication for SFTP Transfer.</p> <p>For File Transfer over SSL, make sure you have your private/public keys properly set up and working before you configure the Controller to use it. For example, to validate the keys, log into your destination server from your agent server using ssl.</p>		N
runtimePassPhrase	Pass Phrase (SFTP only)	Pass phrase for the Runtime User's SSL Private key file.		N



runtimePassword	Runtime Password	Runtime user's password.	<ul style="list-style-type: none"> <li>If runtimePassword is omitted in the request, it will be ignored.</li> <li>If runtimePassword is provided in the request, it will be updated.</li> </ul>	N
runtimeUser	Runtime User	Runtime user ID, including an LDAP- or AD-formatted user ID, under which the job will be run.		Y
sysId	n/a	System ID field in the database for this Credential record.	Persisted only if retainSysIds is set to true.	N
type	Type	Type of Credential. <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;">  <b>Note:</b> You cannot modify the type after the Credential has been created, but you can <a href="#">convert</a> any Credential type to any other type. </div>	Valid Values: <ul style="list-style-type: none"> <li>As String = Standard, As Value = 1</li> <li>As String = Resolvable, As Value = 2</li> <li>As String = Web Service, As Value = 3</li> <li>As String = Email, As Value = 4</li> </ul> Default is Standard (1).	N

## Delete a Credential

	Description
URI	<a href="http://host_name/opswise/resources/credential">http://host_name/opswise/resources/credential</a>
HTTP Method	DELETE
Description	Deletes a Credential.
URI Parameters	See <a href="#">Delete a Credential: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opswise/resources/credential?credentialname=test">http://localhost:8080/opswise/resources/credential?credentialname=test</a>

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Credential deleted successfully.</li> <li>• Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>credentialname</code> and <code>credentialid</code> at the same time.</li> <li>• Status 404 /Not Found A credential with {name/id} "test" does not exist.</li> </ul>
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### Delete a Credential: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
<code>credentialid</code>	ID used within the Controller to identify this Credential.	String; URI parameter.	Y (unless <code>credentialname</code> is specified)	<code>credentialname</code>
<code>credentialname</code>	Name used within the Controller to identify this Credential.	String; URI parameter.	Y (unless <code>credentialid</code> is specified)	<code>credentialid</code>

### List Credentials

	Description
URI	<a href="http://host_name/opswise/resources/credential/list">http://host_name/opswise/resources/credential/list</a>
HTTP Method	GET
Description	Retrieves information on all Credentials.
Example URI	<a href="http://localhost:8080/opswise/resources/credential/list">http://localhost:8080/opswise/resources/credential/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Credentials: Example Response</a> , below.
Properties	See <a href="#">Credential Properties</a> .

### List Credentials: Example Response

XML Response	JSON Response
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XML Response	JSON Response
<pre> &lt;credentials&gt;   &lt;credential version="1"&gt;     &lt;description /&gt;     &lt;name&gt;test&lt;/name&gt;     &lt;opswiseGroups&gt;       &lt;opswiseGroup&gt;bs1&lt;/opswiseGroup&gt;       &lt;opswiseGroup&gt;bs2&lt;/opswiseGroup&gt;     &lt;/opswiseGroups&gt;     &lt;runtimeKeyLocation /&gt;     &lt;runtimeUser&gt;ops.admin&lt;   /runtimeUser&gt;   &lt;sysId &gt;36208a27bda64312a854985314922953&lt;   /sysId&gt;   &lt;type&gt;Standard&lt;/type&gt;   &lt;/credential&gt;   &lt;credential version="1"&gt;     &lt;description /&gt;     &lt;name&gt;test 2&lt;/name&gt;     &lt;opswiseGroups&gt;       &lt;opswiseGroup&gt;bs1&lt;/opswiseGroup&gt;       &lt;opswiseGroup&gt;bs2&lt;/opswiseGroup&gt;     &lt;/opswiseGroups&gt;     &lt;runtimeKeyLocation /&gt;     &lt;runtimeUser&gt;ops.admin2&lt;   /runtimeUser&gt;   &lt;sysId &gt;36208a27bda64312a854985314922954&lt;   /sysId&gt;   &lt;type&gt;Standard&lt;/type&gt;   &lt;/credential&gt; &lt;/credentials&gt;                 </pre>	<pre> [ {   "description": null,   "name": "test",   "opswiseGroups": ["bs1","bs2"],   "runtimeKeyLocation": null,   "runtimeUser": "test",   "sysId":   "6e9791f0d0f541339dad3202e806276f",   "type": "Standard",   "version": 1 }, {   "description": null,   "name": "test 2",   "opswiseGroups": ["bs1","bs2"],   "runtimeKeyLocation": null,   "runtimeUser": "test 2",   "sysId":   "6e9791f0d0f541339dad3202e806276g",   "type": "Standard",   "version": 1 } ]                 </pre>

## Modify a Credential

	Description
URI	<a href="http://host_name/opswise/resources/credential">http://host_name/opswise/resources/credential</a>
HTTP Method	PUT
Description	Modifies the Credential specified by the <code>sysId</code> .
Example URI	<a href="http://localhost:8080/opswise/resources/credential">http://localhost:8080/opswise/resources/credential</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a

Example Request	See <a href="#">Modify a Credential: Example Request</a> , below.
Properties	See <a href="#">Credential Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the credential with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Modify a Credential: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre>&lt;credential&gt;   &lt;description&gt;Testing/description   &gt;   &lt;name&gt;test&lt;/name&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;bs1&lt;/opswiseGroup&gt;     &lt;opswiseGroup&gt;bs2&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;runtimeKeyLocation /&gt;   &lt;runtimePassPhrase /&gt;   &lt;runtimePassword&gt;ops.admin&lt;   /runtimePassword&gt;   &lt;runtimeUser&gt;test&lt;/runtimeUser&gt;   &lt;sysId   &gt;36208a27bda64312a854985314922953&lt;   /sysId&gt;   &lt;type&gt;Standard&lt;/type&gt; &lt;/credential&gt;</pre>	<p>JSON Request</p> <pre>{   "description": "Testing",   "name": "test",   "opswiseGroups": [     "bs1",     "bs2"   ],   "runtimeKeyLocation": null,   "runtimePassPhrase": null,   "runtimePassword": "test",   "runtimeUser": "test",   "sysId":   "6e9791f0d0f541339dad3202e806276f",   "type": "Standard" }</pre>

## Read a Credential

URI	<a href="http://host_name/opswise/resources/credential">http://host_name/opswise/resources/credential</a>
HTTP Method	GET
Description	Retrieves information on a specific Credential.
URI Parameters	See <a href="#">Read a Credential: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/credential?credentialname=test">http://localhost:8080/opswise/resources/credential?credentialname=test</a></li> <li><a href="http://localhost:8080/opswise/resources/credential?credentialid=f87848b00a0001037f43e7c81c8ec969">http://localhost:8080/opswise/resources/credential?credentialid=f87848b00a0001037f43e7c81c8ec969</a></li> </ul>
Consumes Content-Type	n/a

Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">Read a Credential: Example Response</a> , below.
Properties	See <a href="#">Credential Properties</a> .

### Read a Credential: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
credentialid	ID used within the Controller to identify this Credential.	String; URI parameter.	Y (unless credentialname is specified)	credentialname
credentialname	Name used within the Controller to identify this Credential.	String; URI parameter.	Y (unless credentialid is specified)	credentialid

### Read a Credential: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre>&lt;credential retainSysIds="true" version="1"&gt;   &lt;description /&gt;   &lt;name&gt;test&lt;/name&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;bs1&lt;/opswiseGroup&gt;     &lt;opswiseGroup&gt;bs2&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;runtimeKeyLocation /&gt;   &lt;runtimeUser&gt;ops.admin&lt;/runtimeUser&gt;   &lt;sysId&gt;36208a27bda64312a854985314922953&lt;   /sysId&gt;   &lt;type&gt;Standard&lt;/type&gt; &lt;/credential&gt;</pre>	<p>JSON Response</p> <pre>{   "description": null,   "name": "test",   "opswiseGroups": ["bs1","bs2"],   "retainSysIds": true,   "runtimeKeyLocation": null,   "runtimeUser": "test",   "sysId":   "6e9791f0d0f541339dad3202e806276f",   "type": "Standard",   "version": 1 }</pre>

## Custom Day Web Services

- Overview
- Create a Custom Day
  - Create a Custom Day: Example Request
  - Custom Day: Properties
- Delete a Custom Day
  - Delete a Custom Day: URI Parameters
- List Custom Day Qualifying Dates
  - List Custom Day Qualifying Dates: URI Parameters
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- List Custom Days
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- Modify a Custom Day
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  - Read a Custom Day: Example Response

### Overview

Universal Controller supports the following RESTful-based web services for Custom Day operations, which are listed alphabetically on this page.

- [Create a Custom Day](#)
- [Delete a Custom Day](#)
- [List Custom Day Qualifying Dates](#)
- [List Custom Day Qualifying Periods](#)
- [List Custom Days](#)
- [Modify a Custom Day](#)
- [Read a Custom Day](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

For Local Custom Day operations, see [Calendar Web Services](#).



#### Note

You can create and modify a Custom Day only if the [Custom Day Global Permitted](#) Universal Controller system property is set to **true**.

### Create a Custom Day

	Description
URI	<a href="http://host_name/opswise/resources/customday">http://host_name/opswise/resources/customday</a>
HTTP Method	POST
Description	Creates a new Custom Day.
Example URI	<a href="http://localhost:8080/opswise/resources/customday">http://localhost:8080/opswise/resources/customday</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create a Custom Day: Example Request</a> , below.
Custom Day Properties	See <a href="#">Custom Day Properties</a> , below.
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the custom day with sysId &lt;sysId&gt;.</li> </ul>

### Create a Custom Day: Example Request

XML Request	JSON Request
-------------	--------------

XML Request

```
<customDay retainSysIds="true">
  <adjustment>None<
/adjustment>
  <adjustmentAmount>1<
/adjustmentAmount>
  <adjustmentType>Day<
/adjustmentType>
  <category>Day<
/category>
  <comments />
  <ctype>Relative
Repeating Date</ctype>
  <date />
  <dateList />
  <day>1</day>
  <dayofweek>Sun<
/dayofweek>
  <holiday>>false<
/holiday>
  <month>Sep</month>
  <name>special day<
/name>
  <nthAmount>8<
/nthAmount>
  <nthType>Business
Day</nthType>
  <observedRules />
  <period>>false</period
>
  <relfreq>Nth</relfreq
>
  <sysId
>dae77560c0a80165006d8051753b806c<
/sysId>
</customDay>
```

JSON Request

```
{
  "adjustment": "None",
  "adjustmentAmount": 1,
  "adjustmentType": "Day",
  "category": "Day",
  "comments": null,
  "ctype": "Relative Repeating
Date",
  "date": null,
  "dateList": [],
  "day": 1,
  "dayofweek": "Sun",
  "holiday": false,
  "month": "Sep",
  "name": "special day",
  "nthAmount": 8,
  "nthType": "Business Day",
  "observedRules": [],
  "period": false,
  "relfreq": "Nth",
  "retainSysIds": true,
  "sysId":
"dae77560c0a80165006d8051753b806c"
}
```

Custom Day: Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With




adjustment	Adjustment	If ctype is Relative Repeating Date (1); Adjustment for the repeating date.	Valid values:  <ul style="list-style-type: none"> <li>• As String = None, As Value = 0</li> <li>• As String = Less, As Value = 1</li> <li>• As String = Plus, As Value = 2</li> </ul> Default is None (0).	N	
adjustmentAmount	Adjustment Amount	If adjustment is Less (1) or Plus (2); Amount (number of days) of the adjustment to be made.	Default is 1.	N	
adjustmentType	Adjustment Type	If adjustment is Less (1) or Plus (2); Type of day on which to make the adjustment.	Valid values:  <ul style="list-style-type: none"> <li>• As String = Day, As Value = 1</li> <li>• As String = Business Day, As Value = 2</li> </ul> Default is Day (1).	N	
category	Category	Category of this Local Custom Day.	Valid values:  <ul style="list-style-type: none"> <li>• As String = Day, As Value = 1</li> <li>• As String = Business Day, As Value = 2</li> <li>• As String = Holiday, As Value = 3</li> <li>• As String = Period, As Value = 4</li> </ul> Default is Day (1).	N	
comments	Description	Description of this Custom Day.		N	

ctype	Type	Type of this Custom Day.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Single Date, As Value = 0</li> <li>• As String = Relative Repeating Date, As Value = 1</li> <li>• As String = Absolute Repeating Date, As Value = 2</li> <li>• As String = List of Dates, As Value = 3</li> </ul> <p>Default is Single Date (0).</p>	N	
date	Date	Specific date for this Custom Day	Format: yyyy-mm-dd.	Y (if ctype = Single Date. )	datelist
dateList	Dates	<p>Multiple specific dates for this Custom Day.</p> <p><b>XML</b></p> <pre>&lt;dateList&gt;   &lt;date&gt;2017-12-13&lt;/date&gt;   &lt;date&gt;2017-12-14&lt;/date&gt; &lt;/dateList&gt;</pre> <p><b>JSON</b></p> <pre>"dateList": [   "2017-12-13",   "2017-12-14" ],</pre>		Y (if ctype is List of Dates.)	date
day	Day	Day of the month.	Integer; Valid values: 1-31.	Y (if ctype is Absolute Repeating Date)	

dayofweek	Day Of Week	Day of the week.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Sun, As Value = 1</li> <li>• As String = Mon, As Value = 2</li> <li>• As String = Tue, As Value = 3</li> <li>• As String = Wed, As Value = 4</li> <li>• As String = Thu, As Value = 5</li> <li>• As String = Fri, As Value = 6</li> <li>• As String = Sat, As Value = 7</li> </ul> <p>Default is Mon (2).</p>	<p>Y (if <code>ctype</code> is Relative Repeating Date)</p> <p>N (if <code>relfreq</code> is Nth)</p>	
holiday	(none)	<b>Deprecated.</b> Indication of whether or not this Custom Day is a holiday.	Boolean; Valid values: true/false; Default is false.	N	
month	Month	Month of the year.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Jan, As Value = 0</li> <li>• As String = Feb, As Value = 1</li> <li>• As String = Mar, As Value = 2</li> <li>• As String = Apr, As Value = 3</li> <li>• As String = May, As Value = 4</li> <li>• As String = Jun, As Value = 5</li> <li>• As String = Jul, As Value = 6</li> <li>• As String = Aug, As Value = 7</li> <li>• As String = Sep, As Value = 8</li> <li>• As String = Oct, As Value = 9</li> <li>• As String = Nov, As Value = 10</li> <li>• As String = Dec, As Value = 11</li> <li>• As String = ALL, As Value = 12</li> </ul> <p>Default is Jan (0).</p>	<p>Y (if <code>ctype</code> is Relative Repeating Date or Absolute Repeating Date)</p>	

name	Name	Name of this Custom Day.		Y	
nthAmount	Nth Amount	If relfreq is Nth; Value of N.		Y	
nthType	Nth Type	If relfreq is Nth; Type of Nth day.	Valid values:  <ul style="list-style-type: none"> <li>As String = Day, As Value = 1</li> <li>As String = Business Day, As Value = 2</li> </ul> Default is Day (1).	N	
observedRules	Observed Rules	If category is Holiday (3) and ctype is Relative Repeating Date (1) or Absolute Repeating Date (2); Rules for when the holiday will be observed.  <b>XML</b>  <pre> &lt;observedRules&gt;   &lt;observedRule&gt;     &lt;actualDayOfWeek&gt;Sat&lt;/actualDayOfWeek&gt;      &lt;observedDayOfWeek&gt;Fri&lt;/observedDayOfWeek&gt;   &lt;/observedRule&gt;   &lt;observedRule&gt;     &lt;actualDayOfWeek&gt;Sun&lt;/actualDayOfWeek&gt;      &lt;observedDayOfWeek&gt;Mon&lt;/observedDayOfWeek&gt;   &lt;/observedRule&gt; &lt;/observedRules&gt;                     </pre> <b>JSON</b>  <pre> "observedRules" : [ {   "actualDayOfWeek" : "Sat",   "observedDayOfWeek" : "Fri" }, {   "actualDayOfWeek" : "Sun",   "observedDayOfWeek" : "Mon" } ]                     </pre>	Valid day of week values:  <ul style="list-style-type: none"> <li>Sun, Mon, Tue, Wed, Thu, Fri, Sat</li> </ul>	N	
period	(none)	<b>Deprecated.</b> Indication of whether or not this Custom Day defines a custom period of days.	Boolean; Valid values: true/false; Default is false.	N	

relfreq	When	Occurrence of this day in the month.	Valid values: <ul style="list-style-type: none"> <li>As String = 1st, As Value = 1</li> <li>As String = 2nd, As Value = 2</li> <li>As String = 3rd, As Value = 3</li> <li>As String = 4th, As Value = 4</li> <li>As String = Last, As Value = 5</li> <li>As String = Every, As Value = 6</li> <li>As String = Nth, As Value = 7</li> <li>As String = Last Day, As Value = 8</li> <li>As String = Last Business Day, As Value = 9</li> </ul> Default is 1st (1).	Y (if ctype is Relative Repeating Date)	
retainSysIds	n/a	Specification for whether or not the Create a Custom Day web service will persist the sysId property. <ul style="list-style-type: none"> <li>If <b>retainSysIds</b>="true" and <code>sysId</code> is included in the request/response, <code>sysId</code> will be persisted to the database.</li> <li>If <b>retainSysIds</b>="false" and <code>sysId</code> is included in the request/response, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;customDay&gt;</code> element.</p> </div>	Valid values: true/false (default is true).	N	
sysId	n/a	System ID in the database for this Custom Day.	Persisted only if <b>retainSysIds</b> is set to true.	Y (if retainSysIds is true.)	

## Delete a Custom Day

	Description
URI	<a href="http://host_name/opswise/resources/customday">http://host_name/opswise/resources/customday</a>
HTTP Method	DELETE
Description	Deletes a specific <a href="#">Custom Day</a> .

URI Parameters	See <a href="#">Delete a Custom Day: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/customday?customdayname=testCustomDay">http://localhost:8080/opswise/resources/customday?customdayname=testCustomDay</a></li> <li><a href="http://localhost:8080/opswise/resources/customday?customdayid=f87848b00a0001037f43e7c81c8ec969">http://localhost:8080/opswise/resources/customday?customdayid=f87848b00a0001037f43e7c81c8ec969</a></li> </ul>
Authentication	HTTP Basic
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Custom day deleted successfully.</li> <li>Status 404 /Not Found A custom day with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>

### Delete a Custom Day: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
customdayid	Unique ID for this Custom Day.		Y (unless <code>customdayname</code> is specified)	customdayname
customdayname	Name used within the Controller to identify this Custom Day.	Maximum 40 alphanumeric.	Y (unless <code>customdayid</code> is specified)	customdayid

### List Custom Day Qualifying Dates

	Description
URI	<a href="http://host_name/opswise/resources/customday/qualifyingdates">http://host_name/opswise/resources/customday/qualifyingdates</a>
HTTP Method	GET
Description	Retrieves information on Qualifying Dates for a specific Custom Day.
URI Parameters	See <a href="#">List Custom Day Qualifying Dates URI Parameters: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/customday/qualifyingdates?customdayname=testCustomDay">http://localhost:8080/opswise/resources/customday/qualifyingdates?customdayname=testCustomDay</a></li> <li><a href="http://localhost:8080/opswise/resources/customday/qualifyingdates?customdayname=testCustomDay&amp;calendarname=testCalendar">http://localhost:8080/opswise/resources/customday/qualifyingdates?customdayname=testCustomDay&amp;calendarname=testCalendar</a></li> </ul>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Custom Day Qualifying Dates: Example Response</a> , below.

### List Custom Day Qualifying Dates: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
customdayid	Unique ID for this Custom Day.		Y (unless customdayname is specified)	customdayname
customdayname	Name used within the Controller to identify this Custom Day.	Maximum 40 alphanumerics.	Y (unless customdayid is specified)	customdayid
calendarid	Unique ID for this Calendar.		Y; If Custom Day adjustmentType is Business Day or When is Last Business Day. (unless calendarname is specified)	calendarname
calendarname	Name used within the Controller to identify a Calendar.	Maximum 40 alphanumerics.	Y; If Custom Day adjustmentType is Business Day or When is Last Business Day. (unless calendarid is specified)	calendarid

### List Custom Day Qualifying Dates: Example Response

<a href="#">XML Response</a>	<a href="#">JSON Response</a>
------------------------------	-------------------------------

XML Response	JSON Response
<pre> &lt;qualifyingDates&gt;   &lt;qualifyingDate&gt;Mon, Jan 1, 2018&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Tue, Jan 1, 2019&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Wed, Jan 1, 2020&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Fri, Jan 1, 2021&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Sat, Jan 1, 2022&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Sun, Jan 1, 2023&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Mon, Jan 1, 2024&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Wed, Jan 1, 2025&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Thu, Jan 1, 2026&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Fri, Jan 1, 2027&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Sat, Jan 1, 2028&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Mon, Jan 1, 2029&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Tue, Jan 1, 2030&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Wed, Jan 1, 2031&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Thu, Jan 1, 2032&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Sat, Jan 1, 2033&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Sun, Jan 1, 2034&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Mon, Jan 1, 2035&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Tue, Jan 1, 2036&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Thu, Jan 1, 2037&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Fri, Jan 1, 2038&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Sat, Jan 1, 2039&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Sun, Jan 1, 2040&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Tue, Jan 1, 2041&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Wed, Jan 1, 2042&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Thu, Jan 1, 2043&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Fri, Jan 1, 2044&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Sun, Jan 1, 2045&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Mon, Jan 1, 2046&lt;/qualifyingDate&gt;   &lt;qualifyingDate&gt;Tue, Jan 1, 2047&lt;/qualifyingDate&gt; &lt;/qualifyingDates&gt;           </pre>	<pre> [   "Mon, Jan 1, 2018",   "Tue, Jan 1, 2019",   "Wed, Jan 1, 2020",   "Fri, Jan 1, 2021",   "Sat, Jan 1, 2022",   "Sun, Jan 1, 2023",   "Mon, Jan 1, 2024",   "Wed, Jan 1, 2025",   "Thu, Jan 1, 2026",   "Fri, Jan 1, 2027",   "Sat, Jan 1, 2028",   "Mon, Jan 1, 2029",   "Tue, Jan 1, 2030",   "Wed, Jan 1, 2031",   "Thu, Jan 1, 2032",   "Sat, Jan 1, 2033",   "Sun, Jan 1, 2034",   "Mon, Jan 1, 2035",   "Tue, Jan 1, 2036",   "Thu, Jan 1, 2037",   "Fri, Jan 1, 2038",   "Sat, Jan 1, 2039",   "Sun, Jan 1, 2040",   "Tue, Jan 1, 2041",   "Wed, Jan 1, 2042",   "Thu, Jan 1, 2043",   "Fri, Jan 1, 2044",   "Sun, Jan 1, 2045",   "Mon, Jan 1, 2046",   "Tue, Jan 1, 2047" ]           </pre>

### List Custom Day Qualifying Periods

	Description
URI	<a href="http://host_name/opswise/resources/customday/qualifyingperiods">http://host_name/opswise/resources/customday/qualifyingperiods</a>
HTTP Method	GET
Description	Retrieves information on Qualifying Periods for a specific Custom Day.
URI Parameters	See List Custom Day Qualifying Periods URI Parameters: URI Parameters, below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/customday/qualifyingperiods?customdayname=testCustomDay">http://localhost:8080/opswise/resources/customday/qualifyingperiods?customdayname=testCustomDay</a></li> <li><a href="http://localhost:8080/opswise/resources/customday/qualifyingperiods?customdayname=testCustomDay&amp;calendarname=testCalendar">http://localhost:8080/opswise/resources/customday/qualifyingperiods?customdayname=testCustomDay&amp;calendarname=testCalendar</a></li> </ul>



Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Custom Day Qualifying Periods: Example Response</a> , below.

### List Custom Day Qualifying Periods: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
customdayid	Unique ID for this Custom Day.		Y (unless customdayname is specified)	customdayname
customdayname	Name used within the Controller to identify this Custom Day.	Maximum 40 alphanumerics.	Y (unless customdayid is specified)	customdayid
calendarid	Unique ID for this Calendar.		Y If Custom Day When is Last Business Day. (unless calendarname is specified)	calendarname
calendarname	Name used within the Controller to identify a Calendar.	Maximum 40 alphanumerics.	Y If Custom Day When is Last Business Day. (unless calendarid is specified)	calendarid

### List Custom Day Qualifying Periods: Example Response

<a href="#">XML Response</a>	<a href="#">JSON Response</a>
------------------------------	-------------------------------

<p>XML Response</p> <pre> &lt;qualifyingPeriods&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 1, 2017&lt;/startDate&gt;     &lt;endDate&gt;Sat, Jan 6, 2018&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 7, 2018&lt;/startDate&gt;     &lt;endDate&gt;Sat, Jan 5, 2019&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 6, 2019&lt;/startDate&gt;     &lt;endDate&gt;Sat, Jan 4, 2020&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 5, 2020&lt;/startDate&gt;     &lt;endDate&gt;Sat, Jan 2, 2021&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 3, 2021&lt;/startDate&gt;     &lt;endDate&gt;Sat, Jan 1, 2022&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt;   &lt;qualifyingPeriod&gt;     &lt;startDate&gt;Sun, Jan 2, 2022&lt;/startDate&gt;     &lt;endDate&gt;Sat, Dec 31, 2022&lt;/endDate&gt;   &lt;/qualifyingPeriod&gt; &lt;/qualifyingPeriods&gt;                 </pre>	<p>JSON Response</p> <pre> [   {     "startDate": "Sun, Jan 1, 2017",     "endDate": "Sat, Jan 6, 2018"   },   {     "startDate": "Sun, Jan 7, 2018",     "endDate": "Sat, Jan 5, 2019"   },   {     "startDate": "Sun, Jan 6, 2019",     "endDate": "Sat, Jan 4, 2020"   },   {     "startDate": "Sun, Jan 5, 2020",     "endDate": "Sat, Jan 2, 2021"   },   {     "startDate": "Sun, Jan 3, 2021",     "endDate": "Sat, Jan 1, 2022"   },   {     "startDate": "Sun, Jan 2, 2022",     "endDate": "Sat, Dec 31, 2022"   } ]                 </pre>
--	---

## List Custom Days

	Description
URI	<a href="http://host_name/opswise/resources/customday/list">http://host_name/opswise/resources/customday/list</a>
HTTP Method	GET
Description	Retrieves information on all Custom Days.
Example URI	<a href="http://localhost:8080/opswise/resources/customday/list">http://localhost:8080/opswise/resources/customday/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See List Custom Days: Example Response, below.
Custom Day Properties	See Custom Day Properties.

## List Custom Days: Example Response

XML Response	JSON Response
<p data-bbox="142 250 317 277">XML Response</p> <pre data-bbox="178 412 661 1479"> &lt;customDays&gt;   &lt;customDay version="1"&gt;     &lt;adjustment&gt;None&lt;   /adjustment&gt;     &lt;adjustmentAmount&gt;1&lt;   /adjustmentAmount&gt;     &lt;adjustmentType&gt;Day&lt;   /adjustmentType&gt;     &lt;category&gt;Day&lt;   /category&gt;     &lt;comments /&gt;     &lt;ctype&gt;Relative   Repeating Date&lt;/ctype&gt;     &lt;date /&gt;     &lt;dateList /&gt;     &lt;day&gt;1&lt;/day&gt;     &lt;dayofweek&gt;Sun&lt;   /dayofweek&gt;     &lt;holiday&gt;false&lt;   /holiday&gt;     &lt;month&gt;Sep&lt;/month&gt;     &lt;name&gt;special day&lt;   /name&gt;     &lt;nthAmount&gt;8&lt;   /nthAmount&gt;     &lt;nthType&gt;Business   Day&lt;/nthType&gt;     &lt;period&gt;&gt;false&lt;/period&gt;   &gt;     &lt;relfreq&gt;Nth&lt;/relfreq&gt;   &gt;     &lt;sysId   &gt;dae77560c0a80165006d8051753b806c&lt;   /sysId&gt;     &lt;/customDay&gt;   &lt;customDay version="1"&gt;     &lt;adjustment&gt;None&lt;   /adjustment&gt;     &lt;adjustmentAmount&gt;1&lt;   /adjustmentAmount&gt;     &lt;adjustmentType&gt;Day&lt;   /adjustmentType&gt;     &lt;category&gt;Day&lt;   /category&gt;     &lt;comments /&gt;     &lt;ctype&gt;Relative           </pre>	<p data-bbox="724 250 919 277">JSON Response</p>

```

Repeating Date</ctype>
  <date />
  <dateList />
  <day>1</day>
  <dayofweek>Sun<
/dayofweek>
  <holiday>>false<
/holiday>
  <month>Sep</month>
  <name>special day<
/name>
  <nthAmount>9<
/nthAmount>
  <nthType>Business
Day</nthType>
  <period>>false</period>
>
  <relfreq>Nth</relfreq>
>
  <sysId
>dae77560c0a80165006d8051753b806c<
/sysId>

```

```

[
  {
    "adjustment": "None",
    "adjustmentAmount": 1,
    "adjustmentType": "Day",
    "category": "Day",
    "comments": null,
    "ctype": "Relative Repeating
Date",
    "date": null,
    "dateList": [],
    "day": 1,
    "dayofweek": "Sun",
    "holiday": false,
    "month": "Sep",
    "name": "special day",
    "nthAmount": 8,
    "nthType": "Business Day",
    "period": false,
    "relfreq": "Nth",
    "retainSysIds": true,
    "sysId":
"dae77560c0a80165006d8051753b806c"
    "version": 1
  },
  {
    "adjustment": "None",
    "adjustmentAmount": 1,
    "adjustmentType": "Day",
    "category": "Day",
    "comments": null,
    "ctype": "Relative Repeating
Date",
    "date": null,
    "dateList": [],
    "day": 1,
    "dayofweek": "Sun",
    "holiday": false,
    "month": "Sep",
    "name": "special day",
    "nthAmount": 9,
    "nthType": "Business Day",
    "period": false,
    "relfreq": "Nth",
    "retainSysIds": true,
    "sysId":
"abc77560c0a80165006d8051753b806c"
    "version": 1
  }
]

```

```
</customDay>
</customDays>
```

## Modify a Custom Day

	Description
URI	<a href="http://host_name/opswise/resources/customday">http://host_name/opswise/resources/customday</a>
HTTP Method	PUT
Description	Modifies the <a href="#">Custom Day</a> specified by the <code>sysId</code> .
Example URI	<a href="http://localhost:8080/opswise/resources/customday">http://localhost:8080/opswise/resources/customday</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify a Custom Day: Example Request</a> , below.
Custom Day Properties	See <a href="#">Custom Day Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the custom day with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Modify a Custom Day: Example Request

XML Request	JSON Request
-------------	--------------

XML Request	JSON Request
<pre> &lt;customDay&gt;   &lt;adjustment&gt;None&lt; /adjustment&gt;   &lt;adjustmentAmount&gt;1&lt; /adjustmentAmount&gt;   &lt;adjustmentType&gt;Day&lt; /adjustmentType&gt;   &lt;category&gt;Day&lt; /category&gt;   &lt;comments /&gt;   &lt;ctype&gt;Relative Repeating Date&lt;/ctype&gt;   &lt;date /&gt;   &lt;dateList /&gt;   &lt;day&gt;1&lt;/day&gt;   &lt;dayofweek&gt;Sun&lt; /dayofweek&gt;   &lt;holiday&gt;&gt;false&lt; /holiday&gt;   &lt;month&gt;Sep&lt;/month&gt;   &lt;name&gt;special day&lt; /name&gt;   &lt;nthAmount&gt;8&lt; /nthAmount&gt;   &lt;nthType&gt;Business Day&lt;/nthType&gt;   &lt;period&gt;&gt;false&lt;/period&gt;   &gt;   &lt;relfreq&gt;Nth&lt;/relfreq&gt;   &gt;   &lt;sysId &gt;dae77560c0a80165006d8051753b806c&lt; /sysId&gt; &lt;/customDay&gt; </pre>	<pre> {   "adjustment": "None",   "adjustmentAmount": 1,   "adjustmentType": "Day",   "category": "Day",   "comments": null,   "ctype": "Relative Repeating Date",   "date": null,   "dateList": [],   "day": 1,   "dayofweek": "Sun",   "holiday": false,   "month": "Sep",   "name": "special day",   "nthAmount": 8,   "nthType": "Business Day",   "period": false,   "relfreq": "Nth",   "sysId": "dae77560c0a80165006d8051753b806c" } </pre>

## Read a Custom Day

	Description
URI	<a href="http://host_name/opswise/resources/customday">http://host_name/opswise/resources/customday</a>
HTTP Method	GET
Description	Retrieves information on a specific Custom Day.
URI Parameters	See <a href="#">Read a Custom Day: URI Parameters</a> , below.
Consumes Content-Type	n/a

Produces Content-Type	application/xml, application/json
Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/customday?customdayname=testCustomDay">http://localhost:8080/opswise/resources/customday?customdayname=testCustomDay</a></li> <li>• <a href="http://localhost:8080/opswise/resources/customday?customdayid=f87848b00a0001037f43e7c81c8ec969">http://localhost:8080/opswise/resources/customday?customdayid=f87848b00a0001037f43e7c81c8ec969</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Read a Custom Day: Example Response</a>, below.)</li> <li>• Status 404 /Not Found A custom day with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Custom Day Properties	See <a href="#">Custom Day Properties</a> .

### Read a Custom Day: URI Parameters

Name	Description	Specifications	Required	Mutually Exclusive With
customdayid	Unique ID for this Custom Day.		Y (unless customdayname is specified)	customdayname
customdayname	Name used within the Controller to identify this Custom Day.	Maximum 40 alphanumerics.	Y (unless customdayid is specified)	customdayid

### Read a Custom Day: Example Response

<a href="#">XML Response</a>	<a href="#">JSON Response</a>
------------------------------	-------------------------------

XML Response

```
<customDay retainSysIds="true" version="1">
  <adjustment>None</adjustment>
  <adjustmentAmount>1<
/adjustmentAmount>
  <adjustmentType>Day<
/adjustmentType>
  <category>Day</category>
  <comments />
  <ctype>Relative Repeating
Date</ctype>
  <date />
  <dateList />
  <day>1</day>
  <dayofweek>Sun</dayofweek>
  <holiday>>false</holiday>
  <month>Sep</month>
  <name>special day</name>
  <nthAmount>8</nthAmount>
  <nthType>Business Day</nthType
>
  <period>>false</period>
  <relfreq>Nth</relfreq>
  <sysId
>dae77560c0a80165006d8051753b806c</sysId>
</customDay>
```

JSON Response

```
{
  "adjustment": "None",
  "adjustmentAmount": 1,
  "adjustmentType": "Day",
  "category": "Day",
  "comments": null,
  "ctype": "Relative Repeating
Date",
  "date": null,
  "dateList": [],
  "day": 1,
  "dayofweek": "Sun",
  "holiday": false,
  "month": "Sep",
  "name": "special day",
  "nthAmount": 8,
  "nthType": "Business Day",
  "period": false,
  "relfreq": "Nth",
  "retainSysIds": true,
  "sysId":
"dae77560c0a80165006d8051753b806c"
  "version": 1
}
```



## Group Web Services

- Overview
- Create a Group
- Create and Modify a Group: XML and JSON Examples
- Delete a Group
  - Delete a Group: URI Parameters
- List Groups
  - List Groups XML and JSON Examples
- Modify a Group
- Read a Group
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  - Read a Group XML and JSON Examples
- Properties
  - Group Properties
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  - Group Permission Properties
  - Group Role Properties

### Overview

Universal Controller supports the following RESTful-based web services for User and Group operations, which are listed alphabetically on this page.

- [Create a Group](#)
- [Delete a Group](#)
- [List Groups](#)
- [Modify a Group](#)
- [Read a Group](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

### Create a Group

	Description
URI	<a href="http://host_name/opswise/resources/usergroup">http://host_name/opswise/resources/usergroup</a>
HTTP Method	POST
Description	Creates a new User Group.
Example URI	<a href="http://localhost:8080/opswise/resources/usergroup">http://localhost:8080/opswise/resources/usergroup</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Create and Modify a Group: XML and JSON Examples</a> , below.

Group Properties	See <a href="#">Group Properties</a> , below.
Group Member Properties	See <a href="#">Group Member Properties</a> , below.
Group Permission Properties	See <a href="#">Group Permission Properties</a> , below.
Group Role Properties	See <a href="#">Group Role Properties</a> , below.
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the group with sysId {sysId}.</li> </ul>

## Create and Modify a Group: XML and JSON Examples

The `excludeRelated` and `retainSysIds` properties are specified as attributes in the `<userGroup>` element of XML web services.

<a href="#">XML</a>	<a href="#">JSON</a>
---------------------	----------------------

## XML

```

<userGroup retainSysIds="true">
  <ctrlNavigationVisibility>true<
/ctrlNavigationVisibility>
  <description>Description</description>
  <email>test@stonebranch.com</email>
  <groupMembers>
    <groupMember>
      <sysId>1fe28873315d4316ad8fec7c89477723</sysId>
      <user>userc</user>
    </groupMember>
    <groupMember>
      <sysId>361f995ad8f04a2ab39ee112e4a1301a</sysId>
      <user>userb</user>
    </groupMember>
  </groupMembers>
  <groupRoles>
    <groupRole>
<role>ops_report_admin</role>
<sysId>9c0d5e987a5847668c0182abf03c01e7</sysId>
    </groupRole>
  </groupRoles>
  <manager />
  <name>test</name>
  <navigationVisibility>
    <navigationNode>Reports</navigationNode>
  </navigationVisibility>
  <parent />
  <permissions>
    <permission>
<allGroups>true</allGroups>
<commands />
<defaultGroup>true</defaultGroup>
<nameWildcard>*</nameWildcard>
<opCreate>true</opCreate>
<opDelete>true</opDelete>
<opExecute>>false</opExecute>
<opRead>true</opRead>
<opUpdate>true</opUpdate>
<opswiseGroups />
<permissionType>Task</permissionType>
<sysId>48eb7ec0c0a8026e0da9406feb022f4e</sysId>
    </permission>
    ...
  </permissions>
  <sysId>920ef061ff4d498abe6e7ef883b1b5e1</sysId>
</userGroup>

```

## JSON

```

{
  "ctrlNavigationVisibility": true,
  "description": "Description",
  "email": "test@stonebranch.com",
  "groupMembers": [ {
    "sysId": "b6fd058ee3db424ea374109299949b18",
    "user": "userc"
  }, {
    "sysId": "c54e8898f3bb493e9f5ed7f030007e2e",
    "user": "userb"
  } ],
  "groupRoles": [ {
    "role": "ops_report_admin",
    "sysId": "4112408600e947b89d051d36bf9cf6b3"
  } ],
  "manager": null,
  "name": "test",
  "navigationVisibility": [ "Reports" ],
  "parent": null,
  "permissions": [ {
    "allGroups": true,
    "commands": null,
    "defaultGroup": true,
    "nameWildcard": "*",
    "opCreate": true,
    "opDelete": true,
    "opExecute": false,
    "opRead": true,
    "opUpdate": true,
    "opswiseGroups": [],
    "permissionType": "Task",
    "sysId": "48eb7ec0c0a8026e0da9406feb022f4e"
  } ],
  "retainSysIds": true,
  "sysId": "920ef061ff4d498abe6e7ef883b1b5e1"
}

```

## Delete a Group

	Description
URI	<a href="http://host_name/opswise/resources/usergroup">http://host_name/opswise/resources/usergroup</a>
HTTP Method	DELETE
Description	Deletes a Group.
URI Parameters	See <a href="#">Delete a Group URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:9080/opswise/resources/usergroup?groupname=Test_Group">http://localhost:9080/opswise/resources/usergroup?groupname=Test_Group</a></li> <li><a href="http://localhost:9080/opswise/resources/usergroup?groupid=f93b9403aec546bcbe1c2c06cf26e3c">http://localhost:9080/opswise/resources/usergroup?groupid=f93b9403aec546bcbe1c2c06cf26e3c</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK User group {groupname} deleted successfully.</li> <li>Status 400 /Bad Request Mutual exclusion violation. Cannot specify groupid and groupname at the same time.</li> <li>Status 404 /Not Found User group with {groupname/groupid} does not exist.</li> </ul>

### Delete a Group: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
groupid	ID used within the Controller to identify this group.	String; URI parameter.	Y (unless groupname is specified)	groupname
groupname	Name used within the Controller to identify this group.	String; URI parameter.	Y (unless groupid is specified)	groupid

### List Groups

	Description
URI	<a href="http://host_name/opswise/resources/usergroup/list">http://host_name/opswise/resources/usergroup/list</a>
HTTP Method	GET
Description	Retrieves information on all Groups.
Example URI	<a href="http://localhost:8080/opswise/resources/usergroup/list">http://localhost:8080/opswise/resources/usergroup/list</a>
Authentication	HTTP Basic
Produces Content-Type	application/xml, application/json
Example	See <a href="#">Read a Group: XML and JSON Examples</a> .
Group Properties	See <a href="#">Group Properties</a> .
Group Member Properties	See <a href="#">Group Member Properties</a> .

Group Permission Properties	See <a href="#">Group Permission Properties</a> .
Group Role Properties	See <a href="#">Group Role Properties</a> .

## List Groups XML and JSON Examples

XML	JSON
<p>XML</p> <pre> &lt;userGroups&gt;   &lt;userGroup&gt;     &lt;ctrlNavigationVisibility&gt;true&lt;   /ctrlNavigationVisibility&gt;     &lt;description&gt;Description&lt;/description&gt;     &lt;email&gt;test@stonebranch.com&lt;/email&gt;     &lt;groupMembers&gt;       &lt;groupMember&gt;         &lt;sysId&gt;1fe28873315d4316ad8fec7c89477723&lt;/sysId&gt;         &lt;user name="User C"&gt;userc&lt;/user&gt;       &lt;/groupMember&gt;       &lt;groupMember&gt;         &lt;sysId&gt;361f995ad8f04a2ab39ee112e4a1301a&lt;/sysId&gt;         &lt;user name="User B"&gt;userb&lt;/user&gt;       &lt;/groupMember&gt;     &lt;/groupMembers&gt;     &lt;groupRoles&gt;       &lt;groupRole&gt;         &lt;role description="report admin         role"&gt;ops_report_admin&lt;/role&gt;         &lt;sysId&gt;9c0d5e987a5847668c0182abf03c01e7&lt;/sysId&gt;       &lt;/groupRole&gt;     &lt;/groupRoles&gt;     &lt;manager /&gt;     &lt;name&gt;test1&lt;/name&gt;     &lt;navigationVisibility&gt;       &lt;navigationNode&gt;Reports&lt;/navigationNode&gt;     &lt;/navigationVisibility&gt;     &lt;parent /&gt;     &lt;permissions&gt;       &lt;permission&gt;         &lt;allGroups&gt;true&lt;/allGroups&gt;         &lt;commands /&gt;         &lt;defaultGroup&gt;true&lt;/defaultGroup&gt;         &lt;nameWildcard&gt;*&lt;/nameWildcard&gt;         &lt;opCreate&gt;true&lt;/opCreate&gt;         &lt;opDelete&gt;true&lt;/opDelete&gt;         &lt;opExecute&gt;&gt;false&lt;/opExecute&gt;         &lt;opRead&gt;true&lt;/opRead&gt;         &lt;opUpdate&gt;true&lt;/opUpdate&gt;         &lt;opswiseGroups /&gt;       &lt;/permission&gt;     &lt;/permissions&gt;   &lt;/userGroup&gt; &lt;/userGroups&gt;                 </pre>	<p>JSON</p> <pre> [   {     "ctrlNavigationVisibility": true,     "description": "Description",     "email": "test@stonebranch.com",     "groupMembers": [       {         "sysId": "b6fd058ee3db424ea374109299949b18",         "user": {           "name": "USERC",           "value": "userc"         }       }     ],     "groupRoles": [       {         "role": {           "description": "The report administrator role.",           "value": "ops_report_admin"         },         "sysId": "4112408600e947b89d051d36bf9cf6b3"       }     ],     "manager": null,     "name": "test1",     "navigationVisibility": [ "Reports" ],     "parent": null,     "permissions": [],     "sysId": "920ef061ff4d498abe6e7ef883b1b5e1"   },   {     "ctrlNavigationVisibility": true,     "description": "Description",     "groupMembers": [],     "groupRoles": [       {         "role": {           "description": "The report administrator role.",           "value": "ops_report_admin"         },         "sysId": "4112408600e947b89d051d36bf9cf6b3"       }     ]   } ]                 </pre>

```

<permissionType>Task</permissionType>
<sysId>48eb7ec0c0a8026e0da9406feb022f4e</sysId>
  </permission>
</permissions>
<sysId>920ef061ff4d498abe6e7ef883b1b5e1</sysId>
</userGroup>
<userGroup>
  <ctrlNavigationVisibility>true<
/ctrlNavigationVisibility>
  <description>Description</description>
  <groupMembers />
  <groupRoles>
    <groupRole>
      <role description="report admin
role">ops_report_admin</role>
      <sysId>9c0d5e987a5847668c0182abf03c01e7</sysId>
      </groupRole>
    </groupRoles>
    <manager />
    <name>test2</name>
    <navigationVisibility>
      <navigationNode>Reports</navigationNode>
    </navigationVisibility>
    <parent />
    <permissions>
      <permission>
        <allGroups>true</allGroups>
        <commands />
        <defaultGroup>true</defaultGroup>
        <nameWildcard>*</nameWildcard>
        <opCreate>true</opCreate>
        <opDelete>true</opDelete>
        <opExecute>false</opExecute>
        <opRead>true</opRead>
        <opUpdate>true</opUpdate>
        <opwiseGroups />
        <permissionType>Task</permissionType>
        <sysId>48eb7ec0c0a8026e0da9406feb022f4e</sysId>
      </permission>
    </permissions>

```

```

],
"manager": null,
"name": "test2",
"navigationVisibility": [ "Reports" ],
"parent": null,
"permissions": [
  {
    "allGroups": true,
    "commands": null,
    "defaultGroup": true,
    "nameWildcard": "*",
    "opCreate": true,
    "opDelete": true,
    "opExecute": false,
    "opRead": true,
    "opUpdate": true,
    "opwiseGroups": [],
    "permissionType": "Task",
    "sysId": "48eb7ec0c0a8026e0da9406feb022f4e"
  }
],
"sysId": "920ef061ff4d498abe6e7ef883b1b5e1"

```

```
<sysId>920ef061ff4d498abe6e7ef883b1b5e1</sysId>
</userGroup>
```

```
}
]
```

## Modify a Group

	Description
URI	<a href="http://host_name/opswise/resources/usergroup">http://host_name/opswise/resources/usergroup</a>
HTTP Method	PUT
Description	Modifies the <b>Group</b> specified by the <code>sysId</code> in the <b>request</b> .  To modify Group properties without modifying related records, see the <code>excludeRelated</code> property, below.
Example URI	<a href="http://localhost:8080/opswise/resources/usergroup">http://localhost:8080/opswise/resources/usergroup</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create and Modify a Group: XML and JSON Examples</a> .
Group Properties	See <a href="#">Group Properties</a> .
Group Member Properties	See <a href="#">Group Member Properties</a> .
Group Permission Properties	See <a href="#">Group Permission Properties</a> .
Group Role Properties	See <a href="#">Group Role Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the user group with sysId &lt;sysId&gt;.</li> </ul>

## Read a Group

	Description
URI	<a href="http://host_name/opswise/resources/usergroup">http://host_name/opswise/resources/usergroup</a>
HTTP Method	GET
Description	Retrieves information on a specific <b>Group</b> .
URI Parameters	See <a href="#">Read a Group: URI Parameters</a> , below.

Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/usergroup?groupname=test.group">http://localhost:8080/opswise/resources/usergroup?groupname=test.group</a></li> <li>• <a href="http://localhost:8080/opswise/resources/usergroup?groupid=c489750500d444eca9325559d0ef9673">http://localhost:8080/opswise/resources/usergroup?groupid=c489750500d444eca9325559d0ef9673</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Read a Group: Example XML and JSON Examples</a>, below.)</li> <li>• Status 404 /Not Found A user group with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Response Group Member Properties	See <a href="#">Group Member Properties</a> .
Response Group Permission Properties	See <a href="#">Group Permission Properties</a> .
Response Group Role Properties	See <a href="#">Group Role Properties</a> .

### Read a Group: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
groupid	ID used within the Controller to identify this group.	String; URI parameter.	Y (unless <code>groupname</code> is specified)	groupname
groupname	Name used within the Controller to identify this group.	String; URI parameter.	Y (unless <code>groupid</code> is specified)	groupid

### Read a Group XML and JSON Examples

The `retainSyslds` property is specified as an attribute in the `<userGroup>` element of the XML response.

<a href="#">XML</a>	<a href="#">JSON</a>
---------------------	----------------------



## XML

```

<userGroup retainSysIds="true">
  <ctrlNavigationVisibility>true<
  /ctrlNavigationVisibility>
  <description>Description</description>
  <email>test@stonebranch.com</email>
  <groupMembers>
    <groupMember>
      <sysId>1fe28873315d4316ad8fec7c89477723</sysId>
      <user name="User C">userc</user>
    </groupMember>
    <groupMember>
      <sysId>361f995ad8f04a2ab39ee112e4a1301a</sysId>
      <user name="User B">userb</user>
    </groupMember>
  </groupMembers>
  <groupRoles>
    <groupRole>
      <role description="report admin
      role">ops_report_admin</role>
      <sysId>9c0d5e987a5847668c0182abf03c01e7</sysId>
    </groupRole>
  </groupRoles>
  <manager />
  <name>test</name>
  <navigationVisibility>
    <navigationNode>Reports</navigationNode>
  </navigationVisibility>
  <parent />
  <permissions>
    <permission>
      <allGroups>true</allGroups>
      <commands />
      <defaultGroup>true</defaultGroup>
      <nameWildcard>*</nameWildcard>
      <opCreate>true</opCreate>
      <opDelete>true</opDelete>
      <opExecute>false</opExecute>
      <opRead>true</opRead>
      <opUpdate>true</opUpdate>
      <opswiseGroups />
      <permissionType>Task</permissionType>
      <sysId>48eb7ec0c0a8026e0da9406feb022f4e</sysId>
    </permission>
    ...
  </permissions>
  <sysId>920ef061ff4d498abe6e7ef883b1b5e1</sysId>
</userGroup>

```

## JSON


```

{
  "ctrlNavigationVisibility": true,
  "description": "Description",
  "email": "test@stonebranch.com",
  "groupMembers": [ {
    "sysId": "b6fd058ee3db424ea374109299949b18",
    "user": {
      "name": "USERC",
      "value": "userc"
    }
  }, {
    "sysId": "c54e8898f3bb493e9f5ed7f030007e2e",
    "user": {
      "name": "USERB",
      "value": "userb"
    }
  } ],
  "groupRoles": [ {
    "role": {
      "description": "The report administrator role.",
      "value": "ops_report_admin"
    },
    "sysId": "4112408600e947b89d051d36bf9cf6b3"
  } ],
  "manager": null,
  "name": "test",
  "navigationVisibility": [ "Reports" ],
  "parent": null,
  "permissions": [ {
    "allGroups": true,
    "commands": null,
    "defaultGroup": true,
    "nameWildcard": "*",
    "opCreate": true,
    "opDelete": true,
    "opExecute": false,
    "opRead": true,
    "opUpdate": true,
    "opswiseGroups": [],
    "permissionType": "Task",
    "sysId": "48eb7ec0c0a8026e0da9406feb022f4e"
  } ],
  "retainSysIds": true,
  "sysId": "920ef061ff4d498abe6e7ef883b1b5e1"
}


```

## Properties

## Group Properties

Property	UI Field Name	Description	Specifications	Required
ctrlNavigationVisibility	Control Navigation Visibility	Indication of whether or not to control the visibility of navigation pane entries in the Controller Navigator, via the navigationVisibility property, for members of this Group. If ctrlNavigationVisibility is false, all entries are visible.	Boolean. Valid values: true/false. Default is false.	N
description	Description	Description of the group.		N
email	Email	Email address of this group.		N
excludeRelated	n/a	<p>For the Modify Group web service; specification for whether or not to exclude related records (Group Roles, Group Members, Group Permissions) from the update, even if they are provided in the request.</p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML, excludeRelated is specified as an attribute in the &lt;userGroup&gt; element.</p> </div>	Valid values: true/false (default is false).	N
groupMembers	n/a	Users in this group	<p>Format:</p> <p><b>XML</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> &lt;groupMembers&gt;   &lt;groupMember&gt;     &lt;user&gt;userc&lt;/user&gt;   &lt;/groupMember&gt; &lt;/groupMembers&gt; </pre> <p><b>JSON</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> "groupMembers": [   {     "user": "userc"   } ] </pre>	N

groupRoles	n/a	Roles assigned to this group.	<p>Format: <b>XML</b></p> <pre data-bbox="1203 207 1808 383"> &lt;groupRoles&gt;   &lt;groupRole&gt;     &lt;role&gt;ops_report_admin&lt;/role&gt;   &lt;/groupRole&gt; &lt;/groupRoles&gt; </pre> <p><b>JSON</b></p> <pre data-bbox="1203 483 1808 659"> "groupRoles": [   {     "role": "ops_report_global"   } ] </pre>	N
manager	Manager	ID of the Universal Controller user that is the manager of this group.		N
name	Name	Name of the group.		Y

<p>navigationVisibility</p>	<p>Navigation Visibility</p>	<p>List of all Controller Navigator entries.</p>	<p>Format: <b>XML</b></p> <pre data-bbox="1203 207 1808 339">&lt;navigationVisibility&gt;   &lt;navigationNode&gt;Reports&lt;/navigationNode&gt; &lt;/navigationVisibility&gt;</pre> <p>To include all values, set the navigationNode to All</p> <pre data-bbox="1203 412 1808 544">&lt;navigationVisibility&gt;   &lt;navigationNode&gt;All&lt;/navigationNode&gt; &lt;/navigationVisibility&gt;</pre> <p><b>JSON</b></p> <pre data-bbox="1203 643 1808 797">"navigationVisibility": [   "Reports",   "Support Portal" ]</pre> <p>Valid values: (see <a href="#">navigationNode Valid Values</a>, below)</p>	<p>N</p>
<p>parent</p>	<p>Parent</p>	<p>Name of this group's parent group, if any.</p>		<p>N</p>
<p>permissions</p>	<p>n/a</p>	<p>Permissions assigned to this group.</p>		<p>N</p>
<p>retainSysIds</p>	<p>n/a</p>	<p>For Create and Read web services; specification for whether or not the web service should persist the <a href="#">sysId</a> property.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds</code> is true and <code>sysId</code> is included in the request/response, <code>sysId</code> will be persisted to the database.</li> <li>• If <code>retainSysIds</code> is false and <code>sysId</code> is included in the request/response, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.  </li> </ul> <div data-bbox="632 1281 1100 1438" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;userGroup&gt;</code> element.</p> </div>	<p>Valid values: true/false (default is true).</p>	<p>N</p>

sysId	n/a	System ID field in the database for this record.	Persisted only if <b>retainSysIds</b> is set to true.	N
-------	-----	--	---	---

**navigationNode Valid Values**

Values	Navigation Panel
<ul style="list-style-type: none"> <li>All</li> </ul>	All navigation panels

<ul style="list-style-type: none"> <li>• Activity</li> <li>• Task Instances</li> <li>• History</li> <li>• All Triggers</li> <li>• Active Triggers</li> <li>• Cron Triggers</li> <li>• Time Triggers</li> <li>• Manual Triggers</li> <li>• Temporary Triggers</li> <li>• File Monitor Triggers</li> <li>• Task Monitor Triggers</li> <li>• Variable Monitor Triggers</li> <li>• Email Monitor Triggers</li> <li>• Application Monitor Triggers</li> <li>• Composite Triggers</li> <li>• Forecasts</li> <li>• Forecast Calendar</li> <li>• All Tasks</li> <li>• Workflow Tasks</li> <li>• Linux/Unix Tasks</li> <li>• Windows Tasks</li> <li>• z/OS Tasks</li> <li>• Universal Command Tasks</li> <li>• SAP Tasks</li> <li>• PeopleSoft Tasks</li> <li>• File Transfer Tasks</li> <li>• Manual Tasks</li> <li>• Timer Tasks</li> <li>• SQL Tasks</li> <li>• Stored Procedure Tasks</li> <li>• Email Tasks</li> <li>• Web Service Tasks</li> <li>• Task Monitors</li> <li>• File Monitors</li> <li>• FTP File Monitors</li> <li>• System Monitors</li> <li>• Variable Monitors</li> <li>• Email Monitors</li> <li>• Application Control Tasks</li> <li>• Calendars</li> <li>• Custom Days</li> <li>• Variables</li> <li>• Scripts</li> <li>• Virtual Resources</li> <li>• Credentials</li> </ul>	<p>Automation Center</p>
<ul style="list-style-type: none"> <li>• Dashboards</li> <li>• Reports</li> <li>• Widgets</li> <li>• Colors</li> </ul>	<p>Reporting</p>

<ul style="list-style-type: none"> <li>• All Agents</li> <li>• Linux/Unix Agents</li> <li>• Windows Agents</li> <li>• z/OS Agents</li> <li>• Linux/Unix Agent Clusters</li> <li>• Windows Agent Clusters</li> <li>• OMS Servers</li> <li>• Cluster Nodes</li> <li>• Email Templates</li> <li>• Email Connections</li> <li>• Database Connections</li> <li>• PeopleSoft Connections</li> <li>• SAP Connections</li> <li>• SNMP Managers</li> <li>• Applications</li> </ul>	Agents & Connections
<ul style="list-style-type: none"> <li>• Bundles</li> <li>• Promotion Targets</li> <li>• Promotion History</li> <li>• Promotion Schedules</li> </ul>	Bundles & Promotion
<ul style="list-style-type: none"> <li>• Properties</li> <li>• LDAP Settings</li> <li>• Data Backup / Purge</li> <li>• Server Operations</li> <li>• Universal Templates</li> <li>• Filters</li> <li>• Users</li> <li>• Groups</li> <li>• Business Services</li> <li>• Audits</li> <li>• Support Portal</li> <li>• Video Classroom</li> </ul>	Administration

### Group Member Properties

Property	UI Field Name	Description	Specifications	Required
sysId	n/a	System ID field in the database for this record.		N
user	User	User name of a group member.		Y

### Group Permission Properties

Property	UI Field Name	Description	Specifications	Required
----------	---------------	-------------	----------------	----------

allGroups	Member of Any Business Service or Unassigned	Specification for whether or not this permission applies both to records that belong to any Business Service and to records that do not belong to any Business Service.	Boolean. Valid Values: true/false. Default is false.	N
commands	Commands	Commands that are associated with each permission.	Valid values: see <a href="#">Command Permissions</a> , below.	N
defaultGroup	Unassigned to Business Service	Specification for whether or not this permission applies to records that do not belong to any Business Service.	Boolean. Valid Values: true/false. Default is false.	N
nameWildcard	Name	Specification to apply this permission to records whose name matches the string specified here.	Wildcards (*s) can be used.	Y
opCreate	Create	Allows members of the group to create records of the specified <code>permissionType</code> .	Boolean. Valid Values: true/false. Default is false. Cannot be set to true if <code>permissionType</code> is Agent or Task Instance.	N
opDelete	Delete	Allows members of the group to delete records of the specified <code>permissionType</code> .	Boolean. Valid Values: true/false. Default is false. Cannot be set to true if <code>permissionType</code> is Agent.	N
opExecute	Execute	Allows the user to execute records of the specified <code>permissionType</code> .	Boolean. Valid Values: true/false. Default is false.  If the <a href="#">Strict Connection Execute Constraints</a> Universal Controller system property is false: <ul style="list-style-type: none"> <li>• <code>opExecute</code> can be set to true only if <code>permissionType</code> is Agent, Credential, Script, or Virtual Resource.</li> </ul> If the <a href="#">Strict Connection Execute Constraints</a> Universal Controller system property is true: <ul style="list-style-type: none"> <li>• <code>opExecute</code> can be set to true only if <code>permissionType</code> is Agent, Credential, Database Connection, Email Connection, SAP Connection, Script, SNMP Manager, or Virtual Resource.</li> </ul>	N
opRead	Read	Allows the user to read records of the specified <code>permissionType</code> .	Boolean. Valid Values: true/false. Default is false.  If the <a href="#">Strict Business Service Membership Read Constraints</a> Universal Controller system property is false: <ul style="list-style-type: none"> <li>• <code>opRead</code> must be set to true if <code>permissionType</code> is Agent, Agent Cluster, Calendar, Credential, Database Connection, Email Connection, SAP Connection, Email Template, SNMP Manager, or Virtual Resource.</li> </ul>	N
opUpdate	Update	Allows members of the group to update records of the specified <code>permissionType</code> .	Boolean. Valid Values: true/false. Default is false. Must be set to true if <code>opCreate</code> is set to true.	N



opswiseGroups	Member of Business Services	Applies this permission to records that are members of the selected Business Service(s).	<p>Format:</p> <p><b>XML</b></p> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;test&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <p><b>JSON</b></p> <pre>"opswiseGroups": ["test"]</pre>	N
permissionType	Type	Type of permission for this group.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Agent, As Value = 1</li> <li>• As String = Calendar, As Value = 2</li> <li>• As String = Credential, As Value = 3</li> <li>• As String = Task, As Value = 4</li> <li>• As String = Task Instance, As Value = 5</li> <li>• As String = Trigger, As Value = 6</li> <li>• As String = Application, As Value = 7</li> <li>• As String = Script, As Value = 8</li> <li>• As String = Variable, As Value = 9</li> <li>• As String = Virtual Resource, As Value = 10</li> <li>• As String = Agent Cluster, As Value = 11</li> <li>• As String = Email Template, As Value = 12</li> <li>• As String = Email Connection, As Value = 13</li> <li>• As String = Database Connection, As Value = 14</li> <li>• As String = SAP Connection, As Value = 15</li> <li>• As String = SNMP Manager, As Value = 16</li> <li>• As String = PeopleSoft Connection, As Value = 17</li> <li>• As String = Bundle, As Value = 18</li> <li>• As String = Promotion Target, As Value = 19</li> </ul>	Y
sysId	n/a	System ID field in the database for this record.	Persisted only if <b>retainSysIds</b> is set to true.	N

**Command Permissions**

Permission Type	Commands
Agent	<ul style="list-style-type: none"> <li>• ALL</li> <li>• resume_agent</li> <li>• suspend_agent</li> </ul>

Agent Cluster	<ul style="list-style-type: none"> <li>• ALL</li> <li>• resolve_agent_cluster</li> <li>• resume_agent_cluster</li> <li>• suspend_agent_cluster</li> <li>• resume_agent_cluster_membership</li> <li>• suspend_agent_cluster_membership</li> </ul>
Application	<ul style="list-style-type: none"> <li>• ALL</li> <li>• appl_start</li> <li>• appl_stop</li> <li>• appl_query</li> </ul>
Bundle	<ul style="list-style-type: none"> <li>• ALL</li> <li>• promote_bundle</li> </ul>
Calendar	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_calendar</li> </ul>
Credential	
Database Connection	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_database_connection</li> <li>• database_connection_test</li> </ul>
Email Connection	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_email_connection</li> <li>• email_connection_test</li> </ul>
Email Template	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_email_template</li> </ul>
PeopleSoft Connection	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_peoplesoft_connection</li> </ul>
Promotion Target	<ul style="list-style-type: none"> <li>• ALL</li> <li>• refresh_target_agents</li> </ul>

SAP Connection	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_sap_connection</li> </ul>
Script	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_script</li> </ul>
SNMP Manager	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_snmp_manager</li> </ul>
Task	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_task</li> <li>• launch</li> <li>• recalculate_forecast</li> <li>• reset_statistics</li> <li>• reset_zos_override_statistics</li> <li>• set_execution_restriction</li> </ul>
Task Instance	<ul style="list-style-type: none"> <li>• ALL</li> <li>• cancel</li> <li>• clear_all_dependencies</li> <li>• clear_exclusive</li> <li>• clear_resources</li> <li>• clear_timewait</li> <li>• force_finish</li> <li>• force_finish_cancel</li> <li>• hold</li> <li>• insert_task</li> <li>• rerun</li> <li>• release</li> <li>• release_recursive</li> <li>• retrieve_output</li> <li>• set_edge_satisfied (Mark as Satisfied in UI)</li> <li>• set_edges_satisfied (Clear Predecessors in UI)</li> <li>• set_priority_low</li> <li>• set_priority_medium</li> <li>• set_priority_high</li> <li>• set_manual_completed</li> <li>• set_manual_started</li> <li>• skip</li> <li>• unskip</li> </ul>

Trigger	<ul style="list-style-type: none"> <li>• ALL</li> <li>• assign_trigger_execution_user</li> <li>• copy_trigger</li> <li>• disable_trigger</li> <li>• enable_trigger</li> <li>• recalculate_forecast</li> <li>• trigger_now</li> </ul>
Variable	
Virtual Resource	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_virtual_resource</li> </ul>

### Group Role Properties

Property	UI Field Name	Description	Specifications	Required
role	Role	Role assigned to this group.		Y
sysId	n/a	System ID field in the database for this record.		N

## OMS Server Web Services

- [Overview](#)
- [Create an OMS Server](#)
- [Delete an OMS Server](#)
- [List OMS Servers](#)
- [Modify an OMS Server](#)
- [Read an OMS Server](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for OMS Server operations, which are listed alphabetically on this page.

- [Create an OMS Server](#)
- [Delete an OMS Server](#)
- [List OMS Servers](#)
- [Modify an OMS Server](#)
- [Read an OMS Server](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

### Create an OMS Server

	Description
URI	<a href="http://host_name/opswise/resources/omsserver">http://host_name/opswise/resources/omsserver</a>
HTTP Method	POST
Description	Creates an <a href="#">OMS Server</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/omsserver">http://localhost:8080/opswise/resources/omsserver</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">OMS Server: XML and JSON Examples</a> .
Request OMS Server Properties	See <a href="#">OMS Server: Properties</a> .
Request Email Notification Properties	See <a href="#">OMS Server: Email Notification Properties</a> .
Request SNMP Notification Properties	See <a href="#">OMS Server: SNMP Notification Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the OMS Server with sysId {sysId}.</li> <li>Status 400 /Bad Request Create OMS Server failed. A duplicate value has been detected. OMS Server Address must be unique.</li> </ul>
------------------	---

## Delete an OMS Server

	Description
URI	<a href="http://host_name/opswise/resources/omsserver">http://host_name/opswise/resources/omsserver</a>
HTTP Method	DELETE
Description	Deletes an OMS Server.
URI Parameters	See <a href="#">Delete an OMS Server: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opswise/resources/omsserver?serveraddress=localhost:7878">http://localhost:8080/opswise/resources/omsserver?serveraddress=localhost:7878</a>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK OMS Server deleted successfully.</li> <li>Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>serveraddress</code> and <code>serverid</code> at the same time.</li> <li>Status 404 /Not Found OMS Server with {server address/id} "localhost:7878" does not exist.</li> </ul>

### Delete an OMS Server: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
<code>serverid</code>	ID used within the Controller to identify this OMS Server.	String; URI parameter.	Y (unless <code>serveraddress</code> is specified)	<code>serveraddress</code>
<code>serveraddress</code>	IP address or host name of this OMS Server.	String; URI parameter.	Y (unless <code>serverid</code> is specified)	<code>serverid</code>

## List OMS Servers

	Description
URI	<a href="http://host_name/opswise/resources/omsserver/list">http://host_name/opswise/resources/omsserver/list</a>
HTTP Method	GET

Description	Retrieves the Server address or partial server address of all OMS servers.
Example URI	<a href="http://localhost:8080/opswise/resources/omsserver/list">http://localhost:8080/opswise/resources/omsserver/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">OMS Server: XML and JSON Examples</a> .
Response Properties	See <a href="#">OMS Server: Properties</a> .

## Modify an OMS Server

	Description
URI	<a href="http://host_name/opswise/resources/omsserver">http://host_name/opswise/resources/omsserver</a>
HTTP Method	PUT
Description	<p>Modifies the OMS Server specified by the <code>sysId</code>.</p> <p>To modify OMS Server properties without modifying related records, see the <code>excludeRelated</code> property.</p>
Example URI	<a href="http://localhost:8080/opswise/resources/omsserver">http://localhost:8080/opswise/resources/omsserver</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">OMS Server: XML and JSON Examples</a> .
Request Properties	See <a href="#">OMS Server: Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the OMS Server with <code>sysId</code> {<code>sysId</code>}.</li> <li>• Status 400 /Bad Request Update OMS Server failed. A duplicate value has been detected. OMS Server Address must be unique.</li> </ul>

## Read an OMS Server

URI	<a href="http://host_name/opswise/resources/omsserver">http://host_name/opswise/resources/omsserver</a>
HTTP Method	GET
Description	Retrieves information on a specific OMS Server.
URI Parameters	See <a href="#">Read an OMS Server: URI Parameters</a> .

Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example URI	<a href="http://localhost:8080/opswise/resources/omsserver?serveraddress=localhost:7878">http://localhost:8080/opswise/resources/omsserver?serveraddress=localhost:7878</a>
Example Response	See <a href="#">OMS Server: XML and JSON Examples</a> .
Response Properties	See <a href="#">OMS Server: Properties</a> .

### Read an OMS Server: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
serverid	ID used within the Controller to identify this OMS Server.	String; URI parameter.	Y (unless <code>serveraddress</code> is specified)	serveraddress
serveraddress	IP address or host name of this OMS Server.	String; URI parameter.	Y (unless <code>serverid</code> is specified)	serverid

### OMS Server: XML and JSON Examples

<a href="#">XML</a>	<a href="#">JSON</a>
---------------------	----------------------



## XML

```

<omsServer version="1">
  <authenticate>>false<
/authenticate>
  <lastConnected
>localhost/127.0.0.1:7878<
/lastConnected>
  <notifications>
    <emailNotification>
      <status>Disconnected</status>
      <sysId
>735cc6806d1347e5a073036ee5397097<
/sysId>
      <bcc />
      <body>test</body>
      <cc />
      <emailConnection>Opwise -
Test Account</emailConnection>
      <emailTemplate>Opwise -
Template</emailTemplate>
      <replyTo />
      <subject />
      <to />
    </emailNotification>
    <snmpNotification>
      <status>Disconnected</status>
      <sysId
>c17b45b2bdd84b3aa9437c60baf60647<
/sysId>
      <severity>Minor</severity>
      <snmpManager>SNMP Manager<
/sntpManager>
    </snmpNotification>
  </notifications>
  <serverAddress>localhost:7878<
/serverAddress>
  <sessionStatus>None<
/sessionStatus>
  <status>Disconnected</status>
  <sysId
>1307d3159099415c9bd36158b812ed54<
/sysId>
  <timeout>30</timeout>
</omsServer>

```

## JSON



```

{
  "authenticate": false,
  "lastConnected":
"localhost/127.0.0.1:7878",
  "notifications": {
    "emailNotifications": [ {
      "bcc": null,
      "body": "test",
      "cc": null,
      "emailConnection": "Opwise -
Test Account ",
      "emailTemplate": "Opwise -
Template",
      "replyTo": null,
      "status": "Disconnected",
      "subject": null,
      "sysId":
"3104c0f2e5fd4e8c9e54ab5f653cfe2e",
      "to": null
    } ],
    "snmpNotifications": [ {
      "severity": "Minor",
      "snmpManager": "SNMP Manager",
      "status": "Disconnected",
      "sysId":
"bc2898e0c1b94594ac7912a34df33216"
    } ]
  },
  "retainSysIds": true,
  "serverAddress": "localhost:7878",
  "sessionStatus": "Operational",
  "status": "Connected",
  "sysId":
"0f28a0cadaa64e2a8710c417bb895055",
  "timeout": 60
}

```

## Properties

### OMS Server: Properties

Property	UI Field Name	Description	Specifications	Required
authenticate	Authenticate OMS Server	Specification for whether or not the Controller authenticates the OMS server digital certificate.	Boolean; Valid values: true/false. Default is false.	N
excludeRelated	n/a	For the Modify OMS Server web service; specification for whether or not to exclude related records from the update, even if they are provided in the request. <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b>                          In XML, <code>excludeRelated</code> is specified as an attribute in the <code>&lt;omsServer&gt;</code> element.                     </div>	Valid values: true/false (default is false).	No
lastConnected	Last Connected Server Address	OMS Server, in a High Availability environment of multiple cluster nodes, that is connected to the Controller or was last connected to the Controller.	Read-only.	n/a
retainSysIds	n/a	Specification for whether or not the Create an OMS Server web service will persist the <code>sysId</code> property. <ul style="list-style-type: none"> <li>If <code>retainSysIds="true"</code> and <code>sysId</code> is included in the request/response, <code>sysId</code> will be persisted to the database.</li> <li>If <code>retainSysIds="false"</code> and <code>sysId</code> is included in the request/response, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <div style="background-color: #ffffcc; padding: 10px; margin-top: 10px;">  <b>Note</b>                          In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;omsServer&gt;</code> element.                     </div>	Valid values: true/false (default is true).	N
serverAddress	OMS Server Address	IP address or host name of an OMS Server, or a comma-separated list of OMS Servers configured as an OMS Server cluster.		Y
sessionStatus	Session Status	Current status of the OMS server messaging sessions: heartbeat, input, and output sessions.	Read-only. Valid values: <ul style="list-style-type: none"> <li>None</li> <li>Impaired</li> <li>Operational</li> </ul>	n/a
status	Status	Current status of the OMS server.	Read-only. Valid values: <ul style="list-style-type: none"> <li>Disconnected</li> <li>Connected</li> </ul>	n/a
sysId	n/a	System ID field in the database for this OMS Server record.	Persisted only if <b>retainSysIds</b> is set to true.	N
timeout	Network Timeout (Seconds)	Network socket time-out value used for TCP/IP receive and connect operations.	Integer.	N

## OMS Server: Email Notification Properties

Property	UI Field Name	Description	Specifications	Required
bcc	Bcc	Email address of the party being sent a blind (hidden) copy of the email, if any.	Use commas to separate multiple recipients. <a href="#">Variables and Functions</a> are supported.	N
body	Body	Text of the email message.	<a href="#">Variables and Functions</a> are supported. If the emailTemplate contains text in the body, this text is appended.	N
cc	Cc	Email address of the party being sent a copy of the email, if any.	Use commas to separate multiple recipients. <a href="#">Variables and Functions</a> are supported.	N
emailConnection	Email Connection	Name of an <a href="#">Email Connection</a> .	If you specify both an emailConnection and an emailTemplate, the Controller uses the emailConnection.	Y (unless emailTemplate is specified)
emailTemplate	Email Template	Name of an <a href="#">Email Template</a> .	If you specify both an emailConnection and an emailTemplate, the Controller uses the emailConnection.	Y (unless emailConnection is specified)
replyTo	Reply-To	Email address of the sender of the email.	Use commas to separate multiple recipients. <a href="#">Variables and Functions</a> are supported.	N
status	Status Options	Comma-separated list of statuses	Valid values: <ul style="list-style-type: none"> <li>• As String = Disconnected, As Value = 0</li> <li>• As String = Connected, As Value = 1</li> </ul>	N
subject	Subject	Subject line of the email.	<a href="#">Variables and Functions</a> are supported.	N
sysId	n/a	sys_id used within the Controller to identify this Email Notification.		N
to	To	Email address of the recipient.	Use commas to separate multiple recipients <a href="#">Variables and Functions</a> are supported.	N

## OMS Server: SNMP Notification Properties

Property	UI Field Name	Description	Specifications	Required
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severity	Notification Severity	Severity level of this notification.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Normal, As Value = 1</li> <li>• As String = Warning, As Value = 2</li> <li>• As String = Minor, As Value = 3</li> <li>• As String = Major, As Value = 4</li> <li>• As String = Critical, As Value = 5</li> </ul> <p>Default is Normal (1).</p>	N
snmpManager	SNMP Manager	<a href="#">SNMP Manager</a> that will receive this notification.		N
status	Status Options	Comma-separated list of statuses	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Disconnected, As Value = 0</li> <li>• As String = Connected, As Value = 1</li> </ul>	N
sysId	n/a	sys_id used within the Controller to identify this SNMP Notification.		N

## Password Web Services

- [Overview](#)
- [Change a Universal Controller User Password](#)
- [Change Runtime Password of Credentials](#)

### Overview

Universal Controller supports the following RESTful-based web services for Password operations, which are listed alphabetically on this page.

- [Change a Universal Controller User Password](#)
- [Change Runtime Password of Credentials](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

### Change a Universal Controller User Password

	Description
URI	<a href="http://host_name/opswise/resources/opswise/ops-change-user-password">http://host_name/opswise/resources/opswise/ops-change-user-password</a>
HTTP Method	POST
Description	Changes a Universal Controller user password.
Example URI	<a href="http://localhost:8080/opswise/resources/opswise/ops-change-user-password">http://localhost:8080/opswise/resources/opswise/ops-change-user-password</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Change a Universal Controller User Password: XML and JSON Examples</a> .
Request Properties	See <a href="#">Change a Universal Controller User Password: Request Properties</a> .
Example Response	See <a href="#">Change a Universal Controller User Password: XML and JSON Examples</a> .



**Note**

The Authentication user must have the `ops_admin` or `ops_user_admin` role.

If the Authentication user has an [expired password](#) or has a [Password Requires Reset](#) condition, the Authentication user can change only his/her own password.

The Password Requires Reset condition will be cleared only if the Authentication user is changing his/her own password.

The Password Last Changed time will be updated for any user whose password has been changed through the Change User Password operation, regardless of who changed it.

Once the Authentication user, with an expired password or Password Requires Reset condition, has changed his/her own password via the Change User Password operation, he/she can proceed with authenticating for all other Web Service APIs.

### Change a Universal Controller User Password: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;change-user-password&gt;   &lt;userId&gt;test.password&lt;/userId&gt;   &lt;newPassword&gt;test&lt;/newPassword&gt; &lt;/change-user-password&gt;</pre>	<p>JSON</p> <pre>{   "userId": "test.password",   "newPassword": "test" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;change_user_password&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully changed password for user   "test.password".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "change_user_password",   "success": true,   "info": "Successfully changed password for user   "test.password".",   "errors": "" }</pre>

### Change a Universal Controller User Password: Request Properties

Property	UI Field Name	Description	Specifications	Required
userId	User Id	ID of this Universal Controller user.		Y
newPassword	Password	Name of a user password for this user.		Y

## Change Runtime Password of Credentials

	Description
URI	<a href="http://host_name/opswise/resources/credential/ops-change-password">http://host_name/opswise/resources/credential/ops-change-password</a>
HTTP Method	POST
Description	Changes the runtime password of the credentials based on name.
Example URI	<a href="http://localhost:8080/opswise/resources/credential/ops-change-password">http://localhost:8080/opswise/resources/credential/ops-change-password</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Change Runtime Password of Credentials: XML and JSON Examples</a> .
Request Properties	See <a href="#">Change Runtime Password of Credentials: Request Properties</a> .
Example Response	See <a href="#">Change Runtime Password of Credentials: XML and JSON Examples</a> .



**Note**

The user must have the **Update Credential** permission.

### Change Runtime Password of Credentials: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;change-credentials-password&gt;   &lt;name&gt;test&lt;/name&gt;   &lt;newRuntimePassword&gt;test2&lt;/newRuntimePassword&gt; &lt;/change-credentials-password&gt;</pre>	<p>JSON</p> <pre>{   "name": "test",   "newRuntimePassword": "test2" }</pre>

<p>Example Response</p>	<p>▼ XML</p> <pre data-bbox="327 196 1098 415"> &lt;command-response&gt;   &lt;type&gt;change_credentials_password&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully changed runtime password for credentials with name "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt; </pre>	<p>▼ JSON</p> <pre data-bbox="1203 196 1919 415"> {   "type": "change_credentials_password",   "success": true,   "info": "Successfully changed runtime password for credentials with name "test".",   "errors": "" } </pre>
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### Change Runtime Password of Credentials: Request Properties

Property	UI Field Name	Description	Specifications	Required
name	Name	Name of this Credential.		Y
newruntimepassword	Runtime Password	Name of a new runtime password for this Credential.		Y



## Properties Web Services

- [Overview](#)
- [List Properties](#)
- [Modify a Property](#)
- [Read a Property](#)

### Overview

Universal Controller supports the following RESTful-based web services for Universal Controller system properties, which are listed alphabetically on this page.

- [List Properties](#)
- [Modify a Property](#)
- [Read a Property](#)

Formatting specifications for each web service, including details about property requirements, are provided.

### List Properties

	Description
URI	<a href="http://host_name:port/opwise/resources/property/list">http://host_name:port/opwise/resources/property/list</a>
HTTP Method	GET
Description	Retrieves information on all properties.
Example URI	<a href="http://localhost:8080/opwise/resources/property/list">http://localhost:8080/opwise/resources/property/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Properties: XML and JSON Responses</a> , below.
List Properties Properties	See <a href="#">List Properties: Properties</a> , below.

### List Properties: XML and JSON Responses

XML	JSON
-----	------

XML

```
<properties>
  <property>
    <name label="Administrator Email
Address">admin.email_addr</name>
    <value>admin@stonebranch.com</value>
  </property>
  <property>
    <name label="Agent Cache Retention Period In
Days">agent.cache.retention</name>
    <value>7</value>
  </property>
</properties>
```

JSON

```
[ {
  "name": {
    "label": "Administrator Email Address",
    "value": "admin.email_addr"
  },
  "value": "admin@stonebranch.com"
},
{
  "name": {
    "label": "Agent Cache Retention Period In Days",
    "value": "agent.cache.retention"
  },
  "value": "7"
}
]
```

List Properties: Properties

Property	UI Field Name	Description
name	Name	Name of the property.
value	Value	Value of the property.

Modify a Property

	Description
URI	<a href="http://host_name:port/opswise/resources/property">http://host_name:port/opswise/resources/property</a>
HTTP Method	PUT
Description	Modifies the specified property.
Example URI	<a href="http://localhost:8080/opswise/resources/property?propertyname=opswise.forecast.days&amp;value=20">http://localhost:8080/opswise/resources/property?propertyname=opswise.forecast.days&amp;value=20</a>
URI Parameters	See <a href="#">Modify a Property: URI Parameters</a> , below.
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the property with name {propertyname}.</li> <li>Status 404 /Not Found A property with name {propertyname} does not exist.</li> </ul>

Modify a Property: URI Parameters

Parameter	Description	Specifications	Required
propertyname	Name used within the Controller to identify this property.	String; URI parameter.	Y
value	Value of this property.	Case-sensitive; URI parameter.	Y

## Read a Property

URI	<a href="http://host_name:port/opwise/resources/property">http://host_name:port/opwise/resources/property</a>
HTTP Method	GET
Description	Retrieves information on a specific property.
URI Parameters	See <a href="#">Read a Property: URI Parameters</a> , below. z\
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example URI	<a href="http://localhost:8080/opwise/resources/property?propertyname=opwise.forecast.days">http://localhost:8080/opwise/resources/property?propertyname=opwise.forecast.days</a>
Example Response	See <a href="#">Read a Property: XML and JSON Responses</a> , below.
Read a Property Properties	See <a href="#">List Properties: Properties</a> .

## Read a Property: URI Parameters

Parameter	Description	Specifications	Required
propertyname	Name used within the Controller to identify this property.	String; URI parameter.	Y

## Read a Property XML and JSON Responses

XML	JSON
<p>XML</p> <pre>&lt;property&gt;   &lt;name label="Forecast Period In Days"&gt;opwise.forecast.days&lt;/name&gt;   &lt;value&gt;31&lt;/value&gt; &lt;/property&gt;</pre>	<p>JSON</p> <pre>{   "name": {     "name": "Forecast Period In Days",     "value": "opwise.forecast.days"   },   "value": "31" }</pre>



## Report Web Services

- [Overview](#)
- [Run Report](#)

### Overview

Universal Controller supports the following RESTful-based web service for Report.

- [Run Report](#)

Formatting specifications for the web service, including details about parameter requirements, are provided.

### Run Report

	Description
URI	<a href="http://host_name/opswise/resources/report/run">http://host_name/opswise/resources/report/run</a>
HTTP Method	GET
HTTP Header	Accept <ul style="list-style-type: none"> <li>• application/pdf (Default)</li> <li>• application/xml</li> <li>• application/json</li> <li>• text/csv</li> <li>• text/tab-separated-values</li> </ul>
Description	<p>Run report.</p> <p>Chart reports are generated in png format ("image/png")</p> <p>List reports are generated in pdf format (application/pdf), by default.</p> <ul style="list-style-type: none"> <li>• To get the report in XML format, the Accept HTTP Header must be set to application/xml.</li> <li>• To get the report in JSON format, the Accept HTTP Header must be set to application/json.</li> <li>• To get the report in CSV format, the Accept HTTP Header must be set to text/csv.</li> <li>• To get the report in TSV format, the Accept HTTP Header must be set to text/tab-separated-values.</li> </ul>
URI Parameters	See <a href="#">Run Report: URI Parameters</a> , below.

Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/report/run?reporttitle=testReport">http://localhost:8080/opswise/resources/report/run?reporttitle=testReport</a></li> <li>• <a href="http://localhost:8080/opswise/resources/report/run?reporttitle=testReport&amp;visibility=Me">http://localhost:8080/opswise/resources/report/run?reporttitle=testReport&amp;visibility=Me</a></li> <li>• <a href="http://localhost:8080/opswise/resources/report/run?reporttitle=testReport&amp;visibility=Group&amp;groupname=testGroup">http://localhost:8080/opswise/resources/report/run?reporttitle=testReport&amp;visibility=Group&amp;groupname=testGroup</a></li> <li>• <a href="http://localhost:8080/opswise/resources/report/run?reporttitle=testReport&amp;visibility=Everyone">http://localhost:8080/opswise/resources/report/run?reporttitle=testReport&amp;visibility=Everyone</a></li> </ul>
Authentication	HTTP Basic
Example Responses	See <a href="#">Run Report Examples</a> , below.

## Run Report: URI Parameters

Parameter	Description	Specifications	Required
groupname	If <code>visibility = Group</code> ; Name of a specific user group.		N
reporttitle	Title of the Report.		Y
visibility	Users that will be able to view this report.	Valid Values: <ul style="list-style-type: none"> <li>• Me</li> <li>• Group</li> <li>• Everyone</li> </ul> If there are multiple reports with the same title: <ul style="list-style-type: none"> <li>• If <code>visibility</code> is not provided, reports are sorted in the following order:                             <ol style="list-style-type: none"> <li>1. User visibility</li> <li>2. Group visibility (group(s) that the user running the report is a member of)</li> <li>3. Everyone visibility</li> </ol> </li> <li>• If <code>visibility</code> is provided:                             <ul style="list-style-type: none"> <li>• If <code>visibility = Me</code>, web service returns only the report that matches <code>reporttitle</code> and is visible to the user running the report.</li> <li>• If <code>visibility = Group</code>, web service returns only the report matches <code>reporttitle</code> and is visible to the <code>groupname</code>.</li> <li>• If <code>visibility = Everyone</code>, web service returns only the report that matches <code>reporttitle</code> and is visible to Everyone.</li> </ul> </li> </ul>	N

## Run Report Examples

<a href="#">XML</a>	<a href="#">JSON</a>	<a href="#">CSV</a>
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XML

```
<report>
  <rows rowCount="2">
    <row>
      <columns>
        <column label="Task Name">t1</column>
        <column label="Type">Workflow</column>
        <column label="Task Description" />
      </columns>
    </row>
    <row>
      <columns>
        <column label="Task name">t2</column>
        <column label="Type">Workflow</column>
        <column label="Task Description" />
      </columns>
    </row>
  </rows>
  <title>test report</title>
  <totalRows>2</totalRows>
</report>
```

JSON

```
{
  "rows": {
    "rowCount": 2,
    "rows": [ {
      "columns": [ {
        "label": "Task Name",
        "value": "t1"
      }, {
        "label": "Type",
        "value": "Workflow"
      }, {
        "label": "Task Description",
        "value": ""
      } ]
    }, {
      "columns": [ {
        "label": "Task Name",
        "value": "t2"
      }, {
        "label": "Type",
        "value": "Workflow"
      }, {
        "label": "Task Description",
        "value": ""
      } ]
    } ]
  },
  "title": "test report",
  "totalRows": 2
}
```

CSV

```
Task Name,Type,Task Description
t1,Workflow,,
t2,Workflow,,
```

## Script Web Services

- [Overview](#)
- [Create a Script](#)
- [Delete a Script](#)
- [List Scripts](#)
- [Modify a Script](#)
- [Read a Script](#)

### Overview

Universal Controller supports the following RESTful-based web services for Script operations, which are listed alphabetically on this page.

- [Create a Script](#)
- [Delete a Script](#)
- [List Scripts](#)
- [Modify a Script](#)
- [Read a Script](#)

Formatting specifications for each web service, including details about property requirements, are provided.

### Create a Script

	Description
URI	<a href="http://host_name/opswise/resources/script">http://host_name/opswise/resources/script</a>
HTTP Method	POST
Description	Creates a Script.
Example URI	<a href="http://localhost:8080/opswise/resources/script">http://localhost:8080/opswise/resources/script</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create a Script: Example Request</a> , below.
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the Script with sysId {sysId}.</li> <li>• Status 400 /Bad Request Create Script failed. A duplicate value has been detected. Name must be unique.</li> </ul>
Script Properties	See <a href="#">Create a Script: Script Properties</a> , below.
Notes Properties	See <a href="#">Create a Script: Notes Properties</a> , below.




### Create a Script: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre data-bbox="178 329 787 865"> &lt;script retainSysIds="true"&gt;   &lt;content&gt;echo %*&lt;/content&gt;   &lt;description&gt;description&lt;/description&gt;   &lt;notes&gt;     &lt;note&gt;       &lt;sysId&gt; &gt;a8756a120a00010357097d05fa5c558e&lt;/sysId&gt;       &lt;text&gt;test&lt;/text&gt;       &lt;title&gt;note 1&lt;/title&gt;     &lt;/note&gt;   &lt;/notes&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;1&lt;/opswiseGroup&gt;     &lt;opswiseGroup&gt;2&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;resolveVariables&gt;false&lt;/resolveVariables&gt;   &lt;scriptName&gt;test.bat&lt;/scriptName&gt;   &lt;scriptType&gt;Script&lt;/scriptType&gt;   &lt;sysId&gt;f8756a120a00010357097d05fa5c558e&lt; / sysId&gt; &lt;/script&gt; </pre>	<p>JSON Request</p> <pre data-bbox="892 329 1417 797"> {   "content": "echo",   "description": "description",   "notes": [ {     "sysId": "a8756a120a00010357097d05fa5c558e",     "text": "test",     "title": "note"   } ],   "opswiseGroups": ["1","2"],   "resolveVariables": false,   "retainSysIds": true,   "scriptName": "test.bat",   "scriptType": "Script",   "sysId": "f8756a120a00010357097d05fa5c558e" } </pre>

### Create a Script: Script Properties

Property	UI Field Name	Description	Specifications	Required
content	Content	Content of the script or SAP definition file.		Y
description	Description	User-defined; description of this record.		N
excludeRelated	n/a	Specification for whether or not to exclude related records (Notes) from an update, even if they are provided in the request.	Valid values: true/false (default is false).	N

opswisewGroups	Member of Business Services	<p>Business Services that this record belongs to.</p> <p><b>XML</b></p> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;group1&lt;/opswiseGroup&gt;   &lt;opswiseGroup&gt;group2&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <p><b>JSON</b></p> <pre>"opswiseGroups": ["group1", "group2"]</pre>		N
resolvableVariables	Resolvable UAC Variables	Controls whether or not the Script will be parsed in pursuit of Universal Controller variables. It allows the Controller to avoid the overhead of parsing a Script that does not contain variables.		N
retainSysIds	n/a	<p>Specification for whether or not the Create a Script web service will persist the <code>sysId</code> property.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> is included in the request/response, <code>sysId</code> will be persisted to the database.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> is included in the request/response, <code>sysId</code> will be ignored; it will be autogenerated by the Controller.</li> </ul> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is specified as an attribute in the <code>&lt;script&gt;</code> element.</p>	Valid values: true/false (default is true).	N
scriptName	Script Name	Name of the script.	<p>This name can be the same as the name of the script file.</p> <p>You also can specify a file extension; the default file extension for Windows is <code>.bat</code>.</p> <p>If the name has the extension <code>.ps1</code>, Windows will run the script as a powershell script.</p> <p>You may have to create the appropriate file association and security for this to work.</p>	Y

scriptType	Script Type	Type of Script	Valid Values: <ul style="list-style-type: none"> <li>As String = Script, As Value = 1 (for use in Windows or Linux/Unix tasks)</li> <li>As String = SAP Definition, As Value = 2 (for use in SAP tasks)</li> <li>As String = UDM Script, As Value = 3 (for use in UDM File Transfer tasks)</li> <li>As String = Web Service Payload, As Value = 4 (for use in Web Service tasks)</li> </ul> Default is Script (1).	N
sysId	n/a	System ID field in the database for this Script record.	Persisted only if <b>retainSysIds</b> is set to true.	N

### Create a Script: Notes Properties

Property	UI Field Name	Description	Specifications	Required
sysId	n/a	sys_id used within the Controller to identify this Note.		N
text	Text	Text of this note.		N
title	Title	Title of this note.		N

### Delete a Script

	Description
URI	<a href="http://host_name/opswise/resources/script">http://host_name/opswise/resources/script</a>
HTTP Method	DELETE
Description	Deletes a Script.
URI Parameters	See <a href="#">Delete a Script: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opswise/resources/script?scriptname=test">http://localhost:8080/opswise/resources/script?scriptname=test</a>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Script deleted successfully.</li> <li>Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>scriptname</code> and <code>scriptid</code> at the same time.</li> <li>Status 404 /Not Found A Script with {name/id} "test" does not exist.</li> </ul>

### Delete a Script: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
scriptid	ID used within the Controller to identify this Script.	String; URI parameter.	Y (unless scriptname is specified)	scriptname
scriptname	Name used within the Controller to identify this Script.	String; URI parameter.	Y (unless scriptid is specified)	scriptid

### List Scripts

	Description
URI	<a href="http://host_name/opswise/resources/script/list">http://host_name/opswise/resources/script/list</a>
HTTP Method	GET
Description	Retrieves information on all Scripts.
Example URI	<a href="http://localhost:8080/opswise/resources/script/list">http://localhost:8080/opswise/resources/script/list</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Scripts: Example Response</a> , below.
Script Properties	See <a href="#">Create a Script: Script Properties</a> .
Notes Properties	See <a href="#">Create a Script: Notes Properties</a> .

### List Scripts: Example Response

XML Response	JSON Response
--------------	---------------

XML Response

```
<scripts>
  <script version="2">
    <content>echo %*</content>
    <description>description</description>
    <notes>
      <note>
        <sysId
>a8756a120a00010357097d05fa5c558e</sysId>
        <text>test</text>
        <title>note 1</title>
      </note>
    </notes>
    <opswiseGroups>
      <opswiseGroup>group1</opswiseGroup>
      <opswiseGroup>group2</opswiseGroup>
    </opswiseGroups>
    <resolveVariables>false</resolveVariables>
    <scriptName>test.bat</scriptName>
    <scriptType>Script</scriptType>
    <sysId>f8756a120a00010357097d05fa5c558e</sysId>
  </script>
  <script version="3">
    <content>echo ?*</content>
    <description>description</description>
    <notes>
      <note>
        <sysId
>a8756a120a00010357097d05fa5c558f</sysId>
        <text>test</text>
        <title>note 1</title>
      </note>
    </notes>
    <opswiseGroups>
      <opswiseGroup>group1</opswiseGroup>
      <opswiseGroup>group2</opswiseGroup>
    </opswiseGroups>
    <resolveVariables>false</resolveVariables>
    <scriptName>test2.bat</scriptName>
    <scriptType>Script</scriptType>
    <sysId>f8756a120a00010357097d05fa5c558f</sysId>
  </script>
</scripts>
```

JSON Response

```
[
  {
    "content": "echo",
    "description": "description",
    "notes": [ {
      "sysId":
"a8756a120a00010357097d05fa5c558e",
      "text": "test",
      "title": "note"
    } ],
    "opswiseGroups":
["group1","group2"],
    "resolveVariables": false,
    "scriptName": "test.bat",
    "scriptType": "Script",
    "sysId":
"f8756a120a00010357097d05fa5c558e",
    "version": 2
  },
  {
    "content": "echo",
    "description": "description",
    "notes": [ {
      "sysId":
"a8756a120a00010357097d05fa5c558f",
      "text": "test",
      "title": "note"
    } ],
    "opswiseGroups":
["group1","group2"],
    "resolveVariables": false,
    "scriptName": "test2.bat",
    "scriptType": "Script",
    "sysId":
"f8756a120a00010357097d05fa5c558f",
    "version": 3
  }
]
```

### Modify a Script

	Description
URI	<a href="http://host_name/opswise/resources/script">http://host_name/opswise/resources/script</a>

HTTP Method	PUT
Description	Modifies the Script specified by the <code>sysId</code> .
Example URI	<a href="http://localhost:8080/opswise/resources/script">http://localhost:8080/opswise/resources/script</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify a Script: Example Request</a> , below.
Script Properties	See <a href="#">Create a Script: Script Properties</a> .
Notes Properties	See <a href="#">Create a Script: Notes Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the Script with <code>sysId</code> &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Modify a Script: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre>&lt;script&gt;   &lt;content&gt;echo %*&lt;/content&gt;   &lt;description&gt;description&lt;/description&gt;   &lt;notes&gt;     &lt;note&gt;       &lt;sysId &gt;a8756a120a00010357097d05fa5c558e&lt;/sysId&gt;       &lt;text&gt;test&lt;/text&gt;       &lt;title&gt;note 1&lt;/title&gt;     &lt;/note&gt;   &lt;/notes&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;group1&lt;/opswiseGroup&gt;     &lt;opswiseGroup&gt;group2&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;resolveVariables&gt;false&lt;/resolveVariables&gt;   &lt;scriptName&gt;test.bat&lt;/scriptName&gt;   &lt;scriptType&gt;Script&lt;/scriptType&gt;   &lt;sysId&gt;f8756a120a00010357097d05fa5c558e&lt;/sysId&gt; &lt;/script&gt;</pre>	<p>JSON Request</p> <pre>{   "content": "echo",   "description": "description",   "notes": [ {     "sysId": "a8756a120a00010357097d05fa5c558e",     "text": "test",     "title": "note"   } ],   "opswiseGroups": [ "group1", "group2" ],   "resolveVariables": false,   "scriptName": "test.bat",   "scriptType": "Script",   "sysId": "f8756a120a00010357097d05fa5c558e" }</pre>

## Read a Script

URI	<a href="http://host_name/opswise/resources/script">http://host_name/opswise/resources/script</a>
HTTP Method	GET
Description	Retrieves information on a specific Script.
URI Parameters	See <a href="#">Read a Script: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/script?scriptname=test">http://localhost:8080/opswise/resources/script?scriptname=test</a></li> <li><a href="http://localhost:8080/opswise/resources/Script?Scriptid=f87848b00a0001037f43e7c81c8ec969">http://localhost:8080/opswise/resources/Script?Scriptid=f87848b00a0001037f43e7c81c8ec969</a></li> </ul>
Example Response	See <a href="#">Read a Script: Example Response</a> , below.
Script Properties	See <a href="#">Create a Script: Script Properties</a> .
Notes Properties	See <a href="#">Create a Script: Notes Properties</a> .

### Read a Script: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
<code>scriptid</code>	ID used within the Controller to identify this Script.	String; URI parameter.	Y (unless <code>scriptname</code> is specified)	<code>scriptname</code>
<code>scriptname</code>	Name used within the Controller to identify this Script.	String; URI parameter.	Y (unless <code>scriptid</code> is specified)	<code>scriptid</code>

### Read a Script: Example Response

<b>XML Response</b>	<b>JSON Response</b>
---------------------	----------------------

## XML Response

```

<script retainSysIds="true" version="1">
  <content>echo %*</content>
  <description>description</description>
  <notes>
    <note>
      <sysId
>a8756a120a00010357097d05fa5c558e</sysId>
      <text>test</text>
      <title>note 1</title>
    </note>
  </notes>
  <opswiseGroups>
    <opswiseGroup>group1</opswiseGroup>
    <opswiseGroup>group2</opswiseGroup>
  </opswiseGroups>
  <resolveVariables>>false</resolveVariables>
  <scriptName>test.bat</scriptName>
  <scriptType>Script</scriptType>
  <sysId>f8756a120a00010357097d05fa5c558e</sysId>
</script>

```

## JSON Response

```

{
  "content": "echo",
  "description": "description",
  "notes": [ {
    "sysId":
"a8756a120a00010357097d05fa5c558e",
    "text": "test",
    "title": "note"
  } ],
  "opswiseGroups":
[ "group1", "group2" ],
  "resolveVariables": false,
  "retainSysIds": true,
  "scriptName": "test.bat",
  "scriptType": "Script",
  "sysId":
"f8756a120a00010357097d05fa5c558e",
  "version": 2
}

```



## Server Operations Web Services

### Overview

Universal Controller supports RESTful-based web services for the following types of Server Operations:

- [Export and Import](#)
- [LDAP](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

## Server Operations Web Services - Export and Import

- Overview
- Bulk Export
- Bulk Export with Versions
- Bulk Export Activity
- Bulk Export Audit
- Bulk Export History
- Bulk Import

### Overview

Universal Controller supports the following RESTful-based web services for Export and Import Server Operations, which are listed alphabetically on this page.

- Bulk Export
- Bulk Export with Versions
- Bulk Export Activity
- Bulk Export Audit
- Bulk Export History
- Bulk Import

Formatting specifications for each web service, including details about parameter requirements, are provided.

### Bulk Export

	Description
URI	<a href="http://host_name/opswise/resources/serveroperation/bulkExport">http://host_name/opswise/resources/serveroperation/bulkExport</a>
HTTP Method	POST
Description	Performs a Bulk Export server operation.
Example URI	<a href="http://localhost:8080/opswise/resources/serveroperation/bulkExport">http://localhost:8080/opswise/resources/serveroperation/bulkExport</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">Bulk Export: XML and JSON Examples</a> .
Response Properties	See <a href="#">Bulk Export: Response Properties</a> .

### Bulk Export: Example Response

XML Response	JSON Response

## XML Response

```

<serverOperationResponse>
  <operation>Bulk Export</operation>
  <success>true</success>
  <output>Bulk export completed successfully.
Bulk exporting table: ops_abort_action
No records exported for table ops_abort_action.
...
Bulk exporting table: ops_backup
Bulk exporting 3 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_backup.xml".
Bulk exporting table: ops_bundle
No records exported for table ops_bundle.
...
Bulk exporting table: ops_calendar
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_calendar.xml".
Bulk exporting table: ops_config
Bulk exporting 134 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_config.xml".
Bulk exporting table: ops_credentials
No records exported for table ops_credentials.
...
Bulk exporting table: ops_task_manual
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_task_manual.xml".
Bulk exporting table: ops_task_monitor
No records exported for table ops_task_monitor.
...
Bulk exporting table: ops_task_sleep
Bulk exporting 3 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_task_sleep.xml".
Bulk exporting table: ops_task_sql
No records exported for table ops_task_sql.
...
Bulk exporting table: ops_trigger_manual
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_trigger_manual.xml".
Bulk exporting table: ops_trigger_temp
No records exported for table ops_trigger_temp.
...
Bulk exporting table: ops_unix_agent_cluster
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_unix_agent_cluster.xml".
Bulk exporting table: ops_unix_agent_cluster_join
No records exported for table ops_unix_agent_cluster_join.
...
Bulk exporting table: ops_windows_agent_cluster
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_windows_agent_cluster.xml".
Bulk exporting table: ops_win_agent_cluster_join
No records exported for table ops_win_agent_cluster_join.

```

## JSON Response

```

{
  "operation": "Bulk Exp
  "success": true,
  "output": "Bulk export
for table ops_abort_acti
...
\nBulk exporting table:
\"D:\\tomcat\\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\"D:\\tomcat\\opswise_ex
\nBulk exporting table:
\"D:\\tomcat\\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\"D:\\tomcat\\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\"D:\\tomcat\\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\"D:\\tomcat\\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\"D:\\tomcat\\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\"D:\\tomcat\\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\"D:\\tomcat\\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\"D:\\tomcat\\opswise_ex

```

```

...
Bulk exporting table: ops_group_has_role
Bulk exporting 6 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_group_has_role.xml".
Bulk exporting table: ops_user
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_user.xml".
Bulk exporting table: ops_user_grmmember
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_user_grmmember.xml".
Bulk exporting table: ops_user_group
Bulk exporting 2 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_user_group.xml".
Bulk exporting table: ops_user_has_role
Bulk exporting 25 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_user_has_role.xml".
Bulk exporting table: ops_permission
Bulk exporting 8 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_permission.xml".
Bulk exporting table: ops_user_preference
No records exported for table ops_user_preference.
...
Bulk exporting table: ops_nav_tree_pref
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_nav_tree_pref.xml".
Bulk exporting table: ops_ldap
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_ldap.xml".
Bulk exporting table: ops_ldap_mapping
Bulk exporting 13 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_ldap_mapping.xml".
Bulk exporting table: ops_single_sign_on
Bulk exporting 2 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_single_sign_on.xml".
Bulk exporting table: ops_chart_color
Bulk exporting 26 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_chart_color.xml".
Bulk exporting table: ops_widget_activity
No records exported for table ops_widget_activity.
...
Bulk exporting table: ops_dashboard
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_23_59_EDT_2018-BULK_EXPORT\ops_dashboard.xml".
Bulk exporting table: ops_dashboard_portlet
No records exported for table ops_dashboard_portlet.
...
Bulk exporting table: ops_unv_tmplt_field_choice
No records exported for table ops_unv_tmplt_field_choice.
</output>

```

```

\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
...
.\nBulk exporting table:
ops_unv_tmplt_field_choi

```



```

Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_calendar.xml".
Bulk exporting table: ops_config
Bulk exporting 134 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_config.xml".
Bulk exporting table: ops_credentials
No records exported for table ops_credentials.
...
Bulk exporting table: ops_task_manual
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_task_manual.xml".
Bulk exporting table: ops_task_monitor
No records exported for table ops_task_monitor.
...
Bulk exporting table: ops_task_sleep
Bulk exporting 3 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_task_sleep.xml".
Bulk exporting table: ops_task_sql
No records exported for table ops_task_sql.
...
Bulk exporting table: ops_trigger_manual
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_trigger_manual.xml".
Bulk exporting table: ops_trigger_temp
No records exported for table ops_trigger_temp.
...
Bulk exporting table: ops_unix_agent_cluster
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_unix_agent_cluster.xml".
Bulk exporting table: ops_unix_agent_cluster_join
No records exported for table ops_unix_agent_cluster_join.
...
Bulk exporting table: ops_windows_agent_cluster
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_windows_agent_cluster.xml".
Bulk exporting table: ops_win_agent_cluster_join
No records exported for table ops_win_agent_cluster_join.
...
Bulk exporting table: ops_group_has_role
Bulk exporting 6 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_group_has_role.xml".
Bulk exporting table: ops_user
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_user.xml".
Bulk exporting table: ops_user_grmmember
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_user_grmmember.xml".
Bulk exporting table: ops_user_group
Bulk exporting 2 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_user_group.xml".
Bulk exporting table: ops_user_has_role
Bulk exporting 25 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_user_has_role.xml".
Bulk exporting table: ops_permission
Bulk exporting 8 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_permission.xml".
Bulk exporting table: ops_user_preference
No records exported for table ops_user_preference.

```

```

...
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
ops_list_grid_pref\nNo r
\nBulk exporting table:
...
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\D:\tomcat\opswise_ex
\nBulk exporting table:
...
\nBulk exporting table:
\D:\tomcat\opswise_ex

```

```
...
Bulk exporting table: ops_nav_tree_pref
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_nav_tree_pref.xml".
Bulk exporting table: ops_ldap
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_ldap.xml".
Bulk exporting table: ops_ldap_mapping
Bulk exporting 13 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_ldap_mapping.xml".
Bulk exporting table: ops_single_sign_on
Bulk exporting 2 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_single_sign_on.xml".
Bulk exporting table: ops_chart_color
Bulk exporting 26 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_chart_color.xml".
Bulk exporting table: ops_widget_activity
No records exported for table ops_widget_activity.
...
Bulk exporting table: ops_dashboard
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_dashboard.xml".
Bulk exporting table: ops_dashboard_portlet
No records exported for table ops_dashboard_portlet.
...
Bulk exporting table: ops_task_manual_v
Bulk exporting 3 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_task_manual_v.xml".
Bulk exporting table: ops_task_monitor_v
No records exported for table ops_task_monitor_v.
...
Bulk exporting table: ops_trigger_manual_v
Bulk exporting 1 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_30_48_EDT_2018-BULK_EXPORT\ops_trigger_manual_v.xml".
Bulk exporting table: ops_trigger_temp_v
No records exported for table ops_trigger_temp_v.
...
</output>
```

```
\nBulk exporting table:
...
\nBulk exporting table:
ops_zos_step_action_syso;
```

```
<path>D:\tomcat\opswise_export\Fri_Jun_15_14_27_58_EDT_2018-BULK_EXPORT</path>
</serverOperationResponse>
```

```
"path": "D:\\tomcat\\"
}
```

## Bulk Export Activity

	Description
URI	<a href="http://host_name/opswise/resources/serveroperation/bulkExportActivity">http://host_name/opswise/resources/serveroperation/bulkExportActivity</a>
HTTP Method	POST
Description	Performs a Bulk Export Activity server operation.
Example URI	<a href="http://localhost:8080/opswise/resources/serveroperation/bulkExportActivity">http://localhost:8080/opswise/resources/serveroperation/bulkExportActivity</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">Bulk Export: XML and JSON Examples</a> .
Response Properties	See <a href="#">Bulk Export: Response Properties</a> .

### Bulk Export Activity: Example Response

#### Success

XML Response	JSON Response
--------------	---------------



XML Response

```
<serverOperationResponse>
  <operation>Bulk Export Activity</operation>
  <success>true</success>
  <output>Bulk export completed successfully.
Bulk exporting table: ops_exec_workflow
No records exported for table ops_exec_workflow.
...
Bulk exporting table: ops_exec_manual
Bulk exporting 13 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_36_48_EDT_2018-BULK_EXPORT\ops_exec_manual.xml".
Bulk exporting table: ops_exec_email
No records exported for table ops_exec_email.
...
Bulk exporting table: ops_map
Bulk exporting 13 record(s) to file
"D:\tomcat\opswise_export\Tue_Jun_19_14_36_48_EDT_2018-BULK_EXPORT\ops_map.xml".
Bulk exporting table: ops_exec_to_resource
No records exported for table ops_exec_to_resource.
...
  </output>
  <path>D:\tomcat\opswise_export\Fri_Jun_15_14_27_58_EDT_2018-BULK_EXPORT</path>
</serverOperationResponse>
```

JSON Response

```
{
  "operation": "Bulk Export Activi
  "success": true,
  "output": "Bulk export activity
\nBulk exporting table: ops_exec_w
...
\nBulk exporting table: ops_exec_m
\nD:\\tomcat\\opswise_export\\Tue_
\nBulk exporting table: ops_exec_e
...
\nBulk exporting table: ops_map\nB
\nD:\\tomcat\\opswise_export\\Tue_
\nBulk exporting table: ops_exec_t
...
\nBulk exporting table: ops_zos_st
ops_zos_step_action_sysop.\n",
  "path": "D:\\tomcat\\opswise_exp
}
```

Failure

XML Response	JSON Response
<p>XML Response</p> <pre>&lt;serverOperationResponse&gt;   &lt;operation&gt;Bulk Export Activity&lt; /operation&gt;   &lt;success&gt;false&lt;/success&gt;   &lt;output&gt;Failed to complete bulk export activity due to error(s). Bulk Export Activity not permitted; Universal Controller property "Bulk Export Activity Permitted" is not enabled.   &lt;/output&gt; &lt;/serverOperationResponse&gt;</pre>	<p>JSON Response</p> <pre>{   "operation": "Bulk Export Activity",   "success": false,   "output": "Failed to complete bulk export activity due to error(s).\nBulk Export Activity not permitted; Universal Controller property \"Bulk Export Activity Permitted\" is not enabled.\n", }</pre>

Bulk Export Audit

	Description
URI	<a href="http://host_name/opswise/resources/serveroperation/bulkExportAudit">http://host_name/opswise/resources/serveroperation/bulkExportAudit</a>
HTTP Method	POST
Description	Performs a Bulk Export Audit server operation.
Example URI	<a href="http://localhost:8080/opswise/resources/serveroperation/bulkExportAudit">http://localhost:8080/opswise/resources/serveroperation/bulkExportAudit</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">Bulk Export: XML and JSON Examples</a> .
Response Properties	See <a href="#">Bulk Export: Response Properties</a> .

### Bulk Export Audit: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre> &lt;serverOperationResponse&gt;   &lt;operation&gt;Bulk Export Audit &lt;/operation&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;output&gt;Bulk export audit completed successfully. Bulk exporting table: ops_audit Bulk exporting 65 record(s) to file "D:\tomcat\opswise_export\Tue_Jun_19_14_38_07_EDT_2018-BULK_EXPORT\ops_audit.xml". &lt;/output&gt;   &lt;path&gt;D:\tomcat\opswise_export\Fri_Jun_15_14_27_58_EDT_2018-BULK_EXPORT&lt;/path&gt; &gt; &lt;/serverOperationResponse&gt;                     </pre>	<p>JSON Response</p> <pre> {   "operation": "Bulk Export Audit",   "success": true,   "output": "Bulk export audit completed suc ops_audit\nBulk exporting 67 record(s) to fi \D:\\tomcat\\opswise_export\\Tue_Jun_19_14_ "path": "D:\\tomcat\\opswise_export\\Fri_ }                     </pre>

### Bulk Export History

	Description
URI	<a href="http://host_name/opswise/resources/serveroperation/bulkExportHistory">http://host_name/opswise/resources/serveroperation/bulkExportHistory</a>
HTTP Method	POST
Description	Performs a Bulk Export History server operation.
Example URI	<a href="http://localhost:8080/opswise/resources/serveroperation/bulkExportHistory">http://localhost:8080/opswise/resources/serveroperation/bulkExportHistory</a>

Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">Bulk Export: XML and JSON Examples</a> .
Response Properties	See <a href="#">Bulk Export: Response Properties</a> .

### Bulk Export History: Example Response

XML Response	JSON Response
<p>XML Response</p> <pre>&lt;serverOperationResponse&gt;   &lt;operation&gt;Bulk Export History&lt;/operation&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;output&gt;Bulk export history completed successfully. Bulk exporting table: ops_history No records exported for table ops_history.   &lt;/output&gt;   &lt;path &gt;D:\tomcat\opswise_export\Fri_Jun_15_14_27_58_EDT_2018-BULK_EXPORT&lt;   /path&gt; &lt;/serverOperationResponse&gt;</pre>	<p>JSON Response</p> <pre>{   "operation": "Bulk Export History",   "success": true,   "output": "Bulk export history completed successfully.\nBu table: ops_history\nNo records exported for table ops_histor   "path": "D:\\tomcat\\opswise_export\\Fri_Jun_15_14_27_29_EDT_2018-BU }</pre>

### Bulk Export: Response Properties

Property	UI Field Name	Description	Specifications
operation	n/a	Server Operation that was performed.	
success	n/a	Result of the Server Operation.	Boolean; Valid values: true/false.
output	n/a	Output of the server operation.	
path	n/a	Directory containing the exported files.	

### Bulk Import

	Description
URI	<a href="http://host_name/opswise/resources/serveroperation/bulkImport">http://host_name/opswise/resources/serveroperation/bulkImport</a>
HTTP Method	POST

Description	Performs a Bulk Import server operation.
URI Parameters	See <a href="#">Bulk Import: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opswise/resources/serveroperation/bulkImport?path=&lt;path&gt;">http://localhost:8080/opswise/resources/serveroperation/bulkImport?path=&lt;path&gt;</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">Bulk Import: XML and JSON Examples</a> .
Response Properties	See <a href="#">Bulk Import: Properties</a> .

### Bulk Import: URI Parameters

Name	Description	Specifications	Required
path	Directory containing the imported file(s).		Y



#### Note

Some characters in the path parameter may need to be URL-encoded. For example, the backslash character in a Windows path may need to be encoded as %5C as shown below:

[http://localhost:8080/opswise/resources/serveroperation/bulkImport?path=D:%5Ctomcat%5Copswise\\_export%5CFri\\_Jun\\_15\\_14\\_17\\_33\\_EDT\\_2018-BULK\\_EXPORT](http://localhost:8080/opswise/resources/serveroperation/bulkImport?path=D:%5Ctomcat%5Copswise_export%5CFri_Jun_15_14_17_33_EDT_2018-BULK_EXPORT)

### Bulk Import: Example Response

XML Response	JSON Response
--------------	---------------

XML Response

```
<serverOperationResponse>
  <operation>Bulk Import</operation>
  <success>true</success>
  <output>Bulk import completed successfully.
  Processing bulk import directory
  "D:\tomcat\opswise_export\Fri_Jun_15_14_17_33_EDT_2018-BULK_EXPORT".
  Bulk importing 1 file(s).
  Bulk importing file:
  D:\tomcat\opswise_export\Fri_Jun_15_14_17_33_EDT_2018-BULK_EXPORT\ops_audit.xml
  47 record(s) found in file ops_audit.xml.
  </output>
</serverOperationResponse>
```

JSON Response

```
{
  "operation": "Bulk Import",
  "success": true,
  "output": "Bulk import completed successfully.\nD:\tomcat\opswise_export\Fri_Jun_15_14_17_33_EDT_2018-BULK_EXPORT\nimporting 1 file(s).\nBulk importing file: D:\tomcat\opswise_export\Fri_Jun_15_14_17_33_EDT_2018-BULK_EXPORT\ops_audit.xml\n47 record(s) found in file ops_audit.xml.\n"}
}
```

**Bulk Import: Response Properties**

Property	UI Field Name	Description	Specifications
operation	n/a	Server Operation that was performed.	
success	n/a	Result of the Server Operation.	Boolean; Valid values: true/false.
output	n/a	Output of the server operation.	

## Server Operations Web Services - LDAP

- [Overview](#)
- [LDAP Refresh](#)
  - [LDAP Refresh: Example Response](#)
  - [LDAP Refresh: Response Properties](#)
- [LDAP Refresh \(Asynchronous\)](#)
  - [LDAP Refresh \(Asynchronous\): Example Response](#)
  - [LDAP Refresh \(Asynchronous\): Response Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for LDAP Server Operations, which are listed alphabetically on this page.

- [LDAP Refresh](#)
- [LDAP Refresh \(Asynchronous\)](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

### LDAP Refresh

	Description
URI	<a href="http://host_name/opswise/resources/serveroperation/ldapRefresh">http://host_name/opswise/resources/serveroperation/ldapRefresh</a>
HTTP Method	POST
Description	If LDAP is configured for this installation, it refreshes every 24 hours. This system operation forces a refresh. The refresh writes all log entries to the response output, as well as to the log, and the response will not be returned until the process completes. If you estimate the refresh could take a considerable amount of time, we recommend you use <a href="#">LDAP Refresh (Asynchronous)</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/serveroperation/ldapRefresh">http://localhost:8080/opswise/resources/serveroperation/ldapRefresh</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">LDAP Refresh: Example Response</a> .
Response Properties	See <a href="#">LDAP Refresh: Response Properties</a> .

### LDAP Refresh: Example Response

## XML Response

## JSON Response

## XML Response

```

<serverOperationResponse>
  <operation>LDAP Refresh</operation>
  <success>true</success>
  <output>Processing LDAP users with target OU: OU=TestUsers
LDAP Processing Range: (sAMAccountName<=a)
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName<=a))(&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (sAMAccountName>=z)
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=z))(&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=_) (sAMAccountName<=0))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=_) (sAMAccountName<=0)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=0) (sAMAccountName<=1))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=0) (sAMAccountName<=1)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=1) (sAMAccountName<=2))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=1) (sAMAccountName<=2)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=2) (sAMAccountName<=3))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=2) (sAMAccountName<=3)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=3) (sAMAccountName<=4))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=3) (sAMAccountName<=4)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=4) (sAMAccountName<=5))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=4) (sAMAccountName<=5)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=5) (sAMAccountName<=6))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=5) (sAMAccountName<=6)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=6) (sAMAccountName<=7))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=6) (sAMAccountName<=7)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=7) (sAMAccountName<=8))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=7) (sAMAccountName<=8)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=8) (sAMAccountName<=9))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=8) (sAMAccountName<=9)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=9) (sAMAccountName<=a))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=9) (sAMAccountName<=a)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=a) (sAMAccountName<=b))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=a) (sAMAccountName<=b)) (&(objectClass=user)(objectCategory=person)))]
LDAP Processing Range: (&(sAMAccountName>=b) (sAMAccountName<=c))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((sAMAccountName>=b) (sAMAccountName<=c)) (&(objectClass=user)(objectCategory=person)))]

```

## JSON Response

```

{
  "operation": "LD
  "success": true,
  "output": "Proce
(sAMAccountName<=a
Filter[(&((sAMAcco
(sAMAccountName>=z
Filter[(&((sAMAcco
(&(sAMAccountName>
Filter[(&((sAMAcc
Processing Range:
(&(sAMAccountName>
Filter[(&((sAMAcc
Processing Range:
(&(sAMAccountName>
Filter[(&((sAMAcc
Processing Range:
(&(sAMAccountName>
Filter[(&((sAMAcc
Processing Range:
(&(sAMAccountName>
Filter[(&((sAMAcc
Processing Range:
(&(sAMAccountName>
Filter[(&((sAMAcc
Processing Range:
(&(sAMAccountName>
Filter[(&((sAMAcc
Processing Range:
(&(sAMAccountName>
Filter[(&((sAMAcc
Processing Range:
(&(sAMAccountName>
Filter[(&((sAMAcc
Processing Range:
(&(sAMAccountName>
Filter[(&((sAMAcc
Processing Range:

```





```
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((&(sAMAccountName>=v)(sAMAccountName<=w))((&(objectClass=user)(objectCategory=person))))]
LDAP Processing Range: (&(sAMAccountName>=w)(sAMAccountName<=x))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((&(sAMAccountName>=w)(sAMAccountName<=x))((&(objectClass=user)(objectCategory=person))))]
LDAP Processing Range: (&(sAMAccountName>=x)(sAMAccountName<=y))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((&(sAMAccountName>=x)(sAMAccountName<=y))((&(objectClass=user)(objectCategory=person))))]
LDAP Processing Range: (&(sAMAccountName>=y)(sAMAccountName<=z))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((&(sAMAccountName>=y)(sAMAccountName<=z))((&(objectClass=user)(objectCategory=person))))]
Skipping LDAP group processing. No group filter or target OUs specified.
```

```
Filter[(&((&(sAMAccountName>=w)(sAMAccountName<=x))((&(objectClass=user)(objectCategory=person))))]
LDAP Processing Range: (&(sAMAccountName>=w)(sAMAccountName<=x))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((&(sAMAccountName>=w)(sAMAccountName<=x))((&(objectClass=user)(objectCategory=person))))]
LDAP Processing Range: (&(sAMAccountName>=x)(sAMAccountName<=y))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((&(sAMAccountName>=x)(sAMAccountName<=y))((&(objectClass=user)(objectCategory=person))))]
LDAP Processing Range: (&(sAMAccountName>=y)(sAMAccountName<=z))
LDAP Search: Name[OU=TestUsers,dc=qad,dc=stone,dc=branch],
Filter[(&((&(sAMAccountName>=y)(sAMAccountName<=z))((&(objectClass=user)(objectCategory=person))))]
Skipping LDAP group processing. No group filter or target OUs specified.
```

```
</output>
</serverOperationResponse>
```

```
LDAP group process
}
```

### LDAP Refresh: Response Properties

Property	UI Field Name	Description	Specifications
operation	n/a	Server Operation that was performed.	
success	n/a	Result of the Server Operation.	Boolean; Valid values: true/false.
output	n/a	Output of the server operation.	

### LDAP Refresh (Asynchronous)

	Description
URI	<a href="http://host_name/opswise/resources/serveroperation/ldapRefreshAsync">http://host_name/opswise/resources/serveroperation/ldapRefreshAsync</a>
HTTP Method	POST
Description	If LDAP is configured for this installation, it refreshes every 24 hours. This system operation forces a refresh. The refresh is performed in the background and sends log entries to the Controller log.
Example URI	<a href="http://localhost:8080/opswise/resources/serveroperation/ldapRefreshAsync">http://localhost:8080/opswise/resources/serveroperation/ldapRefreshAsync</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">LDAP Refresh (Asynchronous): Example Response</a> .
Response Properties	See <a href="#">LDAP Refresh (Asynchronous): Response Properties</a> .

### LDAP Refresh (Asynchronous): Example Response

XML Response	JSON Response
--------------	---------------

<p>XML Response</p> <pre>&lt;serverOperationResponse&gt;   &lt;operation&gt;LDAP Refresh (Asynchronous)&lt; /operation&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;output&gt;LDAP Refresh scheduled for background processing   &lt;/output&gt; &lt;/serverOperationResponse&gt;</pre>	<p>JSON Response</p> <pre>{   "operation": "LDAP Refresh",   "success": true,   "output": "LDAP Refresh scheduled for background processing." }</pre>
--	---

### LDAP Refresh (Asynchronous): Response Properties

Property	UI Field Name	Description	Specifications
operation	n/a	Server Operation that was performed.	
success	n/a	Result of the Server Operation.	Boolean; Valid values: true/false.
output	n/a	Output of the server operation.	

## System Web Services

- [Overview](#)
- [Retrieve System Details](#)

### Overview

Universal Controller supports the following RESTful-based web services for system operations, which are listed alphabetically on this page.

- [Retrieve System Details](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

### Retrieve System Details

	Description
URI	<a href="http://host_name/opswise/resources/opswise/status">http://host_name/opswise/resources/opswise/status</a>
HTTP Method	GET
Description	Retrieves Universal Controller system status/information.
Example URI	<a href="http://localhost:8080/opswise/resources/opswise/status">http://localhost:8080/opswise/resources/opswise/status</a>
Authentication	HTTP Basic
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">Retrieve System Details: Example Response</a> , below.

### Retrieve System Details: Example Response

XML Response	JSON Response
--------------	---------------

XML Response

```
<status>
  <build>build.78</build>
  <buildDate>04-06-2017_0217</buildDate>
  <databaseConnections>Client (0/3) Reserved (0/2) Server (0/6)</databaseConnections>
  <databaseName>qa_opswise6410b78</databaseName>
  <databaseType>MYSQL</databaseType>
  <databaseURL>jdbc:mysql://qa-db2.stone.branch/</databaseURL>
  <license>[Agents: 129/5000] [Triggers: Unlimited] [Tasks: Unlimited] [Days: 8/365]</license>
  <licenseExpired>>false</licenseExpired>
  <memoryFree>76976.09 MB (95.80%)</memoryFree>
  <memoryMaximum>7282.00 MB</memoryMaximum>
  <memoryUsed>305.91 MB (4.20%)</memoryUsed>
  <nodeId>qa-opswise6:8080-qa_opswise6410b78</nodeId>
  <nodeMode>Active</nodeMode>
  <nodeTime>2018-01-01 11:26:52 -0400</nodeTime>
  <nodeUptime>6 Days 19 Hours 53 Minutes 53 Seconds</nodeUptime>
  <release>6.4.3.0</release>
</status>
```

JSON Response

```
{
  "build": "build.78",
  "buildDate": "04-06-2017_0217",
  "databaseConnections": "Client (0/3) Reserved (0/2) Server (0/6)",
  "databaseName": "qa_opswise6410b78",
  "databaseType": "MYSQL",
  "databaseURL": "jdbc:mysql://qa-db2.stone.branch/",
  "license": "[Agents: 129/5000] [Triggers: Unlimited] [Tasks: Unlimited] [Days: 8/365]",
  "licenseExpired": false,
  "memoryFree": "76976.09 MB (95.80%)",
  "memoryMaximum": "7282.00 MB",
  "memoryUsed": "305.91 MB (4.20%)",
  "nodeId": "qa-opswise6:8080-qa_opswise6410b78",
  "nodeMode": "Active",
  "nodeTime": "2018-01-01 11:26:52 -0400",
  "nodeUptime": "6 Days 19 Hours 53 Minutes 53 Seconds",
  "release": "6.4.3.0"
}
```

### Retrieve System Details Properties

The System Details properties match the fields on the [System Details widget](#) which displays, by default, on the Universal Controller Home dashboard.

Property	UI Field Name	Description
build	Build	Build number for this version of the Controller.
buildDate	Build Date	Date when this build was created.
databaseConnections	Database Connections	
databaseName	Database Name	Name of the database used by this Controller.
databaseType	DatabaseType	Type of database used by this Controller.
databaseURL	Database URL	URL of the database used by this Controller.

license	License	<p>License information for Agents, Triggers, Tasks, and Days.</p> <p>Valid values:</p> <ul style="list-style-type: none"> <li>• Unlimited</li> <li>• Number remaining in license / total number in license</li> </ul>
licenseExpired	n/a	Indication (true or false) that your Universal Controller license has expired.
memoryFree	Memory Free	Amount of memory available for use by this Controller.
memoryMaximum	Memory Maximum	Maximum amount of memory for this Controller.
memoryUsed	Memory Used	Amount of memory currently being used by this Controller.
nodeId	Node Id	URL of the Controller.
nodeMode	Node Mode	<p>Current mode of the Controller.</p> <p>Valid values:</p> <ul style="list-style-type: none"> <li>• Active</li> <li>• Passive</li> <li>• Offline</li> </ul>
nodeTime	Node Time	Time of day on the Controller when the details were retrieved.
nodeUptime	Node Uptime	Amount of time the Controller has been running.
release	Release	<a href="#">Release level</a> of the Controller.



## Task Instance Web Services

- Overview
- Cancel a Task Instance
- Clear All Dependencies
- Clear Exclusive Dependencies
- Clear Predecessor Dependencies
- Clear Time Dependency
- Clear Virtual Resource Dependencies
- Delete a Task Instance
- Force Finish a Task Instance
- Force Finish/Cancel a Task Instance
- Hold a Task Instance
- Issue Set Completed Command for a Manual Task Instance
- Issue Set Started Command for a Manual Task Instance
- List Task Instances
- List Task Instance Variables (Show Variables)
- Release a Task Instance from Hold
- Rerun a Task Instance
- Retrieve Task Instance Output
- Set or Modify Wait Time/Duration for Task Instance
- Set Priority for a Task Instance
- Skip a Task Instance
- Skip a Task Instance Path
- Unskip a Task Instance

### Overview

Universal Controller supports the following RESTful-based web services for Task Instance operations, which are listed alphabetically on this page.

- Cancel a Task Instance
- Clear All Dependencies
- Clear Exclusive Dependencies
- Clear Predecessor Dependencies
- Clear Time Dependency
- Clear Virtual Resource Dependencies
- Delete a Task Instance
- Force/Finish a Task Instance
- Force/Finish Cancel a Task Instance
- Hold a Task Instance
- Issue Set Completed Command for a Manual Task Instance
- Issue Set Started Command for a Manual Task Instance
- List Task Instances
- List Task Instance Variables (Show Variables)
- Release a Task Instance from Hold
- Rerun a Task Instance
- Retrieve Task Instance Output
- Set or Modify Wait Time/Duration for Task Instance
- Set Priority for a Task Instance
- Skip a Task Instance



- [Skip a Task Instance Path](#)
- [Unskip a Task Instance](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

For RESTful-based web services for Workflow Task Instance operations, see [Workflow Task Instance Web Services](#).

## Cancel a Task Instance



**Note**

A Web Service Task instance cannot be cancelled if the specified Protocol is SOAP.

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/cancel">http://host_name/opswise/resources/taskinstance/cancel</a>
HTTP Method	POST
Description	Cancel a task instance.
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/cancel">http://localhost:8080/opswise/resources/taskinstance/cancel</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Cancel a Task Instance: XML and JSON Examples</a> .
Request Properties	See <a href="#">Cancel a Task Instance: Request Properties</a> .
Example Response	See <a href="#">Cancel a Task Instance: XML and JSON Examples</a> .

### Cancel a Task Instance: XML and JSON Examples

Examples	XML	JSON
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<p>Example Request</p>	<p>▼ XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &gt; &lt;/task-instance&gt;</pre>	<p>▼ JSON</p> <pre>{   "name": "Timer 60",   "criteria": "Newest Instance",   "workflowInstanceName": "test" }</pre>
<p>Example Response</p>	<p>▼ XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;cancel&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Cancel executed successfully against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>▼ JSON</p> <pre>{   "type": "cancel",   "success": true,   "info": "Command Cancel executed successfully against task instance \"Timer 60\".",   "errors": "" }</pre>

### Cancel a Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
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criteria	n/a	Specific task instance with this task instance name that you want to cancel.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Clear All Dependencies

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/cleardependencies">http://host_name/opswise/resources/taskinstance/cleardependencies</a>
HTTP Method	POST
Description	Clears all dependencies of a task instance.
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/cleardependencies">http://localhost:8080/opswise/resources/taskinstance/cleardependencies</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Clear All Dependencies: XML and JSON Examples</a> .
Request Properties	See <a href="#">Clear All Dependencies: Request Properties</a> .

Example Response	See <a href="#">Clear All Dependencies: XML and JSON Examples.</a>
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### Clear All Dependencies: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Timer 60",   "criteria": "Newest Instance",   "workflowInstanceName": "Test" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;clear_all_dependencies&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Clear All Dependencies executed   successfully against task instance "Timer 60".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "clear_all_dependencies",   "success": true,   "info": "Command Clear All Dependencies executed   successfully against task instance \"Timer 60\".",   "errors": "" }</pre>

### Clear All Dependencies: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With

criteria	n/a	Specific task instance with this task instance <i>name</i> for which you want to clear all dependencies.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	<i>sys_id</i> used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	


**Note**

Values with an underscore characters ( `_` ) instead of spaces also are supported (for example, **oldest\_active\_instance**).

## Clear Exclusive Dependencies

	Description
URI	<a href="http://host_name/opwise/resources/taskinstance/clearexclusive">http://host_name/opwise/resources/taskinstance/clearexclusive</a>
HTTP Method	POST
Description	Clears all <i>exclusive dependencies</i> of a task instance.
Authentication	HTTP Basic
Example URI	<a href="http://localhost:8080/opwise/resources/taskinstance/clearexclusive">http://localhost:8080/opwise/resources/taskinstance/clearexclusive</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Clear Exclusive Dependencies: XML and JSON Examples</a> .
Request Properties	See <a href="#">Clear Exclusive Dependencies: Request Properties</a> .

Example Response

See [Clear Exclusive Dependencies: XML and JSON Examples.](#)


### Clear Exclusive Dependencies: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Timer 60",   "criteria": "Newest Instance",   "workflowInstanceName": "Test" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;clear_exclusive&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Clear Exclusive executed successfully   against task instance "Timer 60".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "clear_exclusive",   "success": true,   "info": "Command Clear Exclusive executed successfully   against task instance \"Timer 60\".",   "errors": "" }</pre>

### Clear Exclusive Dependencies: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With

criteria	n/a	Specific task instance with this task instance name for which you want to clear exclusive dependencies.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

 **Note**  
 Values with an underscore characters ( \_ ) instead of spaces also are supported (for example, **oldest\_active\_instance**).

## Clear Predecessor Dependencies

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/clearpredecessors">http://host_name/opswise/resources/taskinstance/clearpredecessors</a>
HTTP Method	POST
Description	Clears all predecessor dependencies of a task instance in a Workflow.
Authentication	HTTP Basic
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/clearpredecessors">http://localhost:8080/opswise/resources/taskinstance/clearpredecessors</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Clear Predecessor Dependencies: XML and JSON Examples</a> .

Request Properties	See <a href="#">Clear Predecessor Dependencies: Request Properties</a> .
Example Response	See <a href="#">Clear Predecessor Dependencies: XML and JSON Examples</a> .

### Clear Predecessor Dependencies: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt;   &lt;predecessorName&gt;*&lt;/predecessorName&gt; &lt;/task-instance&gt;</pre> <p>or</p> <pre>&lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt;   &lt;predecessorName&gt;*&lt;/predecessorName&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Timer 60",   "criteria": "Newest Instance",   "workflowInstanceName": "Test",   "predecessorName": "Task 1" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;set_edges_satisfied&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Clear Predecessors executed successfully against task instance "Timer 60".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "set_edge_satisfied",   "success": true,   "info": "Successfully marked the dependency as satisfied.",   "errors": "" }</pre>

### Clear Predecessor Dependencies: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With



criteria	n/a	Specific task instance with this task instance name for which you want to clear predecessor dependencies.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
predecessorName	n/a	Name of the predecessor task instance for which you want to clear dependency.	* = Clears dependencies from all predecessor task instances.	Y	
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Clear Time Dependency

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/clearawait">http://host_name/opswise/resources/taskinstance/clearawait</a>
HTTP Method	POST
Description	Clears the time dependency of a task instance.
Authentication	HTTP Basic
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/clearawait">http://localhost:8080/opswise/resources/taskinstance/clearawait</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json

Example Request	See <a href="#">Clear Time Dependency: XML and JSON Examples</a> .
Request Properties	See <a href="#">Clear Time Dependency : Request Properties</a> .
Example Response	See <a href="#">Clear Time Dependency: XML and JSON Examples</a> .


### Clear Time Dependency: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Test task&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;clear_timewait&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Clear Time Wait/Delay executed   successfully against task instance "Test task".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "clear_timewait",   "success": true,   "info": "Command Clear Time Wait/Delay executed   successfully against task instance \"Task 1\".",   "errors": "" }</pre>

### Clear Time Dependency: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With

criteria	n/a	Specific task instance with this task instance name for which you want to clear time dependency.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

 **Note**  
Values with an underscore characters ( \_ ) instead of spaces also are supported (for example, **oldest\_active\_instance**).

## Clear Virtual Resource Dependencies

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/clearresources">http://host_name/opswise/resources/taskinstance/clearresources</a>
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/clearresources">http://localhost:8080/opswise/resources/taskinstance/clearresources</a>
HTTP Method	POST
Description	Clears virtual resource dependencies of a task instance.
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Clear Virtual Resource Dependencies: XML and JSON Examples</a> .
Request Properties	See <a href="#">Clear Virtual Resource Dependencies: Request Properties</a> .

Example Response      See [Clear Virtual Resource Dependencies: XML and JSON Examples](#).

### Clear Virtual Resource Dependencies: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt;   &lt;resourceName&gt;V1&lt;/resourceName&gt; &lt;/task-instance&gt;</pre> <p>or</p> <pre>&lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt;   &lt;resourceName&gt;V1&lt;/resourceName&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test",   "resourceName": "V1" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;clear_resources&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Clear Resources executed successfully   against task instance "Timer 60".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "clear_resources",   "success": true,   "info": "Command Clear Resources executed successfully   against task instance \"Task 1\".",   "errors": "" }</pre>

### Clear Virtual Resource Dependencies: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With

criteria	n/a	Specific task instance with this task instance name for which you want to clear virtual resource dependencies.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	<code>sys_id</code> used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
resourceName	n/a	Name of the virtual resource for which you want to clear dependency.	* = Clears dependencies from all virtual resources.	Y	
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Delete a Task Instance


	Description
URI	<a href="http://host_name/opswise/resources/taskinstance">http://host_name/opswise/resources/taskinstance</a>
HTTP Method	DELETE
Description	Deletes the specified <a href="#">task instance</a> . For Workflow task instances, if the <code>recursive</code> property is set to true, all children task instances will be removed.
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance">http://localhost:8080/opswise/resources/taskinstance</a>
Example Request	See <a href="#">Delete a Task Instance: XML and JSON Examples</a> .

Request Properties	See <a href="#">Delete a Task Instance: Request Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Task instance(s) deleted successfully.</li> </ul>

### Delete a Task Instance: XML and JSON Examples

XML	JSON
<p>XML</p> <p><b>Delete Task instance by task instance id.</b></p> <pre>&lt;task-instance&gt;   &lt;id&gt; &gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;</pre> <p><b>Delete Task instance and all of its children by task instance id.</b></p> <pre>&lt;task-instance&gt;   &lt;id&gt; &gt;14483224900880190549PGHP23IR12MO&lt;/id&gt;   &lt;recursive&gt;true&lt;/recursive&gt; &lt;/task-instance&gt;</pre> <p><b>Delete Task instance by task instance name.</b></p> <pre>&lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt; /criteria&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance" }</pre>

### Delete a Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
criteria	n/a	Specific task instance with this task instance <code>name</code> which you want to delete.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Instance (3). <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;">  <b>Note</b>                          Values with an underscore characters ( <code>_</code> ) instead of spaces also are supported (for example, <b>oldest_instance</b>).                     </div>	N	
id	n/a	<code>sys_id</code> used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
recursive	n/a	For Workflow task instances only; Specification for whether or not to delete all children task instances of the task instance.	Boolean; Valid values: true/false. Default is false.	N	

## Force Finish a Task Instance

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/forcefinish">http://host_name/opswise/resources/taskinstance/forcefinish</a>
HTTP Method	POST
Description	Force Finish a task instance. (To Force Finish (Halt) a task instance, set the <code>halt</code> property to true.)
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/forcefinish">http://localhost:8080/opswise/resources/taskinstance/forcefinish</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Force Finish a Task Instance: XML and JSON Examples</a> .

Request Properties	See Force Finish a Task Instance: Request Properties.
Example Response	See Force Finish a Task Instance: XML and JSON Examples.

### Force Finish a Task Instance: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;halt&gt;true&lt;/halt&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "halt": "True",   "criteria": "Newest Instance",   "workflowInstanceName": "Test" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;force_finish&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Force Finish executed successfully   against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "force_finish",   "success": true,   "info": "Command Force Finish executed successfully   against task instance \"Task 1\".",   "errors": "" }</pre>

### Force Finish a Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With



criteria	n/a	Specific task instance with this task instance name that you want to force finish.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
halt	n/a	Prevents successor task instances of the specified task instance in a Workflow from being run.	Boolean. Valid values: true/false. Default is false.	N	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Force Finish/Cancel a Task Instance

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/forcefinishcancel">http://host_name/opswise/resources/taskinstance/forcefinishcancel</a>
HTTP Method	POST
Description	Force Finish/Cancel a task instance. (To Force Finish/Cancel (Halt) a task instance, set the <a href="#">halt</a> property to true.)
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/forcefinishcancel">http://localhost:8080/opswise/resources/taskinstance/forcefinishcancel</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json

Example Request	See <a href="#">Force Finish Cancel a Task Instance: XML and JSON Examples</a> .
Request Properties	See <a href="#">Force Finish/Cancel a Task Instance: Request Properties</a> .
Example Response	See <a href="#">Force Finish Cancel a Task Instance: XML and JSON Examples</a> .

### Force Finish/Cancel a Task Instance: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;halt&gt;true&lt;/halt&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "halt": "True",   "criteria": "Newest Instance",   "workflowInstanceName": "Test" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;force_finish_cancel&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Force Finish/Cancel executed successfully against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "force_finish_cancel",   "success": true,   "info": "Command Force Finish/Cancel executed successfully against task instance \"Task 1\".",   "errors": "" }</pre>

### Force Finish/Cancel a Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With

criteria	n/a	Specific task instance with this task instance name that you want to force finish/cancel.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
halt	n/a	Prevents successor task instances of the specified task instance in a Workflow from being run.	Boolean. Valid values: true/false. Default is false.	N	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Hold a Task Instance

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/hold">http://host_name/opswise/resources/taskinstance/hold</a>
HTTP Method	POST
Description	Hold a task instance.
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/hold">http://localhost:8080/opswise/resources/taskinstance/hold</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json

Example Request	See <a href="#">Hold a Task Instance: XML and JSON Examples</a> .
Request Properties	See <a href="#">Hold a Task Instance: Request Properties</a> .
Example Response	See <a href="#">Hold a Task Instance: XML and JSON Examples</a> .


### Hold a Task Instance: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;410d6c0bc0a801c901838d8ac43b3279&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;hold&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Command Hold executed successfully against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "hold",   "success": true,   "info": "Command Hold executed successfully against task instance \"Task 1\".",   "errors": "" }</pre>

### Hold a Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With

criteria	n/a	Specific task instance with this task instance <i>name</i> that you want to hold.	Valid values: <ul style="list-style-type: none"> <li>• As String = Oldest Active Instance, As Value = 1</li> <li>• As String = Newest Active Instance, As Value = 2</li> <li>• As String = Oldest Instance, As Value = 3</li> <li>• As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	<i>sys_id</i> used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

 **Note**  
Values with an underscore characters ( `_` ) instead of spaces also are supported (for example, `oldest_active_instance`).

## Issue Set Completed Command for a Manual Task Instance

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/setcompleted">http://host_name/opswise/resources/taskinstance/setcompleted</a>
HTTP Method	POST
Description	Issues a Set Completed command for a Manual Task instance.
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/setcompleted">http://localhost:8080/opswise/resources/taskinstance/setcompleted</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Issue Set Completed Command for a Manual Task Instance: XML and JSON Examples</a> .
Request Properties	See <a href="#">Issue Set Completed Command for a Manual Task Instance: Request Properties</a> .

Example Response

See [Issue Set Completed Command for a Manual Task Instance: XML and JSON Examples](#).

### Issue Set Completed Command for a Manual Task Instance: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;test manual&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;set_manual_completed&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Command Set Completed executed successfully   against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "set_manual_completed",   "success": true,   "info": "Command Set Completed executed successfully   against task instance \"Task 1\".",   "errors": "" }</pre>

### Issue Set Completed Command for a Manual Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With

criteria	n/a	Specific task instance with this task instance name that you want to issue a Set Completed command for.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	<code>sys_id</code> used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Issue Set Started Command for a Manual Task Instance

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/setstarted">http://host_name/opswise/resources/taskinstance/setstarted</a>
HTTP Method	POST
Description	Issues a Set Started command for a Manual Task instance.
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/setstarted">http://localhost:8080/opswise/resources/taskinstance/setstarted</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Issue Set Started Command for a Manual Task Instance: XML and JSON Examples</a> .

Request Properties	See <a href="#">Issue Set Started Command for a Manual Task Instance: Request Properties</a>
Example Response	See <a href="#">Issue Set Started Command for a Manual Task Instance: XML and JSON Examples</a> .

### Issue Set Started Command for a Manual Task Instance: XML and JSON Examples


Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;test manual&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;set_manual_started&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Command Set Started executed successfully against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "set_manual_started",   "success": true,   "info": "Command Set Started executed successfully against task instance \"Task 1\".",   "errors": "" }</pre>

### Issue Set Started Command for a Manual Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With



criteria	n/a	Specific task instance with this task instance name that you want to issue a Set Started command for.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

 **Note**  
 Values with an underscore characters ( \_ ) instead of spaces also are supported (for example, **oldest\_active\_instance**).

## List Task Instances

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/list">http://host_name/opswise/resources/taskinstance/list</a>
HTTP Method	POST
Description	Retrieves information on task instances matching specific search criteria.
Authentication	HTTP Basic
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/list">http://localhost:8080/opswise/resources/taskinstance/list</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">List Task Instances: XML and JSON Request Examples</a> .
Request Properties	See <a href="#">List Task Instances: Request Properties</a> .

Example Response

See [List Task Instances: XML and JSON Response Examples](#).

## List Task Instances: XML and JSON Examples

Examples	XML	JSON
<p>Example Request</p>	<p>XML</p> <p>All task instances in the last three minutes.</p> <pre data-bbox="384 431 1083 618">&lt;task-instance-query-filter&gt;   &lt;name&gt;*&lt;/name&gt;   &lt;updatedAtTimeType&gt;Offset&lt;/updatedAtTimeType&gt;   &lt;updatedAtTime&gt;-3mn&lt;/updatedAtTime&gt; &lt;/task-instance-query-filter&gt;</pre> <p>Task instance with the specified id.</p> <pre data-bbox="384 740 1083 911">&lt;task-instance-query-filter&gt;   &lt;sysId&gt;1448396297341015141TB2QF51JBYM8V&lt;   /sysId&gt; &lt;/task-instance-query-filter&gt;</pre> <p>Task instance with multiple query criteria.</p> <pre data-bbox="384 1032 1083 1317">&lt;task-instance-query-filter&gt;   &lt;name&gt;*&lt;/name&gt;   &lt;status&gt;110&lt;/status&gt;   &lt;type&gt;windows&lt;/type&gt;   &lt;agentName&gt;test agent&lt;/agentName&gt;   &lt;lateStart&gt;true&lt;/lateStart&gt;   &lt;lateFinish&gt;true&lt;/lateFinish&gt;   &lt;earlyFinish&gt;&gt;false&lt;/earlyFinish&gt; &lt;/task-instance-query-filter&gt;</pre> <p>All task instances that either started late or finished late.</p>	<p>JSON</p> <p>All task instances in the last three minutes.</p> <pre data-bbox="1188 431 1797 643">{   "name": "*",   "type": "Timer",   "updatedAtTimeType": "offset",   "updatedAtTime": "-3mn" }</pre> <p>Task instance with the specified id.</p> <pre data-bbox="1188 740 1797 935">{   "sysId":   "1513644026115413351LS9ACLESSKLXZ" }</pre> <p>Task instance with multiple query criteria.</p> <pre data-bbox="1188 1032 1797 1317">{   "name": "*",   "status": "200",   "type": "windows",   "agentName": "Mark-4 - AGNT0002",   "lateStart": true,   "lateFinish": false,   "earlyFinish": false }</pre> <p>All task instances that either started late or finished late.</p>

```
<task-instance-query-filter>
  <name>*</name>
  <late>>true</late>
</task-instance-query-filter>
```

All task instances that either started late, finished late, or finished early.

```
<task-instance-query-filter>
  <name>*</name>
  <lateEarly>true</lateEarly>
</task-instance-query-filter>
```

All task instances that neither started late nor finished late.

```
<task-instance-query-filter>
  <name>*</name>
  <late>>false</late>
</task-instance-query-filter>
```

All task instances that neither started late, finished late, nor finished early.

```
<task-instance-query-filter>
  <name>*</name>
  <lateEarly>>false</lateEarly>
</task-instance-query-filter>
```

```
{
  "name": "*",
  "late": true
}
```

All task instances that either started late, finished late, or finished early.

```
{
  "name": "*",
  "lateEarly": true
}
```

All task instances that neither started late nor finished late.

```
{
  "name": "*",
  "late": false
}
```

All task instances that neither started late, finished late, nor finished early.



```
{
  "name": "*",
  "lateEarly": false
}
```

<p>Example Response</p>	<p>XML</p> <pre>&lt;taskInstances&gt;   &lt;taskInstance&gt;     &lt;agent&gt;AGNT0004&lt;/agent&gt;     &lt;credentials&gt;john.doe&lt;/credentials&gt;     &lt;earlyFinish&gt;&gt;false&lt;/earlyFinish&gt;     &lt;endTime&gt;&lt;/endTime&gt;     &lt;executionUser&gt;ops.admin&lt;/executionUser&gt;     &lt;exitCode&gt;0&lt;/exitCode&gt;     &lt;finishedEarly&gt;&gt;false&lt;/finishedEarly&gt;     &lt;finishedLate&gt;&gt;false&lt;/finishedLate&gt;     &lt;lateFinish&gt;&gt;false&lt;/lateFinish&gt;     &lt;lateStart&gt;&gt;false&lt;/lateStart&gt;     &lt;launchTime&gt;2018-08-08 10:54:12 -0400&lt;/launchTime&gt;     &lt;name&gt;SB_WIN&lt;/name&gt;     &lt;queuedTime&gt;2018-08-08 10:54:44 -0400&lt;/queuedTime&gt;     &lt;startTime&gt;2018-08-08 10:54:47 -0400&lt;/startTime&gt;     &lt;startedLate&gt;&gt;false&lt;/startedLate&gt;     &lt;status&gt;RUNNING&lt;/status&gt;     &lt;sysId&gt;15331548309913031557HB5KKS6JYEUE&lt;/sysId&gt;     &lt;triggerTime&gt;2018-08-08 10:54:12 -0400&lt;/triggerTime&gt;     &lt;triggeredBy&gt;Workflow: SB_WF&lt;/triggeredBy&gt;     &lt;type&gt;Windows&lt;/type&gt;     &lt;updatedAtTime&gt;2018-08-08 10:54:48 -0400&lt;/updatedAtTime&gt;   &lt;/taskInstance&gt; &lt;/taskInstances&gt;</pre>	<p>JSON</p> <pre>[ {   "agent": "AGNT0004",   "credentials": "john.doe",   "earlyFinish": "false",   "endTime": "",   "executionUser": "ops.admin",   "exitCode": "0",   "finishedEarly": "false",   "finishedLate": "false",   "lateFinish": "false",   "lateStart": "false",   "launchTime": "2018-08-08 10:54:12 -0400",   "name": "SB_WIN",   "queuedTime": "2018-08-08 10:54:44 -0400",   "startTime": "2018-08-08 10:54:47 -0400",   "startedLate": "false",   "status": "RUNNING",   "sysId": "1513644026115442351XDI2DNW3K3YTY",   "triggerTime": "2018-08-08 10:54:12 -0400",   "triggeredBy": "Workflow: SB_WF",   "type": "Windows",   "updatedAtTime": "2018-08-08 10:54:48 -0400" } ]</pre>
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### List Task Instances: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
agentName	Agent	Name of the agent that this task instances is assigned to run on.		N	
businessServices	Member of Business Services	Business Services that this task instance belongs to.	Comma-separated list.	N	
executionUser	Execution User	Execution User of a task instance that determines the security context under which the task instance runs.	System-supplied.	N	
late	Started Late / Finished Late	Indication of whether or not to list all task instances that started late or finished late.	Valid values: true/false.	N	

lateEarly	Started Late / Finished Late / Finished Early	Indication of whether or not to list all task instances that started late, finished late, or finished early.	Valid values: true/false.	N	
name	Instance name	Name or partial name of one or more task instances.	Wildcards are supported.	Y (unless sysId is specified)	sysId
status	Status	List of comma-separated task instance status codes and/or names (not case sensitive).	<p>Specifying one or more statuses automatically excludes task instances in all other statuses.</p> <p>To list task instances for all statuses, enter &lt;status&gt;&lt;/status&gt; in the request.</p> <p>To list task instances for all statuses except one or more specific statuses, enter the status code or name for each status to be excluded with a preceding exclamation mark (!). For example, !200.</p>	N	
sysId	n/a	sys_id used within the Controller to identify a task instance.		Y (unless name is specified)	name
type	n/a	Task type of this task instance.	<p>Valid values: One of the following (not case sensitive): application_control, email, email_monitor, file_monitor, ftp, ftp_file_monitor, indesca / universal_command / ucmd, manual, sap, sql, stored_procedure, system_monitor, task_monitor, timer, universal, unix, variable_monitor, web_service, windows, workflow, zos.</p> <p>To list task instances for all task types, enter &lt;type&gt;&lt;/type&gt; in the request.</p>	N	

updatedTime	n/a	If updatedTimeType = Offset; -offset period.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• mn (minutes)</li> <li>• h (hours)</li> <li>• d (days)</li> </ul> <p>Default is d.</p> <p>Examples: -5d (last 5 days), -30mn (last 30 minutes), -6h (last 6 hours), -7 (last 7 days).</p> <p>If updatedTimeType is Since; date/time value ( yyyy-MM-dd [HH:mm:ss] )</p> <div data-bbox="919 500 1432 630" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The time is relative to the Time Zone specified for the User.</p> </div>	Y (if updatedTimeType is Offset, Since, or Older Than.)	
updatedTimeType	n/a	Type of updateTime.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Today, As Value = 1</li> <li>• As String = Offset, As Value = 2</li> <li>• As String = Since, As Value = 3</li> <li>• As String = Older Than, As Value = 4</li> </ul>	N	
workflowInstanceCriteria	n/a	Specification for how workflowInstanceName finds the matching workflow.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Oldest Active Instance, As Value = 1</li> <li>• As String = Newest Active Instance, As Value = 2</li> <li>• As String = Oldest Instance, As Value = 3</li> <li>• As String = Newest Instance, As Value = 4</li> </ul> <p>Default is Oldest Active Instance (1).</p> <div data-bbox="919 1101 1432 1256" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> Values with an underscore characters ( _ ) instead of spaces also are supported (for example, <b>oldest_active_instance</b>).</p> </div>	N	
workflowInstanceId	n/a	sys_id of the parent workflow task instance. Only task instances within this workflow task instance will be listed.		N	workflowInstanceName

workflowInstanceName	Workflow	Name of the parent workflow task instance. Only task instances within this workflow task instance will be listed.		N	workflowInstanceId
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## Task Instance Status Types

The following table describes all possible task instance statuses for all task types.



### Note

The format of multi-word task status names specified in the [Task Instance Status](#) Web Service differs from the format of task status names used in the Controller [user interface](#). In [Task Instance Status](#), the words are separated by an underscore character; in the user interface, they are separated by a space.

Status Name	Status Code	Task Type	Description
<b>Action_Required</b>	60	Manual	When a manual task launches, it goes into Action Required status, meaning a user must perform some manual activity. For details, see <a href="#">Manual task</a> .
<b>Cancel_Pending</b>	99	Agent-based	A process running on the Agent needs to be terminated. When the Cancel command is issued, the task instance will go into a Cancel Pending status until the Agent reports back that the process has been cancelled. At that point, the task instance will transition into the Cancelled status.
<b>Cancelled</b>	130	All	The task was cancelled by a user.
<b>Confirmation_Required</b>	125	z/OS	If you make JCL changes and restart a z/OS task, Universal Controller will put the task into Confirmation Required status and prompt you for a confirmation. For detailed processing steps, see <a href="#">Rerunning a z/OS Task</a> .
<b>Defined</b>	0	All	The new task instance has been created (the task has been launched).
<b>Exclusive_Requested</b>	22	All	All tasks with a <a href="#">mutually exclusive task</a> defined go immediately to a status of Exclusive Requested. If the task is available to run exclusively, the task then moves to the next appropriate processing status.
<b>Exclusive_Wait</b>	23	All	The task is <a href="#">mutually exclusive</a> with one or more other tasks, and it is waiting for those tasks to finish before it will run.
<b>Execution_Wait</b>	33	Agent-based	The task must wait to be completed; either the Agent/Agent Cluster running the task has reached its Task Execution Limit, or the ability of the Agent/Agent Cluster to run tasks has been <a href="#">suspended</a> .
<b>Failed</b>	140	All*	The task ran to a failure status.
<b>Finished</b>	190	All	The task was forced by the user to finish. The user may do this in cases where the task had a Cancelled or Failed status, and the user needed to release other task instances depending on the successful completion of this task instance in a workflow. For more information, see <a href="#">Force Finishing a Task</a> .
<b>Held</b>	20	All	The task has been put on hold by a user.
<b>In_Doubt</b>	110	Agent-based	The Agent is "in doubt" about the current status of the task instance. This may occur if an Agent or Agent connection goes down. In this case, the Agent restarts and reviews its data about tasks in progress. If the Agent finds a task still running, it resumes normal monitoring. If the Agent cannot find the task, this usually indicates that the task completed, but the Agent considers the task status to be "in doubt."

<b>Queued</b>	40	Agent-based	The task has been queued on a resource.
<b>Resource_Requested</b>	25	All	All tasks with a <a href="#">virtual resource</a> defined go immediately to a status of Resource Requested. If the resource is available, the task then moves to the next appropriate processing status.
<b>Resource_Wait</b>	30	All	All tasks with a <a href="#">virtual resource</a> defined go immediately to a status of Resource Requested. If the resource is not available, the task goes to a status of Resource Wait. When the resource becomes available, the task moves to the next appropriate processing status
<b>Running</b>	80	All	The task is running. For Agent-based tasks, the Agent has started running the program.
<b>Running/Problems</b>	81	Workflow	One or more tasks within the workflow has one of the following statuses: <ul style="list-style-type: none"> <li>• Cancelled</li> <li>• Confirmation Required</li> <li>• Failure</li> <li>• In Doubt</li> <li>• Running/Problems (for sub-workflows)</li> <li>• Start Failure</li> <li>• Undeliverable</li> </ul>
<b>Skipped</b>	180	All	The task was skipped by a user.
<b>Start Failure</b>	120	All	The task was unable to start.
<b>Started</b>	70	Agent-based , Manual	The task has started. For Agent-based tasks, this means the Agent has received the task.
<b>Submitted</b>	43	z/OS	The task has been submitted to the z/OS Job Entry subsystem and scheduled by the z/OS Job Scheduler.
<b>Success</b>	200	All	The task has completed successfully. Workflows will transition to Success status when all of its tasks have transitioned to Success, Finished, or Skipped status.
<b>Time_Wait</b>	15	All (except Timer)	The task is waiting to start based on a Wait To Start and/or Delay On Start specification.
<b>Undeliverable</b>	35	Agent-based	The Agent is unavailable.
<b>Waiting</b>	10	All	The task has been loaded by a workflow and is waiting on a predecessor.

\* Workflows cannot go to Failed status.

## List Task Instance Variables (Show Variables)

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/showvariables">http://host_name/opswise/resources/taskinstance/showvariables</a>
HTTP Method	GET
Description	Retrieve the variables for a specific task instance. (Comparable to the <a href="#">Show Variables</a> functionality in the user interface.)
Authentication	HTTP Basic



Example URI	<ul style="list-style-type: none"> <li>• <a href="http://host_name/opswise/resources/taskinstance/showvariables?taskinstancename=Complete_Order">http://host_name/opswise/resources/taskinstance/showvariables?taskinstancename=Complete_Order</a></li> <li>• <a href="http://host_name/opswise/resources/taskinstance/showvariables?taskinstancename=Complete_Order&amp;fetchglobal=true">http://host_name/opswise/resources/taskinstance/showvariables?taskinstancename=Complete_Order&amp;fetchglobal=true</a></li> <li>• <a href="http://host_name/opswise/resources/taskinstance/showvariables?taskinstanceid=1540493193934844131JT6DW8IKYH2MM">http://host_name/opswise/resources/taskinstance/showvariables?taskinstanceid=1540493193934844131JT6DW8IKYH2MM</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example URI Properties	See <a href="#">List Task Instance Variables: Example URI Properties</a> .
Example Response	See <a href="#">List Task Instance Variables: XML and JSON Response Examples</a> .

## List Task Instance Variables (Show Variables): XML and JSON Response Examples

XML	JSON
<p>XML</p> <pre>&lt;showVariables&gt;   &lt;instanceName&gt;Complete_Order&lt;/instanceName&gt;   &lt;instanceId&gt;1540493193934844131JT6DW8IKYH2MM&lt;/instanceId&gt;   &lt;status&gt;Running&lt;/status&gt;   &lt;statusDescription&gt;&lt;/statusDescription&gt;   &lt;invokedBy&gt;Workflow: Submit_Order_Sub_Workflow&lt;/invokedBy&gt;   &lt;executionUser&gt;ops.admin&lt;/executionUser&gt;   &lt;variables&gt;     &lt;variable&gt;       &lt;name&gt;ops_agent_id&lt;/name&gt;       &lt;value&gt;c140722e9a744fcfb648388aa1d7f733&lt;/value&gt;       &lt;instanceName&gt;Complete_Order&lt;/instanceName&gt;       &lt;instanceId&gt;1540493193934844131JT6DW8IKYH2MM&lt;/instanceId&gt;     &lt;/variable&gt;     &lt;variable&gt;       &lt;name&gt;ops_attempt&lt;/name&gt;       &lt;value&gt;1&lt;/value&gt;       &lt;instanceName&gt;Complete_Order&lt;/instanceName&gt;       &lt;instanceId&gt;1540493193934844131JT6DW8IKYH2MM&lt;/instanceId&gt;     &lt;/variable&gt;     &lt;variable&gt;       &lt;name&gt;ops_avg_estimated_end_time&lt;/name&gt;       &lt;value&gt;2018-10-25 16:49:30 -0400&lt;/value&gt;       &lt;instanceName&gt;Complete_Order&lt;/instanceName&gt;       &lt;instanceId&gt;1540493193934844131JT6DW8IKYH2MM&lt;/instanceId&gt;     &lt;/variable&gt;     &lt;variable&gt;       &lt;name&gt;ops_cluster_hostname&lt;/name&gt;       &lt;value&gt;jmwin7&lt;/value&gt;       &lt;instanceName&gt;Complete_Order&lt;/instanceName&gt;       &lt;instanceId&gt;1540493193934844131JT6DW8IKYH2MM&lt;/instanceId&gt;     &lt;/variable&gt;     &lt;variable&gt;       &lt;name&gt;ops_cluster_id&lt;/name&gt;</pre>	<p>JSON</p> <pre>{   "instanceName": "Complete_Order",   "instanceId":   "1540493193934844131JT6DW8IKYH2MM",   "status": "Running",   "statusDescription": "",   "invokedBy": "Workflow:   Submit_Order_Sub_Workflow",   "executionUser": "ops.admin",   "variables": [     {       "name": "ops_agent_id",       "value":       "c140722e9a744fcfb648388aa1d7f733",       "instanceName": "Complete_Order",       "instanceId":       "1540493193934844131JT6DW8IKYH2MM"     },     {       "name": "ops_attempt",       "value": "1",       "instanceName": "Complete_Order",       "instanceId":       "1540493193934844131JT6DW8IKYH2MM"     },     {       "name": "ops_avg_estimated_end_tim       "value": "2018-10-25 16:49:30 -040       "instanceName": "Complete_Order",       "instanceId":       "1540493193934844131JT6DW8IKYH2MM"     },     {       "name": "ops_cluster_hostname",</pre>

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        <value>jmwin7:9081-ops6204</value>
        <instanceName>Complete_Order</instanceName>
        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
    </variable>
    <variable>
        <name>ops_cluster_ipaddr</name>
        <value>10.253.1.49</value>
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        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
    </variable>
    <variable>
        <name>ops_cluster_mode</name>
        <value>Active</value>
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        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
    </variable>
    <variable>
        <name>ops_cluster_start_time</name>
        <value>2018-10-25 14:46:33 -0400</value>
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        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
    </variable>
    <variable>
        <name>ops_cluster_uptime</name>
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        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
    </variable>
    <variable>
        <name>ops_cmd</name>
        <value>C:\orders\bin\do_order.bat</value>
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        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
    </variable>
    <variable>
        <name>ops_cmd_parms</name>
        <value>C:\orders\342\67.csv</value>
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        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
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        <value></value>
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        <name>ops_custom_field2</name>
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        "value": "jmwin7:9081-ops6204",
        "instanceName": "Complete_Order",
        "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
    },
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        "value": "10.253.1.49",
        "instanceName": "Complete_Order",
        "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
    },
    {
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        "value": "Active",
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        "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
    },
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Seconds",
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"1540493193934844131JT6DW8IKYH2MM"
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        "value":
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        "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
    },
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```

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        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
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    <variable>
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        <value>ops.admin</value>
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    </variable>
    <variable>
        <name>ops_exit_code</name>
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        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
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        <name>ops_highest_estimated_end_time</name>
        <value>2018-10-25 16:53:00 -0400</value>
        <instanceName>Complete_Order</instanceName>
        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
    </variable>
    <variable>
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        <value>2018-10-25 16:48:00 -0400</value>
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        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
    </variable>
    <variable>
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        <value>2018-10-25 16:48:00 -0400</value>
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        <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
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    <variable>
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"1540493193934844131JT6DW8IKYH2MM"
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    {
        "name": "ops_custom_field2",
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        "name": "ops_description",
        "value": "",
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    {
        "name": "ops_execution_user",
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    },
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        "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
    },
    },
    {
    
```

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    <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
  </variable>
  <variable>
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    <value></value>
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    <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
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    <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
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    <value>2018-10-25 16:48:00 -0400</value>
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  <variable>
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  <variable>
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  <variable>
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    "instanceId":
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  },
  {
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    "value": "2018-10-25 16:48:00 -0400",
    "instanceName": "Complete_Order",
    "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
  },
  {
    "name": "ops_status",
    "value": "RUNNING",
    "instanceName": "Complete_Order",
    "instanceId":
"1540493193934844131JT6DW8IKYH2MM"

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  <value>Windows</value>
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  <instanceId>1540493193934844131JT6DW8IKYH2MM</instanceId>
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  <value>1540493193934840131AAC49YBBVB4BB</value>
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  <value>C:\orders\${client_no}\${order_no}.csv</value>
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  <value>${client_contact},orders@stonebranch.com</value>
  <valueResolved>client@stonebranch.com,orders@stonebranch.com</valueResolved>
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<variable>
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},
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  "value": "",
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},
{
  "name": "ops_system_identifier",
  "value": "DEV",
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  "instanceId":
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},
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  "value":
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  "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
},
{
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  "value": "Complete_Order",
  "instanceName": "Complete_Order",
  "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
},
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  "value": "2",
  "instanceName": "Complete_Order",
  "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
},
{
  "name": "ops_task_time_zone",
  "value": "America/New_York",
  "instanceName": "Complete_Order",
  "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
},
{
  "name": "ops_task_type",
  "value": "Windows",
  "instanceName": "Complete_Order",
  "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
},
{
  "name": "ops_task_type_value",
  "value": "3",
  "instanceName": "Complete_Order",
  "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
},
{
  "name": "ops_top_level_workflow_id
"value":

```

```

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<instanceId>1540493193934840131AAC49YBBVB4BB</instanceId>
<inherited>true</inherited>
</variable>
<variable>
  <name>client_no</name>
  <value>342</value>
  <instanceName>Client_Workflow</instanceName>
  <instanceId>1540493193934840131AAC49YBBVB4BB</instanceId>
  <inherited>true</inherited>
</variable>
<variable>
  <name>ops_time_zone</name>
  <value>America/New_York</value>
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</variable>
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  <value>Client_Workflow #TRIGGER#</value>
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  <instanceId>1540493193934840131AAC49YBBVB4BB</instanceId>
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<variable>
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  <inherited>true</inherited>
</variable>

```

```

"1540493193934840131AAC49YBBVB4BB",
  "instanceName": "Complete_Order",
  "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
  },
  {
    "name": "ops_vertex_id",
    "value": "2",
    "instanceName": "Complete_Order",
    "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
  },
  {
    "name": "ops_workflow_id",
    "value":
"1540493193934842131RCD2RVA6OQX9G",
    "instanceName": "Complete_Order",
    "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
  },
  {
    "name": "ops_workflow_name",
    "value": "Submit_Order_Sub_Workflo",
    "instanceName": "Complete_Order",
    "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
  },
  {
    "name": "order_file",
    "value":
"C:\\orders\\${client_no}\\${order_no}.csv",
    "valueResolved":
"\\orders\\342\\67.csv",
    "instanceName": "Complete_Order",
    "instanceId":
"1540493193934844131JT6DW8IKYH2MM"
  },
  {
    "name": "order_no",
    "value": "67",
    "instanceName":
"Submit_Order_Sub_Workflow",
    "instanceId":
"1540493193934842131RCD2RVA6OQX9G",
    "inherited": true
  },
  {
    "name": "recipients",
    "value":
"${client_contact},orders@stonebranch.com",
    "valueResolved":
"client@stonebranch.com,orders@stonebranch.com",
    "instanceName":
"Submit_Order_Sub_Workflow",
    "instanceId":
"1540493193934842131RCD2RVA6OQX9G",
    "inherited": true
  },
  {
    "name": "client_contact",
    "value": "client@stonebranch.com",

```

```
</variables>
</showVariables>
```

```

      "instanceName": "Client_Workflow",
      "instanceId":
"1540493193934840131AAC49YBBVB4BB",
      "inherited": true
    },
    {
      "name": "client_no",
      "value": "342",
      "instanceName": "Client_Workflow",
      "instanceId":
"1540493193934840131AAC49YBBVB4BB",
      "inherited": true
    },
    {
      "name": "ops_time_zone",
      "value": "America/New_York",
      "instanceName": "Client_Workflow",
      "instanceId":
"1540493193934840131AAC49YBBVB4BB",
      "inherited": true
    },
    {
      "name": "ops_trigger_name",
      "value": "Client_Workflow #TRIGGER",
      "instanceName": "Client_Workflow",
      "instanceId":
"1540493193934840131AAC49YBBVB4BB",
      "inherited": true
    },
    {
      "name": "ops_trigger_time",
      "value": "2018-10-25 16:48:00 -040",
      "instanceName": "Client_Workflow",
      "instanceId":
"1540493193934840131AAC49YBBVB4BB",
      "inherited": true
    },
    {
      "name": "ops_trigger_time_tz",
      "value": "2018-10-25 16:48:00 -040",
      "instanceName": "Client_Workflow",
      "instanceId":
"1540493193934840131AAC49YBBVB4BB",
      "inherited": true
    },
    {
      "name": "recipients",
      "value": "${client_contact}",
      "valueResolved":
"client@stonebranch.com",
      "instanceName": "Client_Workflow",
      "instanceId":
"1540493193934840131AAC49YBBVB4BB",
      "inherited": false
    },
    {
      "name": "DATE_YYYY_MM_DD",
      "value": "${_date('yyyy-MM-dd')}",
      "valueResolved": "2018-10-25",
      "inherited": true
    }
  }

```

```
} ]
```

### List Task Instance Variables (Show Variables): Example URI Properties

	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
criteria	n/a	Used if <code>taskinstancename</code> is specified; Specific task instance with this <code>taskinstancename</code> .	String; URI parameter. Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
taskinstanceid	UUID	UUID of the task instance for which you want to list variables.	String; URI parameter.	Y (unless <code>taskinstancename</code> is specified.)	<code>taskinstancename</code>
taskinstancename	Instance Name	Name of the task instance for which you want to list variables.	String; URI parameter.	Y (unless <code>taskinstanceid</code> is specified.)	<code>taskinstanceid</code>
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

### Release a Task Instance from Hold

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/release">http://host_name/opswise/resources/taskinstance/release</a>
HTTP Method	POST
Description	Releases the specified task instance from hold.  For Workflow task instances, if the <code>recursive</code> property is set to true, all children task instances will be released from hold.  See <a href="#">Releasing a Task Instance from Hold</a> for a description of behavior and restrictions.
Authentication	HTTP Basic
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/release">http://localhost:8080/opswise/resources/taskinstance/release</a>



Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Release a Task Instance from Hold: XML and JSON Examples</a> .
Request Properties	See <a href="#">Release a Task Instance from Hold: Request Properties</a>
Example Response	See <a href="#">Release a Task Instance from Hold: XML and JSON Examples</a> .

### Release a Task Instance from Hold: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt;   &lt;recursive&gt;true&lt;/recursive&gt; &lt;/task-instance&gt;</pre> <p>or</p> <pre>&lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test" }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;release&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Release executed successfully against task instance "Timer 60".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "release",   "success": true,   "info": "Command Release executed successfully against task instance \"Task 1\".",   "errors": "" }</pre>

### Release a Task Instance from Hold: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With

criteria	n/a	Specific task instance with this task instance name which you want to release from hold.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	<code>sys_id</code> used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance		Y (unless id is specified)	id
recursive	n/a	For Workflow task instances only; Specification for whether or not to release from hold all children task instances of the task instance.	Boolean; Valid values: true/false. Default is false.	N	
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Rerun a Task Instance


	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/rerun">http://host_name/opswise/resources/taskinstance/rerun</a>
HTTP Method	POST
Description	Rerun a task instance.
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/rerun">http://localhost:8080/opswise/resources/taskinstance/rerun</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json

Produces Content-Type	application/xml, application/json
Example Request	See Rerun a Task Instance: XML and JSON Examples.
Request Properties	See Rerun a Task Instance: Request Properties.
Example Response	See Rerun a Task Instance: XML and JSON Examples.


### Rerun a Task Instance: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>▼ XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt;   &lt;taskStatus&gt;Success&lt;/taskStatus&gt;   &lt;recursive&gt;true&lt;/recursive&gt; &lt;/task-instance&gt;</pre>	<p>▼ JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test" }</pre>
Example Response	<p>▼ XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;rerun&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Re-run executed successfully against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>▼ JSON</p> <pre>{   "type": "rerun",   "success": true,   "info": "Command Re-run executed successfully against task instance \"Task 1\".",   "errors": "" }</pre>

### Rerun a Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
criteria	n/a	Specific task instance with this task instance name that you want to rerun.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> <p>Default is Oldest Active Instance (1).</p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> Values with an underscore characters ( _ ) instead of spaces also are supported (for example, <b>oldest_active_instance</b>).</p> </div>	N	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
recursive	n/a	Indication of whether or not tasks within sub-workflows will qualify for rerun.	Valid values: true/false. Default is false.	N	
taskStatus	Status	If matched task instance is workflow type; List of comma-separated status codes or case-insensitive status names. All tasks within the matching workflow with a matching status will be queued for rerun.	<p>Valid statuses:</p> <ul style="list-style-type: none"> <li>Start_Failure (120)</li> <li>Cancelled (130)</li> <li>Failed (140)</li> <li>Finished (190)</li> <li>Success (200)</li> </ul>	N	
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Retrieve Task Instance Output

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/retrieveoutput">http://host_name/opswise/resources/taskinstance/retrieveoutput</a>
HTTP Method	GET
Description	<p>Retrieves the output of a task instance.</p> <div style="background-color: #ffffcc; padding: 10px; margin: 10px 0;"> <p> <b>Note</b>                      When Universal Controller requests the output from the associated Agent, only the output type specified by the <code>outputtype</code> property will be requested. However, the Universal Controller response also will include any previously requested output associated with the task instance in the database, regardless of output type.</p> </div>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/taskinstance/retrieveoutput?taskinstanceid=14573966811010045745MXV75CR7QE8G&amp;outputtype=STDOUT&amp;numlines=10&amp;startline">http://localhost:8080/opswise/resources/taskinstance/retrieveoutput?taskinstanceid=14573966811010045745MXV75CR7QE8G&amp;outputtype=STDOUT&amp;numlines=10&amp;startline</a></li> <li><a href="http://localhost:8080/opswise/resources/taskinstance/retrieveoutput?taskinstancename=testZosTask&amp;workflowinstancename=testWorkflow">http://localhost:8080/opswise/resources/taskinstance/retrieveoutput?taskinstancename=testZosTask&amp;workflowinstancename=testWorkflow</a></li> </ul>
Example URI Properties	See <a href="#">Retrieve Task Instance Output: Example URI Properties</a> .
Example Response	See <a href="#">Retrieve Task Instance Output: XML and JSON Response Examples</a> .

### Retrieve Task Instance Output: XML and JSON Response Examples

<a href="#">XML</a>	<a href="#">JSON</a>
---------------------	----------------------

**XML**

```
<taskInstanceOutputs>
<taskInstanceOutput>
  <attemptCount>1</attemptCount>
  <outputData>
    test output data
  </outputData>
  <outputType>STDOUT</outputType>
</taskInstanceOutput>
<taskInstanceOutput>
  <attemptCount>1</attemptCount>
  <outputData>[empty]</outputData>
  <outputType>STDERR</outputType>
</taskInstanceOutput>
</taskInstanceOutputs>
```

**JSON**

```
[
  {
    "attemptCount": 1,
    "outputData": "This is the output.",
    "outputFileName": null,
    "outputType": "STDOUT"
  },
  {
    "attemptCount": 1,
    "outputData": "[empty]",
    "outputFileName": null,
    "outputType": "STDERR"
  }
]
```

### Retrieve Task Instance Output: Example URI Properties

	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
criteria	n/a	Used if taskinstancename is specified; Specific task instance with this taskinstancename.	String; URI parameter. Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1). <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;"> <p><b>Note</b> Values with an underscore characters ( _ ) instead of spaces also are supported (for example, <b>oldest_active_instance</b>).</p> </div>	N	
numlines	Number of Lines	Number of lines to retrieve.	Integer	N	
outputtype	Output Type	Type of task instance output to retrieve.	String; URI parameter. Valid values: <ul style="list-style-type: none"> <li>As String = OUTERR, As Value = 0</li> <li>As String = STDOUT, As Value = 1</li> <li>As String = STDERR, As Value = 2</li> </ul> Default is OUTERR (0).	Y (except for z/OS task instances: output defaults to z/OS joblog)	

scantext	Scan Text	Scan the data for the text specified and retrieve only that.	String; URI parameter.	N	
startline	Start Line	Retrieve data beginning at the line indicated.	Integer; URI parameter. Default is 1.	N	
taskinstanceid	UUID	UUID of the task instance for which you want to retrieve output.	String; URI parameter.	Y (unless taskinstancename is specified.)	taskinstancename
taskinstancename	Instance Name	Name of the task instance for which you want to retrieve output.	String; URI parameter.	Y (unless taskinstanceid is specified.)	taskinstanceid
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Set or Modify Wait Time/Duration for Task Instance


	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/settimewait">http://host_name/opswise/resources/taskinstance/settimewait</a>
HTTP Method	POST
Description	Sets or modifies a wait time/duration for a task instance.
Authentication	HTTP Basic
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/settimewait">http://localhost:8080/opswise/resources/taskinstance/settimewait</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Set or Modify Wait Time/Duration for Task Instance: XML and JSON Examples</a> .
Request Properties	See <a href="#">Set or Modify Wait Time/Duration for Task Instance: Request Properties</a> .
Example Response	See <a href="#">Set or Modify Wait Time/Duration for Task Instance: XML and JSON Examples</a> .

## Set or Modify Wait Time/Duration for Task Instance: XML and JSON Examples

Examples	XML	JSON
----------	-----	------

<p>Example Request</p>	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt;   &lt;waitType&gt;time&lt;/waitType&gt;   &lt;waitTime&gt;00:33&lt;/waitTime&gt;   &lt;delayType&gt;duration&lt;/delayType&gt;   &lt;delayDuration&gt;00:00:00:33&lt;/delayDuration&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "id": "15137106032955949535QDWA9IA700W",   "waitType": "Time",   "waitTime": "00:33",   "delayType": "duration",   "delayDuration": "00:00:00:33" }</pre>
<p>Example Response</p>	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;set_timewait&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully set timewait for task instance   "test task".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "set_timewait",   "success": true,   "info": "Successfully set timewait for task instance   \"Task 1\".",   "errors": "" }</pre>

### Set or Modify Wait Time/Duration for Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
criteria	n/a	Specific task instance with this task instance name which you want to release from hold.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> <p>Default is Oldest Active Instance (1).</p> <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;"> <p> <b>Note</b> Values with an underscore characters ( _ ) instead of spaces also are supported (for example, <b>oldest_active_instance</b>).</p> </div>	N	



delayDuration	Delay Duration	If waitType is duration; Number of days, hours, minutes, and seconds to delay after starting the task.	Format: DD:HH:MM:SS	Y (if delayType is duration)	
delaySeconds	Delay Duration In Seconds	If delayType is seconds; Number of seconds to delay after starting the task.	Format: SS	Y (if delayType is seconds)	
delayType	Delay On Start	Amount of time to delay the start of a task once it is eligible to start.	Valid values: <ul style="list-style-type: none"> <li>• As String = none, As Value = 0</li> <li>• As String = duration, As Value = 2</li> <li>• As String = seconds, As Value = 3</li> </ul>	Y (unless waitType is specified.)	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance		Y (unless id is specified)	id

waitDayConstraint	Wait Day Constraint	If waitTime is time or relative time; Specification for whether or not to advance the wait time to another day.	Valid values: <ul style="list-style-type: none"> <li>As String = none, As Value = 0                     <ul style="list-style-type: none"> <li>If waitType is time; Advance to the next day if calculated wait time is before the current time.</li> <li>If waitType is relative time; Advance to the next day if calculated wait time is before the Trigger/Launch Time.</li> </ul> </li> <li>As String = same day/same_day, As Value = 1 (Do not advance day.)</li> <li>As String = next day/next_day, As Value = 2 (Advance to the next day.)</li> <li>As String = next business day/next_business_day, As Value = 3 (Advance to the next business day.)</li> <li>As String = sunday, As Value = 4 (If today is not Sunday, advance to next Sunday.)</li> <li>As String = monday, As Value = 5 (If today is not Monday, advance to next Monday.)</li> <li>As String = tuesday, As Value = 6 (If today is not Tuesday, advance to next Tuesday.)</li> <li>As String = wednesday, As Value = 7 (If today is not Wednesday, advance to next Wednesday.)</li> <li>As String = thursday, As Value = 8 (If today is not Thursday, advance to next Thursday.)</li> <li>As String = friday, As Value = 9 (If today is not Friday, advance to next Friday.)</li> <li>As String = saturday, As Value = 10 (If today is not Saturday, advance to next Saturday.)</li> </ul>	N	
waitDuration	Wait Duration	If waitType is duration; Number of days, hours, minutes, and seconds to wait before starting the task.	Format: DD:HH:MM:SS	Y (if {{waitType is duration})	
waitSeconds	Wait Duration In Seconds	If waitType is seconds; Number of seconds to wait before starting the task.	Format: SS	Y (if waitType is seconds)	
waitTime	Wait Time	If waitType is time or relative time; Number of hours and minutes to wait before starting the task.	Format: HH:MM	Y (if waitType is time or relative time)	
waitType	Wait To Start	Amount of time to wait before starting a task after it has been launched.	Valid values: <ul style="list-style-type: none"> <li>As String = none, As Value = 0</li> <li>As String = time, As Value = 1</li> <li>As String = duration, As Value = 2</li> <li>As String = seconds, As Value = 3</li> <li>As String = relative time, As Value = 4</li> </ul>	Y (unless delayType is specified.)	

workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	
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## Set Priority for a Task Instance

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/setpriority">http://host_name/opswise/resources/taskinstance/setpriority</a>
HTTP Method	POST
Description	Set priority for a task instance (Linux/Unix, Windows, Universal, or z/OS). See <a href="#">Changing the Priority of a Task Instance</a> for a description of behavior and restrictions.
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/setpriority">http://localhost:8080/opswise/resources/taskinstance/setpriority</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Set Priority for a Task Instance: XML and JSON Examples</a> .
Request Properties	See <a href="#">Set Priority for a Task Instance: Request Properties</a> .
Example Response	See <a href="#">Set Priority for a Task Instance: XML and JSON Examples</a> .

### Set Priority for a Task Instance: XML and JSON Examples

Examples	XML	JSON
----------	-----	------

<p>Example Request</p>	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt;   &lt;priorityType&gt;medium&lt;/priorityType&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt;   &lt;priorityType&gt;medium&lt;/priorityType&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test",   "priorityType": "High" }</pre>
<p>Example Response</p>	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;set_priority_(low   medium   high)&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Command Set Priority (low   medium   high) executed   successfully against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "set_priority_high",   "success": true,   "info": "Command Set Priority High executed   successfully against task instance \"Task 1\".",   "errors": "" }</pre>

### Set Priority for a Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
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criteria	n/a	Specific task instance with this task instance name that you want to set a priority for.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
priorityType	n/a	Sets the priority for this task instance.	Valid values: low, medium, high; Case-insensitive.	Y	
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Skip a Task Instance

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/skip">http://host_name/opswise/resources/taskinstance/skip</a>
HTTP Method	POST
Description	Skip a task instance.
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/skip">http://localhost:8080/opswise/resources/taskinstance/skip</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Skip a Task Instance: XML and JSON Examples</a> .

Request Properties	See <a href="#">Skip a Task Instance: Request Properties</a> .
Example Response	See <a href="#">Skip a Task Instance: XML and JSON Examples</a> .

### Skip a Task Instance: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;</pre> <p>or</p> <pre>&lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test", }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;skip&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Skip executed successfully against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "skip",   "success": true,   "info": "Command Skip executed successfully against task instance \"Task 1\".",   "errors": "" }</pre>

### Skip a Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With

criteria	n/a	Specific task instance with this task instance <code>name</code> that you want to skip.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	<code>sys_id</code> used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Skip a Task Instance Path

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/skippath">http://host_name/opswise/resources/taskinstance/skippath</a>
HTTP Method	POST
Description	Skip a task instance and all of its dependent task instances.
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/skippath">http://localhost:8080/opswise/resources/taskinstance/skippath</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Skip a Task Instance Path: XML and JSON Examples</a> .
Request Properties	See <a href="#">Skip a Task Instance Path: Request Properties</a> .

Example Response	See <a href="#">Skip a Task Instance Path: XML and JSON Examples</a> .
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### Skip a Task Instance Path: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test", }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;skip&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Command Skip Path executed successfully against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "skip",   "success": true,   "info": "Command Skip Path executed successfully against task instance \"Task 1\".",   "errors": "" }</pre>

### Skip a Task Instance Path: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With



criteria	n/a	Specific task instance with this task instance name whose path you want to skip.	Valid values: <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> Default is Oldest Active Instance (1).	N	
id	n/a	sys_id used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Unskip a Task Instance

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/unskip">http://host_name/opswise/resources/taskinstance/unskip</a>
HTTP Method	POST
Description	Unskip a task instance.
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/unskip">http://localhost:8080/opswise/resources/taskinstance/unskip</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Unskip a Task Instance: XML and JSON Examples</a> .
Request Properties	See <a href="#">Unskip a Task Instance: Request Properties</a> .


Example Response      See [Unskip a Task Instance: XML and JSON Examples.](#)

### Unskip a Task Instance: XML and JSON Examples

Examples	XML	JSON
Example Request	<p>XML</p> <pre>&lt;task-instance&gt;   &lt;id&gt;1464817327170011848D633V6106ENQ7&lt;/id&gt; &lt;/task-instance&gt;  or  &lt;task-instance&gt;   &lt;name&gt;Timer 60&lt;/name&gt;   &lt;criteria&gt;Newest Instance&lt;/criteria&gt;   &lt;workflowInstanceName&gt;test&lt;/workflowInstanceName&gt; &lt;/task-instance&gt;</pre>	<p>JSON</p> <pre>{   "name": "Task 1",   "criteria": "Newest Instance",   "workflowInstanceName": "Test", }</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;unskip&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Unskip Path executed successfully against task instance "test".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>JSON</p> <pre>{   "type": "unskip",   "success": true,   "info": "Command Unskip executed successfully against task instance \"Task 1\".",   "errors": "" }</pre>

### Unskip a Task Instance: Request Properties

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With

criteria	n/a	Specific task instance with this task instance <code>name</code> that you want to unskip.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> <p>Default is Oldest Active Instance (1).</p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> Values with an underscore characters ( <code>_</code> ) instead of spaces also are supported (for example, <b><code>oldest_active_instance</code></b>).</p> </div>	N	
id	n/a	<code>sys_id</code> used within the Controller to identify this task instance.		Y (unless name is specified)	name
name	Instance Name	Name of the task instance.		Y (unless id is specified)	id
workflowInstanceName	Workflow	Name of the parent Workflow of the task instance.	You can select to display the Workflow field on the Activity Monitor and/or Task Instances List; it is not displayed in the Task Instance Details.	N	

## Workflow Task Instance Web Services

- [Overview](#)
- [Insert a Task into a Workflow with Dependencies](#)
- [List Predecessors / Successors of a Task Instance in a Workflow](#)

### Overview

Universal Controller supports the following RESTful-based web services for Workflow Task Instance operations, which are listed alphabetically on this page.

- [Insert a Task into a Workflow with Dependencies](#)
- [List Predecessors / Successors of a Task Instance in a Workflow](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

### Insert a Task into a Workflow with Dependencies

	Description
URI	<a href="http://host_name/opswise/resources/taskinstance/ops-task-insert">http://host_name/opswise/resources/taskinstance/ops-task-insert</a>
HTTP Method	POST
Description	Insert a task into a Workflow with dependencies.
Authentication	HTTP Basic
Example URI	<a href="http://localhost:8080/opswise/resources/taskinstance/ops-task-insert">http://localhost:8080/opswise/resources/taskinstance/ops-task-insert</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Request Example	See <a href="#">Insert a Task into a Workflow with Dependencies: XML and JSON Examples</a> .
Request Properties	See <a href="#">Insert a Task into a Workflow with Dependencies: Request Properties</a> .
Response Example	See <a href="#">Insert a Task into a Workflow with Dependencies: XML and JSON Examples</a> .


### Insert a Task into a Workflow with Dependencies: XML and JSON Examples

Examples	XML	JSON
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<p>Example Request</p>	<p>▼ XML</p> <pre>&lt;task-insert&gt;   &lt;name&gt;Sleep 30&lt;/name&gt;   &lt;alias&gt;Test&lt;/alias&gt;   &lt;workflowInstanceId &gt;ac2cfdd14c8c4238a4a6ecd03db41e87&lt;/workflowInstanceId&gt;   &lt;predecessors&gt;     &lt;predecessor&gt;Sleep 30&lt;/predecessor&gt;   &lt;/predecessors&gt;   &lt;successors&gt;     &lt;successor&gt;Sleep 60&lt;/successor&gt;   &lt;/successors&gt;   &lt;vertexX&gt;25&lt;/vertexX&gt;   &lt;inheritTriggerTime&gt;true&lt;/inheritTriggerTime&gt;   &lt;vertexY&gt;25&lt;/vertexY&gt; &lt;/task-insert&gt;</pre>	<p>▼ JSON</p> <pre>{   "name": "Sleep 10",   "alias": "Test",   "workflowInstanceId": "1513717759915306953T5FNZB71S6OUF",   "predecessors": [ "Task 1" ],   "successors": [ "Sleep 60" ],   "vertexX": "25",   "inheritTriggerTime": "true",   "vertexY": "25" }</pre>
<p>Example Response</p>	<p>▼ XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;create_task&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Command Insert Task executed successfully against task instance "test workflow".&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>▼ JSON</p> <pre>{   "type": "create_task",   "success": true,   "info": "Command Insert Task executed successfully against task instance \"Test Workflow\".",   "errors": "" }</pre>

**Insert a Task into a Workflow with Dependencies: Request Properties**

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
alias	n/a	Alias used for the task within the Workflow; specifically, the value of <code>ops_exec_workflow_vertex.name</code> .		N	
id	n/a	sys_id of the task to be inserted.		Y (unless name is specified)	name
name	Task Name	Name of the task to be inserted.		Y (unless id is specified)	id

predecessors	Predecessors	Comma-separated list of predecessor task instances within the workflow for the task to be inserted.		N	
successors	Successors	Comma-separated list of successor task instances within the workflow for the task to be inserted.		N	
vertexX	n/a	x-coordinate of the task to be inserted within the workflow.	Default is 0.	N	
vertexY	n/a	y-coordinate of the task to be inserted within the workflow.	Default is 0.	N	
inheritTriggerTime	n/a	Specification for whether or not the inserted task will inherit the Trigger Time of the Workflow task instance.	Boolean; Valid values (not case-sensitive): <ul style="list-style-type: none"> <li>• Yes, Y, true</li> <li>• No, N, false</li> </ul> Default is Yes, Y, true.	N	
workflowInstanceCriteria	n/a	If search is by <code>workflowInstanceName</code> ; Specific Workflow task instance with this task instance name which you want to insert the task into.	Valid values: <ul style="list-style-type: none"> <li>• As String = oldest active instance, As Value = 1</li> <li>• As String = newest active instance, As Value = 2</li> <li>• As String = oldest instance, As Value = 3</li> <li>• As String = newest instance, As Value = 4</li> </ul> Default is oldest active instance (1). <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;">  <b>Note</b>  Values with an underscore characters ( <code>_</code> ) instead of spaces also are supported (for example, <b>oldest_active_instance</b> ). </div>	N	
workflowInstanceId	n/a	<code>sys_id</code> of the Workflow to insert the task into.		Y (unless <code>workflowInstanceName</code> is specified)	<code>workflowInstanceName</code>

workflowInstanceName	Instance Name	Name of the Workflow to insert the task into.		Y (unless workflowInstanceId is specified)	workflowInstanceId
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**Note**

- If both `predecessors` and `successors` lists are empty, the task is inserted without dependencies.
- If there is a task name in a `predecessors` or `successors` list that does not exist, the operation will fail with error **Cannot find vertex with the name ...**
- If a `predecessors` or `successors` list contains a task name with multiple occurrences in the workflow, the operation will fail with error **Multiple vertices found for the name...** (For example, the workflow contains two tasks named **Sleep 30** and you are trying to insert **Task ABC** with predecessor **Sleep 30**).

### List Predecessors / Successors of a Task Instance in a Workflow

	Description
URI	<a href="http://host_name/opwise/resources/taskinstance/dependency/list">http://host_name/opwise/resources/taskinstance/dependency/list</a>
HTTP Method	GET
Description	Returns the list of task instance dependencies.
URI Parameters	See <a href="#">List Predecessors / Successors of a Task Instance in a Workflow: URI Parameters</a> .
Example URI	<ul style="list-style-type: none"> <li>• To list all dependencies for the task instance id: <a href="http://localhost:8080/opwise/resources/taskinstance/dependency/list?taskinstanceid=431191ad05e6483c8cfa71380947268c">http://localhost:8080/opwise/resources/taskinstance/dependency/list?taskinstanceid=431191ad05e6483c8cfa71380947268c</a></li> <li>• To list all successors for the task instance name <b>X</b>: <a href="http://localhost:8080/opwise/resources/taskinstance/dependency/list?taskinstancename=X&amp;dependencytype=successors">http://localhost:8080/opwise/resources/taskinstance/dependency/list?taskinstancename=X&amp;dependencytype=successors</a></li> <li>• To list all predecessors for the oldest task instance named <b>X</b> in workflow <b>Y</b>: <a href="http://localhost:8080/opwise/resources/taskinstance/dependency/list?taskinstancename=X&amp;workflowinstancename=Y&amp;criteria=oldest_instance&amp;dependencytype=predece">http://localhost:8080/opwise/resources/taskinstance/dependency/list?taskinstancename=X&amp;workflowinstancename=Y&amp;criteria=oldest_instance&amp;dependencytype=predece</a></li> </ul>
Authentication	HTTP Basic
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List Predecessors / Successors of a Task Instance in a Workflow: XML and JSON Examples</a> .
Response Properties	See <a href="#">List Predecessors / Successors of a Task Instance in a Workflow: Response Properties</a> .


### List Predecessors / Successors of a Task Instance in a Workflow: XML and JSON Examples

XML	JSON
<p>XML</p> <pre> &lt;task-dependencies&gt;   &lt;task-dependency&gt;     &lt;condition&gt;Success&lt;   /condition&gt;     &lt;name&gt;Sleep 30&lt;   /name&gt;     &lt;satisfied&gt;&gt;false&lt;   /satisfied&gt;     &lt;taskInstanceId &gt;1471465078487058257PY97G57T09HKB&lt;   /taskInstanceId&gt;     &lt;type&gt;predecessors&lt;   /type&gt;     &lt;vertexId&gt;20&lt;   /vertexId&gt;     &lt;vertexName&gt;Sleep 30&lt;/vertexName&gt;   &lt;/task-dependency&gt;   &lt;task-dependency&gt;     &lt;condition&gt;Success&lt;   /condition&gt;     &lt;name&gt;Opswise - Sleep 60&lt;/name&gt;     &lt;satisfied&gt;&gt;false&lt;   /satisfied&gt;     &lt;taskInstanceId &gt;151371775991531795355TV2GX49AWD6&lt;   /taskInstanceId&gt;     &lt;type&gt;successors&lt;   /type&gt;     &lt;vertexId&gt;2&lt;   /vertexId&gt;     &lt;vertexName&gt;Sleep 60&lt;/vertexName&gt;   &lt;/task-dependency&gt; </pre>	<p>JSON</p> <pre> [ {   "condition": {     "value": "Success"   },   "name": "Sleep 30",   "satisfied": false,   "taskInstanceId": "1471465078487058257PY97G57T09HKB",   "type": "Predecessor",   "vertexId": "20",   "vertexName": "Sleep 30" }, {   "condition": {     "value": "Success"   },   "name": "Sleep 60",   "satisfied": false,   "taskInstanceId": "151371775991531795355TV2GX49AWD6",   "type": "Successor",   "vertexId": "2",   "vertexName": "Sleep 60" } ] </pre>

**List Predecessors / Successors of a Task Instance in a Workflow: URI Parameters**

Parameter	Description	Specifications	Required	Mutually Exclusive With



criteria	If taskinstancename is specified; Specific task instance with this task instance name for which you want to list predecessors and successors.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>As String = oldest active instance, As Value = 1</li> <li>As String = newest active instance, As Value = 2</li> <li>As String = oldest instance, As Value = 3</li> <li>As String = newest instance, As Value = 4</li> </ul> <p>Default is oldest active instance (1).</p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid black;"> <p> <b>Note</b> Values with an underscore characters ( _ ) instead of spaces also are supported (for example, <b>oldest_active_instance</b> ).</p> </div>	N	
dependencytype	Type of dependency to list for the task instance.	Valid values: predecessors, successors, * (all predecessors and successors).	N	
taskinstanceid	sys_id of the task instance for which you want to list predecessors and successors.		Y (unless taskinstancename is specified)	taskinstancename
taskinstancename	Name of the task instance for which you want to list predecessors and successors.		Y (unless taskinstanceid is specified)	taskinstanceid
workflowinstancename	If taskinstancename is specified; Name of the Workflow task instance containing the task instance for which you want to list predecessors and successors.		N	

**List Predecessors / Successors of a Task Instance in a Workflow: Response Properties**

Property	UI Field Name	Description
condition	n/a	Dependency condition between the task instance and the listed Predecessor / Successor task instance.
name	n/a	Resolved name of the Predecessor / Successor task instance.
satisfied	n/a	Indication of whether the condition was satisfied or not satisfied.

taskInstanceId	n/a	sys_id of the task instance for which the Predecessor / Successor task instance is listed.
type	n/a	Type of dependency for the Predecessor / Successor task instance.
vertexId	n/a	Vertex ID of the Predecessor / Successor task instance. Each task instance within a Workflow has a unique Vertex ID to distinguish it from other tasks, if any, of the same name.
vertexName	n/a	Name of the Predecessor / Successor task instance.

## Task Web Services

- [Overview](#)
- [Delete a Task](#)
- [Launch a Task](#)
- [List All Workflows That a Task Belongs To](#)
- [List Tasks](#)

### Overview

Universal Controller supports the following RESTful-based web services for Task operations.

Formatting specifications for each web service, including details about parameter requirements, are provided.

### Common Web Services

The following web services are common to all Task types:

- [Delete a Task](#)
- [Launch a Task](#)
- [List All Workflows That a Task Belongs To](#)
- [List Tasks](#)

Detailed information for each of these web services is provided on this page.

### Task-Specific Web Services

The following web services are specific for each Task type:

- [Create a Task](#)
- [Modify a Task](#)
- [Read a Task](#)

For detail information about these task-specific web services, see:

- [Application Control Task Web Services](#)
- [Email Task Web Services](#)
- [Email Monitor Task Web Services](#)
- [File Monitor Task Web Services](#)
- [File Transfer Task Web Services](#)
- [FTP File Monitor Task Web Services](#)
- [Linux Unix Task Web Services](#)
- [Manual Task Web Services](#)
- [PeopleSoft Task Web Services](#)
- [SAP Task Web Services](#)
- [SQL Task Web Services](#)
- [Stored Procedure Task Web Services](#)

- System Monitor Task Web Services
- Task Monitor Task Web Services
- Timer Task Web Services
- Universal Command Task Web Services
- Universal Task Web Services
- Variable Monitor Task Web Services
- Web Service Task Web Services
- Windows Task Web Services
- Workflow Task Web Services
- z/OS Task Web Services

## Delete a Task

	Description
URI	<code>http://host_name/opswise/resources/task</code>
HTTP Method	DELETE
Description	Deletes the specified <i>task</i> .
URI Parameters	See <a href="#">Delete a Task: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li>• <code>http://localhost:8080/opswise/resources/task?taskname=testTask</code></li> <li>• <code>http://localhost:8080/opswise/resources/task?taskid=d26265a2c4f345359d9b356f18a462c1</code></li> </ul>
Authentication	HTTP Basic
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Task deleted successfully.</li> <li>• Status 400 /Bad Request Mutual exclusion violation. Cannot specify taskname and taskid at the same time.</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>

### Delete a Task: URI Parameters

Parameter	Description	Specifications	Required	Mutually Exclusive With
taskid	ID used within the Controller to identify this task.	String; URI parameter.	Y (unless taskname is specified)	taskname
taskname	Name used within the Controller to identify this task.	String; URI parameter.	Y (unless taskid is specified)	taskid

## Launch a Task

	Description
URI	<a href="http://host_name/opswise/resources/task/ops-task-launch">http://host_name/opswise/resources/task/ops-task-launch</a>
HTTP Method	POST
Description	Launches the specified <a href="#">task</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/task/ops-task-launch">http://localhost:8080/opswise/resources/task/ops-task-launch</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Launch a Task: XML and JSON Examples</a> .
Example Request for Task-Related Records	See <a href="#">Launch a Task: XML and JSON Examples</a> .
Request Properties	See <a href="#">Launch a Task: Request Properties</a> .
Request Task-Related Records Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Task-Related Records Properties: Variables</a>.</li> <li>• See <a href="#">Task-Related Records Properties: Virtual Resources</a>.</li> </ul>
Example Response	See <a href="#">Launch a Task: XML and JSON Examples</a> .

### Launch a Task: XML and JSON Examples

Examples	XML	JSON
Example Request for Task	<p>XML</p> <pre>&lt;task-launch&gt;   &lt;variables /&gt;   &lt;virtual-resources /&gt;   &lt;name&gt;Timer 0&lt;/name&gt;   &lt;timeZone&gt;America/Halifax&lt;/timeZone&gt;   &lt;virtualResourcePriority&gt;10&lt; /virtualResourcePriority&gt;   &lt;hold&gt;yes&lt;/hold&gt; &lt;/task-launch&gt;</pre>	<p>JSON</p> <pre>{   "variables": null,   "virtual-resources": null,   "name": "Timer 0",   "timeZone": "America/Halifax",   "virtualResourcePriority": 10,   "hold": "yes" }</pre>

<p>Example Request for Task-Related Records</p>	<p>▼ XML</p> <p>Variables</p> <pre>&lt;variables&gt;   &lt;variable&gt;     &lt;name&gt;testVar&lt;/name&gt;     &lt;value&gt;value&lt;/value&gt;   &lt;/variable&gt; &lt;/variables&gt;</pre> <p>Virtual Resources</p> <pre>&lt;virtual-resources&gt;   &lt;virtual-resource&gt;     &lt;name&gt;Opwise - Solo&lt;/name&gt;     &lt;limit&gt;2&lt;/limit&gt;   &lt;/virtual-resource&gt; &lt;/virtual-resources&gt;</pre>	<p>▼ JSON</p> <pre>{   "variables": [{     "name": "testvar",     "value": "abc"   }],   "virtualResources": [ {     "name": "aaaaa",     "limit": 2   } ],   "name": "Timer 0",   "virtualResourcePriority": 10,   "hold": "yes" }</pre>
<p>Example Response</p>	<p>▼ XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;launch&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully launched the Timer task   Timer 0.&lt;/info&gt;   &lt;sysId&gt;1484021712811013671DQNR5P2F9846&lt;/sysId&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>	<p>▼ JSON</p> <pre>{   "type": "launch",   "success": true,   "info": "Successfully launched the Timer task "Timer 0"   with task instance sys_id   15136440261151733518FCQUD1BNHITA with hold on start.",   "errors": "",   "sysId": "15136440261151733518FCQUD1BNHITA" }</pre>

### Launch a Task: Request Properties

Property	UI Field Name	Description	Specifications	Required
hold	Hold on Start	Indicates that when the task is launched, it appears in the Activity Monitor with a status of <b>Held</b> . The task runs when the user releases it.	Valid values = Yes,Y,true	N
name	Task Name	Name of the task.		Y
timeZone	Time Zone	Time Zone in the which the task is launched.		N

virtualResourcePriority	Virtual Resource Priority	Priority for acquiring a resource when two or more tasks are waiting for the resource; applies to all resources required by the task.	Integer; Valid values: 1 (high) to 20 (low). Default is 10.	N
-------------------------	---------------------------	---	---	---

### Task-Related Records Properties: Variables

Property	UI Field Name	Description	Specifications	Required
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y

### Task-Related Records Properties: Virtual Resources

The virtual resource dependencies specified in `virtual-resources` are merged with the default virtual resource dependencies:

- If a default virtual resource dependency already exists for a specified virtual resource amount, the virtual resource dependency is updated.
- Any virtual resource specified with an amount of **0** is dropped from the default virtual resource dependencies; if the virtual resource did not exist as a default dependency, the command will fail.
- If a default virtual resource dependency does not already exist for a specified virtual resource amount, the virtual resource dependency is added. |

Property	UI Field Name	Description	Specifications	Required
description	Resource Description	Description of the virtual resource.		N
name	Resource Name	Name of the virtual resource.		Y
limit	Resource Limit	Maximum number of units for this resource.		Y

### List All Workflows That a Task Belongs To

	Description
URI	<a href="http://host_name/opswise/resources/task/parent/list">http://host_name/opswise/resources/task/parent/list</a>
HTTP Method	GET
Description	Retrieves a list of parent workflows that a task belongs to.
URI Parameters	See <a href="#">List All Workflows That a Task Belongs To: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/task/parent/list?taskname=SB_JOB">http://localhost:8080/opswise/resources/task/parent/list?taskname=SB_JOB</a></li> <li>• <a href="http://localhost:8080/opswise/resources/task/parent/list?taskid=fcd85a9c486845139bee49cbd5af3d98">http://localhost:8080/opswise/resources/task/parent/list?taskid=fcd85a9c486845139bee49cbd5af3d98</a></li> </ul>
Authentication	HTTP Basic
Consumes Content-Type	n/a

Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">List All Workflows That a Task Belongs To: XML and JSON Examples</a> .
Response Properties	See <a href="#">List All Workflows That a Task Belongs To: Response Properties</a> .

**List All Workflows That a Task Belongs To: URI Parameters**

Parameter	Description	Specifications	Required	Mutually Exclusive With
taskid	ID used within the Controller to identify this task.	String; URI parameter.	Y (unless taskname is specified)	taskname
taskname	Name used within the Controller to identify this task.	String; URI parameter.	Y (unless taskid is specified)	taskid

**List All Workflows That a Task Belongs To: XML and JSON Examples**

Examples	XML	JSON
----------	-----	------



Example Response

XML

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<workflows>
  <workflow>
    <name>WF_A</name>
    <sysId>2be1385324ab410995fda3f0292c07ee</sysId
  >
    <description />
    <version>2</version>
    <vertexName>SB_JOB</vertexName>
    <vertexId>2</vertexId>
  </workflow>
  <workflow>
    <name>WF_B</name>
    <sysId>c8d5ad7cee3f46288482872dbd63770c</sysId>
    <description />
    <version>43</version>
    <vertexName>SB_JOB</vertexName>
    <vertexId>2</vertexId>
  </workflow>
  <workflow>
    <name>WF_C</name>
    <sysId>830105616cc74d7d8d394bedc1c47a43</sysId>
    <description />
    <version>6</version>
    <vertexName>SB_JOB.1</vertexName>
    <vertexId>2</vertexId>
  </workflow>
  <workflow>
    <name>WF_C</name>
    <sysId>830105616cc74d7d8d394bedc1c47a43</sysId>
    <description />
    <version>6</version>
    <vertexName>SB_JOB.2</vertexName>
    <vertexId>3</vertexId>
  </workflow>
</workflows>
```

JSON

```
[ {
  "name": "WF_A",
  "sysId":
  "2be1385324ab410995fda3f0292c07ee",
  "description": null,
  "version": 2,
  "vertexName": "SB_JOB",
  "vertexId": "2"
}, {
  "name": "WF_B",
  "sysId": "c8d5ad7cee3f46288482872dbd63770c",
  "description": null,
  "version": 43,
  "vertexName": "SB_JOB",
  "vertexId": "2"
}, {
  "name": "WF_C",
  "sysId": "830105616cc74d7d8d394bedc1c47a43",
  "description": null,
  "version": 6,
  "vertexName": "SB_JOB.1",
  "vertexId": "2"
}, {
  "name": "WF_C",
  "sysId": "830105616cc74d7d8d394bedc1c47a43",
  "description": null,
  "version": 6,
  "vertexName": "SB_JOB.2",
  "vertexId": "3"
} ]
```

List All Workflows That a Task Belongs To: Response Properties

Property	UI Field Name	Description
description	Task Description	User-defined description of this workflow.
name	Task Name	Name of this workflow.
sysId	UUID	sys_id used within the Controller to identify this workflow.
version	Version	Version number of this workflow.

vertexId	n/a	Vertex ID of the task within this workflow.
vertexName	n/a	Name (or alias) of the task within this workflow.

## List Tasks

	Description
URI	<a href="http://host_name/opswise/resources/task/list">http://host_name/opswise/resources/task/list</a>
HTTP Method	POST
Description	Retrieves information on tasks matching specific search criteria.
Example URI	<a href="http://localhost:8080/opswise/resources/task/list">http://localhost:8080/opswise/resources/task/list</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">List Tasks: XML and JSON Examples</a> .
Request Properties	See <a href="#">List Tasks: Request Properties</a> .
Example Response	See <a href="#">List Tasks: XML and JSON Examples</a> .


## List Tasks: XML and JSON Examples

Examples	XML	JSON
----------	-----	------

<p>Example Request</p>	<p>XML</p> <pre>&lt;generic-query-filter&gt;   &lt;name&gt;*&lt;/name&gt;   &lt;type&gt;Timer&lt;/type&gt;   &lt;updatedAtTimeType&gt;offset&lt;/updatedAtTimeType&gt;   &lt;updatedAtTime&gt;-10d&lt;/updatedAtTime&gt;   &lt;businessServices&gt;bService1,bService2&lt; /businessServices&gt; &lt;/generic-query-filter&gt;  or  &lt;generic-query-filter&gt;   &lt;name&gt;*&lt;/name&gt;   &lt;workflowId&gt;1463438057231012663TP5JP5EA801YS&lt; /workflowId&gt; &lt;/generic-query-filter&gt;</pre>	<p>JSON</p> <pre>All task instances in the last three minutes. {   "name": "*",   "updatedAtTimeType": "offset",   "updatedAtTime": "-3mn" }  Or  {   "name": "*",   "workflowId": "a21c68bba02c43919d5a6d6042a3f082" }</pre>
<p>Example Response</p>	<p>XML</p> <pre>&lt;tasks&gt;   &lt;task&gt;     &lt;description&gt;description&lt;/description&gt;     &lt;name&gt;test task 1&lt;/name&gt;     &lt;sysID&gt;410d6c0bc0a801c901838d8ac43b3279&lt;/sysID&gt;     &lt;type&gt;Windows&lt;/type&gt;     &lt;version&gt;2&lt;/version&gt;   &lt;/task&gt;   &lt;task&gt;     &lt;description&gt;description&lt;/description&gt;     &lt;name&gt;test task 2&lt;/name&gt;     &lt;sysID&gt;410d6880c0a801c90196685fcc1ecb47&lt;/sysID&gt;     &lt;type&gt;Windows&lt;/type&gt;     &lt;version&gt;9&lt;/version&gt;   &lt;/task&gt; &lt;/tasks&gt;</pre>	<p>JSON</p> <pre>[ {   "description": "Description",   "name": "test task 1",   "sysId": "371be743130a4b18a9fc49961650593c",   "type": "Timer",   "version": 23 }, {   "description": "Description",   "name": "test task 2",   "sysId": "10d58f96ab2b42e69d7e9bdde2ed21a7",   "type": "Timer",   "version": 2 } ]</pre>

**List Tasks: Request Properties**

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
businessServices	Member of Business Services	Business Services that this task instance belongs to.	Comma-separated list.	N	

name	Task Name	Name or partial name of one or more tasks.	Wildcards are supported.	N	
type	n/a	Task Type of tasks to list.	<p>Valid values: One of the following (not case sensitive):</p> <ul style="list-style-type: none"> <li>• As String = Workflow, As Value = 1</li> <li>• As String = Timer, As Value = 2</li> <li>• As String = Windows, As Value = 3</li> <li>• As String = Linux/Unix, As Value = 4</li> <li>• As String = z/OS, As Value = 5</li> <li>• As String = File Monitor, As Value = 6</li> <li>• As String = Manual, As Value = 7</li> <li>• As String = Email, As Value = 8</li> <li>• As String = File Transfer, As Value = 9</li> <li>• As String = SQL, As Value = 10</li> <li>• As String = FTP File Monitor, As Value = 11</li> <li>• As String = Task Monitor, As Value = 12</li> <li>• As String = Stored Procedure, As Value = 13</li> <li>• As String = Universal Command, As Value = 14</li> <li>• As String = System Monitor, As Value = 15</li> <li>• As String = Application Control, As Value = 16</li> <li>• As String = SAP, As Value = 17</li> <li>• As String = Variable Monitor, As Value = 18</li> <li>• As String = Web Service, As Value = 19</li> <li>• As String = Email Monitor, As Value = 20</li> <li>• As String = PeopleSoft, As Value = 21</li> <li>• As String = Universal, As Value = 99</li> </ul> <p>To list tasks for all task types, enter &lt;type&gt;&lt;/type&gt; in the request.</p>	N	
updatedAt	n/a	If updatedAtType = Offset; -offset period.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• mn (minutes)</li> <li>• h (hours)</li> <li>• d (days)</li> </ul> <p>Default is d.</p> <p>Examples: -5d (last 5 days), -30mn (last 30 minutes), -6h (last 6 hours), -7 (last 7 days).</p> <p>If updatedAtType is Since; date/time value (yyyy-MM-dd [HH:mm:ss])</p> <p>If updatedAtType is Today; updatedAt is ignored.</p> <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;"> <p> <b>Note</b> The time is relative to the Time Zone specified for the User.</p> </div>	Y (if updatedAtType is Offset, Since, or Older Than.)	

updatedTimeType	n/a	Type of updateTime.	Valid values: <ul style="list-style-type: none"> <li>• As String = Today, As Value = 1</li> <li>• As String = Offset, As Value = 2</li> <li>• As String = Since, As Value = 3</li> <li>• As String = Older Than, As Value = 4</li> </ul>	N	
workflowId	n/a	ID used within the Controller to identify a workflow.	If workflowId or workflowName is specified, List Tasks returns a list of tasks within that workflow.	N	workflowName
workflowName	Task Name	Name of a workflow.	If workflowId or workflowName is specified, List Tasks returns a list of tasks within that workflow.	N	workflowId

## Application Control Task Web Services

- [Overview](#)
- [Create an Application Control Task](#)
- [Modify an Application Control Task](#)
- [Read an Application Control Task](#)
- [Application Control Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Application Control Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create an Application Control Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Application Control task.  To persist <code>sysIds</code> , use the <code>retainSysIds</code> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Application Control Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify an Application Control Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Application Control Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Application Control Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read an Application Control Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	taskId or taskname
Mutually Exclusive Parameters	taskId and taskname
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Application Control Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## Application Control Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in the `<task type>` element in XML.

Examples	XML	JSON
Example for Task	<p>▼ XML</p> <pre>&lt;taskApplicationControl retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;false&lt; /efEnabled&gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; /executionRestriction&gt;   &lt;holdResources&gt;false&lt; /holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt; /lfDayConstraint&gt;</pre>	<p>▼ JSON</p> <pre>{   "type": "taskApplicationControl",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "application": "test",   "command": "QUERY",   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opswise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,   "efTime": "00:00",   "efType": "Time",   "excludeRelated": false,   "exclusiveTasks": [],   "executionRestriction": "Run",</pre>



```

        <lfDuration>00:00:00:00<
    /lfDuration>
    <lfEnabled>>false<
    /lfEnabled>
    <lfNthAmount>1<
    /lfNthAmount>
    <lfTime>00:00</lfTime>
    <lfType>Time</lfType>
    <lsDayConstraint>Nth<
    /lsDayConstraint>
    <lsDuration>00:00:00:00<
    /lsDuration>
    <lsEnabled>>false<
    /lsEnabled>
    <lsNthAmount>7<
    /lsNthAmount>
    <lsTime>00:00</lsTime>
    <lsType>Time</lsType>
    <name>Opwise - Test
    Email</name>
    <opwiseGroups />
    <resolveNameImmediately
    >false</resolveNameImmediately>
    <resPriority>10<
    /resPriority>
    <restrictionPeriod>Span<
    /restrictionPeriod>
    <
    restrictionPeriodAfterDate
    >2017-11-10<
    /restrictionPeriodAfterDate>
    <
    restrictionPeriodAfterTime>10:30<
    /restrictionPeriodAfterTime>
    <
    restrictionPeriodBeforeDate
    >2017-11-20<
    /restrictionPeriodBeforeDate>
    <
    restrictionPeriodBeforeTime>15:00<
    /restrictionPeriodBeforeTime>
    <restrictionPeriodDateList
    />
    <startHeld>>false<
    /startHeld>
    <startHeldReason />
    <summary>Test Email<
    /summary>
    <sysId
    >fb59a227517a421a92c15ff5aefe3b66<
    /sysId>
    <timeZonePref>-- System
    Default --</timeZonePref>
    <twDelayAmount />
    <twDelayDuration
    >00:00:00:00</twDelayDuration>
    <twDelayType>None<
    /twDelayType>

```

```

"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Opwise - Test Email",
"notes": [],
"opwiseGroups": null,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 1,

```

```
<twWaitAmount />
<twWaitDayConstraint>NONE<
/twWaitDayConstraint>
<twWaitDuration
>00:00:00:00</twWaitDuration>
<twWaitTime>00:00<
/twWaitTime>
<twWaitType>None<
/twWaitType>
<twWorkflowOnly>-- System
Default --</twWorkflowOnly>
<userEstimatedDuration />
<application>test app<
/application>
```

```
"virtualResources": [ ]
}
```

```
<command>QUERY</command>  
</taskApplicationControl>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Application Control Task Properties](#)

## Email Task Web Services

- [Overview](#)
- [Create an Email Task](#)
- [Modify an Email Task](#)
- [Read an Email Task](#)
- [Email Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Email Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create an Email Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Email task.  To persist sysIds, use the <a href="#">retainSysIds</a> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Email Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify an Email Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Email Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Email Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read an Email Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Email Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## Email Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in the `<task type>` element in XML.

Examples	XML	JSON
Example for Task	<p>XML</p> <pre>&lt;taskEmail retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt;/cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; / customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt;/efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt;/efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt;/efEnabled&gt;   &lt;efNthAmount&gt;10&lt;/efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; / executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt;/holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt;/lfDayConstraint&gt;   &lt;lfDuration&gt;00:00:00:00&lt;/lfDuration&gt;   &lt;lfEnabled&gt;&gt;false&lt;/lfEnabled&gt;   &lt;lfNthAmount&gt;1&lt;/lfNthAmount&gt;   &lt;lfTime&gt;00:00&lt;/lfTime&gt;   &lt;lfType&gt;Time&lt;/lfType&gt;   &lt;lsDayConstraint&gt;Nth&lt;/lsDayConstraint&gt;   &lt;lsDuration&gt;00:00:00:00&lt;/lsDuration&gt;   &lt;lsEnabled&gt;&gt;false&lt;/lsEnabled&gt;   &lt;lsNthAmount&gt;7&lt;/lsNthAmount&gt;</pre>	<p>JSON</p> <pre>{   "type": "taskEmail",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "attachLocalFile": true,   "bccRecipients": null,   "body": "This is a test.",   "ccRecipients": null,   "connection": "Gmail Account",   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opswise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,   "efTime": "00:00",   "efType": "Time",</pre>

```

<lsTime>00:00</lsTime>
<lsType>Time</lsType>
<name>Test Email</name>
<opswiseGroups />
<resolveNameImmediately>>false<
/resolveNameImmediately>
<resPriority>10</resPriority>
<restrictionPeriod>Span</restrictionPeriod>
<restrictionPeriodAfterDate>2017-11-10<
/restrictionPeriodAfterDate>
  <restrictionPeriodAfterTime>10:30<
/restrictionPeriodAfterTime>
  <restrictionPeriodBeforeDate>2017-11-20<
/restrictionPeriodBeforeDate>
  <restrictionPeriodBeforeTime>15:00<
/restrictionPeriodBeforeTime>
  <restrictionPeriodDateList />
  <startHeld>>false</startHeld>
  <startHeldReason />
  <summary>Test Email</summary>
  <sysId>fb59a227517a421a92c15ff5aefe3b66<
/sysId>
  <timeZonePref>-- System Default --<
/timeZonePref>
  <twDelayAmount />
  <twDelayDuration>00:00:00:00<
/twDelayDuration>
  <twDelayType>None</twDelayType>
  <twWaitAmount />
  <twWaitDayConstraint>NONE<
/twWaitDayConstraint>
  <twWaitDuration>00:00:00:00</twWaitDuration>
  <twWaitTime>00:00</twWaitTime>
  <twWaitType>None</twWaitType>
  <twWorkflowOnly>-- System Default --<
/twWorkflowOnly>
  <userEstimatedDuration />
  <attachLocalFile>>true</attachLocalFile>
  <bccRecipients />
  <body>This is a test.</body>
  <ccRecipients />
  <connection>Gmail Account</connection>
  <localAttachment>report.pdf</localAttachment
>
  <localAttachmentsPath>E:\temp<
/localAttachmentsPath>
  <replyTo />
  <report />
  <reportVar />
  <subject>Test Email sent from ${_hostname()}
(${_ipaddress()})</subject>
  <template>Test Template</template>

```

```

"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"localAttachment": "report.pdf",
"localAttachmentsPath": "E:\temp",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Test Email",
"notes": [],
"opswiseGroups": null,
"replyTo": null,
"report": null,
"reportVar": null,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"startHeld": false,
"startHeldReason": null,
"subject": "Test Email sent from ${_hostname()}
(${_ipaddress()})",
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"template": "Test Template",
"templateVar": null,
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 1,

```

```
<templateVar />  
</taskEmail>
```

```
"virtualResources": []  
}
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Email Task Properties](#)



## Email Monitor Task Web Services

- [Overview](#)
- [Create an Email Monitor Task](#)
- [Modify an Email Monitor Task](#)
- [Read an Email Monitor Task](#)
- [Email Monitor Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Email Monitor Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create an Email Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Email Monitor task.  To persist sysIds, use the <a href="#">retainSysIds</a> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Email Monitor Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify an Email Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Email Monitor Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Email Monitor Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read an Email Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See Email Monitor Task: XML and JSON Examples.)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties</a> .

## Email Monitor Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>▼ XML</p> <pre>&lt;taskEmailMonitor retainSysIds ="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials&gt;outlook&lt; /credentials&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt; /efEnabled&gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; /executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt; /holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt;</pre>	<p>▼ JSON</p> <pre>{   "type": "taskEmailMonitor",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "action": "Mark As Read",   "body": null,   "bodyBeginMarker": "TBD",   "bodyEndMarker": "TBD",   "bodyFilter": "None",   "bodyVariables": "None",   "caseSensitive": false,   "cc": null,   "ccFilter": "None",   "connection": "Test Email Connection",   "connectionVar": null,   "contentProcessingType": "None",   "contentValue": null,   "csContentProcessing": false,   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": "outlook",   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opswise/"   },   "customField2": {</pre>

```

/lfDayConstraint>
  <lfDuration>00:00:00:00<
/lfDuration>
  <lfEnabled>>false<
/lfEnabled>
  <lfNthAmount>1<
/lfNthAmount>
  <lfTime>00:00</lfTime>
  <lfType>Time</lfType>
  <lsDayConstraint>Nth<
/lsDayConstraint>
  <lsDuration>00:00:00:00<
/lsDuration>
  <lsEnabled>>false<
/lsEnabled>
  <lsNthAmount>7<
/lsNthAmount>
  <lsTime>00:00</lsTime>
  <lsType>Time</lsType>
  <name>Opswise - Test
Email</name>
  <opswiseGroups />
  <resolveNameImmediately
>false</resolveNameImmediately>
  <resPriority>10<
/resPriority>
  <restrictionPeriod>Span<
/restrictionPeriod>
  <
restrictionPeriodAfterDate
>2017-11-10<
/restrictionPeriodAfterDate>
  <
restrictionPeriodAfterTime>10:30<
/restrictionPeriodAfterTime>
  <
restrictionPeriodBeforeDate
>2017-11-20<
/restrictionPeriodBeforeDate>
  <
restrictionPeriodBeforeTime>15:00<
/restrictionPeriodBeforeTime>
  <restrictionPeriodDateList
/>
  <startHeld>>false<
/startHeld>
  <startHeldReason />
  <summary>Test Email<
/summary>
  <sysId
>fb59a227517a421a92c15ff5aefe3b66<
/sysId>
  <timeZonePref>-- System
Default --</timeZonePref>
  <twDelayAmount />
  <twDelayDuration
>00:00:00:00</twDelayDuration>
  <twDelayType>None<

```

```

  "label": null,
  "value": null
},
"efDayConstraint": "Nth Day",
"efDuration": "00:00:00:00",
"efEnabled": false,
"efNthAmount": 10,
"efTime": "00:00",
"efType": "Time",
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"filterLogic": "And",
"from": null,
"fromFilter": "None",
"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"mailboxFolder": true,
"mailboxFolderDestination": null,
"moveToTrash": true,
"name": "Opswise - Test Email",
"notes": [],
"opswiseGroups": null,
"receivedAfter": "Date",
"receivedAfterDate": null,
"receivedAfterOffset": "00:00",
"receivedBefore": "Date",
"receivedBeforeDate": null,
"receivedBeforeOffset": "00:00",
"receivedOn": "Date",
"receivedOnDate": null,
"receivedRestriction": "None",
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"sentAfter": "Date",
"sentAfterDate": null,
"sentAfterOffset": "00:00",
"sentBefore": "Date",
"sentBeforeDate": null,
"sentBeforeOffset": "00:00",

```

```

/twDelayType>
  <twWaitAmount />
  <twWaitDayConstraint>NONE<
/twWaitDayConstraint>
  <twWaitDuration
>00:00:00:00:00</twWaitDuration>
  <twWaitTime>00:00<
/twWaitTime>
  <twWaitType>None<
/twWaitType>
  <twWorkflowOnly>-- System
Default --</twWorkflowOnly>
  <userEstimatedDuration />
  <action>Mark As Read<
/action>
  <body />
  <bodyBeginMarker>TBD<
/bodyBeginMarker>
  <bodyEndMarker>TBD<
/bodyEndMarker>
  <bodyFilter>None<
/bodyFilter>
  <bodyVariables>None<
/bodyVariables>
  <caseSensitive>>false<
/caseSensitive>
  <cc />
  <ccFilter>None</ccFilter>
  <connection>Test Email
Connection</connection>
  <connectionVar />
  <contentProcessingType
>None</contentProcessingType>
  <contentValue />
  <csContentProcessing
>>false</csContentProcessing>
  <filterLogic>And<
/filterLogic>
  <from />
  <fromFilter>None<
/fromFilter>
  <includeReadEmail>>true<
/includeReadEmail>
  <mailboxFolder>true<
/mailboxFolder>
  <mailboxFolderDestination
/>
  <moveToTrash>true<
/moveToTrash>
  <receivedAfter>Date<
/receivedAfter>
  <receivedAfterDate />
  <receivedAfterOffset
>00:00</receivedAfterOffset>
  <receivedBefore>Date<
/receivedBefore>
  <receivedBeforeDate />
  <receivedBeforeOffset

```

```

"sentOn": "Date",
"sentOnDate": null,
"sentRestriction": "None",
"startHeld": false,
"startHeldReason": null,
"subject": null,
"subjectFilter": "None",
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeLimit": 12,
"timeLimitUnit": "Hours",
"timeZonePref": "-- System Default --",
"to": null,
"toFilter": "None",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"useAdvancedCriteria": false,
"userEstimatedDuration": null,
"variables": [],
"version": 1,

```

```
>00:00</receivedBeforeOffset>  
  <receivedOn>Date<  
/receivedOn>  
  <receivedOnDate />  
  <receivedRestriction>None<  
/receivedRestriction>  
  <sentAfter>Date</sentAfter  
>  
  <sentAfterDate />  
  <sentAfterOffset>00:00<  
/sentAfterOffset>  
  <sentBefore>Date<  
/sentBefore>  
  <sentBeforeDate />  
  <sentBeforeOffset>00:00<  
/sentBeforeOffset>  
  <sentOn>Date</sentOn>  
  <sentOnDate />  
  <sentRestriction>None<  
/sentRestriction>  
  <subject />  
  <subjectFilter>None<  
/subjectFilter>  
  <timeLimit>12</timeLimit>  
  <timeLimitUnit>Hours<  
/timeLimitUnit>  
  <to />  
  <toFilter>None</toFilter>  
  <useAdvancedCriteria
```

```
"virtualResources": []  
}
```

```
>false</useAdvancedCriteria>  
</taskEmailMonitor>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Email Monitor Task Properties](#)

## File Monitor Task Web Services

- [Overview](#)
- [Create a File Monitor Task](#)
- [Modify a File Monitor Task](#)
- [Read a File Monitor Task](#)
- [File Monitor Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for File Monitor Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a File Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new File Monitor task.  To persist <code>sysIds</code> , use the <code>retainSysIds</code> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">File Monitor Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .



Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a File Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify File Monitor Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">File Monitor Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a File Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See File Monitor Task: XML and JSON Examples.)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties</a> .

## File Monitor Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>XML</p> <pre>&lt;taskFileMonitor retainSysIds ="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;agent /&gt;   &lt;agentCluster&gt;Opwise Demo Cluster&lt;/agentCluster&gt;   &lt;agentClusterVar /&gt;   &lt;agentVar /&gt;   &lt;broadcastCluster /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt; /efEnabled&gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;</pre>	<p>JSON</p> <pre>{   "type": "taskFileMonitor",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "agent": null,   "agentCluster": "Opwise Demo Cluster",   "agentClusterVar": null,   "agentVar": null,   "broadcastCluster": null,   "byPercentage": null,   "byScale": "1024",   "bySize": null,   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opwise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,</pre>

```

    <executionRestriction>Run<
  /executionRestriction>
    <holdResources>false<
  /holdResources>
    <lfDayConstraint>Nth<
  /lfDayConstraint>
    <lfDuration>00:00:00:00<
  /lfDuration>
    <lfEnabled>false<
  /lfEnabled>
    <lfNthAmount>1<
  /lfNthAmount>
    <lfTime>00:00</lfTime>
    <lfType>Time</lfType>
    <lsDayConstraint>Nth<
  /lsDayConstraint>
    <lsDuration>00:00:00:00<
  /lsDuration>
    <lsEnabled>false<
  /lsEnabled>
    <lsNthAmount>7<
  /lsNthAmount>
    <lsTime>00:00</lsTime>
    <lsType>Time</lsType>
    <name>Opswise - Test
  Email</name>
    <opswiseGroups />
    <resolveNameImmediately
  >false</resolveNameImmediately>
    <resPriority>10<
  /resPriority>
    <restrictionPeriod>Span<
  /restrictionPeriod>
    <
  restrictionPeriodAfterDate
  >2017-11-10<
  /restrictionPeriodAfterDate>
    <
  restrictionPeriodAfterTime>10:30<
  /restrictionPeriodAfterTime>
    <
  restrictionPeriodBeforeDate
  >2017-11-20<
  /restrictionPeriodBeforeDate>
    <
  restrictionPeriodBeforeTime>15:00<
  /restrictionPeriodBeforeTime>
    <restrictionPeriodDateList
  />
    <startHeld>false<
  /startHeld>
    <startHeldReason />
    <summary>Test Email<
  /summary>
    <sysId
  >fb59a227517a421a92c15ff5aefe3b66<
  /sysId>
    <timeZonePref>-- System

```

```

"efNthAmount": 10,
"efTime": "00:00",
"efType": "Time",
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"fileName": "${demo_ops_download_dir}",
"fileOwner": "file owner",
"fntype": "Exist",
"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"maxFiles": null,
"minFileScale": "KB",
"minFileSize": null,
"name": "Opswise - Test Email",
"notes": [],
"opswiseGroups": null,
"recursive": true,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"scanForward": false,
"scanText": null,
"stableSeconds": null,
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default --",
"toScale": 1024,
"toSize": null,
"triggerOnExist": false,
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",

```

```

Default --</timeZonePref>
  <twDelayAmount />
  <twDelayDuration
>00:00:00:00</twDelayDuration>
  <twDelayType>None<
/twDelayType>
  <twWaitAmount />
  <twWaitDayConstraint>NONE<
/twWaitDayConstraint>
  <twWaitDuration
>00:00:00:00</twWaitDuration>
  <twWaitTime>00:00<
/twWaitTime>
  <twWaitType>None<
/twWaitType>
  <twWorkflowOnly>-- System
Default --</twWorkflowOnly>
  <userEstimatedDuration />
  <byPercentage />
  <byScale>1024</byScale>
  <bySize />
  <fileName
>${demo_ops_download_dir}/<
/fileName>
  <fileOwner>file owner<
/fileOwner>
  <fmttype>Exist</fmttype>
  <maxFiles />
  <minFileScale>KB</
minFileScale>
  <minFileSize />
  <recursive>true</recursive
>
  <scanForward>false<
/scanForward>
  <scanText />
  <stableSeconds />
  <toScale>1024</toScale>
  <toSize />
  <triggerOnExist>false<
/triggerOnExist>

```

```

"useRegex": true,
"userEstimatedDuration": null,
"variables": [],

```

```
<useRegex>true</useRegex>  
</taskFileMonitor>
```

```
"version": 1  
}
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [File Monitor Task Properties](#)

## File Transfer Task Web Services

- [Overview](#)
- [Create a File Transfer Task](#)
- [Modify a File Transfer Task](#)
- [Read a File Transfer Task](#)
- [File Transfer Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for File Transfer Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a File Transfer Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new File Transfer task.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">File Transfer Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a File Transfer Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>, below.</p> <p>To modify File Transfer Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">File Transfer Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a File Transfer Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See File Transfer Task: XML and JSON Examples.)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties</a> .

## File Transfer Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>XML</p> <pre>&lt;taskFtp retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;agent /&gt;   &lt;agentCluster&gt;Opwise Demo Cluster&lt;/agentCluster&gt;   &lt;agentClusterVar /&gt;   &lt;agentVar /&gt;   &lt;broadcastCluster /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt;/customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt;/efEnabled&gt;   &lt;efNthAmount&gt;10&lt;/efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; /executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt;</pre>	<p>JSON</p> <pre>{   "type": "taskFtp",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "agent": null,   "agentCluster": "Opwise Demo Cluster",   "agentClusterVar": null,   "agentVar": null,   "broadcastCluster": null,   "codepage": "-- None --",   "command": "GET",   "compress": "NO",   "cpDuration": null,   "cpDurationUnit": "Minutes",   "createop": "-- None --",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opwise/"   },   "customField2": {     "label": null,     "value": null   },   "encrypt": "NO",   "efDayConstraint": "Nth Day",</pre>



```

/holdResources>
  <lfDayConstraint>Nth<
/lfDayConstraint>
  <lfDuration>00:00:00:00<
/lfDuration>
  <lfEnabled>>false</lfEnabled>
  <lfNthAmount>1</lfNthAmount>
  <lfTime>00:00</lfTime>
  <lfType>Time</lfType>
  <lsDayConstraint>Nth<
/lsDayConstraint>
  <lsDuration>00:00:00:00<
/lsDuration>
  <lsEnabled>>false</lsEnabled>
  <lsNthAmount>7</lsNthAmount>
  <lsTime>00:00</lsTime>
  <lsType>Time</lsType>
  <name>Opswise - Test Email<
/name>
  <opswiseGroups />
  <resolveNameImmediately>>false<
/resolveNameImmediately>
  <resPriority>10</resPriority>
  <restrictionPeriod>Span<
/restrictionPeriod>
  <restrictionPeriodAfterDate
>2017-11-10<
/restrictionPeriodAfterDate>
  <restrictionPeriodAfterTime
>10:30</restrictionPeriodAfterTime>
  <restrictionPeriodBeforeDate
>2017-11-20<
/restrictionPeriodBeforeDate>
  <restrictionPeriodBeforeTime
>15:00</restrictionPeriodBeforeTime>
  <restrictionPeriodDateList />
  <startHeld>>false</startHeld>
  <startHeldReason />
  <summary>Test Email</summary>
  <sysId
>fb59a227517a421a92c15ff5aefe3b66<
/sysId>
  <timeZonePref>-- System
Default --</timeZonePref>
  <twDelayAmount />
  <twDelayDuration>00:00:00:00<
/twDelayDuration>
  <twDelayType>None</twDelayType>
>
  <twWaitAmount />
  <twWaitDayConstraint>NONE<
/twWaitDayConstraint>
  <twWaitDuration>00:00:00:00<
/twWaitDuration>
  <twWaitTime>00:00</twWaitTime>
  <twWaitType>None</twWaitType>
  <twWorkflowOnly>-- System
Default --</twWorkflowOnly>

```

```

"efDuration": "00:00:00:00",
"efEnabled": false,
"efNthAmount": 10,
"efTime": "00:00",
"efType": "Time",
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"exitCodeOutput": null,
"exitCodeProcessing": "Success Exitcode Range",
"exitCodeText": null,
"exitCodes": 0,
"formOrScript": "Form",
"format": "ASCII",
"ftpSubcommands": null,
"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"move": true,
"name": "Opswise - Test Email",
"nft": false,
"notes": [],
"opswiseGroups": null,
"outputType": "STDOUT",
"primaryBrokerChoice": "Agent",
"primaryBrokerRef": null,
"primaryCredVar": null,
"primaryCredentials": null,
"primaryFilesys": "-- None --",
"primaryOpenOptions": null,
"remoteCredVar": null,
"remoteCredentials": "Opswise - Anonymous",
"remoteFilename": "welcome.msg",
"remoteServer": "ftp.winzip.com",
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"retryExitCodes": null,
"retryIndefinitely": false,
"retryInterval": 60,
"retryMaximum": 0,
"retrySuppressFailure": false,

```

```

    <userEstimatedDuration />
    <codepage>-- None --</codepage>
  >
    <command>GET</command>
    <compress>NO</compress>
    <createop>-- None --</createop>
  >
    <encrypt>NO</encrypt>
    <exitCodeOutput />
    <exitCodeProcessing>Success
Exitcode Range</exitCodeProcessing>
    <exitCodeText />
    <exitCodes>0</exitCodes>
    <formOrScript>Form<
  /formOrScript>
    <format>ASCII</format>
    <ftpSubcommands />
    <jobcard />
    <localFilename
>${demo_ops_download_dir}/welcome.msg<
  /localFilename>
    <move>>true</move>
    <nft>>false</nft>
    <outputType>STDOUT</outputType>
  >
    <primaryBroker />
    <primaryBrokerChoice>Agent<
  /primaryBrokerChoice>
    <primaryBrokerRef />
    <primaryCredVar />
    <primaryCredentials />
    <primaryFilesys>-- None --<
  /primaryFilesys>
    <primaryOpenOptions />
    <remoteCredVar />
    <remoteCredentials>Opswise -
Anonymous</remoteCredentials>
    <remoteFilename>welcome.msg<
  /remoteFilename>
    <remoteServer>ftp.winzip.com<
  /remoteServer>
    <retryExitCodes />
    <retryIndefinitely>>false<
  /retryIndefinitely>
    <retryInterval>60<
  /retryInterval>
    <retryMaximum>0</retryMaximum>
    <retrySuppressFailure>>false<
  /retrySuppressFailure>
    <runtimeDir />
    <script />
    <secondaryBroker />
    <secondaryBrokerChoice>Agent<
  /secondaryBrokerChoice>
    <secondaryBrokerRef />
    <secondaryCredVar />
    <secondaryCredentials />
    <secondaryFilesys>-- None --<

```

```

"runtimeDir": null,
"script": null,
"secondaryBroker": null,
"secondaryBrokerChoice": "Agent",
"secondaryBrokerRef": null,
"secondaryCredVar": null,
"secondaryCredentials": null,
"secondaryFilesys": "-- None --",
"secondaryOpenOptions": null,
"serverType": "FTP",
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default --",
"transferMode": "Passive",
"trimSpace": false,
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkFlowOnly": "-- System Default --",
"udmOptions": null,
"useRegex": false,
"userEstimatedDuration": null,
"variables": [],
"version": 1,

```

```
/secondaryFilesys>  
  <secondaryOpenOptions />  
  <serverType>FTP</serverType>  
  <transferMode>Passive<  
/transferMode>  
  <trimSpace>>false</trimSpace>  
  <udmOptions />
```

```
"virtualResources": []  
}
```

```
<useRegex>false</useRegex>  
</taskFtp>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [File Transfer Task Properties](#)

## FTP File Monitor Task Web Services

- [Overview](#)
- [Create an FTP File Monitor Task](#)
- [Modify an FTP File Monitor Task](#)
- [Read an FTP File Monitor Task](#)
- [FTP File Monitor Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for FTP File Monitor Task operations, which are listed alphabetically on this page.

- [Create an FTP File Monitor Task](#)
- [Modify an FTP File Monitor Task](#)
- [Read an FTP File Monitor Task](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create an FTP File Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new FTP File Monitor task.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">FTP File Monitor Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify an FTP File Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>, below.</p> <p>To modify FTP File Monitor Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">FTP File Monitor Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read an FTP File Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See FTP File Monitor Task: XML and JSON Examples.)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties</a> .

## FTP File Monitor Task: XML and JSON Examples

The `retainsSysId` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>XML</p> <pre>&lt;taskFtpFileMonitor retainSysIds="true"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;agent /&gt;   &lt;agentCluster /&gt;   &lt;agentClusterVar /&gt;   &lt;agentVar&gt;agentVar&lt;/agentVar&gt;   &lt;broadcastCluster /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt;/cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;[credentialsVar All Tasks Properties#credentialsVar - All&lt;/customField1 All Tasks Properties#customField1 - UT]&gt;    &lt;[customField2 All Tasks Properties#customField2 - All] /&gt;    &lt;[efDayConstraint All Tasks Properties#efDayConstraint - All]&gt;Nth&lt;/efDayConstraint All Tasks Properties#efDayConstraint- All]&gt;    &lt;[efDuration All Tasks Properties#efDuration - All]&gt;00:00:00:00&lt;/efDuration All Tasks Properties#efDuration - All]&gt;    &lt;[efEnabled All Tasks Properties#efEnabled - All]&gt;&gt;false&lt;/efEnabled All Tasks Properties#efEnabled - All]&gt;    &lt;[efNthAmount All Tasks Properties#efNthAmount - All]&gt;10&lt;/efNthAmount All Tasks Properties#efNthAmount - All]&gt;    &lt;[efTime All Tasks Properties#efTime - All]&gt;00:00&lt;/efTime All</pre>	<p>JSON</p> <pre>{   "type": "taskFtpFileMonitor",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "agent": null,   "agentCluster": "Opswise Demo Cluster",   "agentClusterVar": null,   "agentVar": null,   "broadcastCluster": null,   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opswise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,</pre>

```

Tasks Properties#efTime - All] >
    <[efType|All Tasks Properties#efType - All] >Time<[/efType|All
Tasks Properties#efType - All] >

    <[executionRestriction|All Tasks Properties#executionRestriction
- All] >Run<[/executionRestriction|All Tasks
Properties#executionRestriction - All] >

    <[holdResources|All Tasks Properties#holdResources -
All] >false<[/holdResources|All Tasks Properties#holdResources - All] >

    <[lfDayConstraint|All Tasks Properties#lfDayConstraint -
All] >Nth<[/lfDayConstraint|All Tasks Properties#lfDayConstraint - All] >

    <[lfDuration|All Tasks Properties#lfDuration -
All] >00:00:00:00<[/lfDuration|All Tasks Properties#lfDuration - All] >

    <[lfEnabled|All Tasks Properties#lfEnabled -
All] >false<[/lfEnabled|All Tasks Properties#lfEnabled - All] >

    <[lfNthAmount|All Tasks Properties#lfNthAmount -
All] >1<[/lfNthAmount|All Tasks Properties#lfNthAmount - All] >

    <[lfTime|All Tasks Properties#lfTime - All] >00:00<[/lfTime|All
Tasks Properties#lfTime - All] >

    <[lfType|All Tasks Properties#lfType - All] >Time<[/lfType|All
Tasks Properties#lfType - All] >

    <[lsDayConstraint|All Tasks Properties#lsDayConstraint -
All] >Nth<[/lsDayConstraint|All Tasks Properties#lsDayConstraint - All] >

    <[lsDuration|All Tasks Properties#lsDuration -
All] >00:00:00:00<[/lsDuration|All Tasks Properties#lsDuration - All] >

    <[lsEnabled|All Tasks Properties#lsEnabled -
All] >false<[/lsEnabled|All Tasks Properties#lsEnabled - All] >

    <[lsNthAmount|All Tasks Properties#lsNthAmount -
All] >7<[/lsNthAmount|All Tasks Properties#lsNthAmount - All] >

    <[lsTime|All Tasks Properties#lsTime - All] >00:00<[/lsTime|All
Tasks Properties#lsTime - All] >

    <[lsType|All Tasks Properties#lsType - All] >Time<[/lsType|All
Tasks Properties#lsType - All] >

    <[name|All Tasks Properties#name - All] >Opwise - Test
Email<[/name|All Tasks Properties#name - All] >

    <[opwiseGroups|All Tasks Properties#opwiseGroups - All] />

    <[resolveNameImmediately|All Tasks
Properties#resolveNameImmediately -
All] >false<[/resolveNameImmediately|All Tasks
Properties#resolveNameImmediately - All] >

```

```

"efTime": "00:00",
"efType": "Time",
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"ftpFmtype": "Exist",
"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"minFileScale": "KB",
"minFileSize": 10,
"name": "Opwise - Test Email",
"notes": [],
"opwiseGroups": null,
"pollInterval": 30,
"pollMaximum": 2,
"remoteCredentials": null,
"remoteCredVar": "credVar",
"remoteFilename":
"${demo_ops_download_dir}/ftpfile.txt",
"remoteServer": "test.com",
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate":
"2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate":
"2017-11-20",
"restrictionPeriodBeforeTime":
"15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"servertype": "FTP",
"stableSeconds": null,
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId":
"fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default
--",
"transferMode": "Passive",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",

```



```

    <[resPriority|All Tasks Properties#resPriority -
All]>10<[/resPriority|All Tasks Properties#resPriority - All]>

    <[restrictionPeriod|All Tasks Properties#restrictionPeriod -
All]>Span<[/restrictionPeriod|All Tasks Properties#restrictionPeriod -
All]>

    <[restrictionPeriodAfterDate|All Tasks
Properties#restrictionPeriodAfterDate -
All]>2017-11-10<[/restrictionPeriodAfterDate|All Tasks
Properties#restrictionPeriodAfterDate - All]>

    <[restrictionPeriodAfterTime|All Tasks
Properties#restrictionPeriodAfterTime -
All]>10:30<[/restrictionPeriodAfterTime|All Tasks
Properties#restrictionPeriodAfterTime - All]>

    <[restrictionPeriodBeforeDate|All Tasks
Properties#restrictionPeriodBeforeDate -
All]>2017-11-20<[/restrictionPeriodBeforeDate|All Tasks
Properties#restrictionPeriodBeforeDate - All]>

    <[restrictionPeriodBeforeTime|All Tasks
Properties#restrictionPeriodBeforeTime -
All]>15:00<[/restrictionPeriodBeforeTime|All Tasks
Properties#restrictionPeriodBeforeTime - All]>

    <[restrictionPeriodDateList|All Tasks
Properties#restrictionPeriodDateList - All] />

    <[startHeld|All Tasks Properties#startHeld -
All]>false<[/startHeld|#startHeld - All]>

    <[startHeldReason|All Tasks Properties#startHeldReason - All] />

    <[summary|All Tasks Properties#summary - All] />

    <[sysId|All Tasks Properties#sysId -
All]>3309586343d26172001d662b049d90c8<[/sysId|#sysId - All]>

    <[timeZonePref|All Tasks Properties#timeZonePref- All]>-- System
Default --<[/timeZonePref|All Tasks Properties#timeZonePref - All]>

    <[twDelayAmount|All Tasks Properties#twDelayAmount - All] />

    <[twDelayDuration|All Tasks Properties#twDelayDuration -
All]>00:00:00:00<[/twDelayDuration|All Tasks Properties#twDelayDuration
- All]>

    <[twDelayType|All Tasks Properties#twDelayType -
All]>None<[/twDelayType|All Tasks Properties#twDelayType - All]>

    <[twWaitAmount|All Tasks Properties#twWaitAmount - All] />

    <[twWaitDayConstraint|All Tasks Properties#twWaitDayConstraint -
All] />

    <[twWaitDuration|All Tasks Properties#twWaitDuration -

```

```

"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default
--",
"useRegex": false,
"userEstimatedDuration": null,
"variables": [],
"version": 1,
"virtualResources": [],

```

```

All]>00:00:00:00<[/twWaitDuration|All Tasks Properties#twWaitDuration -
All]>

    <[/twWaitTime|All Tasks Properties#twWaitTime -
All]>00:00:00<[/twWaitTime|All Tasks Properties#twWaitTime - All]>

    <[/twWaitType|All Tasks Properties#twWaitType -
All]>None<[/twWaitType|All Tasks Properties#twWaitType - All]>

    <[/twWorkflowOnly|All Tasks Properties#twWorkflowOnly - All]>--
System Default --<[/twWorkflowOnly|All Tasks Properties#twWorkflowOnly
- All]>

    <[/userEstimatedDuration|All Tasks
Properties#userEstimatedDuration - All] />

    <[/ftpFmtype|FTP File Monitor Task Properties#ftpFmtype -
FTP]>Exist<[/ftpFmtype|FTP File Monitor Task Properties#ftpFmtype -
FTP]>

    <[/jobcard|FTP File Monitor Task Properties#jobcard - FTP] />

    <[/listOptions|FTP File Monitor Task Properties#listOptions -
FTP] />

    <[/minFileScale|FTP File Monitor Task Properties#minFileScale -
FTP]>KB<[/minFileScale|FTP File Monitor Task Properties#minFileScale -
FTP]>

    <[/minFileSize|FTP File Monitor Task Properties#minFileSize -
FTP]>10<[/minFileSize|FTP File Monitor Task Properties#minFileSize -
FTP]>

    <[/pollInterval|FTP File Monitor Task Properties#pollInterval -
FTP]>30<[/pollInterval|FTP File Monitor Task Properties#pollInterval -
FTP]>

    <[/pollMaximum|FTP File Monitor Task Properties#pollMaximum -
FTP]>2<[/pollMaximum|FTP File Monitor Task Properties#pollMaximum -
FTP]>

    <[/remoteCredentials|FTP File Monitor Task
Properties#remoteCredentials - FTP] />

    <[/remoteCredVar|FTP File Monitor Task Properties#remoteCredVar -
FTP]>credVar<[/remoteCredVar|FTP File Monitor Task
Properties#remoteCredVar - FTP]>

```

```

    "wait": true
  }

```

```

    <[remoteFilename|FTP File Monitor Task Properties#remoteFilename
- FTP]>$

```

Unknown macro: {demo\_ops\_download\_dir}

```

/ftpfile.txt<[/remoteFilename|FTP File Monitor Task Properties#remoteFilename - FTP]>
<[remoteServer|FTP File Monitor Task Properties#remoteServer -
FTP]>test.com<[/remoteServer|FTP File Monitor Task Properties#remoteServer - FTP]>
<[servertype|FTP File Monitor Task Properties#servertype - FTP]>FTP<[/servertype|FTP File
Monitor Task Properties#servertype - FTP]>
<[stableSeconds|FTP File Monitor Task Properties#stableSeconds - FTP] />
<[transferMode|FTP File Monitor Task Properties#transferMode -
FTP]>Passive<[/transferMode|FTP File Monitor Task Properties#transferMode - FTP]>
<[useRegex|FTP File Monitor Task Properties#useRegex - FTP]>>false<[/useRegex|FTP File
Monitor Task Properties#useRegex - FTP]>
<[wait|FTP File Monitor Task Properties#wait - FTP]>>true<[/wait|FTP File Monitor Task
Properties#wait - FTP]>
</taskFtpFileMonitor>
</pre>

```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [FTP File Monitor Task Properties](#)

## Linux Unix Task Web Services

- [Overview](#)
- [Create a Linux/Unix Task](#)
- [Modify a Linux/Unix Task](#)
- [Read a Linux/Unix Task](#)
- [Linux/Unix Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Linux/Unix Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a Linux/Unix Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Linux/Unix task.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Linux/Unix Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a Linux/Unix Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Linux/Unix Task properties without modifying related records, use the <a href="#">excludeRelated</a> property.</p>
Example	See <a href="#">Linux/Unix Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Linux/Unix Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

## Example Response

- Status 200 /OK  
(See [Linux/Unix Task: XML and JSON Examples.](#))
- Status 404 /Not Found  
A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.

## Linux/Unix Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<div style="text-align: right; margin-bottom: 10px;">XML</div> <pre data-bbox="365 594 863 1482"> &lt;taskUnix retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;agent /&gt;   &lt;agentCluster&gt;Opwise - Demo Linux/Unix Cluster&lt; /agentCluster&gt;   &lt;agentClusterVar /&gt;   &lt;agentVar /&gt;   &lt;broadcastCluster /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt;/efEnabled&gt; &gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt;                     </pre>	<div style="text-align: right; margin-bottom: 10px;">JSON</div> <pre data-bbox="963 594 1650 1482"> {   "type": "taskUnix",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "agent": null,   "agentCluster": "Opwise Demo Cluster",   "agentClusterVar": null,   "agentVar": null,   "broadcastCluster": null,   "command": null,   "commandOrScript": "Script",   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opwise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,   "efTime": "00:00",   "efType": "Time",                     </pre>

```

/executionRestriction>
  <holdResources>>false<
/holdResources>
  <lfDayConstraint>Nth<
/lfDayConstraint>
  <lfDuration>00:00:00:00<
/lfDuration>
  <lfEnabled>>false</lfEnabled>
>
  <lfNthAmount>1</lfNthAmount>
>
  <lfTime>00:00</lfTime>
  <lfType>Time</lfType>
  <lsDayConstraint>Nth<
/lsDayConstraint>
  <lsDuration>00:00:00:00<
/lsDuration>
  <lsEnabled>>false</lsEnabled>
>
  <lsNthAmount>7</lsNthAmount>
>
  <lsTime>00:00</lsTime>
  <lsType>Time</lsType>
  <name>Opwise - Test Email<
/name>
  <opwiseGroups />
  <resolveNameImmediately>
>false</resolveNameImmediately>
  <resPriority>10<
/resPriority>
  <restrictionPeriod>Span<
/restrictionPeriod>
  <restrictionPeriodAfterDate>
>2017-11-10<
/restrictionPeriodAfterDate>
  <restrictionPeriodAfterTime>
>10:30</restrictionPeriodAfterTime>
>
  <restrictionPeriodBeforeDate>
>2017-11-20<
/restrictionPeriodBeforeDate>
  <restrictionPeriodBeforeTime>
>15:00<
/restrictionPeriodBeforeTime>
  <restrictionPeriodDateList />
  <startHeld>true</startHeld>
  <startHeldReason>hold
reason</startHeldReason>
  <summary />
  <sysId>
>f87848b00a0001037f43e7c81c8ec969<
/sysId>
  <timeZonePref>-- System
Default --</timeZonePref>
  <twDelayAmount />
  <twDelayDuration

```

```

"environment": null,
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"exitCodeOutput": null,
"exitCodeProcessing": "Success Exitcode Range",
"exitCodeText": null,
"exitCodes": 0,
"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Opwise - Test Email",
"notes": [],
"opwiseGroups": null,
"outputFailureOnly": true,
"outputReturnFile": null,
"outputReturnNline": 100,
"outputReturnSline": 1,
"outputReturnText": null,
"outputReturnTextType": "STDERR",
"outputType": "STDOUT",
"parameters": "Opwise Demo",
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"retryExitCodes": null,
"retryIndefinitely": true,
"retryInterval": 60,
"retryMaximum": 0,
"retrySuppressFailure": false,
"runAsSudo": false,
"runtimeDir": null,
"script": "test.bat",
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,

```

```

>00:00:01:00</twDelayDuration>
  <twDelayType>Duration<
/twDelayType>
  <twWaitAmount />
  <twWaitDayConstraint />
  <twWaitDuration
>00:00:00:00</twWaitDuration>
  <twWaitTime>00:00<
/twWaitTime>
  <twWaitType>Time<
/twWaitType>
  <twWorkflowOnly>Yes<
/twWorkflowOnly>
  <userEstimatedDuration
>00:00:00:02<
/userEstimatedDuration>
  <command />
  <commandOrScript>Script<
/commandOrScript>
  <environment />
  <exitCodeOutput />
  <exitCodeProcessing>Success
Exitcode Range</exitCodeProcessing
>
  <exitCodeText />
  <exitCodes>0</exitCodes>
  <outputFailureOnly>true<
/outputFailureOnly>
  <outputReturnFile />
  <outputReturnNline>100<
/outputReturnNline>
  <outputReturnSline>1<
/outputReturnSline>
  <outputReturnText />
  <outputReturnType>STDERR<
/outputReturnType>
  <outputType>STDOUT<
/outputType>
  <parameters>Opswise Demo<
/parameters>
  <retryExitCodes />
  <retryIndefinitely>true<
/retryIndefinitely>
  <retryInterval>60<
/retryInterval>
  <retryMaximum>0<
/retryMaximum>
  <retrySuppressFailure
>false</retrySuppressFailure>
  <runAsSudo>false</runAsSudo
>
  <runtimeDir />
  <script>test.bat</script>
  <waitForOutput>false<

```

```

"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 1,
"virtualResources": [],

```



```
/waitForOutput>  
</taskUnix>
```

```
"waitForOutput": false  
}
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Linux/Unix Task Properties](#)

## Manual Task Web Services

- [Overview](#)
- [Create a Manual Task](#)
- [Modify a Manual Task](#)
- [Read a Manual Task](#)
- [Manual Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Manual Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a Manual Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Manual task.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Manual Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a Manual Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Manual Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Manual Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Manual Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

## Example Response

- Status 200 /OK  
(See [Manual Task: XML and JSON Examples.](#))
- Status 404 /Not Found  
A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.

## Manual Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>XML</p> <pre> &lt;taskManual retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; / cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt;/customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; / efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt;/efDuration &gt;   &lt;efEnabled&gt;false&lt;/efEnabled&gt;   &lt;efNthAmount&gt;10&lt;/efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; / executionRestriction&gt;   &lt;holdResources&gt;false&lt;/holdResources &gt;   &lt;lfDayConstraint&gt;Nth&lt; / lfDayConstraint&gt;   &lt;lfDuration&gt;00:00:00:00&lt;/lfDuration &gt;   &lt;lfEnabled&gt;false&lt;/lfEnabled&gt;   &lt;lfNthAmount&gt;1&lt;/lfNthAmount&gt;   &lt;lfTime&gt;00:00&lt;/lfTime&gt;                     </pre>	<p>JSON</p> <pre> {   "type": "taskManual",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opwise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,   "efTime": "00:00",   "efType": "Time",   "excludeRelated": false,   "exclusiveTasks": [],   "executionRestriction": "Run",   "holdResources": false,   "lfDayConstraint": "Nth Day",   "lfDuration": "00:00:00:00",                     </pre>

```

</lfType>Time</lfType>
<lsDayConstraint>Nth<
/lsDayConstraint>
<lsDuration>00:00:00:00</lsDuration
>
<lsEnabled>>false</lsEnabled>
<lsNthAmount>7</lsNthAmount>
<lsTime>00:00</lsTime>
<lsType>Time</lsType>
<name>Opswise - Test Email</name>
<opswiseGroups />
<resolveNameImmediately>>false<
/resolveNameImmediately>
<resPriority>10</resPriority>
<restrictionPeriod>Span<
/restrictionPeriod>
<restrictionPeriodAfterDate
>2017-11-10</restrictionPeriodAfterDate>
<restrictionPeriodAfterTime>10:30<
/restrictionPeriodAfterTime>
<restrictionPeriodBeforeDate
>2017-11-20</restrictionPeriodBeforeDate>
<restrictionPeriodBeforeTime>15:00<
/restrictionPeriodBeforeTime>
<restrictionPeriodDateList />
<startHeld>>false</startHeld>
<startHeldReason />
<summary>Test Email</summary>
<sysId
>fb59a227517a421a92c15ff5aefe3b66</sysId>
<timeZonePref>-- System Default --<
/timeZonePref>
<twDelayAmount />
<twDelayDuration>00:00:00:00<
/twDelayDuration>
<twDelayType>None</twDelayType>
<twWaitAmount />
<twWaitDayConstraint>NONE<
/twWaitDayConstraint>
<twWaitDuration>00:00:00:00<
/twWaitDuration>
<twWaitTime>00:00</twWaitTime>
<twWaitType>None</twWaitType>
<twWorkflowOnly>-- System Default
--</twWorkflowOnly>

```

```

"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Opswise - Test Email",
"notes": [],
"opswiseGroups": null,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 1,

```

```
<userEstimatedDuration />
</taskManual>
```

```
"virtualResources": []
}
```

Examples for Task Actions

XML

Abort

```
<abortAction>
  <description />
  <exitCodes />
  <notifyOnEarlyFinish>>false<
/notifyOnEarlyFinish>
  <notifyOnLateFinish>>false<
/notifyOnLateFinish>
  <notifyOnLateStart>>false<
/notifyOnLateStart>
  <status>Waiting</status>
  <sysId
>ad42c3268468425db6e1580cd53f57f0</sysId>
  <cancelProcess>>false</cancelProcess
>
  <haltOnFinish>>false</haltOnFinish>
  <overrideExitCode />
</abortAction>
```

Email Notification

JSON

Abort

```
"abortActions": [ {
  "cancelProcess": false,
  "description": null,
  "exitCodes": null,
  "haltOnFinish": true,
  "notifyOnEarlyFinish": false,
  "notifyOnLateFinish": false,
  "notifyOnLateStart": false,
  "overrideExitCode": null,
  "status": "Waiting",
  "sysId": "ad42c3268468425db6e1580cd53f57f0"
} ],
```

Email Notification

```

<emailNotification>
  <description />
  <exitCodes />
  <notifyOnEarlyFinish>>false<
/notifyOnEarlyFinish>
  <notifyOnLateFinish>>false<
/notifyOnLateFinish>
  <notifyOnLateStart>>false<
/notifyOnLateStart>
  <status>Success</status>
  <sysId
>2b72cdaaf3a145e4bbae5a7ddd24baff</sysId>
  <attachFile>>false</attachFile>
  <attachJobLog>>false</attachJobLog>
  <attachStdError>>false<
/attachStdError>
  <attachStdOut>>true</attachStdOut>
  <bcc />
  <body>test body</body>
  <cc />
  <emailConnection>Opwise - Gmail
Account</emailConnection>
  <emailTemplate />
  <emailTemplateVar />
  <fileName />
  <fileNumLines>100</fileNumLines>
  <fileScanText />
  <fileStartLine>1</fileStartLine>
  <joblogNumLines>100</joblogNumLines
>
  <joblogScanText />
  <joblogStartLine>1</joblogStartLine
>
  <replyTo>replyTo@test.com</replyTo>
  <report>
    <groupName />
    <title>report1</title>
    <userName>ops.admin</userName>
  </report>
  <stderrNumLines>100</stderrNumLines
>
  <stderrScanText />
  <stderrStartLine>1</stderrStartLine
>
  <stdoutNumLines>100</stdoutNumLines
>
  <stdoutScanText />
  <stdoutStartLine>1</stdoutStartLine
>
  <subject />
  <to>test@test.com</to>
</emailNotification>

```

```

"emailNotifications": [ {
  "attachFile": false,
  "attachJobLog": false,
  "attachStdError": false,
  "attachStdOut": true,
  "bcc": null,
  "body": "test body",
  "cc": null,
  "description": null,
  "emailConnection": "Opwise - Gmail Account",
  "emailTemplate": null,
  "emailTemplateVar": null,
  "exitCodes": null,
  "fileName": null,
  "fileNumLines": 100,
  "fileScanText": null,
  "fileStartLine": 1,
  "joblogNumLines": 100,
  "joblogScanText": null,
  "joblogStartLine": 1,
  "notifyOnEarlyFinish": false,
  "notifyOnLateFinish": false,
  "notifyOnLateStart": false,
  "replyTo": "replyTo@test.com",
  "report": {
    "groupName": null,
    "title": "report1",
    "userName": "ops.admin"
  },
  "status": "Success",
  "stderrNumLines": 100,
  "stderrScanText": null,
  "stderrStartLine": 1,
  "stdoutNumLines": 100,
  "stdoutScanText": null,
  "stdoutStartLine": 1,
  "subject": null,
  "sysId": "2b72cdaaf3a145e4bbae5a7ddd24baff",
  "to": "test@test.com"
}
],

```

Set Variable

Set Variable

```
<setVariableAction>
  <description />
  <exitCodes />
  <notificationOption>Operation
  Failure</notificationOption>
  <notifyOnEarlyFinish>>false<
/notifyOnEarlyFinish>
  <notifyOnLateFinish>>false<
/notifyOnLateFinish>
  <notifyOnLateStart>>false<
/notifyOnLateStart>
  <status>Waiting</status>
  <sysId
>f7824e38add745c2bf41017b07697bdf</sysId>
  <variableName>name</variableName>
  <variableScope>Self</variableScope>
  <variableValue />
</setVariableAction>
```

SNMP Notification

```
<snmpNotification>
  <description />
  <exitCodes />
  <notifyOnEarlyFinish>>false<
/notifyOnEarlyFinish>
  <notifyOnLateFinish>>false<
/notifyOnLateFinish>
  <notifyOnLateStart>>false<
/notifyOnLateStart>
  <status>Resource Requested</status>
  <sysId
>1a1ddf2fa7f7466db8b5fc7863fc4ea3</sysId>
  <severity>Normal</severity>
  <snmpManager>test manager<
/snmpManager>
</snmpNotification>
```

System Operation

```
"setVariableActions": [ {
  "description": null,
  "exitCodes": null,
  "notificationOption": "Operation Failure",
  "notifyOnEarlyFinish": false,
  "notifyOnLateFinish": false,
  "notifyOnLateStart": false,
  "status": "Waiting",
  "sysId": "f7824e38add745c2bf41017b07697bdf",
  "variableName": "name",
  "variableScope": "Self",
  "variableValue": null
}
],
```

SNMP Notification

```
"snmpNotifications": [ {
  "description": null,
  "exitCodes": null,
  "notifyOnEarlyFinish": false,
  "notifyOnLateFinish": false,
  "notifyOnLateStart": false,
  "severity": "Normal",
  "snmpManager": "test manager",
  "status": "Resource Requested",
  "sysId": "1a1ddf2fa7f7466db8b5fc7863fc4ea3"
}
],
```

System Operation



```

<systemOperation>
  <description />
  <exitCodes />
  <notifyOnEarlyFinish>>false<
/notifyOnEarlyFinish>
  <notifyOnLateFinish>>false<
/notifyOnLateFinish>
  <notifyOnLateStart>>false<
/notifyOnLateStart>
  <status>Held</status>
  <sysId
>742beaf652834054b1edc37e6423700d</sysId>
  <agent />
  <agentCluster />
  <agentClusterVar />
  <agentVar />
  <execCommand>Cancel</execCommand>
  <execCriteria>Oldest Active
Instance</execCriteria>
  <execId />
  <execLookupOption>Task<
/execLookupOption>
  <execName />
  <execWorkflowNameCond />
  <execWorkflowName />
  <limit />
  <notificationOption>Operation
Failure</notificationOption>
  <operation>Run Task Instance
Command</operation>
  <task>Opwise - B=${B}</task>
  <taskLimitType>Unlimited<
/taskLimitType>
  <taskVar />
  <trigger />
  <triggerVar />
  <variables>
    <variable>
      <name>var1</name>
      <value>vall</value>
    </variable>
    <variable>
      <name>var2</name>
      <value>val2</value>
    </variable>
  </variables>
  <variablesUnresolved>>false<
/variablesUnresolved>
  <variablesUnresolved />
  <virtualResource />
  <virtualResourceVar />
</systemOperation>

```

```

"systemOperations": [ {
  "agent": null,
  "agentCluster": null,
  "agentClusterVar": null,
  "agentVar": null,
  "description": null,
  "execCommand": "Cancel",
  "execCriteria": "Oldest Active Instance",
  "execId": null,
  "execLookupOption": "Task",
  "execName": null,
  "execWorkflowNameCond": null,
  "execWorkflowName": null,
  "exitCodes": null,
  "limit": null,
  "notificationOption": "Operation Failure",
  "notifyOnEarlyFinish": false,
  "notifyOnLateFinish": false,
  "notifyOnLateStart": false,
  "operation": "Run Task Instance Command",
  "task": "Opwise - B=${B}",
  "taskLimitType": "Unlimited",
  "taskVar": null,
  "trigger": null,
  "triggerVar": null,
  "status": "Held",
  "sysId": "742beaf652834054b1edc37e6423700d",
  "variables": [ {
    "name": "var1",
    "value": "vall"
  },
  {
    "name": "var2",
    "value": "val2"
  } ],
  "variablesUnresolved": false,
  "virtualResource": null,
  "virtualResourceVar": null
} ]

```

Examples for Task-Related Records

XML

Mutually Exclusive Tasks

```
<exclusiveTasks>
  <exclusiveTask>
    <sysId>
    >5d2c0886b69745aa916a755602a1b77f</sysId>
    <task>Sleep 0<task>

    <type>Direct<type>
  </exclusiveTask>
  <exclusiveTask>
    <sysId>
    >c1342b7597f9492e927ce24c5126f9d4</sysId>
    <task>Sleep 30</task>
    <type>Direct</type>
  </exclusiveTask>
</exclusiveTasks>
```

Notes

```
<notes>
  <note>
    <sysId>
    >8122cc80fbb4e12b2c7118c172038fc</sysId>
    <text>note2 text</text>
    <title>note2</title>
  </note>
  <note>
    <sysId>
    >eb95737f44664bd3bd4002690e00d715</sysId>
    <text>note1 text</text>
    <title>note1</title>
  </note>
</notes>
```

Variables

JSON

Mutually Exclusive Tasks

```
"exclusiveTasks": [ {
  "sysId": "5d2c0886b69745aa916a755602a1b77f",
  "task": "Sleep 0",
  "type": "Direct"
},
{
  "sysId": "c1342b7597f9492e927ce24c5126f9d4",
  "task": "Sleep 30",
  "type": "Direct"
} ]
```

Notes

```
"notes": [ {
  "sysId": "8122cc80fbb4e12b2c7118c172038fc",
  "text": "note2 text",
  "title": "note2"
},
{
  "sysId": "eb95737f44664bd3bd4002690e00d715",
  "text": "note1 text",
  "title": "note1"
} ]
```

Variables

```
<variables>
  <variable>
    <description>description<
  /description>
    <name>var1</name>
    <sysId
>76af48c246954c128ef90da254044618</sysId>
    <value>value1</value>
  </variable>
  <variable>
    <description />
    <name>var2</name>
    <sysId
>899912878e4b4a36848269dc8a75dc1c</sysId>
    <value>value2</value>
  </variable>
</variables>
```

Virtual Resources

```
<virtualResources>
  <virtualResource>
    <amount>1</amount>
    <resource>Opswise - Solo<
  /resource>
    <sysId
>4f5bb3fda5874dac8bb1897382d1317d</sysId>
  </virtualResource>
</virtualResources>
```

```
"variables": [ {
  "description": "description",
  "name": "var1",
  "sysId": "76af48c246954c128ef90da254044618",
  "value": "value1"
},
{
  "description": null,
  "name": "var2",
  "sysId": "899912878e4b4a36848269dc8a75dc1c",
  "value": "value2"
} ]
```

Virtual Resources

```
"virtualResources": [ {
  "amount": 1,
  "resource": "Opswise - Solo",
  "sysId": "4f5bb3fda5874dac8bb1897382d1317d"
} ]
```

Properties

Task Properties	<ul style="list-style-type: none"> <li>• See <a href="#">All Tasks Properties</a></li> </ul>
Task Action Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Abort Action Properties</a></li> <li>• See <a href="#">Email Notification Action Properties</a></li> <li>• See <a href="#">Set Variable Action Properties</a></li> <li>• See <a href="#">SNMP Notification Action Properties</a></li> <li>• See <a href="#">System Operation Action Properties</a></li> </ul>

Task-Related Records Properties	<ul style="list-style-type: none"><li>• See <a href="#">Mutually Exclusive Tasks Properties</a></li><li>• See <a href="#">Notes Properties</a></li><li>• See <a href="#">Variables in Tasks Properties</a></li><li>• See <a href="#">Virtual Resources Properties</a></li></ul>
---------------------------------	---

## PeopleSoft Task Web Services

- [Overview](#)
- [Create a PeopleSoft Task](#)
- [Modify a PeopleSoft Task](#)
- [Read a PeopleSoft Task](#)
- [PeopleSoft Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for PeopleSoft Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a PeopleSoft Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new PeopleSoft task.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">PeopleSoft Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a PeopleSoft Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <code>request</code>.</p> <p>To modify PeopleSoft Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">PeopleSoft Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a PeopleSoft Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <code>task</code> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">PeopleSoft Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## PeopleSoft Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>▼ XML</p> <pre>&lt;taskPeopleSoft retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;runtimeParameters /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;agent&gt;AGNT0001&lt;/agent&gt;   &lt;agentCluster /&gt;   &lt;agentClusterVar /&gt;   &lt;agentVar /&gt;   &lt;broadcastCluster /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt;/cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt;/customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt;/efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt;/efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt;/efEnabled&gt;   &lt;efNthAmount&gt;10&lt;/efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt;/executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt;/holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt;/lfDayConstraint&gt;   &lt;lfDuration&gt;00:00:00:00&lt;/lfDuration&gt;   &lt;lfEnabled&gt;&gt;false&lt;/lfEnabled&gt;   &lt;lfNthAmount&gt;1&lt;/lfNthAmount&gt;   &lt;lfTime&gt;00:00&lt;/lfTime&gt;   &lt;lfType&gt;Time&lt;/lfType&gt;</pre>	<p>▼ JSON</p> <pre>{   "type": "taskPeoplesoft",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "agent": null,   "agentCluster": "Opwise Demo Cluster",   "agentClusterVar": null,   "agentVar": null,   "broadcastCluster": null,   "command": "Schedule Job",   "connection": "PS_Connection 1",   "connectionVar": null,   "contentFilter": null,   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opwise/"   },   "customField2": {     "label": null,     "value": null   },   "distributionOptions": [</pre>

```

</lsDayConstraint>Nth</lsDayConstraint>
</lsDuration>00:00:00:00</lsDuration>
</lsEnabled>>false</lsEnabled>
</lsNthAmount>7</lsNthAmount>
</lsTime>00:00</lsTime>
</lsType>Time</lsType>
<name>Opswise - Test Email</name>
<opswiseGroups />
<resolveNameImmediately>>false</resolveNameImmediately>
<resPriority>10</resPriority>
<restrictionPeriod>Span</restrictionPeriod>
<restrictionPeriodAfterDate>2017-11-10<
/restrictionPeriodAfterDate>
  <restrictionPeriodAfterTime>10:30<
/restrictionPeriodAfterTime>
  <restrictionPeriodBeforeDate>2017-11-20<
/restrictionPeriodBeforeDate>
  <restrictionPeriodBeforeTime>15:00<
/restrictionPeriodBeforeTime>
  <restrictionPeriodDateList />
  <startHeld>>true</startHeld>
  <startHeldReason>hold reason</startHeldReason>
  <summary />
  <sysId>f87848b00a0001037f43e7c81c8ec969</sysId>
  <timeZonePref>-- System Default --</timeZonePref>
  <twDelayAmount />
  <twDelayDuration>00:00:01:00</twDelayDuration>
  <twDelayType>Duration</twDelayType>
  <twWaitAmount />
  <twWaitDayConstraint />
  <twWaitDuration>00:00:00:00</twWaitDuration>
  <twWaitTime>00:00</twWaitTime>
  <twWaitType>Time</twWaitType>
  <twWorkflowOnly>Yes</twWorkflowOnly>
  <userEstimatedDuration>00:00:00:02<
/userEstimatedDuration>
  <command>Schedule Job</command>
  <connection>PS_Connection 1</connection>
  <connectionVar />
  <contentFilter />
  <distributionOptions>
    <distributionOption>
      <distributionIdType>User</distributionIdType>
      <distributionId>PS_User_1</distributionId>
    </distributionOption>
    <distributionOption>
      <distributionIdType>Role</distributionIdType>
      <distributionId>PS_Role_1</distributionId>
    </distributionOption>
  </distributionOptions>
  <emailAddresses>"stone@qa.stone.branch</emailAddresses>
  <emailAttachLog>>false</emailAttachLog>
  <emailSubject>Test Subject for ${ops_task_name}<
/emailSubject>
  <emailText>Test Body for ${ops_task_name} with id
  ${ops_task_id}.</emailText>
  <emailWebReport>>false</emailWebReport>
  <exitCodeOutput />

```

```

    {
      "distributionId": "PS_User_1",
      "distributionIdType": "User"
    },
    {
      "distributionId": "PS_Role_1",
      "distributionIdType": "Role"
    }
  ],
  "efDayConstraint": "Nth Day",
  "efDuration": "00:00:00:00",
  "efEnabled": false,
  "efNthAmount": 10,
  "efTime": "00:00",
  "efType": "Time",
  "emailAddresses": "stone@qa.stone.branch",
  "emailAttachLog": false,
  "emailSubject": "Test Subject for
  ${ops_task_name}",
  "emailText": "Test Body for
  ${ops_task_name} with id ${ops_task_id}.",
  "emailWebReport": false,
  "excludeRelated": false,
  "exclusiveTasks": [],
  "executionRestriction": "Run",
  "exitCodeOutput": null,
  "exitCodeProcessing": "Success Exitcode
  Range",
  "exitCodes": 0,
  "exitCodeText": null,
  "holdResources": false,
  "lfDayConstraint": "Nth Day",
  "lfDuration": "00:00:00:00",
  "lfEnabled": false,
  "lfNthAmount": 1,
  "lfTime": "00:00",
  "lfType": "Time",
  "lsDayConstraint": "Nth Day",
  "lsDuration": "00:00:00:00",
  "lsEnabled": false,
  "lsNthAmount": 7,
  "lsTime": "00:00",
  "lsType": "Time",
  "mainJobName": null,
  "mainSchedName": null,
  "name": "Opswise - Test Email",
  "notes": [],
  "opswiseGroups": null,
  "outputDestFormat": 0,
  "outputDestString": null,
  "outputDestType": 0,
  "outputFailureOnly": true,
  "outputReturnFile": null,
  "outputReturnNline": 100,
  "outputReturnSline": 1,
  "outputReturnText": null,
  "outputReturnType": "OUTERR",
  "outputType": "STDOUT",

```



```

    <exitCodeProcessing>Success Exitcode Range<
  /exitCodeProcessing>
  <exitCodes>0</exitCodes>
  <exitCodeText />
  <mainJobName />
  <mainSchedName />
  <outputDestFormat>0</outputDestFormat>
  <outputDestString />
  <outputDestType>0</outputDestType>
  <outputFailureOnly>>true</outputFailureOnly>
  <outputReturnFile />
  <outputReturnNline>100</outputReturnNline>
  <outputReturnSline>1</outputReturnSline>
  <outputReturnText />
  <outputReturnType>OUTERR</outputReturnType>
  <outputType>STDOUT</outputType>
  <printAppMessage>>false</printAppMessage>
  <printDistList>>false</printDistList>
  <printJobTree>>false</printJobTree>
  <printParamList>>false</printParamList>
  <printSystemMessage>>false</printSystemMessage>
  <processFileName />
  <processName>TREEMOVER</processName>
  <processType>PSJob</processType>
  <psCredentials>PeopleSoft</psCredentials>
  <psCredentialsVar />
  <report>>false</report>
  <reportFolderName />
  <retentionDays />
  <runControlId>ESS1A</runControlId>
  <serverName />

```

```

"printAppMessage": false,
"printDistList": false,
"printJobTree": false,
"printParamList": false,
"printSystemMessage": false,
"processFileName": null,
"processName": "TREEMOVER",
"processType": PSJob,
"psCredentials": "PeopleSoft",
"report": false,
"reportFolderName": null,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate":
"2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"retentionDays": null,
"runControlId": ESS1A,
"runtimeParameters": [],
"serverName": null,
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId":
"fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 1,
"virtualResources": [],

```

```
<waitForOutput>false</waitForOutput>  
</taskPeopleSoft>
```

```
"waitForOutput": false  
}
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [PeopleSoft Task Properties](#)

## SAP Task Web Services

- [Overview](#)
- [Create an SAP Task](#)
- [Modify an SAP Task](#)
- [Read an SAP Task](#)
- [SAP Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for SAP Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create an SAP Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new SAP task.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">SAP Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

### Modify an SAP Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify SAP Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">SAP Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

### Read an SAP Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">SAP Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## SAP Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>XML</p> <pre>&lt;taskSap retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;agent&gt;AGNT0001&lt;/agent&gt;   &lt;agentCluster /&gt;   &lt;agentClusterVar /&gt;   &lt;agentVar /&gt;   &lt;broadcastCluster /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;false&lt; /efEnabled&gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt;</pre>	<p>JSON</p> <pre>{   "type": "taskSap",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "agent": null,   "agentCluster": "Opwise Demo Cluster",   "agentClusterVar": null,   "agentVar": null,   "broadcastCluster": null,   "chainDesc": null,   "chainId": null,   "commandGroup": "Run",   "commandOptions": null,   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opwise/"   },   "customField2": {     "label": null,     "value": null   },   "dataSource": null,   "defFile": null,</pre>

```

/executionRestriction>
  <holdResources>>false<
/holdResources>
  <lfDayConstraint>Nth<
/lfDayConstraint>
  <lfDuration>00:00:00:00<
/lfDuration>
  <lfEnabled>>false<
/lfEnabled>
  <lfNthAmount>1<
/lfNthAmount>
  <lfTime>00:00</lfTime>
  <lfType>Time</lfType>
  <lsDayConstraint>Nth<
/lsDayConstraint>
  <lsDuration>00:00:00:00<
/lsDuration>
  <lsEnabled>>false<
/lsEnabled>
  <lsNthAmount>7<
/lsNthAmount>
  <lsTime>00:00</lsTime>
  <lsType>Time</lsType>
  <name>Opwise - Test
Email</name>
  <opwiseGroups />
  <resolveNameImmediately
>>false</resolveNameImmediately>
  <resPriority>10<
/resPriority>
  <restrictionPeriod>Span<
/restrictionPeriod>
  <
restrictionPeriodAfterDate
>2017-11-10<
/restrictionPeriodAfterDate>
  <
restrictionPeriodAfterTime>10:30<
/restrictionPeriodAfterTime>
  <
restrictionPeriodBeforeDate
>2017-11-20<
/restrictionPeriodBeforeDate>
  <
restrictionPeriodBeforeTime>15:00<
/restrictionPeriodBeforeTime>
  <restrictionPeriodDateList
/>
  <startHeld>>true</startHeld
>
  <startHeldReason>hold
reason</startHeldReason>
  <summary />
  <sysId
>f87848b00a0001037f43e7c81c8ec969<
/sysId>
  <timeZonePref>-- System
Default --</timeZonePref>

```

```

"definitionOrModel": "USAP Definition File",
"definitionOrModelJobVar": "USAP Definition
File",
"dispAbapName": null,
"dispSapEventId": null,
"dispSapEventParm": null,
"dispVariant": null,
"efDayConstraint": "Nth Day",
"efDuration": "00:00:00:00",
"efEnabled": false,
"efNthAmount": 10,
"efTime": "00:00",
"efType": "Time",
"environment": null,
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"exitCodeOutput": null,
"exitCodeProcessing": "Success Exitcode Range",
"exitCodeText": null,
"exitCodes": 0,
"holdResources": false,
"immediate": true,
"infoPackage": null,
"infoPackageJobName": null,
"infoSource": null,
"jobId": null,
"jobLog": true,
"jobName": null,
"jobStatus": null,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Opwise - Test Email",
"notes": [],
"opwiseGroups": null,
"outputFailureOnly": true,
"outputReturnFile": null,
"outputReturnNline": 100,
"outputReturnSline": 1,
"outputReturnText": null,
"outputReturnType": "OUTERR",
"outputType": "STDOUT",
"pcRestart": false,
"printAppLog": true,
"printAppRc": true,
"purge": false,
"repositoryOrFilesys": "Script Library",
"requestId": null,

```

```

    <twDelayAmount />
    <twDelayDuration
>00:00:01:00</twDelayDuration>
    <twDelayType>Duration<
/twDelayType>
    <twWaitAmount />
    <twWaitDayConstraint />
    <twWaitDuration
>00:00:00:00</twWaitDuration>
    <twWaitTime>00:00<
/twWaitTime>
    <twWaitType>Time<
/twWaitType>
    <twWorkflowOnly>Yes<
/twWorkflowOnly>
    <userEstimatedDuration
>00:00:00:02<
/userEstimatedDuration>
    <chainDesc />
    <chainId />
    <commandGroup>Run<
/commandGroup>
    <commandOptions />
    <dataSource />
    <defFile />
    <definitionOrModel>USAP
Definition File</definitionOrModel
>
    <definitionOrModelJobVar
>USAP Definition File<
/definitionOrModelJobVar>
    <dispAbapName />
    <dispSapEventId />
    <dispSapEventParm />
    <dispVariant />
    <environment />
    <exitCodeOutput />
    <exitCodeProcessing
>Success Exitcode Range<
/exitCodeProcessing>
    <exitCodeText />
    <exitCodes>0</exitCodes>
    <immediate>true</immediate
>
    <infoPackage />
    <infoPackageJobName />
    <infoSource />
    <jobId />
    <jobLog>true</jobLog>
    <jobName />
    <jobStatus />
    <logId />
    <outputFailureOnly>true<
/outputFailureOnly>
    <outputReturnFile />
    <outputReturnNline>100<
/outputReturnNline>
    <outputReturnSline>1<

```

```

"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"retryIndefinitely": false,
"retryInterval": 60,
"retryMaximum": 0,
"retrySuppressFailure": false,
"runtimeDir": null,
"sapCommandMask": null,
"sapCmProfileId": null,
"sapCmProfileType": null,
"sapCmXmlFile": null,
"sapConnection": null,
"sapConnectionVar": null,
"sapCred": "Opwise - Db Credentials",
"sapCredVar": null,
"sapDispConfirmEvents": false,
"sapDispEventSelectState": "New",
"sapDisplayCommand": null,
"sapEventId": null,
"sapEventParm": null,
"sapFromDate": null,
"sapLang": null,
"sapPrinterName": null,
"sapToDate": null,
"script": "test script",
"sourceSystem": null,
"spollist": true,
"start": false,
"startHeld": false,
"startHeldReason": null,
"stepNum": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"targetJobName": null,
"targetServer": "serv1",
"targetVariantName": null,
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"useAppRc": false,
"userEstimatedDuration": null,
"variables": [],
"version": 1,
"virtualResources": [],

```

```

/outputReturnSLine>
  <outputReturnText />
  <outputReturnTypes>OUTERR<
/outputReturnTypes>
  <outputType>STDOUT<
/outputType>
  <pcRestart>>false<
/pcRestart>
  <printAppLog>>true<
/printAppLog>
  <printAppRc>>true<
/printAppRc>
  <purge>>false</purge>
  <repositoryOrFilesys>
>Script Library<
/repositoryOrFilesys>
  <requestId />
  <retryIndefinitely>>false<
/retryIndefinitely>
  <retryInterval>60<
/retryInterval>
  <retryMaximum>0<
/retryMaximum>
  <retrySuppressFailure>
>>false</retrySuppressFailure>
  <runtimeDir />
  <sapCommandMask />
  <sapCmProfileId />
  <sapCmProfileType />
  <sapCmXmlFile />
  <sapConnection /&gt;
  <sapConnectionVar /&gt;
  <sapCred>Opwise - Db
Credentials</sapCred>
  <sapCredVar />
  <sapDispConfirmEvents>
>>false</sapDispConfirmEvents>
  <sapDispEventSelectState>
>New</sapDispEventSelectState>
  <sapDisplayCommand />
  <sapEventId />
  <sapEventParm />
  <sapFromDate />
  <sapLang />
  <sapPrinterName />
  <sapToDate />
  <script>test script<
/script>
  <sourceSystem />
  <spoollist>>true</spoollist>
>
  <start>>false</start>
  <stepNum />
  <targetJobName />
  <targetServer>serv1<
/targetServer>
  <targetVariantName />
  <useAppRc>>false</useAppRc>

```

```
"wait": false,
```



```
<wait>false</wait>  
<waitForOutput>false<
```

```
"waitForOutput": false  
}
```

```
/waitForOutput>  
</taskSap>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [SAP Task Properties](#)

## SQL Task Web Services

- [Overview](#)
- [Create a SQL Task](#)
- [Modify a SQL Task](#)
- [Read a SQL Task](#)
- [SQL Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for SQL Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a SQL Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new SQL task.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>  To persist sysIds, use the <a href="#">retainSysIds</a> property.
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">SQL Task: XML and JSON Examples</a> , below.

Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>

## Modify a SQL Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <a href="#">sysId</a> in the <a href="#">request</a>.</p> <p>To modify SQL Task properties without modifying related records, use the <a href="#">excludeRelated</a> property.</p>
Example	See <a href="#">SQL Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a SQL Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	taskId or taskname
Mutually Exclusive Parameters	taskId and taskname
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a

Produces Content-Type	application/xml, application/json
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">SQL Task: XML and JSON Examples</a>.)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties</a> .

## SQL Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>▼ XML</p> <pre>&lt;taskSql retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt;/customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt;/efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt;/efEnabled&gt;   &lt;efNthAmount&gt;10&lt;/efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; /executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt;/holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt; /lfDayConstraint&gt;   &lt;lfDuration&gt;00:00:00:00&lt;/lfDuration&gt;   &lt;lfEnabled&gt;&gt;false&lt;/lfEnabled&gt;   &lt;lfNthAmount&gt;1&lt;/lfNthAmount&gt;   &lt;lfTime&gt;00:00&lt;/lfTime&gt;</pre>	<p>▼ JSON</p> <pre>{   "type": "taskSql",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "autoCleanup": true,   "columnName": null,   "columnOp": "=",   "columnValue": null,   "connection": "Opwise - Db Connection",   "connectionVar": null,   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opwise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,</pre>

```

    <lfType>Time</lfType>
    <lsDayConstraint>Nth<
  /lsDayConstraint>
  <lsDuration>00:00:00:00</lsDuration>
  <lsEnabled>>false</lsEnabled>
  <lsNthAmount>7</lsNthAmount>
  <lsTime>00:00</lsTime>
  <lsType>Time</lsType>
  <name>Opwise - Test Email</name>
  <opwiseGroups />
  <resolveNameImmediately>>false<
  /resolveNameImmediately>
  <resPriority>10</resPriority>
  <restrictionPeriod>Span<
  /restrictionPeriod>
  <restrictionPeriodAfterDate
>2017-11-10</restrictionPeriodAfterDate>
  <restrictionPeriodAfterTime>10:30<
  /restrictionPeriodAfterTime>
  <restrictionPeriodBeforeDate
>2017-11-20</restrictionPeriodBeforeDate>
  <restrictionPeriodBeforeTime>15:00<
  /restrictionPeriodBeforeTime>
  <restrictionPeriodDateList />
  <startHeld>>false</startHeld>
  <startHeldReason />
  <summary>Test Email</summary>
  <sysId
>fb59a227517a421a92c15ff5aefe3b66</sysId>
  <timeZonePref>-- System Default --<
  /timeZonePref>
  <twDelayAmount />
  <twDelayDuration>00:00:00:00<
  /twDelayDuration>
  <twDelayType>None</twDelayType>
  <twWaitAmount />
  <twWaitDayConstraint>NONE<
  /twWaitDayConstraint>
  <twWaitDuration>00:00:00:00<
  /twWaitDuration>
  <twWaitTime>00:00</twWaitTime>
  <twWaitType>None</twWaitType>
  <twWorkflowOnly>-- System Default
--</twWorkflowOnly>
  <userEstimatedDuration />
  <autoCleanup>>true</autoCleanup>
  <columnName />
  <columnOp>=</columnOp>
  <columnValue />
  <connection>Opwise - Db Connection<
  /connection>
  <connectionVar />
  <exitCodes>0</exitCodes>
  <maxRows />
  <resultProcessing>Skip Result
Processing</resultProcessing>
  <retryIndefinitely>>false<
  /retryIndefinitely>

```

```

"efNthAmount": 10,
"efTime": "00:00",
"efType": "Time",
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"maxRows": null,
"name": "Opwise - Test Email",
"notes": [],
"opwiseGroups": null,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"resultProcessing": "Skip Result Processing",
"retainSysIds": true,
"retryIndefinitely": false,
"retryInterval": 60,
"retryMaximum": 0,
"retrySuppressFailure": false,
"sqlCommand": "CREATE TABLE test (name varchar(128), value
varchar(128));",
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 1,

```

```
<retryInterval>60</retryInterval>  
<retryMaximum>0</retryMaximum>  
<retrySuppressFailure>false<  
/retrySuppressFailure>  
<sqlCommand>CREATE TABLE test (name  
varchar(128), value
```

```
"virtualResources": []  
}
```

```
        varchar(128));</sqlCommand>  
</taskSql>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [SQL Task Properties](#)



## Stored Procedure Task Web Services

- [Overview](#)
- [Create a Stored Procedure Task](#)
- [Modify a Stored Procedure Task](#)
- [Read a Stored Procedure Task](#)
- [Stored Procedure Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Stored Procedure Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a Stored Procedure Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Stored Procedure task.  To persist sysIds, use the <a href="#">retainSysIds</a> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Stored Procedure Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a Stored Procedure Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Stored Procedure Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Stored Procedure Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Stored Procedure Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See Stored Procedure Task: XML and JSON Examples.)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties</a> .

## Stored Procedure Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>▼ XML</p> <pre>&lt;taskStoredProc retainSysIds ="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt; /efEnabled&gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; /executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt; /holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt; /lfDayConstraint&gt;</pre>	<p>▼ JSON</p> <pre>{   "type": "taskStoredProc",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "autoCleanup": false,   "columnName": null,   "connection": "Opwise - Db Connection",   "connectionVar": null,   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opwise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,   "efTime": "00:00",   "efType": "Time",   "excludeRelated": false,</pre>

```

        <lfDuration>00:00:00:00<
    /lfDuration>
    <lfEnabled>>false<
    /lfEnabled>
    <lfNthAmount>1<
    /lfNthAmount>
    <lfTime>00:00</lfTime>
    <lfType>Time</lfType>
    <lsDayConstraint>Nth<
    /lsDayConstraint>
    <lsDuration>00:00:00:00<
    /lsDuration>
    <lsEnabled>>false<
    /lsEnabled>
    <lsNthAmount>7<
    /lsNthAmount>
    <lsTime>00:00</lsTime>
    <lsType>Time</lsType>
    <name>Opwise - Test
    Email</name>
    <opwiseGroups />
    <resolveNameImmediately
    >false</resolveNameImmediately>
    <resPriority>10<
    /resPriority>
    <restrictionPeriod>Span<
    /restrictionPeriod>
    <
    restrictionPeriodAfterDate
    >2017-11-10<
    /restrictionPeriodAfterDate>
    <
    restrictionPeriodAfterTime>10:30<
    /restrictionPeriodAfterTime>
    <
    restrictionPeriodBeforeDate
    >2017-11-20<
    /restrictionPeriodBeforeDate>
    <
    restrictionPeriodBeforeTime>15:00<
    /restrictionPeriodBeforeTime>
    <restrictionPeriodDateList
    />
    <startHeld>>false<
    /startHeld>
    <startHeldReason />
    <summary>Test Email<
    /summary>
    <sysId
    >fb59a227517a421a92c15ff5aefe3b66<
    /sysId>
    <timeZonePref>-- System
    Default --</timeZonePref>
    <twDelayAmount />
    <twDelayDuration
    >00:00:00:00</twDelayDuration>
    <twDelayType>None<
    /twDelayType>

```

```

    "exclusiveTasks": [],
    "executionRestriction": "Run",
    "holdResources": false,
    "lfDayConstraint": "Nth Day",
    "lfDuration": "00:00:00:00",
    "lfEnabled": false,
    "lfNthAmount": 1,
    "lfTime": "00:00",
    "lfType": "Time",
    "lsDayConstraint": "Nth Day",
    "lsDuration": "00:00:00:00",
    "lsEnabled": false,
    "lsNthAmount": 7,
    "lsTime": "00:00",
    "lsType": "Time",
    "maxRows": null,
    "name": "Opwise - Test Email",
    "notes": [],
    "opwiseGroups": null,
    "parameterPosition": 1,
    "resolveNameImmediately": false,
    "resPriority": 10,
    "restrictionPeriod": "Span",
    "restrictionPeriodAfterDate": "2017-11-10",
    "restrictionPeriodAfterTime": "10:30",
    "restrictionPeriodBeforeDate": "2017-11-20",
    "restrictionPeriodBeforeTime": "15:00",
    "restrictionPeriodDateList": [],
    "resultOp": "=",
    "resultProcessing": "Skip Result Processing",
    "resultValue": null,
    "retainSysIds": true,
    "retryIndefinitely": false,
    "retryInterval": 60,
    "retryMaximum": 0,
    "retrySuppressFailure": false,
    "startHeld": false,
    "startHeldReason": null,
    "storedProcName": "sprocl",
    "summary": "Test Email",
    "sysId": "fb59a227517a421a92c15ff5aefe3b66",
    "timeZonePref": "-- System Default --",
    "twDelayAmount": null,
    "twDelayDuration": "00:00:00:00",
    "twDelayType": "None",
    "twWaitAmount": null,
    "twWaitDayConstraint": "NONE",
    "twWaitDuration": "00:00:00:00",
    "twWaitTime": "00:00",
    "twWaitType": "None",
    "twWorkflowOnly": "-- System Default --",
    "userEstimatedDuration": null,
    "variables": [],
    "version": 1,

```

```
<twWaitAmount />
<twWaitDayConstraint>NONE<
/twWaitDayConstraint>
<twWaitDuration
>00:00:00:00</twWaitDuration>
<twWaitTime>00:00<
/twWaitTime>
<twWaitType>None<
/twWaitType>
<twWorkflowOnly>-- System
Default --</twWorkflowOnly>
<userEstimatedDuration />
<autoCleanup>>false<
/autoCleanup>
<columnName />
<connection>Opwise - Db
Connection</connection>
<connectionVar />
<exitCodes />
<maxRows />
<parameterPosition>1<
/parameterPosition>
<resultOp>=</resultOp>
<resultProcessing>Skip
Result Processing<
/resultProcessing>
<resultValue />
<retryIndefinitely>>false<
/retryIndefinitely>
<retryInterval>60<
/retryInterval>
<retryMaximum>0<
/retryMaximum>
<retrySuppressFailure
>>false</retrySuppressFailure>
<storedProcName>sprocl<
```

```
"virtualResources": [ ]
}
```

```
/storedProcName>  
</taskStoredProc>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Stored Procedure Task Properties](#)

## System Monitor Task Web Services

- [Overview](#)
- [Create a System Monitor Task](#)
- [Modify a System Monitor Task](#)
- [Read a System Monitor Task](#)
- [System Monitor Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for System Monitor Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a System Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new System Monitor task.  To persist sysIds, use the <a href="#">retainSysIds</a> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">System Monitor Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a System Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify System Monitor Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">System Monitor Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a System Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json



Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">System Monitor Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## System Monitor Task: XML and JSON Examples

The following XML and JSON examples are the same for the Create, Modify, and Read System Monitor task web services, except for the [excludeRelated](#), [retainSysIds](#), and [version](#) JSON properties, which are specified as attributes in the <task type> element of XML web services.

Examples	XML	JSON
Example for Task	<p>XML</p> <pre>&lt;taskSystemMonitor retainSysIds ="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;agent /&gt;   &lt;agentCluster /&gt;   &lt;agentClusterVar /&gt;   &lt;agentVar &gt;\${target_server}&lt;/agentVar&gt;   &lt;broadcastCluster /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt; /efEnabled&gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;</pre>	<p>JSON</p> <pre>{   "type": "taskSystemMonitor",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "agent": null,   "agentCluster": "Opwise Demo Cluster",   "agentClusterVar": null,   "agentVar": null,   "broadcastCluster": null,   "byScale": "MB",   "condition": "&gt;",   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opwise/"   },   "customField2": {     "label": null,     "value": null   },   "drive": "c:\",   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",</pre>

```

    <efType>Time</efType>
    <executionRestriction>Run<
  /executionRestriction>
    <holdResources>>false<
  /holdResources>
    <lfDayConstraint>Nth<
  /lfDayConstraint>
    <lfDuration>00:00:00:00<
  /lfDuration>
    <lfEnabled>>false<
  /lfEnabled>
    <lfNthAmount>1<
  /lfNthAmount>
    <lfTime>00:00</lfTime>
    <lfType>Time</lfType>
    <lsDayConstraint>Nth<
  /lsDayConstraint>
    <lsDuration>00:00:00:00<
  /lsDuration>
    <lsEnabled>>false<
  /lsEnabled>
    <lsNthAmount>7<
  /lsNthAmount>
    <lsTime>00:00</lsTime>
    <lsType>Time</lsType>
    <name>Opwise - Test
Email</name>
    <opwiseGroups />
    <resolveNameImmediately
>>false</resolveNameImmediately>
    <resPriority>10<
  /resPriority>
    <restrictionPeriod>Span<
  /restrictionPeriod>
    <
  restrictionPeriodAfterDate
>2017-11-10<
  /restrictionPeriodAfterDate>
    <
  restrictionPeriodAfterTime>10:30<
  /restrictionPeriodAfterTime>
    <
  restrictionPeriodBeforeDate
>2017-11-20<
  /restrictionPeriodBeforeDate>
    <
  restrictionPeriodBeforeTime>15:00<
  /restrictionPeriodBeforeTime>
    <restrictionPeriodDateList
  />
    <startHeld>>false<
  /startHeld>
    <startHeldReason />
    <summary>Test Email<
  /summary>
    <sysId
>fb59a227517a421a92c15ff5aefe3b66<
  /sysId>

```

```

"efEnabled": false,
"efNthAmount": 10,
"efTime": "00:00",
"efType": "Time",
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"freeSize": "1.0",
"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Opwise - Test Email",
"notes": [],
"opwiseGroups": null,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"smtype": "DISKFRESPEC",
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 1,

```

```
<timeZonePref>-- System
Default --</timeZonePref>
<twDelayAmount />
<twDelayDuration
>00:00:00:00</twDelayDuration>
<twDelayType>None<
/twDelayType>
<twWaitAmount />
<twWaitDayConstraint>NONE<
/twWaitDayConstraint>
<twWaitDuration
>00:00:00:00</twWaitDuration>
<twWaitTime>00:00<
/twWaitTime>
<twWaitType>None<
/twWaitType>
<twWorkflowOnly>-- System
Default --</twWorkflowOnly>
<userEstimatedDuration />
<byScale>MB</byScale>
<condition>></condition>
<drive>c:\</drive>
<freeSize>1.0</freeSize>
<smtype>DISKFREEESP<
```

```
"virtualResources": [ ]
}
```

```
/smtype>  
</taskSystemMonitor>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [System Monitor Task Properties](#)

## Task Monitor Task Web Services

- [Overview](#)
- [Create a Task Monitor Task](#)
- [Modify a Task Monitor Task](#)
- [Read a Task Monitor Task](#)
- [Task Monitor Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Task Monitor Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a Task Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Task Monitor task.  To persist <code>sysIds</code> , use the <code>retainSysIds</code> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Task Monitor Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a Task Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Task Monitor Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Task Monitor Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Task Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Task Monitor Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## Task Monitor Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<div style="border: 1px solid #ccc; padding: 10px;"> <p>▼ XML</p> <pre>&lt;taskMonitor retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt;/cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt;/customField1 &gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt;/efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt;/efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt;/efEnabled&gt;   &lt;efNthAmount&gt;10&lt;/efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt;/executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt;/holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt;/lfDayConstraint&gt;   &lt;lfDuration&gt;00:00:00:00&lt;/lfDuration&gt;   &lt;lfEnabled&gt;&gt;false&lt;/lfEnabled&gt;   &lt;lfNthAmount&gt;1&lt;/lfNthAmount&gt;   &lt;lfTime&gt;00:00&lt;/lfTime&gt;   &lt;lfType&gt;Time&lt;/lfType&gt;   &lt;lsDayConstraint&gt;Nth&lt;/lsDayConstraint&gt;   &lt;lsDuration&gt;00:00:00:00&lt;/lsDuration&gt;   &lt;lsEnabled&gt;&gt;false&lt;/lsEnabled&gt;   &lt;lsNthAmount&gt;7&lt;/lsNthAmount&gt;   &lt;lsTime&gt;00:00&lt;/lsTime&gt;</pre> </div>	<div style="border: 1px solid #ccc; padding: 10px;"> <p>▼ JSON</p> <pre>{   "type": "taskMonitor",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opswise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,   "efTime": "00:00",   "efType": "Time",   "excludeRelated": false,   "exclusiveTasks": [],   "executionRestriction": "Run",   "holdResources": false,   "lfDayConstraint": "Nth Day",</pre> </div>

```

<lsType>Time</lsType>
<name>Opwise - Test Email</name>
<opwiseGroups />
<resolveNameImmediately>>false<
/resolveNameImmediately>
<resPriority>10</resPriority>
<restrictionPeriod>Span</restrictionPeriod>
<restrictionPeriodAfterDate>2017-11-10<
/restrictionPeriodAfterDate>
<restrictionPeriodAfterTime>10:30<
/restrictionPeriodAfterTime>
<restrictionPeriodBeforeDate>2017-11-20<
/restrictionPeriodBeforeDate>
<restrictionPeriodBeforeTime>15:00<
/restrictionPeriodBeforeTime>
<restrictionPeriodDateList />
<startHeldReason />
<summary>Test Email</summary>
<sysId>fb59a227517a421a92c15ff5ae3b66</sysId>
<timeZonePref>-- System Default --</timeZonePref>
<twDelayAmount />
<twDelayDuration>00:00:00:00</twDelayDuration>
<twDelayType>None</twDelayType>
<twWaitAmount />
<twWaitDayConstraint>NONE</twWaitDayConstraint>
<twWaitDuration>00:00:00:00</twWaitDuration>
<twWaitTime>00:00</twWaitTime>
<twWaitType>None</twWaitType>
<twWorkflowOnly>-- System Default --<
/twWorkflowOnly>
<userEstimatedDuration />
<monType>General</monType>
<relativeTimeFrom>00:00</relativeTimeFrom>
<relativeTimeTo />
<statusText>Defined, Waiting, Time Wait, Held,
Exclusive Requested,
    Exclusive Wait, Resource Requested,
Resource Wait, Execution Wait,
    Undeliverable, Queued, Submitted, Action
Required, Started, Running,
    Running/Problems, Cancel Pending, In Doubt,
Start Failure,
    Confirmation Required, Cancelled, Failed,
Skipped, Finished, Success
</statusText>
<typeText>Workflow, Timer, Windows, Linux/Unix,
z/OS, File Monitor,
    Manual, Email, File Transfer, SQL, FTP File
Monitor, Task Monitor,
    Variable Monitor, Stored Procedure, Universal
Command, System Monitor,
    Application Control, SAP, Email Monitor, Web
Service,
    Universal</typeText>
<wfConditionType>Starts With</wfConditionType>

```

```

"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"monType": "General",
"name": "Opwise - Test Email",
"notes": [],
"opwiseGroups": null,
"relativeTimeFrom": "00:00",
"relativeTimeTo": null,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"startHeld": false,
"startHeldReason": null,
"statusText": "Success",
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5ae3b66",
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"typeText": "Workflow, Timer, Windows, Linux/Unix,
z/OS, File Monitor,
    Manual, Email, File Transfer, SQL, FTP File
Monitor, Task Monitor,
    Variable Monitor, Stored Procedure, Universal
Command, System Monitor,
    Application Control, SAP, Email Monitor, Web
Service, Universal",
"userEstimatedDuration": null,
"variables": [],
"version": 1,
"virtualResources": [],
"wfConditionType": "Starts With",

```



```
<wfConditionValue>test</wfConditionValue>  
</taskMonitor>
```

```
"wfConditionValue": "test"  
}
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Task Monitor Task Properties](#)

## Timer Task Web Services

- [Overview](#)
- [Create a Timer Task](#)
- [Modify a Timer Task](#)
- [Read a Timer Task](#)
- [Timer Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Timer Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a Timer Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Timer task.  To persist sysIds, use the <a href="#">retainSysIds</a> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Timer Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a Timer Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Timer Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Timer Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Timer Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Timer Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## Timer Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<div style="border: 1px solid #ccc; padding: 10px;"> <p>▼ XML</p> <pre>&lt;taskSleep retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;false&lt; /efEnabled&gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; /executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt; /holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt; /lfDayConstraint&gt;</pre> </div>	<div style="border: 1px solid #ccc; padding: 10px;"> <p>▼ JSON</p> <pre>{   "type": "taskSleep",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opswise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,   "efTime": "00:00",   "efType": "Time",   "excludeRelated": false,   "exclusiveTasks": [],   "executionRestriction": "Run",   "holdResources": false,   "lfDayConstraint": "Nth Day",</pre> </div>

```

    <lfDuration>00:00:00:00<
  /lfDuration>
  <lfEnabled>>false<
 /lfEnabled>
  <lfNthAmount>1<
 /lfNthAmount>
  <lfTime>00:00</lfTime>
  <lfType>Time</lfType>
  <lsDayConstraint>Nth<
 /lsDayConstraint>
  <lsDuration>00:00:00:00<
 /lsDuration>
  <lsEnabled>>false<
 /lsEnabled>
  <lsNthAmount>7<
 /lsNthAmount>
  <lsTime>00:00</lsTime>
  <lsType>Time</lsType>
  <name>Opwise - Test
Email</name>
  <opwiseGroups />
  <resolveNameImmediately
>false</resolveNameImmediately>
  <resPriority>10<
 /resPriority>
  <restrictionPeriod>Span<
 /restrictionPeriod>
  <
restrictionPeriodAfterDate
>2017-11-10<
 /restrictionPeriodAfterDate>
  <
restrictionPeriodAfterTime>10:30<
 /restrictionPeriodAfterTime>
  <
restrictionPeriodBeforeDate
>2017-11-20<
 /restrictionPeriodBeforeDate>
  <
restrictionPeriodBeforeTime>15:00<
 /restrictionPeriodBeforeTime>
  <restrictionPeriodDateList
 />
  <startHeld>>false<
 /startHeld>
  <startHeldReason />
  <summary>Test Email<
 /summary>
  <sysId
>fb59a227517a421a92c15ff5aefe3b66<
 /sysId>
  <timeZonePref>-- System
Default --</timeZonePref>
  <userEstimatedDuration />
  <sleepAmount>0<
 /sleepAmount>
  <sleepDayConstraint>None</
sleepDayConstraint>

```

```

"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Opwise - Test Email",
"notes": [],
"opwiseGroups": null,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"sleepAmount": 0,
"sleepDayConstraint": "None",
"sleepDuration": "00:00:00:00",
"sleepTime": "00:00",
"sleepType": "Seconds",
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 1,

```

```
<sleepDuration  
>00:00:00:00</sleepDuration>  
  <sleepTime>00:00<  
/sleepTime>  
  <sleepType>Seconds<
```

```
"virtualResources": []  
}
```

```
/sleepType>  
</taskSleep>
```

## Properties

- [See All Tasks Properties](#)
- [See Timer Task Properties](#)

## Universal Command Task Web Services

- [Overview](#)
- [Create a Universal Command Task](#)
- [Modify a Universal Command Task](#)
- [Read a Universal Command Task](#)
- [Universal Command Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Universal Command Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a Universal Command Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Universal Command task.  To persist sysIds, use the <a href="#">retainSysIds</a> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Universal Command Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .



Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a Universal Command Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <code>request</code>.</p> <p>To modify Universal Command Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Universal Command Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Universal Command Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <code>task</code> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See Universal Command Task: XML and JSON Examples.)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties</a> .

## Universal Command Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>XML</p> <pre>&lt;taskUcmd retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;agent /&gt;   &lt;agentCluster &gt;linux-cluster&lt;/agentCluster&gt;   &lt;agentClusterVar /&gt;   &lt;agentVar /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;false&lt; /efEnabled&gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt;</pre>	<p>JSON</p> <pre>{   "type": "taskUcmd",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "agent": null,   "agentCluster": "linux-cluster",   "agentClusterVar": null,   "agentVar": null,   "broker": "\${ftp_server}",   "brokerChoice": "Agent Hostname",   "brokerCred": null,   "brokerCredVar": "\${ftp_cred}",   "brokerRef": null,   "command": "\\whoami\\",   "commandOptions": "-G yes",   "commandOrScript": "Command",   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opswise/"   },   "customField2": {     "label": null,     "value": null   } }</pre>

```

/executionRestriction>
  <holdResources>>false<
/holdResources>
  <lfDayConstraint>Nth<
/lfDayConstraint>
  <lfDuration>00:00:00:00<
/lfDuration>
  <lfEnabled>>false<
/lfEnabled>
  <lfNthAmount>1<
/lfNthAmount>
  <lfTime>00:00</lfTime>
  <lfType>Time</lfType>
  <lsDayConstraint>Nth<
/lsDayConstraint>
  <lsDuration>00:00:00:00<
/lsDuration>
  <lsEnabled>>false<
/lsEnabled>
  <lsNthAmount>7<
/lsNthAmount>
  <lsTime>00:00</lsTime>
  <lsType>Time</lsType>
  <name>Opswise - Test
Email</name>
  <opswiseGroups />
  <resolveNameImmediately
>>false</resolveNameImmediately>
  <resPriority>10<
/resPriority>
  <restrictionPeriod>Span<
/restrictionPeriod>
  <
restrictionPeriodAfterDate
>2017-11-10<
/restrictionPeriodAfterDate>
  <
restrictionPeriodAfterTime>10:30<
/restrictionPeriodAfterTime>
  <
restrictionPeriodBeforeDate
>2017-11-20<
/restrictionPeriodBeforeDate>
  <
restrictionPeriodBeforeTime>15:00<
/restrictionPeriodBeforeTime>
  <restrictionPeriodDateList
/>
  <startHeld>>false<
/startHeld>
  <startHeldReason />
  <summary>Test Email<
/summary>
  <sysId
>fb59a227517a421a92c15ff5aefe3b66<
/sysId>
  <timeZonePref>-- System
Default --</timeZonePref>
    
```

```

},
"efDayConstraint": "Nth Day",
"efDuration": "00:00:00:00",
"efEnabled": false,
"efNthAmount": 10,
"efTime": "00:00",
"efType": "Time",
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"exitCodeOutput": null,
"exitCodeProcessing": "Success Exitcode Range",
"exitCodeText": null,
"exitCodes": 0,
"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Opswise - Test Email",
"notes": [],
"opswiseGroups": null,
"outputFailureOnly": true,
"outputReturnFile": null,
"outputReturnNline": 100,
"outputReturnSline": 1,
"outputReturnText": null,
"outputReturnType": "OUTERR",
"outputType": "STDOUT",
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"retryExitCodes": null,
"retryIndefinitely": false,
"retryInterval": 60,
"retryMaximum": 0,
"retrySuppressFailure": false,
"runtimeDir": null,
"script": null,
"scriptOptions": null,
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
    
```

```

    <twDelayAmount />
    <twDelayDuration
>00:00:00:00</twDelayDuration>
    <twDelayType>None<
/twDelayType>
    <twWaitAmount />
    <twWaitDayConstraint>NONE<
/twWaitDayConstraint>
    <twWaitDuration
>00:00:00:00</twWaitDuration>
    <twWaitTime>00:00<
/twWaitTime>
    <twWaitType>None<
/twWaitType>
    <twWorkflowOnly>-- System
Default --</twWorkflowOnly>
    <userEstimatedDuration />
    <broker>${ftp_server}<
/broker>
    <brokerChoice>Agent
Hostname</brokerChoice>
    <brokerCred />
    <brokerCredVar
>${ftp_cred}</brokerCredVar>
    <brokerRef />
    <command>"whoami"</command
>
    <commandOptions>-G yes<
/commandOptions>
    <commandOrScript>Command<
/commandOrScript>
    <exitCodeOutput />
    <exitCodeProcessing
>Success Exitcode Range<
/exitCodeProcessing>
    <exitCodeText />
    <exitCodes>0</exitCodes>
    <outputFailureOnly>>true<
/outputFailureOnly>
    <outputReturnFile />
    <outputReturnNline>100<
/outputReturnNline>
    <outputReturnSline>1<
/outputReturnSline>
    <outputReturnText />
    <outputReturnTextType>OUTERR<
/outputReturnTextType>
    <outputType>STDOUT<
/outputType>
    <retryExitCodes />
    <retryIndefinitely>>false<
/retryIndefinitely>
    <retryInterval>60<
/retryInterval>
    <retryMaximum>0<
/retryMaximum>
    <retrySuppressFailure
>>false</retrySuppressFailure>

```

```

"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 1,
"virtualResources": [],

```

```
<runtimeDir />  
<script />  
<scriptOptions />  
<waitForOutput>>false<
```

```
"waitForOutput": false  
}
```

```
/waitForOutput>  
</taskUcmd>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Universal Command Task Properties](#)

## Universal Task Web Services

- [Overview](#)
- [Create a Universal Task](#)
- [Modify a Universal Task](#)
- [Read a Universal Task](#)
- [Universal Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Universal Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a Universal Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Universal task.  To persist <code>sysIds</code> , use the <code>retainSysIds</code> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Universal Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a Universal Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Universal Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Universal Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Universal Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	taskId or taskname
Mutually Exclusive Parameters	taskId and taskname
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json



Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Universal Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## Universal Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<div style="border: 1px solid #ccc; padding: 10px; background-color: #f9f9f9;"> <p>XML</p> <pre>&lt;taskUniversal retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;agent /&gt;   &lt;agentCluster&gt;Opwise Demo Cluster&lt;/agentCluster&gt;   &lt;agentClusterVar /&gt;   &lt;agentVar /&gt;   &lt;broadcastCluster /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt;/cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt;/customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt;/efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt;/efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt;/efEnabled&gt;   &lt;efNthAmount&gt;10&lt;/efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt;/executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt;/holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt;/lfDayConstraint&gt;   &lt;lfDuration&gt;00:00:00:00&lt;/lfDuration&gt;   &lt;lfEnabled&gt;&gt;false&lt;/lfEnabled&gt;   &lt;lfNthAmount&gt;1&lt;/lfNthAmount&gt;   &lt;lfTime&gt;00:00&lt;/lfTime&gt;   &lt;lfType&gt;Time&lt;/lfType&gt;   &lt;lsDayConstraint&gt;Nth&lt;/lsDayConstraint&gt;</pre> </div>	<div style="border: 1px solid #ccc; padding: 10px; background-color: #f9f9f9;"> <p>JSON</p> <pre>{   "type": "taskUniversal",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "agent": null,   "agentCluster": "Opwise Demo Cluster",   "agentClusterVar": null,   "agentVar": null,   "arrayField1": {     "fields": [       {         "name": "John Doe Jr.",         "value": "1234567"       },       {         "name": "Max",         "value": "888888"       }     ]   },   "label": "Customers",   "name": "array1",   "nameTitle": "Custom Name",   "valueTitle": "Custom Id" },   "arrayField2": {     "fields": [       {</pre> </div>

```

<lsDuration>00:00:00:00</lsDuration>
<lsEnabled>>false</lsEnabled>
<lsNthAmount>7</lsNthAmount>
<lsTime>00:00</lsTime>
<lsType>Time</lsType>
<name>Opswise - Test Email</name>
<opwiseGroups />
<resolveNameImmediately>>false</resolveNameImmediately>
<resPriority>10</resPriority>
<restrictionPeriod>Span</restrictionPeriod>
<restrictionPeriodAfterDate>2017-11-10<
/restrictionPeriodAfterDate>
  <restrictionPeriodAfterTime>10:30<
/restrictionPeriodAfterTime>
  <restrictionPeriodBeforeDate>2017-11-20<
/restrictionPeriodBeforeDate>
  <restrictionPeriodBeforeTime>15:00<
/restrictionPeriodBeforeTime>
  <restrictionPeriodDateList />
  <startHeld>>false</startHeld>
  <startHeldReason />
  <summary>Test Email</summary>
  <sysId>fb59a227517a421a92c15ff5aefe3b66</sysId>
  <timeZonePref>-- System Default --</timeZonePref>
  <twDelayAmount />
  <twDelayDuration>00:00:00:00</twDelayDuration>
  <twDelayType>None</twDelayType>
  <twWaitAmount />
  <twWaitDayConstraint>NONE</twWaitDayConstraint>
  <twWaitDuration>00:00:00:00</twWaitDuration>
  <twWaitTime>00:00</twWaitTime>
  <twWaitType>None</twWaitType>
  <twWorkflowOnly>-- System Default --</twWorkflowOnly>
  <userEstimatedDuration />
  <arrayField1 name="array1" label="Customers"
nameTitle="Custom Name" valueTitle="Custom Id">
    <field>
      <name>John Doe Jr.</name>
      <value>1234567</value>
    </field>
    <field>
      <name>Max</name>
      <value>888888</value>
    </field>
  </arrayField1>
  &lt;arrayField2 name="array2" label="Array2">
    <field>
      <name>A1</name>
      <value>test1</value>
    </field>
    <field>
      <name>A2</name>
      <value>test2</value>
    </field>
  </arrayField2>
  <booleanField1 name="run_immediately" label="Run
Immediately">>false</booleanField1>
  <choiceField1 name="programe" label="Program Name">val 1<

```

```

    "name": "A1",
    "value": "test1"
  },
  {
    "name": "A2",
    "value": "test2"
  }
],
"label": "Array2",
"name": "array2"
},
"booleanField1": {
  "label": "Run Immediately",
  "name": "run_immediately",
  "value": false
},
"broadcastCluster": null,
"choiceField1": {
  "label": "Program Name",
  "name": "programe",
  "value": "1"
},
"cpDuration": null,
"cpDurationUnit": "Minutes",
"createConsole": false,
"credentialField1": {
  "label": "Credential Name",
  "name": "credname",
  "value": "A"
},
"credentials": null,
"credentialsVar": null,
"customField1": {
  "label": "Domain",
  "value":
"http://qa-cntlr-mssql:8080/opswise/"
},
"customField2": {
  "label": null,
  "value": null
},
"desktopInteract": false,
"efDayConstraint": "Nth Day",
"efDuration": "00:00:00:00",
"efEnabled": false,
"efNthAmount": 10,
"efTime": "00:00",
"efType": "Time",
"elevateUser": false,
"environment": null,
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"exitCodeOutput": null,
"exitCodeProcessing": "Success Exitcode
Range",
"exitCodes": 0,
"exitCodeText": null,

```

```

/choiceField1>
  <createConsole>>false</createConsole>
  <credentialField1 name="credname" label="Credential
Name">cred 1</credentialField1>
  <desktopInteract>>false</desktopInteract>
  <elevateUser>>false</elevateUser>
  <environment />
  <exitCodeOutput />
  <exitCodeProcessing>Success Exitcode Range<
/exitCodeProcessing>
  <exitCodes>0</exitCodes>
  <exitCodeText />
  <intField1 name="error_level" label="Error Level">12<
/intField1>
  <largeTextField1 name="respapp" label="Responsibility
Application">test text</largeTextField1>
  <outputFailureOnly>>true</outputFailureOnly>
  <outputReturnFile />
  <outputReturnNline>100</outputReturnNline>
  <outputReturnSline>1</outputReturnSline>
  <outputReturnText />
  <outputReturnType>NONE</outputReturnType>
  <outputType>STDOUT</outputType>
  <retryExitCodes />
  <retryIndefinitely>>false</retryIndefinitely>
  <retryInterval>60</retryInterval>
  <retryMaximum>0</retryMaximum>
  <retrySuppressFailure>>false</retrySuppressFailure>
  <runtimeDir />
  <scriptField1 name="s1" label="Script 1">Data3.txt<
/scriptField1>
  <template>test template</template>
  <textField1 name="username" label="Application User">test

```

```

"holdResources": false,
"intField1": {
  "label": "Error Level",
  "name": "error_level",
  "value": 12
},
"largeTextField1": {
  "label": "Responsibility
Application",
  "name": "respapp",
  "value": "test text"
},
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Opswise - Test Email",
"notes": [],
"opswiseGroups": null,
"outputFailureOnly": true,
"outputReturnFile": null,
"outputReturnNline": 100,
"outputReturnSline": 1,
"outputReturnText": null,
"outputReturnType": "NONE",
"outputType": "STDOUT",
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate":
"2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate":
"2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"retryExitCodes": null,
"retryIndefinitely": false,
"retryInterval": 60,
"retryMaximum": 0,
"retrySuppressFailure": false,
"runtimeDir": null,
"scriptField1": {
  "label": "Script 1",
  "name": "s1",
  "value": "Data3.txt"
},
"startHeld": false,
"startHeldReason": null,

```

```
text</textField1>
</taskUniversal>
```

```
"summary": "Test Email",
"sysId":
"fb59a227517a421a92c15ff5aefe3b66",
"template": "test template",
"textField1": {
  "label": "Application User",
  "name": "username",
  "value": "test text"
},
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default
--",
"userEstimatedDuration": null,
"variables": [],
"version": 1,
```

```
"virtualResources": []  
}
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Universal Task Properties](#)

## Variable Monitor Task Web Services

- [Overview](#)
- [Create a Variable Monitor Task](#)
- [Modify a Variable Monitor Task](#)
- [Read a Variable Monitor Task](#)
- [Variable Monitor Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Variable Monitor Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a Variable Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Variable Monitor task.  To persist sysIds, use the <a href="#">retainSysIds</a> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Variable Monitor Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a Variable Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Variable Monitor Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Variable Monitor Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Variable Monitor Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Variable Monitor Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## Variable Monitor Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<div style="border: 1px solid #ccc; padding: 10px;"> <p>▼ XML</p> <pre>&lt;taskVariableMonitor retainSysIds ="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt; /efEnabled&gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; /executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt; /holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt; /lfDayConstraint&gt;</pre> </div>	<div style="border: 1px solid #ccc; padding: 10px;"> <p>▼ JSON</p> <pre>{   "type": "taskVariableMonitor",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opswise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,   "efTime": "00:00",   "efType": "Time",   "excludeRelated": false,   "exclusiveTasks": [],   "executionRestriction": "Run",   "holdResources": false,   "lfDayConstraint": "Nth Day",</pre> </div>



```

        <lfDuration>00:00:00:00<
    /lfDuration>
    <lfEnabled>>false<
    /lfEnabled>
    <lfNthAmount>1<
    /lfNthAmount>
    <lfTime>00:00</lfTime>
    <lfType>Time</lfType>
    <lsDayConstraint>Nth<
    /lsDayConstraint>
    <lsDuration>00:00:00:00<
    /lsDuration>
    <lsEnabled>>false<
    /lsEnabled>
    <lsNthAmount>7<
    /lsNthAmount>
    <lsTime>00:00</lsTime>
    <lsType>Time</lsType>
    <name>Opwise - Test
    Email</name>
    <opwiseGroups />
    <resolveNameImmediately
    >false</resolveNameImmediately>
    <resPriority>10<
    /resPriority>
    <restrictionPeriod>Span<
    /restrictionPeriod>
    <
    restrictionPeriodAfterDate
    >2017-11-10<
    /restrictionPeriodAfterDate>
    <
    restrictionPeriodAfterTime>10:30<
    /restrictionPeriodAfterTime>
    <
    restrictionPeriodBeforeDate
    >2017-11-20<
    /restrictionPeriodBeforeDate>
    <
    restrictionPeriodBeforeTime>15:00<
    /restrictionPeriodBeforeTime>
    <restrictionPeriodDateList
    />
    <startHeld>>false<
    /startHeld>
    <startHeldReason />
    <summary>Test Email<
    /summary>
    <sysId
    >fb59a227517a421a92c15ff5aefe3b66<
    /sysId>
    <timeZonePref>-- System
    Default --</timeZonePref>
    <twDelayAmount />
    <twDelayDuration
    >00:00:00:00</twDelayDuration>
    <twDelayType>None<
    /twDelayType>

```

```

"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Opwise - Test Email",
"notes": [],
"opwiseGroups": null,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeLimit": 12,
"timeLimitUnit": "Hours",
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"userEstimatedDuration": null,
"value": "val",
"valueCondition": "regex",
"valueMonitorType": "Current",
"variableName": "demo_ops_global",
"variables": [],
"version": 1,

```

```
<twWaitAmount />
<twWaitDayConstraint>NONE<
/twWaitDayConstraint>
<twWaitDuration
>00:00:00:00</twWaitDuration>
<twWaitTime>00:00<
/twWaitTime>
<twWaitType>None<
/twWaitType>
<twWorkflowOnly>-- System
Default --</twWorkflowOnly>
<userEstimatedDuration />
<timeLimit>12</timeLimit>
<timeLimitUnit>Hours<
/timeLimitUnit>
<value>val</value>
<valueCondition>regex<
/valueCondition>
<valueMonitorType>Current<
/valueMonitorType>
<variableName
```

```
"virtualResources": [ ]
}
```

```
>demo_ops_global</variableName>  
</taskVariableMonitor>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Variable Monitor Task Properties](#)

## Web Service Task Web Services

- [Overview](#)
- [Create a Web Service Task](#)
- [Modify a Web Service Task](#)
- [Read a Web Service Task](#)
- [Web Service Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Web Service Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a Web Service Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Web Service task.  To persist <code>sysIds</code> , use the <code>retainSysIds</code> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Web Service Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a Web Service Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <code>request</code>.</p> <p>To modify Web Service Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Web Service Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Web Service Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <code>task</code> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Web Service Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## Web Service Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>▼ XML</p> <pre>&lt;taskWebService retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials&gt;web-cred&lt; /credentials&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt;/customField1 &gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt;/efEnabled&gt;   &lt;efNthAmount&gt;10&lt;/efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; /executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt; /holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt; /lfDayConstraint&gt;   &lt;lfDuration&gt;00:00:00:00&lt;</pre>	<p>▼ JSON</p> <pre>{   "type": "taskWebService",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "autoCleanup": true,   "cpDuration": null,   "cpDurationUnit": "Minutes",   "credentials": "web-cred",   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opswise/"   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,   "efTime": "00:00",   "efType": "Time",   "excludeRelated": false,   "exclusiveTasks": [],   "executionRestriction": "Run",   "formData": [</pre>

```

/lfDuration>
  <lfEnabled>>false</lfEnabled>
  <lfNthAmount>1</lfNthAmount>
  <lfTime>00:00</lfTime>
  <lfType>Time</lfType>
  <lsDayConstraint>Nth<
/lsDayConstraint>
  <lsDuration>00:00:00:00<
/lsDuration>
  <lsEnabled>>false</lsEnabled>
  <lsNthAmount>7</lsNthAmount>
  <lsTime>00:00</lsTime>
  <lsType>Time</lsType>
  <name>Opswise - Test Email<
/name>
  <opswiseGroups />
  <resolveNameImmediately
>false</resolveNameImmediately>
  <resPriority>10</resPriority>
  <restrictionPeriod>Span<
/restrictionPeriod>
  <restrictionPeriodAfterDate
>2017-11-10<
/restrictionPeriodAfterDate>
  <restrictionPeriodAfterTime
>10:30</restrictionPeriodAfterTime>
  <restrictionPeriodBeforeDate
>2017-11-20<
/restrictionPeriodBeforeDate>
  <restrictionPeriodBeforeTime
>15:00</restrictionPeriodBeforeTime>
  <restrictionPeriodDateList />
  <startHeld>>false</startHeld>
  <startHeldReason />
  <summary>Test Email</summary>
  <sysId
>fb59a227517a421a92c15ff5aeffe3b66<
/sysId>
  <timeZonePref>-- System
Default --</timeZonePref>
  <twDelayAmount />
  <twDelayDuration>00:00:00:00<
/twDelayDuration>
  <twDelayType>None<
/twDelayType>
  <twWaitAmount />
  <twWaitDayConstraint>NONE<
/twWaitDayConstraint>
  <twWaitDuration>00:00:00:00<
/twWaitDuration>
  <twWaitTime>00:00</twWaitTime
>
  <twWaitType>None</twWaitType>
  <twWorkflowOnly>-- System
Default --</twWorkflowOnly>
  <userEstimatedDuration />
  <autoCleanup>>true<
/autoCleanup>

```

```

{
  "name": "field1",
  "value": "value1"
},
{
  "name": "field2",
  "value": "value2"
}
],
"holdResources": false,
"httpAuth": "Basic",
"httpHeaders": [
  {
    "name": "header1",
    "value": "val1"
  },
  {
    "name": "header2",
    "value": "val2"
  }
],
"httpMethod": "PUT",
"httpPayloadType": "Form Data",
"httpVersion": "1.1",
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"mimeType": null,
"name": "Opswise - Test Email",
"notes": [],
"opswiseGroups": null,
"outputConditionOperator": "=",
"outputConditionStrategy": "Match Any",
"outputConditionValue": null,
"outputPathExpression": null,
"outputType": "Text",
"payload": null,
"payloadScript": null,
"payloadSource": "Form",
"protocol": "HTTP(S)/REST",
"resolveNameImmediately": false,
"responseProcessingType": "Default Success Status
Code Range",
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",

```

```

    <formData>
  <formField>
    <name>field1</name>
    <value>value1</value>
  </formField>
  <formField>
    <name>field2</name>
    <value>value2</value>
  </formField>
  </formData>
  <httpAuth>Basic</httpAuth>
  <httpHeaders>
  <httpHeader>
    <name>header1</name>
    <value>val1</value>
  </httpHeader>
  <httpHeader>
    <name>header2</name>
    <value>val2</value>
  </httpHeader>
  </httpHeaders>
  <httpMethod>PUT</httpMethod>
  <httpPayloadType>Form Data<
/ httpPayloadType>
  <httpVersion>1.1</httpVersion
>
  <contentType />
  <outputConditionOperator>=<
/ outputConditionOperator>
  <outputConditionStrategy
>Match Any</outputConditionStrategy>
  <outputConditionValue />
  <outputPathExpression />
  <outputType>Text</outputType>
  <payload />
  <payloadScript />
  <payloadSource>Form<
/ payloadSource>
  <protocol>HTTP(S)/REST<
/ protocol>
  <responseProcessingType
>Default Success Status Code Range<
/ responseProcessingType>
  <retryIndefinitely>>false<
/ retryIndefinitely>
  <retryInterval>60<
/ retryInterval>
  <retryMaximum>0</retryMaximum
>
  <retrySuppressFailure>>false<
/ retrySuppressFailure>
  <soapAction />
  <soapPayloadType>Body<
/ soapPayloadType>
  <soapResponseOutput
>Body/First Element<
/ soapResponseOutput>
  <soapVersion>1.2</soapVersion

```

```

"restrictionPeriodDateList": [],
"retainSysIds": true,
"retryIndefinitely": false,
"retryInterval": 60,
"retryMaximum": 0,
"retrySuppressFailure": false,
"soapAction": null,
"soapPayloadType": "Body",
"soapResponseOutput": "Body/First Element",
"soapVersion": "1.2",
"startHeld": false,
"startHeldReason": null,
"statusCodeRange": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeout": 20,
"timeZonePref": "-- System Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"url":
"http://localhost:8080/opswise/resources/omsserver",
"urlParameters": [
  {
    "name": "param1",
    "value": "value1"
  },
  {
    "name": "param2",
    "value": "value"
  }
],
"userEstimatedDuration": null,
"variables": [],
"version": 1,

```



```
>
  <statusCodeRange />
  <timeout>20</timeout>
  <url
>http://www.rest.com/resources/users<
/urll>
  <urlParameters>
  <urlParameter>
  <name>param1</name>
  <value>value1</value>
  </urlParameter>
  <urlParameter>
  <name>param2</name>
  <value>value2</value>
  </urlParameter>
```

```
"virtualResources": []
}
```

```
</urlParameters>  
</taskWebService>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Web Service Task Properties](#)

## Windows Task Web Services

- [Overview](#)
- [Create a Windows Task](#)
- [Modify a Windows Task](#)
- [Read a Windows Task](#)
- [Windows Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Windows Task operations, which are listed alphabetically on this page.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a Windows Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Windows task.  To persist <code>sysIds</code> , use the <code>retainSysIds</code> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Windows Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .

Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>
------------------	--

## Modify a Windows Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <code>sysId</code> in the <a href="#">request</a>.</p> <p>To modify Windows Task properties without modifying related records, use the <code>excludeRelated</code> property.</p>
Example	See <a href="#">Windows Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Windows Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=testTask">http://localhost:8080/opswise/resources/task?taskname=testTask</a></li> <li><a href="http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1">http://localhost:8080/opswise/resources/task?taskId=d26265a2c4f345359d9b356f18a462c1</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Windows Task: XML and JSON Examples.</a>)</li> <li>• Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.</li> </ul>
Properties	See <a href="#">Properties.</a>

## Windows Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>▼ XML</p> <pre>&lt;taskWindows retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;agent /&gt;   &lt;agentCluster&gt;Opwise - Demo Windows Cluster&lt; /agentCluster&gt;   &lt;agentClusterVar /&gt;   &lt;agentVar /&gt;   &lt;broadcastCluster /&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt; /customField1&gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;false&lt; /efEnabled&gt;   &lt;efNthAmount&gt;10&lt; /efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;</pre>	<p>▼ JSON</p> <pre>{   "type": "taskWindows",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "agent": null,   "agentCluster": "Opwise Demo Cluster",   "agentClusterVar": null,   "agentVar": null,   "broadcastCluster": null,   "command": "\${demo_ops_snooze}",   "commandOrScript": "Command",   "cpDuration": null,   "cpDurationUnit": "Minutes",   "createConsole": false,   "credentials": null,   "credentialsVar": null,   "customField1": {     "label": "Domain",     "value": "http://qa-cntlr-mssql:8080/opwise/"   },   "customField2": {     "label": null,     "value": null   },   "desktopInteract": false,   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",</pre>

```

    <efType>Time</efType>
    <executionRestriction>Run<
  /executionRestriction>
    <holdResources>>false<
  /holdResources>
    <lfDayConstraint>Nth<
  /lfDayConstraint>
    <lfDuration>00:00:00:00<
  /lfDuration>
    <lfEnabled>>false<
  /lfEnabled>
    <lfNthAmount>1<
  /lfNthAmount>
    <lfTime>00:00</lfTime>
    <lfType>Time</lfType>
    <lsDayConstraint>Nth<
  /lsDayConstraint>
    <lsDuration>00:00:00:00<
  /lsDuration>
    <lsEnabled>>false<
  /lsEnabled>
    <lsNthAmount>7<
  /lsNthAmount>
    <lsTime>00:00</lsTime>
    <lsType>Time</lsType>
    <name>Opwise - Test
Email</name>
    <opwiseGroups />
    <resolveNameImmediately
>>false</resolveNameImmediately>
    <resPriority>10<
  /resPriority>
    <restrictionPeriod>Span<
  /restrictionPeriod>
    <
  restrictionPeriodAfterDate
>2017-11-10<
  /restrictionPeriodAfterDate>
    <
  restrictionPeriodAfterTime>10:30<
  /restrictionPeriodAfterTime>
    <
  restrictionPeriodBeforeDate
>2017-11-20<
  /restrictionPeriodBeforeDate>
    <
  restrictionPeriodBeforeTime>15:00<
  /restrictionPeriodBeforeTime>
    <restrictionPeriodDateList
  />
    <startHeld>>false<
  /startHeld>
    <startHeldReason />
    <summary>Test Email<
  /summary>
    <sysId
>fb59a227517a421a92c15ff5aefe3b66<
  /sysId>

```

```

"efEnabled": false,
"efNthAmount": 10,
"efTime": "00:00",
"efType": "Time",
"elevateUser": false,
"environment": null,
"excludeRelated": false,
"exclusiveTasks": [],
"executionRestriction": "Run",
"exitCodeOutput": null,
"exitCodeProcessing": "Success Exitcode Range",
"exitCodes": 0,
"exitCodeText": null,
"holdResources": false,
"lfDayConstraint": "Nth Day",
"lfDuration": "00:00:00:00",
"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "Opwise - Test Email",
"notes": [],
"opwiseGroups": null,
"outputFailureOnly": true,
"outputReturnFile": null,
"outputReturnNline": 100,
"outputReturnSline": 1,
"outputReturnText": null,
"outputReturnTextType": "NONE",
"outputType": "STDOUT",
"parameters": "${_random(30,10)} 0",
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate": "2017-11-10",
"restrictionPeriodAfterTime": "10:30",
"restrictionPeriodBeforeDate": "2017-11-20",
"restrictionPeriodBeforeTime": "15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"retryExitCodes": null,
"retryIndefinitely": false,
"retryInterval": 60,
"retryMaximum": 0,
"retrySuppressFailure": false,
"runtimeDir": null,
"script": null,
"startHeld": false,
"startHeldReason": null,
"summary": "Test Email",
"sysId": "fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System Default --",

```

```

    <timeZonePref>-- System
Default --</timeZonePref>
    <twDelayAmount />
    <twDelayDuration
>00:00:00:00</twDelayDuration>
    <twDelayType>None<
/twDelayType>
    <twWaitAmount />
    <twWaitDayConstraint>NONE<
/twWaitDayConstraint>
    <twWaitDuration
>00:00:00:00</twWaitDuration>
    <twWaitTime>00:00<
/twWaitTime>
    <twWaitType>None<
/twWaitType>
    <twWorkflowOnly>-- System
Default --</twWorkflowOnly>
    <userEstimatedDuration />
    <command
>${demo_ops_snooze}</command>
    <commandOrScript>Command<
/commandOrScript>
    <createConsole>>false<
/createConsole>
    <desktopInteract>>false<
/desktopInteract>
    <elevateUser>>false<
/elevateUser>
    <environment />
    <exitCodeOutput />
    <exitCodeProcessing
>Success Exitcode Range<
/exitCodeProcessing>
    <exitCodes>0</exitCodes>
    <exitCodeText />
    <outputFailureOnly>>true<
/outputFailureOnly>
    <outputReturnFile />
    <outputReturnNline>100<
/outputReturnNline>
    <outputReturnSline>1<
/outputReturnSline>
    <outputReturnText />
    <outputReturnType>NONE<
/outputReturnType>
    <outputType>STDOUT<
/outputType>
    <parameters
>${_random(30,10)} 0</parameters>
    <retryExitCodes />
    <retryIndefinitely>>false<
/retryIndefinitely>
    <retryInterval>60<
/retryInterval>
    <retryMaximum>0<
/retryMaximum>
    <retrySuppressFailure

```

```

"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "NONE",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 1,
"virtualResources": [],

```

```
>false</retrySuppressFailure>  
<runtimeDir />  
<script />  
<waitForOutput>>false<
```

```
"waitForOutput": false  
}
```



```
/waitForOutput>  
</taskWindows>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Windows Task Properties](#)

## Workflow Task Web Services

- [Overview](#)
- [Create a Workflow Task](#)
- [Modify a Workflow Task](#)
- [Read a Workflow Task](#)
- [Workflow Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Workflow Task operations.

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter requirements, are provided.

Links to detailed information about the [properties](#) used in these web services also is located on this page.

For information on Workflow Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

For a list of Workflow Vertex and Edge web services, see:

- [Workflow Task and Dependency Web Services](#)

### Create a Workflow Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new Workflow task.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Workflow Task: XML and JSON Examples</a> , below.

Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the &lt;task type&gt; task with sysId &lt;sysId&gt;.</li> </ul>

## Modify a Workflow Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	<p>Modifies the task specified by the <a href="#">sysId</a> in the <a href="#">request</a>.</p> <p>To modify Workflow Task properties without modifying related records, use the <a href="#">excludeRelated</a> property.</p>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sysId &lt;sysId&gt; to version &lt;version&gt;.</li> </ul>

## Read a Workflow Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified <a href="#">task</a> .
Request Parameters	taskId or taskname
Mutually Exclusive Parameters	taskId and taskname
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task?taskname=test">http://localhost:8080/opswise/resources/task?taskname=test</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json

## Example Response

- Status 200 /OK  
(See [Workflow Task: XML and JSON Examples.](#))
- Status 404 /Not Found  
A task with id "f87848b00a0001037f43e7c81c8ec969" does not exist.

## Workflow Task: XML and JSON Examples

The `retainSysIds` and `version` properties are specified as attributes in XML.

Examples	XML	JSON
Example for Task	<p>XML</p> <pre> &lt;taskWorkflow retainSysIds="true"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;stepConditions /&gt;   &lt;stepActions /&gt;   &lt;runCriteria /&gt;   &lt;workflowVertices&gt;     &lt;workflowVertex&gt;       &lt;alias /&gt;       &lt;task&gt;Sleep 30&lt;/task&gt;       &lt;vertexId&gt;2&lt;/vertexId&gt;       &lt;vertexX&gt;360&lt;/vertexX&gt;       &lt;vertexY&gt;60&lt;/vertexY&gt;     &lt;/workflowVertex&gt;     &lt;workflowVertex&gt;       &lt;alias /&gt;       &lt;task&gt;Sleep 60&lt;/task&gt;       &lt;vertexId&gt;3&lt;/vertexId&gt;       &lt;vertexX&gt;360&lt;/vertexX&gt;       &lt;vertexY&gt;170&lt;/vertexY&gt;     &lt;/workflowVertex&gt;     &lt;workflowVertex&gt;       &lt;alias /&gt;       &lt;task&gt;zos task&lt;/task&gt;       &lt;vertexId&gt;4&lt;/vertexId&gt;       &lt;vertexX&gt;560&lt;/vertexX&gt;       &lt;vertexY&gt;50&lt;/vertexY&gt;     &lt;/workflowVertex&gt;     &lt;workflowVertex&gt;       &lt;alias /&gt;       &lt;task&gt;Opswise - Windows Sleep&lt;/task&gt;                     </pre>	<p>JSON</p> <pre> {   "type": "taskWorkflow",   "actions": {     "abortActions": [],     "emailNotifications": [],     "setVariableActions": [],     "snmpNotifications": [],     "systemOperations": []   },   "calculateCp": false,   "calendar": null,   "cpDuration": null,   "cpDurationUnit": "Minutes",   "customField1": {     "label": "Domain",     "value": null   },   "customField2": {     "label": null,     "value": null   },   "efDayConstraint": "Nth Day",   "efDuration": "00:00:00:00",   "efEnabled": false,   "efNthAmount": 10,   "efTime": "00:00",   "efType": "Time",   "excludeRelated": false,   "exclusiveTasks": [],   "executionRestriction": "Run",   "holdResources": false,   "layoutOption": "-- None --",   "lfDayConstraint": "Nth Day",   "lfDuration": "00:00:00:00",                     </pre>

```

        <vertexId>5</vertexId>
        <vertexX>390</vertexX>
        <vertexY>310</vertexY>
    </workflowVertex>
</workflowVertices>
<workflowEdges>
    <workflowEdge>
        <condition>Success</condition>
        <sourceId>2</sourceId>
        <straightEdge>true</straightEdge>
        <targetId>3</targetId>
    </workflowEdge>
    <workflowEdge>
        <condition type="Exit Code">123</condition>
        <sourceId>3</sourceId>
        <straightEdge>true</straightEdge>
        <targetId>5</targetId>
    </workflowEdge>
    <workflowEdge>
        <condition type="Step
Condition">1:*:*:1</condition>
        <sourceId>4</sourceId>
        <straightEdge>true</straightEdge>
        <targetId>2</targetId>
    </workflowEdge>
</workflowEdges>
<cpDuration />
<cpDurationUnit>Minutes</cpDurationUnit>
<customField1 label="Domain">web.com</customField1>
<customField2 />
<efDayConstraint>Nth</efDayConstraint>
<efDuration>00:00:00:00</efDuration>
<efEnabled>>false</efEnabled>
<efNthAmount>10</efNthAmount>
<efTime>00:00</efTime>
<efType>Time</efType>
<executionRestriction>Run</executionRestriction>
<holdResources>>false</holdResources>
<lfDayConstraint>Nth</lfDayConstraint>
<lfDuration>00:00:00:00</lfDuration>
<lfEnabled>>false</lfEnabled>
<lfNthAmount>1</lfNthAmount>
<lfTime>00:00</lfTime>
<lfType>Time</lfType>
<lsDayConstraint>Nth</lsDayConstraint>
<lsDuration>00:00:00:00</lsDuration>
<lsEnabled>>false</lsEnabled>
<lsNthAmount>7</lsNthAmount>
<lsTime>00:00</lsTime>
<lsType>Time</lsType>
<name>Opwise - Test Email</name>
<opwiseGroups />
<resolveNameImmediately>>false</resolveNameImmediately>
<resPriority>10</resPriority>
<restrictionPeriod>Span</restrictionPeriod>
<restrictionPeriodAfterDate>2017-11-10<
/restrictionPeriodAfterDate>
<restrictionPeriodAfterTime>10:30</restrictionPeriodAfterTime>

```

```

"lfEnabled": false,
"lfNthAmount": 1,
"lfTime": "00:00",
"lfType": "Time",
"lsDayConstraint": "Nth Day",
"lsDuration": "00:00:00:00",
"lsEnabled": false,
"lsNthAmount": 7,
"lsTime": "00:00",
"lsType": "Time",
"name": "test-wkfl-web-service",
"notes": [],
"numberOfTasks": 2,
"opwiseGroups": [],
"overrideCalendar": false,
"resolveNameImmediately": false,
"resPriority": 10,
"restrictionPeriod": "Span",
"restrictionPeriodAfterDate":
"2017-11-10",
"restrictionPeriodAfterTime":
"10:30",
"restrictionPeriodBeforeDate":
"2017-11-20",
"restrictionPeriodBeforeTime":
"15:00",
"restrictionPeriodDateList": [],
"retainSysIds": true,
"runCriteria": [],
"skippedOption": "Show Skipped",
"startHeld": false,
"startHeldReason": null,
"stepActions": [],
"stepConditions": [],
"summary": null,
"sysId":
"fb59a227517a421a92c15ff5aefe3b66",
"timeZonePref": "-- System
Default --",
"twDelayAmount": null,
"twDelayDuration": "00:00:00:00",
"twDelayType": "None",
"twWaitAmount": null,
"twWaitDayConstraint": "None",
"twWaitDuration": "00:00:00:00",
"twWaitTime": "00:00",
"twWaitType": "None",
"twWorkflowOnly": "-- System
Default --",
"userEstimatedDuration": null,
"variables": [],
"version": 2,
"virtualResources": [],
"workflowEdges": [ {
"condition": {
"value": "Success"
}
},
"sourceId": {

```

```

    <restrictionPeriodBeforeDate>2017-11-20<
  /restrictionPeriodBeforeDate>
    <restrictionPeriodBeforeTime>15:00</restrictionPeriodBeforeTime
  >
    <restrictionPeriodDateList />
    <skippedOption>Show Skipped</skippedOption>
    <startHeld>>false</startHeld>
    <startHeldReason />
    <summary />
    <sysId>c835007fc0a802650080dabfc04d4d67</sysId>
    <timeZonePref>-- System Default --</timeZonePref>
    <twDelayAmount />
    <twDelayDuration>00:00:00:00</twDelayDuration>
    <twDelayType>None</twDelayType>
    <twWaitAmount />
    <twWaitDayConstraint>None</twWaitDayConstraint>
    <twWaitDuration>00:00:00:00</twWaitDuration>
    <twWaitTime>00:00</twWaitTime>
    <twWaitType>None</twWaitType>
    <twWorkflowOnly>-- System Default --</twWorkflowOnly>
    <userEstimatedDuration />
    <calculateCp>>false</calculateCp>
    <calendar />
    <layoutOption>-- None --</layoutOption>
    <numberOfTasks>10</numberOfTasks>
    <overrideCalendar>>false</overrideCalendar>

```

```

    "taskName": "SB_ZOS_Task ",
    "value": "2"
  },
  "straightEdge": true,
  "targetId": {
    "taskAlias": "Timer 0",
    "taskName": "Sleep 0",
    "value": "3"
  }
} ],
"workflowVertices": [ {
  "alias": null,
  "task": {
    "value": "SB_ZOS_Task"
  },
  "vertexId": "2",
  "vertexX": "480",
  "vertexY": "90"
}, {
  "alias": "Timer 0",
  "task": {
    "value": "Sleep 0"
  },
  "vertexId": "3",
  "vertexX": "480",
  "vertexY": "270"
}

```

```
<skippedOption>Show Skipped</skippedOption>  
</taskWorkflow>
```

```
}  
}]
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-related records.

See [Workflow Task - Workflow Task-Related Records](#) for XML and JSON examples of Workflow task-related records.

## Properties

- See [All Tasks Properties](#)
- See [Workflow Task Properties](#)
- See [Workflow Task - Workflow Task-Related Records Properties](#)

## Workflow Task - Workflow Task-Related Records

### Examples

The following examples are for task-related records for all task types except where noted otherwise.

Examples	XML	JSON
<p>Examples for Workflow Task-Related Records</p>	<p>XML</p> <p>Workflow Vertices</p> <pre data-bbox="636 524 1115 808"> &lt;workflowVertices&gt;   &lt;workflowVertex&gt;     &lt;alias /&gt;     &lt;task&gt;zos task&lt;/task&gt;     &lt;vertexId&gt;4&lt;/vertexId&gt;     &lt;vertexX&gt;560&lt;/vertexX&gt;     &lt;vertexY&gt;50&lt;/vertexY&gt;   &lt;/workflowVertex&gt; &lt;/workflowVertices&gt; </pre> <p>Workflow Edges</p> <pre data-bbox="636 930 1115 1466"> &lt;workflowEdges&gt;   &lt;workflowEdge&gt;     &lt;condition type="Step Condition"&gt;1:*:*:1&lt;/condition&gt;     &lt;sourceId&gt;4&lt;/sourceId&gt;     &lt;straightEdge&gt;true&lt; /staightEdge&gt;     &lt;targetId&gt;2&lt;/targetId&gt;   &lt;/workflowEdge&gt;   &lt;workflowEdge&gt;     &lt;points&gt;       &lt;point x="280" y="300" /&gt;     &lt;/points&gt;     &lt;condition&gt;Success&lt;/condition&gt;     &lt;sourceId&gt;2&lt;/sourceId&gt;     &lt;straightEdge&gt;&gt;false&lt; /staightEdge&gt;     &lt;targetId&gt;3&lt;/targetId&gt;   &lt;/workflowEdge&gt; &lt;/workflowEdges&gt; </pre>	<p>JSON</p> <p>Workflow Vertices</p> <pre data-bbox="1224 524 1751 829"> "workflowVertices": [ {   "alias": null,   "task": {     "value": "SB_ZOS_Task "   },   "vertexId": "2",   "vertexX": "510",   "vertexY": "40" } ] </pre> <p>Workflow Edges</p> <pre data-bbox="1224 930 1751 1352"> "workflowEdges": [ {   "condition": {     "value": "Success"   },   "sourceId": {     "taskName": "SB_ZOS_Task ",     "value": "2"   },   "straightEdge": true,   "targetId": {     "taskAlias": "Timer 0",     "taskName": "Sleep 0",     "value": "3"   } } ] </pre> <p>Step Conditions</p>



### Step Conditions

```
<stepConditions>
  <stepCondition>
    <programName>programName<
  /programName>
    <pstepName>procedureName<
  /pstepName>
    <stepAction>Continue/Success<
  /stepAction>
    <stepCodes>U0016</stepCodes>
    <stepName>stepName</stepName>
    <stepOrder>0</stepOrder>
    <sysId>
  >1f85c539f50a4b488af5aad39a60c05c<
  /sysId>
  </stepCondition>
</stepConditions>
```

### Step Actions

```
<stepActions>
  <systemOperation>
    <actionCriteriaTask>zos task<
  /actionCriteriaTask>
    <agent>AGNT0001</agent>
    <agentCluster />
    <agentClusterVar />
    <agentVar />
    <description>description<
  /description>
    <execCommand>Cancel<
  /execCommand>
    <execCriteria>Oldest Active
  Instance</execCriteria>
    <execId />
    <execLookupOption>Instance
  Name</execLookupOption>
    <execName />
    <execWorkflowName />
    <execWorkflowNameCode>Equals<
  /execWorkflowNameCode>
    <limit />
    <notificationOption>Operation
  Success/Failure<
  /notificationOption>
    <operation>Suspend Agent<
  /operation>
```

```
"stepConditions": [ {
  "programName": null,
  "pstepName": null,
  "stepAction": "Halt/Failed",
  "stepCodes": "1-4095",
  "stepName": null,
  "stepOrder": 1,
  "sysId":
  "100b1da7c19f40a3848c2549a7c24de4"
}
]
```

### Step Actions

```

<programName />
<pstepName />
<stepCodes>123</stepCodes>
<stepName />
<sysId
>d722fd81df0b4ac8ad0c684alb17a766<
/sysId>
  <task />
  <taskLimitType>Unlimited<
/taskLimitType>
  <taskVar />
    <trigger>Trigger
A</trigger>
  <triggerVar />>
  <variables>
    <variable>
      <name
>var1</name>
      <
value>val1</value>
    </variable>
    <variable>
      <name
>var2</name>
      <
value>val2</value>
    </variable>
  </variables>
  <
variablesUnresolved>false<
/variablesUnresolved>
  <vertexId>1</vertexId>
  <virtualResource />
  <virtualResourceVar />

```

```

"stepActions": [ {
  "actionCriteriaTask":
"SB_ZOS_Task ",
  "agent": null,
  "agentCluster": null,
  "agentClusterVar": null,
  "agentVar": null,
  "description": null,
  "execCommand": "Cancel",
  "execCriteria": "Oldest Active
Instance",
  "execId": null,
  "execLookupOption": "Instance
Name",
  "execName": "SB_Timer",
  "execWorkflowName":
"SB_Workflow",
  "execWorkflowNameCond": "Equals",
  "limit": null,
  "notificationOption": "Operation
Failure",
  "operation": "Task Instance
Command",
  "programName": null,
  "pstepName": null,
  "stepCodes": "S0C4",
  "stepName": null,
  "sysId":
"e1149f680ce542febfa022f3c0dbf828",
  "task": null,
  "taskLimitType": "Unlimited",
  "taskVar": null,
  "trigger": null,
  "triggerVar": null,
  "variables": [ ],
  "variablesUnresolved": false,
  "vertexId": "Any",
  "virtualResource": null,
  "virtualResourceVar": null
}
]

```

Run Criteria

```
</systemOperation>
</stepActions>
```

### Run Criteria

```
<runCriteria>
  <runCriterion>
    <businessDay>true</businessDay>
    <complex>>false</complex>
    <complexAdjective>Every<
  /complexAdjective>
    <complexNoun>Day</complexNoun>
    <complexNthAmount>5<
  /complexNthAmount>
    <complexQualifier>Year<
  /complexQualifier>
    <customDay>>false</customDay>
    <customDayChoice />
    <description />
    <evaluateAt>Trigger Time<
  /evaluateAt>
    <holiday>>false</holiday>
    <specificDay>>false</specificDay>
  >
    <specificDayFri>>false<
  /specificDayFri>
    <specificDayMon>>false<
  /specificDayMon>
    <specificDaySat>>false<
  /specificDaySat>
    <specificDaySun>>false<
  /specificDaySun>
    <specificDayThu>>false<
  /specificDayThu>
    <specificDayTue>>false<
  /specificDayTue>
    <specificDayWed>>false<
  /specificDayWed>
    <sysId
  >bb5f7807b0614153942572ecbc2dcfbe<
  /sysId>
    <task>Sleep 60</task>
    <type>Skip Criteria</type>
    <variable>>false</variable>
    <variableName />
    <variableOp>=</variableOp>
    <variableValue />
    <vertexId>13</vertexId>
  </runCriterion>
</runCriteria>
```

```
"runCriteria": [ {
  "businessDay": false,
  "complex": true,
  "complexAdjective": "Every",
  "complexNoun": {
    "value": "SB_Custom_Day"
  },
  "complexNthAmount": 5,
  "complexQualifier": {
    "value": "Year"
  },
  "customDay": false,
  "customDayChoice": null,
  "description": null,
  "evaluateAt": "Trigger Time",
  "holiday": false,
  "specificDay": false,
  "specificDayFri": false,
  "specificDayMon": false,
  "specificDaySat": false,
  "specificDaySun": false,
  "specificDayThu": false,
  "specificDayTue": false,
  "specificDayWed": false,
  "sysId":
  "1ec6b25f49a249c8a953f45e14620960",
  "task": "Sleep 5",
  "type": "Skip Criteria",
  "variable": false,
  "variableName": null,
  "variableOp": "=",
  "variableValue": null,
  "vertexId": "Any"
}
]
```

## Properties

See the [Workflow Task - Workflow Task-Related Records Properties](#) page for information on Workflow task-related records properties.

- See [Workflow Vertices Properties](#)
- See [Workflow Edges Properties](#)
- See [Step Conditions Properties](#)
- See [Step Actions Properties](#)
- See [Run Criteria Properties](#)

## Workflow Task - Workflow Task-Related Records Properties


- Workflow Vertices
- Workflow Edges
- Step Conditions
- Step Actions
- Run Criteria

### Workflow Vertices

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
alias	n/a	Alias used for the task to be inserted within the workflow; specifically, the value of <code>ops_exec_workflow_vertex.name</code> .		N	
task	Task Name	Name of the task to be inserted within the workflow.  Example: <code>&lt;task sysId="true"&gt;a8756a120a00010357097d05fa5c558e&lt;/task&gt;</code>		Y	
vertexId	n/a	Vertex ID of the task to be inserted within the workflow.  Each task within a Workflow must have a unique Vertex ID to distinguish it from other tasks, if any, of the same name.		Y	
vertexX	n/a	x-coordinate of the task to be inserted within the workflow.	Default is 0.	N	
vertexY	n/a	y-coordinate of the task to be inserted within the workflow.	Default is 0.	N	

### Workflow Edges

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
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<p>condition</p>	<p>n/a</p>	<p>Dependency condition between the source and target tasks of this edge (connector).</p> <p>Example: <code>&lt;condition type="Exit Code"&gt;123&lt;/condition&gt;</code></p>	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• Success</li> <li>• Failure</li> <li>• Success/Failure</li> <li>• Exit Code; Format: Numeric. Use commas to list a series of exit codes; use hyphens to specify a range. Example: 1,5, 22-30</li> <li>• Step Condition; Format: step:procedure:program:condition codes. Example: *:*:JCLERR</li> </ul> <p>Default is Success.</p> <p>For example:</p> <pre> &lt;condition&gt;Success&lt;/condition&gt; &lt;condition&gt;Failure&lt;/condition&gt; &lt;condition&gt;Success/Failure&lt;/condition&gt; &lt;condition&gt;1,5,22-30&lt;/condition&gt; &lt;condition&gt;*:*:JCLERR&lt;/condition&gt; &lt;condition&gt;S1:PROC1:PGM1:U016&lt;/condition&gt; &lt;condition type="Exit Code"&gt;1,5,22-30&lt;/condition&gt; &lt;condition type="Step Condition"&gt;*:*:JCLERR&lt;/condition&gt; &lt;condition type="Step Condition"&gt;*:*:S0C4&lt;/condition&gt; &lt;condition type="Step Condition"&gt;S1:PROC1:PGM1:U016&lt;/condition&gt; </pre> <p>Step Condition is valid for z/OS tasks only.</p> <p>Success/Failure and Failure are not valid for Workflow, Timer, and Manual tasks.</p> <div data-bbox="758 846 1688 1024" style="background-color: #ffffcc; padding: 10px;"> <p> <b>Note</b> The type attribute (type=) is optional for Exit Code and Step Condition. Based on the format of the condition, in most cases it is easily determined if the condition is Exit Code and Step Condition. If the condition cannot be determined, the type attribute can be checked.</p> </div>	<p>Y</p>	
<p>points</p>	<p>n/a</p>	<p>If straightEdge is false; x and y coordinates of the Edge angles.</p>	<p>For example:</p> <div data-bbox="758 1135 1688 1268" style="border: 1px solid #ccc; padding: 10px; background-color: #f0f0f0;"> <pre> &lt;points&gt;   &lt;point x="280" y="300" /&gt; &lt;/points&gt; </pre> </div>	<p>Y</p>	
<p>sourceId</p>	<p>n/a</p>	<p>Vertex ID of the source task.</p> <p>Example: <code>&lt;sourceId taskName="Sleep 10"taskAlias="Sleep 10-alias"&gt;20&lt;/sourceId&gt;</code></p>		<p>Y</p>	

straightEdge	n/a	Specification for whether the edge is straight or bent.	Boolean; Valid values: true/false. Default is true.	N	
targetId	n/a	Vertex ID of the target task.  Example: <targetID taskName="Sleep 10"taskAlias="Sleep 10-alias">20</targetId>		Y	

### Step Conditions

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
programName	Program	Program name to match.	A blank value or an asterisk ( * ) will match any program name. Generic matching characters asterisk ( * ) and question mark ( ? ) match zero or more characters and one character, respectively.	N	
pstepName	Procedure	Procedure step name to match.	A blank value or an asterisk ( * ) will match any procedure step name. Generic matching characters asterisk ( * ) and question mark ( ? ) match zero or more characters and one character, respectively.	N	
stepAction	Action	Action to take and the task status to set if the Step Condition matches.	Valid values: <ul style="list-style-type: none"> <li>• As String = Continue/Success, As Value = 1</li> <li>• As String = Continue/Failed, As Value = 2</li> <li>• As String = Halt/Failed, As Value = 3</li> <li>• As String = Askoper, As Value = 4</li> </ul> Default is Continue/Success (1).	N	
stepCodes	Condition Codes	Integer return codes from the program or ABEND codes.	Integer return codes are specified as a comma-separated list of integer values or ranges. Ranges are specified with a dash ( - ) separating the lower and upper bounds of the range. The z/OS job step return code range is 0-4095. ABEND codes are specified directly as either a user ABEND or a system ABEND. The ABEND code must be specified verbatim including leading zeroes.	Y	
stepName	Step	Job step name to match.	A blank value or an asterisk ( * ) will match any job step name. Generic matching characters asterisk ( * ) and question mark ( ? ) match zero or more characters and one character, respectively.	N	
stepOrder	Evaluation Order	Order for step condition evaluation.	Step conditions with a lower order are evaluated before step conditions with a higher order.	N	
sysId	n/a	sys_id used within the Controller to identify this Step Condition.		N	

### Step Actions

Property	UI Field Name	Description	Specifications	Required	Mutually Exclusive With
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actionCriteriaTask	Task	Name of a task. In combination with the <code>vertexId</code> , it specifies a specific task within the Workflow to which the step action applies; if no task is specified, the step action applies to all z/OS tasks within the Workflow.		N	
agent	Agent	If <code>operation</code> is Suspend Agent, Resume Agent, Suspend Cluster Membership, Resume Cluster Membership, or Set Agent Task Execution Limit; Agent for which the system operation is to be performed.		N	agentVar
agentCluster	Agent Cluster	If <code>operation</code> is Suspend Agent Cluster, Resume Agent Cluster, Suspend Cluster Membership, Resume Cluster Membership, or Set Cluster Task Execution Limit; Agent Cluster for which the system operation is to be performed.		N	agentClusterVar
agentClusterVar	Agent Cluster Variable	Name of a variable that will be resolved at run time to the name of the Agent Cluster to use.		N	agentCluster
agentVar	Agent Variable	Name of a variable that will be resolved at run time to the name of the Agent to use.		N	agent
description	Description	Description of this System Operation Step Action.		N	



<p>execCommand</p>	<p>Command</p>	<p>If operation is Run Task Instance Command; Type of task instance command to run.</p>	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Cancel, As Value = 1</li> <li>• As String = Force Finish, As Value = 2</li> <li>• As String = Force Finish (Halt), As Value = 3</li> <li>• As String = Force Finish/Cancel, As Value = 4</li> <li>• As String = Force Finish/Cancel (Halt), As Value = 5</li> <li>• As String = Skip, As Value = 6</li> <li>• As String = Hold, As Value = 7</li> <li>• As String = Release, As Value = 8</li> <li>• As String = Release Recursive, As Value = 9</li> <li>• As String = Clear All Dependencies, As Value = 10</li> <li>• As String = Clear Exclusive, As Value = 11</li> <li>• As String = Clear Predecessors, As Value = 12</li> <li>• As String = Clear Resources, As Value = 13</li> <li>• As String = Unskip, As Value = 14</li> <li>• As String = Clear Timewait, As Value = 15</li> <li>• As String = Re-run, As Value = 16</li> </ul> <p>Default value is Cancel (1).</p>	<p>N</p>	
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execCriteria	Instance Criteria	If <code>operation</code> is Run Task Instance Command; Additional criteria for selecting a specific task instance if multiple task instances have matching names.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>As String = Oldest Active Instance, As Value = 1</li> <li>As String = Newest Active Instance, As Value = 2</li> <li>As String = Oldest Instance, As Value = 3</li> <li>As String = Newest Instance, As Value = 4</li> </ul> <p>Default is Oldest Active Instance (1).</p> <ul style="list-style-type: none"> <li>An Active task instance is an instance that is not in any of these statuses: Skipped, Finished, Success.</li> <li>An Unskip command can use only the Newest Instance and Oldest Instance criteria; an active instance cannot be unskipped.</li> </ul>	N	
execId	Instance ID	If <code>execLookupOption</code> is Instance Id; ID of task instance to run the command against.		N	
execLookupOption	Instance Lookup Option	If <code>operation</code> is Run Task Instance Command; Specification for how to search for the task instance to run a command against.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>As String = Instance Name, As Value = 1</li> <li>As String = Instance Name/Task, As Value = 2</li> <li>As String = Instance Id, As Value = 3</li> <li>As String = Task, As Value = 4</li> </ul> <p>Default is Instance Name (1).</p>	N	
execName	Instance Name	If <code>execLookupOption</code> is Instance Name; Name of the task instance to run the command against.		N	
execWorkflowName	Workflow Instance Name	If <code>operation</code> is Run Task Instance Command; Name of the parent workflow task instance that contains the task on which to perform the specified action.		N	

execWorkflowNameCond	Workflow Instance Name Condition	If <code>operation</code> is Run Task Instance Command; Type of condition for the name of the parent workflow task instance that contains the task on which to perform the specified action. If you select a condition type, enter a value for that condition. The action will be performed only on a task instance in a parent workflow task instance meeting the specified condition value.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>As String = Equals, As Value = 1</li> <li>As String = Starts With, As Value = 2</li> <li>As String = Contains, As Value = 3</li> <li>As String = Ends With, As Value = 4</li> </ul> <p>Default is Equals (1).</p>	N	
limit	Limit	<ul style="list-style-type: none"> <li>If <code>operation</code> is Set Agent Task Execution Limit or Set Cluster Task Execution Limit, and <code>taskLimitType</code> is Limited; Number of tasks that can be run concurrently by the specified Agent / Agent Cluster.</li> <li>If <code>operation</code> is Set Virtual Resource Limit; Virtual resource limit to be set for the specified virtual resource.</li> </ul>		N	
name	Name	Name of a variable to override.		N	
notificationOption	System Notification	Status of the specified <code>operation</code> that will trigger a system notification.	<p>Valid values:</p> <ul style="list-style-type: none"> <li>As String = -- None --, As Value = 0</li> <li>As String = Operation Failure, As Value = 1</li> <li>As String = Operation Success/Failure, As Value = 2</li> <li>As String = Operation Success, As Value = 3</li> </ul> <p>Default is Operation Failure (1).</p>	N	

<p>operation</p>	<p>System Operation</p>	<p>Specific system operation to perform.</p>	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Suspend Agent, As Value = 1</li> <li>• As String = Resume Agent, As Value = 2</li> <li>• As String = Suspend Agent Cluster , As Value = 3</li> <li>• As String = Resume Agent Cluster, As Value = 4</li> <li>• As String = Suspend Cluster Membership, As Value = 5</li> <li>• As String = Resume Cluster Membership, As Value = 6</li> <li>• As String = Set Agent Task Execution Limit, As Value = 7</li> <li>• As String = Set Cluster Task Execution Limit, As Value = 8</li> <li>• As String = Set Virtual Resource Limit, As Value = 9</li> <li>• As String = Task Instance Command, As Value = 10</li> <li>• As String = Launch Task, As Value = 11</li> <li>• As String = Trigger Now, As Value = 12</li> </ul> <p>Default is Suspend Agent (1).</p>	<p>N</p>	
<p>programName</p>	<p>Program</p>	<p>Program name to match.</p>	<p>A blank value or an asterisk ( * ) will match any program name. Generic matching characters asterisk ( * ) and question mark ( ? ) match zero or more characters and one character, respectively.</p>	<p>N</p>	
<p>pstepName</p>	<p>Procedure</p>	<p>Procedure step name to match.</p>	<p>A blank value or an asterisk ( * ) will match any procedure step name. Generic matching characters asterisk ( * ) and question mark ( ? ) match zero or more characters and one character, respectively.</p>	<p>N</p>	


stepCodes	Condition Codes	Conditions codes are integer return codes from the program or ABEND codes. Integer return codes are specified as a comma-separated list of integer values or ranges. Ranges are specified with a dash ( - ) separating the lower and upper bounds of the range. The z/OS job step return code range is 0-4095. ABEND codes are specified directly as either a user ABEND or a system ABEND. The ABEND code must be specified verbatim including leading zeroes.		N	
stepName	Step	Job step name to match.	A blank value or an asterisk ( * ) will match any job step name. Generic matching characters asterisk ( * ) and question mark ( ? ) match zero or more characters and one character, respectively.	N	
task	Task Reference	<ul style="list-style-type: none"> <li>• If <code>execLookupOption</code> is Instance Name/Task or Task; Name of the task for which the task instance was run.</li> <li>• If <code>operation</code> is Launch Task; Name of the task to launch.</li> </ul>		N	taskVar
taskLimitType	Task Execution Limit	If <code>operation</code> is Set Agent Task Execution Limit or Set Cluster Task Execution Limit; Specification for whether a limited or unlimited number of task instances can be run concurrently on the specified Agent / Agent Cluster.	Valid values: <ul style="list-style-type: none"> <li>• As String = Unlimited, As Value = 1</li> <li>• As String = Limited, As Value = 2</li> </ul> Default is Unlimited.	N	
taskVar	Task Reference Variable	<ul style="list-style-type: none"> <li>• If <code>execLookupOption</code> is Instance Name/Task or Task; Name of a variable that will be resolved at run time to the name of the task for which the task instance was run.</li> <li>• If <code>operation</code> is Launch Task; Name of a variable that will be resolved at run time to the name of the task to launch.</li> </ul>		N	task
trigger	Trigger Reference	If <code>operation</code> is Trigger Now; Name of the trigger.		N	triggerVar
triggerVar	Trigger Reference Variable	If <code>operation</code> is Trigger Now; Name of a variable that will be resolved at run time to the name of the trigger.		N	trigger
value	Value	Value of a variable to override.		N	
variables	Override Variables	List of variables to override.		N	

variablesUnresolved	Override Variables Resolution Disabled	Specification for whether or not <code>variables</code> resolution should be disabled to allow for passing unresolved variable values. <ul style="list-style-type: none"> <li>If <code>variables</code> resolution is disabled, any unresolved variables will be resolved in the context of the launched or triggered task instance.</li> <li>If <code>variables</code> resolution is not disabled, <code>variables</code> will be resolved prior to the execution of the Launch Task or Trigger Now operation.</li> </ul>	Boolean; Valid values: true/false. Default is false.	N	
vertexId	Vertex Id	Numerical ID of the task that identifies it uniquely from other tasks of the same type in the Workflow.	Valid values: <ul style="list-style-type: none"> <li>Any - The action applies to any instance of the specified task in the Workflow.</li> <li>&lt;number&gt; - The action applies only to this instance of the task in the Workflow.</li> </ul>	N	
virtualResource	Virtual Resource	If <code>operation</code> is Set Virtual Resource Limit; Virtual resource for which a virtual resource limit is to be set.		N	virtualResourceVar
virtualResourceVar	Virtual Resource Variable	Name of a variable that will be resolved at run time to the name of the Virtual Resource to use.		N	virtualResource


### Run Criteria

Property	UI Field Name	Description	Specifications
businessDays	Business Day	Specification for whether the task runs or skips on all business days.	Boolean; Valid values: true/false. Default is false.
complex	Complex	Specification for whether the task runs or skips on the day(s) indicated in the <code>complexAdjective</code> , <code>complexNoun</code> , and <code>complexQualifier</code> .	Boolean; Valid values: true/false. Default is false.

<p>complexAdjective</p>	<p>Adjective</p>	<p>If <code>complex</code> is specified; Used with <code>complexNoun</code>, <code>complexQualifier</code>, and <code>complexNthAmount</code> (if <code>complexAdjective</code> is <code>Nth</code>) to specify which in a series of days you want to select. For example, to specify "the 15th business day of the month," select <code>complexAdjective</code> is <code>Nth</code>, <code>complexNoun</code> is <code>Business Day</code>, <code>complexQualifier</code> is <code>Month</code>, and <code>complexNthAmount</code> is 15.</p>	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• As String = Every, As Value = 0</li> <li>• As String = 1st, As Value = 1</li> <li>• As String = 2nd, As Value = 2</li> <li>• As String = 3rd, As Value = 3</li> <li>• As String = 4th, As Value = 4</li> <li>• As String = 5th, As Value = 5</li> <li>• As String = 6th, As Value = 6</li> </ul> <p>Default is Every (0).</p>
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<p>complexNoun</p>	<p>Noun</p>	<p>If <code>complex</code> is specified; Used with <code>complexAdjective</code>, <code>complexQualifier</code>, and <code>complexNthAmount</code> (if <code>complexAdjective</code> is Nth) to specify the type of day you want to select. For example, to specify "the 1st business day of the month," select <code>complexAdjective</code> is 1st, <code>complexNoun</code> is Business Day, and <code>complexQualifier</code> is Month.</p> <p>Example:  <code>&lt;complexNoun local="true"&gt;LCD1&lt;/complexNoun&gt;</code></p> <p>To specify a <a href="#">Custom Day</a>, use the name of the Custom Day. For example:</p> <p><b>XML</b>  <code>&lt;complexNoun&gt;CustomDay1&lt;/complexNoun&gt;</code></p> <p><b>JSON</b>  <pre>"complexNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the <code>local</code> attribute. For example:</p> <p><b>XML</b>  <code>&lt;complexNoun local="true"&gt;CustomDay2&lt;/complexNoun&gt;</code></p> <p><b>JSON</b>  <pre>"complexNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div data-bbox="537 1024 1010 1179" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b>          The Default Calendar for the Workflow task is used to verify Custom Day references.</p> </div>	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• Sunday through Saturday</li> <li>• Day (any day)</li> <li>• Business Day (The business days specified in the calendar selected in the Workflow Ca</li> <li>• Custom Days specified in the calendar selected in the Workflow Calendar.</li> </ul>
<p>complexNthAmount</p>	<p>Nth Amount</p>	<p>If <code>complexAdjective</code> is Nth; Sequential occurrence of the day selected in <code>complexNoun</code> within the selected <code>complexQualifier</code>.</p>	<p>Integer.</p>



complexQualifier	Qualifier	<p>If <code>complex</code> is specified; Used with the <code>complexAdjective</code>, <code>complexNoun</code>, and <code>complexNthAmount</code> (if <code>complexAdjective</code> is <code>Nth</code>) to specify the period for your selection formula. For example, to specify "the 1st business day of the month," select <code>complexAdjective</code> is <code>1st</code>, <code>complexNoun</code> is <code>Business Day</code>, <code>complexQualifier</code> is <code>Month</code>.</p> <p>Example:  <code>&lt;complexQualifier local="true"&gt;Year&lt;/complexQualifier&gt;</code></p> <p>To specify a <a href="#">Custom Day Period</a>, use the name of the Custom Day Period. For example:</p> <p><b>XML</b>  <code>&lt;complexQualifier&gt;CustomDayPeriod1&lt;/complexQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"complexQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the <code>local</code> attribute. For example:</p> <p><b>XML</b>  <code>&lt;complexQualifier local="true"&gt;CustomDayPeriod2&lt;/complexQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"complexQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div data-bbox="537 1024 1010 1179" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b>  The Default Calendar for the Workflow task is used to verify Custom Day references.</p> </div>	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• Month</li> <li>• Year</li> <li>• January through December</li> <li>• Custom Period</li> </ul>
customDay	Custom Day	Specification that the task runs or skips on the day you select in the <code>customDayChoice</code> .	
customDayChoice	Custom Day Choice	If <code>customDay</code> is specified; Custom day for which you are specifying run or skip criteria.	
description	Description	Description of this record.	

evaluateAt	Evaluate At	If <code>variable</code> is specified; When you want the Controller to evaluate the variable.	Valid values: <ul style="list-style-type: none"> <li>As String = Trigger Time, As Value = 1</li> <li>As String = Run Time, As Value = 2</li> </ul> Default is Trigger Time (1).
holiday	Holiday	Specification for whether or not the task runs or skips on holidays.	Boolean; Valid values: true/false. Default is false.
specificDay	Specific Day(s)	Specification for whether or not the task runs or skips on the day(s) you select in the <code>specificDayFri</code> to <code>specificDayWed</code> .	Boolean; Valid values: true/false. Default is false.
specificDayFri	Friday	If <code>specificDay</code> is selected; Specification for whether or not the task runs or skips on this day of the week.	Boolean; Valid values: true/false. Default value is false.
specificDayMon	Monday	If <code>specificDay</code> is selected; Specification for whether or not the task runs or skips on this day of the week.	Boolean; Valid values: true/false. Default value is false.
specificDaySat	Saturday	If <code>specificDay</code> is selected; Specification for whether or not the task runs or skips on this day of the week.	Boolean; Valid values: true/false. Default value is false.
specificDaySun	Sunday	If <code>specificDay</code> is selected; Specification for whether or not the task runs or skips on this day of the week.	Boolean; Valid values: true/false. Default value is false.
specificDayThu	Thursday	If <code>specificDay</code> is selected; Specification for whether or not the task runs or skips on this day of the week.	Boolean; Valid values: true/false. Default value is false.
specificDayTue	Tuesday	If <code>specificDay</code> is selected; Specification for whether or not the task runs or skips on this day of the week.	Boolean; Valid values: true/false. Default value is false.
specificDayWed	Wednesday	If <code>specificDay</code> is selected; Specification for whether or not the task runs or skips on this day of the week.	Boolean; Valid values: true/false. Default value is false.
task	Task	Task for which you are specifying run or skip criteria.	
type	Type	Specification for whether this criteria is for running or skipping the specified task.	Valid values: <ul style="list-style-type: none"> <li>As String = Run Criteria, As Value = 1</li> <li>As String = Skip Criteria, As Value = 2</li> </ul> Default is Run Criteria (1).
variable	Variable	Used with <code>evaluateAt</code> , <code>variableName</code> , <code>variableOp</code> , and <code>variableValue</code> ; Instructs the Controller to run or not run the task, depending on the value of a specific variable.	
variableName	Name	If <code>variable</code> is specified; Name of the variable being evaluated.	
variableOp	Operator	If <code>variable</code> is specified; Operator to be used in the evaluation.	Valid values: <ul style="list-style-type: none"> <li>As String = =, As Value = 1</li> </ul>

- As String = !=, As Value = 2
- As String = >, As Value = 3
- As String = >=, As Value = 4
- As String = <, As Value = 5
- As String = <=, As Value = 6
- As String = regex, As Value = 7

**Add a Dependency to a Workflow**

	Description
URI	<a href="http://host_name/opswise/resources/wc">http://host_name/opswise/resources/wc</a>
HTTP Method	POST
Description	Adds a dependency to a workflow, with
URI Parameters	See <a href="#">Add a Dependency to a Workflow:</a>
Example URI	<a href="http://localhost:8080/opswise/resources">http://localhost:8080/opswise/resources</a>
Example Request	See <a href="#">Add a Dependency to a Workflow:</a>
Add a Dependency to a Workflow Properties	See <a href="#">Add a Dependency to a Workflow:</a>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully added a depende</li> <li>• Status 400 /Bad Request Workflow &lt;workflowName&gt; do</li> </ul>

**Add a Dependency to a Workflow: URI Parameters**


Name	Description	Specific:
workflowid	ID used within the Controller to identify the workflow.	String; U
workflowname	Name used within the Controller to identify the workflow.	String; U

**Add a Dependency to a Workflow: Example Request**

XML	JSON
<p data-bbox="1161 215 1241 240">XML</p> <pre data-bbox="1203 264 1724 570"> &lt;workflowEdge&gt;   &lt;condition&gt;Success&lt;/condition&gt;   &lt;points&gt;     &lt;point x="280" y="300" /&gt;   &lt;/points&gt;   &lt;sourceId&gt;2&lt;/sourceId&gt;   &lt;straightEdge&gt;&gt;false&lt; /straightEdge&gt;   &lt;targetId&gt;3&lt;/targetId&gt; &lt;/workflowEdge&gt; </pre>	<p data-bbox="1782 215 1877 240">JSON</p> <pre data-bbox="1824 264 1976 711"> {   "conditi   "value   },   "points"     "x":     "y":   } ],   "source:   "value   },   "straight   false,   "target:   "value   } } </pre>

**Add a Dependency to a Workflow: Request Properties**

Property	UI Field Name	Description	Specifications

condition	n/a	Dependency condition between the source and target tasks of this dependency (connector).	<p>Valid values:</p> <ul style="list-style-type: none"> <li>• Success</li> <li>• Failure</li> <li>• Success/Fai</li> <li>• Exit Code; F</li> <li>• Example: 1,;</li> <li>• Step Condi</li> </ul> <p>Default is Success.</p> <p>For example:</p> <pre>&lt;condition&gt;Succes &lt;condition&gt;Failure &lt;condition&gt;Succes &lt;condition&gt;1,5,22- &lt;condition&gt;*:*:JC &lt;condition&gt;S1:PRC &lt;condition type="E &lt;condition type="S &lt;condition type="S &lt;condition type="S</pre> <p>Step Condition is val</p> <p>Success/Failure and</p> <div data-bbox="1818 821 1976 976" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The type the cond Condition</p> </div>
points	n/a	If straightEdge is false; x and y coordinates of the Edge angles.	<p>For example:</p> <div data-bbox="1818 1086 1976 1219" style="border: 1px solid #add8e6; padding: 5px;"> <pre>&lt;points&gt; &lt;point x=" &lt;/points&gt;</pre> </div>
sourceId	n/a	Vertex ID of the source task.	
straightEdge	n/a	Specification for whether the edge is straight or bent.	Boolean; Valid value
targetId	n/a	Vertex ID of the target task.	

### Add a Task to a Workflow

	Description
URI	<a href="http://host_name/opswise/resources/workflow/v">http://host_name/opswise/resources/workflow/v</a>
HTTP Method	POST
Description	Adds a task to a workflow, with the task represe
URI Parameters	See <a href="#">Add a Task to a Workflow: URI Parameters</a>
Example URI	<a href="http://localhost:8080/opswise/resources/workflo">http://localhost:8080/opswise/resources/workflo</a>
Example Request	See <a href="#">Add a Task to a Workflow: Example Reque</a>
Add a Task to a Workflow Properties	See <a href="#">Add a Task to a Workflow: Properties</a> , belo
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully added vertex with vertex i</li> <li>• Status 400 /Bad Request Workflow &lt;workflowName&gt; doesn't ex</li> </ul>

### Add a Task to a Workflow: URI Parameters

Name	Description	Specific:
workflowid	ID used within the Controller to identify the workflow.	String; U
workflowname	Name used within the Controller to identify the workflow.	String; U

### Add a Task to a Workflow: Example Request

XML	JSON
<p>XML</p> <pre>&lt;workflowVertex&gt;   &lt;alias &gt;S30&lt;/alias&gt;   &lt;task &gt;Sleep 30&lt;/task&gt;   &lt;vertexX &gt;360&lt;/vertexX&gt;   &lt;vertexY &gt;60&lt;/vertexY&gt; &lt;/workflowVertex&gt;</pre>	<p>JSON</p> <pre>{   "alias": "S30",   "task": {     "value": "Sleep 30"   },   "vertexX": "360",   "vertexY": "60" }</pre>

**Add a Task to a Workflow: Request Properties**

Property	UI Field Name	Description
alias	n/a	Alias used for the task added to the workflow; specificall
task	Task Name	Name of the task added to the workflow.
vertexId	n/a	Vertex ID of the task added to the workflow. Each task within a Workflow has a unique Vertex ID to c
vertexX	n/a	x-coordinate of the task added to the workflow.
vertexY	n/a	y-coordinate of the task added to the workflow.

**List Dependencies in a Workflow**

	Description
URI	<a href="http://host_name/opswise/resources/workflow/edges">http://host_name/opswise/resources/workflow/edges</a>
HTTP Method	GET
Description	Returns the list of dependencies for all tasks in a workflow,
URI Parameters	See <a href="#">List Dependencies in a Workflow: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opswise/resources/workflow/edges?w">http://localhost:8080/opswise/resources/workflow/edges?w</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml
Produces Content-Type	application/xml
Example Response	See <a href="#">List Dependencies in a Workflow: Example Response</a> , below.
Response Properties	See <a href="#">List Dependencies in a Workflow: Properties</a> , below.

***List Dependencies in a Workflow: URI Parameters***

Name	Description	Specific:
sourceid	Vertex ID of the source task.	String; U
targetid	Vertex ID of the target task.	String; U
workflowid	ID used within the Controller to identify the workflow.	String; U
workflowname	Name used within the Controller to identify the workflow.	String; U

***List Dependencies in a Workflow: Example Response***



XML	JSON
<p>XML</p> <pre data-bbox="1203 261 1761 872"> &lt;workflowEdges&gt;   &lt;workflowEdge&gt;     &lt;condition&gt;Success&lt;   /condition&gt;     &lt;sourceId taskName="Sleep 30" taskAlias="test"&gt;2&lt;   /sourceId&gt;     &lt;straightEdge&gt;true&lt;   /straightEdge&gt;     &lt;targetId taskName="Sleep 60"&gt;3&lt;/targetId&gt;   &lt;/workflowEdge&gt;   &lt;workflowEdge&gt;     &lt;condition&gt;Success&lt;   /condition&gt;     &lt;sourceId taskName="Sleep 60"&gt;3&lt;/sourceId&gt;     &lt;straightEdge&gt;true&lt;   /straightEdge&gt;     &lt;targetId taskName="Sleep 60"&gt;6&lt;/targetId&gt;   &lt;/workflowEdge&gt; &lt;/workflowEdges&gt; </pre>	<p>JSON</p> <pre data-bbox="1864 261 1976 1034"> [   {     "cond "ve   },   "sou "ta "ta "ve   },   "stra "targ "ta "ve   } }, {   "cond "ve   },   "sou "ta "ve   },   "stra "targ "ta "ve   } } ] </pre>

**List Dependencies in a Workflow: Properties**

Property	UI Field Name	Description
condition	n/a	Dependency condition between the source and tar
sourceId	n/a	Vertex ID of the source task.
straightEdge	n/a	Specification for whether the edge is straight or be
targetId	n/a	Vertex ID of the target task.

**List Tasks in a Workflow**

Attribute **sysId** identifies the sysid of the specified task.

	Description
URI	<a href="http://host_name/opswise/resources/workflow/vertices">http://host_name/opswise/resources/workflow/vertices</a>
HTTP Method	GET
Description	Returns the list of tasks in a workflow, with each task repre:
URI Parameters	See <a href="#">List Tasks in a Workflow: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/workflow/">http://localhost:8080/opswise/resources/workflow/</a></li> <li>• <a href="http://localhost:8080/opswise/resources/workflow/">http://localhost:8080/opswise/resources/workflow/</a></li> </ul>
Authentication	HTTP Basic
Consumes Content-Type	application/xml
Produces Content-Type	application/xml
Example Response	See <a href="#">List Tasks in a Workflow: Example Response</a> , below.
Response Properties	See <a href="#">List Tasks in a Workflow: Properties</a> , below.

***List Tasks in a Workflow: URI Parameters***

Parameter	Description
taskalias	Alias used for the task within the Workflow; specifically, the value of <i>name</i> .
taskid	ID used within the Controller to identify this task.
taskname	Name used within the Controller to identify this task.
vertexid	Vertex ID of the task in the workflow to be listed.  Each task within a Workflow has a unique Vertex ID to distinguish it same name.
workflowid	ID used within the Controller to identify a workflow.
workflowname	Name of a workflow.

**List Tasks in a Workflow: Example Response**

XML	JSON
<p>XML</p> <pre data-bbox="1201 263 1864 824"> &lt;workflowVertices&gt;   &lt;workflowVertex&gt;     &lt;alias&gt;Task 1&lt;/alias&gt;     &lt;task       sysId="1010f538c0a801c900e0fe0af94d9be5"&gt;task1&lt;     /task&gt;     &lt;vertexId&gt;5&lt;/vertexId&gt;     &lt;vertexX&gt;253&lt;/vertexX&gt;     &lt;vertexY&gt;296&lt;/vertexY&gt;   &lt;/workflowVertex&gt;   &lt;workflowVertex&gt;     &lt;alias&gt;Task 2&lt;/alias&gt;     &lt;task       sysId="f81d30ccc0a801c9008ea20e4f5f61d6"&gt;task2&lt;     /task&gt;     &lt;vertexId&gt;6&lt;/vertexId&gt;     &lt;vertexX&gt;252.5&lt;/vertexX&gt;     &lt;vertexY&gt;429&lt;/vertexY&gt;   &lt;/workflowVertex&gt; &lt;/workflowVertices&gt; </pre>	<p>JSON</p>

**List Tasks in a Workflow: Response Properties**

Property	UI Field Name	Description
alias	n/a	Alias used for the task; specifically, the value of <code>ops_tas</code>
task	Task Name	Name of the task added.
vertexId	n/a	Vertex ID of the task.
		Each task within a Workflow has a unique Vertex ID to c
vertexX	n/a	x-coordinate of the task.
vertexY	n/a	y-coordinate of the task.

**Modify a Dependency in a Workflow**

	Description
URI	<a href="http://host_name/opswise/resources/">http://host_name/opswise/resources/</a>
HTTP Method	PUT
Description	Modifies a dependency in a workflow
URI Parameters	See <a href="#">Modify a Dependency in a Workf</a>
Example URI	<a href="http://localhost:8080/opswise/resourc">http://localhost:8080/opswise/resourc</a>
Example Request	See <a href="#">Modify a Dependency in a Workf</a>
Modify a Dependency in a Workflow Properties	See <a href="#">Add a Dependency to a Workflo</a>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated depen</li> <li>• Status 400 /Bad Request Workflow &lt;workflowName&gt; c</li> </ul>

***Modify a Dependency in a Workflow: URI Parameters***

Name	Description	Specific:
workflowid	ID used within the Controller to identify the workflow.	String; U
workflowname	Name used within the Controller to identify the workflow.	String; U

***Modify a Dependency in a Workflow: Example Request***

XML	JSON
<p data-bbox="1163 212 1241 240">XML</p> <pre data-bbox="1205 261 1724 570"> &lt;workflowEdge&gt;   &lt;condition&gt;Success&lt;/condition&gt;   &lt;points&gt;     &lt;point x="280" y="300" /&gt;   &lt;/points&gt;   &lt;sourceId&gt;2&lt;/sourceId&gt;   &lt;straightEdge&gt;&gt;false&lt; /straightEdge&gt;   &lt;targetId&gt;3&lt;/targetId&gt; &lt;/workflowEdge&gt; </pre>	<p data-bbox="1785 212 1877 240">JSON</p> <pre data-bbox="1827 261 1976 708"> {   "conditi:     "valu   },   "points"     "x":     "y":   } ],   "source:     "value   },   "straight false,   "target:     "value   } } </pre>

### Modify a Task in a Workflow

	Description
URI	<a href="http://host_name/opswise/resources/workflow">http://host_name/opswise/resources/workflow</a>
HTTP Method	PUT
Description	Modifies a task in a workflow, with the task re
URI Parameters	See <a href="#">Modify a Task in a Workflow: URI Param</a>
Example URI	<a href="http://localhost:8080/opswise/resources/work">http://localhost:8080/opswise/resources/work</a>
Example Request	See <a href="#">Modify a Task in a Workflow: Example R</a>
Modify a Task in a Workflow Properties	See <a href="#">Add a Task to a Workflow: Properties</a> .

### Modify a Task in a Workflow: URI Parameters

Name	Description	Specific:
workflowid	ID used within the Controller to identify the workflow.	String; U
workflowname	Name used within the Controller to identify the workflow.	String; U

**Modify a Task in a Workflow: Example Request**

XML	JSON
<p>XML</p> <pre>&lt;workflowVertex&gt;   &lt;alias&gt;   &gt;S30&lt;/alias&gt;   &lt;task&gt;   &gt;Sleep 30&lt;/task&gt;   &lt;vertexX&gt;   &gt;360&lt;/vertexX&gt;   &lt;vertexY&gt;   &gt;60&lt;/vertexY&gt; &lt;/workflowVertex&gt;</pre>	<p>JSON</p> <pre>{   "alias": "S30",   "task": {     "value": "sleep 30"   },   "vertexX": "360",   "vertexY": "60" }</pre>

**Modify a Task in a Workflow: Properties**

Property	UI Field Name	Description
alias	n/a	Alias used for the task to be modified in the workflow; specific value of <code>ops_task_workflow_vertex.name</code> .
task	Task Name	Name of the task to be modified in the workflow.
vertexId	n/a	Vertex ID of the task within the workflow.  Each task within a Workflow has a unique Vertex ID to disting other tasks of the same name, if any.
vertexX	n/a	x-coordinate of the task to be modified in the workflow.
vertexY	n/a	y-coordinate of the task to be modified in the workflow.

### Remove a Dependency from a Workflow

	Description
URI	<a href="http://host_name/opswise/resources/workflow/edges">http://host_name/opswise/resources/workflow/edges</a>
HTTP Method	DELETE
Description	Removes a dependency from a workflow, with the dependency r
URI Parameters	See <a href="#">Remove a Dependency from a Workflow: URI Parameters</a> , l
Example URI	<a href="http://localhost:8080/opswise/resources/workflow/edges?workflo">http://localhost:8080/opswise/resources/workflow/edges?workflo</a>
Authentication	HTTP Basic
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated vertex with vertex id &lt;vertexId&gt;.</li> <li>• Status 400 /Bad Request Workflow &lt;workflowName&gt; doesn't exist.</li> </ul>

### Remove a Dependency from a Workflow: URI Parameters



Name	Description	Specificat
sourceid	Vertex ID of the source task.	Integer; UF
targetid	Vertex ID of the target task.	Integer; UF
workflowid	ID used within the Controller to identify a workflow.	String; URI
workflowname	Name used within the Controller to identify a workflow.	String; URI

### Remove Task(s) from a Workflow

	Description
URI	<a href="http://host_name/opswise/resources/wc">http://host_name/opswise/resources/wc</a>
HTTP Method	DELETE
Description	Removes one or more tasks from a wor
URI Parameters	See <a href="#">Remove Task(s) from a Workflow:</a>
Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/re">http://localhost:8080/opswise/re</a></li> <li>• <a href="http://localhost:8080/opswise/re">http://localhost:8080/opswise/re</a></li> <li>• <a href="http://localhost:8080/opswise/re">http://localhost:8080/opswise/re</a></li> </ul>
Authentication	HTTP Basic
Example Response	See <a href="#">Remove Task(s) from a Workflow:</a>
Remove Task(s) from a Workflow Properties	See <a href="#">Remove Task(s) from a Workflow:</a>

### **Remove Task(s) from a Workflow: URI Parameters**

If `taskid`, `taskname`, or `taskalias` is specified, all tasks matching the `taskid`, `tas`

If `vertexid` is specified, only the task with that specific Vertex ID - and its dependencie

Parameter	Description
taskalias	Alias of the task(s) to be removed from the Workflow; specifically, the <code>ops_task_workflow_vertex.name</code> .
taskid	System ID of the task(s) to be removed from the Workflow.
taskname	Name of the task(s) to be removed from the Workflow.
vertexid	Vertex ID of the task to be removed from the workflow.  Each task within a Workflow has a unique Vertex ID to distinguish it from the same name.
workflowid	ID used within the Controller to identify a workflow.
workflowname	Name used within the Controller to identify a workflow.

***Remove Task(s) from a Workflow: Example Response***

XML	JSON
<p>XML</p> <pre data-bbox="1201 263 1864 591"> &lt;workflowVertices&gt;   &lt;workflowVertex&gt;     &lt;alias&gt;Task 1&lt;/alias&gt;     &lt;task       sysId="1010f538c0a801c900e0fe0af94d9be5"&gt;task1&lt;     /task&gt;     &lt;vertexId&gt;5&lt;/vertexId&gt;     &lt;vertexX&gt;253&lt;/vertexX&gt;     &lt;vertexY&gt;296&lt;/vertexY&gt;   &lt;/workflowVertex&gt; &lt;/workflowVertices&gt; </pre>	<p>JSON</p>



**Note**

If there are no matching tasks to remove, an empty list is returned.

***Remove Task(s) from a Workflow: Response Properties***

This response contains a list of tasks removed from a workflow

Property	UI Field Name	Description
alias	n/a	Alias of the task removed from the Workflow; specifically
task	Task Name	Name of the task removed from the Workflow.
vertexId	n/a	Vertex ID of the task removed from the Workflow. Each task within a Workflow has a unique Vertex ID to c
vertexX	n/a	x-coordinate of the task removed from the Workflow.
vertexY	n/a	y-coordinate of the task removed from the Workflow.

## z/OS Task Web Services

- [Overview](#)
- [Create a z/OS Task](#)
- [Modify a z/OS Task](#)
- [Read a z/OS Task](#)
- [z/OS Task: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for z/OS Task c

- [Create](#)
- [Modify](#)
- [Read](#)

Formatting specifications for each web service, including details about parameter require  
 Links to detailed information about the [properties](#) used in these web services also is loc:

For information on Task web services that are applicable to all task types, see:

- [Delete a Task](#)
- [Launch a Task](#)
- [List Tasks](#)

### Create a z/OS Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	POST
Description	Creates a new z/OS task.  To persist <a href="#">syslds</a> , use the <a href="#">retainSyslds</a> property.
Example URI	<a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">z/OS Task: XML and JSON Examples</a> , below.
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;task type&gt; task with sys</li> </ul>

### Modify a z/OS Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
HTTP Method	PUT
Description	Modifies the task specified by the <code>sysId</code> in the request. To modify z/OS Task properties without modifying related r
Example	See <a href="#">z/OS Task: XML and JSON Examples</a> .
Properties	See <a href="#">Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the &lt;task type&gt; task with sys</li> </ul>

### Read a z/OS Task

	Description
URI	<a href="http://host_name/opswise/resources/task">http://host_name/opswise/resources/task</a>
HTTP Method	GET
Description	Retrieves information on the specified task.
Request Parameters	<code>taskId</code> or <code>taskname</code>
Mutually Exclusive Parameters	<code>taskId</code> and <code>taskname</code>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a></li> <li><a href="http://localhost:8080/opswise/resources/task">http://localhost:8080/opswise/resources/task</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">z/OS Task: XML and JSON Examples</a>.)</li> <li>Status 404 /Not Found A task with id "f87848b00a0001037f43e7c81"</li> </ul>
Properties	See <a href="#">Properties</a> .

### z/OS Task: XML and JSON Examples

The retainSysIds and version properties are specified as attributes in XML.

Examples	XML
Example for Task	<div data-bbox="1352 305 1430 337">  XML                     </div> <pre data-bbox="1388 378 1913 1490"> &lt;taskZos retainSysIds="true" version="1"&gt;   &lt;actions /&gt;   &lt;variables /&gt;   &lt;notes /&gt;   &lt;virtualResources /&gt;   &lt;exclusiveTasks /&gt;   &lt;stepConditions /&gt;   &lt;restartCriteria /&gt;   &lt;agent /&gt;   &lt;agentVar&gt;agentVar&lt;/agentVar&gt;   &lt;cpDuration /&gt;   &lt;cpDurationUnit&gt;Minutes&lt; /cpDurationUnit&gt;   &lt;credentials /&gt;   &lt;credentialsVar /&gt;   &lt;customField1 label="Domain"&gt;web.com&lt;/customField1 &gt;   &lt;customField2 /&gt;   &lt;efDayConstraint&gt;Nth&lt; /efDayConstraint&gt;   &lt;efDuration&gt;00:00:00:00&lt; /efDuration&gt;   &lt;efEnabled&gt;&gt;false&lt;/efEnabled&gt;   &lt;efNthAmount&gt;10&lt;/efNthAmount&gt;   &lt;efTime&gt;00:00&lt;/efTime&gt;   &lt;efType&gt;Time&lt;/efType&gt;   &lt;executionRestriction&gt;Run&lt; /executionRestriction&gt;   &lt;holdResources&gt;&gt;false&lt; /holdResources&gt;   &lt;lfDayConstraint&gt;Nth&lt; /lfDayConstraint&gt;   &lt;lfDuration&gt;00:00:00:00&lt; /lfDuration&gt;   &lt;lfEnabled&gt;&gt;false&lt;/lfEnabled&gt;   &lt;lfNthAmount&gt;1&lt;/lfNthAmount&gt;   &lt;lfTime&gt;00:00&lt;/lfTime&gt;   &lt;lfType&gt;Time&lt;/lfType&gt;   &lt;lsDayConstraint&gt;Nth&lt; /lsDayConstraint&gt;   &lt;lsDuration&gt;00:00:00:00&lt; /lsDuration&gt;                     </pre>

```

        <lsEnabled>>false</lsEnabled>
        <lsNthAmount>7</lsNthAmount>
        <lsTime>00:00</lsTime>
        <lsType>Time</lsType>
        <name>Opswise - Test Email<
    /name>
        <opswiseGroups />
        <resolveNameImmediately
    >false</resolveNameImmediately>
        <resPriority>10</resPriority>
        <restrictionPeriod>Span<
    /restrictionPeriod>
        <restrictionPeriodAfterDate
    >2017-11-10<
    /restrictionPeriodAfterDate>
        <restrictionPeriodAfterTime
    >10:30</restrictionPeriodAfterTime>
        <restrictionPeriodBeforeDate
    >2017-11-20<
    /restrictionPeriodBeforeDate>
        <restrictionPeriodBeforeTime
    >15:00</restrictionPeriodBeforeTime>
        <restrictionPeriodDateList />
        <startHeld>false</startHeld>
        <startHeldReason />
        <summary>Test Email</summary>
        <sysId
    >fb59a227517a421a92c15ff5aefe3b66<
    /sysId>
        <twDelayAmount />
        <timeZonePref>-- System
    Default --</timeZonePref>
        <twDelayDuration>00:00:00:00<
    /twDelayDuration>
        <twDelayType>None<
    /twDelayType>
        <twWaitAmount />
        <twWaitDayConstraint>NONE<
    /twWaitDayConstraint>
        <twWaitDuration>00:00:00:00<
    /twWaitDuration>
        <twWaitTime>00:00</twWaitTime
    >
        <twWaitType>None</twWaitType>
        <twWorkflowOnly>-- System
    Default --</twWorkflowOnly>
        <userEstimatedDuration />
        <autoRestartOption>Restart
    From First Job Step<
    /autoRestartOption>
        <deleteOverrideJcl>true<
    /deleteOverrideJcl>
        <exitCodeOutput />
        <exitCodeProcessing>Success
    Output Contains</exitCodeProcessing>
        <exitCodeText>exitCodeText<
    /exitCodeText>
        <exitCodes>0</exitCodes>
    
```

```
<jclLocation>jclLocation<
/jclLocation>
<jobclassNew>jobclassNew<
/jobclassNew>
<jobnameNew>NEWJOBNM<
/jobnameNew>
<msgclassNew>MSGCLASSNAME<
/msgclassNew>
<outputFailureOnly>>true<
/outputFailureOnly>
<outputReturnFile />
<outputReturnNline>100<
/outputReturnNline>
<outputReturnSline>1<
/outputReturnSline>
<outputReturnText />
<outputReturnType>NONE<
/outputReturnType>
<outputType>STDOUT<
/outputType>
<overrideJclDelInstCount>1<
/overrideJclDelInstCount>
<overrideJclLocation
>OVERRIDEJCLLOC</overrideJclLocation>
<parameters>
  <parameter>
    <name>TEST</name>
    <value>val</value>
  </parameter>
</parameters>
<proclibName />
<retryIndefinitely>>false<
/retryIndefinitely>
<retryInterval>60<
/retryInterval>
<retryMaximum>0</retryMaximum
>
  <retrySuppressFailure>>false<
/retrySuppressFailure>
<scheduleId>123</scheduleId>
<useOverrideLib>>true<
/useOverrideLib>
<waitForOutput>>false<
```



```
/waitForOutput>  
</taskZos>
```

See [Task Web Services - Task Actions](#) for XML and JSON examples of task actions.

See [Task Web Services - Task-Related Records](#) for XML and JSON examples of task-r

### Properties

- See [All Tasks Properties](#)
- See [z/OS Task Properties](#)

## Task Web Services - Task Actions

The following Task Action examples are for all task types.

### Examples

Examples	XML
<p>Examples for Task Actions</p>	<p>XML</p> <p>Abort</p> <pre data-bbox="1476 558 1969 1026"> &lt;abortAction&gt;   &lt;description /&gt;   &lt;exitCodes /&gt;   &lt;notifyOnEarlyFinish&gt;&gt;false&lt; /notifyOnEarlyFinish&gt;   &lt;notifyOnLateFinish&gt;&gt;false&lt; /notifyOnLateFinish&gt;   &lt;notifyOnLateStart&gt;&gt;false&lt; /notifyOnLateStart&gt;   &lt;status&gt;Waiting&lt;/status&gt;   &lt;sysId &gt;ad42c3268468425db6e1580cd53f57f0&lt;/sy   &lt;cancelProcess&gt;&gt;false&lt;/cancelPr   &gt;   &lt;haltOnFinish&gt;&gt;false&lt;/haltOnFin   &lt;overrideExitCode /&gt; &lt;/abortAction&gt; </pre> <p>Email Notification</p> <pre data-bbox="1476 1146 1969 1490"> &lt;emailNotification&gt;   &lt;description /&gt;   &lt;exitCodes /&gt;   &lt;notifyOnEarlyFinish&gt;&gt;false&lt; /notifyOnEarlyFinish&gt;   &lt;notifyOnLateFinish&gt;&gt;false&lt; /notifyOnLateFinish&gt;   &lt;notifyOnLateStart&gt;&gt;false&lt; /notifyOnLateStart&gt;   &lt;status&gt;Success&lt;/status&gt;   &lt;sysId </pre>

```

>2b72cdaaf3a145e4bbae5a7ddd24baff</sy
  <attachFile>>false</attachFile>
  <attachJobLog>>false</attachJob
  <attachLocalFile>>true<
/attachLocalFile>
  <attachStdError>>false<
/attachStdError>
  <attachStdOut>>true</attachStdO
  <bcc />
  <body>test body</body>
  <cc />
  <emailConnection>Opwise - Gma
Account</emailConnection>
  <emailTemplate />
  <emailTemplateVar />
  <fileName />
  <fileNumLines>100</fileNumLine
  <fileScanText />
  <fileStartLine>1</fileStartLin
  <joblogNumLines>100</joblogNum
>
  <joblogScanText />
  <joblogStartLine>1</joblogStar
>
  <localAttachment>report.pdf<
/localAttachment>
  <localAttachmentsPath>E:\temp<
/localAttachmentsPath>
  <replyTo>replyTo@test.com</rep
  <report>
    <groupName />
    <title>report1</title>
    <userName>ops.admin</use
  </report>
  <stderrNumLines>100</stderrNum
>
  <stderrScanText />
  <stderrStartLine>1</stderrStar
>
  <stdoutNumLines>100</stdoutNum
>
  <stdoutScanText />
  <stdoutStartLine>1</stdoutStar
>
  <subject />

```

```
<to>test@test.com</to>
</emailNotification>
```

#### Set Variable

```
<setVariableAction>
  <description />
  <exitCodes />
  <notificationOption>Operation
  Failure</notificationOption>
  <notifyOnEarlyFinish>>false<
/notifyOnEarlyFinish>
  <notifyOnLateFinish>>false<
/notifyOnLateFinish>
  <notifyOnLateStart>>false<
/notifyOnLateStart>
  <status>Waiting</status>
  <sysId
>f7824e38add745c2bf41017b07697bdf</sy
  <variableName>name</variableNa
  <variableScope>Self</variableS
  <variableValue />
</setVariableAction>
```

#### SNMP Notification

```
<snmpNotification>
  <description />
  <exitCodes />
  <notifyOnEarlyFinish>>false<
/notifyOnEarlyFinish>
  <notifyOnLateFinish>>false<
/notifyOnLateFinish>
  <notifyOnLateStart>>false<
/notifyOnLateStart>
  <status>Resource Requested</st
  <sysId
>1a1ddf2fa7f7466db8b5fc7863fc4ea3</sy
  <severity>Normal</severity>
  <snmpManager>test manager<
/ snmpManager>
</snmpNotification>
```

System Operation

```

<systemOperation>
  <description />
  <exitCodes />
  <notifyOnEarlyFinish>>false<
/notifyOnEarlyFinish>
  <notifyOnLateFinish>>false<
/notifyOnLateFinish>
  <notifyOnLateStart>>false<
/notifyOnLateStart>
  <status>Held</status>
  <sysId
>742beaf652834054b1edc37e6423700d</sy
  <agent />
  <agentCluster />
  <agentClusterVar />
  <agentVar />
  <execCommand>Cancel</execComma
  <execCriteria>Oldest Active
Instance</execCriteria>
  <execId />
  <execLookupOption>Task<
/execLookupOption>
  <execName />
  <execWorkflowNameCond />
  <execWorkflowName />
  <limit />
  <notificationOption>Operation
Failure</notificationOption>
  <operation>Run Task Instance
Command</operation>
  <task>Opwise - B=${B}</task>
  <taskLimitType>Unlimited<
/taskLimitType>
  <taskVar />
  <trigger />
  <triggerVar />
  <variables>
    <variable>
      <name>var1</name>
      <value>val1</value>
    </variable>
    <variable>
      <name>var2</name>
      <value>val2</value>
    </variable>
  </variables>
  <variablesUnresolved>>false<
/variablesUnresolved>
  <variablesUnresolved />
  <virtualResource />
  <virtualResourceVar />
</systemOperation>

```

## Properties

See the [Task Action Properties](#) page for information on all task action properties.

- [Abort Action](#)
- [Email Notification Action](#)
- [Set Variable Action](#)
- [SNMP Notification Action](#)
- [System Operation Action](#)

Task action properties are the same for every task type.

## Task Web Services - Task-Related Records

### Examples

The following examples are for task-related records for all task types except where note

Examples	XML
<p>Examples for Task-Related Records</p>	<p>▼ XML</p> <p>Advanced Criteria (Email Monitor Tasks only)</p> <pre data-bbox="1551 561 1969 1008"> &lt;emailCriteria&gt;   &lt;emailCriterion&gt;     &lt;body /&gt;     &lt;bodyFilter&gt;None&lt;/bodyFilt     &lt;caseSensitive&gt;&gt;false&lt;/case     &lt;cc&gt;test@test.com&lt;/cc&gt;     &lt;ccFilter&gt;Equals&lt;/ccFilter     &lt;filterLogic&gt;Or&lt;/filterLog     &lt;from /&gt;     &lt;fromFilter&gt;None&lt;/fromFilt     &lt;subject /&gt;     &lt;subjectFilter&gt;None&lt;/subje     &lt;to&gt;test@test.com&lt;/to&gt;     &lt;toFilter&gt;Equals&lt;/toFilter   &lt;/emailCriterion&gt; &lt;/emailCriteria&gt; </pre> <p>Mutually Exclusive Tasks</p>



```

<exclusiveTasks>
  <exclusiveTask>
    <sysId>5d2c0886b697
  /sysId>
    <task>Sleep 0<task>
    <type>Direct<type>
  </exclusiveTask>
  <exclusiveTask>
    <sysId>c1342b7597f9
  /sysId>
    <task>Sleep 30</tas
    <type>Direct</type>
  </exclusiveTask>
</exclusiveTasks>

```

#### Notes

```

<notes>
  <note>
    <sysId>8122cc80fbdb
  /sysId>
    <text>note2 text</t
    <title>note2</title
  </note>
  <note>
    <sysId>eb95737f4466
  /sysId>
    <text>note1 text</t
    <title>note1</title
  </note>
</notes>

```

#### Restart Criteria (z/OS Tasks only)

```

<restartCriteria>
  <restartCriterion>
    <directives>
      <directive
        <typ
        <pro
        <ste
      </directiv
      <directive
        <typ
        <pro
        <ste
      </directiv
    </directives>
    <evaluationOrder>
    <programName />
    <pstepName />
    <restartOption>Re
  /restartOption>
    <stepCodes>S806</
    <stepName>S5</ste
    <sysId>76ce212c77
  /sysId>
  </restartCriterion>
  ...
</restartCriteria>

```

RunTime Parameters (PeopleSoft Tasks only)

```

<runtimeParameters>
  <runtimeParameter>
    <parameterName>RTP
    <parameterValue>10
    <processName>TREEM
    <processType>Appli
  /processType>
    <sysId>4f5bb3fda58
  /sysId>
  </runtimeParameter>
</runtimeParameters>

```

Step Conditions (z/OS Tasks only)

```

<stepConditions>
<stepCondition>
  <programName>*/programName
  <pstepName>*/pstepName>
  <stepAction>Continue/Suc
  <stepCodes>1-4095</stepC
  <stepName>*/stepName>
  <stepOrder>1</stepOrder>
  <sysId>1481337495c04883b
</stepCondition>
...
</stepConditions>

```

Stored Procedure Parameters (Stored Procedure  
(Set only if resultProcessing is Success Out  
Parameter.)

```

<storedProcParams>
<storedProcParam>
  <description />
  <isNull>>false</isNull>
  <ivalue />
  <ovalue />
  <paramMode>Output</paramMode>
  <paramType>VARCHAR</paramType>
  <paramVar>var</paramVarr>
  <pos>2</pos>
  <sysId>5cad4c1b80694f90a968c6
  <variableScope>Self</variable
</storedProcParam>
</storedProcParams>

```

Variables

```

<variables>
  <variable>
    <description>descr
    <name>var1</name>
    <sysId>76af48c2469

  /sysId>
    <value>value1</val
  </variable>
  <variable>
    <description />
    <name>var2</name>
    <sysId>899912878e4

  /sysId>
    <value>value2</val
  </variable>
</variables>

```

#### Virtual Resources

```

<virtualResources>
  <virtualResource>
    <amount>1</amount>
    <resource>Opswise
    <sysId>4f5bb3fda58

  /sysId>
  </virtualResource>
</virtualResources>

```

## Properties

See the [Task-Related Records Properties](#) page for information on all task-related records. Click the links in the following table to view properties for specific task-related records or



**Note**

As shown in the following table, some task-related records are specific to a

<b>Task-Related Records</b>	<b>Task Type</b>
Advanced Criteria	Email Monitor
Mutually Exclusive Tasks	All
Notes	All
Restart Criteria	z/OS
RunTime Parameters	PeopleSoft
Step Conditions	z/OS
Stored Procedure Parameters	Stored Procedure
Variables in Tasks Properties	All
Virtual Resources Properties	All

## Task Web Services - Properties

There are task web service properties for:

- All tasks properties
- Task-specific properties
- Task action properties
- Task-related records properties
- Workflow task-related records properties

## Task Properties

- All Tasks Properties
- Application Control Task Properties
- Email Task Properties
- Email Monitor Task Properties
- File Monitor Task Properties
- File Transfer Task Properties
- FTP File Monitor Task Properties
- Linux Unix Task Properties
- SAP Task Properties
- SQL Task Properties
- Stored Procedure Task Properties
- System Monitor Task Properties
- Task Monitor Task Properties
- Timer Task Properties
- Universal Command Task Properties
- Universal Task Properties
- Variable Monitor Task Properties
- Web Service Task Properties
- Windows Task Properties
- Workflow Task Properties
- z/OS Task Properties

**All Tasks Properties**


**All Tasks Properties**

Property	UI Field Name	Description
agent	Agent	For Agent-based task types only;
agentCluster	Agent Cluster	For Agent-based task types only; the Controller will choose to run t broadcastCluster).
agentClusterVar	Agent Cluster Variable	For Agent-based task types only; resolved at run time to the name
agentVar	Agent Variable	For Agent-based task types only; resolved at run time to the name
broadcastCluster	Cluster Broadcast	For Agent-based task types only; run this task (compare with agent task running on its own Agent be record in the database and displ Monitor.
cpDuration	CP Duration	Used with cpDurationUnit; All Critical Path Duration of the task most cases, cpDuration and c; which implies that the Controller ' Duration based on historical exec



cpDurationUnit	CP Duration Unit	Used with the cpDuration; type example, for a Critical Path Duration cpDuration and Minutes in cpI
credentials	Credentials	For Agent-based task types only; Agent runs this task. These credentials provided in the Agent Details for
credentialsVar	Credentials Variable	For Agent-based task types only; resolved at run time to the name
customField1	n/a	User-Defined field.  Example: <customField1 label="Domain">\
customField2	n/a	User-Defined field.  Example: <customField2 label="Domain">\


efDayConstraint	Early Finish Day Constraint	If efType = Time (1); Specification of the early finish time to another day.
efDuration	Early Finish Duration	If efType = Duration (2); Shortest duration the task instance should take to run.
efEnabled	Early Finish	Specification that if the task instance is enabled, the task should run for the duration of efDuration or efTime, the task should finish.
efTime	Early Finish Time	If efType = Time (1); Time before the task instance is considered early. That is, the time before the task instance is running.

efType	Early Finish Type	Type of early finish.
excludeRelated	n/a	For Modify task JSON web service not to exclude related records (A Notes, Variables in Tasks, Virtual even if they are provided in the re  <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;">  <b>Note</b>                      In XML web services specified as an attribute element.                 </div>
executionRestriction	Execution Restriction	For tasks in a workflow; Specific restriction for this task to be run,
holdResources	Hold Resources on Failure	Specification for the task instance resources if the task instance fail returned only if the task instance Finished, or Skipped.  <b>Deprecated</b> for Workflow tasks.

lfDayConstraint	Late Finish Day Constraint	If lfType = Time (1); Specifies the late finish time to another day
lfDuration	Late Finish Duration	If lfType = Duration (2); Longest should take to run.
lfEnabled	Late Finish	Specification that if the task instance lfDuration or lfTime, the task is considered late.
lfTime	Late Finish Time	If lfType = Time (1); Time after considered late.

lfType	Late Finish Type	Type of late finish.
lsDayConstraint	Late Start Day Constraint	If lsType = Time (1); Specificati the late start time to another day.
lsDuration	Late Start Duration	If lsType = Duration (2); Duratio which the task is considered to h


lsEnabled	Late Start	Specification that if the task instance duration or lsTime, the task is considered late.
lsTime	Late Start Time	If lsType = Time (1); Time after considered late.
lsType	Late Start Type	Type of late start.
name	Task Name	Name of this task.
opswiseGroups	Member of Business Services	List of Business Services that this task depends on. <b>XML</b> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;   &lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <b>JSON</b> <pre>"opswiseGroups" : [</pre>
resolveNameImmediately	Resolve Name Immediately	Specification for whether or not to resolve the task name at trigger/launch time.
resPriority	Virtual Resource Priority	Priority for acquiring a resource for the resource. This priority applies to the task.

restrictionPeriod	Restriction Period	If <code>[[executionRestriction]] = Run</code> , the task is restricted.
restrictionPeriodAfterDate	After Date	If <code>restrictionPeriod = After</code> restriction is valid.
restrictionPeriodBeforeDate	Before Date	If <code>restrictionPeriod = Before</code> restriction is valid.
restrictionPeriodDateList	Date List	If <code>restrictionPeriod = On</code> ; <code>D</code> valid.
retainSysIds	n/a	<p>For Create web services; specific service should persist the <code>sysId</code> if</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds</code> is true request/response, <code>sysId</code></li> <li>• If <code>retainSysIds</code> is false request/response, <code>sysId</code> autogenerated by the Cc</li> </ul> <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;"> <p> <b>Note</b> In XML web services specified as an attribute element.</p> </div>
startHeld	Hold on Start	Specification for whether or not <code>w</code> appears in the Activity Monitor window when the user releases it.
startHeldReason	Hold Reason	Information about why the task <code>w</code>
summary	Task Description	User-defined description of this task

sysId	n/a	sys_id used within the Controller
twDelayAmount	Delay Duration In Seconds	If twDelayType = Seconds (3); starting the task.
twDelayDuration	Delay Duration	If twDelayType = Duration (2); and seconds to delay after startir
twDelayType	Delay On Start	Amount of time to delay the start launched, from the time that it is dependencies have been met. If is not waiting on any predecesso specified.
twWaitAmount	Wait Duration In Seconds	If twWaitType = Seconds (3); N starting the task.



twWaitDayConstraint	Wait Day Constraint	If twWaitType = Time (1) or Rel whether or not to advance the w
twWaitDuration	Wait Duration	If twWaitType = Duration; Numl seconds to wait before starting th
twWaitTime	Wait Time	If twWaitType = Time (1) or Rel and minutes to wait before startir

twWaitType	Wait To Start	Amount of time to wait before sta was launched.
twWorkflowOnly	Workflow Only	Specification for whether or not to twDelayType specifications onl
userEstimatedDuration	User Estimated Duration	Estimated amount of time it shou
version	n/a	For Read and List task web servi version being read or listed.  <div style="background-color: #ffffcc; padding: 5px; border: 1px solid black;">  <b>Note</b>                      In XML web services attribute in the &lt;task                 </div>

### Application Control Task Properties

#### Application Control Task

Property	UI Field Name	Description
application	Application	Name of the Application resource record. The Application also defines the start, stop, and query commands for the
command	Command	Command that this task is executing against the software

## Email Task Properties

### Email Task

Property	UI Field Name	Description	Specifications
attachLocalFile	Attach Local File	Specification for whether or not a local file is attached.	Specification for whetl
bccRecipients	Bcc	Email address of the party being sent a blind (hidden) copy of the email, if any.	Use commas to separ
body	Body	Text of the email message.	<a href="#">Variables and function</a> in the body, the text is
ccRecipients	Cc	Email address of the party being sent a copy of the email, if any.	Use commas to separ
connection	Email Connection	Name of an <a href="#">Email Connection</a> .	An Email Connection : template and an Err specified by the Email
localAttachmentsPath	Local Attachments Path	Location of Local Attachments for the connected Node.	
localAttachment	Local Attachment	Name of the file(s) to attach.	
replyTo	Reply-To	Email address of the sender.	Use commas to separ

report	Report	<p><b>Report</b> to attach to this email; if reportVar is specified, report is ignored.</p>	<p>Reports do not have to Visibility: per User, per Therefore, when specifying To define a report reference specify:</p> <pre data-bbox="1808 329 1976 505" style="border: 1px solid #ccc; padding: 5px;">                     &lt;report&gt;                       &lt;title                       &lt;userN                       &lt;group                     &lt;/report&gt;                 </pre> <p>To define a report reference specify:</p> <pre data-bbox="1808 626 1976 802" style="border: 1px solid #ccc; padding: 5px;">                     &lt;report&gt;                       &lt;title                       &lt;userN                       &lt;group                     &lt;/report&gt;                 </pre> <p>To define a report reference</p> <pre data-bbox="1808 899 1976 1075" style="border: 1px solid #ccc; padding: 5px;">                     &lt;report&gt;                       &lt;title                       &lt;group                       &lt;userN                     &lt;/report&gt;                 </pre>
reportVar	Report Variable	Name of a variable that will be resolved at run time to the name of the Report to use.	
subject	Subject	Subject line of the email.	Variables and function

template	Email Template	Name of an <a href="#">Email Template</a>	An Email Template all Email Template specify an Email conr the Email server speci Email template. (An Template.)
templateVar	Email Template Variable	Name of a variable that will be resolved at run time to the name of an Email Template to use.	Format: \${variable nar
toRecipients	To	Email address of the recipient.	Use commas to separ

### Email Monitor Task Properties

#### Email Monitor Task

Property	UI Field Name	Description
action	Action	Action to take on mail that matches th
body	Body	If useAdvancedCriteria is false ar None, Is Blank, or Is Not Blank; body
bodyBeginMarker	Body Begin Marker	If bodyVariables is Within Custom within the Email body to start processi
bodyEndMarker	Body End Marker	If bodyVariables is Within Custom within the Email body to stop processi

bodyFilter	Body Filter	If useAdvancedCriteria is false; b
bodyVariables	Body Variables	<p>Specification for whether to parse the create variables from.</p> <ul style="list-style-type: none"> <li>• If None is selected, no proces</li> <li>• If When Within Body is select scanned for a "=" (equal sign) variablized as long as the tex naming standards for variable</li> <li>• If Within Default Markers or V processing for each will be th the demarcation values. <ul style="list-style-type: none"> <li>• For Default Markers, defined by the <a href="#">Email Body Default End M</a> properties.</li> <li>• For Custom Markers explicitly defined.</li> </ul> </li> </ul> <p>When markers are used, all li begin and end markers will be properties. Any lines of the E ignored with respect to variat</p>
caseSensitive	Case Sensitive	If useAdvancedCriteria is false; T case-sensitive.



cc	Cc	If useAdvancedCriteria is false or None, Is Blank, or Is Not Blank; ccFi
ccFilter	Cc Filter	If useAdvancedCriteria is false; c
connection	Email Connection	Email Connection name.
connectionVar	Email Connection Variable	Name of a variable that will be resolve <a href="#">Connection</a> to use.

contentProcessingType	Email Content Processing	Method for determining the success of content.
contentValue	Content Value	If contentProcessingType is not in the email.
csContentProcessing	Case Sensitive Content	If contentProcessingType is not matching will be performed in a case sensitive manner.
filterLogic	Filter Logic	Logic to apply when combining filters. filterLogic specified the logic to a Criteria record.
from	From	If useAdvancedCriteria is false and fromFilter is None; fromFilter condition value.

fromFilter	From Filter	If useAdvancedCriteria is false; f
includeReadMail	Include Read Mail	Specification for whether or not mail n the filter.
mailboxFolder	Mailbox Folder	Mailbox folder to monitor.
mailboxFolderDestination	Mailbox Folder Destination	If action is Move or Move/Mark As F mail into.
moveToTrash	Move To Trash	If action is Delete or Delete/Mark As moved to the trash folder in th Email C
receivedAfter	Receive After	If receivedRestriction is After; r value.
receivedAfterDate	Receive After Date	If receivedAfter is Date; Specific c value.
receivedAfterOffset	Receive After Offset	If receivedAfter is Relative; Offset receivedAfter restriction value.

receivedBefore	Receive Before	If receivedRestriction is Before; value.
receivedBeforeDate	Receive Before Date	If receivedBefore is Date; Specific restriction value.
receivedBeforeOffset	Receive Before Offset	If receivedBefore is Relative; Offset the receivedBefore restriction value.
receivedOn	Receive On	If receivedRestriction is On; receive value.
receivedOnDate	Receive On Date	If receivedOn is Date; Specific date
receivedRestriction	Receive Restriction	Type of Receive restriction to apply.

sentAfter	Sent After	If sentRestriction is After; sentR
sentAfterDate	Sent After Date	If sentAfter is Date; Specific date fo
sentAfterOffset	Sent After Offset	If sentAfter is Relative; Offset, rela sentAfter restriction value.
sentBefore	Sent Before	If sentRestriction is Before; sent
sentBeforeDate	Sent Before Date	If sentBefore is Date; Specific date
sentBeforeOffset	Sent Before Offset	If sentBefore is Relative; Offset, rel sentBefore restriction value.

sentOn	Sent On	If sentRestriction is On; sentRe
sentOnDate	Sent On Date	If sentOn is Date; Specific date for th
sentRestriction	Sent Restriction	Type of Sent restriction to apply.
subject	Subject	If useAdvancedCriteria is false ar than None, Is Blank, or Is Not Blank; s

subjectFilter	Subject Filter	If useAdvancedCriteria is false; s
timeLimit	Time Limit	Used for Email Monitor tasks not assc units specified by timeLimitUnit) t conditions to be met.
timeLimitUnit	Time Limit Unit	Unit of time to use for timeLimit.
to	To	If useAdvancedCriteria is false ar None, Is Blank, or Is Not Blank; toFi

toFilter	To Filter	If useAdvancedCriteria is false; t
useAdvancedCriteria	Use Advanced Criteria	Specification for whether or not to use Monitor filter criteria.



### File Monitor Task Properties

#### Task Properties: File Monitor Task

Property	UI Field Name	Description
byPercentage	By Percentage	If <code>fmtype</code> = Changed (3); Amount that the file size. For example, enter 10 to monitor for a change in file
byScale	By Scale	If <code>fmtype</code> = Changed (3); Used in conjunction with for. For example, to monitor for a change in file size
bySize	By Size	If <code>fmtype</code> = Changed (3); Used in conjunction with monitor for a change in file size of 10MB, enter 10 i
fileName	Monitor File(s)	Location and name of a specific file or file pattern (f
fileOwner	File Owner	If <code>fmtype</code> = Create (1), Delete (2), Changed (3), or operating system; that is, the user name / group na information.
fmtype	Monitor Type	Type of file event being monitored for.
maxFiles	Maximum Files	If <code>fmtype</code> = Create (1), Delete (2), or Changed (3); searched.

minFileScale	Minimum File Scale	If <code>fmtype = Create (1)</code> ; Scale for the minimum file s
minFileSize	Minimum File Size	If <code>fmtype = Create (1)</code> ; Minimum file size.
recursive	Recursive	Specification for whether or not the File Monitor see
scanForward	Scan Forward	If <code>fmtype = Changed (3)</code> ; Specification that once th left off. If it is scanning within a file, it should resum files, it should resume monitoring for the next file. If you want to start from the beginning each time, do i
scanText	Scan Text	If <code>fmtype = Create (1)</code> , <code>Changed (3)</code> , or <code>Exist (4)</code> ; S Specifying a string means that only files containing
stableSeconds	Stable (seconds)	If <code>fmtype = Create (1)</code> or <code>Changed (3)</code> ; Period of tim Monitor checks the modification timestamp and the
toScale	To Scale	If <code>fmtype = Changed (3)</code> ; Used in conjunction with For example, to monitor for a file size of 5KB, enter
toSize	To Size	If <code>fmtype = Changed (3)</code> ; Used in conjunction with for. For example, to monitor for a file size of 5KB, e
triggerOnExist	Trigger on Existence	If <code>fmtype = Create (1)</code> ; task is triggered if the file b
useRegex	Use Regular Expression	Enables the use of a <a href="#">regular expression</a> in <code>fileName</code>

### File Transfer Task Properties

#### Task Properties: File Transfer Task

Property	UI Field Name	Description
codepage	Codepage	If <code>serverType</code> is UDM; Supported co task.



command	Command	If serverType is FTP or SFTP; File T executed.
compress	Compress	If serverType is UDM; Type of data transfer, if any.

createop	File Creation Option	If serverType is UDM; Specification file should be created (new), appended to existing file.
encrypt	Encrypt	If serverType is UDM; Method of encryption will use in the transfer.
exitCodeOutput	Output File	If outputType = FILE (3); Path and filename of output that you want automatically retried on task instance.

exitCodeProcessing	Exit Code Processing	If serverType is UDM; Specification should determine whether the execute completed successfully.
exitCodes	Exit Codes	If exitCodeProcessing = Success Failure Exitcode Range (2); Range of
exitCodeText	Scan Output For	If exitCodeProcessing = Success Failure Exitcode Range (2); Text for w scan the output file. The Controller will regular expression.
format	Transfer Type	If serverType is FTP, SFTP, or FTP:
formOrScript	Form or Script	If serverType is UDM; Form or Scrip to use.
ftpSubcommands	Subcommands (z/OS only)	If serverType is FTP or SFTP; Any s JCL statement.
jobcard	Job Card (zOS only)]	If serverType is FTP or SFTP; Job c statement.
localFilename	Local Filename	If serverType is FTP or SFTP; Path server (that is, the "transfer from" file r

move	Move	If transferProtocol = FTP, SFTP, GET, MGET, PUT, or MPUT; Modifies and PUT/MPUT by deleting the source transferred to the destination.  GET/MGET with Move enabled will de remote FTP server; PUT/MPUT with M files from the local FTP client..
nft	Network Fault Tolerant	If serverType is UDM; Enable if the tolerant.
outputType	Output Type	If exitCodeProcessing = Success Failure Output Contains (4); Type of o
primaryBroker	Source UDM Agent	If serverType is UDM, formOrScri primaryBrokerChoice is Agent Va Hostname (3); Name of the Agent resc Controller that describes the source U transfer server).
primaryBrokerChoice	Source UDM Agent Option	If serverType is UDM and formOrS Specification for how you will specify tl
primaryBrokerRef	Source UDM Agent	If serverType is UDM, formOrScri primaryBrokerChoice is Agent; Ne defined in the Controller that describes machine (primary transfer server).
primaryCred	Source Credentials	If serverType is UDM and formOrS ID and password (local to the host on under which the transfer operation is b
primaryCredVar	Source Credentials Variable	If serverType is UDM and formOrS variable that will be resolved at run tim Credentials to use.



<code>primaryFilesys</code>	Source File System	If <code>serverType</code> is UDM and <code>formOrS</code> system on the source server.
<code>primaryOpenOptions</code>	Append Source Open Options	If <code>serverType</code> is UDM and <code>formOrS</code> additional free form open command of (primary) transfer server.
<code>remoteCredentials</code>	FTP Credentials	If <code>serverType</code> is FTP or SFTP; Login will use to access the FTP or SFTP se
<code>remoteCredVar</code>	FTP Credentials Variable	If <code>serverType</code> is FTP or SFTP; Name resolved at run time to the name of the
<code>remoteFilename</code>	Remote Filename	If <code>serverType</code> is FTP or SFTP; Path server (that is, the "transfer to" file nan
<code>remoteServer</code>	Remote Server	If <code>serverType</code> is FTP or SFTP; Name Transfer server.
<code>retryExitCodes</code>	Retry Exit Codes	Exit code range for which an auto-retry will occur.
<code>retryIndefinitely</code>	Retry Indefinitely	Specification for whether or not the Co trying indefinitely to run this task. If you overrides any value placed in <code>retryM</code>
<code>retryInterval</code>	Retry Interval (Seconds)	Number of seconds between each retr
<code>retryMaximum</code>	Maximum Retries	Maximum number of times that the Co task after it has started and gone to a

retrySuppressFailure	Suppress Intermediate Failures	<p>Specification for whether or not the fol until all scheduled retry attempts have</p> <ul style="list-style-type: none"> <li>• All Actions (Abort, Email Notif Notification, and System Oper the task instance.</li> <li>• Workflow conditional path pro waiting on a failure path will n</li> <li>• Task Monitors will not be notif Also, any Task Monitor task th past will disqualify any matchi with a Failed status if the task automatic retry and for which Failures has been enabled.</li> <li>• Any Workflow containing the l transition to the Running/Prob</li> </ul>
runtimeDir	Runtime Directory	If serverType is UDM; Directory fron should be executed.
script	Script	If serverType is UDM and formOrS script to execute for this File Transfer t
secondaryBroker	Destination UDM Agent	If serverType is UDM, formOrScri secondaryBrokerChoice is Agent ' Hostname (3); Name of the Agent resc Controller that provides details about t machine (secondary transfer server).
secondaryBrokerChoice	Destination UDM Agent Option	If serverType is UDM and formOrS Specification for how you will specify tl
secondaryBrokerRef	Destination UDM Agent	If serverType is UDM, formOrScri secondaryBrokerChoice is Agent; resource defined in the Controller that destination UDM Agent machine (secc
secondaryCred	Destination Credentials	If serverType is UDM and formOrS user ID and password (local to the hos running) under which the transfer oper
secondaryCredVar	Destination Credentials Variable]	If serverType is UDM and formOrS variable that will be resolved at run tim Destination Credentials to use.

secondaryFilesys	Destination File System	If serverType is UDM and formOrS system on the destination server.
secondaryOpenOptions	Append Destination Open Option	If serverType is UDM and formOrS additional free form open command of (secondary) transfer server.
serverType	Transfer Protocol	Type of File Transfer server.
transferMode	Transfer Mode	If serverType is FTP or FTPS; Mode
trimSpace	Trim Trailing Spaces	If serverType is UDM; Specification should trim trailing spaces from lines c
udmOptions	Append UDM Options	If serverType is UDM; Any additional Mover command options.
useRegex	User Regular Expression	Specification for whether or not to enable <a href="#">expression</a> in localFilename.

### FTP File Monitor Task Properties

**Task Properties: FTP File Monitor Task**

Property	UI Field Name	Description
ftpFmtype	Monitor Type	Type of file event being monitored for.
jobcard	Job Card (z/OS only)	For z/OS; Job card information for the JCL state
listOptions	List Format Options	If <code>servertype = FTP</code> ; Allows you to add state the FTP script that control the format of the file returned by the FTP task.
minFileScale	Minimum File Scale	If <code>ftpFmtype = Exist(1)</code> ; Scale for the minimum
minFileSize	Minimum File Size	If <code>ftpFmtype = Exist (1)</code> ; Minimum file size.
pollInterval	Poll Interval (Seconds)	If <code>wait = true</code> ; Frequency, in seconds, in which File Monitor will check to see if the file exists or missing.
pollMaximum	Maximum Polls	If <code>wait = true</code> ; Maximum number of times that t File Monitor will check to see if the file exists or missing.
remoteCredentials	FTP Credentials	Login credentials that the Agent will use to access FTP or SFTP server machine.
remoteCredVar	FTP Credentials Variable	Name of a variable that will be resolved at run t name of the FTP Credentials to use.
remoteFilename	Remote Filename (FTP)	Path and file name on the remote server.

remoteServer	Remote Server (FTP)	Name or IP address of the remote server.
servertype	Server Type	Type of FTP server.
stableSeconds	Stable (Seconds)	If wait is true; Period of time, in seconds, during the file has not changed.
transferMode	Transfer Mode	Transfer mode to use.
useRegex	Use Regular Expression	Enables the use of a <a href="#">regular expression</a> in remoteFilename.
wait	Wait until Satisfied	<p>If true, the task instance starts and continues to one of the following events occurs:</p> <ul style="list-style-type: none"> <li>• If ftpFmtype = Exist and the specifier exists or appears, the task instance completes with a status of SUCCESS.</li> <li>• If ftpFmtype = Missing and the specifier does not exist or exists then disappears, the task instance completes with a status of SUCCESS.</li> </ul> <p>If false, the task instance:</p> <ol style="list-style-type: none"> <li>1. Starts.</li> <li>2. Checks for the existence of the file.</li> <li>3. Takes one of the following actions: <ul style="list-style-type: none"> <li>• If ftpFmtype = Exist and if the file exists, the task instance completes with a status of SUCCESS.</li> <li>• If ftpFmtype = Exist and if the file does not exist, the task instance completes with a status of FAILURE.</li> <li>• If ftpFmtype = Missing and if the file exists, the task instance completes with a status of FAILURE.</li> <li>• If ftpFmtype = Missing and if the file does not exist, the task instance completes with a status of SUCCESS.</li> </ul> </li> </ol>



### Linux Unix Task Properties

#### Task Properties: Linux/Unix Task

Property	UI Field Name	Description
command	Command	If <code>commandOrScript = Command (1)</code> ; C remote machine.
commandOrScript	Command or Script	Specification for whether a single commar
environment	Environment Variables	Environment variables needed by the prog
exitCodeOutput	Output File	If <code>outputType = FILE (3)</code> ; Path and file n be scanned for the text in <code>exitCodeText</code>
exitCodeProcessing	Exit Code Processing	Specification for how the Controller shoulc command failed or completed successfully
exitCodes	Exit Codes	If <code>exitCodeProcessing = Success Exit Range (2)</code> ; Range of exit codes.

exitCodeText	Scan Output For	If exitCodeProcessing = Success Out Contains (4); text for which the Controller
outputFailureOnly	Failure Only	If outputReturnType = STDOUT (2), S (6), and waitForOutput is false; Indicat retrieved on task failure only.
outputReturnFile	Output File	If outputReturnType = FILE (4); Path a that you want automatically retrieved and
outputReturnNline	Number of Lines	If outputReturnType = STDOUT (2), S (6); Allows you to limit the retrieved data to
outputReturnSline	Starting Line	If outputReturnType = STDOUT (2), S (6); Allows you to instruct the Controller to line.
outputReturnText	Scan Text	If outputReturnType = STDOUT (2), S (6); Instructs the Controller to scan the dat only that.
outputReturnType	Automatic Output Retrieval	Specification for whether you want the Co any output from the job and attach it to the
outputType	Output Type	If exitCodeProcessing = Success Out Contains (4); Type of output.
parameters	Parameters	Any arguments needed by the program to
retryExitCodes	Retry Exit Codes	Exit code range for which an auto-retry of occur. Exit code ranges must be in the sai exitCodes. Maximum Retries must be g is not specified, any exit code potentially v



<code>retryIndefinitely</code>	Retry Indefinitely	Specification for whether or not the Contrc indefinitely to run this task. If <code>retryInde:</code> value placed in <code>retryMaximum</code> .
<code>retryInterval</code>	Retry Interval	Number of seconds between each retry.
<code>retryMaximum</code>	Maximum Retries	Maximum number of times that the Contrc has started and gone to a failed state.
<code>retrySuppressFailure</code>	Suppress Intermediate Failures	Specification for whether or not the followi scheduled retry attempts have been made <ul style="list-style-type: none"> <li>• All Actions (Abort, Email Notificati Notification, and System Operatic instance.</li> <li>• Workflow conditional path proces failure path will not be released.</li> <li>• Task Monitors will not be notified Task Monitor task that has a Time any matching task instance in the task instance is scheduled for aut Suppress Intermediate Failures h</li> <li>• Any Workflow containing the Failc to the Running/Problems status.</li> </ul>
<code>runAsSudo</code>	Run as sudo	Specification for whether or not to run the <code>runAsSudo</code> prefixes the command with eit <ul style="list-style-type: none"> <li>• <b>sudo</b> (if a credential is not specifi root)</li> <li>• <b>sudo -u userid</b> (if a credential is Runtime User from the supplied c</li> </ul> <p>When using <code>runAsSudo</code>, you must grant U sudo to the requested <code>userid</code> without spec via the <code>sudoers</code> file. Please refer to your documentation for updating the <code>sudoers</code></p>
<code>runtimeDir</code>	Runtime Directory	Directory from which the application shoul supported.
<code>script</code>	Script	If <code>commandOrScript</code> is Script (2); Name database that will be executed by this task
<code>waitForOutput</code>	Wait For Output	If <code>outputReturnType = STDOUT</code> (2), S (6), and <code>outputFailureOnly</code> is false; S task should wait for the requested output t

## PeopleSoft Task Properties

### Task Properties: PeopleSoft Task

Property	UI Field Name	Description	Specifications
command	Command	PeopleSoft command to execute.	Valid values: <ul style="list-style-type: none"> <li>• As String</li> <li>• As String</li> <li>• As String</li> </ul> Default is Schedu
connection	PeopleSoft Connection	Name of the PeopleSoft Connection.	
connectionVar	PeopleSoft Connection Variable	Name of a variable that will be resolved at run time to the name of the PeopleSoft Connection to use.	
contentFilter	Content Filter	Comma-delimited list of report file suffixes that will not be returned.	For example: pdf,
distributionOptions	Distribution Options	If <code>command</code> is Schedule Process; Recipients of the process output.	Format: <pre>&lt;distrib &lt;distril &lt;distr: &lt;distr: &lt;/distr: &lt;distril &lt;distr: &lt;dist: &lt;/distr: &lt;/distril</pre>
emailAddresses	Email Address List	If <code>command</code> is Schedule Process; list of email addresses, separated by semicolons.	

emailAttachLog	Email With Log	If <code>command</code> is Schedule Process; Specification for whether or not to attach log files resulting from the Structured Query Report (SQR). Only applicable if <code>processType</code> is SQR Report.	Boolean; Valid va
emailSubject	Email Subject	If <code>command</code> is Schedule Process; Subject line of the email.	If not specified, de
emailText	Email Text	If <code>command</code> is Schedule Process; Body of the email.	If not specified, de
emailWebReport	Email Web Report	If <code>command</code> is Schedule Process; Specification for whether or not to include a link to the completed report output. Only applicable when <code>outputType</code> is Web.	Boolean; Valid va
exitCodeProcessing	Exit Code Processing	Specification for how the Controller should determine whether the executed command failed or completed successfully.	Valid values: <ul style="list-style-type: none"> <li>• As String</li> <li>• As String</li> <li>• As String</li> <li>• As String</li> </ul> Default is Succes:
exitCodeText	Scan Output For	If <code>exitCodeProcessing = Success</code> Output Contains or Failure Output Contains; text for which the Controller should scan the output file.	The Controller wil
exitCodes	Exit Codes	If <code>exitCodeProcessing = Success</code> Exitcode Range or Failure Exitcode Range; Range of exit codes.	Format: Numeric. specify a range. E

mainJobName	Main Job Name	If <code>command = Run Jobset</code> ; Name of the job within the jobset schedule.	
mainSchedName	Main Schedule Name	If <code>command = Run Jobset</code> ; Name of the jobset schedule.	
outputDestFormat	Output Destination Format	If <code>command = Schedule Process or Schedule Job</code> ; Override of the default output format for the submitted job or process.	
outputDestString	Output Destination String	If <code>command = Schedule Process or Schedule Job</code> ; File path or printer destination for the output.	
outputDestType	Output Destination Type	If <code>command = Schedule Process or Schedule Job</code> ; Type of output for the submitted process.	
outputFailureOnly	Failure Only	If <code>outputReturnType = STDOUT, STDERR, FILE, or OUTERR</code> , and <code>waitForOutput</code> is false; Indication for whether output should be retrieved on task failure only.	Boolean; Valid va
outputReturnFile	Automatic Output File	If <code>outputReturnType = FILE</code> ; Output file to return automatically.	
outputReturnNline	Number of Lines	If <code>outputReturnType = SSTDOU, STDERR, FILE, or OUTERR</code> ; Allows you to limit the retrieved data to the number of lines specified.	
outputReturnSline	Start Line	If <code>outputReturnType = STDOUT, STDERR, FILE, or OUTERR</code> ; Instructs the Controller to retrieve data beginning at the specified line.	

outputReturnText	Scan Text	If outputReturnType = STDOUT, STDERR, FILE, or OUTERR; Regex pattern that the Controller will search for a match for in STDOUT/STDERR or a specified file.	The Controller will line matched.
outputReturnType	Automatic Output Retrieval	Specification for whether you want the Controller to automatically retrieve any output from the job and attach it to the task instance record.	Valid values: <ul style="list-style-type: none"> <li>• As String</li> <li>• As String</li> <li>• As String</li> <li>• As String</li> </ul> Default is OUTER
outputType	Output Type	If exitCodeProcessing = Success Output Contains (3) or Failure Output Contains (4); Type of output.	Valid values: <ul style="list-style-type: none"> <li>• As String</li> <li>• As String</li> <li>• As String</li> </ul> Default is STDOU
printAppMessage	Print Application Message	Specification for whether or not the application messages for the monitored processes are included in the Job Report.	Boolean; Valid va
printDistList	Print Distribution List	Specification for whether or not the report-recipient distribution list is included in the Job Report.	Boolean; Valid va
printJobTree	Print Job Tree	Specification for whether or not the job tree is included in the Job Report.	Boolean; Valid va
printParamList	Print Parameter List	Specification for whether or not the parameter list job items are included in the Job Report.	Boolean; Valid va

printSystemMessage	Print System Message	Specification for whether or not the system messages for the monitored processes are included in the Job Report.	Boolean; Valid va
processFileName	Process File Name	If command = Schedule Process or Schedule Job; Dependent file name.	
processName	Process File Name	If command = Schedule Process or Schedule Job; Name of the PeopleSoft process.	
processType	Process Type	If command = Schedule Process or Schedule Job; Type of the PeopleSoft process.	
psCredentials	PeopleSoft Credentials	Credentials for the PeopleSoft system.	
psCredentials	PeopleSoft Credentials	Name of a variable that will be resolved at run time to the name of the PeopleSoft Credentials to use.	
report	Report	Specification for whether or not reports associated with a process are returned.	Boolean; Valid va
reportFolderName	Report Folder Name	If command = Schedule Process or Schedule Job; Folder in which the report will be viewed in Report Manager.	
retentionDays	Retention Days	If command = Schedule Process or Schedule Job; Number of days that reports generated by the submitted process should be retained by the system.	

runControlId	Run Control ID	If command = Schedule Process or Schedule Job; Run control ID to be used for the process submission.	
serverName	Server Name	If command = Schedule Process or Schedule Job; Specific server name.	
waitForOutput	Wait For Output	If outputReturnType = STDOUT, STDERR, FILE, or OUTERR, and outputFailureOnly is false; Specification for whether or not the task should wait for the requested output before completing.	Boolean; Valid va

### SAP Task Properties

#### Task Properties: SAP Task

Property	UI Field Name	Description
chainDesc	Chain Description	If <code>sapDisplayCommand</code> equals <code>Proc</code> Displays the list of processes contained in the specified process chain.
chainId	Chain ID	If <code>commandGroup</code> is one of the following process chain to run: <ul style="list-style-type: none"> <li>• Run Process Chain</li> <li>• Start Process Chain</li> <li>• Wait Process Chain</li> <li>• Interrupt Process Chain</li> <li>• Display and <code>sapDisplayCor</code> Chains (19), Process Chain (: Log (21), Process Chain Star Process Chain Status (23)</li> </ul>



commandGroup	Command Group	Universal Connector command group.
commandOptions	SAP Command Options	Any additional command options supported by the Universal Connector.

dataSource	Data Source	If sapDisplayCommand is InfoPacka InfoPackage data source.
defFile	Definition File	For Run, Submit, and Modify comman repositoryOrFilesys is File System name of the file.
definitionOrModel	Definition or Model	If commandGroup is Run(1); Specific SAP job will be created, based either File or an SAP Model Job.
definitionOrModelJobVar	Definition or Model	If commandGroup is Submit(1); Name will be resolved at run time to the name Model to use.
dispAbapName	SAP ABAP Program Name	If definitionOrModelJobVar is S Name of an ABAP program in an SAP model variant belongs.
dispSapEventId	SAP Event	If sapDisplayCommand is Event Hist Event.
dispSapEventParm	SAP Event Parameter	If sapDisplayCommand is Event Hist parameter value for the event.
dispVariant	SAP Variant Name	Pre-existing SAP variant name to use variant.
environment	Environment Variables	List of environment variables needed   run:  <pre> &lt;environment&gt;   &lt;variable&gt;     &lt;name&gt;env1&lt;     &lt;value&gt;test   &lt;/variable&gt;   &lt;variable&gt;     &lt;name&gt;env2&lt;     &lt;value&gt;test   &lt;/variable&gt; &lt;/environment&gt; </pre>

exitCodeOutput	Output File	If outputType = FILE (3); Path and filename of the output file that should be scanned for exitCodeText.
exitCodeProcessing	Exit Code Processing	Specification for how the Controller should process whether the executed command failed successfully.
exitCodes	Exit Codes	If exitCodeProcessing = Success or Failure Exitcode Range (2); Range of exit codes.
exitCodeText	Scan Output For	If exitCodeProcessing = Success or Failure Output Contains (4); text for which the controller should scan the output file.
immediate	Start Immediately	If commandGroup is Run(1) or Start(4) Causes the job to fail if SAP resource is not available; start the job immediately (for example, start the job immediately (for example process). Otherwise, the job will wait for the resource to become available.
infoPackage	InfoPackage	If commandGroup is one of the following InfoPackage: <ul style="list-style-type: none"> <li>• Run InfoPackage (22)</li> <li>• Start InfoPackage(23)</li> <li>• Display(9) and sapDisplay(24) InfoPackages (24).</li> </ul>
infoPackageJobname	InfoPackage Job Name	If commandGroup is one of the following SAP batch job that processes the InfoPackage: <ul style="list-style-type: none"> <li>• Run InfoPackage (22)</li> <li>• Start InfoPackage (23)</li> </ul>
infoSource	InfoSource	If sapDisplayCommand equals InfoSource.
jobId	SAP Job ID	Job ID of the SAP job.
jobLog	Print Job Log	If commandGroup is Wait (5) or wait for whether or not the job's joblog is required.
jobName	SAP Job Name	Job name of the SAP job.

jobStatus	Status	If sapDisplayCommand equals InfoF Current status for an SAP job.
logId	Log ID	If commandGroup is one of the followi process chain instance to be restartec <ul style="list-style-type: none"> <li>• Start Process Chain and pcr</li> <li>• Wait Process Chain.</li> <li>• Display (9) and sapDisplay Chain (20), Process Chain Lc Chain Status (23).</li> </ul>
outputFailureOnly	Failure Only	If outputReturnType = STDOUT (2 (4), or OUTERR (6), and waitForOu Indication for whether output should b failure only.
outputReturnFile	Output File	If outputReturnType is FILE (4); P; containing the output that you want at and attached to the task instance.
outputReturnNline	Number of Lines	If outputReturnType is STDOUT (2 FILE (4), or OUTERR (6); Allows you data to the number of lines specified.
outputReturnSline	Starting Line	If outputReturnType is STDOUT (2 FILE (4), or OUTERR (6); Allows you Controller to retrieve data beginning a
outputReturnText	Scan Text	If outputReturnType is STDOUT (2 FILE (4), or OUTERR (6); Instructs the the data for the text specified and retri

outputReturnType	Automatic Output Retrieval	Specification for whether you want the automatically retrieve any output from to the task instance record.
outputType	Output Type	If exitCodeProcessing = Success or Failure Output Contains (4); Type c
pcRestart	Restart	If commandGroup equals Start Proces: Specification for whether or not to rest cancelled processes (R or X) in the sp chain instance.
printAppLog	Print Application Log	If commandGroup is Run (1) or Wait ( Specification for whether or not the job one was generated, is returned.
printAppRc	Print Application RC	If commandGroup is Run (1) or Wait ( Specification for whether or not the job codes, if they were set, are returned.
purge	Delete SAP Job on Completion	If commandGroup is Wait(5) or wait

repositoryOrFilesys	Script or File System	Specification for whether the USAP de the file system of the machine where t or in Scripts.
requestId	Request ID	If <code>commandGroup</code> is <code>Wait InfoPackag</code> and <code>sapDisplayCommand</code> is <code>InfoPac</code> Request ID of the InfoPackage that is
retryIndefinitely	Retry Indefinitely	Specification for whether or not the Cc continue trying indefinitely to run this t
retryInterval	Retry Interval]	Number of seconds between each ret
retryMaximum	Maximum Retries	Maximum number of times that the Cc this task after it has started and gone
retrySuppressFailure	Suppress Intermediate Failures	Specification for whether or not the fol suppressed until all scheduled retry at made: <ul style="list-style-type: none"> <li>• All Actions (Abort, Email Notif SNMP Notification, and Syste made against the task instanc</li> <li>• Workflow conditional path prc Successors waiting on a failu released.</li> <li>• Task Monitors will not be noti status. Also, any Task Monito Time Scope in the past will di matching task instance in the status if the task instance is s automatic retry and for which Intermediate Failures has bee</li> <li>• Any Workflow containing the will not transition to the Runni</li> </ul>
runtimeDir	Runtime Directory	Directory from which the application s <a href="#">Variables</a> are supported.
sapCmProfileId	SAP Criteria Manager Profile ID	If <code>commandGroup</code> is <code>Set CM Profile, /</code> or <code>Delete CM Profile</code> ; ID of the profile.

sapCmProfileType	SAP Criteria Manager Profile Type	If <code>commandGroup</code> is Set CM Profile, Deactivate CM Profile, or Delete CM Profile. For the default criteria types the values are: <ul style="list-style-type: none"> <li>• EVTHIS - Identifies a criteria history.</li> <li>• EVHIRO - Identifies a criteria reorganization of raised event.</li> <li>• INTERC - Identifies a criteria interception.</li> </ul>
sapCmXmlFile	SAP Criteria Manager XML File	If <code>commandGroup</code> is Create CM Profile and <code>repositoryOrFilesys</code> is File, the file that contains the Criteria Manager XML File.
sapCommandMask	SAP Command Mask	Name of a command or a mask used external commands that match the mask.
sapConnection	SAP Connection	Name of the SAP connection.
sapConnectionVar	SAP Connection Variable	Name of a variable that will be resolve name of the SAP Connection to use.
sapCred	SAP Credentials	Login credentials that the Controller will use for the SAP system.
sapCredVar	SAP Credentials Variable	Name of a variable that will be resolve name of the SAP Credentials to use.
sapDispConfirmEvents	Confirm Returned Events	If <code>sapDisplayCommand</code> is Event History, the specification for whether or not the status of the events should be changed in the SAP system.
sapDispEventSelectState	Event Select State	Event status of the events which should be displayed.

sapDisplayCommand	Display Command	Displays the specified data, which is v output.
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sapEventId	SAP Event	If commandGroup is Raise Event (8);
sapEventParm	SAP Event Parameter	If commandGroup equals Raise Even parameter value for the event.
sapFromDate	From Date	If sapDisplayCommand is Select (7) Earliest date to use for job selection o
sapLang	SAP Language	SAP logon language used when exec
sapPrinterName	SAP Printer Name	If sapDisplayCommand is Print Form the SAP printer.
sapToDate	To Date	If sapDisplayCommand is Select(7) Latest date to use for job selection or
script	Script	If repositoryOrFilesys is Script; Definition script in the Controller datat
sourceSystem	Source System	If sapDisplayCommand equals InfoF InfoPackage source system.
spoollist	Print Spooled Output	If commandGroup is Wait(5) or wait for whether or not the spoollists of all j returned.
start	Start	Specification for whether or not the ne should be started.
stepNum	SAP Job Step Number	If sapDisplayCommand is Spool List SAP job step.
targetJobName	Target Job Name	If commandGroup equals Run or Subi definitionOrModel is SAP Model new SAP job being created.

targetServer	SAP Target Server	If <code>commandGroup</code> is Run (1) or Start (2) Name of an SAP instance at which a task should be run.
targetVariantName	Target Variant Name	If <code>commandGroup</code> is Submit and <code>definitionOrModelJobVar</code> is SAF One or more replacement variants for steps in an SAP job.
useAppRc	Use Application RC	If <code>commandGroup</code> is Run (1) or Wait(5) Specification for whether or not the SAP return codes will be used to determine the Universal Controller task.
wait	Wait	Specification for whether or not the Controller should wait for the SAP process chain to complete.
waitForOutput	Wait For Output	If <code>outputReturnTypes</code> = STDOUT (2), STDERR (4), or OUTERR (6), and <code>outputFailOn</code> = true. Specification for whether or not the task should wait for the requested output before completing.

### SQL Task Properties

**Task Properties: SQL Task**

Property	UI Field Name	Description
autoCleanup	Auto Cleanup	Specification for whether or not data retrieved and written into a database table is discarded upon completion of the task (or workflow if the task is a workflow).
columnName	Column Name	If <code>resultProcessing</code> is Success Result Set Contains (5); Name of a database table for a specific value.
columnOp	Operator	If <code>resultProcessing</code> is Success Result Set Contains (5); Operator being used.
columnValue	Value	If <code>resultProcessing</code> is Success Result Set Contains (5); Value being compared to <code>columnOp</code> .
connection	Database Connection	Name of the Universal Controller <a href="#">Database Connection</a> .
connectionVar	Database Connection Variable	Name of a variable that will be resolved at <a href="#">Database Connection</a> to use.

<code>exitCodes</code>	Exit Codes	If <code>resultProcessing</code> equals Success E Exitcode Range (3); Range of exit codes.
<code>maxRows</code>	Maximum Rows	Limit to the number of rows you want retur
<code>resultProcessing</code>	Result Processing	Specification for how the Controller shoulc command failed or completed successfully
<code>retryIndefinitely</code>	Retry Indefinitely	Specification for whether or not the Contrc indefinitely to run this task.
<code>retryInterval</code>	Retry Interval	Number of seconds between each retry.
<code>retryMaximum</code>	Maximum Retries	Maximum number of times that the Contro has started and gone to a failed state.

retrySuppressFailure	Suppress Intermediate Failures	<p>Specification for whether or not the following scheduled retry attempts have been made</p> <ul style="list-style-type: none"> <li>• All Actions (Abort, Email Notification, and System Operation instance.</li> <li>• Workflow conditional path process failure path will not be released.</li> <li>• Task Monitors will not be notified Task Monitor task that has a Time any matching task instance in the task instance is scheduled for auto Suppress Intermediate Failures h</li> <li>• Any Workflow containing the Failure to the Running/Problems status.</li> </ul>
sqlCommand	SQL Command	SQL command being executed against the

### Stored Procedure Task Properties

#### Task Properties: Stored Procedure Task

Property	UI Field Name	Description
autoCleanup	Auto Cleanup	Specification for whether or not data retrieved and then written into a database table is deleted upon completion of the task (or workflow if the task is a workflow).
columnName	Column Name	If <code>resultProcessing</code> is Success Result Set Contains; Name of a database column specific value.
connection	Database Connection	Universal Controller <a href="#">Database Connection</a>
connectionVar	Database Connection Variable	Name of a variable that will be resolved at <a href="#">Database Connection</a> to use.
exitCodes	Exit Codes	If <code>resultProcessing</code> is Success Exit Code Range; Range of exit codes.
maxRows	Maximum Rows	Limit to the number of rows you want returned; value overrides any value specified in the task.
parameterPosition	Parameter Position	If <code>resultProcessing</code> is Success Output Parameter; Position of this parameter within the task.

resultOp	Operator	If resultProcessing is Success Result Contains, Success Output Parameter, or F Operator being used for the comparison.
resultProcessing	Result Processing	Specification for how the Controller should Procedure failed or completed successful
resultValue	Value	If resultProcessing is Success Result Result Set Contains, Success Output Parameter; Value being compared, using resultOp.
retryIndefinitely	Retry Indefinitely	Specification for whether or not the Controller indefinitely to run this task. This value over retryMaximum.

retryInterval	Retry Interval (Seconds)	Number of seconds between each retry.
retryMaximum	Maximum Retries	Maximum number of times that the Contro has started and gone to a failed state.
retrySuppressFailure	Suppress Intermediate Failures	<p>If the task instance is in the Failed status; the following will be suppressed until all sc <code>retryMaximum</code> value has been specified true):</p> <ul style="list-style-type: none"> <li>• All Actions (Abort, Email Notificati Notification, and System Operatio instance.</li> <li>• Workflow conditional path proces: failure path will not be released.</li> <li>• Task Monitors will not be notified Task Monitor task that has a Time any matching task instance in the task instance is scheduled for aut Suppress Intermediate Failures h.</li> <li>• Any Workflow containing the Fail to the Running/Problems status.</li> </ul>
storedProcName	Stored Procedure Name	Name of the file containing the stored proc database. <i>Variables</i> are supported.



### System Monitor Task Properties

**Task Properties: System Monitor Task**

Property	UI Field Name	Description
byScale	By Scale	Scale of the number you entered in freeSize.
condition	Condition	Specification for whether you want to check for free disk space. Resource Available field.
drive	Mount Points or Drives	Specific mount point or drive, such as drive C: for Windows.
freeSize	Resource Available	Used in conjunction with byScale; Amount of the resource the machine has at least 1GB of free disk space, enter 1 in freeSize.
smtype	Monitor Type	Type of system status to monitor for.

### Task Monitor Task Properties

#### Task Properties: Task Monitor Task

Property	UI Field Name	Description
monType	Monitoring Type	Specification for which task or tasks are being monitored.
relativeTimeFrom	From	<p>If timeScope is Relative; Used for Task Monitor. Together with relativeTimeTo, it allows you to specify the time the Task Monitor task launched, during which the conditions must be met. If the conditions are not met, the Task Monitor task goes to a FAILED status.</p> <p>If you specify a past time in relativeTimeFrom, the Controller searches the Activity Log for the specified conditions. If the conditions are satisfied, the Task Monitor task goes to a SUCCESS status immediately. Otherwise, the task goes to a FAILED status until the relativeTimeTo time.</p>
relativeTimeTo	Time Scope To	<p>If timeScope is Relative; Used for Task Monitor. Together with relativeTimeFrom, it allows you to specify the time the Task Monitor task launched, during which the conditions must be met. If the conditions are not met, the Task Monitor task goes to a FAILED status.</p> <p>If the conditions in the Task Monitor task are satisfied, the Task Monitor task goes to a SUCCESS status immediately. Otherwise, until the relativeTimeTo time, the Task Monitor task goes to a FAILED status.</p>
statusText	Status to Monitor	Status being monitored for. When the task reaches this status, the associated trigger is satisfied and you can specify status only, or status and event as needed.
taskMonName	Task to Monitor	If monType is Specific; Task to monitor.

taskNameLookup	Task Name Condition	If monType is General; Type of condition for
taskNameValue	Task Name <Condition Value>	If monType is General and taskNameLookup condition specified in taskNameLookup.
taskNameValueResolve	Resolve Task Name Condition	If monType is General and taskNameLookup whether or not to resolve at run time any va monitored.
timeScope	Time Scope	Used for Task Monitor tasks not associated during which the Task Monitor conditions m be satisfied. The timeScope window is alw Monitor launched. For example, if you speci 02:00 in relativeTimeTo, the window's b Monitor is launched and its end time is two l
typeText	Task Type to Monitor	If monType is General; Task type(s) to mon
wfConditionType	Workflow Name Condition	Type of condition for the name of a workflow monitored for.
wfConditionValue	Workflow Name <Condition Value>	If wfConditionType is not – None --; Valu

### Timer Task Properties

#### Task Properties: Timer Task

Property	UI Field Name	Description
sleepAmount	Timer Duration in Seconds	If sleepType is Seconds; Number c
sleepDayConstraint	Timer Day Constraint	If sleepType is Time or Relative Tim the timer to another day.
sleepDuration	Timer Duration	If sleepType is Duration; Number c Timer task will run.
sleepTime	Timer Time	If sleepType is Time or Relative Tim a completed status.
sleepType	Timer Type	Type of Timer command to execute.

## Universal Command Task Properties

### Task Properties: Universal Command Task

Property	UI Field Name	Description
broker	UCMD Agent	If <code>brokerChoice</code> is Agent Hostname or / <ul style="list-style-type: none"> <li>• Variable that will be resolved whe</li> <li>• Host name of a machine where th</li> </ul>
brokerChoice	UCMD Agent Option	Specification for how the name of the UCMD Agent is resolved in <code>broker</code> or <code>brokerRef</code> .
brokerCred	UCMD Credentials	Login credentials that Controller will use to connect to where the UCMD Agent is running.
brokerCredVar	UCMD Credentials Variable	Name of a variable that will be resolved at UCMD Credentials to use.
brokerRef	UCMD Agent	If <code>brokerChoice</code> is Agent; UCMD Agent Hostname from UCMD Agent table.
command	Command	If <code>commandOrScript</code> is Command; Command to execute on remote machine.
commandOptions	UCMD Options	Any UCMD options needed by the program.
commandOrScript	Command or Script	Specification for whether a single command or script is executed.
exitCodeOutput	Output File	Path and file name of the output file that stores the exit code in <code>exitCodeText</code> .

exitCodeProcessing	Exit Code Processing	Specification for how the Controller should execute a command failed or completed successfully.
exitCodes	Exit Codes	If exitCodeProcessing is Success Exitcode Range; Range of exit codes.
exitCodeText	Scan Output For	If exitCodeProcessing = Success Output Contains (4); text for which the Controller should scan.
outputFailureOnly	Failure Only	If outputReturntype is STDOUT, STDERR waitforoutput is false; Indication for whether to retrieve output on task failure only.
outputReturnFile	Output File	If outputReturntype is FILE; Path and filename of output that you want automatically retrieved on task failure.
outputReturnNline	Number of Lines	If outputReturntype is STDOUT, STDERR Limit the retrieved data to this number of lines.
outputReturnSline	Start Line	If outputReturntype is STDOUT, STDERR Instructs the Controller to retrieve data beginning at this line.
outputReturnText	Scan Text	If outputReturntype is STDOUT, STDERR Instructs the Controller to scan the data for the specified text and retrieve only that.

outputReturnType	Automatic Output Retrieval	Specification for whether you want the Controller to retrieve any output from the job and attach it to the record.
outputType	Output Type	If <code>exitCodeProcessing</code> is <code>Success</code> Output of output.
retryExitCodes	Retry Exit Codes	Exit code range for which an auto-retry will occur. Exit code ranges must be in the range specified in <code>exitCodes</code> . Maximum number of retries an exit code range is not specified, any exit code range will result in a retry.
retryInterval	Retry Interval (Seconds)	Number of seconds between each retry.
retryMaximum	Maximum Retries	Maximum number of times that the Controller will retry after it has started and gone to a failed state.

retrySuppressFailure	Suppress Intermediate Failures	<p>If the task instance is in the Failed status; not the following will be suppressed until a (a Maximum Retries value has been entered) have been made:</p> <ul style="list-style-type: none"> <li>• All Actions (Abort, Email Notification, and System Operatio task instance.</li> <li>• Workflow conditional path proces: on a failure path will not be releas</li> <li>• Task Monitors will not be notified any Task Monitor task that has a disqualify any matching task insta status if the task instance is sche for which Suppress Intermediate I</li> <li>• Any Workflow containing the Faile transition to the Running/Problem</li> </ul>
runtimeDir	Runtime Directory	Directory from which the application should
script	Script File	If <code>commandOrScript</code> is Script; Path and will be executed on the remote machine.
scriptOptions	Script Options	If <code>commandOrScript</code> is Script; One or more pass to the script file.
waitForOutput	Wait For Output	If <code>outputReturnTypes</code> = STDOUT (2), STDERR (6), and <code>outputFailureOnly</code> whether or not the task should wait for the completing.



## Universal Task Properties

### Task Properties: Universal Task

Property	UI Field Name	Description
arrayField{1-2}	<array field>	<p>Array field for this Universal task.</p> <p>Examples:</p> <p><b>Create / Update</b>  XML:  &lt;arrayField1 nameTitle="Custom Name" \ Id"&gt;    &lt;field&gt;      &lt;name&gt;John Doe Jr.&lt;/name&gt;      &lt;value&gt;1234567&lt;/value&gt;    &lt;/field&gt;    &lt;field&gt;      &lt;name&gt;Max&lt;/name&gt;      &lt;value&gt;888888&lt;/value&gt;    &lt;/field&gt;  &lt;/arrayField1&gt;  &lt;arrayField2&gt;    &lt;field&gt;      &lt;name&gt;A1&lt;/name&gt;      &lt;value&gt;test1&lt;/value&gt;    &lt;/field&gt;    &lt;field&gt;      &lt;name&gt;A2&lt;/name&gt;      &lt;value&gt;test2&lt;/value&gt;    &lt;/field&gt;  &lt;/arrayField2&gt;</p> <p>JSON:  "arrayField1": {    "fields": [      {        "name": "John Doe Jr.",        "value": "1234567"      },      {        "name": "Max",        "value": "888888"      }    ],    "nameTitle": "Custom Name",    "valueTitle": "Custom Id"  },  "arrayField2": {    "fields": [  </p>

```

    {
      "name": "A1",
      "value": "test1"
    },
    {
      "name": "A2",
      "value": "test2"
    }
  ]
},

```

**Read**

XML:

```

<arrayField1 name="array1" label="Custo
nameTitle="Custom Name" valueTitle="Cu
  <field>
    <name>John Doe Jr.</name>
    <value>1234567</value>
  </field>
  <field>
    <name>Max</name>
    <value>888888</value>
  </field>
</arrayField1>

```

JSON:

```

"arrayField1": {
  "fields": [
    {
      "name": "John Doe Jr.",
      "value": "1234567"
    },
    {
      "name": "Max",
      "value": "888888"
    }
  ],
  "label": "Customers",
  "name": "array1",

```

		<pre>"nameTitle": "Custom Name", "valueTitle": "Custom Id" }</pre>
booleanField{1-10}	<boolean field>	<p>Boolean field for this Universal task.</p> <p>Examples:</p> <p><b>Create / Update</b>  XML:  &lt;booleanField1&gt;&gt;false&lt;/booleanField1&gt;  JSON:  "booleanField1": false</p> <p><b>Read</b>  XML:  &lt;booleanField1 name="run_immediately" Immediately"&gt;&gt;false&lt;/booleanField1&gt;  JSON:  "booleanField1": {  "label": "Run Immediately",  "name": "run_immediately",  "value": false  }</p>
choiceField{1-10}	<choice field>	<p>Choice field for this Universal task.</p> <p>Examples:</p> <p><b>Create / Update</b>  XML:  &lt;choiceField1&gt;val 1&lt;/choiceField1&gt;  JSON:  "choiceField1": "val 1"</p> <p><b>Read</b>  XML:  &lt;choiceField1 name="programe" label="F Name"&gt;val 1&lt;/choiceField1&gt;  JSON:  "choiceField1": {  "label": "Program Name",  "name": "programe",  "value": "val 1",  }</p>
createConsole	Create Console	If desktopInteract is true; Specificatio not to allocate a new console for the proce having it inherit one.

credentialField{1-4}	<credential field>	<p>Credential field for this Universal task.</p> <p>Examples:</p> <p><b>Create / Update</b>  XML:  &lt;credentialField1&gt;val 1&lt;/credentialField1&gt;  JSON:  "credentialField1": "val 1"</p> <p><b>Read</b>  XML:  &lt;credentialField1 name="credname" label Name"&gt;val 1&lt;/credentialField1&gt;  JSON:  "credentialField1": {  "label": "Credential Name",  "name": "credname",  "value": "val 1",  }</p>
desktopInteract	Interact with Desktop	Specification for whether or not a task that application with a GUI requires some man user (for example, clicking buttons or ente
elevateUser	Run with Highest Privileges	Specification for whether or not to execute elevated privileges token, rather than one Account Control (UAC) restrictions. An ele a process to execute with all the privileges specified credentials. For example, a task administrative account will behave as thou permission via a UAC dialog to perform a operation.

environment	Environment Variables	Environment variables needed by the prog
exitCodeOutput	Output File	Path and file name of the output file that s for the text in exitCodeText.
exitCodeProcessing	Exit Code Processing	Specification for how the Controller should whether the executed command failed or successfully.
exitCodes	Exit Codes	If exitCodeProcessing is Success Exit Failure Exitcode Range; Range of exit coc
exitCodeText	Scan Output For	If exitCodeProcessing = Success Output ( Failure Output Contains (4); text for which should scan the output file.
intField{1-10}	<integer field>	Integer field for this Universal task.  Examples:  <b>Create / Update</b> XML: <intField1>12</intField1> JSON: "intField1": 12  <b>Read</b> XML: <intField1 name="error_level" label="Error Level">12</intField1> JSON: "intField1": { "label": "Error Level", "name": "error_level", "value": 12, }

largeTextField{1-2}	<text field>	<p>Large text field for this Universal task.</p> <p>Examples:</p> <p><b>Create / Update</b>  XML:  &lt;largeTextField1&gt;test text&lt;/largeTextFielc  JSON:  "largeTextField1": "test text"</p> <p><b>Read</b>  XML:  &lt;largeTextField1 name="respapp" label="Application"&gt;test text&lt;/largeTextField1&gt;  JSON:  "largeTextField1": {  "label": "Responsibility Application",  "name": "respapp",  "value": "test text",  }</p>
outputFailureOnly	Failure Only	If outputReturnType is STDOUT, STDI OUTERR; Indication for whether output sf on task failure only.
outputReturnFile	Output File	If outputReturnType is FILE; Path and containing the output that you want autom and attached to the task instance.
outputReturnNline	Number of Lines	If outputReturnType is STDOUT, STDI OUTERR; Limit the retrieved data to this r
outputReturnSline	Start Line	If outputReturnType is STDOUT, STDI OUTERR; Instructs the Controller to retriee at the line indicated.
outputReturnText	Scan Text	If outputReturnType is STDOUT, STDI OUTERR; Instructs the Controller to scan text specified and retrieve only that.

outputReturnType	Automatic Output Retrieval	Specificaton for whether you want the Cor automatically retrieve any output from the the task instance record.
outputType	Output Type	If exitCodeProcessing is Success Out Output; Type of output.
retryExitCodes	Retry Exit Codes	Exit code range for which an auto-retry of status will occur. Exit code ranges must be format as ranges specified in exitCodes must be greater than 0. If an exit code ran any exit code potentially will cause a retry.
retryInterval	Retry Interval (Seconds)	Number of seconds between each retry.
retryMaximum	Maximum Retries	Maximum number of times that the Contrc this task after it has started and gone to a

retrySuppressFailure	Suppress Intermediate Failures	<p>If the task instance is in the Failed status; whether or not the following will be suppressed scheduled retry attempts (a Maximum Ret been entered or Retry Indefinitely has been made):</p> <ul style="list-style-type: none"> <li>• All Actions (Abort, Email Notification, SNMP Notification, and System C made against the task instance.</li> <li>• Workflow conditional path processes Successors waiting on a failure process released.</li> <li>• Task Monitors will not be notified status. Also, any Task Monitor task Scope in the past will disqualify an instance in the past with a Failed instance is scheduled for automatic which Suppress Intermediate Fail enabled.</li> <li>• Any Workflow containing the Failed will not transition to the Running/Failed</li> </ul>
runtimeDir	Runtime Directory	Directory from which the application should
scriptField{1-2}	<script field>	<p>Script field for this Universal task.</p> <p>Examples:</p> <p><b>Create / Update</b>  XML:  &lt;scriptField1&gt;val 1&lt;/scriptField1&gt;  JSON:  "scriptField1": "val 1"</p> <p><b>Read</b>  XML:  &lt;scriptField1 name="scriptname" label="Script 1"&gt;val 1&lt;/scriptField1&gt;  JSON:  "scriptField1": {  "label": "Script Name",  "name": "scriptname",  "value": "val 1",  }</p>
template	n/a	Universal Template on which the Universal



<code>textField{1-20}</code>	<code>&lt;text field&gt;</code>	<p>Text field for this Universal task.</p> <p>Examples:</p> <p><b>Create / Update</b>  XML:  <code>&lt;textField1&gt;test text&lt;/textField1&gt;</code>  JSON:  <code>"textField1": "test text"</code></p> <p><b>Read</b>  XML:  <code>&lt;textField1 name="username" label="App text"&gt;</code>  JSON:  <code>"textField1": {</code>  <code>  "label": "Application User",</code>  <code>  "name": "username",</code>  <code>  "value": "test text",</code>  <code>}</code></p>
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### Variable Monitor Task Properties

#### Task Properties: Variable Task Monitor Task

Property	UI Field Name	Description
timeLimit	Time Limit	If valueMonitorType is Change or Current/Char associated with a trigger; Amount of time (in units of timeLimitUnit) for the Variable Monitor conditions to be met.
timeLimitUnit	Time Limit Unit	Unit of time to use for timeLimit.
value	Value	If valueCondition is =, !=, >, >=, <, <=, or regex
valueCondition	Value Condition	Condition for the value of the variable being monitored.
valueMonitorType	Value Monitor Type	Type of monitoring to be done on the Variable value.
variableName	Variable to Monitor	Name of the variable to monitor.

### Web Service Task Properties

**Task Properties: Web Service Task**

Property	UI Field Name	Description
autoCleanup	Auto Cleanup	Specification for whether or not to erase Web Service response output upon completion or, if the task instance is within a workflow instance completes.
formData	Form Data	If httpPayloadType = Form Data; encoded and added to the message
httpAuth	HTTP Authentication	HTTP authentication scheme to use
httpHeaders	HTTP Headers	HTTP headers.

httpMethod	HTTP Method	If protocol = HTTP; Type of HTTP
httpPayloadType	HTTP Payload Type	If protocol = HTTP and httpMethod = PATCH; Type of HTTP payload.
httpVersion	HTTP Version	Version of the HTTP protocol to use
mimeType	MIME Type	If protocol = HTTP; MIME type of
outputConditionOperator	Operator	If responseProcessingType = Success; Failure Output Contains; Condition combination with outputConditionValue
outputConditionStrategy	Strategy	If outputType = XML or JSON; Strategy applying outputConditionOperator outputConditionValue against outputConditionValue matches.
outputConditionValue	Value	If responseProcessingType = Success; Failure Output Contains; Condition value combination with the outputConditionOperator
outputPathExpression	Path Expression	If outputType = XML or JSON; Expression evaluating the response output.

outputType	Output Type	If responseProcessingType = Si or Failure Status Code Range; Output Processing mechanism should assume output. If the expected output is XML specify Text. However, when specify output must be XML or JSON, response parsing will fail and the path expression no matches.
payload	Payload	If protocol = HTTP, httpMethod PATCH, httpPayloadType is Raw Form, or if protocol = SOAP and ; Request payload.
payloadScript	Payload Script	If payloadSource = Script; Script is the request payload.
payloadSource	Payload Source	If protocol = HTTP, httpMethod PATCH, and httpPayloadType is SOAP; Specification for whether the payload or in payloadScript.
protocol	Protocol	Protocol to use for the operation.
responseProcessingType	Response Processing	Specification for how to process the response to determine success or failure.
soapPayloadType	SOAP Payload Type	If protocol = SOAP; Type of SOAP payload.

soapResponseOutput	SOAP Response Output	If <code>protocol = SOAP</code> ; Element of the captured as output.
soapVersion	SOAP Version	If <code>protocol = SOAP</code> ; Version of the
statusCodeRange	Status Codes	If <code>responseProcessingType = Success</code> or Failure Status Code Range; Quali
timeout	Timeout	Number of seconds to wait for the re
url	URL	URL of the target service, excluding
urlParameters	URL Query Parameters	If <code>protocol = HTTP</code> ; Any query pa a query string and appended to the l

## Windows Task Properties

### Task Properties: Windows Task

Property	UI Field Name	Description
command	Command	If <code>commandOrScript = Command (1)</code> ; Command executed on the remote machine.
commandOrScript	Command or Script	Specification for whether a single command or script being executed.
createConsole	Create Console	If <code>desktopInteract</code> is true; Specification to allocate a new console for the process, inherit one.
desktopInteract	Interact with Desktop	Specification for whether or not a task that with a GUI requires some manual actions example, clicking buttons or entering values.
elevateUser	Run with Highest Privileges	Specification for whether or not to execute elevated privileges token, rather than one Account Control (UAC) restrictions. An elevated process to execute with all the privileges specified credentials. For example, a task administrative account will behave as though it has permission via a UAC dialog to perform a

environment	Environment Variables	Environment variables needed by the prog
exitCodeOutput	Output File	If outputType = FILE (3); Path and file n file that should be scanned for the text in e
exitCodeProcessing	Exit Code Processing	Specification for how the Controller should the executed command failed or complete
exitCodes	Exit Codes	If exitCodeProcessing = Success Exit Failure Exitcode Range (2); Range of exit
exitCodeText	Scan Output For	If exitCodeProcessing = Success Out Failure Output Contains (4); text for which should scan the output file.
outputFailureOnly	Failure Only	If outputReturnType = STDOUT (2), S (4), or OUTERR (6), and waitForOutput for whether output should be retrieved on
outputReturnFile	Output File	If outputReturnType is FILE (4); Path a containing the output that you want autom and attached to the task instance.
outputReturnNline	Number of Lines	If outputReturnType is STDOUT (2), S (4), or OUTERR (6); Allows you to limit the the number of lines specified.
outputReturnSline	Starting Line	If outputReturnType is STDOUT (2), S (4), or OUTERR (6); Allows you to instruct retrieve data beginning at this line.
outputReturnText	Scan Text	If outputReturnType is STDOUT (2), S (4), or OUTERR (6); Instructs the Controll for the text specified and retrieve only that




outputReturnType	Automatic Output Retrieval	Specification for whether you want the Controller to automatically retrieve any output from the task instance record.
outputType	Output Type	If <code>exitCodeProcessing = Success</code> Output Contains (4); Type of output
parameters	Parameters	Any arguments needed by the program to
retryExitCodes	Retry Exit Codes	Exit code range for which an auto-retry of status will occur. Exit code ranges must be as ranges specified in <code>exitCodes</code> . Maximum greater than 0. If an exit code range is not code potentially will cause a retry.
retryIndefinitely	Retry Indefinitely	Specification for whether or not the Controller trying indefinitely to run this task. If <code>retry</code> yes, it overrides any value placed in <code>retr</code>
retryInterval	Retry Interval	Number of seconds between each retry.
retryMaximum	Maximum Retries	Maximum number of times that the Controller task after it has started and gone to a failure

retrySuppressFailure	Suppress Intermediate Failures	<p>Specification for whether or not the followi suppressed until all scheduled retry attem made:</p> <ul style="list-style-type: none"> <li>• All Actions (Abort, Email Notificati SNMP Notification, and System C made against the task instance.</li> <li>• Workflow conditional path proces: Successors waiting on a failure p: released.</li> <li>• Task Monitors will not be notified Also, any Task Monitor task that f the past will disqualify any matchi the past with a Failed status if the scheduled for automatic retry and Intermediate Failures has been ei</li> <li>• Any Workflow containing the Faili not transition to the Running/Prot</li> </ul>
runtimeDir	Runtime Directory	Directory from which the application shoul <a href="#">Variables</a> are supported.
script	Script	If <code>commandOrScript</code> is Script (2); Name Controller database that will be executed l
waitForOutput	Wait For Output	If <code>outputReturnType</code> = STDOUT (2), S (4), or OUTERR (6), and <code>outputFailur</code> Specification for whether or not the task sl requested output before completing.

**Workflow Task Properties**

**Task Properties: Workflow Task**

Property	UI Field Name	Description
calculateCp	Calculate Critical Path	<p>Specification for whether or not the Control by default, display it in the Workflow Monitor.</p> <div style="background-color: #ffe6e6; padding: 10px; border: 1px solid #ccc;"> <p> <b>Important</b></p> <ul style="list-style-type: none"> <li>When restoring a Workflow setting (yes or no) will</li> <li>When promoting a Workflow Details:                             <ul style="list-style-type: none"> <li>Critical Path</li> <li>Calculate Critical Path</li> </ul> </li> <li>If the database is "drc"                             <ul style="list-style-type: none"> <li>Critical Path</li> <li>Calculate Critical Path</li> </ul> </li> </ul> </div>
calendar	Default Calendar	<p>Default calendar used by the Workflow. If calendar overrides this default calendar.</p> <p>The Calendar will be used to verify any Control Run Criteria.</p>
layoutOption	Auto Layout	<p>If skippedOption is Hide Skipped (2); S</p>
numberOfTasks	Progress	<p>Total number of tasks in the Workflow.</p>
overrideCalendar	Override Inherited Calendar	<p>Specification for whether or not to use the the calendar used in the trigger or parent Workflow.</p>
skippedOption	Show/Hide Skipped Tasks	<p>Specification to either show or hide tasks in Task).</p>



## zOS Task Properties

### Task Properties: z/OS Task

Property	UI Field Name	Description
autoRestartOption	Auto-Restart Option	Allows the z/OS job to be resubmitted
deleteOverrideJcl	Delete Override JCL]	If useOverrideLib is true; Allows th control the automated clean-up of the deleteOverrideJcl is false, the C action to delete the override JCL from
exitCodeOutput	Output File	If outputType = FILE (3); Path and f should be scanned for the text in exit
exitCodeProcessing	Exit Code Processing	Specification for how the Controller sh executed command failed or complete
exitCodes	Exit Codes	If exitCodeProcessing = Success Exitcode Range (2); Range of exit coc
exitCodeText	Scan Output For	If exitCodeProcessing = Success Output Contains (4); text for which the output file.

jclLocation	JCL Location	File and member name containing the
jobclassNew	New Jobclass	New Jobclass to replace the one in the override the value in your JCL without
jobnameNew	New Jobname	Job name that will replace the one in the override the value in your JCL without
msgclasNew	New Msgclass	New MSGCLASS to replace the one in the you to override the value in your JCL without having to modify the JCL.
outputFailureOnly	Failure Only	If outputReturnType = FILE (4) or waitForOutput is false; Indication for retrieved on task failure only.
outputReturnFile	Output File	If outputReturnType = FILE (4); Specifies output that you want automatically retrieved instance.
outputReturnNline	Number of Lines	If outputReturnType = STDOUT (2) OUTERR (6); Allows you to limit the number of lines specified.
outputReturnSline	Starting Line	If outputReturnType = STDOUT (2) OUTERR (6); Allows you to instruct the beginning at this line.
outputReturnText	Scan Text	If outputReturnType = STDOUT (2) OUTERR (6); Instructs the Controller to specified and retrieve only that.

outputReturnType	Automatic Output Retrieval	Specification for whether you want the retrieve any output from the job and a record.
outputType	Output Type	If <code>exitCodeProcessing = Success</code> Output Contains (4); Type of output.
overrideJclDelInstCount	Override Instance Count for Deletion	If <code>deleteOverrideJcl</code> is true; Num instances that must occur before the c deleted. When the deletion criteria ha will instruct the Agent to delete the me Location.  An override instance is considered su in the controller is SUCCESS.
overrideJclLocation	JCL Override Location	If <code>useOverrideLib</code> is true; File and containing an override JCL script.
parameters	Parameters	Any arguments needed by the program



proclibName	Procedure Library	<p>Allows you to define a JES2 PROCLIE JCL. For example, a PROCLIB value following JES2 control statement gene</p> <pre style="border: 1px solid black; padding: 5px; margin: 10px 0;">/*JESPARM PROCLIB=PROC</pre> <p>The PROCLIB value must refer to a d procedure. Refer to IBM MVS JCL Re regarding the JES2 PROCLIB control</p>
retryIndefinitely	Retry Indefinitely	Specification for whether or not the Cc indefinitely to run this task. If retryI any value placed in retryMaximum.
retryInterval	Retry Interval	Number of seconds between each ret
retryMaximum	Maximum Retries	Maximum number of times that the Cc after it has started and gone to a failc
retrySuppressFailure	Suppress Intermediate Failures	<p>Specification for whether or not the fol all scheduled retry attempts have bee</p> <ul style="list-style-type: none"> <li>• All Actions (Abort, Email Notif Notification, and System Ope task instance.</li> <li>• Workflow conditional path prc on a failure path will not be re</li> <li>• Task Monitors will not be noti any Task Monitor task that he disqualify any matching task i status if the task instance is s for which Suppress Intermedi</li> <li>• Any Workflow containing the transition to the Running/Prot</li> </ul>
scheduleId	Schedule ID	CA7 Schedule ID; for CA7 toleration c zOS Tasks#CA7/CA11 Tolerat
useOverrideLib	Use JCL Override Library	<p>Specification for whether or not to allo override library on the target system.</p> <p>If useOverrideLib is true, the Agen path (specified in overrideJclLoca from jclLocation. If a JCL member the job is submitted from there. Other jclLocation path for submission.</p>
waitForOutput	Wait For Output	If outputReturnType = FILE (4) or . outputFailureOnly is false;; Spec task should wait for the requested out



## Task Action Properties

- [Abort Action](#)
- [Email Notification Action](#)
- [Set Variable Action](#)
- [SNMP Notification Action](#)
- [System Operation Action](#)

### Abort Action

Property	UI Field Name	Description
cancelProcess	Cancel Process if Active	Instructs the Controller to cancel the process Finishing the task.
description	Description	Description of this Abort action.
exitCodes	Exit Codes	One or more exit codes that, together with a
haltOnFinish	Halt On Force Finish	Instructs the Controller to <a href="#">Force Finish (Halt) Finish</a>
inheritance	Action Inheritance	For Workflow tasks only; Records that this ac
notifyOnEarlyFinish	On Early Finish	Generates the action if the task finishes early the task.
notifyOnLateFinish	On Late Finish	Generates the action if the task finishes late, task.
notifyOnLateStart	On Late Start	Generates the action if the task started late, task.
overrideExitCode	Override Exit Code	Overrides the exit code returned by the proce Force Finish a task instance with a specific e take a conditional path using Conditions.
status	Status	<a href="#">Status</a> of this task, by itself or together with a You can specify as many statuses as needed
sysId	n/a	sys_id used within the Controller to identify th

**Email Notification Action**

Property	UI Field Name	Description
attachFile	Attach Remote File	For <a href="#">Agent-based tasks</a> only; Specification not a text file that is accessible by the Agent.
attachJobLog	Attach Job Log	For <a href="#">z/OS tasks</a> ; Specification for whether or not the job log is attached.
attachLocalFile	Attach Local File	Specification for whether or not a local file is attached.
attachStdError	Attach Standard Error	For <a href="#">Agent-based tasks</a> only (except z/OS) for whether or not standard error data generated by the associated task is attached.
attachStdOut	Attach Standard Output	For <a href="#">Agent-based tasks</a> only (except z/OS) for whether or not standard output data generated by the associated task is attached.
bcc	BCC	Email address of the party being sent a blind copy of the email, if any.
body	Body	Text of the email message.
cc	CC	Email address of the party being sent a carbon copy of the email, if any.
description	Description	Description of this Email Notification action.
emailConnection	Email Connection	Name of an <a href="#">Email Connection</a> .
emailTemplate	Email Template	Name of an <a href="#">Email Template</a> .
emailTemplateVar	Email Template Variable	Name of a variable that will be resolved at the name of an Email Template to use.
exitCodes	Exit Codes	One or more exit codes that will trigger this action.

fileName	File Name	If attachFile is enabled; Name of an at
fileNumLines	Number of Lines	Number of lines to limit the retrieved data. fileNumLines is not specified, the default of the Retrieve Output Default Maximum L Controller system property.
fileScanText	Scan Text	Regex pattern that the Controller will search for in STDOUT/STDERR or a specified file. Controller will include the fileNumLines below the first line matched.
fileStartLine	Start Line	Integer; Starting line of the attached data.
inheritance	Action Inheritance	For Workflow tasks only; Records that this applies to.
joblogNumLines	Number of Lines	For z/OS tasks only; Number of lines to limit retrieved data in the job log to.
joblogScanText	Scan Text	For z/OS tasks only; Regex pattern that the Controller will search for a match for in the job log.
joblogStartLine	Start Line	For z/OS tasks only; Starting line of the attached data.
localAttachmentsPath	Local Attachments Path	Location of Local Attachments for the controller.
localAttachment	Local Attachment	Name of the file(s) to attach.
notifyOnEarlyFinish	On Early Finish	Specification to generate the action if the task finishes early, based on the Early Finish Time specification.
notifyOnLateFinish	On Late Finish	Specification to generate the action if the task finishes late, based on the Late Finish Time specification.
notifyOnLateStart	On Late Start	Specification to generate the action if the task starts late, based on the Late Start Time specification.
replyTo	Reply-To	Email address of the sender of the email.
report	Report	Report attached to this notification.



<code>reportVar</code>	Report Variable	Name of a variable that will be resolved at the name of the Report to attach.
<code>status</code>	Status	<a href="#">Status</a> of this task, by itself or together with that will trigger this Email Notification action specify as many statuses as needed.
<code>stderrNumLines</code>	Number of Lines	Number of lines to limit the retrieved stderr. <code>stderrNumLines</code> is not specified, the default value of the <a href="#">Retrieve Output Default Maximum</a> Universal Controller system property.
<code>stderrScanText</code>	Scan Text	Regex pattern that the Controller will search for in stderr. The Controller will include the Lines above and below the first line match.
<code>stderrStartLine</code>	Start Line	Starting line of the attached stderr data.

stdoutNumLines	Number of Lines	Number of lines to limit the retrieved stdout. If stdoutNumLines is not specified, the default value of the Retrieve Output Default Maxir Universal Controller system property.
stdoutScanText	Scan Text	Regex pattern that the Controller will search for in stdout. The Controller will include the lines above and below the first line match.
stdoutStartLine	Start Line	Starting line of the attached stdout data.
subject	Subject	Subject line of the email.
sysId	n/a	sys_id used within the Controller to identify Notification action.
to	To	Email address of the recipient.

**Set Variable Action**

Property	UI Field Name	Description
description	Description	Description of this Set Variable action.
exitCodes	Exit Codes	One or more exit codes that will trigger this action.
inheritance	Action Inheritance	For Workflow tasks only; Records that this action applies to.
notificationOption	System Notification	If variableScope is Global (4); Status of the Set Variable action that will trigger a system notification.
notifyOnEarlyFinish	On Early Finish]	Specification to generate the action if the task finishes early, based on the Early Finish Time specified in the task.



notifyOnLateFinish	On Late Finish	Specification to generate the action if the task finishes late, based on the Late Finish Time specified in the task.
notifyOnLateStart	On Late Start	Specification to generate the action if the task starts late, based on the Late Start Time specified in the task.
status	Status	Status of this task, by itself or together with an exit code, that will trigger this Set Variable action. You can specify as many statuses as needed.
sysId	n/a	sys_id used within the Controller to identify this Email Notification action.
variableName	Name	Name of the variable.
variableScope	Variable Scope	Applies to variables associated with a task in a Workflow.
variableValue	Value	Value of this variable.

**SNMP Notification Action**

Property	UI Field Name	Description
description	Description	Description of this action.
exitCodes	Exit Codes	One or more exit codes that will trigger this a
inheritance	Action Inheritance	For Workflow tasks only; Records that this ac
notifyOnEarlyFinish	On Early Finish	Specification to generate the action if the tas based on the Early Finish Time specified in t
notifyOnLateFinish	On Late Finish	Specification to generate the action if the tas based on the Late Finish Time specified in th
notifyOnLateStart	On Late Start	Specification to generate the action if the tas based on the Late Start Time specified in the
severity	Notification Severity	Severity level of this notification.
status	Status	Status of this task, by itself or together with a will trigger this SNMP Notification action. You many statuses as needed.
sysId	n/a	sys_id used within the Controller to identify th Notification action.
snmpManager	SNMP Manager	SNMP Manager that will receive this notificat

**System Operation Action**

Property	UI Field Name	Description
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agent	Agent	If operation is Suspend Agent, Resume / Suspend Cluster Membership, Resume Clu Membership, or Set Agent Task Execution   for which the System Operation is to be per
agentCluster	Agent Cluster	If operation is Suspend Agent Cluster, R Cluster, Suspend Cluster Membership, Res Membership, or Set Cluster Task Executior Cluster for which the system operation is to
agentClusterVar	Agent Cluster Variable	If operation is Suspend Agent Cluster, R Cluster, Suspend Cluster Membership, Res Membership, or Set Cluster Task Execution of a variable that will be resolved at run time of the Agent Cluster to use.
agentVar	Agent Variable	If System Operation is Suspend Agent, Res Suspend Cluster Membership, Resume Clu Membership, or Set Agent Task Execution   a variable that will be resolved at run time to the Agent to use.
description	Description	Description of this System Operation action

execCommand	Command	If operation is Run Task Instance Command instance command to run.
execCriteria	Instance Criteria	If execLookupOption is Instance Name, Instance Name/Task, or Task; Additional criteria for selecting specific task instance if multiple task instances matching names.

execId	Instance Id	If <code>execLookupOption</code> is Instance Id; ID of to run the command against.
execLookupOption	Instance Lookup Option	If <code>operation</code> is Run Task Instance Command Specification for how to search for the task a command against.
execName	Instance Name	If <code>execLookupOption</code> is Instance Name command/Task; Name of the task instance to run command against.
execWorkflowNameCondition	Workflow Instance Name Condition	If <code>operation</code> is Run Task Instance Command condition for the name of the parent workflow instance that contains the task on which to specified action. The action will be performed task instance in a parent workflow task instance the specified condition value.
execWorkflowName	Workflow Instance Name <Condition Value>	Value for <code>execWorkflowNameCondition</code> .
exitCodes	Exit Codes	One or more exit codes that will trigger this
limit	Limit	If <code>operation</code> is Set Agent Task Execution Cluster Task Execution Limit, and <code>taskLimit</code> Limited; Number of tasks that can be run on the specified Agent / Agent Cluster.

inheritance	Action Inheritance	For Workflow tasks only; Records that this : to.
name	Name	Name of a variable to override.
notificationOption	System Notification	Status of the specified operation that will system notification.
notifyOnEarlyFinish	On Early Finish	Specification to generate the action if the ta early, based on the Early Finish Time speci task.
notifyOnLateFinish	On Late Finish	Specification to generate the action if the ta late, based on the Late Finish Time specific
notifyOnLateStart	On Late Start	Specification to generate the action if the ta based on the Late Start Time specified in th

operation	System Operation	System operation to perform.
status	Status	Status of this task, by itself or together with that will trigger this System Operation action specify as many statuses as needed.
sysId	n/a	sys_id used within the Controller to identify Operation action.
task	Task Reference	<ul style="list-style-type: none"> <li>• If <code>execLookupOption</code> is Instance or Task; Name of the task for which instance was run.</li> <li>• If <code>operation</code> is Launch Task; Name to launch.</li> </ul>
taskLimitType	Task Execution Limit	If <code>operation</code> is Set Agent Task Execution Cluster Task Execution Limit; Specification limited or unlimited number of task instance concurrently on the specified Agent / Agent


taskVar	Task Reference Variable	<ul style="list-style-type: none"> <li>If <code>execLookupOption</code> is Instance or Task; Name of a variable that will be resolved at run time to the name of the task instance that was run.</li> <li>If <code>operation</code> is Launch Task; Name of a variable that will be resolved at run time to the name of the task to launch.</li> </ul>
trigger	Trigger Reference	If <code>operation</code> is Trigger Now; Name of the trigger.
triggerVar	Trigger Reference Variable	If <code>operation</code> is Trigger Now; Name of a variable that will be resolved at run time to the name of the trigger.
value	Value	Value of a variable to override.
variables	Override Variables	List of variables to override.
variablesUnresolved	Override Variables Resolution Disabled	<p>Specification for whether or not variables should be disabled to allow for passing unresolved variable values.</p> <ul style="list-style-type: none"> <li>If <code>variables</code> resolution is disabled; unresolved variables will be resolved in the context of the launched or triggered instance.</li> <li>If <code>variables</code> resolution is not disabled; variables will be resolved prior to execution of the Launch Task or Trigger operation.</li> </ul>
virtualResource	Virtual Resource	If <code>operation</code> is Set Virtual Resource Limit; Name of the virtual resource for which a virtual resource limit is to be set.
virtualResourceVar	Virtual Resource Variable	If <code>operation</code> is Set Virtual Resource Limit; Name of a variable that will be resolved at run time to the name of the virtual resource to use.



## Task-Related Records Properties

- Advanced Criteria
- Mutually Exclusive Tasks
- Notes
- Restart Criteria
- RunTime Parameters
- Step Conditions
- Stored Procedure Parameters
- Variables in Tasks
- Virtual Resources

### Advanced Criteria

 **Note**  
 These properties are for the Email Monitor task only.

Property	UI Field Name	Description
body	Body	If <code>bodyFilter</code> is any value other than None, Is Blank value.
bodyFilter	Body Filter	body filter condition to apply.
caseSensitive	Case Sensitive	Text-based filters should be treated as case-sensitive
cc	Cc	If <code>ccFilter</code> is any value other than None, Is Blank

ccFilter	Cc Filter	cc filter condition to apply.
filterLogic	Filter Logic	Logic to apply when combining filters.
from	From	If fromFilter is any value other than None; from
fromFilter	From Filter	from filter condition to apply.
subject	Subject	If subjectFilter is any value other than None, I condition value.

subjectFilter	Subject Filter	subject filter condition to apply.
to	To	If toFilter is any value other than None, Is Blank
toFilter	To Filter	to condition to apply.

**Mutually Exclusive Tasks**

Property	UI Field Name	Description	Specific
sysId	n/a	sysId of the task-to-exclusive-task relationship.	
task	Exclusive Task	Name of this Mutually Exclusive task.	
type	Type	Type of Mutually Exclusive task.	Valid va • Default i

**Notes**

Property	UI Field Name	Description	St
sysId	n/a	sys_id used within the Controller to identify this Note.	
text	Text	Text of this note.	
title	Title	Title of this note.	

**Restart Criteria**



**Note**

These properties are for the z/OS task only.

Property	UI Field Name	Description	Specifications
directives	Directives List	Collection of directive objects.	Valid values: <ul style="list-style-type: none"> <li>• As String = Start, A</li> <li>• As String = Skip, As</li> <li>• As String = End, As</li> </ul>
evaluationOrder	Evaluation Order	Order for restart criteria evaluation.	Integer; Restart criteria with
programName	Program	Program name to match.	A blank value or an asterisk question mark ( ? ) match z
pstepName	Procedure	Procedure step name to match.	A blank value or an asterisk and question mark ( ? ) mat
restartOption	Auto-Restart Option	Method of step selection to perform for the restart.	Valid values: <ul style="list-style-type: none"> <li>• As String = Restart</li> <li>• As String = Restart</li> <li>• As String = Restart</li> </ul> Default is Restart From Firs
stepCodes	Condition Codes	Integer return codes from the program or ABEND codes.	Integer return codes are spe with a dash ( - ) separating t 0-4095. ABEND codes are s must be specified verbatim i
stepName	Step	Job step name to match.	A blank value or an asterisk question mark ( ? ) match z
sysId	n/a	sys_id used within the Controller to identify this Restart Criteria.	

**RunTime Parameters**




**Note**

These properties are for the PeopleSoft task only.

Property	UI Field Name	Description
parameterName	Parameter Name	Name of this RunTime Parameter.
parameterValue	Parameter Value	Value of this RunTime Parameter.
processName	Process/Job Name	If <code>command</code> in PeopleSoft task = Schedule Pro
processType	Process Type	If <code>command</code> in PeopleSoft task = Schedule Pro
sysId	n/a	<code>sys_id</code> used within the Controller to identify this

**Step Conditions**

 **Note**  
 These properties are for the z/OS task only.

Property	UI Field Name	Description	Specifications
programName	Program	Program name to match.	A blank value or an asterisk ( * ) match zero or more charac
pstepName	Procedure	Procedure step name to match.	A blank value or an asterisk ( * ) question mark ( ? ) match zero
stepAction	Action	Action to take and the task status to set if the Step Condition matches.	Valid values: <ul style="list-style-type: none"> <li>• As String = Continue/S</li> <li>• As String = Continue/F</li> <li>• As String = Halt/Failed,</li> <li>• As String = Askoper, A</li> </ul> Default is Continue/Success (1)
stepCodes	Condition Codes	Integer return codes from the program or ABEND codes.	Integer return codes are specifi - ) separating the lower and up specified directly as either a use leading zeroes.
stepName	Step	Job step name to match.	A blank value or an asterisk ( * ? ) match zero or more characte
stepOrder	Evaluation Order	Order for step condition evaluation.	Integer; Step conditions with a l
sysId	n/a	<code>sys_id</code> used within the Controller to identify this Step Condition.	

**Stored Procedure Parameters**



**Note**  
These properties are for the Stored Procedure task only.

Property	UI Field Name	Description
description	Description	Description of this parameter.
isNull	Value is Null	Applies to the input part of a stored procedure p database NULL value.  That is, if a value in a database is undefined, it i  An input value can be NULL and is represented
ivalue	Input Value	If paramMode is Input and isNull is false; Inp
ovalue	n/a	If paramMode is Input/Output and isNull is fa
paramMode	Parameter Mode	Mode of this parameter.
paramType	Parameter Type	Type of Parameter

paramVar	Variable Name	If paramMode is Output or Input/Output; Name
pos	Parameter Position	Position of this parameter within a list of param
sysId	n/a	sys_id used within the Controller to identify this
variableScope	Variable Scope	If paramMode is Output or Input/Output; Scope

**Variables in Tasks**

Property	UI Field Name	Description
description	Description	Description of this variable.
name	Name	Name of this variable.
sysId	n/a	sys_id used within the Controller to identify this Vari
value	Value	Value of this variable.

**Virtual Resources**

Property	UI Field Name	Description
amount	Amount	Amount of resources to use for this task.
resource	Resource Name	Name of this Virtual Resource
sysId	n/a	sys_id used within the Controller to identify this Virtual





## Trigger Web Services

- [Overview](#)
- [Assign an Execution User to a Trigger](#)
- [Delete a Trigger](#)
- [Enable/Disable a Trigger](#)
- [List Triggers](#)
- [Trigger a Task](#)
- [Unassign an Execution User from a Trigger](#)

### Overview

Universal Controller supports the following RESTful-based web services for Trigger operations. Formatting specifications for each web service, including details about parameter requirements, are provided on the following page.

### Common Web Services

The following web services are common to all Trigger types:

- [Assign an Execution User to a Trigger](#)
- [Delete a Trigger](#)
- [Enable/Disable a Trigger](#)
- [List Triggers](#)
- [Trigger a Task](#)
- [Unassign an Execution User from a Trigger](#)

Detailed information for each of these web services is provided on this page.

### Trigger-Specific Web Services

The following web services are specific to each Trigger type:

- [Create a Trigger](#)
- [List Trigger Qualifying Times \(Cron and Time Triggers only\)](#)
- [Modify a Trigger](#)
- [Modify Time of Time Trigger \(Time trigger only\)](#)
- [Read a Trigger](#)

For detail information about these trigger-specific web services, see:

- Application Monitor Trigger Web Services
- Composite Trigger Web Services
- Cron Trigger Web Services
- Email Monitor Trigger Web Services
- File Monitor Trigger Web Services
- Manual Trigger Web Services
- Task Monitor Trigger Web Services
- Temporary Trigger Web Services
- Time Trigger Web Services
- Variable Monitor Trigger Web Services

### Assign an Execution User to a Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger/assignexecutionuser">http://host_name/opswise/resources/trigger/assignexecutionuser</a>
HTTP Method	POST
Description	Assigns an Execution User to the specified trigger.
URI Parameters	See <a href="#">Assign an Execution User to a Trigger: URI Parameters</a> .
Authentication	HTTP Basic
Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/trigger/assignex">http://localhost:8080/opswise/resources/trigger/assignex</a></li> <li>• <a href="http://localhost:8080/opswise/resources/trigger/assignex">http://localhost:8080/opswise/resources/trigger/assignex</a></li> </ul>
Example Request	See <a href="#">Assign an Execution User to a Trigger: XML and JSON Req</a>
Request Properties	See <a href="#">Assign an Execution User to a Trigger: Request Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully assigned execution user "test" to trigger "te</li> <li>• Status 404 /Not Found Assign Execution User failed. You must provide an exec</li> </ul>

### Assign an Execution User to a Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

### Assign an Execution to a Trigger: XML and JSON Request Ex:

Examples	XML	JSON
Request Example	▼ XML <pre>&lt;executionUser&gt;   &lt;username&gt; &gt;test&lt;/username&gt;   &lt;password&gt; &gt;pass1&lt;/password&gt; &gt; &lt;/executionUser&gt;</pre>	▼ JSON <pre>{   "username": "t   "password": "p }</pre>

### Assign an Execution User to a Trigger: Request Properties

Property	UI Field Name	Description
password	n/a	If the user executing this web service does not have the
username	n/a	Name of the Execution User.

### Delete a Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	DELETE
Description	Assigns an execution user to the specified trigger.
URI Parameters	See <a href="#">Delete a Trigger: URI Parameters</a> .
Authentication	HTTP Basic
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/trigger?triggername">http://localhost:8080/opswise/resources/trigger?triggername</a></li> <li><a href="http://localhost:8080/opswise/resources/trigger?triggerid">http://localhost:8080/opswise/resources/trigger?triggerid</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Trigger deleted successfully.</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43e7c81c8ec969"</li> </ul>

### Delete a Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

## Enable/Disable a Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger/ops-enable-dis">http://host_name/opswise/resources/trigger/ops-enable-dis</a>
HTTP Method	POST
Description	Enables/Disables a list of triggers.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger/ops-enable-">http://localhost:8080/opswise/resources/trigger/ops-enable-</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Enable/Disable a Trigger: XML and JSON Examples</a> .
Request Properties	See <a href="#">Enable/Disable a Trigger: Request Trigger Properties</a> .
Example Response	See <a href="#">Enable/Disable a Trigger: XML and JSON Examples</a> .

## Enable/Disable a Trigger: XML and JSON Examples

Examples	XML
Request Example	<p>XML</p> <pre>&lt;enable-disable-trigger&gt;   &lt;trigger enable="true" name="Opwise - 1st an 15th"&gt;&lt;/trigger&gt;   &lt;trigger enable="false" name="Opwise - 1st S of Month"&gt;&lt;/trigger&gt; &lt;/enable-disable-trigger&gt;</pre>
Response Example	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;Enable Disable Triggers&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully enabled trigger Opwise - 1st 15th, Successfully disabled trigger Opwise - 1st S of Month&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt;</pre>

### Enable/Disable a Trigger: Request Trigger Properties

Property	UI Field Name	Description
trigger	n/a	<p>There are two attributes for this property:</p> <ul style="list-style-type: none"> <li>enable: Indication of whether to enable or disable the trigger. Valid values: true/false.</li> <li>name: Name used within the Controller to identify the trigger.</li> </ul> <p>For example: &lt;trigger enable="false" name="Opwise - 1st</p>

### List Triggers

	Description
URI	<a href="http://host_name/opswise/resources/trigger/list">http://host_name/opswise/resources/trigger/list</a>
HTTP Method	POST
Description	Lists <a href="#">triggers</a> matching specific search criteria.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger/list">http://localhost:8080/opswise/resources/trigger/list</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">List Triggers: XML and JSON Examples</a> .
Request Properties	See <a href="#">List Triggers: Request Properties</a> .
Example Response	See <a href="#">List Triggers: XML and JSON Examples</a> .

### List Triggers: XML and JSON Examples

Examples	XML
Request Example	<p data-bbox="1373 212 1444 240">▼ XML</p> <pre data-bbox="1409 261 1969 451" style="border: 1px solid #ccc; padding: 10px;"> &lt;generic-query-filter&gt;   &lt;name&gt;*time*&lt;/name&gt;   &lt;enabled&gt;&gt;true&lt;/enabled&gt;   &lt;type&gt;Time&lt;/type&gt; &lt;/generic-query-filter&gt; </pre>
Response Example	<p data-bbox="1373 505 1444 532">▼ XML</p> <pre data-bbox="1409 553 1969 971" style="border: 1px solid #ccc; padding: 10px;"> &lt;triggers&gt;   &lt;trigger&gt;     &lt;enabled&gt;true&lt;/enabled&gt;     &lt;name&gt;Example time trigger 1&lt;/name&gt;     &lt;sysID&gt;07e69e9ac0a830016f4e065eb8e4ff&lt;/sysID&gt;     &lt;type&gt;Time&lt;/type&gt;     &lt;version&gt;1&lt;/version&gt;   &lt;/trigger&gt;   &lt;trigger&gt;     &lt;enabled&gt;true&lt;/enabled&gt;     &lt;name&gt;Example time trigger 2&lt;/name&gt;     &lt;sysID&gt;07e69051c0a8300135a540b2d5b07a&lt;/sysID&gt;     &lt;type&gt;Time&lt;/type&gt;     &lt;version&gt;1&lt;/version&gt;   &lt;/trigger&gt; &lt;/triggers&gt; </pre>

**List Triggers: Request Properties**



Property	UI Field Name	Description
enabled	Status	Indication of whether to list enabled (true) or disabled (false).
name	Name	Name or partial name of one or more triggers.
type	n/a	Type of triggers to list.

## Trigger a Task

	Description
URI	<a href="http://host_name/opswise/resources/trigger/ops-trigger-ops-trigger">http://host_name/opswise/resources/trigger/ops-trigger-</a>
HTTP Method	POST
Description	Launches trigger-associated tasks.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger/ops-trigger-ops-trigger">http://localhost:8080/opswise/resources/trigger/ops-trigger-</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Trigger a Task: XML and JSON Examples</a> .
Example Request Properties	See <a href="#">Trigger a Task: Request Properties</a> .
Example Response	See <a href="#">Trigger a Task: XML and JSON Examples</a> .

## Trigger a Task: XML and JSON Examples

Examples	XML
Request Example	<p data-bbox="1325 212 1398 240">▼ XML</p> <pre data-bbox="1367 261 1971 802"> &lt;trigger-now&gt;   &lt;name&gt;Opswise - Every 15 Minutes MWF 9-5&lt;/   &gt;   &lt;hold&gt;yes&lt;/hold&gt;   &lt;timeZone&gt;America/Chicago&lt;/timeZone&gt;   &lt;virtualResourcePriority&gt;10&lt;   /virtualResourcePriority&gt;   &lt;virtual-resources&gt;     &lt;virtual-resource&gt;       &lt;name&gt;Opswise - Solo&lt;/name&gt;       &lt;limit&gt;2&lt;/limit&gt;     &lt;/virtual-resource&gt;   &lt;/virtual-resources&gt;   &lt;variables&gt;     &lt;variable&gt;       &lt;name&gt;testVariable&lt;/name&gt;       &lt;value&gt;Hello&lt;/value&gt;     &lt;/variable&gt;   &lt;/variables&gt; &lt;/trigger-now&gt; </pre>
Response Example	<p data-bbox="1325 850 1398 878">▼ XML</p> <pre data-bbox="1367 899 1971 1143"> &lt;command-response&gt;   &lt;type&gt;trigger_now&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Successfully triggered - Every 15 Minut   MWF 9-5&lt;/info&gt;   &lt;sys_id&gt;4c7d6b9cc0a801c900e7dac8b24ef142&lt;\sys   &lt;errors /&gt; &lt;/command-response&gt; </pre>

**Trigger a Task: Request Properties**

Property	UI Field Name	Description
hold	Hold on Start	Indication of whether or not to launch the status. The task runs when the user relea
name	Name	Name of the trigger to trigger the task.
timeZone	Time Zone	Time zone in which task is triggered.
variables	n/a	<pre> &lt;variables&gt;   &lt;variable&gt;     &lt;name&gt;testVar   /name&gt;     &lt;value&gt;Hello&lt;   &gt;     &lt;/variable&gt;   &lt;/variables&gt; </pre> <p>See <a href="#">Trigger a Task: Request Variable Pr</a></p>
virtualResourcePriority	Virtual Resource Priority	Priority for acquiring a resource when two are waiting for the resource. This priority resources required by the task.
virtual-resources	n/a	<pre> &lt;virtual-resources&gt;   &lt;virtual-resource     &lt;name&gt;Opwise   Solo&lt;/name&gt;     &lt;limit&gt;2&lt;/lim   &lt;/virtual-resourc   &lt;/virtual-resources&gt; </pre> <p>See <a href="#">Trigger a Task: Request Virtual Res Properties.</a></p>

### Trigger a Task: Request Variable Properties

Property	UI Field Name	Description
name	Name	Name used within the Controller to identify this variable.
value	Value	Value of the variable.

### Trigger a Task: Request Virtual Resource Properties

Property	UI Field Name	Description
limit	Resource Limit	Maximum number of units available for this resource.
name	Resource Name	Name used within the Controller to identify this virtual re

### Unassign an Execution User from a Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger/unassignexecutionus">http://host_name/opswise/resources/trigger/unassignexecutionus</a>
HTTP Method	POST
Description	Unassigns an Execution User from the specified trigger.
URI Parameters	See <a href="#">Unassign an Execution User to a Trigger: URI Parameters</a> .
Authentication	HTTP Basic
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/trigger/unassign">http://localhost:8080/opswise/resources/trigger/unassign</a></li> <li><a href="http://localhost:8080/opswise/resources/trigger/unassign">http://localhost:8080/opswise/resources/trigger/unassign</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK</li> <li>Successfully unassigned execution user "test" from trigg</li> </ul>

### Unassign an Execution User from a Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40



## Application Monitor Trigger Web Services

- Overview
- Create an Application Monitor Trigger
- Modify an Application Monitor Trigger
- Read an Application Monitor Trigger
  - Read an Application Monitor Trigger: URI Parameters
- Application Monitor Trigger: XML and JSON Examples
- Properties
  - Trigger Properties: All Triggers
  - Trigger Properties: Application Monitor Trigger
  - Trigger-Related Records Properties: Variables

### Overview

Universal Controller supports the following RESTful-based web services for Application

- Create an Application Monitor Trigger
- Modify an Application Monitor Trigger
- Read an Application Monitor Trigger

Formatting specifications for each web service, including details about parameter require



#### Note

For information on Trigger web services that are applicable to all trigger type

- Delete a Trigger
- Enable/Disable a Trigger
- List Triggers
- Trigger a Task

### Create an Application Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	POST
Description	Creates a new Application Monitor trigger.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Application Monitor Trigger: XML and JSON</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Application Monit</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;trigger type&gt; tr</li> </ul>

### Modify an Application Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	PUT
Description	Modifies the trigger specified by the sysId in the r To modify Application Monitor Trigger properties v
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Application Monitor Trigger: XML and JSON</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Application Monit</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the &lt;trigger type&gt; t</li> </ul>

### Read an Application Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	GET
Description	Retrieves information for the specified trigger
URI Parameters	See <a href="#">Read an Application Monitor Trigger: URI Pa</a>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Trigger Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>See <a href="#">Trigger Properties: Application Monit</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">Application Monitor Trigger: XML ar</a>)</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43"</li> </ul>

**Read an Application Monitor Trigger: URI Parameters**

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

**Application Monitor Trigger: XML and JSON Examples**

retainSysIds and version properties are specified as attributes in the <trigger type> elem

Examples	XML
----------	-----



Example for Trigger

XML

```

<triggerApplMonitor retainSysIds="
version="1">
  <variables />
  <action />
  <calendar>System Default</c
<description />
  <name>application monitor t
/ >name>
  <opswiseGroups>
    <opswiseGroup>bus se
1</opswiseGroup>
  </opswiseGroups>
  <rdExcludeBackup>true</rdEx
>
  <restriction>>false</restric
<restrictionAdjective>Every
/ >restrictionAdjective>
  <restrictionComplex>>false<
/ >restrictionComplex>
  <restrictionMode>Or</restric
<restrictionNoun>Day</restric
<restrictionNthAmount />
  <restrictionQualifier>Year<
/ >restrictionQualifier>
  <restrictionSimple>>false<
/ >restrictionSimple>
  <retentionDuration>1<
/ >retentionDuration>
  <retentionDurationPurge>tru
/ >retentionDurationPurge>
  <retentionDurationUnit>Days
/ >retentionDurationUnit>
  <simulationOption />
  <situation />
  <skipCondition>None</skipCc
<skipCount>0</skipCount>
  <sysId
>0fc6b7d9c0a801c9017b6c27c259937e<
  <tasks>
    <task>Sleep 30</task>
  </tasks>
  <timeZone />
  <applNameCondition>All<
/ >applNameCondition>
  <applNameValue />
  <applType>Windows Service,I
Daemon,z/OS Started Task</applType
<application>appl</applicat
<monitorType>Specific</moni
<status>Start Failure</stat
</triggerApplMonitor>


```

<p>Example for Trigger-Related Records</p>	<p>XML</p> <pre>&lt;variables&gt;   &lt;variable&gt;     &lt;description /&gt;     &lt;name&gt;testVar&lt;/name&gt;     &lt;value&gt;value&lt;/value&gt;   &lt;/variable&gt; &lt;/variables&gt;</pre>
--	---


## Properties


### Trigger Properties: All Triggers

Property	UI Field Name	Description
action	Action	For all trigger types except Manual and T non-business day or holiday (see situa


calendar	Calendar	Calendar that defines the business days, days that determine the run dates for the trigger.  The Calendar will be used to verify any C restrictionNoun.
description	Description	Description of this trigger.
excludeRelated	n/a	For Modify Trigger web services; specific exclude related records from the update, the request.  <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;">  <b>Note</b>                      In XML web services, exclu as an attribute in the &lt;trigger                 </div>
name	Name	Name used within the Controller to identi
opwiseGroups	Member of Business Services	List of <a href="#">Business Service(s)</a> that this trigger  <b>XML</b> <div style="border: 1px solid #ccc; padding: 5px; background-color: #f0f0f0;"> <pre>&lt;opwiseGroups&gt;   &lt;opwiseGroup&gt;test&lt; &lt;/opwiseGroups&gt;</pre> </div> <b>JSON</b> <div style="border: 1px solid #ccc; padding: 5px; background-color: #f0f0f0;"> <pre>"opwiseGroups": [   "test" ]</pre> </div>
rdExcludeBackup	Exclude Backup	Set only if retentionDurationPurge whether qualifying task instances can be when being purged by retention duration
restriction	Special Restriction	Indication of whether or not you want to : that tell the Controller how to handle exc trigger is satisfied on a holiday or non-bu simple and/or complex restrictions. For e simpleRestriction that disables the holiday identified in the calendar and/or : disables the trigger on the last business

restrictionAdjective	Restriction Adjective	Type of selection for restrictionNoun
restrictionComplex	Complex Restriction	Set only if restriction is true; Set of 1 or more situations when this trigger should be active in conjunction with restrictionMode, restrictionNoun, and restrictionSimple. you can specify that you do not want to be active on a business day of the year or the first day of the year.
restrictionMode	Restriction Mode	Set only if restrictionSimple is true. Set only if you want to use restrictionSimple- and restrictionNoun-related values.

restrictionNoun	Restriction Noun	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name example:</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restricti</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div data-bbox="1633 748 1974 881" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b>  The Calendar for the trigger Day references.</p> </div>
restrictionNthAmount	Restriction Nth Amount	Set only if restrictionAdjective is

restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the Period. For example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomDayPeriod2&lt;/restrictionQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div data-bbox="1633 800 1974 930" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionSimple	Simple Restriction	<p>Set only if <code>restriction</code> is true; Specifies restriction based on a specific situation.</p>
retainSysIds	n/a	<p>Specification for whether or not the web service will retain system IDs as a property.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> request/response, <code>sysId</code> will be retained.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> request/response, <code>sysId</code> will be autogenerated by the Controller.</li> </ul> <div data-bbox="1633 1287 1974 1417" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is used as an attribute in the <code>&lt;trigger&gt;</code> element.</p> </div>

retentionDuration	Retention Duration	Set only if retentionDurationPurge retention duration for the selected reter triggered task instances can qualify for p
retentionDurationPurge	Purge By Retention Duration	Specification for whether triggered task i retention duration.
retentionDurationUnit	Retention Duration Unit	Set only if retentionDurationPurge duration unit.
simulationOption	Simulate	For Cron, Temporary, and Time triggers the <a href="#">Enable Trigger Simulation</a> Universal specification for whether or not to simula triggers are eligible to fire. (If simulati the scheduled launch of the task by the t
situation	Situation	Type of day that causes the Controller to
skipActive	Skip Trigger if Active	<b>Deprecated.</b> Indication for whether or nc the next run of the specified task(s) if the a Complete status (that is, it is still active
skipCondition	Task Launch Skip Condition	Controls when launching a task for the tr  <div style="background-color: #ffffcc; padding: 5px;"><b>Note</b> When reading a Trigger, both skipCondition are return creating/updating a Trigger, used if present. If skipConc skipActive is used. If both skipCondition are preser set to true only if skipCond.</div>
skipCount	Skip Count	Specification that the Controller should s task is triggered.
sysId	n/a	System ID field in the database for this tr

tasks	Tasks	<p>Name of the task(s) being triggered when</p> <p><b>XML</b></p> <pre data-bbox="1633 232 1969 363">&lt;tasks&gt;   &lt;task&gt;Opwise - Demo &lt;/tasks&gt;</pre> <p><b>JSON</b></p> <pre data-bbox="1633 461 1969 548">"tasks": [ "Opwise - Demo</pre>
timeZone	Time Zone	<p>Name of the time zone that will be applied to the trigger.</p>
version	n/a	<p>For Read and List web services; specific or listed.</p> <div data-bbox="1633 753 1969 886" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version attribute in the &lt;trigger&gt; element</p> </div>

**Trigger Properties: Application Monitor Trigger**



Property	UI Field Name	Description
application	Application	If monitorType is Specific (1); Name o
applNameCondition	Application Monitor Condition	If monitorType is General (2); Allows y
applNameValue	Condition Value	If applNameCondition is Starts With (
applType	Application Type(s)	If monitorType is General (2); Comma
monitorType	Monitoring Type	Indicates whether you are monitoring on selection parameters to monitor multiple
status	Status(es)	Comma-separated list of application stat

**Trigger-Related Records Properties: Variables**

Property	UI Field Name	Description	Specifications	Req
description	Description	Description of the variable.		N
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y

## Composite Trigger Web Services

- [Overview](#)
- [Create a Composite Trigger](#)
- [Modify a Composite Trigger](#)
- [Read a Composite Trigger](#)
- [Composite Trigger: XML and JSON Examples](#)
- [Properties](#)

### Overview

Universal Controller supports the following RESTful-based web services for Composite

- [Create a Composite Trigger](#)
- [Modify a Composite Trigger](#)
- [Read a Composite Trigger](#)

Formatting specifications for each web service, including details about parameter require



#### Note

For information on Trigger web services that are applicable to all trigger type

- [Delete a Trigger](#)
- [Enable/Disable a Trigger](#)
- [List Triggers](#)
- [Trigger a Task](#)

### Create a Composite Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	POST
Description	Retrieves information for the specified trigger.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Composite Trigger: XML and JSON Example</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> </ul>
Trigger Component Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Composite Tri</a></li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;trigger type&gt; tr</li> </ul>

### Modify a Composite Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	PUT
Description	Modifies the trigger specified by the <code>sysId</code> in the E To modify Composite Trigger properties without n
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Composite Trigger: XML and JSON Example</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> </ul>
Trigger Component Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Composite Tri</a></li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>• See <a href="#">Trigger Properties: Composite Trigg</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the &lt;trigger type&gt; t</li> </ul>

### Read a Composite Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	GET
Description	Retrieves information for the specified trigger.
URI Parameters	See <a href="#">Read a Composite Trigger: URI Parameters</a> .
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Trigger Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>See <a href="#">Trigger Properties: Composite Trigg</a></li> </ul>
Trigger Component Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Composite Tri</a></li> <li>See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>See <a href="#">Trigger Properties: Composite Trigg</a></li> <li>See <a href="#">Trigger Properties: Composite Trigg</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger-Related Records Properties</a>:</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">Composite Trigger: XML and JSON</a>)</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43"</li> </ul>

### Read a Composite Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

### Composite Trigger: XML and JSON Examples

retainSysIds and version properties are specified as attributes in the <trigger type> elem

Examples	XML
<p>Example for Trigger</p>	<p>XML</p> <pre data-bbox="1646 261 1976 1494"> &lt;triggerComposite version="1.0"   &lt;variables /&gt;   &lt;components /&gt;   &lt;action&gt;Do Not Tr /triggerComposite&gt;   &lt;calendar&gt;System /triggerComposite&gt;   &lt;description /&gt;   &lt;enabledEnd&gt;00:00 /triggerComposite&gt;   &lt;enabledStart&gt;00:00 /triggerComposite&gt;   &lt;name&gt;test compos triggerComposite&lt;/name&gt;   &lt;opswiseGroups /&gt;   &lt;queueDepth&gt;100&lt; /triggerComposite&gt;   &lt;rdExcludeBackup&gt; /triggerComposite&gt;   &lt;restrictedTimes&gt; /triggerComposite&gt;   &lt;restriction&gt;fals /triggerComposite&gt;   &lt;restrictionAdjec &gt;Every&lt;/restrictionAdjec   &lt;restrictionCompl /triggerComposite&gt;   &lt;restrictionMode&gt; /triggerComposite&gt;   &lt;restrictionNoun&gt; /triggerComposite&gt;   &lt;restrictionNthAm   &lt;restrictionQuali &gt;Year&lt;/restrictionQualif   &lt;restrictionSimpl /triggerComposite&gt;   &lt;retentionDuratic /triggerComposite&gt;   &lt;retentionDuratic &gt;true&lt;/retentionDuratic   &lt;retentionDuratic &gt;Days&lt;/retentionDuratic   &lt;situation&gt;Holid /triggerComposite&gt;   &lt;skipCondition&gt;Nc /triggerComposite&gt;   &lt;skipCount&gt;0&lt;/ski   &lt;sysId &gt;79b81a71740e493db3dc155 </pre>

```
/sysId>  
  <tasks>  
    <task>Test Tas  
  </tasks>  
  <timeLimit />  
  <timeLimitUnits>M  
/timeLimitUnits>
```



	<pre>                 &lt;timeZone /&gt;             &lt;/triggerComposite&gt;         </pre>
<p>Example for Trigger-Related Records</p>	<p>XML</p> <pre> &lt;variables&gt;   &lt;variable&gt;     &lt;description /&gt;     &lt;name&gt;testVar&lt;/     &lt;value&gt;value&lt;/v   &lt;/variable&gt; &lt;/variables&gt;         </pre>
<p>Example for Composite Trigger Components</p>	<p>XML</p> <p><b>Composite Trigger: Time Componen</b></p> <pre> &lt;timeComponent&gt;   &lt;action&gt;Do Not Tr / action&gt;   &lt;description /&gt;   &lt;enabledEnd&gt;00:00 / enabledEnd&gt;   &lt;enabledStart&gt;00: / enabledStart&gt;   &lt;name&gt;test specia / name&gt;   &lt;restrictionAdjec &gt;Every&lt;/restrictionAdjec   &lt;restrictionCompl / restrictionComplex&gt;   &lt;restrictionMode&gt; / restrictionMode&gt;   &lt;restrictionNoun&gt; / restrictionNoun&gt;   &lt;restrictionNthAm   &lt;restrictionQuali &gt;Year&lt;/restrictionQualif   &lt;restrictionSimpl / restrictionSimple&gt;   &lt;situation&gt;Holida / situation&gt;   &lt;sysId &gt;0fc6b7d9c0a801c9017b6c2 / sysId&gt;   &lt;variablePrefix /         </pre>

```

        <adjustInterval>f
    /adjustInterval>
        <adjustmentAmount>
    /adjustmentAmount>
        <adjustmentType>I
    /adjustmentType>
        <dateAdjective>Ev
    /dateAdjective>
        <dateAdjustment>N
    /dateAdjustment>
        <dateNoun>Saturda
    /dateNoun>
        <dateQualifier>Ye
    /dateQualifier>
        <dayInterval>2<
    /dayInterval>
        <dayStyle>Complex
    /dayStyle>
        <eventMatchType>S
    /eventMatchType>
        <fri>>false</fri>
        <intervalStarting
>2015-06-17</intervalSta
        <mon>>false</mon>
        <nthAmount>5</nth
        <sat>>false</sat>
        <simpleDateType>E
    /simpleDateType>
        <startTimeEnable>
    /startTimeEnable>
        <startingAt>*:00<
    /startingAt>
        <sun>>false</sun>
        <thu>>false</thu>
        <time>00:00</time
        <timeIntervalUnit
    /timeIntervalUnits>
        <timeStyle>Absolu
    /timeStyle>
        <tue>>false</tue>
    
```

```
<wed>false</wed>  
</timeComponent>
```

**Composite Trigger: File Monitor Con**

```

<fileMonitorComponent>
  <action>Do Not Tr
/action>
  <description />
  <enabledEnd>00:00
/enableEnd>
  <enabledStart>00:
/enableStart>
  <name>test file m
component</name>
  <restrictedTimes>
/restrictedTimes>
  <restriction>fals
/restriction>
  <restrictionAdjec
>Every</restrictionAdjec
  <restrictionCompl
/restrictionComplex>
  <restrictionMode>
/restrictionMode>
  <restrictionNoun>
/restrictionNoun>
  <restrictionNthAn
  <restrictionQuali
>Year</restrictionQualif
  <restrictionSimpl
/restrictionSimple>
  <situation>Holida
/situation>
  <sysId
>5d2ac48e2dd64b5894bef18
/sysId>
  <variablePrefix /
  <fileMonitor>file
1</fileMonitor>
</fileMonitorComponent>

```

**Composite Trigger: Task Monitor Co**

```
<taskMonitorComponent>
  <action>Do Not Tr
/action>
  <description />
  <enabledEnd>00:00
/enableEnd>
  <enabledStart>00:
/enableStart>
  <name>test task m
component</name>
  <restrictionCompl
/restrictionComplex>
  <restrictionMode>
/restrictionMode>
  <restrictionAdjec
>Every</restrictionAdjec
  <restrictionNoun>
/restrictionNoun>
  <restrictionNthAm
  <restrictionQuali
>Year</restrictionQualif
  <restrictedTimes>
/restrictedTimes>
  <restriction>fals
/restriction>
  <restrictionCompl
/restrictionComplex>
  <restrictionMode>
/restrictionMode>
  <restrictionSimpl
/restrictionSimple>
  <situation>Holida
/situation>
  <sysId
>2445dbd9e58546b69e5d503
/sysId>
  <variablePrefix /
  <taskMonitor>test
monitor</taskMonitor>
</taskMonitorComponent>
```

**Composite Trigger: Variable Monitor**

```

<variableMonitorComponent
  <action>Do Not Tr
/Action>
  <description />
  <enabledEnd>00:00
/enabledEnd>
  <enabledStart>00:
/enabledStart>
  <name>test variab
monitor component</name>
  <restrictedTimes>
/restrictedTimes>
  <restriction>fals
/restriction>
  <restrictionAdjec
>Every</restrictionAdjec
  <restrictionCompl
/restrictionComplex>
  <restrictionMode>
/restrictionMode>
  <restrictionNoun>
/restrictionNoun>
  <restrictionNthAn
  <restrictionQuali
>Year</restrictionQualif
  <restrictionSimpl
/restrictionSimple>
  <situation>Holida
/situation>
  <sysId
>2445dbd9e58546b69e5d503
/sysId>
  <variablePrefix /
  <variableMonitor>
/variableMonitor>
</variableMonitorCompone

```

**Composite Trigger: Email Monitor C**


```

<emailMonitorComponent>
  <action>Do Not Tr
/action>
  <description />
  <enabledEnd>00:00
/enabledEnd>
  <enabledStart>00:
/enabledStart>
  <name>test email
component</name>
  <restrictedTimes>
/restrictedTimes>
  <restriction>fals
/restriction>
  <restrictionAdjec
>Every</restrictionAdjec
  <restrictionCompl
/restrictionComplex>
  <restrictionMode>
/restrictionMode>
  <restrictionNoun>
/restrictionNoun>
  <restrictionNthAm
  <restrictionQuali
>Year</restrictionQualif
  <restrictionSimpl
/restrictionSimple>
  <situation>Holida
/situation>
  <sysId
>2445dbd9e58546b69e5d503
/sysId>
  <variablePrefix /
  <emailMonitor>tes
/emailMonitor>
</emailMonitorComponent>
    
```

## Properties

### Trigger Properties: All Triggers

Property	UI Field Name	Description
----------	---------------	-------------

action	Action	For all trigger types except Manual and 1 non-business day or holiday (see situa
calendar	Calendar	Calendar that defines the business days, days that determine the run dates for the trigger.  The Calendar will be used to verify any C restrictionNoun and dateNoun.
description	Description	Description of this trigger.
excludeRelated	n/a	For Modify Trigger web services; specific exclude related records from the update, the request.  <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, exclu as an attribute in the &lt;trigger</p> </div>
forecast	Forecast	For Cron, Temporary, and Time triggers trigger will be satisfied for the next numb Forecast Period In Days Universal Contr Controller writes the forecasting entries t
name	Name	Name used within the Controller to identi




opswiseGroups	Member of Business Services	<p>List of <a href="#">Business Service(s)</a> that this trigger is associated with.</p> <p><b>XML</b></p> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;test&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <p><b>JSON</b></p> <pre>"opswiseGroups": [   "test" ]</pre>
rdExcludeBackup	Exclude Backup	Set only if <code>retentionDurationPurge</code> whether qualifying task instances can be when being purged by retention duration
restriction	Special Restriction	Indication of whether or not you want to use restrictions that tell the Controller how to handle execution when a trigger is satisfied on a holiday or non-business day. For simple and/or complex restrictions. For example, a <code>simpleRestriction</code> that disables the holiday identified in the calendar and/or a <code>complexRestriction</code> that disables the trigger on the last business day of the year.
restrictionAdjective	Restriction Adjective	Type of selection for <code>restrictionNoun</code> .
restrictionComplex	Complex Restriction	Set only if <code>restriction</code> is true; Set of two or more situations when this trigger should execute in conjunction with <code>restrictionMode</code> , <code>restrictionNoun</code> , and <code>restrictionAdjective</code> . You can specify that you do not want to execute on the last business day of the year or the first day of the year.

restrictionMode	Restriction Mode	Set only if <code>restrictionSimple</code> is true want to use <code>restrictionSimple</code> - and -related values.
restrictionNoun	Restriction Noun	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name example:</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restrictionNoun&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div data-bbox="1633 919 1974 1049" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionNthAmount	Restriction Nth Amount	Set only if <code>restrictionAdjective</code> is

restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the Period. For example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomDayPeriod2&lt;/restrictionQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionSimple	Simple Restriction	<p>Set only if <code>restriction</code> is true; Specifies restriction based on a specific situation.</p>
retainSysIds	n/a	<p>Specification for whether or not the web service property.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> request/response, <code>sysId</code> will be retained.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> request/response, <code>sysId</code> will be autogenerated by the Controller.</li> </ul> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is used as an attribute in the <code>&lt;trigger&gt;</code> element.</p> </div>

retentionDuration	Retention Duration	Set only if retentionDurationPurge retention duration for the selected reter triggered task instances can qualify for p
retentionDurationPurge	Purge By Retention Duration	Specification for whether triggered task i retention duration.
retentionDurationUnit	Retention Duration Unit	Set only if retentionDurationPurge duration unit.
simulationOption	Simulate	For Cron, Temporary, and Time triggers the <a href="#">Enable Trigger Simulation</a> Universal specification for whether or not to simula triggers are eligible to fire. (If simulati the scheduled launch of the task by the t
situation	Situation	Type of day that causes the Controller to
skipActive	Skip Trigger if Active	<b>Deprecated.</b> Indication for whether or nc the next run of the specified task(s) if the a Complete status (that is, it is still active
skipCondition	Task Launch Skip Condition	Controls when launching a task for the tr  <div style="background-color: #ffffcc; padding: 5px;"><b>Note</b> When reading a Trigger, both skipCondition are return creating/updating a Trigger, used if present. If skipConc skipActive is used. If both skipCondition are preser set to true only if skipCond.</div>
skipCount	Skip Count	Specification that the Controller should s task is triggered.
sysId	n/a	System ID field in the database for this tr

tasks	Tasks	<p>Name of the task(s) being triggered when</p> <p><b>XML</b></p> <pre data-bbox="1633 233 1976 363">&lt;tasks&gt;   &lt;task&gt;Opwise - Demo &lt;/tasks&gt;</pre> <p><b>JSON</b></p> <pre data-bbox="1633 464 1976 548">"tasks": [ "Opwise - Demo</pre>
timeZone	Time Zone	<p>Name of the time zone that will be applied to the trigger.</p>
version	n/a	<p>For Read and List web services; specific or listed.</p> <div data-bbox="1633 756 1976 886" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version attribute in the &lt;trigger&gt; element</p> </div>

**Trigger Properties - Composite Trigger**

Property	UI Field Name	Description
enabledEnd	Enabled End	End time of the period during which the trigger should be active.
enabledStart	Enabled Start	Start time of the period during which the trigger should be active.
queueDepth	Queue Depth	Number of events that are maintained in the queue. If the number of events in the queue exceeds <code>queueDepth</code> , the Controller discards the oldest events.
restrictedTimes	Restrict Times	Indication that the trigger is active only during the period defined by <code>enabledStart</code> and <code>enabledEnd</code> .
timeLimit	Time Limit	Amount of time (in <code>timeLimitUnits</code> ) that the trigger is active for before it is removed.
timeLimitUnits	Time Limit Unit	Unit of time specified in the <code>timeLimit</code> .

**Trigger Properties - All Composite Trigger Components**


Property	UI Field Name	Description
----------	---------------	-------------

action	Action	For all trigger types except Manual and Ten non-business day or holiday (see <i>situati</i>
description	Description	Description of this component.
enabledEnd	Enabled End	End time of the period during which the con
enabledStart	Enabled Start	Start time of the period during which the co
name	Name	Name used within the Controller to identify
restrictedTimes	Restrict Times	Indication that the trigger is active only durin enabledStart and enabledEnd.

restriction	Special Restriction	Indication of whether or not you want to spe Controller how to handle exceptions, such a holiday or non-business day. You can spec For example, you can specify a simpleRe: it is satisfied on a holiday identified in the c restrictionComplex that disables the tr every month.
restrictionAdjective	Restriction Adjective	Type of selection for restrictionNoun.
restrictionComplex	Complex Restriction	Set only if restriction is true; Set of par situations when this trigger should not be s: restrictionMode, restrictionAdjec restrictionQualifier. For example, y satisfy this trigger on the last business day month.
restrictionMode	Restriction Mode	Set only if restrictionSimple is true; S use restrictionSimple- and/or restri




restrictionNoun	Restriction Noun	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name of</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restrictionNoun&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the <b>local</b> attribute.</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomDay1&lt;/restrictionNoun&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay1" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b>  The Calendar for the Composite Day references.</p> </div>
restrictionNthAmount	Restriction Nth Amount	Set only if restrictionAdjective is Nth

restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the n example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1&lt;/r</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b>  The Calendar for the Composite Day references.</p> </div>
restrictionSimple	Simple Restriction	Set only if <code>restriction</code> is true; Specificat a specific situation.
situation	Situation	Type of day that causes the Controller to in
variablePrefix	Built-in Variable Prefix	Prefix that enables built-in variables to be p

**Trigger Properties - Composite Trigger Time Component**

Property	UI Field Name	Description
adjustInterval	Adjust Interval To Enable Start	Set only if restrictedTimes is true; Spe enabledStart (true) or based upon the a
adjustmentAmount	Adjustment Amount	Set only if dayStyle is Complex; Number setting.
adjustmentType	Adjustment Type	Set only if dayStyle is Complex; Type of
dateAdjective	Date Adjective	Which in a series of days to select. Used in dateQualifier. For example, to specify dateAdjective = Nth, dateNoun = Busi nthAmount = 15.
dateAdjustment	Date Adjustment	Set only if dayStyle is Complex; Specific plus number of Days or Business Days. Fo month (last day of the month less one day) Day, dateQualifier = Month, dateAdj adjustmentType = Day.

dateNoun	Date Noun	<p>Type of day you want to select. Used in <code>dateQualifier</code>. For example, to specify <code>dateAdjective = Nth</code>, <code>dateNoun = BusinessDay</code>, <code>nthAmount = 15</code>.</p> <p>To specify a <a href="#">Custom Day</a>, use the name of</p> <p><b>XML</b>  <code>&lt;dateNoun&gt;CustomDay1&lt;/dateNoun&gt;</code></p> <p><b>JSON</b>  <pre>"dateNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the <code>local</code></p> <p><b>XML</b>  <code>&lt;dateNoun local="true"&gt;CustomDay2&lt;/dateNoun&gt;</code></p> <p><b>JSON</b>  <pre>"dateNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div data-bbox="1612 803 1974 933" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b>  The Calendar for the Composition references.</p> </div>
----------	-----------	--

dateQualifier	Date Qualifier	<p>Period for your date selection. Used in conjunction with dateNoun. For example, to specify "the 15th business day", dateNoun = Business Day, dateQualifier = 15.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the following XML:</p> <p><b>XML</b>  <code>&lt;dateQualifier&gt;CustomDayPeriod1&lt;/dateQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"dateQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following XML:</p> <p><b>XML</b>  <code>&lt;dateQualifier local="true"&gt;CustomDayPeriod1&lt;/dateQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"dateQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div data-bbox="1612 781 1976 906" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b>          The Calendar for the Composition references.</p> </div>
dayInterval	Day Interval	Interval (number of days) at which this trigger will be run.
dayStyle	Day Style	Indication of when this trigger will be run.

eventMatchType	Event Match Type	Controls whether events from the Time cor matches at the Composite trigger level.
fri	Friday	Set only if simpleDateType is Specific D Friday.
intervalStartingDate	Interval Start	First day of the interval on which this trigge
mon	Monday	Set only if simpleDateType is Specific D Monday.
nthAmount	Nth Amount	Value of N.
sat	Saturday	Set only if simpleDateType is Specific D Saturday.
simpleDateType	n/a	Indication of when this trigger will be run.

startingAt	Initial Time Offset	Set only if <code>timeStyle</code> is Interval; Starting
startTimeEnable	Enable Offset	Set only if <code>timeStyle</code> is Interval; Indicatio a starting time, in minutes offset from the h
sun	Sunday	Set only if <code>simpleDateType</code> is Specific D Sunday.
thu	Thursday	Set only if <code>simpleDateType</code> is Specific D Thursday.
time	Time	Time when the trigger will be run.
timeInterval	Time Interval	Number of <code>timeIntervalUnits</code> .
timeIntervalUnits	Time Interval Units	Type of time interval.
timeStyle	Time Style	Indicates whether this trigger is for a specif
tue	Tuesday	Set only if <code>simpleDateType</code> is Specific D Tuesday.
wed	Wednesday	Set only if <code>simpleDateType</code> is Specific D Wednesday.

**Trigger Properties - Composite Trigger File Monitor Component**

Property	UI Field Name	Description	Spe
fileMonitor	File Monitor	Name of the File Monitor task to be triggered.	

**Trigger Properties - Composite Trigger Task Monitor Component**

Property	UI Field Name	Description	Sp
taskMonitor	Name	Name of the Task Monitor task to be triggered.	

**Trigger Properties - Composite Trigger Variable Monitor Component**

Property	UI Field Name	Description
variableMonitor	Name	Name of the Variable Monitor task to be triggered.

**Trigger Properties - Composite Trigger Email Monitor Component**

Property	UI Field Name	Description	S
emailMonitor	Name	Name of the Email Monitor task to be triggered.	

**Trigger-Related Records Properties: Variables**

Property	UI Field Name	Description	Specifications	Requ
description	Description	Description of the variable.		N
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y



## Cron Trigger Web Services

- Overview
- Create a Cron Trigger
- Modify a Cron Trigger
- Read a Cron Trigger
  - Read a Cron Trigger: URI Parameters
- Cron Trigger: XML and JSON Examples
- Properties
  - Trigger Properties: All Triggers
  - Trigger Properties: Cron Trigger
  - Trigger-Related Records Properties: Variables
- List Trigger Qualifying Times
  - List Trigger Qualifying Times: URI Parameters
  - List Trigger Qualifying Times: XML and JSON Examples

### Overview

Universal Controller supports the following RESTful-based web services for Cron Trigger

- Create a Cron Trigger
- Modify a Cron Trigger
- Read a Cron Trigger

Formatting specifications for each web service, including details about parameter require



**Note**

For information on Trigger web services that are applicable to all trigger type

- Delete a Trigger
- Enable/Disable a Trigger
- List Triggers
- Trigger a Task

### Create a Cron Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	POST
Description	Creates a new Cron trigger.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Cron Trigger: XML and JSON Examples</a> .
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Cron Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>.</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;trigger type&gt; tr</li> </ul>

### Modify a Cron Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	PUT
Description	Modifies the trigger specified by the sysId in the r To modify Cron Trigger properties without modifyi
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Cron Trigger: XML and JSON Examples</a> .
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Cron Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>.</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the &lt;trigger type&gt; t</li> </ul>

### Read a Cron Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	GET
Description	Retrieves information for the specified trigger
URI Parameters	See <a href="#">Read a Cron Trigger: URI Parameters</a> .
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Trigger Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>See <a href="#">Trigger Properties: Cron Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger-Related Records Properties</a>:</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">Cron Trigger: XML and JSON Exam</a>)</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43"</li> </ul>

### Read a Cron Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

### Cron Trigger: XML and JSON Examples

retainSysIds and version properties are specified as attributes in the <trigger type> elem

Examples	XML
----------	-----

Example for Trigger

XML

```

<triggerCron retainSysIds="true"
="1">
  <variables />
  <action>Do Not Trigger</a
<calendar>System Default<
<dayLogic>And</dayLogic>
<dayOfMonth>*</dayOfMonth
<dayOfWeek>Mon-Fri</dayOf
<description />
<forecast>>false</forecast>
<hours>9-17</hours>
<minutes>0</minutes>
<month>*</month>
<name>Test- Every hour fr
between 9am and 5pm</name>
<opwiseGroups />
<rdExcludeBackup>>true<
/rdExcludeBackup>
<restrictedTimes>>false<
/restrictedTimes>
<restriction>>false</restr
<restrictionAdjective>Eve
/restrictionAdjective>
<restrictionComplex>>false
/restrictionComplex>
<restrictionMode>Or</rest
<restrictionNoun>Day</res
>
  <restrictionNthAmount />
  <restrictionQualifier>Yea
/restrictionQualifier>
  <restrictionSimple>>false<
/restrictionSimple>
  <retentionDuration>1<
/retentionDuration>
  <retentionDurationPurge>t
/retentionDurationPurge>
  <retentionDurationUnit>Da
/retentionDurationUnit>
  <simulationOption>-- Syst
--</simulationOption>
  <situation>Holiday</situa
<skipCondition>None</skip
<skipCount>0</skipCount>
  <sysId
>0fc6b7d9c0a801c9017b6c27c259937
  <tasks>
    <task>Sleep 30</task
  </tasks>
  <timeZone />
</triggerCron>

```

<p>Example for Trigger-Related Records</p>	<p>XML</p> <pre> &lt;variables&gt;   &lt;variable&gt;     &lt;description /&gt;     &lt;name&gt;testVar&lt;/name&gt;     &lt;value&gt;value&lt;/value&gt;   &lt;/variable&gt; &lt;/variables&gt;                 </pre>
--	---

## Properties

### Trigger Properties: All Triggers



Property	UI Field Name	Description
action	Action	For all trigger types except Manual and T non-business day or holiday (see situa

calendar	Calendar	<p>Calendar that defines the business days, days that determine the run dates for the trigger.</p> <p>The Calendar will be used to verify any C restrictionNoun.</p>
description	Description	Description of this trigger.
excludeRelated	n/a	<p>For Modify Trigger web services; specific exclude related records from the update, the request.</p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, exclu as an attribute in the &lt;trigger</p> </div>
forecast	Forecast	<p>For Cron, Temporary, and Time triggers trigger will be satisfied for the next numb Forecast Period In Days Universal Contr Controller writes the forecasting entries t</p>
name	Name	Name used within the Controller to identi
opwiseGroups	Member of Business Services	<p>List of Business Service(s) that this trigg</p> <p><b>XML</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> &lt;opwiseGroups&gt;   &lt;opwiseGroup&gt;test&lt; &lt;/opwiseGroups&gt;</pre> <p><b>JSON</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> "opwiseGroups": [   "test " ]</pre>
rdExcludeBackup	Exclude Backup	<p>Set only if retentionDurationPurge whether qualifying task instances can be when being purged by retention duration</p>


restriction	Special Restriction	Indication of whether or not you want to : that tell the Controller how to handle exc trigger is satisfied on a holiday or non-bu simple and/or complex restrictions. For e simpleRestriction that disables the holiday identified in the calendar and/or : disables the trigger on the last business
restrictionAdjective	Restriction Adjective	Type of selection for restrictionNoun
restrictionComplex	Complex Restriction	Set only if restriction is true; Set of ; or more situations when this trigger shou conjunction with restrictionMode, re restrictionNoun, and restriction you can specify that you do not want to s business day of the year or the first day
restrictionMode	Restriction Mode	Set only if restrictionSimple is true want to use restrictionSimple- and -related values.

restrictionNoun	Restriction Noun	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name example:</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restricti</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionNthAmount	Restriction Nth Amount	Set only if restrictionAdjective is



restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the Period. For example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomDayPeriod2&lt;/restrictionQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div data-bbox="1633 800 1976 930" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionSimple	Simple Restriction	<p>Set only if <code>restriction</code> is true; Specifies restriction based on a specific situation.</p>
retainSysIds	n/a	<p>Specification for whether or not the web service retains system IDs.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> request/response, <code>sysId</code> will be retained.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> request/response, <code>sysId</code> will be autogenerated by the Controller.</li> </ul> <div data-bbox="1633 1287 1976 1417" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is used as an attribute in the <code>&lt;trigger&gt;</code> element.</p> </div>

retentionDuration	Retention Duration	Set only if retentionDurationPurge retention duration for the selected reter triggered task instances can qualify for p
retentionDurationPurge	Purge By Retention Duration	Specification for whether triggered task i retention duration.
retentionDurationUnit	Retention Duration Unit	Set only if retentionDurationPurge duration unit.
simulationOption	Simulate	For Cron, Temporary, and Time triggers the <a href="#">Enable Trigger Simulation</a> Universal specification for whether or not to simula triggers are eligible to fire. (If simulati the scheduled launch of the task by the t
situation	Situation	Type of day that causes the Controller to
skipActive	Skip Trigger if Active	<b>Deprecated.</b> Indication for whether or nc the next run of the specified task(s) if the a Complete status (that is, it is still active
skipCondition	Task Launch Skip Condition	Controls when launching a task for the tr  <div style="background-color: #ffffcc; padding: 5px;"><b>Note</b> When reading a Trigger, both skipCondition are return creating/updating a Trigger, used if present. If skipConc skipActive is used. If both skipCondition are preser set to true only if skipCond.</div>
skipCount	Skip Count	Specification that the Controller should s task is triggered.
sysId	n/a	System ID field in the database for this tr

tasks	Tasks	<p>Name of the task(s) being triggered when</p> <p><b>XML</b></p> <pre>&lt;tasks&gt;   &lt;task&gt;Opwise - Demo &lt;/tasks&gt;</pre> <p><b>JSON</b></p> <pre>"tasks": [ "Opwise - Demo</pre>
timeZone	Time Zone	<p>Name of the time zone that will be applied to the trigger.</p>
version	n/a	<p>For Read and List web services; specific or listed.</p> <div data-bbox="1633 755 1976 885" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version attribute in the &lt;trigger&gt; element</p> </div>

**Trigger Properties: Cron Trigger**

Property	UI Field Name	Description
dayLogic	Day Logic	Specification for whether to <b>And</b> the dayOfMonth with t dayOfWeek criteria.
dayOfMonth	Day of Month	Day of the month, using standard Cron syntax.
dayOfWeek	Day of Week	Day of the week, using standard Cron syntax.
hours	Hours	Time in hours, using standard Cron syntax. (See also L
minutes	Minutes	Time in minutes, using standard Cron syntax.
month	Month	Month, using standard Cron syntax.

**Trigger-Related Records Properties: Variables**

Property	UI Field Name	Description	Specifications	Req
description	Description	Description of the variable.		N
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y

**List Trigger Qualifying Times**

	Description
URI	<a href="http://host_name/opswise/resources/trigger/qualifyingtimes">http://host_name/opswise/resources/trigger/qualifyingtimes</a>
HTTP Method	GET
Description	Lists Cron trigger qualifying times from a specific starting date.
URI Parameters	See <a href="#">List Trigger Qualifying Times: URI Parameters</a> , below.
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/trigger/qualifyingtimes">http://localhost:8080/opswise/resources/trigger/qualifyingtimes</a></li> <li><a href="http://localhost:8080/opswise/resources/trigger/qualifyingtimes">http://localhost:8080/opswise/resources/trigger/qualifyingtimes</a></li> </ul>
Authentication	HTTP Basic
Example Response	See <a href="#">List Trigger Qualifying Times: XML and JSON Examples</a> .

#### List Trigger Qualifying Times: URI Parameters

Name	Description	Specifications
triggerid	Unique ID for a trigger.	
triggername	Name used within the Controller to identify a trigger.	Maximum 40 characters
count	Number of qualifying days to list.	Maximum is 100
startdate	Starting date of qualifying days to list.	Format: YYYY-MM-DD

#### List Trigger Qualifying Times: XML and JSON Examples

XML

XML

```
<qualifyingTimes triggerTimeZone="Africa/Accra"  
userTimeZone="America/Denver">  
  <qualifyingTime skip="true">  
    <triggerTimeZone>Tuesday, December 19, 2017 18:00:00 MST -07  
-0700</triggerTimeZone>  
    <userTimeZone>Tuesday, December 19, 2017 18:00:00 MST -0700  
-0700</userTimeZone>  
  </qualifyingTime>  
  <qualifyingTime skip="true">  
    <triggerTimeZone>Tuesday, December 19, 2017 19:00:00 MST -07  
-0700</triggerTimeZone>  
    <userTimeZone>Tuesday, December 19, 2017 19:00:00 MST -0700  
-0700</userTimeZone>  
  </qualifyingTime>  
  ...  
</qualifyingTimes>
```

## Email Monitor Trigger Web Services

- Overview
- Create an Email Monitor Trigger
- Modify an Email Monitor Trigger
- Read an Email Monitor Trigger
  - Read an Email Monitor Trigger: URI Parameters
- Email Monitor Trigger: XML and JSON Examples
- Properties
  - Trigger Properties: All Triggers
  - Trigger Properties: Email Monitor Trigger
  - Trigger-Related Records Properties: Variables

### Overview

Universal Controller supports the following RESTful-based web services for Email Monitor Triggers:

- Create an Email Monitor Trigger
- Modify an Email Monitor Trigger
- Read an Email Monitor Trigger

Formatting specifications for each web service, including details about parameter requirements, are provided in the following table:



#### Note

For information on Trigger web services that are applicable to all trigger types, see the following table:

- Delete a Trigger
- Enable/Disable a Trigger
- List Triggers
- Trigger a Task

### Create an Email Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	POST
Description	Creates a new Email Monitor Trigger.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Email Monitor Trigger: XML and JSON Exam</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Email Monitor Tri</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;trigger type&gt; tr</li> </ul>

### Modify an Email Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	PUT
Description	Modifies the trigger specified by the sysId in the r To modify Email Monitor Trigger properties without
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Email Monitor Trigger: XML and JSON Exam</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Email Monitor Tri</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the &lt;trigger type&gt; t</li> </ul>

### Read an Email Monitor Trigger



	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	GET
Description	Retrieves information for the specified trigger
URI Parameters	See <a href="#">Read an Email Monitor Trigger: URI Parameters</a>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Trigger Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>See <a href="#">Trigger Properties: Email Monitor Tri</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">Email Monitor Trigger: XML and JS</a>)</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43"</li> </ul>

### Read an Email Monitor Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

### Email Monitor Trigger: XML and JSON Examples

retainSysIds and version properties are specified as attributes in the <trigger type> elem

Examples	XML
----------	-----

Example for Trigger

XML

```

<triggerEm retainSysIds="true"
  <variables />
  <action>Do Not Trigger</
  <calendar>System Default
  <description>Test Email
Trigger and in Workflow</descri
  <emailMonitor>Email Moni
/ emailMonitor>
  <enabledEnd>00:00</enabl
  <enabledStart>05:00</ens
  <name>Test-Email-Monitor
/ name>
  <opswiseGroups />
  <rdExcludeBackup>true<
/ rdExcludeBackup>
  <restrictedTimes>false<
/ restrictedTimes>
  <restriction>false</rest
  <restrictionAdjective>Ev
/ restrictionAdjective>
  <restrictionComplex>fals
/ restrictionComplex>
  <restrictionMode>Or</res
>
  <restrictionNoun>Day<
/ restrictionNoun>
  <restrictionNthAmount />
  <restrictionQualifier>Ye
/ restrictionQualifier>
  <restrictionSimple>false
/ restrictionSimple>
  <retentionDuration>1<
/ retentionDuration>
  <retentionDurationPurge>
/ retentionDurationPurge>
  <retentionDurationUnit>I
/ retentionDurationUnit>
  <situation>Holiday</situ
  <skipCondition>None</ski
  <skipCount>0</skipCount>
  <sysId
>0fc6b7d9c0a801c9017b6c27c25993
  <tasks>
    <task>Test Task</t
  </tasks>
  <timeZone />
</triggerEm>

```

Example for Trigger-Related Records

XML

```
<variables>
  <variable>
    <description />
    <name>testVar</name>
    <value>value</value>
  </variable>
</variables>
```


## Properties

### Trigger Properties: All Triggers


Property	UI Field Name	Description
action	Action	For all trigger types except Manual and T non-business day or holiday (see situa

calendar	Calendar	<p>Calendar that defines the business days, days that determine the run dates for the trigger.</p> <p>The Calendar will be used to verify any C restrictionNoun.</p>
description	Description	Description of this trigger.
excludeRelated	n/a	<p>For Modify Trigger web services; specific exclude related records from the update, the request.</p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, exclu as an attribute in the &lt;trigger</p> </div>
forecast	Forecast	<p>For Cron, Temporary, and Time triggers trigger will be satisfied for the next numb Forecast Period In Days Universal Contr Controller writes the forecasting entries t</p>
name	Name	Name used within the Controller to identi
opwiseGroups	Member of Business Services	<p>List of Business Service(s) that this trigg</p> <p><b>XML</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> &lt;opwiseGroups&gt;   &lt;opwiseGroup&gt;test&lt; &lt;/opwiseGroups&gt;</pre> <p><b>JSON</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> "opwiseGroups": [   "test " ]</pre>
rdExcludeBackup	Exclude Backup	<p>Set only if retentionDurationPurge whether qualifying task instances can be when being purged by retention duration</p>


restriction	Special Restriction	Indication of whether or not you want to : that tell the Controller how to handle exc trigger is satisfied on a holiday or non-bu simple and/or complex restrictions. For e simpleRestriction that disables the holiday identified in the calendar and/or : disables the trigger on the last business
restrictionAdjective	Restriction Adjective	Type of selection for restrictionNoun
restrictionComplex	Complex Restriction	Set only if restriction is true; Set of p or more situations when this trigger shou conjunction with restrictionMode, re restrictionNoun, and restriction you can specify that you do not want to s business day of the year or the first day
restrictionMode	Restriction Mode	Set only if restrictionSimple is true want to use restrictionSimple- and -related values.

restrictionNoun	Restriction Noun	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name example:</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restrictionNoun&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b>  The Calendar for the trigger Day references.</p> </div>
restrictionNthAmount	Restriction Nth Amount	Set only if restrictionAdjective is

restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the Period. For example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomDayPeriod2&lt;/restrictionQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div data-bbox="1633 800 1976 930" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
retainSysIds	n/a	<p>Specification for whether or not the web service is a system property.</p> <ul style="list-style-type: none"> <li>• If <b>retainSysIds</b>="true" and <code>sysId</code> request/response, <code>sysId</code> will be retained.</li> <li>• If <b>retainSysIds</b>="false" and <code>sysId</code> request/response, <code>sysId</code> will be autogenerated by the Controller.</li> </ul> <div data-bbox="1633 1167 1976 1297" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is used as an attribute in the <code>&lt;trigger&gt;</code> element.</p> </div>
retentionDuration	Retention Duration	<p>Set only if <code>retentionDurationPurge</code> is true. retention duration for the selected retention triggered task instances can qualify for purge.</p>

retentionDurationPurge	Purge By Retention Duration	Specification for whether triggered task is retention duration.
retentionDurationUnit	Retention Duration Unit	Set only if retentionDurationPurge duration unit.
simulationOption	Simulate	For Cron, Temporary, and Time triggers the <a href="#">Enable Trigger Simulation</a> Universal specification for whether or not to simulate triggers are eligible to fire. (If simulation the scheduled launch of the task by the t
situation	Situation	Type of day that causes the Controller to
skipActive	Skip Trigger if Active	<b>Deprecated.</b> Indication for whether or not the next run of the specified task(s) if the a Complete status (that is, it is still active
skipCondition	Task Launch Skip Condition	Controls when launching a task for the tr <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;"> <p> <b>Note</b> When reading a Trigger, both skipCondition are returned creating/updating a Trigger, used if present. If skipCondition skipActive is used. If both skipCondition are present set to true only if skipCond.</p> </div>
skipCount	Skip Count	Specification that the Controller should s task is triggered.
sysId	n/a	System ID field in the database for this tr



tasks	Tasks	<p>Name of the task(s) being triggered when</p> <p><b>XML</b></p> <pre>&lt;tasks&gt;   &lt;task&gt;Opwise - Demo &lt;/tasks&gt;</pre> <p><b>JSON</b></p> <pre>"tasks": [ "Opwise - Demo</pre>
timeZone	Time Zone	<p>Name of the time zone that will be applied to the trigger.</p>
version	n/a	<p>For Read and List web services; specific or listed.</p> <div data-bbox="1633 756 1976 886" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version attribute in the &lt;trigger&gt; element</p> </div>

**Trigger Properties: Email Monitor Trigger**

Property	UI Field Name	Description
emailMonitor	Email Monitor	Email Monitor task being executed.
enabledEnd	Enabled End	End time of the period during which the trigger s
enabledStart	Enabled Start	Start time of the period during which the trigger s
restrictedTimes	Restrict Times	Indication that the trigger is active only during the and enabledEnd.

**Trigger-Related Records Properties: Variables**

Property	UI Field Name	Description	Specifications	Req
description	Description	Description of the variable.		N
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y

## File Monitor Trigger Web Services

- Overview
- Create a File Monitor Trigger
- Modify a File Monitor Trigger
- Read a File Monitor Trigger
  - Read a File Monitor Trigger: URI Parameters
- File Monitor Trigger: XML and JSON Examples
- Properties
  - Trigger Properties: All Triggers
  - Trigger Properties: File Monitor Trigger
  - Trigger-Related Records Properties: Variables

### Overview

Universal Controller supports the following RESTful-based web services for File Monitor

- Create a File Monitor Trigger
- Modify a File Monitor Trigger
- Read a File Monitor Trigger

Formatting specifications for each web service, including details about parameter require



#### Note

For information on Trigger web services that are applicable to all trigger type

- Delete a Trigger
- Enable/Disable a Trigger
- List Triggers
- Trigger a Task

### Create a File Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	POST
Description	Creates a new File Monitor Trigger.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">File Monitor Trigger: XML and JSON Example</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: File Monitor Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>.</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;trigger type&gt; tr</li> </ul>

### Modify a File Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	PUT
Description	Modifies the trigger specified by the sysId in the request. To modify File Monitor Trigger properties without i
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">File Monitor Trigger: XML and JSON Example</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: File Monitor Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>.</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the &lt;trigger type&gt; t</li> </ul>

### Read a File Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	GET
Description	Retrieves information for the specified trigger
URI Parameters	See <a href="#">Read a File Monitor Trigger: URI Parameters</a>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Trigger Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>See <a href="#">Trigger Properties: File Monitor Trigg</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">File Monitor Trigger: XML and JSO</a>)</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43"</li> </ul>

**Read a File Monitor Trigger: URI Parameters**

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

**File Monitor Trigger: XML and JSON Examples**

retainSysIds and version properties are specified as attributes in the <trigger type> elem

Examples	XML
----------	-----

Example for Trigger

XML

```

<triggerFm retainSysIds="true"
  <variables />
  <action>Do Not Trigger</action>
  <calendar>System Default</calendar>
  <description>Test File I
Trigger and in Workflow</descr:
  <enabledEnd>00:00</enab
  <enabledStart>05:00</en
  <name>Opswise - File Cre
Trigger</name>
  <opswiseGroups />
  <rdExcludeBackup>true</rd
/rdExcludeBackup>
  <restriction>>false</rest
  <restrictionAdjective>E
/restrictionAdjective>
  <restrictionComplex>fal
/restrictionComplex>
  <restrictionMode>Or</re
>
  <restrictionNoun>Day</
/restrictionNoun>
  <restrictionNthAmount /:
  <restrictionQualifier>Ye
/restrictionQualifier>
  <restrictionSimple>fals
/restrictionSimple>
  <retentionDuration>1</
/retentionDuration>
  <retentionDurationPurge:
/retentionDurationPurge>
  <retentionDurationUnit>1
/retentionDurationUnit>
  <situation>Holiday</siti
  <skipCondition>None</sk
  <skipCount>0</skipCount:
  <sysId
>0fc6b7d9c0a801c9017b6c27c2599:
  <fileMonitor>Opswise - 1
File Create Check</fileMonitor:
  <tasks>
    <task>Opswise - D
  </tasks>
  <timeZone />
</triggerFm>


```

<p>Example for Trigger-Related Records</p>	<p>XML</p> <pre data-bbox="1564 194 1974 430"> &lt;variables&gt;   &lt;variable&gt;     &lt;description /&gt;     &lt;name&gt;testVar&lt;/name&gt;     &lt;value&gt;value&lt;/value&gt;   &lt;/variable&gt; &lt;/variables&gt; </pre>
--	---

## Properties


### Trigger Properties: All Triggers

Property	UI Field Name	Description
action	Action	For all trigger types except Manual and T non-business day or holiday (see situa


calendar	Calendar	<p>Calendar that defines the business days, days that determine the run dates for the trigger.</p> <p>The Calendar will be used to verify any C restrictionNoun.</p>
description	Description	Description of this trigger.
excludeRelated	n/a	<p>For Modify Trigger web services; specific exclude related records from the update, the request.</p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, exclu as an attribute in the &lt;trigger</p> </div>
forecast	Forecast	<p>For Cron, Temporary, and Time triggers trigger will be satisfied for the next numb Forecast Period In Days Universal Contr Controller writes the forecasting entries t</p>
name	Name	Name used within the Controller to identi
opwiseGroups	Member of Business Services	<p>List of Business Service(s) that this trigg</p> <p><b>XML</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> &lt;opwiseGroups&gt;   &lt;opwiseGroup&gt;test&lt; &lt;/opwiseGroups&gt;</pre> <p><b>JSON</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> "opwiseGroups": [   "test " ]</pre>
rdExcludeBackup	Exclude Backup	<p>Set only if retentionDurationPurge whether qualifying task instances can be when being purged by retention duration</p>




restriction	Special Restriction	Indication of whether or not you want to : that tell the Controller how to handle exc trigger is satisfied on a holiday or non-bu simple and/or complex restrictions. For e simpleRestriction that disables the holiday identified in the calendar and/or : disables the trigger on the last business
restrictionAdjective	Restriction Adjective	Type of selection for restrictionNoun
restrictionComplex	Complex Restriction	Set only if restriction is true; Set of p or more situations when this trigger shou conjunction with restrictionMode, re restrictionNoun, and restriction you can specify that you do not want to s business day of the year or the first day
restrictionMode	Restriction Mode	Set only if restrictionSimple is true want to use restrictionSimple- and -related values.

restrictionNoun	Restriction Noun	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name example:</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restricti</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionNthAmount	Restriction Nth Amount	Set only if restrictionAdjective is

restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the Period. For example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomDayPeriod2&lt;/restrictionQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
retainSysIds	n/a	<p>Specification for whether or not the web service has the retainSysIds property.</p> <ul style="list-style-type: none"> <li>• If <b>retainSysIds="true"</b> and <code>sysId</code> request/response, <code>sysId</code> will be retained.</li> <li>• If <b>retainSysIds="false"</b> and <code>sysId</code> request/response, <code>sysId</code> will be autogenerated by the Controller.</li> </ul> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is used as an attribute in the <code>&lt;trigger&gt;</code> element.</p> </div>
retentionDuration	Retention Duration	<p>Set only if <code>retentionDurationPurge</code> is true. retention duration for the selected retentionDurationPurge triggered task instances can qualify for purge.</p>

retentionDurationPurge	Purge By Retention Duration	Specification for whether triggered task is retention duration.
retentionDurationUnit	Retention Duration Unit	Set only if retentionDurationPurge duration unit.
simulationOption	Simulate	For Cron, Temporary, and Time triggers the <a href="#">Enable Trigger Simulation</a> Universal specification for whether or not to simulate triggers are eligible to fire. (If simulation the scheduled launch of the task by the t
situation	Situation	Type of day that causes the Controller to
skipActive	Skip Trigger if Active	<b>Deprecated.</b> Indication for whether or not the next run of the specified task(s) if the a Complete status (that is, it is still active
skipCondition	Task Launch Skip Condition	Controls when launching a task for the tr <div style="background-color: #ffffcc; padding: 5px; margin-top: 10px;"> <p> <b>Note</b> When reading a Trigger, both skipCondition are returned creating/updating a Trigger, used if present. If skipCondition skipActive is used. If both skipCondition are present set to true only if skipCond.</p> </div>
skipCount	Skip Count	Specification that the Controller should s task is triggered.
sysId	n/a	System ID field in the database for this tr

tasks	Tasks	<p>Name of the task(s) being triggered when</p> <p><b>XML</b></p> <pre>&lt;tasks&gt;   &lt;task&gt;Opwise - Demo &lt;/tasks&gt;</pre> <p><b>JSON</b></p> <pre>"tasks": [ "Opwise - Demo</pre>
timeZone	Time Zone	Name of the time zone that will be applied to the trigger.
version	n/a	<p>For Read and List web services; specific or listed.</p> <div style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version attribute in the &lt;trigger&gt; element</p> </div>

**Trigger Properties: File Monitor Trigger**

Property	UI Field Name	Description
enabledEnd	Enabled End	End time of the period during which the trigger s
enabledStart	Enabled Start	Start time of the period during which the trigger s
restrictedTimes	Restrict Times	Indication that the trigger is active only during the and enabledEnd.
taskMonitor	File Monitor	File Monitor task being executed.

**Trigger-Related Records Properties: Variables**

Property	UI Field Name	Description	Specifications	Req
description	Description	Description of the variable.		N
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y

## Manual Trigger Web Services

- [Overview](#)
- [Create a Manual Trigger](#)
- [Modify a Manual Trigger](#)
- [Read a Manual Trigger](#)
  - [Read a Manual Trigger: URI Parameters](#)
- [Manual Trigger: XML and JSON Examples](#)
- [Properties](#)
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  - [Trigger Properties: Manual Trigger](#)
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### Overview

Universal Controller supports the following RESTful-based web services for Manual Trig

- [Create a Manual Trigger](#)
- [Modify a Manual Trigger](#)
- [Read a Manual Trigger](#)

Formatting specifications for each web service, including details about parameter requir



#### Note

For information on Trigger web services that are applicable to all trigger type

- [Delete a Trigger](#)
- [Enable/Disable a Trigger](#)
- [List Triggers](#)
- [Trigger a Task](#)

### Create a Manual Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	POST
Description	Creates a new Manual Trigger.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Manual Trigger: XML and JSON Examples</a> .
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Manual Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>.</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;trigger type&gt; tr</li> </ul>

### Modify a Manual Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	PUT
Description	Modifies the trigger specified by the sysId in the r To modify Manual Trigger properties without mod
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Manual Trigger: XML and JSON Examples</a> .
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Manual Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>.</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the &lt;trigger type&gt; t</li> </ul>

### Read a Manual Trigger



	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	GET
Description	Retrieves information for the specified trigger
URI Parameters	See <a href="#">Read a Manual Trigger: URI Parameters</a> , bel
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Trigger Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>See <a href="#">Trigger Properties: Manual Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger-Related Records Properties</a>:</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">Manual Trigger: XML and JSON Ex</a>)</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43"</li> </ul>

### Read a Manual Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

### Manual Trigger: XML and JSON Examples


retainSysIds and version properties are specified as attributes in the <trigger type> elem

Examples	XML
Example for Trigger	<p data-bbox="1535 212 1612 240">XML</p> <pre data-bbox="1577 261 1969 873"> &lt;triggerManual retainSysIds=" ="1"&gt;   &lt;variables /&gt;   &lt;calendar&gt;System Defa   &lt;description /&gt;   &lt;name&gt; test manual tr   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;bus service 1   &lt;/opswiseGroups&gt;   &lt;rdExcludeBackup&gt;true /rdExcludeBackup&gt;   &lt;retentionDuration&gt;1&lt; /retentionDuration&gt;   &lt;retentionDurationPur /retentionDurationPurge&gt;   &lt;retentionDurationUni /retentionDurationUnit&gt;   &lt;sysId &gt;0fc6b7d9c0a801c9017b6c27c259   &lt;tasks&gt;     &lt;task&gt;Sleep 30&lt;/task&gt;   &lt;/tasks&gt; &lt;/triggerManual&gt; </pre>
Example for Trigger-Related Records	<p data-bbox="1535 922 1612 950">XML</p> <pre data-bbox="1577 971 1969 1206"> &lt;variables&gt;   &lt;variable&gt;     &lt;description /&gt;     &lt;name&gt;testVar&lt;/name&gt;     &lt;value&gt;value&lt;/value&gt;   &lt;/variable&gt; &lt;/variables&gt; </pre>


### Properties

#### Trigger Properties: All Triggers

Property	UI Field Name	Description
----------	---------------	-------------


action	Action	For all trigger types except Manual and 1 non-business day or holiday (see situa
calendar	Calendar	Calendar that defines the business days, that determine the run dates for the task  The Calendar will be used to verify any C restrictionNoun.
description	Description	Description of this trigger.
excludeRelated	n/a	For Modify Trigger web services; specific exclude related records from the update, request.  <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;">  <b>Note</b>                      In XML web services, exclu as an attribute in the &lt;trigger                 </div>
forecast	Forecast	For Cron, Temporary, and Time triggers trigger will be satisfied for the next numb <a href="#">Forecast Period In Days</a> Universal Contr Controller writes the forecasting entries t
name	Name	Name used within the Controller to identi

opswiseGroups	Member of Business Services	<p>List of <a href="#">Business Service(s)</a> that this trigger applies to.</p> <p><b>XML</b></p> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;test&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <p><b>JSON</b></p> <pre>"opswiseGroups": [   "test" ]</pre>
rdExcludeBackup	Exclude Backup	Set only if <code>retentionDurationPurge</code> whether qualifying task instances can be being purged by retention duration.
restriction	Special Restriction	Indication of whether or not you want to use restrictions that tell the Controller how to handle exceptions when a restriction is satisfied on a holiday or non-business day and/or complex restrictions. For example <code>simpleRestriction</code> that disables the holiday identified in the calendar and/or <code>restrictionComplex</code> that disables the trigger on the last business day of the month.
restrictionAdjective	Restriction Adjective	Type of selection for <code>restrictionNoun</code> .
restrictionComplex	Complex Restriction	Set only if <code>restriction</code> is true; Set of more situations when this trigger should be applied in conjunction with <code>restrictionMode</code> , <code>restrictionNoun</code> , and <code>restrictionAdjective</code> . <code>restrictionComplex</code> can specify that you do not want to satisfy a restriction on a specific day of the year or the first day of each month.

restrictionMode	Restriction Mode	Set only if <code>restrictionSimple</code> is true want to use <code>restrictionSimple</code> - and -related values.
restrictionNoun	Restriction Noun	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name example:</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restrictionNoun&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div data-bbox="1633 946 1971 1076" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>

restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the Period. For example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomDayPeriod2&lt;/restrictionQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div data-bbox="1633 800 1974 930" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionSimple	Simple Restriction	Set only if <code>restriction</code> is true; Specific based on a specific situation.
retainSysIds	n/a	<p>Specification for whether or not the web service property.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> request/response, <code>sysId</code> will be by the Controller.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> request/response, <code>sysId</code> will be by the Controller.</li> </ul> <div data-bbox="1633 1312 1974 1442" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is an attribute in the <code>&lt;trigger&gt;</code> element.</p> </div>

retentionDuration	Retention Duration	Set only if retentionDurationPurge duration for the selected retentionDuration task instances can qualify for purge.
retentionDurationPurge	Purge By Retention Duration	Specification for whether triggered task is retention duration.
retentionDurationUnit	Retention Duration Unit	Set only if retentionDurationPurge unit.
simulationOption	Simulate	For Cron, Temporary, and Time triggers <a href="#">Enable Trigger Simulation</a> Universal Controller specification for whether or not to simulate triggers are eligible to fire. (If simulation scheduled launch of the task by the trigger)
situation	Situation	Type of day that causes the Controller to
skipActive	Skip Trigger if Active	Indication for whether or not the Controller specified task(s) if the previous run has run (that is, it is still active).
skipCount	Skip Count	Specification that the Controller should skip is triggered.
sysId	n/a	System ID field in the database for this trigger

tasks	Tasks	<p>Name of the task(s) being triggered when</p> <p><b>XML</b></p> <pre>&lt;tasks&gt;   &lt;task&gt;Opwise - Demo &lt;/tasks&gt;</pre> <p><b>JSON</b></p> <pre>"tasks": [ "Opwise - Demo</pre>
timeZone	Time Zone	Name of the time zone that will be applied to trigger.
version	n/a	<p>For Read and List web services; specific values are listed.</p> <div style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version is an attribute in the &lt;trigger&gt; element.</p> </div>

**Trigger Properties: Manual Trigger**

(There are no Manual Trigger-specific trigger properties.)

**Trigger-Related Records Properties: Variables**

Property	UI Field Name	Description	Specifications	Required
description	Description	Description of the variable.		N
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y



## Task Monitor Trigger Web Services

- Overview
- Create a Task Monitor Trigger
- Modify a Task Monitor Trigger
- Read a Task Monitor Trigger
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  - Trigger Properties: Task Monitor Trigger
  - Trigger-Related Records Properties: Variables

### Overview

Universal Controller supports the following RESTful-based web services for Task Monitor

- Create a Task Monitor Trigger
- Modify a Task Monitor Trigger
- Read a Task Monitor Trigger

Formatting specifications for each web service, including details about parameter require



#### Note

For information on Trigger web services that are applicable to all trigger type

- Delete a Trigger
- Enable/Disable a Trigger
- List Triggers
- Trigger a Task

### Create a Task Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	POST
Description	Creates a new Task Monitor Trigger.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Task Monitor Trigger: XML and JSON Example</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Task Monitor Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>.</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;trigger type&gt; tr</li> </ul>

### Modify a Task Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	PUT
Description	Modifies the trigger specified by the sysId in the request. To modify Task Monitor Trigger properties without
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Task Monitor Trigger: XML and JSON Example</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Task Monitor Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>.</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the &lt;trigger type&gt; t</li> </ul>

### Read a Task Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	GET
Description	Retrieves information for the specified trigger
URI Parameters	See <a href="#">Read a Task Monitor Trigger: URI Parameter</a>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Trigger Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>See <a href="#">Trigger Properties: Task Monitor Trig</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">Task Monitor Trigger: XML and JSC</a>)</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43"</li> </ul>

### Read a Task Monitor Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

### Task Monitor Trigger: XML and JSON Examples

retainSysIds and version properties are specified as attributes in the <trigger type> elem

Examples	XML
----------	-----

Example for Trigger

XML

```

<triggerTm retainSysIds="true" v
  <variables />
  <action>Do Not Trigger</a
  <calendar>System Default<
  <description>description<
  <name>test task monitor t
  <opswiseGroups>
    <opswiseGroup>bus s
  1</opswiseGroup>
  </opswiseGroups>
  <rdExcludeBackup>true</rd
  <restriction>false</restr
  <restrictionAdjective>Eve
  /restrictionAdjective>
  <restrictionComplex>false
  /restrictionComplex>
  <restrictionMode>Or</rest
  <restrictionNoun>Day</res
  <restrictionNthAmount />
  <restrictionQualifier>Yea
  /restrictionQualifier>
  <restrictionSimple>false<
  /restrictionSimple>
  <retentionDuration>1</ret
  <retentionDurationPurge>t
  /retentionDurationPurge>
  <retentionDurationUnit>Da
  /retentionDurationUnit>
  <situation>Holiday</situa
  <skipCondition>None</skip
  <skipCount>0</skipCount>
  <sysId>0fc6b7d9c0a801c901
  /sysId>
  <tasks>
    <task>Sleep 30</task
  </tasks>
  <timeZone />
  <enabledEnd>00:00</enable
  <enabledStart>00:00</enak
  <restrictedTimes>false</r
  <taskMonitor>Opswise - Wi
  Variable Monitor</taskMonitor>
</triggerTm>

```

<p>Example for Trigger-Related Records</p>	<p>XML</p> <pre>&lt;variables&gt;   &lt;variable&gt;     &lt;description /&gt;     &lt;name&gt;testVar&lt;/name&gt;     &lt;value&gt;value&lt;/value&gt;   &lt;/variable&gt; &lt;/variables&gt;</pre>
--	---

## Properties

### Trigger Properties: All Triggers



Property	UI Field Name	Description
action	Action	For all trigger types except Manual and T non-business day or holiday (see situa

calendar	Calendar	<p>Calendar that defines the business days, days that determine the run dates for the trigger.</p> <p>The Calendar will be used to verify any C restrictionNoun.</p>
description	Description	Description of this trigger.
excludeRelated	n/a	<p>For Modify Trigger web services; specific exclude related records from the update, the request.</p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, exclu as an attribute in the &lt;trigger</p> </div>
forecast	Forecast	<p>For Cron, Temporary, and Time triggers trigger will be satisfied for the next numb Forecast Period In Days Universal Contr Controller writes the forecasting entries t</p>
name	Name	Name used within the Controller to identi
opwiseGroups	Member of Business Services	<p>List of Business Service(s) that this trigg</p> <p><b>XML</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> &lt;opwiseGroups&gt;   &lt;opwiseGroup&gt;test&lt; &lt;/opwiseGroups&gt;</pre> <p><b>JSON</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> "opwiseGroups": [   "test " ]</pre>
rdExcludeBackup	Exclude Backup	<p>Set only if retentionDurationPurge whether qualifying task instances can be when being purged by retention duration</p>


restriction	Special Restriction	Indication of whether or not you want to : that tell the Controller how to handle exc trigger is satisfied on a holiday or non-bu simple and/or complex restrictions. For e simpleRestriction that disables the holiday identified in the calendar and/or : disables the trigger on the last business
restrictionAdjective	Restriction Adjective	Type of selection for restrictionNoun
restrictionComplex	Complex Restriction	Set only if restriction is true; Set of p or more situations when this trigger shou conjunction with restrictionMode, re restrictionNoun, and restriction you can specify that you do not want to s business day of the year or the first day
restrictionMode	Restriction Mode	Set only if restrictionSimple is true want to use restrictionSimple- and -related values.

restrictionNoun	Restriction Noun	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name example:</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restricti</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionNthAmount	Restriction Nth Amount	Set only if restrictionAdjective is



restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the Period. For example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomDayPeriod2&lt;/restrictionQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div data-bbox="1633 800 1971 930" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionSimple	Simple Restriction	<p>Set only if <code>restriction</code> is true; Specifies restriction based on a specific situation.</p>
retainSysIds	n/a	<p>Specification for whether or not the web service will retain system IDs as a property.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> request/response, <code>sysId</code> will be retained.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> request/response, <code>sysId</code> will be autogenerated by the Controller.</li> </ul> <div data-bbox="1633 1287 1971 1417" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is used as an attribute in the <code>&lt;trigger&gt;</code> element.</p> </div>

retentionDuration	Retention Duration	Set only if retentionDurationPurge retention duration for the selected reter triggered task instances can qualify for p
retentionDurationPurge	Purge By Retention Duration	Specification for whether triggered task i retention duration.
retentionDurationUnit	Retention Duration Unit	Set only if retentionDurationPurge duration unit.
simulationOption	Simulate	For Cron, Temporary, and Time triggers the <a href="#">Enable Trigger Simulation</a> Universal specification for whether or not to simula triggers are eligible to fire. (If simulati the scheduled launch of the task by the t
situation	Situation	Type of day that causes the Controller to
skipActive	Skip Trigger if Active	<b>Deprecated.</b> Indication for whether or nc the next run of the specified task(s) if the a Complete status (that is, it is still active
skipCondition	Task Launch Skip Condition	Controls when launching a task for the tr  <div style="background-color: #ffffcc; padding: 5px;"><b>Note</b> When reading a Trigger, both skipCondition are return creating/updating a Trigger, used if present. If skipConc skipActive is used. If both skipCondition are preser set to true only if skipCond.</div>
skipCount	Skip Count	Specification that the Controller should s task is triggered.
sysId	n/a	System ID field in the database for this tr

tasks	Tasks	<p>Name of the task(s) being triggered when</p> <p><b>XML</b></p> <pre data-bbox="1633 232 1969 363">&lt;tasks&gt;   &lt;task&gt;Opwise - Demo &lt;/tasks&gt;</pre> <p><b>JSON</b></p> <pre data-bbox="1633 461 1969 548">"tasks": [ "Opwise - Demo</pre>
timeZone	Time Zone	<p>Name of the time zone that will be applied to the trigger.</p>
version	n/a	<p>For Read and List web services; specific or listed.</p> <div data-bbox="1633 756 1969 886" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version attribute in the &lt;trigger&gt; element</p> </div>

**Trigger Properties: Task Monitor Trigger**

Property	UI Field Name	Description
enabledEnd	Enabled End	End time of the period during which the trigger s
enabledStart	Enabled Start	Start time of the period during which the trigger s
restrictedTimes	Restrict Times	Indication that the trigger is active only during the and enabledEnd.
taskMonitor	Task Monitor	Task Monitor task being executed.

**Trigger-Related Records Properties: Variables**

Property	UI Field Name	Description	Specifications	Req
description	Description	Description of the variable.		N
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y

## Temporary Trigger Web Services

- Overview
- Create a Temporary Trigger
- Modify a Temporary Trigger
- Read a Temporary Trigger
  - Read a Temporary Trigger: URI Parameters
- Temporary Trigger: XML and JSON Examples
- Properties
  - Trigger Properties: All Triggers
  - Trigger Properties: Temporary Trigger
  - Trigger-Related Records Properties: Variables

### Overview

Universal Controller supports the following RESTful-based web services for Temporary

- Create a Temporary Trigger
- Modify a Temporary Trigger
- Read a Temporary Trigger

Formatting specifications for each web service, including details about parameter require



#### Note

For information on Trigger web services that are applicable to all trigger type

- Delete a Trigger
- Enable/Disable a Trigger
- List Triggers
- Trigger a Task

### Create a Temporary Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	POST
Description	Creates a new Temporary Trigger.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Temporary Trigger: XML and JSON Example</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Temporary Trigg</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;trigger type&gt; tr</li> </ul>

### Modify a Temporary Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	PUT
Description	Modifies the trigger specified by the sysId in the r To modify Temporary Trigger properties without n
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Temporary Trigger: XML and JSON Example</a>
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Temporary Trigg</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the &lt;trigger type&gt; t</li> </ul>

### Read a Temporary Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	GET
Description	Retrieves information for the specified trigger
URI Parameters	See <a href="#">Read a Temporary Trigger: URI Parameters</a> ,
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Trigger Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>See <a href="#">Trigger Properties: Temporary Trigg</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">Temporary Trigger: XML and JSON</a>)</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43"</li> </ul>

### Read a Temporary Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

### Temporary Trigger: XML and JSON Examples

retainSysIds and version properties are specified as attributes in the <trigger type> elem

Examples	XML
----------	-----

Example for Trigger

XML

```
<triggerTemp retainSysIds="tr
version="1">
  <variables />
  <action>Do Not Trigger
  <calendar>System Defau
/calendar>
  <description>Run task
the future</description>
  <forecast>>false</forec
  <name>Opswise - Future
/name>
  <opswiseGroups />
  <rdExcludeBackup>>true<
/rdExcludeBackup>
  <retentionDuration>1<
/retentionDuration>
  <retentionDurationPurg
/retentionDurationPurge>
  <retentionDurationUnit
/retentionDurationUnit>
  <simulationOption>-- S
Default --</simulationOption>
  <situation>Holiday</si
  <skipCondition>None<
/skipCondition>
  <skipCount>0</skipCoun
  <sysId
>0fc6b7d9c0a801c9017b6c27c259
/sysId>
  <tasks>
    <task>Opswise -
  </tasks>
  <tdate>2015-10-13</tda
  <timeZone />
  <ttime>09:15</ttime>
</triggerTemp>
```

Example for Trigger-Related Records

XML


```
<variables>
  <variable>
    <description />
    <name>testVar</name>
    <value>value</value>
  </variable>
</variables>
```




## Properties


### Trigger Properties: All Triggers


Property	UI Field Name	Description
action	Action	For all trigger types except Manual and 1 non-business day or holiday (see situa
calendar	Calendar	Calendar that defines the business days, that determine the run dates for the task  The Calendar will be used to verify any C restrictionNoun.
description	Description	Description of this trigger.


excludeRelated	n/a	<p>For Modify Trigger web services; specific exclude related records from the update, request.</p> <div style="background-color: #ffffcc; padding: 5px;">  <b>Note</b>                      In XML web services, exclude as an attribute in the &lt;trigger                 </div>
forecast	Forecast	<p>For Cron, Temporary, and Time triggers trigger will be satisfied for the next number of days. <a href="#">Forecast Period In Days</a> Universal Controller writes the forecasting entries to</p>
name	Name	<p>Name used within the Controller to identify the trigger.</p>
opswiseGroups	Member of Business Services	<p>List of <a href="#">Business Service(s)</a> that this trigger belongs to.</p> <p><b>XML</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;">                     &lt;opswiseGroups&gt;                       &lt;opswiseGroup&gt;test&lt;/opswiseGroup&gt;                     &lt;/opswiseGroups&gt;                 </pre> <p><b>JSON</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;">                     "opswiseGroups": [                       "test"                     ]                 </pre>
rdExcludeBackup	Exclude Backup	<p>Set only if <code>retentionDurationPurge</code> is set to true. Indicates whether qualifying task instances can be being purged by retention duration.</p>
restriction	Special Restriction	<p>Indication of whether or not you want to use a special restriction that tell the Controller how to handle exceptions on a holiday or non-business day and/or complex restrictions. For example <code>simpleRestriction</code> that disables the trigger on the last business day of the month and/or <code>holidayRestriction</code> that disables the trigger on the last business day of the month.</p>

restrictionAdjective	Restriction Adjective	Type of selection for restrictionNoun
restrictionComplex	Complex Restriction	Set only if restriction is true; Set of more situations when this trigger should conjunction with restrictionMode, restrictionNoun, and restriction can specify that you do not want to satisfy day of the year or the first day of each m
restrictionMode	Restriction Mode	Set only if restrictionSimple is true want to use restrictionSimple- and -related values.

<p>restrictionNoun</p>	<p>Restriction Noun</p>	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name example:</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restricti</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div data-bbox="1633 748 1974 881" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b>          The Calendar for the trigger Day references.</p> </div>
------------------------	-------------------------	--

restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the Period. For example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomDayPeriod2&lt;/restrictionQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionSimple	Simple Restriction	<p>Set only if <code>restriction</code> is true; Specific based on a specific situation.</p>
retainSysIds	n/a	<p>Specification for whether or not the web service property.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> request/response, <code>sysId</code> will be by the Controller.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> request/response, <code>sysId</code> will be by the Controller.</li> </ul> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is an attribute in the <code>&lt;trigger&gt;</code> element.</p> </div>

retentionDuration	Retention Duration	Set only if retentionDurationPurge duration for the selected retentionDuration task instances can qualify for purge.
retentionDurationPurge	Purge By Retention Duration	Specification for whether triggered task is retention duration.
retentionDurationUnit	Retention Duration Unit	Set only if retentionDurationPurge unit.
simulationOption	Simulate	For Cron, Temporary, and Time triggers <a href="#">Enable Trigger Simulation</a> Universal Controller specification for whether or not to simulate triggers are eligible to fire. (If simulation scheduled launch of the task by the trigger)
situation	Situation	Type of day that causes the Controller to
skipActive	Skip Trigger if Active	<b>Deprecated.</b> Indication for whether or not next run of the specified task(s) if the previous Complete status (that is, it is still active).
skipCondition	Task Launch Skip Condition	Controls when launching a task for the trigger  <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> When reading a Trigger, both skipCondition are returned a Trigger, skipCondition skipCondition is not present. If both skipActive and skip skipActive can be set to true skipCondition is Active (</p> </div>
skipCount	Skip Count	Specification that the Controller should skip is triggered.
sysId	n/a	System ID field in the database for this trigger

tasks	Tasks	<p>Name of the task(s) being triggered when</p> <p><b>XML</b></p> <pre>&lt;tasks&gt;   &lt;task&gt;Opwise - Dem &lt;/tasks&gt;</pre> <p><b>JSON</b></p> <pre>"tasks": [ "Opwise - Demo</pre>
timeZone	Time Zone	Name of the time zone that will be applied to the trigger.
version	n/a	<p>For Read and List web services; specific version is listed.</p> <div style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version is a required attribute in the &lt;trigger&gt; element.</p> </div>

**Trigger Properties: Temporary Trigger**

Property	UI Field Name	Description	Specifications
tdate	Date	Date when the trigger will be run.	Format: yyyy-mm-dd
ttime	Time	Time when the trigger will be run.	Format: hh:mm

**Trigger-Related Records Properties: Variables**

Property	UI Field Name	Description	Specifications	Required
description	Description	Description of the variable.		N
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y

## Time Trigger Web Services

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- Create a Time Trigger
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### Overview

Universal Controller supports the following RESTful-based web services for Time Trigger

- [Create a Time Trigger](#)
- [Modify a Time Trigger](#)
- [Read a Time Trigger](#)

Formatting specifications for each web service, including details about parameter require



**Note**

For information on Trigger web services that are applicable to all trigger type

- [Delete a Trigger](#)
- [Enable/Disable a Trigger](#)
- [List Triggers](#)
- [Trigger a Task](#)

### Create a Time Trigger



	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	POST
Description	Creates a new Time trigger.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Time Trigger: XML and JSON Examples</a> .
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Time Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>.</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;trigger type&gt; tr</li> </ul>

### Modify a Time Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	PUT
Description	Modifies the trigger specified by the sysId in the r To modify Time Trigger properties without modifyi
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Time Trigger: XML and JSON Examples</a> .
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Time Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>.</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the &lt;trigger type&gt; t</li> </ul>

### Read a Time Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	GET
Description	Retrieves information for the specified trigger
URI Parameters	See <a href="#">Read a Time Trigger: URI Parameters</a> , below
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Trigger Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>See <a href="#">Trigger Properties: Time Trigger</a>.</li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger-Related Records Properties</a>:</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">Time Trigger: XML and JSON Exam</a>)</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43"</li> </ul>

### Read a Time Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

### Time Trigger: XML and JSON Examples

retainSysIds and version properties are specified as attributes in the <trigger type> elem

Examples	XML
Example for Trigger	<p>XML</p> <div style="border: 1px solid #ccc; height: 40px; width: 100%;"></div>

```

<triggerTime retainSysIds="tr
version="1">
  <variables />
  <action>Do Not Trigger
/action>
  <adjustInterval>true<
/adjustInterval>
  <adjustmentAmount>1<
/adjustmentAmount>
  <adjustmentType>Day<
/adjustmentType>
  <calendar>test calenda
/calendar>
  <dateAdjective>Every<
/dateAdjective>
  <dateAdjustment>None<
/dateAdjustment>
  <dateNoun>Saturday1<
/dateNoun>
  <dateQualifier>Year<
/dateQualifier>
  <dayInterval>2<
/dayInterval>
  <dayStyle>Complex<
/dayStyle>
  <description />
  <enabledEnd>00:00<
/enabledEnd>
  <enabledStart>00:00<
/enabledStart>
  <forecast>>false</forec
<fri>>false</fri>
  <intervalStartingDate
>2015-06-17</intervalStarting
<mon>>false</mon>
  <name>test special day
/name>
  <nthAmount>5</nthAmoun
<opwiseGroups />
  <rdExcludeBackup>true<
/rdExcludeBackup>
  <restrictedTimes>>false
/restrictedTimes>
  <restriction>>false<
/restriction>
  <restrictionAdjective
>Every</restrictionAdjective>
  <restrictionComplex>fa
/restrictionComplex>
  <restrictionMode>Or<
/restrictionMode>
  <restrictionNoun>Day<
/restrictionNoun>
  <restrictionNthAmount
  <restrictionQualifier
>Year</restrictionQualifier>
  <restrictionSimple>fal

```


```
/restrictionSimple>
  <retentionDuration>1<
/retentionDuration>
  <retentionDurationPurge
>true</retentionDurationPurge
  <retentionDurationUnit>
>Days</retentionDurationUnit>
  <sat>>false</sat>
  <simpleDateType>Daily<
/simpleDateType>
  <simulationOption>--
System Default --<
/simulationOption>
  <situation>Holiday<
/situation>
  <skipCondition>None<
/skipCondition>
  <skipCount>0</skipCount>
  <startTimeEnable>>false
/sstartTimeEnable>
  <startingAt>*:00<
/sstartingAt>
  <sun>>false</sun>
  <sysId>
>0fc6b7d9c0a801c9017b6c27c259
/sysId>
  <tasks>
    <task>Sleep 30</
  </tasks>
  <thu>>false</thu>
  <time>00:00</time>
  <timeInterval />
  <timeIntervalUnits>Hour
/timeIntervalUnits>
  <timeStyle>Absolute<
/timeStyle>
  <timeZone />
  <tue>>false</tue>
```

	<pre>&lt;wed&gt;false&lt;/wed&gt; &lt;/triggerTime&gt;</pre>
Example for Trigger-Related Records	<p>XML</p> <pre>&lt;variables&gt;   &lt;variable&gt;     &lt;description /&gt;     &lt;name&gt;testVar&lt;/name&gt;     &lt;value&gt;value&lt;/value&gt;   &lt;/variable&gt; &lt;/variables&gt;</pre>


## Properties

### Trigger Properties: All Triggers



Property	UI Field Name	Description
----------	---------------	-------------

action	Action	For all trigger types except Manual and 1 non-business day or holiday (see situa
calendar	Calendar	Calendar that defines the business days, days that determine the run dates for the trigger.  The Calendar will be used to verify any C restrictionNoun and dateNoun.
description	Description	Description of this trigger.
excludeRelated	n/a	For Modify Trigger web services; specific exclude related records from the update, the request.  <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, exclu as an attribute in the &lt;trigger</p> </div>
forecast	Forecast	For Cron, Temporary, and Time triggers trigger will be satisfied for the next numb Forecast Period In Days Universal Contr Controller writes the forecasting entries t
name	Name	Name used within the Controller to identi


opswiseGroups	Member of Business Services	<p>List of <a href="#">Business Service(s)</a> that this trigger is associated with.</p> <p><b>XML</b></p> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;test&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <p><b>JSON</b></p> <pre>"opswiseGroups": [   "test" ]</pre>
rdExcludeBackup	Exclude Backup	Set only if <code>retentionDurationPurge</code> whether qualifying task instances can be when being purged by retention duration.
restriction	Special Restriction	Indication of whether or not you want to use restrictions that tell the Controller how to handle execution when a trigger is satisfied on a holiday or non-business day. For simple and/or complex restrictions. For example, a <code>simpleRestriction</code> that disables the holiday identified in the calendar and/or a <code>complexRestriction</code> that disables the trigger on the last business day of the year.
restrictionAdjective	Restriction Adjective	Type of selection for <code>restrictionNoun</code> .
restrictionComplex	Complex Restriction	Set only if <code>restriction</code> is true; Set of two or more situations when this trigger should execute in conjunction with <code>restrictionMode</code> , <code>restrictionNoun</code> , and <code>restrictionAdjective</code> . You can specify that you do not want to execute on the last business day of the year or the first day of the year.

restrictionMode	Restriction Mode	Set only if <code>restrictionSimple</code> is true want to use <code>restrictionSimple-</code> and <code>-related</code> values.
restrictionNoun	Restriction Noun	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name example:</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restrictionNoun&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div data-bbox="1633 919 1976 1049" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionNthAmount	Restriction Nth Amount	Set only if <code>restrictionAdjective</code> is



restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the Period. For example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomDayPeriod2&lt;/restrictionQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionSimple	Simple Restriction	<p>Set only if <code>restriction</code> is true; Specifies restriction based on a specific situation.</p>
retainSysIds	n/a	<p>Specification for whether or not the web service retains system IDs.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> request/response, <code>sysId</code> will be retained.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> request/response, <code>sysId</code> will be autogenerated by the Controller.</li> </ul> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is used as an attribute in the <code>&lt;trigger&gt;</code> element.</p> </div>


retentionDuration	Retention Duration	Set only if retentionDurationPurge retention duration for the selected reter triggered task instances can qualify for p
retentionDurationPurge	Purge By Retention Duration	Specification for whether triggered task i retention duration.
retentionDurationUnit	Retention Duration Unit	Set only if retentionDurationPurge duration unit.
simulationOption	Simulate	For Cron, Temporary, and Time triggers the <a href="#">Enable Trigger Simulation</a> Universal specification for whether or not to simula triggers are eligible to fire. (If simulati the scheduled launch of the task by the t
situation	Situation	Type of day that causes the Controller to
skipActive	Skip Trigger if Active	<b>Deprecated.</b> Indication for whether or nc the next run of the specified task(s) if the a Complete status (that is, it is still active
skipCondition	Task Launch Skip Condition	Controls when launching a task for the tr  <div style="background-color: #ffffcc; padding: 5px;"><b>Note</b> When reading a Trigger, both skipCondition are return creating/updating a Trigger, used if present. If skipConc skipActive is used. If both skipCondition are preser set to true only if skipCond.</div>
skipCount	Skip Count	Specification that the Controller should s task is triggered.
sysId	n/a	System ID field in the database for this tr


tasks	Tasks	<p>Name of the task(s) being triggered when</p> <p><b>XML</b></p> <pre>&lt;tasks&gt;   &lt;task&gt;Opwise - Demo &lt;/tasks&gt;</pre> <p><b>JSON</b></p> <pre>"tasks": [ "Opwise - Demo</pre>
timeZone	Time Zone	Name of the time zone that will be applied by the trigger.
version	n/a	<p>For Read and List web services; specific or listed.</p> <div style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version attribute in the &lt;trigger&gt; element</p> </div>

**Trigger Properties: Time Trigger**

Property	UI Field Name	Description
adjustInterval	Adjust Interval To Enable Start	Set only if restrictedTimes is true; Specifies when to begin at the enabledStart (true) or base
adjustmentAmount	Adjustment Amount	Set only if dayStyle is Complex; Number to adjust your date setting.

adjustmentType	Adjustment Type	Set only if dayStyle is Complex; Type of setting.
dateAdjective	Date Adjective	Which in a series of days to select. Used in dateQualifier. For example, to specify month," select dateAdjective = Nth, da dateQualifier = Month, and nthAmour
dateAdjustment	Date Adjustment	Set only if dayStyle is Complex; Specific setting by a less or plus number of Days or specify the 2nd to last day of the month (la select dateAdjective = Last, dateNour Month, dateAdjustment = Less, adjust adjustmentType = Day.

dateNoun	Date Noun	<p>Type of day you want to select. Used in <code>calendar</code> and <code>dateQualifier</code>. For example, to specify month, select <code>dateAdjective = Nth</code>, <code>dateQualifier = Month</code>, and <code>nthAmount</code>.</p> <p>To specify a <a href="#">Custom Day</a>, use the name of</p> <p><b>XML</b>  <code>&lt;dateNoun&gt;CustomDay1&lt;/dateNoun&gt;</code></p> <p><b>JSON</b>  <pre>"dateNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the <code>local</code></p> <p><b>XML</b>  <code>&lt;dateNoun local="true"&gt;CustomDay2&lt;/dateNoun&gt;</code></p> <p><b>JSON</b>  <pre>"dateNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div data-bbox="1612 805 1974 933" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b>  The Calendar for the trigger is references.</p> </div>
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dateQualifier	Date Qualifier	<p>Period for your date selection. Used in conjunction with dateAdjective. For example, to specify month, select dateAdjective = Nth, dateQualifier = Month, and nthAmount = 1.</p> <p>To specify a Custom Day Period, use the following XML. For example:</p> <p><b>XML</b>  <code>&lt;dateQualifier&gt;CustomDayPeriod1&lt;/dateQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"dateQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a Local Custom Day Period, use the following XML. For example:</p> <p><b>XML</b>  <code>&lt;dateQualifier local="true"&gt;CustomDayPeriod1&lt;/dateQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"dateQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> The Calendar for the trigger is referenced.</p> </div>
dayInterval	Day Interval	Interval (number of days) at which this trigger will be run.
dayStyle	Day Style	Indication of when this trigger will be run.
enabledEnd	Enabled End	End time of the period during which the trigger is enabled.

enabledStart	Enabled Start	Start time of the period during which the tri
fri	Friday	Set only if simpleDateType is Specific D will be run on Friday.
intervalStartingDate	Interval Start	First day of the interval on which this trigge
mon	Monday	Set only if simpleDateType is Specific D will be run on Monday.
nthAmount	Nth Amount	Value of N.
restrictedTimes	Restrict Times	If timeStyle is Interval; Indication that the period specified by enabledStart and ei
sat	Saturday	Set only if simpleDateType is Specific D will be run on Saturday.
simpleDateType	n/a	Indication of when this trigger will be run.
startingAt	Initial Time Offset	Set only if timeStyle is Interval; Starting hour.
startTimeEnable	Enable Offset	Set only if timeStyle is Interval; Indication (in startingAt) a starting time, in minute trigger to run.
sun	Sunday	Set only if simpleDateType is Specific D will be run on Sunday.
thu	Thursday	Set only if simpleDateType is Specific D will be run on Thursday.

time	Time	Time when the trigger will be run.
timeInterval	Time Interval	Number of timeIntervalUnits.
timeIntervalUnits	Time Interval Units	Type of time interval.
timeStyle	Time Style	Indicates whether this trigger is for a specif
tue	Tuesday	Set only if simpleDateType is Specific D will be run on Tuesday.
wed	Wednesday	Set only if simpleDateType is Specific D will be run on Wednesday.

**Trigger-Related Records Properties: Variables**

Property	UI Field Name	Description	Specifications	Req
description	Description	Description of the variable.		N
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y

**Modify Time of Time Trigger**



	Description
URI	<a href="http://host_name/opswise/resources/trigger/ops-trigger-">http://host_name/opswise/resources/trigger/ops-trigger-</a>
HTTP Method	POST
Description	Modifies the <a href="#">Time</a> field of a <a href="#">Time Trigger</a> with the <a href="#">Time</a>
Example URI	<a href="http://localhost:8080/opswise/resources/trigger/ops-trig">http://localhost:8080/opswise/resources/trigger/ops-trig</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml
Produces Content-Type	application/xml
Example Request	See <a href="#">Modify Time of Time Trigger: XML and JSON Exar</a>
Example Request Properties	See <a href="#">Modify Time of Time Trigger: XML Request Proper</a>
Example Response	See <a href="#">Modify Time of Time Trigger: XML and JSON Exar</a>

**Modify Time of Time Trigger:XML and JSON Examples**

Examples	XML
Example Request	<p>XML</p> <pre>&lt;trigger&gt;   &lt;id&gt;410d6c0bc0a801c901838d8ac43b3279&lt;/id&gt;   &lt;time&gt;21:00&lt;/time&gt; &lt;/trigger&gt;  or  &lt;trigger&gt;   &lt;name&gt;Test Trigger&lt;/name&gt;   &lt;time&gt;21:00&lt;/time&gt; &lt;/trigger&gt;</pre>
Example Response	<p>XML</p> <pre>&lt;command-response&gt;   &lt;type&gt;set_trigger_time&lt;/type&gt;   &lt;success&gt;&gt;true&lt;/success&gt;   &lt;info&gt;Successfully set time for trigger "T Trigger"&lt;/info&gt;   &lt;errors&gt;&lt;/errors&gt; &lt;/command-response&gt;</pre>

### Modify Time of Time Trigger: Request Properties

Property	UI Field Name	Description
id	n/a	sys_id used within the Controller to identify this trigger.
name	Name	Name of the trigger.
time	Time	Time that the trigger will be run.

### List Trigger Qualifying Times

	Description
URI	<a href="http://host_name/opswise/resources/trigger/qualifyingtimes">http://host_name/opswise/resources/trigger/qualifyingtimes</a>
HTTP Method	GET
Description	Lists Time trigger qualifying times from a specific starting date.
URI Parameters	See <a href="#">List Trigger Qualifying Times: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resources/trigger/qualifyingtimes">http://localhost:8080/opswise/resources/trigger/qualifyingtimes</a></li> <li>• <a href="http://localhost:8080/opswise/resources/trigger/qualifyingtimes">http://localhost:8080/opswise/resources/trigger/qualifyingtimes</a></li> </ul>
Authentication	HTTP Basic
Example XML Response	<pre> &lt;qualifyingTimes triggerTimeZone="Africa, &lt;qualifyingTime skip="true"&gt;   &lt;triggerTimeZone&gt;Monday, January 01, 20   &lt;userTimeZone&gt;Monday, January 01, 2018 &lt;/qualifyingTime&gt; &lt;qualifyingTime skip="true"&gt;   &lt;triggerTimeZone&gt;Tuesday, January 01, 2   &lt;userTimeZone&gt;Tuesday, January 01, 2019 &lt;/qualifyingTime&gt; &lt;qualifyingTime skip="true"&gt;   &lt;triggerTimeZone&gt;Wednesday, January 01,   &lt;userTimeZone&gt;Wednesday, January 01, 20 &lt;/qualifyingTime&gt; &lt;qualifyingTime&gt;   &lt;triggerTimeZone&gt;Friday, January 01, 20   &lt;userTimeZone&gt;Friday, January 01, 2021 &lt;/qualifyingTime&gt; ... &lt;/qualifyingTimes&gt; </pre>

### List Trigger Qualifying Times: URI Parameters

Name	Description	Specifications
triggerid	Unique ID for a trigger.	
triggername	Name used within the Controller to identify a trigger.	Maximum 40 a
count	Number of qualifying events to list.	Maximum is 10
startdate	Starting date of qualifying days to list.	Format: YYYY-

## List Trigger Qualifying Times: XML and JSON Examples

### XML

#### XML

```
<qualifyingTimes triggerTimeZone="Africa/Accra"
userTimeZone="America/Denver">
  <qualifyingTime skip="true">
    <triggerTimeZone>Tuesday, December 19, 2017 18:00:00 MST -07
-0700</triggerTimeZone>
    <userTimeZone>Tuesday, December 19, 2017 18:00:00 MST -0700
-0700</userTimeZone>
  </qualifyingTime>
  <qualifyingTime skip="true">
    <triggerTimeZone>Tuesday, December 19, 2017 19:00:00 MST -07
-0700</triggerTimeZone>
    <userTimeZone>Tuesday, December 19, 2017 19:00:00 MST -0700
-0700</userTimeZone>
  </qualifyingTime>
  ...
</qualifyingTimes>
```

## Variable Monitor Trigger Web Services

- Overview
- Create a Variable Monitor Trigger
- Modify a Variable Monitor Trigger
- Read a Variable Monitor Trigger
  - Read a Variable Monitor Trigger: URI Parameters
- Variable Monitor Trigger: XML and JSON Examples
- Properties
  - Trigger Properties: All Triggers
  - Trigger Properties: Variable Monitor Trigger
  - Trigger-Related Records Properties: Variables

### Overview

Universal Controller supports the following RESTful-based web services for Variable Monitor Triggers:

- Create a Variable Monitor Trigger
- Modify a Variable Monitor Trigger
- Read a Variable Monitor Trigger

Formatting specifications for each web service, including details about parameter requirements, are provided in the following sections.



#### Note

For information on Trigger web services that are applicable to all trigger types, see the following sections:

- Delete a Trigger
- Enable/Disable a Trigger
- List Triggers
- Trigger a Task

### Create a Variable Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	POST
Description	Creates a new Variable Monitor Trigger.
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Variable Monitor Trigger: XML and JSON Ex</a> :
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Variable Monitor</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>:</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the &lt;trigger type&gt; tr</li> </ul>

### Modify a Variable Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	PUT
Description	Modifies the trigger specified by the sysId in the r To modify Variable Monitor Trigger properties with
Example URI	<a href="http://localhost:8080/opswise/resources/trigger">http://localhost:8080/opswise/resources/trigger</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Variable Monitor Trigger: XML and JSON Ex</a> :
Trigger Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>• See <a href="#">Trigger Properties: Variable Monitor</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>• See <a href="#">Trigger-Related Records Properties</a>:</li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the &lt;trigger type&gt; t</li> </ul>

### Read a Variable Monitor Trigger

	Description
URI	<a href="http://host_name/opswise/resources/trigger">http://host_name/opswise/resources/trigger</a>
HTTP Method	GET
Description	Retrieves information for the specified trigger
URI Parameters	See <a href="#">Read a Variable Monitor Trigger: URI Param</a>
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> <li><a href="http://localhost:8080/opswise/resources/t">http://localhost:8080/opswise/resources/t</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Trigger Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger Properties: All Triggers</a>.</li> <li>See <a href="#">Trigger Properties: Variable Monitor</a></li> </ul>
Trigger-Related Record Properties	<ul style="list-style-type: none"> <li>See <a href="#">Trigger-Related Records Properties:</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">Variable Monitor Trigger: XML and</a> .</li> <li>Status 404 /Not Found A trigger with id "f87848b00a0001037f43</li> </ul>

### Read a Variable Monitor Trigger: URI Parameters

Name	Description	Specificatio
triggerid	Unique ID for this trigger.	
triggername	Name used within the Controller to identify this trigger.	Maximum 40

### Variable Monitor Trigger: XML and JSON Examples

retainSysIds and version properties are specified as attributes in the <trigger type> elem

Examples	XML
----------	-----

Example for Trigger

XML

```

<triggerVm retainSysIds="true"
  <variables />
  <action>Do Not Trigger<
  <calendar>System Default<
  <description>descriptio
  <name>test variable mor
  <opswiseGroups>
    <opswiseGroup>bus
  1</opswiseGroup>
  </opswiseGroups>
  <rdExcludeBackup>true</
  <restriction>>false</res
  <restrictionAdjective>E
  /restrictionAdjective>
  <restrictionComplex>fal
  <restrictionMode>Or</re
  <restrictionNoun>Day</r
  <restrictionNthAmount /
  <restrictionQualifier>Y
  /restrictionQualifier>
  <restrictionSimple>fals
  <retentionDuration>1</r
  <retentionDurationPurge
  /retentionDurationPurge>
  <retentionDurationUnit>
  /retentionDurationUnit>
  <situation>Holiday</sit
  <skipCondition>None</sk
  <skipCount>0</skipCount
  <sysId>0fc6b7d9c0a801c9
  >
  <tasks>
    <task>Sleep 30</ta
  </tasks>
  <timeZone />
  <enabledEnd>00:00</enak
  <enabledStart>00:00</er
  <restrictedTimes>>false<
  <taskMonitor>test vm</t
</triggerVm>

```



<p>Example for Trigger-Related Records</p>	<p>XML</p> <pre>&lt;variables&gt;   &lt;variable&gt;     &lt;description /&gt;     &lt;name&gt;testVar&lt;/name&gt;     &lt;value&gt;value&lt;/value&gt;   &lt;/variable&gt; &lt;/variables&gt;</pre>
--	---


## Properties



### Trigger Properties: All Triggers

Property	UI Field Name	Description
action	Action	For all trigger types except Manual and T non-business day or holiday (see situa


calendar	Calendar	<p>Calendar that defines the business days, days that determine the run dates for the trigger.</p> <p>The Calendar will be used to verify any C restrictionNoun.</p>
description	Description	Description of this trigger.
excludeRelated	n/a	<p>For Modify Trigger web services; specific exclude related records from the update, the request.</p> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note</b> In XML web services, <code>exclud</code> as an attribute in the <code>&lt;trigger</code></p> </div>
forecast	Forecast	<p>For Cron, Temporary, and Time triggers trigger will be satisfied for the next numb <a href="#">Forecast Period In Days</a> Universal Contr Controller writes the forecasting entries t</p>
name	Name	Name used within the Controller to identi
opwiseGroups	Member of Business Services	<p>List of <a href="#">Business Service(s)</a> that this trigger</p> <p><b>XML</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> &lt;opwiseGroups&gt;   &lt;opwiseGroup&gt;test&lt; &lt;/opwiseGroups&gt;</pre> <p><b>JSON</b></p> <pre style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> "opwiseGroups": [   "test " ]</pre>
rdExcludeBackup	Exclude Backup	<p>Set only if <code>retentionDurationPurge</code> whether qualifying task instances can be when being purged by retention duration</p>

restriction	Special Restriction	Indication of whether or not you want to : that tell the Controller how to handle exc trigger is satisfied on a holiday or non-bu simple and/or complex restrictions. For e simpleRestriction that disables the holiday identified in the calendar and/or : disables the trigger on the last business
restrictionAdjective	Restriction Adjective	Type of selection for restrictionNoun
restrictionComplex	Complex Restriction	Set only if restriction is true; Set of p or more situations when this trigger shou conjunction with restrictionMode, re restrictionNoun, and restriction you can specify that you do not want to s business day of the year or the first day c
restrictionMode	Restriction Mode	Set only if restrictionSimple is true want to use restrictionSimple- and -related values.

restrictionNoun	Restriction Noun	<p>Day to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day</a>, use the name example:</p> <p><b>XML</b>  <code>&lt;restrictionNoun&gt;CustomDay1&lt;/restrictionNoun&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "value": "CustomDay1" }</pre></p> <p>To specify a <a href="#">Local Custom Day</a>, use the</p> <p><b>XML</b>  <code>&lt;restrictionNoun local="true"&gt;CustomD</code></p> <p><b>JSON</b>  <pre>"restrictionNoun": {   "local": "true",   "value": "CustomDay2" }</pre></p> <div data-bbox="1633 748 1971 878" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b>  The Calendar for the trigger Day references.</p> </div>
restrictionNthAmount	Restriction Nth Amount	Set only if restrictionAdjective is

restrictionQualifier	Restriction Qualifier	<p>Period to restrict the trigger to.</p> <p>To specify a <a href="#">Custom Day Period</a>, use the Period. For example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier&gt;CustomDayPeriod1</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "value": "CustomDayPeriod1" }</pre></p> <p>To specify a <a href="#">Local Custom Day Period</a>, use the following example:</p> <p><b>XML</b>  <code>&lt;restrictionQualifier local="true"&gt;CustomDayPeriod2&lt;/restrictionQualifier&gt;</code></p> <p><b>JSON</b>  <pre>"restrictionQualifier": {   "local": "true",   "value": "CustomDayPeriod2" }</pre></p> <div data-bbox="1633 800 1976 930" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> The Calendar for the trigger Day references.</p> </div>
restrictionSimple	Simple Restriction	<p>Set only if <code>restriction</code> is true; Specifies restriction based on a specific situation.</p>
retainSysIds	n/a	<p>Specification for whether or not the web service retains system IDs.</p> <ul style="list-style-type: none"> <li>• If <code>retainSysIds="true"</code> and <code>sysId</code> request/response, <code>sysId</code> will be retained.</li> <li>• If <code>retainSysIds="false"</code> and <code>sysId</code> request/response, <code>sysId</code> will be autogenerated by the Controller.</li> </ul> <div data-bbox="1633 1287 1976 1417" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, <code>retainSysIds</code> is used as an attribute in the <code>&lt;trigger&gt;</code> element.</p> </div>

retentionDuration	Retention Duration	Set only if retentionDurationPurge retention duration for the selected reter triggered task instances can qualify for p
retentionDurationPurge	Purge By Retention Duration	Specification for whether triggered task i retention duration.
retentionDurationUnit	Retention Duration Unit	Set only if retentionDurationPurge duration unit.
simulationOption	Simulate	For Cron, Temporary, and Time triggers the <a href="#">Enable Trigger Simulation</a> Universal specification for whether or not to simula triggers are eligible to fire. (If simulati the scheduled launch of the task by the t
situation	Situation	Type of day that causes the Controller to
skipActive	Skip Trigger if Active	<b>Deprecated.</b> Indication for whether or nc the next run of the specified task(s) if the a Complete status (that is, it is still active
skipCondition	Task Launch Skip Condition	Controls when launching a task for the tr  <div style="background-color: #ffffcc; padding: 5px;"><b>Note</b> When reading a Trigger, both skipCondition are return creating/updating a Trigger, used if present. If skipConc skipActive is used. If both skipCondition are preser set to true only if skipCond.</div>
skipCount	Skip Count	Specification that the Controller should s task is triggered.
sysId	n/a	System ID field in the database for this tr

tasks	Tasks	<p>Name of the task(s) being triggered when</p> <p><b>XML</b></p> <pre data-bbox="1633 232 1969 363">&lt;tasks&gt;   &lt;task&gt;Opwise - Demo &lt;/tasks&gt;</pre> <p><b>JSON</b></p> <pre data-bbox="1633 461 1969 548">"tasks": [ "Opwise - Demo</pre>
timeZone	Time Zone	<p>Name of the time zone that will be applied to the trigger.</p>
version	n/a	<p>For Read and List web services; specific or listed.</p> <div data-bbox="1633 753 1969 886" style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version attribute in the &lt;trigger&gt; element</p> </div>

**Trigger Properties: Variable Monitor Trigger**

Property	UI Field Name	Description
enabledEnd	Enabled End	End time of the period during which the trigger s
enabledStart	Enabled Start	Start time of the period during which the trigger :
restrictedTimes	Restrict Times	Indication that the trigger is active only during th and enabledEnd.
taskMonitor	Variable Monitor	Variable Monitor task being executed.

**Trigger-Related Records Properties: Variables**

Property	UI Field Name	Description	Specifications	Req
description	Description	Description of the variable.		N
name	Name	Name of the variable.		Y
value	Value	Value of the variable.		Y



## Universal Template Web Services

- Overview
- Create a Universal Template
- Create, Modify, and Read a Universal Template: XML and JSON Examples
- Delete a Universal Template
  - Delete a Universal Template: URI Parameters
- List Universal Templates
  - List Universal Templates: XML and JSON Examples
- Modify a Universal Template
- Read a Universal Template
  - Read a Universal Template: URI Parameters
- Properties
  - Universal Template Properties
  - Field Properties
  - Choice Properties

### Overview

Universal Controller supports the following RESTful-based web services for Universal Templates:

- Create a Universal Template
- Delete a Universal Template
- List Universal Templates
- Modify a Universal Template
- Read a Universal Template

Formatting specifications for each web service, including details about parameter requirements, are provided in the following sections.

### Create a Universal Template

	Description
URI	<a href="http://host_name/opswise/resources/universaltemplata">http://host_name/opswise/resources/universaltemplata</a>
HTTP Method	POST
Description	Creates a new Universal Template.
Example URI	<a href="http://localhost:8080/opswise/resources/universaltemp">http://localhost:8080/opswise/resources/universaltemp</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Create, Modify, and Read a Universal Template:</a>
Universal Template Properties	See <a href="#">Universal Template Properties.</a>
Field Properties	See <a href="#">Field Properties.</a>
Choice Properties	See <a href="#">Choice Properties.</a>
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the universal template v</li> <li>Status 400 /Bad Request Create universal template failed. (message)</li> </ul>

### Create, Modify, and Read a Universal Template: XML a

The `excludeRelated` and `retainSysIds` properties are specified as attributes in the `<unive`

XML	JSON
<p>XML</p> <pre>&lt;universalTemplate retainSysIds ="true"&gt;   &lt;agent /&gt;   &lt;agentCluster /&gt;   &lt;agentClusterVar /&gt;   &lt;agentType&gt;Windows&lt;/agentType &gt;   &lt;agentVar /&gt;   &lt;broadcastCluster /&gt;   &lt;createConsole&gt;&gt;false&lt; /createConsole&gt;   &lt;credentials /&gt;</pre>	<p>JSON</p> <pre>{   "agent":   "agentClu   "agentCli   "agentTyp   "agentVar   "broadcas   "createCc   "credent:   "credent:   "descript   "desktop:</pre>



```

        <choiceSortOption
>Sequence</choiceSortOption>
        <choices>
            <choice>
                <fieldValue
>1</fieldValue>
                <
fieldValueLabel>Start<
/fieldValueLabel>
                <sequence>0<
/sequence>
                <sysId
>95b7d388a2ec407cb5f36768482449b0<
/sysId>
                <
useFieldValueForLabel>>false<
/useFieldValueForLabel>
            </choice>
            <choice>
                <fieldValue
>2</fieldValue>
                <
fieldValueLabel>Stop<
/fieldValueLabel>
                <sequence>1<
/sequence>
                <sysId
>07802a9cae3945769cfecbaeb2d1de70<
/sysId>
                <
useFieldValueForLabel>>false<
/useFieldValueForLabel>
            </choice>
        </choices>
        <defaultListView
>>false</defaultListView>
        <fieldLength />
        <fieldMapping>Choice
Field 1</fieldMapping>
        <fieldType>Choice<
/fieldType>
        <fieldValue />
        <formColumnSpan>1<
/formColumnSpan>
        <formEndRow>>false<
/formEndRow>
        <formStartRow>>false<
/formStartRow>
        <hint />
        <intFieldMax />
        <intFieldMin />
        <label>Command</label>
    >
        <name>command</name>
        <requireIfField />
        <requireIfFieldValue
/>
        <required>>false<

```

```

"2",
": "Stop",
"07802a9cae39
useFieldValue
:
:
Field 1",
:
:
null,
:
:
"88ba718e6b8f
}
],
"name": "
"outputFe
"outputRe
"outputRe
"outputRe
"outputRe
"outputTy
"retainSy
"runtimeE
"script":
"scriptTy
"scriptUr
"scriptW:
"sysId":
"32e34b8d138f
"useComme
"variable

```

```
/required>
  <sequence>1</sequence>
>
  <sysId>
>88ba718e6b8b4ee984266faf362c3fde<
  /sysId>
  </field>
</fields>
<name>UT1</name>
<outputFailureOnly>>true<
/outputFailureOnly>
<outputReturnFile />
<outputReturnNline>100<
/outputReturnNline>
<outputReturnSline>1<
/outputReturnSline>
<outputReturnText />
<outputReturnTypes>NONE<
/outputReturnTypes>
<outputType>STDOUT<
/outputType>
<runtimeDir />
<script />
<scriptTypeWindows />
<scriptUnix />
<scriptWindows>exit 0<
/scriptWindows>
<sysId>
>32e34b8d138f40a2afbda79cblbld56<
  /sysId>
  <useCommonScript>>false<
  /useCommonScript>
  <variablePrefix>ut1<
  /variablePrefix>
  <waitForOutput>>false<
```

```
} "waitFor(
```

```

/waitForOutput>
</universalTemplate>
    
```

## Delete a Universal Template

	Description
URI	<a href="http://host_name/opswise/resources/universaltemplate">http://host_name/opswise/resources/universaltemplate</a>
HTTP Method	DELETE
Description	Deletes a Universal Template.
URI Parameters	See <a href="#">Delete a Universal Template URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opswise/resources/universaltemplate?temp">http://localhost:8080/opswise/resources/universaltemplate?temp</a>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Universal template deleted successfully.</li> <li>• Status 400 /Bad Request Mutual exclusion violation. Cannot specify templatenam</li> <li>• Status 404 /Not Found A universal template with {name/id} does not exist.</li> </ul>

### Delete a Universal Template: URI Parameters

Parameter	Description
templateid	ID used within the Controller to identify this Universal Template.
templatename	Name used within the Controller to identify this Universal Template.

## List Universal Templates

	Description
URI	<a href="http://host_name/opswise/resources/universaltemplata">http://host_name/opswise/resources/universaltemplata</a>
HTTP Method	GET
Description	Retrieves information on all Universal Templates.
Example URI	<a href="http://localhost:8080/opswise/resources/universaltemp">http://localhost:8080/opswise/resources/universaltemp</a>
Authentication	HTTP Basic
Produces Content-Type	application/xml, application/json
Example	See <a href="#">List Universal Templates: XML and JSON Exampl</a>
Universal Template Properties	See <a href="#">Universal Template Properties</a> .

### List Universal Templates: XML and JSON Examples

XML	JSON
<p>▼ XML</p> <pre>&lt;universalTemplates&gt;   &lt;universalTemplate&gt;     &lt;agent /&gt;     &lt;agentCluster /&gt;     &lt;agentClusterVar /&gt;     &lt;agentType&gt;Windows&lt;   /agentType&gt;     &lt;agentVar /&gt;     &lt;broadcastCluster /&gt;     &lt;createConsole&gt;&gt;false&lt;   /createConsole&gt;     &lt;credentials /&gt;     &lt;credentialsVar /&gt;     &lt;description /&gt;     &lt;desktopInteract&gt;&gt;false&lt;   /desktopInteract&gt;     &lt;elevateUser&gt;&gt;false&lt;   /elevateUser&gt;     &lt;environment /&gt;     &lt;exitCodeOutput /&gt;     &lt;exitCodeProcessing   &gt;Success Exitcode Range&lt;   /exitCodeProcessing&gt;     &lt;exitCodeText /&gt;     &lt;exitCodes&gt;0&lt;/exitCodes</pre>	<p>▼ JSON</p> <pre>[   {     "agent":     "agentClu     "agentClu     "agentTy     "agentVar     "broadcas     "createCo     "credent:     "credent:     "descript     "desktop:     "elevate     "environr     "exitCode     "exitCode     Exitcode Rang     "exitCode     "exitCode     "fields":     "name":     "outputFe     "outputRe     "outputRe</pre>

```

>
  <fields />
  <name>UT1</name>
  <outputFailureOnly>>true<
/outputFailureOnly>
  <outputReturnFile />
  <outputReturnNline>100<
/outputReturnNline>
  <outputReturnSline>1<
/outputReturnSline>
  <outputReturnText />
  <outputReturnTextType>NONE<
/outputReturnTextType>
  <outputType>STDOUT<
/outputType>
  <runtimeDir />
  <script />
  <scriptTypeWindows />
  <scriptUnix />
  <scriptWindows>exit 0<
/scriptWindows>
  <sysId
>32e34b8d138f40a2afbdda79cb1b1d56<
/sysId>
  <useCommonScript>>false<
/useCommonScript>
  <variablePrefix>ut1<
/variablePrefix>
  <waitForOutput>>false<
/waitForOutput>
</universalTemplate>
<universalTemplate>
  <agent />
  <agentCluster />
  <agentClusterVar />
  <agentType>Linux<
/agentType>
  <agentVar />
  <broadcastCluster />
  <createConsole>>false<
/createConsole>
  <credentials />
  <credentialsVar />
  <description />
  <desktopInteract>>false<
/desktopInteract>
  <elevateUser>>false<
/elevateUser>
  <environment />
  <exitCodeOutput />
  <exitCodeProcessing
>Success ExitCode Range<
/exitCodeProcessing>
  <exitCodeText />
  <exitCodes>0</exitCodes
>
  <fields />
  <name>UT2</name>

```

```

"outputRe
"outputRe
"outputRe
"outputTy
"retainSy
"runtimeE
"script":
"scriptTy
"scriptUr
"scriptW:
"sysId":
"32e34b8d138f
"useCommc
"variable
"waitFor(
},
{
  "agent":
  "agentClu
  "agentClu
  "agentTy
  "agentVar
  "broadcas
  "createC
  "credent:
  "credent:
  "descript
  "desktop:
  "elevateE
  "environr
  "exitCode
  "exitCode
Exitcode Rang
  "exitCode
  "exitCode
  "fields":
  "name": '
  "outputRe
  "outputRe
  "outputRe
  "outputRe
  "outputRe
  "outputTy
  "retainSy
  "runtimeE
  "script":
  "scriptTy
  "scriptUr
  "scriptW:
  "sysId":
"d8dd3d3ee8e
"useCommc
"variable
"waitFor(

```



```
<outputReturnFile />  
<outputReturnNline>100<  
/outputReturnNline>  
<outputReturnSline>1<  
/outputReturnSline>  
<outputReturnText />  
<outputReturnTypes>NONE<  
/outputReturnTypes>  
<outputType>STDOUT<  
/outputType>  
<runtimeDir />  
<script />  
<scriptTypeWindows />  
<scriptUnix />  
<scriptWindows>exit 0<  
/scriptWindows>  
<sysId  
>d8dd3d3ee8ea48aba792702907b161df<  
/sysId>  
<useCommonScript>false<  
/useCommonScript>  
<variablePrefix>ut2<  
/variablePrefix>  
<waitForOutput>false<  
/waitForOutput>
```

```
}  
]
```

```
</universalTemplate>
</universalTemplates>
```

## Modify a Universal Template

	Description
URI	<a href="http://host_name/opswise/resources/universaltemplate">http://host_name/opswise/resources/universaltemplate</a>
HTTP Method	PUT
Description	Modifies the <a href="#">Universal Template</a> specified by the sysId. To modify Universal Template properties without mod
Example URI	<a href="http://localhost:8080/opswise/resources/universaltemp">http://localhost:8080/opswise/resources/universaltemp</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Create, Modify, and Read a Universal Template</a> :
Universal Template Properties	See <a href="#">Universal Template Properties</a> .
Field Properties	See <a href="#">Field Properties</a> .
Choice Properties	See <a href="#">Choice Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully updated the universaltemplate v</li> <li>• Status 400 /Bad Request Update universal template failed. (message)</li> </ul>

## Read a Universal Template

	Description
URI	<a href="http://host_name/opswise/resources/universaltemplat">http://host_name/opswise/resources/universaltemplat</a>
HTTP Method	GET
Description	Retrieves information on a specific <a href="#">Universal Template</a>
URI Parameters	See <a href="#">Read a Universal Template: URI Parameters</a> , below
Example URI	<a href="http://localhost:8080/opswise/resources/universaltemplat">http://localhost:8080/opswise/resources/universaltemplat</a>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Universal Template Properties	See <a href="#">Universal Template Properties</a> .
Field Properties	See <a href="#">Field Properties</a> .
Choice Properties	See <a href="#">Choice Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK (See <a href="#">Create</a>, <a href="#">Modify</a>, and <a href="#">Read a Universal Template</a>)</li> <li>• Status 400 /Bad Request Mutual exclusion violation. Cannot specify terms</li> <li>• Status 404 /Not Found A Universal Template with {name/id} does not exist</li> </ul>

### Read a Universal Template: URI Parameters

Name	Description
templateid	Unique ID for this Universal Template.
templatename	Name used within the Controller to identify this Universal Template.

## Properties

### Universal Template Properties

Property	UI Field Name	Description	S
----------	---------------	-------------	---

agent	Agent	Name of the Agent to use.	
agentCluster	Agent Cluster	Group of Agents, one of which the Controller will choose to run this task (compare with <code>broadcastCluster</code> ).	
agentClusterVar	Agent Cluster Variable	Name of a variable that will be resolved at run time to the name of the Agent Cluster to use.	F
agentType	Agent Type	Type of Agent on which Universal Tasks based on this template can be run.	V
agentVar	Agent Variable	Name of a variable that will be resolved at run time to the name of the Agent to use.	F
broadcastCluster	Cluster Broadcast	Group of Agents, all of which will run this task (compare with <code>agentCluster</code> ). Each instance of the task running on its own Agent becomes a separate task instance record in the database and displays separately on the Activity Monitor.	
broadcastCluster	Cluster Broadcast	Group of Agents, all of which will run this task (compare with <code>agentCluster</code> ). Each instance of the task running on its own Agent becomes a separate task instance record in the database and displays separately on the Activity Monitor.	

createConsole	Create Console	If desktopInteract is true; Specification for whether or not to allocate a new console for the process, rather than having it inherit one.	B
credentials	Credentials	Credentials under which an Agent runs this task. These credentials override any credentials provided in the Agent Details for any Agent running this task.	
credentialsVar	Credentials Variable	Name of a variable that will be resolved at run time to the name of the {Credentials} to use.	
description	Description	Description of this Universal Template.	
desktopInteract	Interact with Desktop	Specification for whether or not a task that runs an application with a GUI requires some manual actions from a user (for example, clicking buttons or entering values).	B T X is in 21 e: el vi
elevateUser	Run with Highest Privileges	Specification for whether or not to execute the task using an elevated privileges token, rather than one subject to User Account Control (UAC) restrictions. An elevated token allows a process to execute with all the privileges available to its specified credentials. For example, a task executed with an administrative account will behave as though it received permission via a UAC dialog to perform a privileged operation.	B T a a e a o
environment	Environment Variables	Environment variables needed by the program to run.	Li

excludeRelated	n/a	Specification for whether or not to exclude related records.	B F th
exitCodeOutput	Output File	Path and file name of the output file that should be scanned for the text in exitCodeText.	
exitCodeProcessing	Exit Code Processing	Specification for how the Controller should determine whether the executed command failed or completed successfully.	V  D
exitCodes	Exit Codes	If exitCodeProcessing is Success Exitcode Range or Failure Exitcode Range; Range of exit codes.	F u:
exitCodeText	Scan Output For	If exitCodeProcessing is Success Output Contains (3) or Failure Output Contains (4); text for which the Controller should scan the output file.	T i
name	Name	Name of this Universal Template.	
outputFailureOnly	Failure Only	If outputReturnType = STDOUT (2), STDERR (3), FILE (4), or OUTERR (6), and waitForOutput is false; Indication for whether output should be retrieved on task failure only.	B
outputReturnFile	Output File	If outputReturnType is FILE; Path and file name containing the output that you want automatically retrieved and attached to the task instance.	
outputReturnNline	Number of Lines	If outputReturnType is STDOUT, STDERR, FILE, or OUTERR; Limit the retrieved data to this number of lines.	D L i
outputReturnSline	Start Line	If outputReturnType is STDOUT, STDERR, FILE, or OUTERR; Instructs the Controller to retrieve data beginning at the line indicated.	D
outputReturnText	Scan Text	If outputReturnType is STDOUT, STDERR, FILE, or OUTERR; Instructs the Controller to scan the data for the text specified and retrieve only that.	T i



scriptWindows	Windows Script	If agentType is Any or Windows; Script to be executed by the Windows Agent.	
scriptTypeWindows	Windows Script File Type	If agentType is Windows; Type of Windows Script to be executed by the Windows Agent.	V
sysId	UUID	System ID field in the database for this record.	P
useCommonScript	Use Common Script	Indication that the specified script can be executed by both Linux/Unix and Windows Agents.	B
variablePrefix	Variable Prefix	Variable prefix to append to the default prefix (ops_) for the system-assigned variables that are provided for the user-defined Fields in this Universal Template.	
waitForOutput	Wait For Output	If outputReturnType = STDOUT (2), STDERR (3), FILE (4), or OUTERR (6), and outputFailureOnly is false; Specification for whether or not the task should wait for the requested output before completing.	B

### Field Properties

Property	UI Field Name	Description
booleanNoValue	No Value	If booleanValueType is Custom; Boolean N Field.
booleanValueType	Boolean Value Type	Type of Boolean value for this Field.



booleanYesValue	Yes Value	If booleanValueType is Custom; Boolean Y this Field.
choiceSortOption	Choice Sort Option	If fieldType is Choice; Specification for how be listed in the Choice field in Universal Task.
defaultListView	Add To Default List View	Specification that the label of this Field will c default, in the list of Universal Tasks based or
fieldLength	Length	If fieldType is Text or Integer; Length of this
fieldMapping	Mapping	Field, from a pool of available fields provided i Universal Template, that this Field is mapped
fieldType	Type	Field type for this Field.
fieldValue	Default Value	Default value for this Field.

formColumnSpan	Column Span	Number of columns (width) in the Universal Template Details for this Field.
formEndRow	End Row	Specification that this Field will end the current row.
formStartRow	Start Row	Specification that this Field will start a new row.
hint	Hint	Field hint for this Field in the Controller user interface.
intFieldMax	Maximum	If <code>fieldType</code> is Integer; Maximum value for this field.
intFieldMin	Minimum	If <code>fieldType</code> is Integer; Minimum value for this field.
label	Label	Name of this Field to be displayed in the Controller interface.
name	Name	Name of this Field in the Controller database.
required	Required	Specification for whether this Field is required.
requiredIfField	Required If Field	If <code>required</code> is false; Specification that this Field is required if the Choice Field or Boolean Field selected matches one of the values defined in the <code>requiredIfFieldValue</code> field. If no value is specified, it is not required.
requiredIfFieldValue	Required If Field Value(s)	If <code>requiredIfField</code> is not null/empty; Value(s) specified for <code>requiredIfField</code> .
sequence	Sequence	For existing Fields only; System-defined; Sequence number of this Field among all user-defined Universal Template Fields included in the Universal Task Details. Starting at 0 for the first defined Field.
sysId	n/a	<code>sys_id</code> used within the Controller to identify this Template Field.

### Choice Properties

Property	UI Field Name	Description
fieldValue	Value	Value of this Choice.
fieldValueLabel	Label	If useFieldValueForLabel is false; Name that will appear for this Choice in the Choice list for a Universal Task. (Maximum = 50 characters.)
sequence	Sequence	For existing Choices only; System-defined sequence of this Choice among all Choices defined for this Field. Starting sequence is 1 for the first defined Choice.
sysId	n/a	sys_id used within the Controller to identify this Universal Template Field.
useFieldValueForLabel	Use Value For Label	If the fieldValue value is 50 characters or less; Use the fieldValue value as the fieldValueLabel value (which is a maximum 50 characters).

## User Web Services

- Overview
- Create a User
- Create, Modify, and Read a User: XML and JSON Examples
- Delete a User
  - Delete a User: URI Parameters
- List Users
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### Overview

Universal Controller supports the following RESTful-based web services for User operat

- Create a User
- Delete a User
- List Users
- Modify a User
- Read a User

Formatting specifications for each web service, including details about parameter requir

### Create a User

	Description
URI	<a href="http://host_name/opswise/resources/user">http://host_name/opswise/resources/user</a>
HTTP Method	POST
Description	Creates a new User.
Example URI	<a href="http://localhost:8080/opswise/resources/user">http://localhost:8080/opswise/resources/user</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Create, Modify, and Read a User: XML and JSON E</a>
User Properties	See <a href="#">User Properties</a> , below.
User Permission Properties	See <a href="#">User Permission Properties</a> , below.
User Role Properties	See <a href="#">User Role Properties</a> , below.
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully created the user with sysId {sysId}.</li> </ul>

### Create, Modify, and Read a User: XML and JSON Exan

The `excludeRelated` and `retainSysIds` properties are specified as attributes in the `<user:`

**XML**

## XML

```

<user retainSysIds="true">
  <active>true</active>
  <browserAccess>-- System Default --</browserAccess>
  <businessPhone />
  <commandLineAccess>-- System Default --</commandLineAccess>
  <department />
  <email>test@test.com</email>
  <firstName>Joe</firstName>
  <lastName>Doe</lastName>
  <lockedOut>>false</lockedOut>
  <loginMethod>Standard, Single Sign-On</loginMethod>
  <manager>Administrator</manager>
  <middleName>M</middleName>
  <mobilePhone />
  <passwordNeedsReset>>false</passwordNeedsReset>
  <permissions>
    <permission>
      <allGroups>>false</allGroups>
      <commands>ALL</commands>
      <defaultGroup>>true</defaultGroup>
      <nameWildcard>*</nameWildcard>
      <opCreate>>false</opCreate>
      <opDelete>>false</opDelete>
      <opExecute>>true</opExecute>
      <opRead>>true</opRead>
      <opUpdate>>true</opUpdate>
      <opwiseGroups />
      <permissionType>Agent</permissionType>
      <sysId>c489750500d444eca9325559d0ef9673</sysId>
    </permission>
  </permissions>
  <sysId>3de4c72e27c94d4aa840bffcb7509ca</sysId>
  <timeZone />
  <title>Vice President</title>
  <userName>test.user</userName>
  <userPassword>abc123</userPassword>
  <userRoles>
    <userRole>
      <role description="The universal template admin
role.">ops_universal_template_admin</role>
      <sysId>187ecb3a27544b7fb702caee6dc8d5e3</sysId>
    </userRole>
    <userRole>
      <role description="The report publishing
role.">ops_report_publish</role>
      <sysId>2eldc86f47c6431884373f0e06b841da</sysId>
    </userRole>
  </userRoles>
  <webServiceAccess>-- System Default --</webServiceAccess>
</user>

```

## Delete a User

	Description
URI	<a href="http://host_name/opswise/resources/user">http://host_name/opswise/resources/user</a>
HTTP Method	DELETE
Description	Deletes a User.
URI Parameters	See <a href="#">Delete a User URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/opswise/resourcess/user?username">http://localhost:8080/opswise/resourcess/user?username</a></li> <li>• <a href="http://localhost:9080/opswise/resources/user?userid=18">http://localhost:9080/opswise/resources/user?userid=18</a></li> </ul>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK User {username} deleted successfully.</li> <li>• Status 400 /Bad Request Mutual exclusion violation. Cannot specify userid and us</li> <li>• Status 404 /Not Found User with {username/userid} does not exist.</li> </ul>

### Delete a User: URI Parameters

Parameter	Description	Specifications
userid	ID used within the Controller to identify this user.	String; URI param
username	Name used within the Controller to identify this user.	String; URI param

## List Users

	Description
URI	<a href="http://host_name/opswise/resources/user/list">http://host_name/opswise/resources/user/list</a>
HTTP Method	GET
Description	Retrieves information on all Users.
Example URI	<a href="http://localhost:8080/opswise/resources/user/list">http://localhost:8080/opswise/resources/user/list</a>
Authentication	HTTP Basic
Produces Content-Type	application/xml, application/json
Example	See <a href="#">List Users: XML and JSON Examples</a> .
User Properties	See <a href="#">User Properties</a> .
User Permission Properties	See <a href="#">User Permission Properties</a> .
User Role Properties	See <a href="#">User Role Properties</a> .

### List Users: XML and JSON Examples

**XML**

XML

```
<users>
  <user>
    <active>true</active>
    <browserAccess>-- System Default --</browserAccess>
    <businessPhone />
    <commandLineAccess>-- System Default --</commandLineAc
    <department />
    <email>test@test.com</email>
    <firstName>Joe</firstName>
    <lastName>Doe</lastName>
    <lockedOut>>false</lockedOut>
    <loginMethod>Standard, Single Sign-On</loginMethod>
    <manager>Administrator</manager>
    <middleName>M</middleName>
    <mobilePhone />
    <passwordNeedsReset>>false</passwordNeedsReset>
    <permissions />
    <sysId>3de4c72e27c94d4aa840bffc7509ca</sysId>
    <timeZone />
    <title>Vice President</title>
    <userName>test.user</userName>
```



```

    <userRoles />
    <webServiceAccess>-- System Default --</webServiceAccess>
  </user>
  <user>
    <active>true</active>
    <browserAccess>-- System Default --</browserAccess>
    <businessPhone />
    <commandLineAccess>-- System Default --</commandLineAccess>
    <department />
    <email>test@test.com</email>
    <firstName>Joe</firstName>
    <lastName>Doe</lastName>
    <lockedOut>>false</lockedOut>
    <loginMethod>Standard, Single Sign-On</loginMethod>
    <manager>Administrator</manager>
    <middleName>M</middleName>
    <mobilePhone />
    <passwordNeedsReset>>false</passwordNeedsReset>
    <permissions />
    <permission>
      <allGroups>>false</allGroups>
      <commands>ALL</commands>
      <defaultGroup>true</defaultGroup>
      <nameWildcard>*</nameWildcard>
      <opCreate>>false</opCreate>
      <opDelete>>false</opDelete>
      <opExecute>>true</opExecute>
      <opRead>true</opRead>
      <opUpdate>true</opUpdate>
      <opwiseGroups />
      <permissionType>Agent</permissionType>
      <sysId>c489750500d444eca9325559d0ef9673</sysId>
    </permission>
    </permissions>
    <sysId>3de4c72e27c94d4aa840bffc7509ca</sysId>
    <timeZone />
    <title>Vice President</title>
    <userName>test.user</userName>
    <userRoles>
      <userRole>
        <role description="The universal template admin
        role.">ops_universal_template_admin</role>
        <sysId>187ecb3a27544b7fb702caee6dc8d5e3</sysId>
      </userRole>
      <userRole>
        <role description="The report publishing
        role.">ops_report_publish</role>
        <sysId>2e1dc86f47c6431884373f0e06b841da</sysId>
      </userRole>
    </userRoles>
    <webServiceAccess>-- System Default --</webServiceAccess>
  </user>

```

```
</user>
</users>
```

## Modify a User

	Description
URI	<a href="http://host_name/opswise/resources/user">http://host_name/opswise/resources/user</a>
HTTP Method	PUT
Description	Modifies the User specified by the sysId in the request. To modify User properties without modifying related reco
Example URI	<a href="http://localhost:8080/opswise/resources/user">http://localhost:8080/opswise/resources/user</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Create, Modify, and Read a User: XML and JSON E</a>
User Properties	See <a href="#">User Properties</a> .
User Permission Properties	See <a href="#">User Permission Properties</a> .
User Role Properties	See <a href="#">User Role Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the user with sysId &lt;sysId</li> </ul>

## Read a User

	Description
URI	<a href="http://host_name/opswise/resources/user">http://host_name/opswise/resources/user</a>
HTTP Method	GET
Description	Retrieves information on a specific User.
URI Parameters	See <a href="#">Read a User: URI Parameters</a> , below.
Example URI	<ul style="list-style-type: none"> <li><a href="http://localhost:8080/opswise/resources/user?us">http://localhost:8080/opswise/resources/user?us</a></li> <li><a href="http://localhost:8080/opswise/resources/user?us">http://localhost:8080/opswise/resources/user?us</a></li> </ul>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
User Properties	See <a href="#">User Properties</a> .
User Permission Properties	See <a href="#">User Permission Properties</a> .
User Role Properties	See <a href="#">User Role Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK (See <a href="#">Create, Modify, and Read a User: XML and JSON</a>)</li> <li>Status 404 /Not Found A user with id "f87848b00a0001037f43e7c81c8e"</li> </ul>


### Read a User: URI Parameters

Name	Description	Specifications
userid	Unique ID for this User.	
username	Name used within the Controller to identify this User.	Maximum 40 alpha

### Properties

#### User Properties

Property	UI Field Name	Description
active	Active	Specification for whether or not the user is active in the Controller. An inactive user cannot log in and will not appear in user lists.

browserAccess	Web Browser Access	Specification for whether or not the user can I
businessPhone	Business Phone	Business phone number of this user.
commandLineAccess	Command Line Access	Specification for whether or not the user can I <a href="#">Command Line Interface (CLI)</a> .
department	Department	Business department of this user.
email	Email	Email address of this user.
excludeRelated	n/a	For the Modify User web service; specifiator related records (User Permissions, User Role are provided in the request.  <div data-bbox="1583 805 1976 935" style="background-color: #ffffcc; padding: 5px;">  <b>Note</b>                      In XML, excludeRelated is spe &lt;user&gt; element.                 </div>
firstName	First Name	First Name of this user.
lastName	Last Name	Last Name of this user.
lockedOut	Locked out	Specification for whether or not the user is loc
loginMethod	Login Methods	Login method(s) that the user can authenticat
manager	Manager	Business manager of this user.
middleName	Middle Name	Middle Name of this user.
mobilePhone	Mobile Phone	Mobile phone number of this user.

passwordNeedsReset	Password Requires Reset	Specification for whether or not the user will be prompted to reset their password at next login.
retainSysIds	n/a	Specification for whether or not the <code>sysId</code> property is retained. <ul style="list-style-type: none"> <li>If <code>retainSysIds="true"</code> and <code>sysId</code> is present, <code>sysId</code> will be persisted to the database.</li> <li>If <code>retainSysIds="false"</code> and <code>sysId</code> is present, <code>sysId</code> will be ignored; it will be auto-generated.</li> </ul> <div style="background-color: #ffffcc; padding: 5px; border: 1px solid #ccc;"> <p><b>Note</b> In XML, <code>retainSysIds</code> is specified in the <code>&lt;user&gt;</code> element.</p> </div>
sysId	n/a	System ID field in the database for this record.
timeZone	Time Zone	Time zone of this user.
title	Title	Business title of this user.
userName	User ID	Log in ID for this user.
userPassword	Password	Password of this user.  If <code>userPassword</code> is included in the request, it will be used to update the user's password.
webServiceAccess	Web Service Access	Specification for whether or not the user can access the <a href="#">RESTful Web Services API</a> .

### User Permission Properties

Property	UI Field Name	Description
allGroups	Member of Any Business Service or Unassigned	Specification for whether or not this permission applies to records that belong to any Business Service that do not belong to any Business Service.
commands	Commands	Commands that are associated with each permission.

defaultGroup	Unassigned to Business Service	Specification for whether or not this permission records that do not belong to any Business Se
nameWildcard	Name	Specification to apply this permission to record matches the string specified here.
opCreate	Create	Allows the user to create records of the specific permissionType.
opDelete	Delete	Allows the user to delete records of the specific permissionType.
opExecute	Execute	Allows the user to execute records of the specific permissionType.
opRead	Read	Allows the user to read records of the specific permissionType.
opUpdate	Update	Allows the user to update records of the specific permissionType.

opwiseGroups	Member of Business Services	<p>Applies this permission to records that are members of selected Business Service(s).</p> <p><b>XML</b></p> <pre data-bbox="1577 256 1976 391">&lt;opwiseGroups&gt;   &lt;opwiseGroup&gt;test&lt;/opwiseGroup&gt; &lt;/opwiseGroups&gt;</pre> <p><b>JSON</b></p> <pre data-bbox="1577 488 1976 574">"opwiseGroups": [ "test" ]</pre>
permissionType	Type	Type of permission for this user.
sysId	n/a	System ID field in the database for a record.

**Command Permissions**

Permission Type	Commands
Agent	<ul style="list-style-type: none"> <li>• ALL</li> <li>• resume_agent</li> <li>• suspend_agent</li> </ul>

Agent Cluster	<ul style="list-style-type: none"> <li>• ALL</li> <li>• resolve_agent_cluster</li> <li>• resume_agent_cluster</li> <li>• suspend_agent_cluster</li> <li>• resume_agent_cluster_membership</li> <li>• suspend_agent_cluster_membership</li> </ul>
Application	<ul style="list-style-type: none"> <li>• ALL</li> <li>• appl_start</li> <li>• appl_stop</li> <li>• appl_query</li> </ul>
Bundle	<ul style="list-style-type: none"> <li>• ALL</li> <li>• promote_bundle</li> </ul>
Calendar	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_calendar</li> </ul>
Credential	
Database Connection	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_database_connection</li> <li>• database_connection_test</li> </ul>
Email Connection	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_email_connection</li> <li>• email_connection_test</li> </ul>
Email Template	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_email_template</li> </ul>
PeopleSoft Connection	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_peoplesoft_connection</li> </ul>
Promotion Target	<ul style="list-style-type: none"> <li>• ALL</li> <li>• refresh_target_agents</li> </ul>
SAP Connection	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_sap_connection</li> </ul>
Script	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_script</li> </ul>
SNMP Manager	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_snmp_manager</li> </ul>
Task	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_task</li> <li>• launch</li> <li>• recalculate_forecast</li> <li>• reset_statistics</li> <li>• reset_zos_override_statistics</li> <li>• set_execution_restriction</li> </ul>



Task Instance	<ul style="list-style-type: none"> <li>• ALL</li> <li>• cancel</li> <li>• clear_all_dependencies</li> <li>• clear_exclusive</li> <li>• clear_resources</li> <li>• clear_timewait</li> <li>• force_finish</li> <li>• force_finish_cancel</li> <li>• hold</li> <li>• insert_task</li> <li>• rerun</li> <li>• release</li> <li>• release_recursive</li> <li>• retrieve_output</li> <li>• set_edge_satisfied (Mark as Satisfied in UI)</li> <li>• set_edges_satisfied (Clear Predecessors in UI)</li> <li>• set_priority_low</li> <li>• set_priority_medium</li> <li>• set_priority_high</li> <li>• set_manual_completed</li> <li>• set_manual_started</li> <li>• skip</li> <li>• unskip</li> </ul>
Trigger	<ul style="list-style-type: none"> <li>• ALL</li> <li>• assign_trigger_execution_user</li> <li>• copy_trigger</li> <li>• disable_trigger</li> <li>• enable_trigger</li> <li>• recalculate_forecast</li> <li>• trigger_now</li> </ul>
Variable	
Virtual Resource	<ul style="list-style-type: none"> <li>• ALL</li> <li>• copy_virtual_resource</li> </ul>

### User Role Properties

Property	UI Field Name	Description	Specificat
role	n/a	Role assigned to this user.	
sysId	n/a	System ID field in the database for a record.	

## Variable Web Services

- [Overview](#)
- [Create a Global Variable](#)
- [Delete a Global Variable](#)
- [List Variables](#)
- [Modify a Global Variable](#)
- [Read a Global Variable](#)
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### Overview

Universal Controller supports the following RESTful-based web services for Variable op

- [Create a Global Variable](#)
- [Delete a Global Variable](#)
- [List Variables](#)
- [Modify a Global Variable](#)
- [Read a Global Variable](#)
- [Set Variables](#)

Formatting specifications for each web service, including details about parameter requir


### Create a Global Variable

	Description
URI	<a href="http://host_name/opswise/resources/variable">http://host_name/opswise/resources/variable</a>
HTTP Method	POST
Description	Creates a Global Variable.
Example URI	<a href="http://localhost:8080/opswise/resources/variable">http://localhost:8080/opswise/resources/variable</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Create a Global Variable: Example Request</a> , below.
Request Properties	See <a href="#">Global Variable Properties</a> , below.
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the variable with sysId {sysId}</li> </ul>

### Create a Global Variable: Example Request

XML Request	JSON Request
<p data-bbox="1161 212 1325 245">XML Request</p> <pre data-bbox="1203 261 1734 613"> &lt;variable retainSysIds="true"&gt;   &lt;description&gt;description&lt;   /description&gt;   &lt;name&gt;demo_ops_global&lt;/name&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;group 1&lt;/opswiseGroup&gt;     &lt;opswiseGroup&gt;group 2&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;sysId   &gt;237f9f6c43d2617201b2bd04063f917a&lt;   /sysId&gt;   &lt;value&gt;Global&lt;/value&gt; &lt;/variable&gt; </pre>	<p data-bbox="1797 212 1961 245">JSON Request</p> <pre data-bbox="1839 261 1978 548"> {   "descr:   "name":   "opswis   2"],   "retain   "sysId"   "237f9f6c   "value" } </pre>

### Global Variable Properties

Property	UI Field Name	Description
description	Description	User-defined; description of this record.
name	Name	Name used within the Controller to identify
opwiseGroups	Member of Business Services	<p>Business Services that this record belongs to</p> <p><b>XML</b></p> <pre>&lt;opwiseGroups&gt;   &lt;opwiseGroup&gt;test&lt;/opwiseGroup&gt; &lt;/opwiseGroups&gt;</pre> <p><b>JSON</b></p> <pre>"opwiseGroups": [ "test" ]</pre>
retainSysIds	n/a	<p>Specification for whether or not the Create record property.</p> <ul style="list-style-type: none"> <li>• If <b>retainSysIds="true"</b> and <code>sysId</code> is provided, it will be added to the database.</li> <li>• * If <b>retainSysIds="false"</b> and <code>sysId</code> is provided, it will be autogenerated by the Controller.</li> </ul> <p> <b>Note</b> In XML, <code>retainSysIds</code> is specified as a boolean attribute.</p>
sysId	n/a	System ID field in the database for a record
value	Value	Value of this variable.

### Delete a Global Variable

	Description
URI	<a href="http://host_name/opswise/resources/variable">http://host_name/opswise/resources/variable</a>
HTTP Method	DELETE
Description	Deletes a Global Variable.
URI Parameters	See <a href="#">Delete a Global Variable: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opswise/resources/variable?variableid=dad">http://localhost:8080/opswise/resources/variable?variableid=dad</a>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Variable deleted successfully.</li> <li>• Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>variablena</code></li> <li>• Status 404 /Not Found A variable with {name/id} "test" does not exist.</li> </ul>

### Delete a Global Variable: URI Parameters

Parameter	Description	Si
variableid	ID used within the Controller to identify this Global Variable.	St
variablename	Name used within the Controller to identify this Global Variable.	St

### List Variables

	Description
URI	<a href="http://host_name/opswise/resources/variable/list">http://host_name/opswise/resources/variable/list</a>
HTTP Method	POST
Description	Retrieves information on <code>variables</code> matching specific search
Example URI	<a href="http://localhost:8080/opswise/resources/variable/list">http://localhost:8080/opswise/resources/variable/list</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">List Global Variables: XML and JSON Examples</a> .
Request Properties	See <a href="#">List Variables: Request Properties</a> .
Example Response	See <a href="#">List Global Variables: XML and JSON Examples</a> .
Response Properties	See <a href="#">List Variables: Response Properties</a> .

## List Variables: XML and JSON Examples

Examples	XML	JS
----------	-----	----

Example Request

XML

```

Global Variable
<variable-query-filter>
  <scope>global</scope>
</variable-query-filter>

<variable-query-filter>
  <scope>global</scope>
  <variableName>demo*<
/variableName>
</variable-query-filter>

Local Variable
<variable-query-filter>
  <scope>local</scope>
</variable-query-filter>

<variable-query-filter>
  <scope>local</scope>
  <variableName>*2<
/variableName>
</variable-query-filter>

Task Variable
<variable-query-filter>
  <scope>task</scope>
  <taskName>UT-WS-Task<
/taskName>
</variable-query-filter>

<variable-query-filter>
  <scope>task</scope>
  <taskName>UT-WS-Task<
/taskName>
  <variableName>UT*2<
/variableName>
</variable-query-filter>

Trigger Variable
<variable-query-filter>
  <scope>trigger</scope>
  <triggerName>UT-WS-Trigger<
/triggerName>
</variable-query-filter>

<variable-query-filter>
  <scope>trigger</scope>
  <triggerName>UT-WS-Trigger<
/triggerName>
  <variableName>*2<
/variableName>
</variable-query-filter>
    
```

Example Response

XML

```

Example 1
<variables>
  <variable>
    <description />
    <name
>demo_ops_download_dir</name>
    <sysId
>db5c436ac0a8016501f1ab660b585961<
/sysId>
    <type>Global</type>
    <version>1</version>
    <value
>/home/opswise/download</value>
  </variable>
  <variable>
    <description />
    <name>demo_ops_linux_rc<
/name>
    <sysId
>db5c7b72c0a80165004cda781dbf3115<
/sysId>
    <type>Global</type>
    <version>1</version>
    <value>0</value>
  </variable>
</variables>

Example 2
<variables>
  <variable>
    <description
>varDescription2</description>
    <name>UT_WS_var_2</name>
    <sysId
>164a03300a0a0a6475b497e5d985c1aa<
/sysId>
    <taskId
>164a02a80a0a0a644fc9a3d6dd33f72b<
/taskId>
    <taskName>UT-WS-Task<
/taskName>
    <type>Task</type>
    <value>varVal2</value>
  </variable>
  <variable>
    <description />
    <name>UT_WS_var_2</name>
    <sysId
>164ea9ff0a0a0a6449f209da49f594c0<
/sysId>
    <triggerId

```



```
>164ea9a40a0a0a647df8372b88eb2394<  
/triggerId>  
  <triggerName  
>UT-WS-Trigger</triggerName>  
  <type>Trigger</type>  
  <value>val</value>
```

```
</variable>
</variables>
```

### List Variables: Request Properties

Property	UI Field Name	Description
scope	n/a	Type of variable to be returned in the Response.
taskName	n/a	If <i>scope</i> is task; Name of task.
triggerName	n/a	If <i>scope</i> is trigger; Name of the trigger.
variableName	n/a	If <i>scope</i> is global (or local), and <i>variableName</i> is n Response.  If <i>scope</i> is Global (or Local), and <i>variableName</i> is returned in the Response.

### List Variables: Response Properties

Property	UI Field Name	Description
description	Description	Description of the variable.
name	Name	Name of the variable.
sysId	n/a	sys_id used within the Controller to identify this variable.
taskId	n/a	ID of the task if the search was for a task-specific variable.
taskName	n/a	Name of the task if the search was for a task-specific variable.
triggerId	n/a	ID of the trigger if the search was for a trigger-specific variable.
triggerName	n/a	Name of the trigger if the search was for a trigger-specific variable.
type	n/a	Type of variable.
value	Value	Value of the variable.
version	Version	Version of the variable.

### Modify a Global Variable

	Description
URI	<a href="http://host_name/opswise/resources/variable">http://host_name/opswise/resources/variable</a>
HTTP Method	PUT
Description	Modifies the <a href="#">Global Variable</a> specified by the sysId.
Example URI	<a href="http://localhost:8080/opswise/resources/variable">http://localhost:8080/opswise/resources/variable</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example Request	See <a href="#">Modify a Global Variable: Example Request</a> , below.
Request Properties	See <a href="#">Global Variable Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the variable with sysId &lt;sysId&gt;</li> </ul>

### Modify a Global Variable: Example Request

XML Request	JSON Request
<p>XML Request</p> <pre data-bbox="1205 261 1736 613"> &lt;variable&gt;   &lt;description&gt;description&lt;   /description&gt;   &lt;name&gt;demo_ops_global&lt;/name&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;group 1&lt;/opswiseGroup&gt;     &lt;opswiseGroup&gt;group 2&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;sysId   &gt;237f9f6c43d2617201b2bd04063f917a&lt;   /sysId&gt;   &lt;value&gt;Global&lt;/value&gt; &lt;/variable&gt; </pre>	<p>JSON Request</p> <pre data-bbox="1839 261 1976 521"> {   "descri:   "name":   "opswis   2"],   "sysId"   "237f9f6c   "value" }</pre>

### Read a Global Variable

	Description
URI	<a href="http://host_name/opswise/resources/variable">http://host_name/opswise/resources/variable</a>
HTTP Method	GET
Description	Retrieves information on a specific <a href="#">Global Variable</a> .
URI Parameters	See <a href="#">Read a Global Variable: URI Parameters</a> , below.
Example URI	<a href="http://localhost:8080/opswise/resources/variable?variablen">http://localhost:8080/opswise/resources/variable?variablen</a>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example Response	See <a href="#">Read a Global Variable: Example Response</a> , below.
Response Properties	See <a href="#">Global Variable Properties</a> .

### Read a Global Variable: URI Parameters

Name	Description	Si
variableid	Unique ID for this Global Variable.	
variablename	Name used within the Controller to identify this Global Variable.	M

### Read a Global Variable: Example Response

XML Response	JSON Resp
<p>XML Response</p> <pre>&lt;variable retainSysIds="true" version="1"&gt;   &lt;description&gt;description&lt;/description&gt;   &lt;name&gt;demo_ops_global&lt;/name&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;group 1&lt;/opswiseGroup&gt;     &lt;opswiseGroup&gt;group 2&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;sysId&gt;237f9f6c43d2617201b2bd04063f917a&lt; /sysId&gt;   &lt;value&gt;Global&lt;/value&gt; &lt;/variable&gt;</pre>	<p>JSON R</p> <pre>{   "c   "I   "c   2" ],   "g   "23"   "j   "v   "v }</pre>

### Set Variables

	Description
URI	<a href="http://host_name/opswise/resources/variable/ops-variable-s">http://host_name/opswise/resources/variable/ops-variable-s</a>
HTTP Method	POST
Description	Sets the specified variable.
Example URI	<a href="http://localhost:8080/opswise/resources/variable/ops-variab">http://localhost:8080/opswise/resources/variable/ops-variab</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml
Produces Content-Type	application/xml
Example Request	See <a href="#">Set Variables: Request Examples</a> .
Example Response	See <a href="#">Set Variables: Response Examples</a> .
Properties	See <a href="#">Set Variables Properties</a> .

### Set Variables: Request Examples

XML Request	JSON Request
<p>XML</p> <pre> Global Variable &lt;set-variable&gt;   &lt;create&gt;true&lt;/create&gt;   &lt;variable&gt;     &lt;name&gt;       &gt;testGlobalVar&lt;/name&gt;     &lt;description&gt;       &gt;testGlobalVar description&lt;       /description&gt;     &lt;value&gt;       &gt;testGlobalVar val&lt;/value&gt;     &lt;/variable&gt;   &lt;/set-variable&gt;  Task Variable &lt;set-variable&gt;   &lt;create&gt;true&lt;/create&gt;   &lt;scope&gt;task&lt;/scope&gt;   &lt;task&gt;Timer 60&lt;/task&gt;   &lt;variable&gt;     &lt;description&gt;       &gt;testTaskVar description&lt;       /description&gt;     &lt;name&gt;testTaskVar&lt;     /name&gt;     &lt;value&gt;testTaskVar     val&lt;/value&gt;   &lt;/variable&gt; &lt;/set-variable&gt;  Trigger Variable &lt;set-variable&gt;   &lt;create&gt;true&lt;/create&gt;   &lt;scope&gt;trigger&lt;/scope&gt;   &lt;trigger&gt;Opwise -   Mon-Fri 9-5&lt;/trigger&gt;   &lt;variable&gt;     &lt;description&gt;       &gt;testTriggerVar description&lt;       /description&gt;     &lt;name&gt;       &gt;testTriggerVar&lt;/name&gt;     &lt;value&gt;       &gt;testTriggerVar val&lt;/value&gt;     &lt;/variable&gt;   &lt;/set-variable&gt; </pre>	<p>JSON</p> <pre> Global Variable {   "create": true,   "variable": {     "name": "testG:     "description":     "testGlobalVar desc     "value": "test(   val"   } }  Task Variable {   "create": true,   "scope": "task",   "task": "Timer 60   "variable": {     "name": "testT:     "description":     description",     "value": "test:   } }  Trigger Variable {   "create": true,   "scope": "trigge   "trigger": "Opsw:   9-5",   "variable": {     "name": "testT:     "description":     "testTriggerVar des     "value": "test:   val"   } } </pre>

**Set Variables: Response Examples**

### XML Response

XML

```
<command-response>
  <type>set_variable</type>
  <success>>true</success>
  <info>Variable testGlobalVar not found., Successfully
created variable=testGlobalVar with value=testGlobalVar
val.</info>
  <errors />
</command-response>
```

### Set Variables Properties

Property	UI Field Name	Description
create	n/a	Specification for whether or not to create a variable.
description	Description	Description of the variable.
name	Name	Name of the variable.
scope	n/a	Type of variable to be returned in the XML Respons
task	n/a	If <i>scope</i> is task; Name of the task.
trigger	n/a	If <i>scope</i> is trigger; Name of the trigger.
value	Value	Value of the variable.



## Virtual Resource Web Services

- [Overview](#)
- [Create a Virtual Resource](#)
- [Delete a Virtual Resource](#)
- [List Virtual Resources](#)
- [Modify a Virtual Resource](#)
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- [Set Limit on a Virtual Resource](#)

### Overview

Universal Controller supports the following RESTful-based web services for Virtual Res

- [Create a Virtual Resource](#)
- [Delete a Virtual Resource](#)
- [List Virtual Resources](#)
- [Modify a Virtual Resource](#)
- [Read a Virtual Resource](#)
- [Set Limit on a Virtual Resource](#)

Formatting specifications for each web service, including details about parameter requir

### Create a Virtual Resource

	Description
URI	<a href="http://host_name/opswise/resources/virtual">http://host_name/opswise/resources/virtual</a>
HTTP Method	POST
Description	Creates a Virtual Resource.
Example URI	<a href="http://localhost:8080/opswise/resources/virtual">http://localhost:8080/opswise/resources/virtual</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Virtual Resource: XML and JSON Examples</a> .
Properties	See <a href="#">Virtual Resource: Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Successfully created the Business Service with sy</li> <li>• Status 400 /Bad Request Create virtual resource failed. Resource Name mu</li> </ul>



### Virtual Resource: XML and JSON Examples

The `excludeRelated` and `retainsSysIds` properties are specified as attributes in the `<virtu`

XML	JSON
<p>XML</p> <pre>&lt;virtualResource retainSysIds ="true"&gt;   &lt;limit&gt;1&lt;/limit&gt;   &lt;name&gt;test&lt;/name&gt;   &lt;opswiseGroups&gt;     &lt;opswiseGroup&gt;1&lt;/opswiseGroup&gt;   &lt;/opswiseGroups&gt;   &lt;summary&gt;Resource with limit of only 1.&lt;/summary&gt;   &lt;sysId &gt;416d78bac0a801c901de14704e00fa75&lt; /sysId&gt;   &lt;type&gt;Renewable&lt;/type&gt; &lt;/virtualResource&gt;</pre>	<p>JSON</p> <pre>{   "limit": 1,   "name": "test",   "opswiseGroups": [     "1"   ],   "retainSysIds": true,   "summary": "Resource with limit of only 1.",   "sysId": "416d78bac0a801c901de14704e00fa75",   "type": "Renewable" }</pre>

### Virtual Resource Properties

Property	UI Field Name	Description
limit	Resource Limit	Number of resources available for the specific resource
name	Name	Name used within the Controller to identify the resource
opswiseGroups	Member of Business Services	Business Services that this record belongs to  <b>XML</b> <pre>&lt;opswiseGroups&gt;   &lt;opswiseGroup&gt;test&lt;/opswiseGroup&gt; &lt;/opswiseGroups&gt;</pre> <b>JSON</b> <pre>"opswiseGroups": ["test"]</pre>

retainSysIds	n/a	<p>For Create web services; specification for w property.</p> <ul style="list-style-type: none"> <li>• If retainSysIds is true and sysI persisted to the database.</li> <li>• If retainSysIds is false and sysI ignored; it will be autogenerated by</li> </ul> <div style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML, retainSysIds is spec element.</p> </div>
summary	Description	User-defined; description of this record.
sysId	N/A	System ID field in the database for a record.
type	Resource Type	Type of Virtual Resource.
version	n/a	<p>For Read and List web services; specificatio</p> <div style="background-color: #ffffcc; padding: 5px;"> <p> <b>Note</b> In XML web services, version element.</p> </div>

### Delete a Virtual Resource

	Description
URI	<a href="http://host_name/opswise/resources/virtual">http://host_name/opswise/resources/virtual</a>
HTTP Method	DELETE
Description	Deletes a <a href="#">Virtual Resource</a> .
URI Parameters	See <a href="#">Delete a Virtual Resource: URI Parameters</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/virtual?resourceid=7717">http://localhost:8080/opswise/resources/virtual?resourceid=7717</a>
Example Response	<ul style="list-style-type: none"> <li>• Status 200 /OK Virtual Resource deleted successfully.</li> <li>• Status 400 /Bad Request Mutual exclusion violation. Cannot specify <code>resourcena</code></li> <li>• Status 404 /Not Found A virtual resource with {name/id} "test" does not exist.</li> </ul>

### Delete a Virtual Resource: URI Parameters

Parameter	Description	§
resourceid	ID used within the Controller to identify this Virtual Resource.	§
resourcename	Name used within the Controller to identify this Virtual Resource.	§

### List Virtual Resources

	Description
URI	<a href="http://host_name/opswise/resources/virtual/list">http://host_name/opswise/resources/virtual/list</a>
HTTP Method	GET
Description	Retrieves information on all <a href="#">Virtual Resources</a> .
URI Parameters	See <a href="#">List Virtual Resources: URI Parameters</a> .
Example URI	<a href="http://localhost:8080/opswise/resources/virtual/list?name=te">http://localhost:8080/opswise/resources/virtual/list?name=te</a>
Authentication	HTTP Basic
Produces Content-Type	application/xml, application/json
Response Example	See <a href="#">List Virtual Resources: XML and JSON Response Exan</a>
Response Properties	See <a href="#">List Virtual Resources: Response Properties</a> .

### List Virtual Resources: URI Parameters

Parameter	Description	Specifications
name	Name of this Virtual Resource.	String; URI wild card parameter (that is,
type	Type of this Virtual Resource.	Valid Values: <ul style="list-style-type: none"> <li>• As String = Renewable, As Valu</li> <li>• As String = Boundary, As Value</li> <li>• As String = Depletable, As Valu</li> </ul> If <code>type</code> is not specified, it defaults to all

### List Virtual Resources: XML and JSON Response Examples


**XML**

XML

```

<virtual-resources>
  <virtual-resource>
    <limit>8</limit>
    <name>test1</name>
    <sysId>416d78bac0a801c901de14704e00fa75</sysId>
    <type>Renewable</type>
    <used>1</used>
    <used-by-tasks>
      <task>
        <amount>1</amount>
        <taskInstanceName>Opwise - Sleep 60</taskInst
      </task>
    </used-by-tasks>
    <version>1</version>
  </virtual-resource>
  <virtual-resource>
    <limit>10</limit>
    <name>test2</name>
    <sysId>416d78bac0a801c901de14704e00fa76</sysId>
    <type>Renewable</type>
    <used>1</used>
    <used-by-tasks>
      <task>
        <amount>1</amount>
        <taskInstanceName>Opwise - Sleep 60</taskInst
      </task>
    </used-by-tasks>
    <version>1</version>
  </virtual-resource>
</virtual-resources>
    
```

### List Virtual Resources: Response Properties

Property	UI Field Name	Description
limit	Resource Limit	Number of resources available for the specific resource.
name	Name	Name used within the Controller to identify this resource.
sysId	n/a	System ID field in the database for a record.
type	Resource Type	Type of Virtual Resource.
used	Resource Used	System-supplied if type is Renewable; Number of resources used.
used-by-tasks	Currently in Use	List of task instances that have acquired this virtual resource.
		<div style="background-color: #ffffcc; padding: 5px;">  <b>Note</b>                      used-by-tasks is defined as "used-by-tasks"                 </div>
version	Version	System-supplied; version number of the virtual resource.

### Modify a Virtual Resource

	Description
URI	<a href="http://host_name/opswise/resources/virtual">http://host_name/opswise/resources/virtual</a>
HTTP Method	PUT
Description	Modifies the <a href="#">Virtual Resource</a> specified by the sysId.
Example URI	<a href="http://localhost:8080/opswise/resources/virtual">http://localhost:8080/opswise/resources/virtual</a>
Consumes Content-Type	application/xml, application/json
Produces Content-Type	n/a
Example	See <a href="#">Virtual Resource: XML and JSON Examples</a> .
Properties	See <a href="#">Virtual Resource: Properties</a> .
Example Response	<ul style="list-style-type: none"> <li>Status 200 /OK Successfully updated the virtual resource with sysId</li> </ul>

### Read a Virtual Resource

	Description
URI	<a href="http://host_name/opswise/resources/virtual">http://host_name/opswise/resources/virtual</a>
HTTP Method	GET
Description	Retrieves information on a specified Virtual Resource.
Example URI	<a href="http://localhost:8080/opswise/resources/virtual?resourceName">http://localhost:8080/opswise/resources/virtual?resourceName</a>
Consumes Content-Type	n/a
Produces Content-Type	application/xml, application/json
Example	See <a href="#">Virtual Resource: XML and JSON Examples</a> .
Properties	See <a href="#">Virtual Resource: Properties</a> .

**Read a Virtual Resource: URI Parameters**

Parameter	Description	§
resourceid	ID used within the Controller to identify this Virtual Resource.	§
resourceName	Name used within the Controller to identify this Virtual Resource.	§

**Set Limit on a Virtual Resource**

	Description
URI	<a href="http://host_name/opswise/resources/virtual/ops-update-res">http://host_name/opswise/resources/virtual/ops-update-res</a>
HTTP Method	POST
Description	Updates resource limit for virtual resources.
Example URI	<a href="http://localhost:8080/opswise/resources/virtual/ops-update-res">http://localhost:8080/opswise/resources/virtual/ops-update-res</a>
Authentication	HTTP Basic
Consumes Content-Type	application/xml, application/json
Produces Content-Type	application/xml, application/json
Example Request	See <a href="#">Set Limit on a Virtual Resource: XML and JSON Examples</a>
Request Properties	See <a href="#">Set Limit on a Virtual Resource: Request Properties</a> .
Example Response	See <a href="#">Set Limit on a Virtual Resource: XML and JSON Examples</a>

**Set Limit on a Virtual Resource: XML and JSON Examples**

Example	XML
Example Request	<p data-bbox="1333 212 1409 240">XML</p> <pre data-bbox="1373 261 1969 430"> &lt;virtual-resource&gt;   &lt;name&gt;Opwise - Solo&lt;/name&gt;   &lt;limit&gt;1&lt;/limit&gt; &lt;/virtual-resource&gt; </pre>
Example Response	<p data-bbox="1333 480 1409 508">XML</p> <pre data-bbox="1373 529 1969 748"> &lt;command-response&gt;   &lt;type&gt;update_resource_limit&lt;/type&gt;   &lt;success&gt;true&lt;/success&gt;   &lt;info&gt;Successfully updated the virtual resource.&lt;/info&gt;   &lt;errors /&gt; &lt;/command-response&gt; </pre>

### Set Limit on a Virtual Resource: Request Properties

Property	UI Field Name	Description
name	Resource Name	Name used within the Controller to identify this resource
limit	Resource Limit	Maximum number of units available for this resource.