

Kelverion Automation

Integration Pack for Microsoft System Center

System Center Orchestrator

User's Guide

Version 3.1

Kelverion Integration Pack for Microsoft System Center

Kelverion Automation

Published: April 2020

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Kelverion Integration Pack for Microsoft System Center

The Integration Pack for Microsoft System Center is an add-on for System Center Orchestrator that enables you to integrate and automate tasks in the following components:

- System Center Configuration Manager (SCCM)
- System Center Operations Manager (SCOM)

System Requirements

Note: This release of the Integration Pack is compatible with SCOM and SCCM versions released with Microsoft System Center 2016 and 2019. For SCOM and SCCM versions released with System Center 2012 you should use Kelverion Integration Pack for Microsoft System Center version 2.1.

The Integration Pack for Microsoft System Center has specific system requirements depending on which component is targeted by the integration.

Common Requirements

The Integration Pack requires the following software to be installed and configured prior to implementing any integration. For more information about installing and configuring Orchestrator, refer to the respective product documentation.

- Microsoft System Center Orchestrator*
- Microsoft .NET Framework 4.5.2
- Microsoft Windows PowerShell 3.0

* Please see Kelverion.com/orchestrator for the latest Orchestrator support information.

SCCM System Requirements

In addition to Common Requirements, SCCM integrations also require the following software to be installed and configured prior to implementing the integration:

- Microsoft System Center Configuration Manager
 - Version 1906
 - Version 1902
 - Version 1706
- Microsoft Windows Remote Management (WinRM)

SCOM System Requirements

In addition to Common Requirements, SCOM integrations also require the following software to be installed and configured prior to implementing the integration:

- Microsoft System Center 2019
 - Operations Manager (10.19.10050.0)
 - Operations Manager Console

- Microsoft System Center 2016
 - Operations Manager (7.2.11878.0)
 - Operations Manager Console

Upgrading from Previous Version(s) of the Integration Pack

If you are upgrading from Kolverion Integration Pack for Microsoft System Center, you must first uninstall the previous integration pack, using the Orchestrator Deployment Manager:

To uninstall the integration pack:

1. Start the **Deployment Manager**.
2. In the navigation pane of the Deployment Manager, expand **Orchestrator Management Server**, expand **Runbook Servers** and then select the runbook server where the integration pack has been installed.
3. Locate the integration pack in the list of integration packs for the selected runbook server.
4. Right click on the integration pack and then click **Uninstall Integration Pack or Hotfix**.
5. Repeat steps 2-4 for all runbook servers and/or runbook designers where the integration pack has been installed.

Registering and Deploying the Integration Pack

After you download the integration pack file, you must register it with the Orchestrator management server and then deploy it to Runbook Servers and Runbook Designers.

To register the integration pack:

1. On the management server, copy the **.OIP** file for the integration pack to a local hard drive or network share.
2. Confirm that the file is not set to **Read Only** to prevent unregistering the integration pack at a later date.
3. Start the **Deployment Manager**.
4. In the navigation pane of the Deployment Manager, expand **Orchestrator Management Server**, right-click **Integration Packs** to select **Register IP with the Orchestrator Management Server**. The **Integration Pack Registration Wizard** opens.
5. Click **Next**.
6. In the **Select Integration Packs or Hotfixes** dialog box, click **Add**.
7. Locate the **.OIP** file that you copied locally from step 1, click **Open** and then click **Next**.
8. In the **Completing the Integration Pack Wizard** dialog box, click **Finish**.
9. On the **End User Agreement** dialog box, read the Kolverion License Terms, and then click **Accept**.
10. The **Log Entries** pane displays a confirmation message when the integration pack is successfully registered.

To deploy the integration pack:

1. In the navigation pane of the **Deployment Manager**, right-click **Integration Packs**, click **Deploy IP to Runbook Server or Runbook Designer**.
2. Select the integration pack that you want to deploy, and then click **Next**.
3. Enter the name of the runbook server or computers with the Runbook Designer installed, on which you want to deploy the integration pack, click **Add**, and then click **Next**.
4. Continue to add additional runbook servers and computers running the Runbook Designer, on which you want to deploy the integration pack. Click **Next**.
5. In the **Installation Options** dialog box, configure the following settings.
6. To choose a time to deploy the integration pack, select the **Schedule installation** check box, and then select the time and date from the **Perform installation** list.
7. Click one of the following:
 - a. **Stop all running runbooks before installing the integration pack** to stop all running runbooks before deploying the integration pack.
 - b. **Install the Integration Packs without stopping the running Runbooks** to install the integration pack without stopping any running runbooks.
8. Click **Next**.
9. In the **Completing Integration Pack Deployment Wizard** dialog box, Click **Finish**.
10. When the integration pack is deployed, the Log Entries pane displays a confirmation message.

Licensing the Integration Pack

After you register and deploy the integration pack you must provide a valid Keverion license before running any runbooks that contain activities from the integration pack

To deploy the integration pack license file

1. Copy the .KAL license file to %PROGRAMFILES(X86)%\Keverion Automation\Licenses
2. Repeat for each Orchestrator Runbook Service and Runbook Designer host system.

Installing and Configuring Required Components

Mandatory Configuration

The following software must be installed and configured:

1. **Windows PowerShell 3.0** – please refer to [Installing Windows PowerShell \(http://technet.microsoft.com/en-us/library/hh847837.aspx\)](http://technet.microsoft.com/en-us/library/hh847837.aspx) for target operating system(s).
2. **PowerShell Script Execution Policy** - must be set to *Remote Signed*
 - Start 32-bit Windows PowerShell (x86) and run PS command *Set-ExecutionPolicy RemoteSigned*.
 - Start 64-bit Windows PowerShell and run PS command *Set-ExecutionPolicy RemoteSigned*.

Additional Configuration

Depending on which System Center products are to be targeted by the integration, the IP may require installing and configuring the following software:

1. **Windows Remote Management (WinRM)** - installed and configured on Orchestrator Runbook Service (WinRM client) and WinRM server machines – please refer to <http://msdn.microsoft.com/en-us/library/aa384372%28v=vs.85%29.aspx> and to [WinRM Configuration Steps](#).
2. **Microsoft System Center 2019 Operations Manager Console** - please refer to <https://docs.microsoft.com/en-us/system-center/scom/deploy-install-ops-console?view=sc-om-2019>.

WinRM Configuration Steps for SCCM

The IP requires WinRM to be installed and configured in order to communicate with the SCCM server. WinRM has to be installed/configured for the Orchestrator Runbook Service machine (WinRM client) and the SCCM server machine (WinRM server). When both of these are installed on the same machine, both WinRM client and server components have to be configured on that machine.

1. Configure a WinRM HTTP listener on the SCCM server (WinRM server) by opening a PowerShell console (Run as Administrator) and running the *winrm quickconfig*.

```
PS C:\Users\orchadmin> winrm quickconfig
WinRM service is already running on this machine.
WinRM is not set up to allow remote access to this machine for management.
The following changes must be made:

Create a WinRM listener on HTTP://* to accept WS-Man requests to any IP on this machine.
Enable the WinRM firewall exception.

Make these changes [y/n]? y

WinRM has been updated for remote management.

Created a WinRM listener on HTTP://* to accept WS-Man requests to any IP on this machine.
WinRM firewall exception enabled.
```

Similarly, if you want to configure a HTTPS listener, use *winrm quickconfig –transport:https*. Note that HTTPS requires a valid SSL certificate to be configured on the server machine.

2. On the SCCM server machine (WinRM server) and Orchestrator Runbook Service machine (WinRM client), make sure that CredSSP authentication is enabled, either via PowerShell command (*Enable-WSManCredSSP –Role Server*) or by running the group policy configuration utility (gpedit.msc).

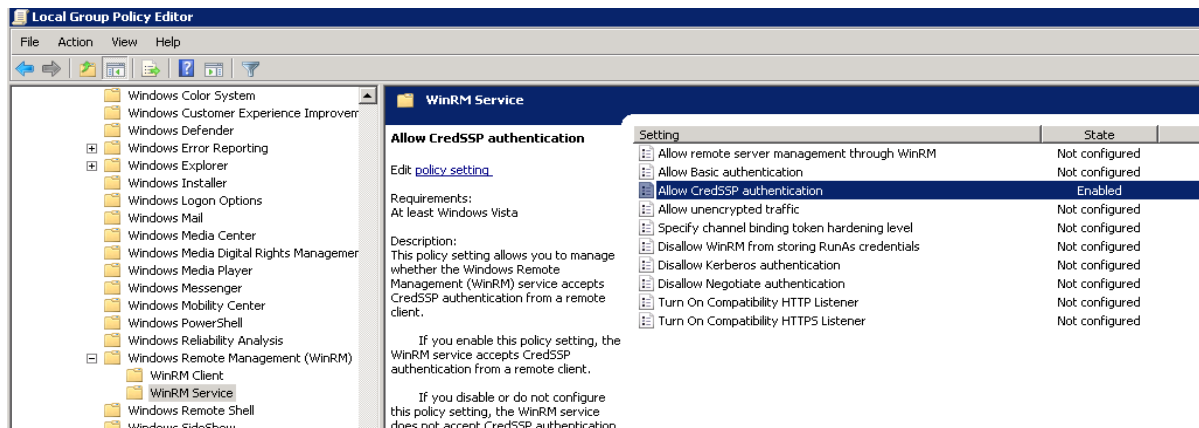
```
PS C:\Windows\system32> Get-WSManCredSSP
The machine is not configured to allow delegating fresh credentials.
This computer is not configured to receive credentials from a remote client computer.
PS C:\Windows\system32> Enable-WSManCredSSP -Role Server

CredSSP Authentication Configuration for WS-Management
CredSSP authentication allows the server to accept user credentials from a remote computer. If you enable CredSSP
authentication on the server, the server will have access to the user name and password of the client computer if the
client computer sends them. For more information, see the Enable-WSManCredSSP Help topic.
Do you want to enable CredSSP authentication?
[Y] Yes [N] No [S] Suspend [?] Help (default is "Y"): y

cfg : http://schemas.microsoft.com/wbem/wsman/1/config/service/auth
lang : en-US
Basic : false
Kerberos : true
Negotiate : true
Certificate : false
CredSSP : true
CbtHardeningLevel : Relaxed

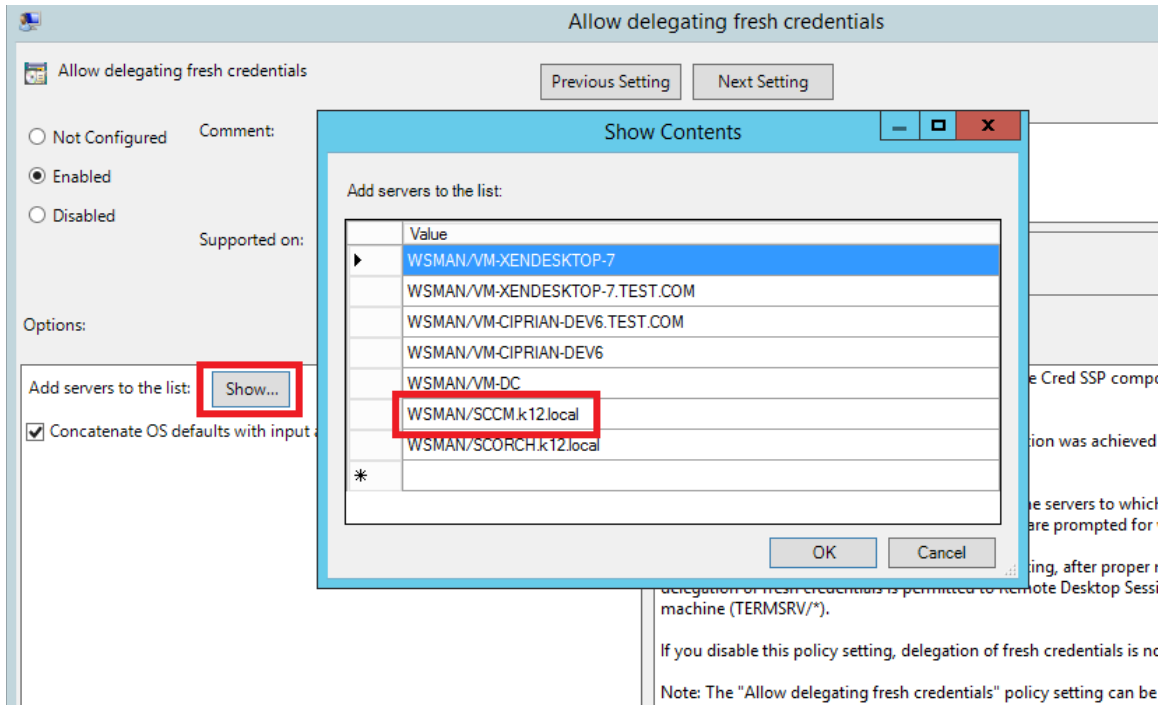
PS C:\Windows\system32> _
```

Navigate to *Computer Configuration -> Administrative Templates -> Windows Components -> Windows Remote Management (WinRM) -> WinRM Service -> Allow CredSSP authentication* and make sure it is enabled.



- On the Orchestrator Runbook Service machine (WinRM client) allow delegation of credentials to SCCM Server machine (WinRM server) either via PowerShell command (`Enable-WSMANCredSSP -Role Client -delegatecomputer <WinRM Server FQDN> -force`) or by running the group policy configuration utility (`gpedit.msc`). Navigate to *Computer Configuration -> Administrative Templates -> System -> Credentials Delegation -> Allow Delegating Fresh Credentials*. Make sure this is enabled. Add the SCCM server machine to the list of servers. This must be in the form `wsman/<SCCM server FQDN>`.

Note: If your Orchestrator machine is not part of the domain where the SCCM server is installed, you may have to configure *Allow Delegating Fresh Credentials with NTLM-only server authentication* in a similar fashion.



Configuring the Kolverion Integration Pack for Microsoft System Center Connections

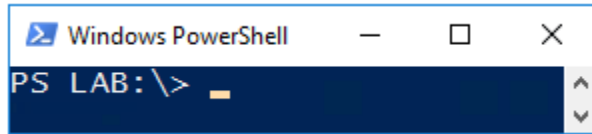
A connection establishes a reusable link between Orchestrator and the target Microsoft System Center component. You can create multiple connections, as you require, specifying links to multiple System Center servers.

SCCM Configuration

► To set up a SCCM configuration:

1. In the Client, click the **Options** menu, and select *KA Microsoft System Center*. The **KA Microsoft System Center** dialog box appears.
2. On the **Configurations** tab, click **Add** to begin the configuration setup. The **Add Configuration** dialog box appears.
3. In the **Name** box, enter a name for the configuration. This could be the name of the Microsoft System Center server or a descriptive name to distinguish the type of configuration.
4. Click the ellipsis button (...) next to the **Type** box and select **SCCM Configuration**.
5. In the **SCCM Server** box, enter the FQDN or the IP address of the machine where your SCCM server (or SCCM console) is installed.
6. In the **SCCM Server Port** box enter the port used to communicate with the SCCM machine. Typical values are 5985 for HTTP and 5986 for HTTPS.

7. In the **SCCM User** box enter a domain user with permissions to administer the SCCM environment, in the form *DOMAIN\user*.
8. In the **SCCM User Password** box enter the password of the SCCM admin user.
9. In the **SCCM Drive** box enter the PowerShell drive for the target SCCM site. Typically this is the same as the site code for the SCCM site you are integrating with. In this example, the SCCM Drive is "LAB".



10. The **Use SSL** box specifies whether the IP uses HTTPS or HTTP to communicate with the SCCM Server. Select **True** to use SSL over HTTPS. Select **False** to use HTTP. Note that configuring this also requires the **SCCM Server Port** to be configured appropriately.
11. The **Skip CA Check** box specifies whether the client does not validate that the server certificate is signed by a trusted certificate authority (CA) when connecting over HTTPS (**Use SSL** box is **True**). Select **True** when the remote server is trusted by using another mechanism, such as when the remote computer is part of a network that is physically secure and isolated or when the remote computer is listed as a trusted host in a WinRM configuration.
12. The **Skip CN Check** box specifies whether the certificate common name (CN) of the server does not need to match the hostname of the server, when connecting over HTTPS (**Use SSL** box is **True**). Select **True** for trusted servers.
13. The **Skip Revocation Check** box specifies whether the revocation status of the server certificate is validated or not.
14. In the **Open Timeout (seconds)** enter the number of seconds the IP should wait before timing out when opening a remote WinRM session to the target SCCM Server.
15. Click **OK** to close the configuration dialog box, and then click **Finish**.

SCOM Configuration

To set up a SCCM configuration:

1. In the Client, click the **Options** menu, and select *KA Microsoft System Center*. The **KA Microsoft System Center** dialog box appears.
2. On the **Configurations** tab, click **Add** to begin the configuration setup. The **Add Configuration** dialog box appears.
3. In the **Name** box, enter a name for the configuration. This could be the name of the Microsoft System Center server or a descriptive name to distinguish the type of configuration.
4. Click the ellipsis button (...) next to the **Type** box and select **SCOM Configuration**.
5. In the **Computer Name** box, enter the FQDN or the IP address of the machine where your SCOM server is installed.
6. In the **SCOM User** box enter a domain user with permissions to administer the SCOM environment, in the form *DOMAIN\user*.
7. In the **SCOM User Password** box enter the password of the SCOM admin user.

8. Click **OK** to close the configuration dialog box, and then click **Finish**.

Microsoft System Center Activities

This integration pack adds the KA Microsoft System Center category to the **Activities** pane in the Client. This category contains the following activities:

- Run SCCM Task
- Run SCOM Task

Common Configuration Instructions for All Activities

The following configuration instructions apply to all activities in this integration pack. Links to this section are included in the configuration instructions for each activity.

Activity Properties

Each activity has a set of required or optional properties that define the configuration of that activity. This includes how it connects to other activity or how the activity performs its actions. You can view or modify activity properties in the Orchestrator Client.

To configure the properties for an activity

1. Double-click the activity. Alternatively, you can right-click the activity, and then click **Properties**.
2. To save your configuration entries, click **Finish**.

In the activity properties dialog box, several tabs along the left side provide access to general and specific settings for the activity. Although the number of available tabs for activity properties differs from activity to activity, all activities will have a **General** tab, a **Properties** tab and/or **Filters** tab, and a **Run Behavior** tab. Some activities may have additional tabs.

General Tab

This tab contains the **Name** and **Description** properties for the activity. By default, the **Name** of the activity is the same as its activity type, and the **Description** is blank. You can modify these properties to create more descriptive names or provide detailed descriptions of the actions of the activity.

Properties/Filters Tab

These tabs contain properties that are specific to the activity.

All activities in this integration pack have the **Configuration Name** property at the top of the **Properties** tab. This property is used to specify the connection to a Microsoft System Center.

To configure the Configuration Name property

- Click the ellipsis (...) button next to the **Name** field, and then select the applicable connection name. Connections displayed in the list have been previously configured as described in [Configuring the Microsoft System Center Connections](#).

Filter Behavior

The Monitor and Get activities use filters to determine the values that will invoke a runbook or retrieve activities. Property values of potential candidates are compared to the values of the filters to determine if they meet the criteria. When matching against values, you select one of the available methods of comparison. An option is provided to either match or not match the filter using each method. For example, the "Does not" version of a method causes alerts that do not match the filter to trigger the runbook.

- **Equals:** the property of the object exactly matches the text or number specified in the filter.
- **Does not equal:** the property of the object does not exactly match the text or number specified in the filter.
- **Is less than:** the property of the object is less than the number specified in the filter.
- **Is less than or equal to:** the property of the object is less than or equal to the number specified in the filter.
- **Is greater than:** the property of the object is greater than the number specified in the filter.
- **Is greater than or equal to:** the property of the object is greater than or equal to the number specified in the filter.
- **Contains:** the property of the object contains the exact text specified in the filter. Unlike the Equals behavior, there can be other text surrounding the matching text.
- **Does not contain:** the property of the object does not contain the exact text specified in the filter. Unlike the Equals behavior, there can be other text surrounding the matching text.
- **Starts with:** the property of the object starts with the exact text specified in the filter. Unlike the Equals behavior, there can be other text following the matching text.
- **Ends with:** the property of the object ends with the exact text specified in the filter. Unlike the Equals behavior, there can be other text preceding the matching text.
- **\$null** is accepted as a filter value and can be used to build filter conditions which test for properties being equal or not equal to PowerShell \$null.
- When building DateTime filter conditions it is recommended to use inequality comparison operators. If you use equals or does not equal to compare with DateTime values, ensure the filter value is specified with millisecond precision, otherwise the comparison evaluation may fail.

Run Behavior Tab

This tab contains the properties that determine how the activity handles multi-value published data and what notifications will be sent if the activity fails or runs for an excessive period of time.

Multi-Value Published Data Behavior

The Get activities retrieve information from another activity or outside source, and can return one or more values in the published data. For example, when you use the Get Collection Member activity, the data output from that activity might be a list of computers that belong to the specified collection.

By default, the data from the Get activity will be passed on as multiple individual outputs. This invokes the next activity as many times as there are items in the output. Alternatively, you can provide a single output for the activity by enabling the **Flatten** option. When you enable this option, you also choose a formatting option:

- **Separate with line breaks.** Each item is on a new line. This format is useful for creating human-readable text files for the output.
- **Separate with _ .** Each item is separated by one or more characters of your choice.
- **Use CSV format.** All items are in CSV (comma-separated value) format. This format is useful for importing data into spreadsheets or other applications.

The activity will produce a new set of data every time it runs. The **Flatten** feature does not flatten data across multiple instances of the same activity.

Event Notifications

Some activities are expected to take a limited amount of time to complete. If they do not complete within that time they may be stalled or there may be another issue preventing them from completing. You can define the number of seconds to wait for completion of the action. After this period a platform event will be sent and the issue will be reported. You can also choose whether to generate a platform event if the activity returns a failure.

To be notified when the activity takes longer than a specified time to run or fails to run

1. In the **Event Notifications** box, enter the **number of seconds** of run time before a notification is generated.
2. Select **Report if activity fails to run** to generate run failure notifications.

For more information about Orchestrator events, see the "Event Notifications " topics in the [Runbook Properties](https://technet.microsoft.com/en-us/library/hh489610.aspx#EventNotifications) (https://technet.microsoft.com/en-us/library/hh489610.aspx#Event Notifications).

Published Data

Published data is the foundation of a working runbook. It is the data produced as a result of the actions of an activity. This data is published to an internal data bus that is unique for each runbook. Subsequent activities in the runbook can subscribe to this data and use it in their configuration. Link conditions also use this information to add decision-making capabilities to runbooks.

An activity can only subscribe to data from the activities that are linked before it in the runbook. You can use published data to automatically populate the property values needed by activities.

To use published data

1. Right-click the property value box, click **Subscribe**, and then click **Published Data**.
2. Click the **Activity** drop-down box and select the activity from which you want to obtain the data.
3. To view additional data elements common to all activities, select **Show Common Published Data**.
4. Click the published data element that you want to use, and then click **OK**.

For a list of the data elements published by each activity, see the Published Data tables in the activity topic. For information about the common published data items, see the [Published Data](http://technet.microsoft.com/en-us/library/hh403821.aspx) (<http://technet.microsoft.com/en-us/library/hh403821.aspx>).

SCCM Activity

The SCCM activity is used in Orchestrator runbooks which integrate and automate SCCM specific tasks. Use the *Task* property in this activity to select one of the following SCCM tasks:

- Add Software Update To Group
- Create Package
- Create Program
- Create Software Update Group
- Get Device
- Get Package
- Get Software Update
- Get Software Update Group
- Import Computer
- Remove Device
- Start Content Distribution
- Update Package
- Update Software Update Group

Add Software Update To Group

The *Add Software Update To Group* task can be used in a runbook to add an existing Software Update to an existing software update group. To configure this task, make sure the *Task* input property is configured with the *Add Software Update To Group* value. The following tables list the required properties for this task. The task does not have any SCCM specific published data.

Add Software Update To Group Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Add Software Update To Group</i>
Software Update ID	Specifies one or more Configuration Item IDs of the software updates to be added to the group. When specifying multiple names, use a comma (,) separated list of strings.	<i>Integer or List of Integer</i>
Software Update Group ID	Specifies the Configuration Item ID of the software update group that will have the software update added to it.	<i>Integer</i>

Create Package

The *Create Package* task can be used in a runbook to create a new SCCM package. To configure this task, make sure the *Task* input property is configured with the *Create Package* value. The following tables list the properties and published data for this task.

Create Package Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Create Package</i>
Name	Specifies the name of the new package that is to be created.	<i>String</i>

Create Package Optional Properties

Name	Description	Valid Values
Description	Specifies a description for the package, maximum of 128 characters.	<i>String</i>
Language	Specifies the language version of the package, maximum of 32 characters, in a format that you choose to use to identify the language version. SCCM uses the Language property together with Manufacturer, Name, and Version to identify a package. For example, you can have an English version and a German version of the same package.	<i>String</i>
Manufacturer	Specifies a manufacturer name to help you identify the package, maximum of 32 characters.	<i>String</i>
Path	Specifies the location of the files to add to the package. You can specify either a full local path or a UNC path. Make sure that this location contains all the files and subdirectories that the program needs to complete, including any scripts.	<i>String</i>
Version	Specifies a version for the package.	<i>String</i>

Create Package Published Data

Name	Description	Valid Values
Package Name	The name of the newly created package.	<i>String</i>
Package ID	The ID of the newly created package.	<i>String</i>
Package Type	The type of package.	<i>Integer</i>

Create Program

The *Create Program* task can be used in a runbook to create a new SCCM program. To configure this task, make sure the *Task* input property is configured with the *Create Program* value. The following tables list the properties and published data for this task.

Create Program Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Create Program</i>
Program Type	Specifies the type of program to be created.	<i>Standard</i> <i>Device</i>
Program Name	Specifies the program name.	<i>String</i>
Package ID	Specifies the package for the program.	<i>String</i>
Command Line	Specifies the command line for the program.	<i>String</i>

Create Standard Program Optional Properties

Name	Description	Valid Values
Disk Space Requirement	Specifies the amount of disk space that the software program requires to run on the computer. If a value is specified, units for the value must also be specified.	<i>Integer</i>
Disk Space Unit	Specifies unit for <i>Disk Space Requirement</i> .	<i>KB</i> <i>MB</i> <i>GB</i>
Drive Letter	Specifies a drive letter to qualify the location if the <i>Drive Mode</i> parameter is used and configured as <i>RequiresSpecificDriveLetter</i> .	<i>String</i>
Drive Mode	Indicates whether the program requires a specific drive letter, specified in the <i>Drive Letter</i> parameter. By default, the program runs with a Universal Naming Convention (UNC) name. If <i>Drive Mode</i> is set to <i>RequiresDriveLetter</i> , the program uses any available drive letter. If <i>DriveMode</i> is set to <i>RequiresSpecificDriveLetter</i> , the program only runs if the drive is not already in use.	<i>RenameWithUnc</i> <i>RequiresDriveLetter</i> <i>RequiresSpecificDriveLetter</i>

Name	Description	Valid Values
Duration (Minutes)	Specifies the maximum amount of time the program is expected to run. The default value is 120 minutes.	<i>Integer</i>
Program Run Type	Specifies the logon conditions that are necessary for the program to run. The default setting is <i>OnlyWhenUserIsLoggedIn</i> .	<i>OnlyWhenNoUserIsLoggedIn</i> <i>OnlyWhenUserIsLoggedIn</i> <i>WhetherOrNotUserIsLoggedIn</i>
Reconnect	Indicates whether the client computer reconnects to the distribution point when the user logs on.	<i>True</i> <i>False</i>
Run Mode	Specifies the credentials that the program requires to run on the client computer.	<i>RunWithAdministrativeRights</i> <i>RunWithUserRights</i>
Run Type	Specifies the mode in which the program will run on the client computer. The default is Normal.	<i>Hidden</i> <i>Maximized</i> <i>Minimized</i> <i>Normal</i>
User Interaction	Indicates whether to allow users to interact with the program.	<i>True</i> <i>False</i>
Working Directory	Specifies a working directory for the program.	<i>String</i>

Create Device Program Optional Properties

Name	Description	Valid Values
Command Line Folder	Specifies the folder that contains the executable program. This folder can be an absolute path on the client, or a path relative to the distribution folder that contains the package.	<i>String</i>
Comment	Specifies optional text about a program, such as a description. On client computers, this text is displayed in Run Advertised Programs in Control Panel.	<i>String</i>
Disk Space Requirement	Specifies the amount of disk space that the software program requires to run on the computer. If a value is specified, units for the value must also be specified.	<i>Integer</i>
Disk Space Unit	Specifies unit for <i>Disk Space Requirement</i> .	<i>KB</i> <i>MB</i>

Name	Description	Valid Values
		<i>GB</i>
Download Program Type	Specifies when the program is to run.	<i>AsSoonAsPossible</i> <i>OnlyOverFastNetwork</i> <i>OnlyWhenTheDeviceIsLocked</i>
Requirement	Specifies additional requirements for standard or device programs.	<i>String</i>
Working Directory	Specifies a working directory for the program.	<i>String</i>

Create Program Published Data

Name	Description	Valid Values
Program Name	The name of the newly created program.	<i>String</i>
Package Name	The name of the package containing the program.	<i>String</i>
Package ID	The ID of the package containing the program.	<i>String</i>

Create Software Update Group

The *Create Software Group* task can be used in a runbook to create a new software update group based on existing Software Updates in SCCM. To configure this task, make sure the *Task* input property is configured with the *Create Software Update Group* value. The following tables list the required properties and published data for this task.

Create Software Update Group Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Create Software Update Group</i>
Name	Specifies the name of the new software update group that is to be created.	<i>String</i>
Update ID	Specifies one or more Configuration Item IDs for the software update(s) which are to be included in the update group. When specifying multiple IDs, use a comma (,) separated list of unsigned integers. Note: You can use the PD item 'Software Update ID' from the SCCM Task 'Get Software Update'	<i>Integer or List of Integer</i>

Create Software Update Group Published Data

Name	Description	Valid Values
Name	The name of the newly created software update group.	<i>String</i>
ID	The Configuration Item ID of the newly created software update group.	<i>Integer</i>
Unique ID	The Unique ID of the newly created software update group.	<i>String</i>

Get Device

The *Get Device* task can be used in a runbook retrieve and filter SCCM devices. To configure this task, make sure the *Task* input property is configured with the *Get Device* value. The following tables list the required properties, optional properties, published data and filters for this task.

Get Device Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Get Device</i>

Get Device Optional Properties

Name	Description	Valid Values
ID	Specifies the ID of the device to retrieve. This property cannot be used when the <i>Name</i> , <i>Collection ID</i> , <i>Collection Name</i> , <i>Threat ID</i> , <i>Threat Name</i> properties are also specified.	<i>String</i>
Name	Specifies the name of the device to retrieve. This property can also be used in conjunction with <i>Collection ID</i> or <i>Collection Name</i> properties, respectively.	<i>String</i>
Collection ID	Specifies the ID of a SCCM collection for which devices are to be retrieved. This property can also be used in conjunction with <i>Name</i> or <i>Threat Name</i> properties, respectively.	<i>String</i>
Collection Name	Specifies the name of a SCCM collection for which devices are to be retrieved. This property can also be used in conjunction with <i>Name</i> property.	<i>String</i>
Threat ID	Specifies the ID of a SCCM threat object for which devices are to be retrieved. This property can also be used in	<i>String</i>

Name	Description	Valid Values
	conjunction with <i>Collection ID</i> property.	
Threat Name	Specifies the name of a SCCM threat object for which devices are to be retrieved. This property can also be used in conjunction with <i>Collection ID</i> property.	<i>String</i>

Get Device Published Data

Name	Description	Valid Values
Device Count	Number of devices retrieved by the activity.	<i>Integer</i>
AD Last Logon Time	Last logon timestamp of the computer (discovered from Active Directory).	<i>DateTime</i>
AD Site Name	Active Directory site to which the resource belongs.	<i>String</i>
AMT Full Version	The version number for Active Management Technology.	<i>String</i>
AMT Status	<p>The status for Active Management Technology.</p> <ul style="list-style-type: none"> 0 - Not AMT capable 1 - AMT capable 2 - Not provisioned 3 - Provisioned 4 - Provisioned by others 5 - Unknown 	<i>Unsigned Integer</i>
Client Active Status	Comes from Client Health.	<i>Integer</i>
Client Certificate Type	<p>Client certificate type. Possible values are:</p> <ul style="list-style-type: none"> 1 - Self-signed Certificate 2 - PKI Certificate 	<i>Unsigned Integer</i>
Client Check Pass	<p>Comes from Client Health.</p> <ul style="list-style-type: none"> 1 - Client is healthy 2 - Client is unhealthy 	<i>Integer</i>
Client Edition	<p>Edition of the client. Possible values are:</p> <ul style="list-style-type: none"> 0 - Not Installed 1 - Windows RT 2 - Windows Mobile 6 	<i>Integer</i>

Name	Description	Valid Values
	3 - Nokia Symbian 4 - Windows Phone 5 - Mac 6 - Windows CE 7 - Windows Embedded 8 - iOS 9 - Andriod 10 - Unix/Linux	
Client Remediation Success	Comes from Client Health. 1 - Client remediation succeeded 2 - Client remediation failed	<i>Integer</i>
Client Type	Type of client. Possible value are: 1 - Client 3 - Device	<i>Unsigned Integer</i>
Client Version	Version of the installed client software.	<i>String</i>
Device Access State	Used by the Exchange connector. Possible values are: Allowed Blocked Quarantined	<i>String</i>
Device OS	Device operating system.	<i>String</i>
Device Type	Type of device.	<i>String</i>
Domain	Domain to which the resource belongs.	<i>String</i>
EAS Device ID	Identifier of the device - used by Exchange Active Sync (EAS). This is specific to device management.	<i>String</i>
EP Antispyware Enabled	Specifies if Endpoint Protection antimalware is enabled.	<i>True or False</i>
EP Antispyware Signature Last Update	The last update time of the Endpoint Protection antimalware signature file.	<i>DateTime</i>

Name	Description	Valid Values
EP Antispyware Signature Last Version	The last version of the Endpoint Protection antimalware signature file.	<i>DateTime</i>
EP Antivirus Enabled	Specifies if Endpoint Protection antivirus is enabled.	<i>True or False</i>
EP Antivirus Signature Last Update	The last update time of the Endpoint Protection antivirus signature file.	<i>DateTime</i>
EP Antivirus Signature Last Version	The last version of the Endpoint Protection antivirus signature file.	<i>DateTime</i>
EP Client Version	End Point Protection client agent version, such as '4.1.522.0'.	<i>String</i>
EP Deployment Description	Deployment description.	<i>String</i>
EP Deployment Error Code	Deployment error code.	<i>Unsigned Integer</i>
EP Deployment State	Deployment state. Possible values are: 1 - Unmanaged 2 - To Be Installed 3 - Managed 4 - Install With Error 5 - Reboot Pending	<i>Unsigned Integer</i>
EP Enabled	Specifies if Endpoint Protection is enabled.	<i>True or False</i>
EP Engine Version	End Point Protection engine version, such as '1.1.8904.0'.	<i>String</i>
EP Last Full Scan End	End time of the last full End Point Protection scan.	<i>DateTime</i>
EP Last Full Scan Start	Start time of last full End Point Protection scan.	<i>DateTime</i>
EP Infection Status	Endpoint Protection infection status. Possible values are: 0 - Unknown 1 - None 2 - Cleaned 3 - Pending	<i>Unsigned Integer</i>

Name	Description	Valid Values
	4 - Failed	
EP Last Infection Time	Last infection time.	<i>DateTime</i>
EP Last Quick Scan End	End time of last quick End Point Protection scan.	<i>DateTime</i>
EP Last Quick Scan Start	Start time of last quick End Point Protection scan.	<i>DateTime</i>
EP Last Threat Name	Last threat name.	<i>String</i>
EP Pending Full Scan	Specifies if Endpoint Protection is pending a full scan.	<i>True or False</i>
EP Pending Manual Steps	Specifies if Endpoint Protection is pending manual steps.	<i>True or False</i>
EP Pending Offline Scan	Specifies if Endpoint Protection is pending an offline scan.	<i>True or False</i>
EP Pending Reboot	Specifies if Endpoint Protection is pending a reboot.	<i>True or False</i>
EP Policy Application Description	Antimalware Policy application description.	<i>String</i>
EP Policy Application Error Code	Policy application error code.	<i>Unsigned Integer</i>
EP Policy Application State	Policy application state. 1 - Success 2 - Failed	<i>Unsigned Integer</i>
EP Product Status	Product status. Possible values are: 0 - No status flags are set. 0 - Service not running. 1 - Service started without any malware protection engine. 2 - Pending a full scan due to threat action. 4 - Pending a reboot due to threat action. 8 - Pending manual steps due to threat action. 16 - AV signatures out of date.	<i>Unsigned Integer</i>

Name	Description	Valid Values
	32 - AS signatures out of date. 64 - No quick scan has happened for a specified period. 128 - No full scan has happened for a specified period. 256 - System initiated scan in progress. 512 - System initiated clean in progress. 1024 - There are samples pending submission. 2048 - Product running in evaluation mode. 4096 - Product running in non-genuine Windows mode. 8192 - Product expired. 16384 - Off-line scan required.	
Exchange Organization	Name of the organization for Exchange Active Sync (EAS).	<i>String</i>
Exchange Server	Name of the Exchange server for Exchange Active Sync (EAS).	<i>String</i>
Is Active	Specifies if there has been a recent heartbeat from the client.	<i>True or False</i>
Is Always Internet	Specifies if a client that is installed has a sustained connection to the Internet.	<i>True or False</i>
Is AOA Capable	Specifies if AOE capable.	<i>True or False</i>
Is Approved	Specifies if system is able to accept secure policy. Unapproved (anonymous) clients will not get policy. Clients that registered via windows authentication, or using PKI certificate chain trust, will be automatically approved.	<i>True or False</i>
Is Assigned	Specifies if the client is a Configuration Manager client.	<i>True or False</i>
Is Blocked	Specifies if a system is blocked. Block/unblock is a manual action in the Admin Console UI that the administrator can invoke. By blocking a client, client	<i>True or False</i>

Name	Description	Valid Values
	communication with the server will be cut off.	
Is Client	Specifies if the client is a Configuration Manager client.	<i>True or False</i>
Is Decommissioned	Specifies if decommissioned.	<i>True or False</i>
Is Direct	Specifies if direct.	<i>True or False</i>
Is Internet Enabled	Specifies if a client is enabled for communication with an internet facing management point.	<i>True or False</i>
Is Obsolete	Specifies if the client has been marked obsolete.	<i>True or False</i>
Is Virtual Machine	Specifies if the client is a virtual machine.	<i>True or False</i>
Last Active Time	Comes from Client Health. Represents the last reported time the client was active.	<i>DateTime</i>
Last Client Check Time	Comes from Client Health. Represents the last reported health evaluation time.	<i>DateTime</i>
Last DDR	Last heartbeat timestamp from client DDR discovery.	<i>DateTime</i>
Last Hardware Scan	Timestamp from the last hardware inventory scan.	<i>DateTime</i>
Last Installation Error	Last reported error code from the installation on this client.	<i>Unsigned Integer</i>
Last MP Server Name	Management Point server name where the client performed its last policy request.	<i>String</i>
Last Policy Request	Timestamp of the last policy request for this client.	<i>DateTime</i>
Last Software Scan	Timestamp of the last software inventory scan for this client.	<i>DateTime</i>
Last Status Message	Timestamp of the last status message received from this client.	<i>DateTime</i>
Last Success Sync Time (UTC)	Timestamp of the last successfully synchronization time for this client.	<i>DateTime</i>
Latest Processing Attempt	Timestamp of the last processing attempt for this client.	<i>DateTime</i>
Name	NetBIOS name for this system. Comes from Discovery.	<i>String</i>
Phone Number	Phone number of the device, as reported by	<i>String</i>

Name	Description	Valid Values
	Exchange Active Sync (EAS).	
Policy Application Status	Application policy status, as reported by Exchange Active Sync (EAS).	<i>String</i>
Resource ID	Unique Configuration Manager-supplied ID for the resource.	<i>Unsigned Integer</i>
Resource Type	<p>Type of resources on the site. Possible values are:</p> <p>3 - User Group</p> <p>4 - User</p> <p>5 - System</p> <p>See Note - IP Network</p> <p>Note</p> <p>The IP network resource type might not have a resource type value of 6. Its value depends on when Network Discovery was initiated relative to the discovery of new architectures by the Discovery Data Manager. The resource type value is 6 if the Data Discovery Manager discovered a new architecture before network discovery was initiated.</p>	<i>Unsigned Integer</i>
Retire Status	Retire Status	<i>String</i>
Site Code	Site code of the site that created the collection.	<i>String</i>
SMS ID	Unique Configuration Manager ID of the client.	<i>String</i>
Status	Current status.	<i>Integer</i>
Suppress Auto Provision	Comes from AMT (Active Management Technology). Indicates whether the client should be blocked from being provisioned automatically.	<i>True or False</i>
Unknown	Specifies if device is unknown.	<i>True or False</i>
User Domain Name	The domain of the user to last log in to this client.	<i>String</i>
User Name	The name of the user to last log in to this client.	<i>String</i>
Wipe Status	<p>Wipe status of the device, as reported through Exchange Active Sync (EAS).</p> <p>1 - Wipe Pending</p>	<i>Unsigned Integer</i>

Name	Description	Valid Values
	2 - Wipe Cancelling	
	3 - Wipe Confirmed/Registered	

Get Device Filters

Name	Description	Filter Operator
AD Last Logon Time	Filter by AD Last Logon Time	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
AD Site Name	Filter by AD Site Name	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
AMT Full Version	Filter by AMT Full Version	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
AMT Status	Filter by AMT Status	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Client Active Status	Filter by Client Active Status	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i>

Name	Description	Filter Operator
		<i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Client Certificate Type	Filter by Client Certificate Type	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Client Check Pass	Filter by Client Check Pass	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Client Edition	Filter by Client Edition	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Client Remediation Success	Filter by Client Remediation Success	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Client Type	Filter by Client Type	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Client Version	Filter by Client Version	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
		<i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Device Access State	Filter by Device Access State	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Device OS	Filter by Device OS	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Device Type	Filter by Device Type	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Domain	Filter by Domain	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
EAS Device ID	Filter by EAS Device ID	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
EP Antispyware Enabled	Filter by EP Antispyware Enabled value	<i>Equals</i> <i>Does not equal</i>
EP Antispyware Signature Last Update	Filter by EP Antispyware Signature Last Update value	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Antispyware Signature Last Version	Filter by EP Antispyware Signature Last Version	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Antivirus Enabled	Filter by EP Antivirus Enabled value	<i>Equals</i> <i>Does not equal</i>
EP Antivirus Signature Last Update	Filter by EP Antivirus Signature Last Update value	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Antivirus Signature Last	Filter by EP Antivirus Signature Last Version	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
Version		<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Client Version	Filter by EP Client Version	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
EP Deployment Description	Filter by EP Deployment Description	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
EP Deployment Error Code	Filter by EP Deployment Error Code	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Deployment State	Filter by EP Deployment State	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Enabled	Filter by EP Enabled value	<i>Equals</i> <i>Does not equal</i>
EP Engine	Filter by EP Engine Version	<i>Equals</i>

Name	Description	Filter Operator
Version		<i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
EP Last Full Scan End	Filter by EP Last Full Scan End value	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Last Full Scan Start	Filter by EP Last Full Scan Start value	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Infection Status	Filter by EP Infection Status	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Last Infection Time	Filter by EP Last Infection Time	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Last Quick Scan End	Filter by EP Last Quick Scan End value	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Last Quick Scan Start	Filter by EP Last Quick Scan Start value	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Last Threat Name	Filter by EP Last Threat Name	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
		<i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
EP Pending Full Scan	Filter by EP Pending Full Scan value	<i>Equals</i> <i>Does not equal</i>
EP Pending Manual Steps	Filter by EP Pending Manual Steps value	<i>Equals</i> <i>Does not equal</i>
EP Pending Offline Scan	Filter by EP Pending Offline Scan value	<i>Equals</i> <i>Does not equal</i>
EP Pending Reboot	Filter by EP Pending Reboot value	<i>Equals</i> <i>Does not equal</i>
EP Policy Application Description	Filter by EP Policy Application Description	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
EP Policy Application Error Code	Filter by EP Policy Application Error Code	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EP Policy Application State	Filter by EP Policy Application State	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>

Name	Description	Filter Operator
EP Product Status	Filter by EP Product Status	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Exchange Organization	Filter by Exchange Organization	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Exchange Server	Filter by Exchange Server	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Is Active	Filter by Is Active value	<i>Equals</i> <i>Does not equal</i>
Is Always Internet	Filter by Is Always Internet value	<i>Equals</i> <i>Does not equal</i>
Is AOA Capable	Filter by Is AOA Capable value	<i>Equals</i> <i>Does not equal</i>
Is Approved	Filter by Is Approved value	<i>Equals</i> <i>Does not equal</i>
Is Assigned	Filter by Is Assigned value	<i>Equals</i> <i>Does not equal</i>
Is Blocked	Filter by Is Blocked value	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
Is Client	Filter by Is Client value	<i>Equals</i> <i>Does not equal</i>
Is Decommissioned	Filter by Is Decommissioned value	<i>Equals</i> <i>Does not equal</i>
Is Direct	Filter by Is Direct value	<i>Equals</i> <i>Does not equal</i>
Is Internet Enabled	Filter by Is Internet Enabled value	<i>Equals</i> <i>Does not equal</i>
Is Obsolete	Filter by Is Obsolete value	<i>Equals</i> <i>Does not equal</i>
Is Virtual Machine	Filter by Is Virtual Machine value	<i>Equals</i> <i>Does not equal</i>
Last Active Time	Filter by Last Active Time	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Last Client Check Time	Filter by Last Client Check Time	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Last DDR	Filter by Last DDR value	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Last Hardware Scan	Filter by Last Hardware Scan value	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Last Installation Error	Filter by Last Installation Error	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i>

Name	Description	Filter Operator
		<i>Is less than</i> <i>Is greater than</i>
Last MP Server Name	Filter by Last MP Server Name	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Last Policy Request	Filter by Last Policy Request value	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Last Software Scan	Filter by Last Software Scan value	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Last Status Message	Filter by Last Status Message value	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Last Success Sync Time (UTC)	Filter by Last Success Sync Time (UTC) value	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Latest Processing Attempt	Filter by Latest Processing Attempt value	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Name	Filter by Name	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Phone Number	Filter by Phone Number	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Policy Application Status	Filter by Policy Application Status	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Resource ID	Filter by Resource ID	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Resource Type	Filter by Resource Type	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Retire Status	Filter by Retire Status	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i>

Name	Description	Filter Operator
		<i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Site Code	Filter by Site Code	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
SMS ID	Filter by SMS ID	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Status	Filter by Status	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Suppress Auto Provision	Filter by Suppress Auto Provision value	<i>Equals</i> <i>Does not equal</i>
Unknown	Filter by Unknown value	<i>Equals</i> <i>Does not equal</i>
User Domain Name	Filter by User Domain Name	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
User Name	Filter by User Name	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Wipe Status	Filter by Wipe Status value	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>

Get Package

The *Get Package* task can be used in a runbook to retrieve and filter SCCM software distribution packages. To configure this task, make sure the *Task* input property is configured with the *Get Package* value. The following tables list the properties, published data and filters for this task.

Get Package Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Get Package</i>

Get Package Optional Properties

Name	Description	Valid Values
Package ID	Specifies one or more ID(s) for the package(s) to be retrieved. When specifying multiple IDs, use a comma (,) separated list of IDs. Cannot be used when specifying <i>Package Name</i> .	<i>String</i> <i>String List</i>
Package Name	Specifies the name of the package to be retrieved. Cannot be used when specifying <i>Package ID</i> .	<i>String</i>

Get Package Published Data

Name	Description	Valid Values
Package Count	The number of packages retrieved by the activity.	<i>Integer</i>
Action In Progress	The current action that is being performed on the package by Configuration Manager. Valid values: <ul style="list-style-type: none"> • 0 – NONE • 1 – UPDATE • 2 – ADD • 3 – DELETE 	<i>0, 1, 2, 3</i>
Description	Package description.	
Forced Disconnect Delay (Minutes)	The time that SCCM waits before forcibly disconnecting users from the distribution point share.	<i>Integer</i>
Forced Disconnect Enabled	Indicates if SCCM should forcibly disconnect users from the distribution point share when a share violation occurs while updating, refreshing, or deleting package source files.	<i>True False</i>
Forced Disconnect Number Retries	The number of times Configuration Manager attempts to disconnect a user from the distribution point share.	<i>Integer</i>
Ignore Address Schedule	Indicates if SSCM ignores any schedule of the sender specified by <i>Preferred Address Type</i> .	<i>Integer</i>
Language	The language of the package. This property is used with <i>Manufacturer</i> , <i>Name</i> , and <i>Version</i> to identify a package in the console. For example, you might have an English version and a German version of the same package.	<i>String</i>
Last Refresh Time	The last date and time when the package source was refreshed at its distribution points.	<i>DateTime</i>
Manufacturer	The manufacturer (publisher) of the package.	<i>String</i>
MIF File Name	The name of the Management Information Format (MIF) file that contains the package status.	<i>String</i>
MIF Name	Name of the MIF file that contains the program status for the package. The file name extension must be .mif.	<i>String</i>
MIF Publisher	The name of the software publisher of the package.	<i>String</i>

Name	Description	Valid Values														
MIF Version	The version number of the package.	String														
Package Name	Name of the package.	String														
Package ID	Unique identifier of the package.	String														
Package Type	The type of the package.	Integer														
Package Flags	Flags specifying special properties of the package. Possible values are: <table><tr><th>Hex (Bit)</th><th>Description</th></tr><tr><td>0x01000000 (24)</td><td>DO_NOT_DOWNLOAD. Do not download the package to branch distribution points, as it will be pre-staged.</td></tr><tr><td>0x02000000 (25)</td><td>PERSIST_IN_CACHE. Persist the package in the cache.</td></tr><tr><td>0x04000000 (26)</td><td>USE_BINARY_DELTA_REP. Marks the package to be replicated by distribution manager using binary delta replication.</td></tr><tr><td>0x10000000 (28)</td><td>NO_PACKAGE. The package does not require distribution points.</td></tr><tr><td>0x20000000 (29)</td><td>USE_SPECIAL_MIF. This value determines if Configuration Manager uses MIF Name, MIF Publisher, and MIF Version for MIF file status matching. Otherwise, Configuration Manager uses Name, Manufacturer, and Version for status matching. For more information, see the Remarks section later in this topic.</td></tr><tr><td>0x40000000 (30)</td><td>DISTRIBUTE_ON_DEMAND. The package is allowed to be distributed on demand to</td></tr></table>	Hex (Bit)	Description	0x01000000 (24)	DO_NOT_DOWNLOAD. Do not download the package to branch distribution points, as it will be pre-staged.	0x02000000 (25)	PERSIST_IN_CACHE. Persist the package in the cache.	0x04000000 (26)	USE_BINARY_DELTA_REP. Marks the package to be replicated by distribution manager using binary delta replication.	0x10000000 (28)	NO_PACKAGE. The package does not require distribution points.	0x20000000 (29)	USE_SPECIAL_MIF. This value determines if Configuration Manager uses MIF Name , MIF Publisher , and MIF Version for MIF file status matching. Otherwise, Configuration Manager uses Name , Manufacturer , and Version for status matching. For more information, see the Remarks section later in this topic.	0x40000000 (30)	DISTRIBUTE_ON_DEMAND. The package is allowed to be distributed on demand to	Integer
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0x40000000 (30)	DISTRIBUTE_ON_DEMAND. The package is allowed to be distributed on demand to															

Name	Description		Valid Values
		branch distribution points.	
Package Source Flag	<p>Flag indicating the method of reading the package source files. Possible values are:</p> <p>0 - STORAGE_NEEDS_SPECIFYING. The user specifies the source file storage.</p> <p>1 - STORAGE_NO_SOURCE. The program does not use source files.</p> <p>2 - STORAGE_DIRECT. Take source files directly from the source without compression. This flag is used when the source files are located on the local server or when a Universal Naming Convention (UNC) path has been specified to a persistent storage location.</p> <p>3 - STORAGE_COMPRESS. Compress the source files and copy them to the site server. This flag is used when the package source files are coming from a CD or a nonpersistent medium. Configuration Manager puts the path to where the files were copied in StoredPkgPath.</p> <p>A refresh schedule cannot be specified when this flag is set.</p> <p>4 - STORAGE_LOCAL. Take source files from a local source.</p>		<i>Integer</i>
Package Source Path	Location of the files of update contents represented by the package. The location can be either a full local path or a UNC path.		<i>String</i>
Preferred Address Type	Preferred sender to use when copying the package source files to distribution points.		<i>String</i>
Priority	<p>Sending priority of the package. Valid values are:</p> <ul style="list-style-type: none"> • 1 – HIGH • 2 – NORMAL • 3 – LOW 		<i>Integer</i>
Refresh Package Source Flag	Indicates if SCCM should refresh the package source files. This property always contains False when read.		<i>True</i> <i>False</i>
Refresh Schedule	Defines when SCCM will update the package source files at the distribution points.		<i>Object List in JSON format</i>
Share Name	Share to use on the distribution point. The name can include directories.		<i>String</i>
Share Type	The type of share used by the distribution point when sharing the package. Valid values are:		<i>Integer</i>

Name	Description	Valid Values
	1 – Share Common 2 – Share Specific	
Source Date	Date and time the package source files were last updated on the distribution points.	<i>DateTime</i>
Source Site	The site code of the site where the package originated.	<i>String</i>
Source Version	The version of the package available at the site. Incremented when the package is updated or the source files are refreshed.	<i>Integer</i>
Stored Package Path	Full path to the location where Configuration Manager stores the compressed version of the source files on the site server. This path is set by SCCM when the value of <i>Package Source Flag</i> is STORAGE_COMPRESS.	<i>String</i>
Stored Package Version	The version of the compressed source files for the stored package.	<i>Integer</i>
Version	The version of the package.	<i>String</i>

Get Package Filters

Name	Description	Filter Operator
Action In Progress	Filter by <i>Action In Progress</i> value.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Description	Filter by <i>Description</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Forced Disconnect Delay	Filter by <i>Forced Disconnect Delay</i> value.	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
(Minutes)		<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Forced Disconnect Enabled	Filter by <i>Forced Disconnect Enabled</i> value.	<i>Equals</i> <i>Does not equal</i>
Forced Disconnect Number Retries	Filter by <i>Forced Disconnect Number Retries</i> value.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Ignore Address Schedule	Filter by <i>Ignore Address Schedule</i> value.	<i>Equals</i> <i>Does not equal</i>
Language	Filter by <i>Language</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Last Refresh Time	Filter by <i>Last Refresh Time</i> .	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Manufacturer	Filter by <i>Manufacturer</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Name	Description	Filter Operator
MIF File Name	Filter by <i>MIF File Name</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
MIF Name	Filter by <i>MIF Name</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
MIF Publisher	Filter by <i>MIF Publisher</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
MIF Version	Filter by <i>MIF Version</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Package Name	Filter by <i>Package Name</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i>

Name	Description	Filter Operator
		<i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Package ID	Filter by <i>Package ID</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Package Type	Filter by <i>Package Type</i> .	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Package Flags	Filter by <i>Package Flags</i> .	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Package Source Flag	Filter by <i>Package Source Flag</i> .	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Package Source Path	Filter by <i>Package Source Path</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i>

Name	Description	Filter Operator
		<i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Preferred Address Type	Filter by <i>Preferred Address Type</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Priority	Filter by <i>Priority</i> .	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Refresh Package Source Flag	Filter by <i>Refresh Package Source Flag</i> value.	<i>Equals</i> <i>Does not equal</i>
Share Name	Filter by <i>Share Name</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Share Type	Filter by <i>Share Type</i> .	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>

Name	Description	Filter Operator
Source Date	Filter by <i>Source Date</i> .	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Source Site	Filter by <i>Source Site</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Source Version	Filter by <i>Source Version</i> .	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Stored Package Path	Filter by <i>Stored Package Path</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Stored Package Version	Filter by <i>Stored Package Version</i> .	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Version	Filter by <i>Version</i> .	<i>Equals</i> <i>Does not equal</i> <i>Contains</i>

Name	Description	Filter Operator
		<i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Get Software Update

The *Get Software Update* task can be used in a runbook to retrieve and filter software updates. To configure this task, make sure the *Task* input property is configured with the *Get Software Update* value. The following tables list the required properties, optional properties, published data and filters for this task.

Get Software Update Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Get Software Update</i>

Get Software Update Optional Properties

Name	Description	Valid Values
Software Update ID	Specifies the Configuration Item IDs for software updates to be retrieved. This property cannot be used when the <i>Name</i> , <i>Update Group ID</i> or <i>Update Group Name</i> properties are also specified.	<i>Integer</i>
Name	Specifies the name for the software updates to be retrieved. This property cannot be used when the <i>ID</i> , <i>Update Group ID</i> or <i>Update Group Name</i> properties are also specified.	<i>String</i>
Update Group ID	Specifies one or more update group IDs for the software updates to be retrieved. When specifying multiple names, use a comma (,) separated list of unsigned integers. This property cannot be used when the <i>ID</i> , <i>Name</i> or <i>Update Group Name</i> properties are also specified.	<i>Integer</i> or <i>List of Integer</i>
Update Group Name	Specifies one or more update group names for the software updates to be retrieved. When specifying multiple names, use a comma (,) separated list of unsigned integers. This property cannot be used when the	<i>String</i> or <i>List of String</i>

Name	Description	Valid Values
	<i>ID, Name or Update Group ID</i> properties are also specified.	

Get Software Update Published Data

Name	Description	Valid Values
Software Update Count	Number of software updates retrieved by the activity.	<i>Integer</i>
Name	Name of the software update.	<i>String</i>
Software Update ID	Configuration Item ID for the software update. This ID is unique only for the site.	<i>Unsigned Integer</i>
Applicability Condition	Condition that the client evaluates before evaluating the software update targeted by an assignment. If the condition does not exist, the configuration item is not evaluated on the client. The string can contain up to 512 characters.	<i>String</i>
Article ID	Knowledge base article ID for the software update. The maximum length for this value is 64 characters.	<i>String</i>
Bulletin ID	Bulletin ID for security updates released by Microsoft. The maximum length for this value is 64 characters.	<i>String</i>
Category Instance Unique IDs	The unique IDs of the categories to which the software update belongs.	<i>String List in JSON format</i>
CI Type ID	The type of the configuration item. For software update this should always be 1.	<i>Unsigned Integer</i>
CI Version	Configuration item policy version, which is automatically incremented.	<i>Unsigned Integer</i>
CI Unique ID	The configuration item unique ID for the software update. This ID is unique across sites.	<i>String</i>
Created By	Name of the user who created the software update.	<i>String</i>
Custom Severity	Custom severity rating for the software update.	<i>Unsigned Integer</i>
Custom Severity Name	Custom severity name for the software update.	<i>String</i>
Date Created	Date and time when the software update was created.	<i>DateTime</i>
Date Last	Date and time when the software update was last	<i>DateTime</i>

Name	Description	Valid Values
Modified	modified.	
Date Posted	Date and time when the software update was published.	<i>DateTime</i>
Date Revised	Date and time when the software update was revised.	<i>DateTime</i>
Effective Date	Date and time when the Network Access Protection (NAP) compliance policy for the software update becomes effective.	<i>DateTime</i>
Execution Context	Execution context that the software update should be evaluated under. Can be one of: <ul style="list-style-type: none"> • 1 – System • 2 – User 	<i>Unsigned Integer</i>
Is Bundle	Indicates if the software update is bundled within another software update.	<i>True or False</i>
Is Content Provisioned	Indicates if the software update content is provisioned.	<i>True or False</i>
Is Deployable	Indicates if the software update is ready to be included in a deployment.	<i>True or False</i>
Is Deployed	Indicates if the software update is deployed.	<i>True or False</i>
Is Digest	Is Digest.	<i>True or False</i>
Is Enabled	Indicates if the software update is enabled and can be evaluated.	<i>True or False</i>
Is Expired	Indicates if the software update is no longer active.	<i>True or False</i>
Is Hidden	Indicates if the software update is not shown in the Configuration Manager console.	<i>True or False</i>
Is Latest	Indicates if the software update is the latest.	<i>True or False</i>
Is Metadata Only Update	Indicates if the software update metabase is only Update CI.	<i>True or False</i>
Is Offline Serviceable	Indicates if the update can be applied to offline images.	<i>True or False.</i>
Is Quarantined	Indicates if the software update is used in NAP policy.	<i>True or False</i>
Is Superseded	Indicates if the software update is superseded by a new software update.	<i>True or False</i>
Is User Defined	Indicates if the software update was created by the user.	<i>True or False</i>
Is Version Compatible	Indicates if the software update has compatible version.	<i>True or False</i>

Name	Description	Valid Values
Last Modified By	User who last modified the software update.	<i>String</i>
Last Status Time	Last status update time.	<i>DateTime</i>
Localized Category Instance Names	Localized names of the categories to which the software update belongs.	<i>String List in JSON format</i>
Localized Description	Localized description of the software update.	<i>String</i>
Localized Display Name	Localized display name of the software update.	<i>String</i>
Localized Informative URL	URL for additional localized information about the software update.	<i>String</i>
Localized Property Locale ID	Locale ID of the localized properties of the software update.	<i>Unsigned Integer</i>
Max Execution Time	Maximum time required for the software update to run.	<i>Unsigned Integer</i>
Model ID	Configuration management model ID for the software update.	<i>Unsigned Integer</i>
Model Name	Configuration management model name for the software update.	<i>String</i>
Number Missing	Number of computers in the targeted collections on which the software update is missing.	<i>Unsigned Integer</i>
Number Not Applicable	Number of computers in the targeted collections on which the software update is not applicable.	<i>Unsigned Integer</i>
Number Present	Number of computers in the targeted collections on which the software update is already installed.	<i>Unsigned Integer</i>
Number Total	Total number of computers in the targeted collections for the software update.	<i>Unsigned Integer</i>
Number Unknown	Number of computers in the targeted collections on which the state for the software update is known.	<i>Unsigned Integer</i>
Percent Compliant	Percentage of client machines which are compliant for this software update.	<i>Unsigned Integer</i>

Name	Description	Valid Values
Permitted Uses	Valid uses of the software update.	<i>Unsigned Integer</i>
Platform Category Instance Unique IDs	Category of the platform that this software update is applicable on.	<i>String List in JSON format</i>
Platform Type	Platform that the software update is applicable on.	<i>Unsigned Integer</i>
Requires Exclusive Handling	Indicates if the software update must be installed separately.	<i>True or False</i>
Revision Number	Revision number for the update.	<i>Unsigned Integer</i>
Secured Scope Names	Secured Scope Names for the software update.	<i>String List in JSON format</i>
SEDO Object Version	SEDO Object Version.	<i>String</i>
Severity	Severity rating for the software update.	<i>Unsigned Integer</i>
Severity Name	Severity rating name for the software update.	<i>String</i>
Size	Size of the software update.	<i>Integer</i>
Source Site	Source site for the software update.	<i>String</i>
Update Locales	Locales applicable to the software update.	<i>String List in JSON format</i>

Get Software Update Filters

Name	Description	Filter Operator
Name	Filters results by software update name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Software Update ID	Filters results by configuration item ID for the software update.	<i>Equals</i>

Name	Description	Filter Operator
		<i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Applicability Condition	Filters results by Applicability Condition field.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Article ID	Filters results by Article ID.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Bulletin ID	Filters results by Bulletin ID.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
CI Type ID	Filters results by the type of the configuration item. For software update this should always be 9.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>

Name	Description	Filter Operator
CI Version	Filters results by configuration item policy version.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
CI Unique ID	Filters results by the configuration item unique ID for the software update.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Created By	Filters results by Created By field.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Custom Severity	Filters results by Custom Severity.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Custom Severity Name	Filters results by Custom Severity Name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i>

Name	Description	Filter Operator
		<i>Ends with</i>
Date Created	Filters results by Date Created field.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Date Last Modified	Filters results by Date Last Modified field.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Date Posted	Filters results by Date Posted.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Date Revised	Filters results by Date Revised.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Effective Date	Filters results by Effective Date field.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EULA Accepted	Filters results by EULA Accepted field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EULA Exists	Filters results by EULA Exists field.	<i>Equals</i> <i>Does not equal</i>
EULA Signoff Date	Filters results by EULA Signoff Date field.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EULA Signoff	Filters results by EULA Signoff User field.	<i>Equals</i>

Name	Description	Filter Operator
User		<i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Execution Context	Filters results by Execution Context filed.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Is Bundle	Filters results by Is Bundle field.	<i>Equals</i> <i>Does not equal</i>
Is Content Provisioned	Filters results by Is Content Provisioned Field.	<i>Equals</i> <i>Does not equal</i>
Is Deployable	Filters results by Is Deployable field.	<i>Equals</i> <i>Does not equal</i>
Is Deployed	Filters results by Is Deployed field.	<i>Equals</i> <i>Does not equal</i>
Is Digest	Filters results by Is Digest field.	<i>Equals</i> <i>Does not equal</i>
Is Enabled	Filters results by Is Enabled field.	<i>Equals</i> <i>Does not equal</i>
Is Expired	Filters results by Is Expired field.	<i>Equals</i> <i>Does not equal</i>
Is Hidden	Filters results by Is Hidden field.	<i>Equals</i> <i>Does not equal</i>
Is Latest	Filters results by Is Latest field.	<i>Equals</i> <i>Does not equal</i>
Is Metadata Only Update	Filters results by Is Metadata Only Update field.	<i>Equals</i> <i>Does not equal</i>
Is Offline	Filters results by is Offline Serviceable field.	<i>Equals</i>

Name	Description	Filter Operator
Serviceable		<i>Does not equal</i>
Is Quarantined	Filters results by Is Quarantined field.	<i>Equals</i> <i>Does not equal</i>
Is Superseded	Filters results by Is Superseded field.	<i>Equals</i> <i>Does not equal</i>
Is User Defined	Filters results by Is User Defined field.	<i>Equals</i> <i>Does not equal</i>
Is Version Compatible	Filters results by Is Version Compatible field.	<i>Equals</i> <i>Does not equal</i>
Last Modified By	Filters results by Last Modified By field.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Last Status Time	Filters results by Last Status Time field.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Localized Description	Filters results by Localized Description.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Localized Display Name	Filters results by Localized Display Name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Localized Informative URL	Filters results by Localized Informative URL.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Localized Property Locale ID	Filters results by Localized Property Locale ID.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Max Execution Time	Filters results by Max Execution Time.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Model ID	Filters results by Model ID.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Model Name	Filters results by Model Name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i>

Name	Description	Filter Operator
		<i>Starts with</i> <i>Ends with</i>
Number Missing	Filters results by Number Missing field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Number Not Applicable	Filters results by Number Not Applicable field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Number Present	Filters results by Number Present field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Number Total	Filters results by Number Total field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Number Unknown	Filters results by Number Unknown field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Percent Compliant	Filters results by Percent Compliant field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i>

Name	Description	Filter Operator
		<i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Permitted Uses	Filters results by Permitted Uses field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Platform Type	Filters results by Platform Type field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Requires Exclusive Handling	Filters results by Requires Exclusive Handling field.	<i>Equals</i> <i>Does not equal</i>
Revision Number	Filters results by Revision Number.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
SDM Package Version	Filters results by SDM Package Version.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
SDM Package XML	Filters results by SDM Package XML.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
SEDO Object Version	SDM Package XML SEDO Object Version.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Severity	Filters results by Severity.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Severity Name	Filters results by Severity Name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Size	Filters results by Size.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Source Site	Filter results by Source Site.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i>

Name	Description	Filter Operator
		<i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Get Software Update Group

The *Get Software Update Group* task can be used in a runbook to retrieve and filter software update groups. To configure this task, make sure the *Task* input property is configured with the *Get Software Update Group* value. The following tables list the required properties, optional properties, published data and filters for this task.

Get Software Update Group Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Get Software Update Group</i>

Get Software Update Group Optional Properties

Name	Description	Valid Values
Software Update Group ID	Specifies one or more Configuration Item IDs for software update groups to be retrieved. When specifying multiple IDs, use a comma (,) separated list of unsigned integers. This property cannot be used when the <i>Name</i> property is also specified.	<i>Integer or List of Integer</i>
Name	Specifies the name for the software update group to be retrieved. This property cannot be used when the ID property is also specified.	<i>String</i>

Get Software Update Group Published Data

Name	Description	Valid Values
Software Update Group Count	Number of software update groups retrieved by the activity.	<i>Integer</i>
Name	Name of the software update group.	<i>String</i>
Software Update Group	Configuration Item ID for the software update group. This ID is unique only for the site.	<i>Unsigned Integer</i>

Name	Description	Valid Values
ID		
Applicability Condition	Condition that the client evaluates before evaluating the software update group targeted by an assignment. If the condition does not exist, the configuration item is not evaluated on the client. The string can contain up to 512 characters.	<i>String</i>
Associated Auto Rule ID	Associated auto deployment rule ID.	<i>Unsigned Integer</i>
Category Instance Unique IDs	The unique IDs of the categories to which the software update group belongs.	<i>String List in JSON format</i>
CI Type ID	The type of the configuration item. For software update group this should always be 9.	<i>Unsigned Integer</i>
CI Version	Configuration item policy version, which is automatically incremented.	<i>Unsigned Integer</i>
CI Unique ID	The configuration item unique ID for the software update group. This ID is unique across sites.	<i>String</i>
Contains Expired Updates	Indicates if the group contains one or more expired updates.	<i>True or False</i>
Contains Superseded Updates	Indicates if the group contains one or more superseded updates.	<i>True or False</i>
Created By	Name of the user who created the software update group.	<i>String</i>
Date Created	Date and time when the software update group was created.	<i>DateTime</i>
Date Last Modified	Date and time when the software update group was last modified.	<i>DateTime</i>
Effective Date	Date and time when the Network Access Protection (NAP) compliance policy for the software update group becomes effective.	<i>DateTime</i>
Execution Context	Execution context that the software update group should be evaluated under. Can be one of: <ul style="list-style-type: none"> • 1 – System • 2 – User 	<i>Unsigned Integer</i>
Is Bundle	Indicates if the software update group is bundled within another software update group.	<i>True or False</i>

Name	Description	Valid Values
Is Deployed	Indicates if the software update group is deployed.	<i>True or False</i>
Is Digest	Is Digest.	<i>True or False</i>
Is Enabled	Indicates if the software update group is enabled and can be evaluated.	<i>True or False</i>
Is Expired	Indicates if the software update group is no longer active.	<i>True or False</i>
Is Hidden	Indicates if the software update group is not shown in the Configuration Manager console.	<i>True or False</i>
Is Latest	Indicates if the software update group is the latest.	<i>True or False</i>
Is Provisioned	Indicates if the content is downloaded for all updates in the group.	<i>True or False</i>
Is Quarantined	Indicates if the software update group is used in NAP policy.	<i>True or False</i>
Is Superseded	Indicates if the software update group is superseded by a new software update group.	<i>True or False</i>
Is User Defined	Indicates if the software update group was created by the user.	<i>True or False</i>
Is Version Compatible	Indicates if the software update group has compatible version.	<i>True or False</i>
Last Modified By	User who last modified the software update group.	<i>String</i>
Last Status Time	Last status update time.	<i>DateTime</i>
Localized Category Instance Names	Localized names of the categories to which the software update group belongs.	<i>String List in JSON format</i>
Localized Description	Localized description of the software update group.	<i>String</i>
Localized Display Name	Localized display name of the software update group.	<i>String</i>
Localized Informative URL	URL for additional localized information about the software update group.	<i>String</i>
Localized Property	Locale ID of the localized properties of the software update group.	<i>Unsigned Integer</i>

Name	Description	Valid Values
Locale ID		
Model ID	Configuration management model ID for the software update group.	<i>Unsigned Integer</i>
Model Name	Configuration management model name for the software update group.	<i>String</i>
Number Of Collections Deployed	Number of collections that the software update group has been deployed to.	<i>Unsigned Integer</i>
Number Compliant	Number of client machines where this software update group is compliant.	<i>Unsigned Integer</i>
Number Non-Compliant	Number of client machines where this software update group is non-compliant.	<i>Unsigned Integer</i>
Number Total	Total number of client machines for this group.	<i>Unsigned Integer</i>
Number Unknown	Number of client machines where this group is in an unknown state.	<i>Unsigned Integer</i>
Percent Compliant	Percentage of client machines which are compliant for this software update group.	<i>Unsigned Integer</i>
Permitted Uses	Valid uses of the software update group.	<i>Unsigned Integer</i>
Platform Category Instance Unique IDs	Category of the platform that this software update group is applicable on.	<i>String List in JSON format</i>
Platform Type	Platform that the software update group is applicable on.	<i>Unsigned Integer</i>
Secured Scope Names	Secured Scope Names for the software update group.	<i>String List in JSON format</i>
SEDO Object Version	SEDO Object Version.	<i>String</i>
Source Site	Site where the software update group is imported or created.	<i>String</i>
Updates	Software Updates included in the software update group.	<i>Object List in JSON format</i>

Get Software Update Group Filters

Name	Description	Filter Operator
Name	Filters results by software update group name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Software Update Group ID	Filters results by configuration item ID for the software update group.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Applicability Condition	Filters results by Applicability Condition field.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Associated Auto Rule ID	Filters results by Associated Auto Rule ID field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
CI Type ID	Filters results by the type of the configuration item. For software update group this should always be 9.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
CI Version	Filters results by configuration item policy version.	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
		<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
CI Unique ID	Filters results by the configuration item unique ID for the software update group.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Contains Expired Updates	Filters results by Contains Expired Updates field.	<i>Equals</i> <i>Does not equal</i>
Contains Superseded Updates	Filters results by Contains Superseded Updates field.	<i>Equals</i> <i>Does not equal</i>
Created By	Filters results by Created By field.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Date Created	Filters results by Date Created field.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Date Last Modified	Filters results by Date Last Modified field.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Effective Date	Filters results by Effective Date field.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>

Name	Description	Filter Operator
EULA Accepted	Filters results by EULA Accepted field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EULA Exists	Filters results by EULA Exists field.	<i>Equals</i> <i>Does not equal</i>
EULA Signoff Date	Filters results by EULA Signoff Date field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
EULA Signoff User	Filters results by EULA Signoff User field.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Execution Context	Filters results by Execution Context field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Is Bundle	Filters results by Is Bundle field.	<i>Equals</i> <i>Does not equal</i>
Is Deployed	Filters results by Is Deployed field.	<i>Equals</i> <i>Does not equal</i>
Is Digest	Filters results by Is Digest field.	<i>Equals</i> <i>Does not equal</i>
Is Enabled	Filters results by Is Enabled field.	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
Is Expired	Filters results by Is Expired field.	<i>Equals</i> <i>Does not equal</i>
Is Hidden	Filters results by Is Hidden field.	<i>Equals</i> <i>Does not equal</i>
Is Latest	Filters results by Is Latest field.	<i>Equals</i> <i>Does not equal</i>
Is Provisioned	Filters results by Is Provisioned field.	<i>Equals</i> <i>Does not equal</i>
Is Quarantined	Filters results by Is Quarantined field.	<i>Equals</i> <i>Does not equal</i>
Is Superseded	Filters results by Is Superseded field.	<i>Equals</i> <i>Does not equal</i>
Is User Defined	Filters results by Is User Defined field.	<i>Equals</i> <i>Does not equal</i>
Is Version Compatible	Filters results by Is Version Compatible field.	<i>Equals</i> <i>Does not equal</i>
Last Modified By	Filters results by Last Modified By field.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Last Status Time	Filters results by Last Status Time field.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Localized Description	Filters results by Localized Description.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Name	Description	Filter Operator
Localized Display Name	Filters results by Localized Display Name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Localized Informative URL	Filters results by Localized Informative URL.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Localized Property Locale ID	Filters results by Localized Property Locale ID.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Model ID	Filters results by Model ID.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Model Name	Filters results by Model Name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Number Of Collections	Filters results by Number of Collections Deployed.	<i>Equals</i>

Name	Description	Filter Operator
Deployed		<i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Number Compliant	Filters results by Number Compliant field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Number Non-Compliant	Filters results by Number Non-Compliant field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Number Total	Filters results by Number Total field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Number Unknown	Filters results by Number Unknown field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Percent Compliant	Filters results by Percent Compliant field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Permitted Uses	Filters results by Permitted Uses field.	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
		<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Platform Type	Filters results by Platform Type field.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
SDM Package Version	Filters results by SDM Package Version.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
SDM Package XML	Filters results by SDM Package XML.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
SEDO Object Version	SDM Package XML SEDO Object Version.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Source Site	Filter results by Source Site.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Import Computer

The *Import Computer* task can be used in a runbook to import computers into SCCM environment. To configure this task, make sure the *Task* input property is configured with the *Import Computer* value. The following tables list the required and optional properties for this task. The task does not have any SCCM specific published data.

Import Computer Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Import Computer</i>
Computer Name	Specifies the name of the computer being imported.	<i>String</i>
MAC Address	MAC address of the computer being imported, in the format XX:XX:XX:XX:XX:XX	<i>String</i>

Import Computer Optional Properties

Name	Description	Valid Values
Collection Name	Specifies the name of the SCCM device collection where the computer is being imported.	<i>String</i>
Merge If Exists	Specifies that the new computer information will be merged with an existing record, if a resource with the same name already exists. Note: The activity will fail if merge is not specified and the computer already exists in SCCM.	<i>True</i> <i>False</i>
Source Computer Name	Specifies a name of a reference computer. Configuration Manager migrates user state and settings from the reference computer to the new computer.	<i>String</i>
System Management BIOS GUID	Specifies a GUID for the system management BIOS (SMBIOS) of a computer.	<i>String</i>
User Account Migration Behavior	Specifies how the user account(s) specified in <i>User Name</i> will be migrated from the specified <i>Source Computer</i> . <ul style="list-style-type: none">• <i>CaptureAllUserAccountsAndRestoreSpecifiedAccounts</i>• <i>CaptureAndRestoreSpecifiedUserAccounts</i> When not specified, the default behavior is to capture and restore all user accounts.	<i>String</i>
User Name	Specifies one or more user accounts to be migrated from the <i>Source Computer</i> . When specifying multiple users, use a comma (,) separated list of user. Each user should be specified in DOMAIN\username format.	<i>String or</i> <i>List of</i> <i>String</i>

Remove Device

The *Remove Device* task can be used in a runbook to remove SCCM devices. To configure this task, make sure the *Task* input property is configured with the *Remove Device* value. Removing a device deletes the client record from the SCCM database. Prior to using 'Remove Device' task, it is advised the SCCM client should be removed from the device itself.

Note: After the SCCM Client is uninstalled and the Remove Device task runs, the device may still be rediscovered in the 'Devices' view, depending on the 'Discovery Methods' configured in SCCM, although the client history and any previous associations are lost.

When you remove a mobile device client that was enrolled by SCCM, this action also revokes the public key infrastructure (PKI) certificate that was issued to the mobile device and this certificate is then rejected by the management point, even if IIS does not check the certificate revocation list (CRL). Certificates on mobile device legacy clients are not revoked when you delete these clients.

The following tables list the required and optional properties for this task. The task does not have any SCCM specific published data.

Remove Device Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Remove Device</i>

Remove Device Optional Properties

Name	Description	Valid Values
Device ID	Specifies the device ID. This property cannot be used when the <i>Device Name</i> property is also specified. Note: You can use the PD item 'Resource ID' from the SCCM Task 'Get Device'	<i>Integer</i>
Device Name	Specifies the device name. This property cannot be used when the <i>Device ID</i> property is also specified.	<i>String</i>

Start Content Distribution

The *Start Content Distribution* task can be used in a runbook to distribute several types of content, including application deployment types, packages, deployment packages, driver packages, operating system images, operating system installers, boot images, and task sequences. You can distribute the content to distribution points, distribution point groups, or collections associated with distribution point groups. To configure this task, make sure the *Task* input property is configured with the *Start Content Distribution* value. The following tables list the required and optional properties for this task. The task does not have any SCCM specific published data.

Start Content Distribution Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Start Content Distribution</i>
Content Type	Specifies the content type. Can be one of: <ul style="list-style-type: none">- Application- Boot Image- Deployment Package- Driver Package- Operating System Image- Operating System Installer- Package- Task Sequence	<i>String</i>
Find Content By	Specifies whether the activity will search for content by ID or by Name.	<i>ID</i> <i>Name</i>
Application ID	Specifies one or more application IDs. When specifying multiple IDs, use a comma (,) separated list of strings.	<i>String or</i> <i>List of String</i>
Application Name	Specifies one or more application names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or</i> <i>List of String</i>
Boot Image ID	Specifies one or more boot image IDs. When specifying multiple IDs, use a comma (,) separated list of strings.	<i>String or</i> <i>List of String</i>
Boot Image Name	Specifies one or more boot image names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or</i> <i>List of String</i>
Deployment Package ID	Specifies one or more deployment package IDs. When specifying multiple IDs, use a comma (,) separated list of strings.	<i>String or</i> <i>List of String</i>
Deployment Package	Specifies one or more deployment package names. When specifying multiple names, use a comma (,) separated list	<i>String or</i> <i>List of String</i>

Name	Description	Valid Values
Name	of strings.	
Driver Package ID	Specifies one or more driver package IDs. When specifying multiple IDs, use a comma (,) separated list of strings.	<i>String or List of String</i>
Driver Package Name	Specifies one or more driver package names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Operating System Image ID	Specifies one or more OS image IDs. When specifying multiple IDs, use a comma (,) separated list of strings.	<i>String or List of String</i>
Operating System Image Name	Specifies one or more OS image names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Operating System Installer ID	Specifies one or more OS installer IDs. When specifying multiple IDs, use a comma (,) separated list of strings.	<i>String or List of String</i>
Operating System Installer Name	Specifies one or more OS installer names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Package ID	Specifies one or more package IDs. When specifying multiple IDs, use a comma (,) separated list of strings.	<i>String or List of String</i>
Package Name	Specifies one or more package names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Task Sequence ID	Specifies one or more task sequence IDs. When specifying multiple IDs, use a comma (,) separated list of strings.	<i>String or List of String</i>
Task Sequence Name	Specifies one or more task sequence names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or List of String</i>

Start Content Distribution Optional Properties

Note that one or more optional properties may also have to be specified depending on how the content is to be distributed.

Name	Description	Valid Values
Collection	Specifies one or more names of a SCCM collection. When specifying multiple names, use a comma (,) separated list	<i>String</i>

Name	Description	Valid Values
Name	of strings.	
Disable Detect Associated Content Dependencies	Indicates that Configuration Manager automatically detects associated content dependencies and adds the associated content to the distribution for applications. Note: Available only for <i>Content Type = Application</i>	<i>True</i> <i>False</i>
Distribution Point Group Name	Specifies one or more names of a distribution point group. When specifying multiple names, use a comma (,) separated list of strings.	<i>String</i>
Distribution Point Name	Specifies one or more names of a distribution point that is associated with the deployment package. When specifying multiple names, use a comma (,) separated list of strings.	<i>String</i>

Update Package

The *Update Package* task can be used in a runbook to update an existing SCCM package. To configure this task, make sure the *Task* input property is configured with the *Update Package* value. The following tables list the properties and published data for this task.

Update Package Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Update Package</i>
Update By	Specifies if the package is to be updated by ID or by Name.	<i>ID</i> <i>Name</i>
Package ID	Specifies the ID of the package to be updated. This property is only available when updating by ID.	<i>String</i>
Package Name	Specifies the Name of the package to be updated. This property is only available when updating by Name.	<i>String</i>

Update Package Optional Properties

Name	Description	Valid Values
Description	Specifies a description for the package, maximum of 128 characters.	<i>String</i>
Distribution Priority	Specifies the sending priority for the deployment package. Configuration Manager uses the sending priority for the deployment package when it sends the package to distribution points at child sites.	<i>High</i> <i>Medium</i> <i>Low</i>

Name	Description	Valid Values
Enable Binary Delta Replication	Specifies whether binary differential replication should be enabled, in order to update only the content that has changed in the package.	<i>True</i> <i>False</i>
Forced Disconnect Delay (Minutes)	Specifies the time, in minutes, that Configuration Manager waits before it forcibly disconnects users from the distribution point share. The default value is 5.	<i>Integer</i>
Forced Disconnect Enabled	Indicates whether Configuration Manager forcibly disconnects users from the distribution point share when a share violation occurs in updating, refreshing, or deleting package source files.	<i>True</i> <i>False</i>
Forced Disconnect Number Retries	Specifies the number of times Configuration Manager attempts to disconnect a user from the distribution point share. The default value is 2.	<i>Integer</i>
Language	Specifies the language version of the package, maximum of 32 characters, in a format that you choose to use to identify the language version. Configuration Manager uses the Language property together with Manufacturer, Name, and Version to identify a package. For example, you can have an English version and a German version of the same package.	<i>String</i>
Manufacturer	Specifies a manufacturer name to help you identify the package, maximum of 32 characters.	<i>String</i>
MIF File Name	Specifies the name of the MIF file that contains the package status.	<i>String</i>
MIF Name	Specifies the name of the MIF file that contains the program status for the package. The file name extension must be .mif.	<i>String</i>
MIF Publisher	Specifies the name of the software publisher of the package.	<i>String</i>
MIF Version	Specifies the version number of the MIF file.	<i>String</i>
Multicast Allow	Specifies whether the package can be transmitted via multicast.	<i>True</i> <i>False</i>
Multicast Encrypt	Specifies whether the multicast package should be encrypted.	<i>True</i> <i>False</i>
Multicast Transfer	Specifies whether the package should only be	<i>True</i>

Name	Description	Valid Values
Only	transferred via multicast.	<i>False</i>
New Name	Specifies a new name for the package.	<i>String</i>
Path	Specifies the location of the files to add to the package. You can specify either a full local path or a UNC path. Make sure that this location contains all the files and subdirectories that the program needs to complete, including any scripts.	<i>String</i>
Persist Content In Cache	Specifies whether package content should be persisted in the client cache. This is typically used for packages that are to be run multiple times.	<i>True</i> <i>False</i>
Prestage Behavior	Specifies the package behavior when a distribution point is enabled for prestaged content. <ul style="list-style-type: none"> DownloadDelta – download only content changes to the distribution point ManualCopy – manually copy the package content to the distribution point OnDemand – automatically download content when packages are assigned to the distribution points 	<i>DownloadDelta</i> <i>ManualCopy</i> <i>OnDemand</i>
Send To Preferred Distribution Point	Specifies whether the package should be sent to a preferred distribution point.	<i>True</i> <i>False</i>
Share Name	Specifies the UNC share location to use on the distribution point. You can include directories in the share name. If the directories do not exist, Configuration Manager creates them. You must specify a share name if you set the <i>Share Type</i> property to <i>ShareSpecific</i> .	<i>String</i>
Share Type	Specifies the type of share that the distribution point uses when it shares the package.	<i>ShareCommon</i> <i>ShareSpecific</i>
Version	Specifies a version for the package.	<i>String</i>

Update Package Published Data

Name	Description	Valid Values
Package Name	The name of the updated package.	<i>String</i>
Package ID	The ID of the updated package.	<i>String</i>

Update Software Update Group

The *Update Software Group* task can be used in a runbook to update an existing software update group. To configure this task, make sure the *Task* input property is configured with the *Update Software Update Group* value. The following tables list the required and optional properties for this task. The task does not have any SCCM specific published data.

Update Software Update Group Required Properties

Name	Description	Valid Values
Task	Specifies the SCCM task to be executed.	<i>Update Software Update Group</i>
ID	Configuration Item ID of the software update group which is to be updated.	<i>Unsigned Integer</i>

Update Software Update Group Optional Properties

Name	Description	Valid Values
Description	Specifies the new description for the software update group.	<i>String</i>
New Name	Specifies the new name for the software update group.	<i>String</i>
Clear Software Update	Specifies if the activity should clear software updates attached to the group	<i>True</i> <i>False</i>
Clear Expired Software Update	Specifies if the activity should clear expired software updates attached to the group	<i>True</i> <i>False</i>
Clear Superseded Software Update	Specifies if the activity should clear superseded software updates attached to the group	<i>True</i> <i>False</i>

SCOM Activity

The SCOM activity is used in Orchestrator runbooks which integrate and automate SCOM specific tasks. Use the *Task* property in this activity to select one of the following SCOM tasks:

- Get Management Pack
- Get Rule
- Get Monitor
- Get Class
- Start Task
- Get Class Instance
- Get Task
- Get Task Result
- Reset Monitoring State
- Install Agent

Get Management Pack

The *Get Management Pack* task can be used in a runbook to retrieve and filter management packs. To configure this task, make sure the *Task* input property is configured with the *Get Management Pack* value. The following tables list the required properties, optional properties, published data and filters for this task.

Get Management Pack Required Properties

Name	Description	Valid Values
Task	Specifies the SCOM task to be executed.	<i>Get Management Pack</i>

Get Management Pack Optional Properties

Name	Description	Valid Values
Bundle File	Specifies one or more management pack bundle file names. When specifying multiple bundle file names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Display Name	Specifies one or more display names. When specifying multiple display names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Management Pack File	Specifies one or more management pack files. When specifying multiple management pack files, use a comma (,) separated list of strings.	<i>String or List of String</i>
Name	Specifies one or more names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or</i>

Name	Description	Valid Values
		<i>List of String</i>
Recurse	Indicates that all management packs that depend on the specified management pack are retrieved recursively	<i>True or False</i>

Get Management Pack Published Data

Name	Description	Valid Values
Management Pack Count	Number of management packs returned	<i>Number</i>
Active Language Code	Active Language Code	<i>String</i>
Computer Name	Computer Name	<i>String</i>
Content Readable	Indicates whether the content inside the management pack is readable.	<i>True or False</i>
Default Language Code	Default language pack used for this management pack.	<i>String</i>
Derived Types	Derived Types	<i>String</i>
Description	Display description of this management pack.	<i>String</i>
Display Name	Name displayed in the user interface of this management pack.	<i>String</i>
Entity Types	Entity Types	<i>String</i>
Extensions	Extensions	<i>String</i>
Features	Features	<i>String</i>
Friendly Name	Name specified by the author.	<i>String</i>
Id	GUID for this management pack.	<i>String</i>
Identifier	Identifier	<i>String</i>
Image References	Image References	<i>String</i>
Key Token	Key Token	<i>String</i>
Last Modified	Date when the management pack was last modified.	<i>Datetime</i>
Lifetime	Lifetime Managers	<i>String</i>

Name	Description	Valid Values
Managers		
Lock Object	Lock Object	<i>String</i>
Management Packs	Management Packs	<i>String</i>
Monitoring	Monitoring	<i>String</i>
Name	Short name used by the system for the management pack.	<i>String</i>
Original Schema Version	Original Schema Version	<i>String</i>
Presentation	Presentation	<i>String</i>
Registry	Registry	<i>String</i>
Schema Version	Schema Version	<i>String</i>
Sealed	Indicates whether the management pack can be edited.	<i>True or False</i>
Store	Store	<i>String</i>
Task	Task	<i>String</i>
Time Created	Date and time when the management pack was created.	<i>Datetime</i>
Version	Version string for the management pack.	<i>String</i>
Version Id	GUID that represents the version identifier for the management pack.	<i>String</i>

Get Management Pack Group Filters

Name	Description	Filter Operator
Active Language Code	Filters results by active language code.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Content Readable	Filters results by content readable.	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
Default Language Code	Filters results by default language code.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Description	Filters result by description.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Display Name	Filters result by display name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Friendly Name	Filters result by friendly name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Id	Filters result by Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i>

Name	Description	Filter Operator
		<i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Key Token	Filters result by key token.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Last Modified	Filters result by last modified date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Name	Filters result by name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Original Schema Version	Filters result by original schema version.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Schema Version	Filters result by schema version.	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
		<i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Sealed	Filters result by sealed state.	<i>Equals</i> <i>Does not equal</i>
Time Created	Filters result by time created date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Version	Filters result by version.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Version Id	Filters result by version Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Get Rule

The *Get Rule* task can be used in a runbook to retrieve and filter rules. To configure this task, make sure the *Task* input property is configured with the *Get Management Pack* value. The following tables list the required properties, optional properties, published data and filters for this task.

Get Rule Required Properties

Name	Description	Valid Values
Task	Specifies the SCOM task to be executed.	<i>Get Management Pack</i>

Get Rule Optional Properties

Name	Description	Valid Values
Display Name	Specifies one or more display names. When specifying multiple display names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Name	Specifies one or more names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or List of String</i>

Get Rule Published Data

Name	Description	Valid Values
Rule Count	Number of rules returned	<i>Number</i>
Category	Category of the rule.	<i>String</i>
Comment	Optional comment associated with this rule.	<i>String</i>
Computer Name	Computer Name	<i>String</i>
Condition Detection	Condition detected module.	<i>String</i>
Confirm Delivery	Value that determines whether to confirm delivery of the rule data.	<i>True or False</i>
Description	Description of the rule.	<i>String</i>
Discard Level	Discard level of the rule.	<i>Integer</i>
Display Name	Display name of the rule.	<i>String</i>
Enabled	Determines whether the rule is enabled.	<i>String</i>
Has Non Category Override	Has Non Category Override	<i>True or False</i>
Id	GUID of the rule.	<i>String</i>
Identifier	Identifier	<i>String</i>
Instance	Instance Name	<i>String</i>

Name	Description	Valid Values
Name		
Language Code	Three-letter language code for this rule.	<i>String</i>
Last Modified	When the item was last modified.	<i>DateTime</i>
Management Group	Management Group	<i>String</i>
Management Group Id	Management Group Id	<i>String</i>
Name	Name of the rule.	<i>String</i>
Priority	Priority of the rule.	<i>String</i>
Remotable	Determines whether the workflow will execute for remote monitoring.	<i>True or False</i>
SCOM User	SCOM User	<i>String</i>
Status	Current status of the item.	<i>String</i>
Target	Management Pack class that the rule targets	<i>String</i>
Task	Task	<i>String</i>
Time Added	UTC time when the item was created.	<i>DateTime</i>
Xml Tag	XML element tag that is defined by this type.	<i>String</i>

Get Rule Filters

Name	Description	Filter Operator
Category	Filters result by category.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Comment	Filters result by comment.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i>

Name	Description	Filter Operator
		<i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Condition Detection	Filters result by condition detection.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Confirm Delivery	Filters result by confirm delivery state.	<i>Equals</i> <i>Does not equal</i>
Description	Filters result by description.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Discard Level	Filters result by discard level.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Display Name	Filters result by display name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i>

Name	Description	Filter Operator
		<i>Starts with</i> <i>Ends with</i>
Enabled	Filters result by enabled state.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Has Non Category Override	Filters result by has non category override state.	<i>Equals</i> <i>Does not equal</i>
Id	Filters result by Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Instance Name	Filters result by Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Language Code	Filters result by language code.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i>

Name	Description	Filter Operator
		<i>Starts with</i> <i>Ends with</i>
Last Modified	Filters result by last modified date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Management Group	Filters result by management group.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Management Group Id	Filters result by management group Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Name	Filters result by name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Priority	Filters result by priority.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Remotable	Filters result by remotable state.	<i>Equals</i> <i>Does not equal</i>
Status	Filters result by status.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Time Added	Filters result by time added date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Xml Tag	Filters result by xml tag.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Get Monitor

The *Get Monitor* task can be used in a runbook to retrieve and filter monitors. To configure this task, make sure the *Task* input property is configured with the *Get Monitor* value. The following tables list the required properties, optional properties, published data and filters for this task.

Get Monitor Required Properties

Name	Description	Valid Values
Task	Specifies the SCOM task to be executed.	<i>Get Monitor</i>

Get Monitor Optional Properties

Name	Description	Valid Values
Display Name	Specifies one or more display names. When specifying multiple display names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Name	Specifies one or more names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or List of String</i>

Get Monitor Published Data

Name	Description	Valid Values
Monitor Count	Number of monitors returned	<i>Number</i>
Accessibility	The accessibility of the Management Pack item.	<i>String</i>
Alert Settings	The alert settings that control the generation of and configuration of alerts generated from this monitor.	<i>String</i>
Algorithm	The algorithm that is used to report health information.	<i>String</i>
Category	The category the monitor is in.	<i>String</i>
Comment	The comment associated with this monitor element.	<i>String</i>
Description	The description of the monitor element.	<i>String</i>
Display Name	The display name of the monitor.	<i>String</i>
Enable	Indicated the monitoring level.	<i>String</i>
Has Non Category Override	Has Non Category Override	<i>True or False</i>
Id	GUID identifier of the monitor element.	<i>String</i>
Identifier	Identifier	<i>String</i>
Instance Name	Instance Name	<i>String</i>
Language Code	Three-letter language code for this monitor.	<i>String</i>
Last Modified	When the item was last modified.	<i>DateTime</i>
Management Group	Management Group	<i>String</i>
Management Group Id	Management Group Id	<i>String</i>

Name	Description	Valid Values
Name	Name of the monitor.	<i>String</i>
Parent Monitor Id	The identifier of the monitor that this monitor will report health information to.	<i>String</i>
Priority	The priority level of the monitor.	<i>String</i>
Remotable	Indicates whether the monitor will be executed for remote monitoring.	<i>True or False</i>
Run As	A reference to a secure reference identifier that is defined in this in this Management Pack or a referenced Management Pack.	<i>String</i>
Status	The current status of the monitor.	<i>String</i>
Target	The class that this monitor targets.	<i>String</i>
Time Added	UTC time when the monitor was created.	<i>String</i>
Xml Tag	XML element tag that is defined by this type.	<i>String</i>

Get Monitor Filters

Name	Description	Filter Operator
Accessibility	Filters result by accessibility.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Algorithm	Filters result by algorithm.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Category	Filters result by category.	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
		<i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Comment	Filters result by comment.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Description	Filters result by description.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Display Name	Filters result by display name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Enable	Filters result by enable state.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Has Non Category Override	Filters result by has non category override state.	<i>Equals</i> <i>Does not equal</i>
Id	Filters result by Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Instance Name	Filters result by instance name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Language Code	Filters result by language code.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Last Modified	Filters result by last modified date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Management	Filters result by management group.	<i>Equals</i>

Name	Description	Filter Operator
Group		<i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Management Group Id	Filters result by management group Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Name	Filters result by name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Priority	Filters result by priority.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Remotable	Filters result by remotable state.	<i>Equals</i> <i>Does not equal</i>
Run As	Filters result by run as value.	<i>Equals</i>

Name	Description	Filter Operator
		<i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Status	Filters result by status.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Time Added	Filters result by time added date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Xml Tag	Filters result by xml tag.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Get Class

The *Get Class* task can be used in a runbook to retrieve and filter classes. To configure this task, make sure the *Task* input property is configured with the *Get Class* value. The following tables list the required properties, optional properties, published data and filters for this task.

Get Class Required Properties

Name	Description	Valid Values
Task	Specifies the SCOM task to be executed.	<i>Get Class</i>

Get Class Optional Properties

Name	Description	Valid Values
Display Name	Specifies one or more display names. When specifying multiple display names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Name	Specifies one or more names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Recurse	Indicates that all management packs will that depend on the specified management pack are retrieved recursively	<i>True or False</i>

Get Class Published Data

Name	Description	Valid Values
Class Count	Number of classes returned.	<i>Number</i>
Abstract	Indicates whether the class is an abstract class.	<i>True or False</i>
Accessibility	The accessibility of the Management Pack item.	<i>String</i>
Base	The class that is this class is derived from.	<i>String</i>
Comment	The comment associated with this class.	<i>String</i>
Description	The description of this class.	<i>String</i>
Display Name	The display name of this class.	<i>String</i>
Extension	Extension	<i>True or False</i>
Hosted	Hosted	<i>True or False</i>
Id	GUID identifier of the class.	<i>String</i>
Identifier	Identifier	<i>String</i>
Instance Name	Instance Name	<i>String</i>
Language Code	Three-letter language code for this class.	<i>String</i>
Last Modified	When the item was last modified.	<i>DateTime</i>
Management	Management Group	<i>String</i>

Name	Description	Valid Values
Group		
Management Group Id	Management Group Id	<i>String</i>
Name	The name of the class.	<i>String</i>
Status	The current status of the class.	<i>String</i>
Time Added	UTC time when the class was created.	<i>DateTime</i>
Xml Tag	XML element tag that is defined by this type.	<i>String</i>

Get Class Filters

Name	Description	Filter Operator
Abstract	Filters result by abstract value.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Accessibility	Filters result by accessibility value.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Comment	Filters result by comment.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Name	Description	Filter Operator
Description	Filters result by description.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Display Name	Filters result by display name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Extension	Filters result by extension value.	<i>Equals</i> <i>Does not equal</i>
Hosted	Filters result by hosted state.	<i>Equals</i> <i>Does not equal</i>
Id	Filters result by Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Instance Name	Filters result by instance name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Language Code	Filters result by language code.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Last Modified	Filters result by last modified date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Management Group	Filters result by management group.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Management Group Id	Filters result by management group Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Name	Filters result by name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i>

Name	Description	Filter Operator
		<i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Status	Filters result by status.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Time Added	Filters result by time added date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Xml Tag	Filters result by xml tag.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Start Task

The *Start Task* task can be used in a runbook to start a SCOM task. To configure this task, make sure the *Task* input property is configured with the *Start Task* value. The following tables list the required properties, optional properties, published data and filters for this task.

Start Task Required Properties

Name	Description	Valid Values
Task	Specifies the SCOM task to be executed.	<i>Start Task</i>
Instance Id	Id of SCOM instance Note: You can use the PD item 'Id' from the SCOM Task 'Get Class Instance'	<i>String</i>

Name	Description	Valid Values
Task Id	Id of task Note: You can use the PD item 'Id' from the SCOM Task 'Get Task'	<i>String</i>

Start Task Published Data

Name	Description	Valid Values
Task Id		<i>String</i>
Batch Id	Batch Id of task	<i>String</i>
Submitted By	Who ran the task	<i>String</i>
Running As	Who the task is running as.	<i>String</i>
Target Object Id	Target of the task.	<i>String</i>
Target Class Id	Target class of the task	<i>String</i>
Location Id	Location of the task.	<i>String</i>
Status	Latest status of the task.	<i>String</i>
Output	Output of the task.	<i>String</i>
Error Code	Error code.	<i>Integer</i>
Error Message	Error message.	<i>String</i>
Time Scheduled	The time the task was scheduled to run.	<i>DateTime</i>
Time Started	The time the task was run.	<i>DateTime</i>
Time Finished	The time the task was finished.	<i>DateTime</i>
Last Modified	The time the result was last modified.	<i>DateTime</i>
Progress Value	Progress value.	<i>Integer</i>
Progress Message	Progress message.	<i>String</i>
Progress Data	Progress data.	<i>String</i>
Progress Last Modified	Progress last modified date.	<i>DateTime</i>
Status Last Modified	Status last modified date.	<i>DateTime</i>

Name	Description	Valid Values
Id	GUID of the task result.	<i>String</i>
Management Group Id	Management group Id.	<i>String</i>
Management Group	Management group.	<i>String</i>

Get Class Instance

The *Get Class Instance* task can be used in a runbook to retrieve and filter class instances. To configure this task, make sure the *Task* input property is configured with the *Get Class Instance* value. The following tables list the required properties, optional properties, published data and filters for this task.

Get Class Instance Required Properties

Name	Description	Valid Values
Task	Specifies the SCOM task to be executed.	<i>Get Class Instance</i>

Get Class Instance Optional Properties

Name	Description	Valid Values
Display Name	Specifies one or more display names. When specifying multiple display names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Name	Specifies one or more names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or List of String</i>

Get Class Instance Published Data

Name	Description	Valid Values
Class Instance Count	Number of class instances returned.	<i>Number</i>
Is Managed	Is managed.	<i>True or False</i>
Health State	Current health state	<i>String</i>
State Last Modified	State last modified	<i>DateTime</i>
Is Available	Indicates whether the object is available to perform an operation.	<i>True or False</i>

Name	Description	Valid Values
Availability Last Modified	Availability last modified date	<i>DateTime</i>
In Maintenance Mode	Indicates whether the monitoring object is in maintenance mode.	<i>True or False</i>
Maintenance Mode last Modified	Maintenance mode last modified date.	<i>DateTime</i>
Monitor Class Ids	List of GUID of the monitoring classes for this partial monitoring object.	<i>String</i>
Least Derived Non Abstract Monitoring Class Id	Least derived non abstract monitoring class Id.	<i>String</i>
Management Group	Management group.	<i>String</i>
Name	The name of class instance.	<i>String</i>
Path	The path of the class instance.	<i>String</i>
Display Name	The display name of the class instance.	<i>String</i>
Full Name	The full name of the class instance	<i>String</i>
Management Pack Class Ids	Management pack class Ids.	<i>String</i>
Least Derived Non Abstract Manage Pack Class Id	Least derived not abstract manage pack class Id.	<i>String</i>
Time Added	Time added date.	<i>DateTime</i>
Last Modified By	Last modified by date.	<i>DateTime</i>
Last Modified	Last modified date.	<i>DateTime</i>
Is New	Is new.	<i>True or False</i>
Has Changes	Has changes.	<i>True or False</i>
Id	GUID Id	<i>String</i>
Management Group Id	Management group Id.	<i>String</i>

Name	Description	Valid Values
Groups As Different Type	Group as different type.	<i>True of False</i>
View Name	View name.	<i>String</i>
Object Mode	Object mode.	<i>String</i>

Get Class Instance Filters

Name	Description	Filter Operator
Is Managed	Filters result by is managed state.	<i>Equals</i> <i>Does not equal</i>
Health State	Filters result by health state.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
State Last Modified	Filters result by state last modified date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Is Available	Filters result by is available state.	<i>Equals</i> <i>Does not equal</i>
Availability Last Modified	Filters result by availability last modified date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
In Maintenance Mode	Filters result by in maintenance mode state.	<i>Equals</i> <i>Does not equal</i>
Maintenance Mode last Modified	Filters result by maintenance mode last modified date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Least Derived	Filters result by least derived non abstract	<i>Equals</i>

Name	Description	Filter Operator
Non Abstract Monitoring Class Id	monitoring class Id.	<i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Management Group	Filters result by management group.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Name	Filters result by name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Path	Filters result by path.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Display Name	Filters result by display name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Full Name	Filters result by full name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Least Derived Non Abstract Manage Pack Class Id	Filters result by least derived non abstract Manage Pack Class Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Time Added	Filters result by time added date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Last Modified By	Filters result by last modified by date.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Last Modified	Filters result by last modified date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Is New	Filters result by is new state.	<i>Equals</i> <i>Does not equal</i>
Has Changes	Filters result by has changes state.	<i>Equals</i>

Name	Description	Filter Operator
		<i>Does not equal</i>
Id	Filters result by Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Management Group Id	Filters result by management group Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Groups As Different Type	Filters result by groups as different type state.	<i>Equals</i> <i>Does not equal</i>
View Name	Filters result by view name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Object Mode	Filters result by object mode.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Get Task

The *Get Task* task can be used in a runbook to retrieve and filter tasks. To configure this task, make sure the *Task* input property is configured with the *Get Task* value. The following tables list the required properties, optional properties, published data and filters for this task.

Get Task Required Properties

Name	Description	Valid Values
Task	Specifies the SCOM task to be executed.	<i>Get Task</i>

Get Task Optional Properties

Name	Description	Valid Values
Display Name	Specifies one or more display names. When specifying multiple display names, use a comma (,) separated list of strings.	<i>String or List of String</i>
Name	Specifies one or more names. When specifying multiple names, use a comma (,) separated list of strings.	<i>String or List of String</i>

Get Task Published Data

Name	Description	Valid Values
Task Count	Number of tasks returned.	<i>Integer</i>
Enabled	Indicates the task is enabled.	<i>True or False</i>
Target	The class that the task targets.	<i>String</i>
Timeout	The time that the workflow is allowed to execute before being terminated by the health service.	<i>Integer</i>
Remotable	Indicates the task will execute for remote monitoring.	<i>True or False</i>
Run Location	Run location.	<i>String</i>
Can Suspend	Can suspend.	<i>True or False</i>
Can Cancel	Can cancel.	<i>True or False</i>
Category	The category that the task is in.	<i>String</i>
Probe Action	The probe action of the task.	<i>String</i>
Write Action	Write action.	<i>String</i>
Xml Tag	XML element tag that is defined by this type.	<i>String</i>
Accessibility	Accessibility of the Management Pack item.	<i>String</i>

Name	Description	Valid Values
Management Group	Management group.	<i>String</i>
Management Group Id	Management group id.	<i>String</i>
Identifier	Identifier.	<i>String</i>
Name	The name of the task.	<i>String</i>
Id	The Id of the task.	<i>String</i>
Display Name	The display name of the task.	<i>String</i>
Description	The description of the task.	<i>String</i>
Language Code	Three-letter language code for this task.	<i>String</i>
Comment	The comment of the task.	<i>String</i>
Status	The current status of the task.	<i>String</i>
Last Modified	UTC last modified date.	<i>DateTime</i>
Time Added	UTC time added date.	<i>DateTime</i>
Instance Name	Instance name.	<i>String</i>

Get Task Filters

Name	Description	Filter Operator
Enabled	Filters result by enabled state.	<i>Equals</i> <i>Does not equal</i>
Target	Filters result by target.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Timeout	Filters result by timeout.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i>

Name	Description	Filter Operator
		<i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Remotable	Filters result by remotable state.	<i>Equals</i> <i>Does not equal</i>
Run Location	Filters result by run location.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Can Suspend	Filters result by can suspend state.	<i>Equals</i> <i>Does not equal</i>
Can Cancel	Filters result by can cancel state.	<i>Equals</i> <i>Does not equal</i>
Category	Filters result by category.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Probe Action	Filters result by probe action.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Write Action	Filters result by write action.	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
		<i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Xml Tag	Filters result by xml tag.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Accessibility	Filters result by accessibility.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Management Group	Filters result by management group.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Management Group Id	Filters result by management group Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Identifier	Filters result by identifier.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Name	Filters result by name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Id	Filters result by Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Display Name	Filters result by display name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Name	Description	Filter Operator
Description	Filters result by description.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Language Code	Filters result by language code.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Comment	Filters result by comment.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Status	Filters result by status.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Last Modified	Filters result by last modified date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i>

Name	Description	Filter Operator
		<i>Is greater than</i>
Time Added	Filters result by time added date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Instance Name	Filters result by instance name.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Get Task Result

The *Get Task Result* task can be used in a runbook to retrieve and filter task results. To configure this task, make sure the *Task* input property is configured with the *Get Task Result* value. The following tables list the required properties, optional properties, published data and filters for this task.

Get Task Result Required Properties

Name	Description	Valid Values
Task	Specifies the SCOM task to be executed.	<i>Get Task Result</i>

Get Task Result Optional Properties

Name	Description	Valid Values
Id	Specifies one or more Ids. When specifying multiple Ids, use a comma (,) separated list of strings.	<i>String or</i> <i>List of String</i>

Get Task Result Published Data

Name	Description	Valid Values
Task Result Count	Number of task results returned.	<i>Integer</i>
Task Id	Task Id of the task.	<i>String</i>

Name	Description	Valid Values
Batch Id	Batch Id of the task that ran.	<i>String</i>
Submitted By	Who the task was submitted by.	<i>String</i>
Running As	Who the task is running as.	<i>String</i>
Target Object Id	Target of the task.	<i>String</i>
Target Class Id	Target class of the task.	<i>String</i>
Location Id	Location of the task that ran.	<i>String</i>
Status	Latest status of the task.	<i>String</i>
Output	Output of the task.	<i>String</i>
Error Code	Error code.	<i>Integer</i>
Error Message	Error message	<i>String</i>
Time Scheduled	Time scheduled date.	<i>DateTime</i>
Time Started	Time started date.	<i>DateTime</i>
Time Finished	Time finished date.	<i>DateTime</i>
Last Modified	Last modified date.	<i>DateTime</i>
Progress Value	Progress value.	<i>Integer</i>
Progress message	Progress message.	<i>String</i>
Progress Data	Progress data.	<i>String</i>
Progress Last Modified	Progress last modified date.	<i>DateTime</i>
Status Last Modified	Status last modified date	<i>DateTime</i>
Id	GUID Id	<i>String</i>
Management Group	Management Group	<i>String</i>
Management Group Id	Management group Id.	<i>String</i>

Get Task Result Filters

Name	Description	Filter Operator
Task Id	Filters result by task Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Batch Id	Filters result by batch Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Submitted By	Filters result by submitted by.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Running As	Filters result by running as.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Target Object Id	Filters result by target object Id.	<i>Equals</i> <i>Does not equal</i>

Name	Description	Filter Operator
		<i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Target Class Id	Filters result by target class Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Location Id	Filters result by location Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Status	Filters result by status.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Output	Filters result by output.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Error Code	Filters result by error code.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Error Message	Filters result by error message.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Time Scheduled	Filters result by time scheduled date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Time Started	Filters result by time started date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Time Finished	Filters result by time finished date.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Last Modified	Filters result by last modified date.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>

Name	Description	Filter Operator
Progress Value	Filters result by progress value.	<i>Equals</i> <i>Does not equal</i> <i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Progress message	Filters result by progress message.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Progress Data	Filters result by progress data.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Progress Last Modified	Filters result by progress last modified.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Status Last Modified	Filters result by status last modified.	<i>Is less than or equal to</i> <i>Is greater than or equal to</i> <i>Is less than</i> <i>Is greater than</i>
Id	Filters result by Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i>

Name	Description	Filter Operator
		<i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Management Group	Filters result by management group.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>
Management Group Id	Filters result by management group Id.	<i>Equals</i> <i>Does not equal</i> <i>Contains</i> <i>Does not contain</i> <i>Matches pattern</i> <i>Does not match pattern</i> <i>Starts with</i> <i>Ends with</i>

Reset Monitoring State

The *Reset Monitoring State* task can be used in a runbook to reset monitoring state. To configure this task, make sure the *Task* input property is configured with the *Reset Monitoring State* value. The following tables list the required properties, optional properties, published data and filters for this task.

Reset Monitoring State Required Properties

Name	Description	Valid Values
Task	Specifies the SCOM task to be executed.	<i>Reset Monitoring State</i>
Monitoring Rule Id		<i>String</i>
Monitoring Class Id		<i>String</i>
Monitoring Object Id		<i>String</i>

Reset Monitoring State Published Data

Name	Description	Valid Values
Task Id	Task Id of the task.	<i>String</i>
Batch Id	Batch Id of the task that ran.	<i>String</i>
Submitted By	Who the task was submitted by.	<i>String</i>
Running As	Who the task is running as.	<i>String</i>
Target Object Id	Target of the task.	<i>String</i>
Target Class Id	Target class of the task.	<i>String</i>
Location Id	Location of the task that ran.	<i>String</i>
Status	Latest status of the task.	<i>String</i>
Output	Output of the task.	<i>String</i>
Error Code	Error code.	<i>Integer</i>
Error Message	Error message	<i>String</i>
Time Scheduled	Time scheduled date.	<i>DateTime</i>
Time Started	Time started date.	<i>DateTime</i>
Time Finished	Time finished date.	<i>DateTime</i>
Last Modified	Last modified date.	<i>DateTime</i>
Progress Value	Progress value.	<i>Integer</i>
Progress Message	Progress message.	<i>String</i>
Progress Data	Progress data.	<i>String</i>
Progress Last Modified	Progress last modified date.	<i>DateTime</i>
Status Last Modified	Status last modified date	<i>DateTime</i>
Id	GUID Id	<i>String</i>
Management Group	Management Group	<i>String</i>
Management Group Id	Management group Id.	<i>String</i>

Install Agent

The *Install Agent* task can be used in a runbook to install a SCOM agent. To configure this task, make sure the *Task* input property is configured with the *Install Agent* value. The following tables list the required properties, optional properties, published data and filters for this task.

Install Agent Required Properties

Name	Description	Valid Values
Task	Specifies the SCOM task to be executed.	<i>Install Agent</i>
DNS Host Name	Computer to install the agent on.	<i>String</i>

Install Agent Optional Properties

Name	Description	Valid Values
Action Account User	The user name used to install the agent.	<i>String</i>
Action Account Password	The password for the user used to install the agent. Note: Required when Action Account User is specified.	<i>String</i>
Agent Action Account User	The user name used to run the agent.	<i>String</i>
Agent Action Account Password	The password for the user used to run the agent. Note: Required when Agent Action Account User is specified.	<i>String</i>
Primary Management Server Name	Specifies the primary management server for the agent. If this property is not specified, the primary management server defaults to the first management server for the configured SCOM server.	<i>String</i>

