



Cisco TEO Northbound Web Services Guide

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Preface

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The Northbound Web Services documentation describes the web services API used with Tidal™ Enterprise Orchestrator (TEO). This documentation describes the XML formatting used to present the input and output of jobs processed via Web services.

Through the Northbound Web Service, users will have the ability to start TEO processes and monitor the started process until its completion. Users can also view the process instance information of a started process.

Users can also programmatically automate the process of creating targets, runtime user accounts, and tasks using the web service.

This guide provides information on the configuration procedures for the Northbound web service and the web service methods which can be use for managing processes, targets, runtime users, and tasks in TEO.

Organization

This guide includes the following sections:

Chapter 1	Configuring TEO Web Services	Provides configuration information on the TEO web service
Chapter 2	Process Web Service	Provides all TEO process web service methods
Chapter 3	Process Instance Web Service	Provides all TEO process instance web service methods
Chapter 4	Create Targets Web Service	Provides the web service methods for creating targets using the web service
Chapter 5	Update Targets Web Service	Provides the web service methods for updating targets using the web service

Chapter 6	View Targets Web Service	Provides the web service methods for viewing defined target properties using the web service
Chapter 7	Create Runtime User Service	Provides the web service methods for creating runtime user accounts using the web service
Chapter 8	Update Runtime User Service	Provides the web service methods for updating runtime user accounts using the web service
Chapter 9	View Runtime User Service	Provides the web service methods for viewing defined runtime user properties using the web service
Chapter 10	Create Tasks Service	Provides the web service methods for creating tasks using the web service
Chapter 11	Update Tasks Service	Provides the web service methods for updating defined tasks using the web service
Chapter 12	View Tasks Service	Provides the web service methods for viewing defined tasks properties using the web service

Conventions

This guide uses the following conventions:

Convention	Indication
bold font	Commands and keywords and user-entered text appear in bold font .
<i>italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic font</i> .
[]	Elements in square brackets are optional.
{ x y z }	Required alternative keywords are grouped in braces and separated by vertical bars.
[x y z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
<code>courier font</code>	Terminal sessions and information the system displays appear in <code>courier font</code> .
< >	Nonprinting characters such as passwords are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

**Note**

Means *reader take note*.

**Tip**

Means *the following information will help you solve a problem*.

**Caution**

Means *reader be careful*. In this situation, you might perform an action that could result in equipment damage or loss of data.

**Timesaver**

Means *the described action saves time*. You can save time by performing the action described in the paragraph.

**Warning**

Means *reader be warned*. In this situation, you might perform an action that could result in bodily injury.

Product Documentation

Documentation Formats

Documentation is provided in the following electronic formats:

- Adobe® Acrobat® PDF files
- Online help


You must have Adobe® Reader® installed to read the PDF files. Adobe Reader installation programs for common operating systems are available for free download from the Adobe Web site at www.adobe.com.

Guides and Release Notes

You can download the TEO product documentation from Cisco.com. Release Notes can be found on Cisco.com and the product CD.

Online Help

Online help is available and can be accessed using the following methods:

- Click **Help** on any dialog box in the application to open the help topic in a pane to the right of the dialog box.
- In the Tidal Enterprise Orchestrator console:
 - Click the  **Help Pane** icon on the toolbar to open the help topic in a pane to the right of the Results pane.

- Click **Help** on the menu bar.

Open Source License Acknowledgements

Licenses and notices for open source software used in Cisco Tidal Enterprise Orchestrator can be found in the [Open Source License Acknowledgements](#) found on Cisco.com. If you have any questions about the open source contained in this product, please email external-opensource-requests@cisco.com.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a RSS feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.



CHAPTER 1

Configuring TEO Web Services

In Tidal Enterprise Orchestrator (TEO) versions 2.1 and later, the end user can expose a Northbound SOAP Web Service into the TEO server. This Web Service is disabled by default, but the end user can expose it either via HTTP or HTTPS end points, on the port of their choosing.

After the Web Service is exposed, it can be used by other tools as an integration point to start processes, disable/enable targets and perform other actions.

This chapter provides instructions for configuring the web service settings.

- [Configuring SSL Certificate v3, page 1-2](#)
- [Configuring HTTP Settings in TEO Console, page 1-4](#)
- [Refreshing the TEO Web Service, page 1-7](#)

Configuring SSL Certificate v3

Use the following steps to configure a SSL certificate for TEO web services. This step is only necessary if the user wishes to configure the HTTPS endpoint. These steps are not necessary if planning to use the HTTP endpoint.

To configure the SSL certificate:

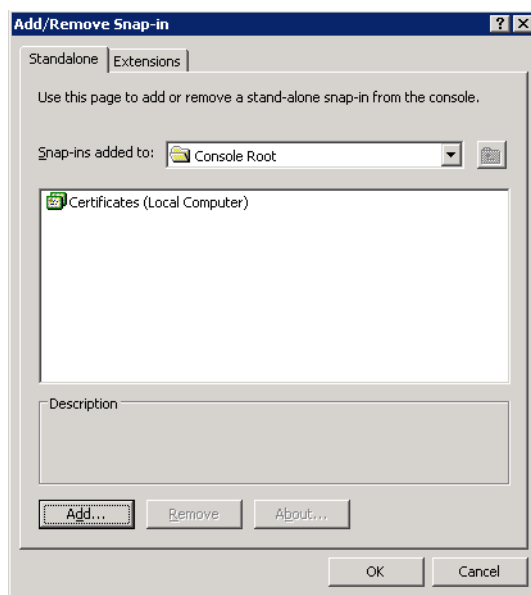
Step 1 Choose **Start > Run**, and in the Open text field, type **MMC**.

The Console dialog box displays.

Step 2 From the File menu, select **Add/Remove Snap-in**.

The Add/Remove Snap-in dialog box displays.

Figure 1-1 Add/Remove Snap-in Dialog Box



Step 3 Click **Add**.

The Add Standalone Snap-in dialog box displays.

Step 4 On the list, click **Certificates**, and then click **Add**.

The Certificates snap-in dialog box displays.

Step 5 Select **Computer Account** and click **Next**.

The Select Computer dialog box displays.

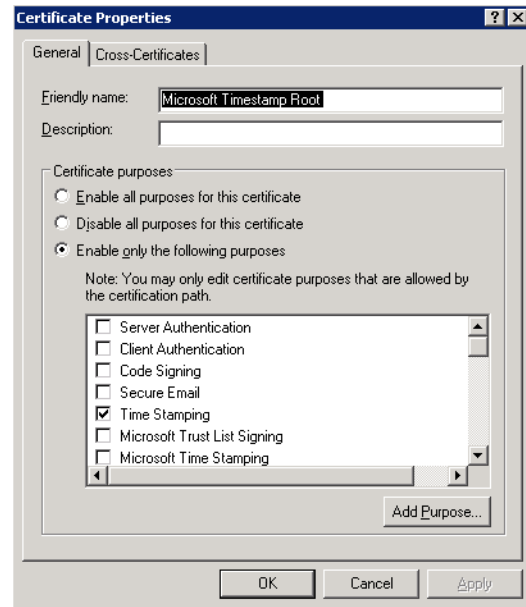
Step 6 Select **Local Computer (the computer this Console is running on)**, and then click **Finish**.

Step 7 On the Add Standalone Snap-in, click **Close** to return to the Add/Remove Snap-in dialog box.

Step 8 Click **OK** to return to the Console.

Step 9 On the Console Root dialog box, scroll to the appropriate certificate for server authentication, right-click and choose **Properties**.

The [Certificate] dialog box displays.

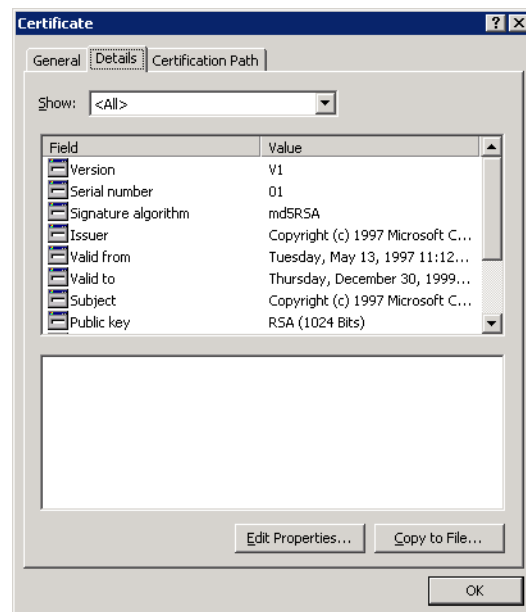
Figure 1-2 Certificate Properties Dialog Box—General Tab

Step 10 Under Certificate Purposes, verify that the Server Authentication check box is listed.

Step 11 Click **OK** to close the dialog box.

Step 12 Right-click on the certificate again and choose **Open**.

The Certificate dialog box displays.

Figure 1-3 Certificate Dialog Box—Details Tab

Step 13 Click the **Details** tab, scroll to Thumbprint, and then click **Copy to File**.

Example:Original

```
eb a6 37 9b fe d5 05 3b f7 00 10 d1 70 87 6a 9b 9d fc bd 0b
```

Step 14 Open **Notepad.exe**, paste the text and remove all the spaces in the thumbprint.

Example:Modified with spaces removed

```
eba6379bfed5053bf70010d170876a9b9dfcbd0b
```

Step 15 Choose **Start > Run** and in the Open text field, type the following command:

For Windows XP or 2003

```
httpcfg set ssl -i 0.0.0.0:61526 -h eba6379bfed5053bf70010d170876a9b9dfcbd0b
```

Step 16 Replace the string "*eba6379...*" with the appropriate thumbprint string. If using a port other than *61526*, replace the port number, also.



Note

The *httpcfg.exe* tool is installed with Windows Server 2003. For additional information, see [Windows Server 2003 Service Pack 2 32-bit Support Tools](#). Windows XP requires a complete installation of the Windows XP Service Pack 2 Support Tools. See [Windows XP SP2 Support Tools](#) for additional information.

For Windows 2008

For new operating systems, *netsh.exe* is required.

Repeat Step 15, and type the following command, replacing the "*eba6379...*" in the certhash with the appropriate thumbprint string.

```
netsh http add sslcert ipport=0.0.0.0:61526
certhash=eba6379bfed5053bf70010d170876a9b9dfcbd0b
appid={1776a671-8e9c-45b0-8304-dec6f472131f}
```

Certhash contains the "thumbprint" that went into the *-h* flag in the *httpcfg.exe* version. *Appid* is an identifier that uniquely ties this certificate assignment to something intended for TEO. This helps identify this association in future versions.

Configuring HTTP Settings in TEO Console

Use the Web Service to modify TEO web service configuration settings. The fields displayed on this property page allow users to modify the HTTP and HTTPS ports as well as the authentication of the HTTP endpoints.

Securing the TEO Web Service

TEO allows users the ability to modify the authentication for the HTTP endpoints. Use the following steps to secure the TEO web service.

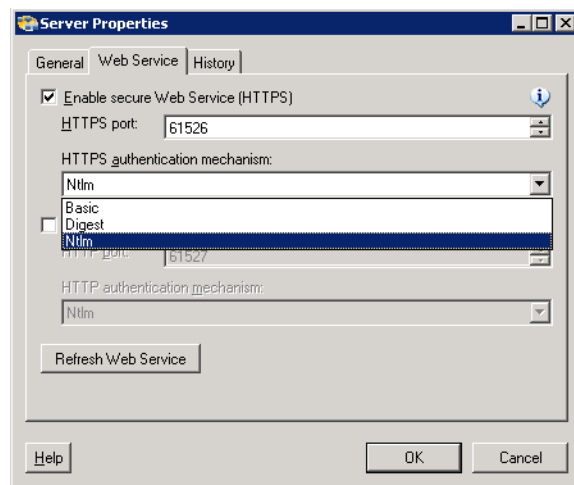
To enable the HTTPs web service;

Step 1 On the TEO Console, choose **File > Server Properties**.

The Server Properties dialog box displays.

Step 2 Click the **Web Service** tab to continue.

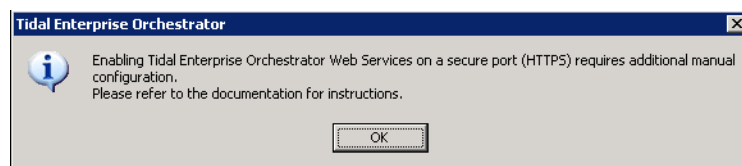
Figure 1-4 Server Properties Dialog Box—Web Service Tab



Step 3 Check the **Enable secure Web Service (HTTPS)** check box to configure the authentication for the HTTP endpoints.

Step 4 The following message displays. Click **OK** to continue.

Figure 1-5 HTTP Authentication Mechanism Message



Step 5 Complete the following fields, as necessary.

Field	Description
HTTPS port	Enter or verify the secure HTTPS port for the TEO web service. (Default: 61526)
HTTPS authentication mechanism	Choose the appropriate authentication for the web service. <ul style="list-style-type: none"> Basic—Sends a username and password as the method of authentication. It's the simplest method of authentication, but the least secure. Digest—Sends cryptographic representation of the password rather than the password itself. This authentication method is more secure than basic authentication. Ntlm—Authentication protocol used on networks that include systems running on the Windows operating system. This option can be used to return to the normal mode of operation.

Step 6 Click **OK** to save the settings.

Enabling a Non-Encrypted Endpoint of the TEO Web Service

Use the following steps to open a non-encrypted endpoint of the TEO web service.

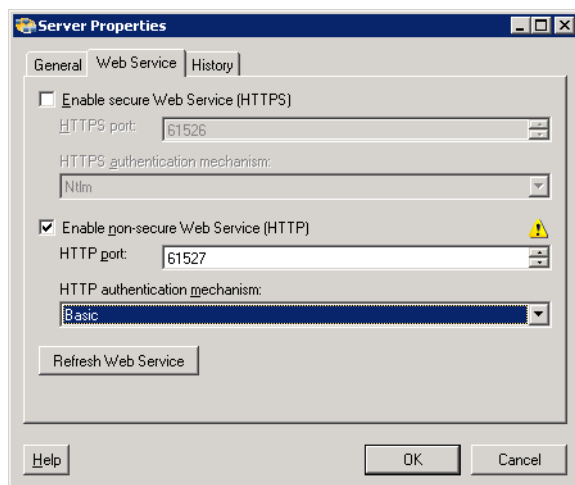
To open a non-encrypted endpoint:

Step 1 On the TEO Console, choose **File > Server Properties**.

The Server Properties dialog box displays.

Step 2 Click the **Web Service** tab to continue.

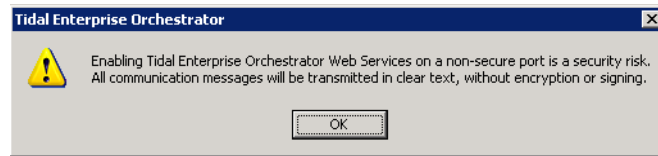
Figure 1-6 Server Properties Dialog Box—Web Service Tab



Step 3 Check the **Enable non-secure Web Service (HTTPS)** check box to unencrypt the HTTP endpoints.

The following message displays.

Figure 1-7 HTTP Authentication Mechanism Message



Step 4 Click **OK** to continue.

Step 5 Complete the following fields, as necessary.

Field	Description
HTTP port	Enter or verify the secure HTTP port for the TEO web service. (Default: 61527)
HTTPS authentication mechanism	Choose the appropriate authentication for the web service. <ul style="list-style-type: none"> Basic—Sends a username and password as the method of authentication. It's the simplest method of authentication, but the least secure. Digest—Sends cryptographic representation of the password rather than the password itself. This authentication method is more secure than basic authentication. Ntlm—Authentication protocol used on networks that include systems running on the Windows operating system. This option can be used to return to the normal mode of operation.

Step 6 Click **OK** to save the settings.

All transmissions through the chosen *NonsecuredHttpPort* are unencrypted. Communications over the SSL-enabled ports (and between the server and Console) will all be unaffected by this setting.

Refreshing the TEO Web Service

Click this button to regenerate the dynamic web service methods in the Northbound web service. This affects the web service methods which start processes and retrieve process instance output variables.

For example, if you create a new process called *My Process*, then in the Northbound web service, the method would be *StartMyProcess*. Click the **Refresh Web Services** button to regenerate the Northbound web service so that the Process service can launch the new *StartMyProcess* call.



CHAPTER 2

Process Web Service

The Process Web Service allows users to start processes and retrieve information, such as the description, ID, and whether the process is enabled or disabled.

The WSDL for the Process web service methods is: `http://<server>:<port>/WS/Process?wsdl`.

The following process web service methods are described in this chapter:

- [StartProcessByName, page 2-2](#)
- [ListProcessDefinitions, page 2-2](#)

Start [UniqueProcessName]

Users will be able to start any process that is defined in TEO and contains an adhoc trigger. These processes show up in the list, for example, as *Start[UniqueProcessName]*. The input variables for the process would be considered the parameters of each process listed.

The web service publishes these processes as dynamic methods that change as processes are added, removed, or the input variables are modified.

The list of the processes changes each time the web service is refreshed or restarted. See [Refreshing the TEO Web Service, page 1-7](#).

StartProcessByName

Starts a TEO process using a single process name or process ID. This method can only start processes that contain an ad hoc trigger. To ensure the process can start on an adhoc trigger, the user must ensure the Started By User trigger is added to the process during the authoring phase.

When starting a process, users have the option of overriding the target (or targets) that the job runs against. The user can specify either a single target or a single target group. If a target group is selected, the server will broadcast the job to all members of that target group.

If no target is specified, then the process will execute against the default target selection of the process.

Parameters

processNameOrId (string)—The display name or Id of the process

targetOverride (string)—The display name or Id of a target to specify a non-default target for the run

Return Type

Guid[]

Exceptions

DeserializationFailed if an improper type of variable parameter is provided to this call.

If no process is found whose Id or display name matches the given name. "The request to run a process with name <name> could not be completed because no process with this name was found."

ListProcessDefinitions

Enumerates all process definitions in TEO. However, there is an optional parameter that allows the user to indicate whether they would like only processes with ad hoc triggers to display.

Parameters

adHocOnly (bool) —A boolean that indicates whether the caller would like to enumerate only processes that can be executed in a manual ad hoc fashion. Value should be either *true* or *false*.

Return Type

ProcessDefinition[]



CHAPTER 3

Process Instance Web Service

The Process Instance Web Service allows users to stop processes and retrieve information, such as whether the process is enabled, and any input and output variables.

The WSDL for this web service method is: `http://<server>:<port>/WS/ProcessInstance?wsdl`.

- [GetInstanceStatuses, page 3-2](#)
- [GetOutputVariablesGeneric, page 3-2](#)
- [GetOutputVariables, page 3-2](#)

GetInstanceStatuses

Checks the status of process instances that have run or are currently running.

Parameters

instanceIds (Guid[])—The Ids of the instances with the statuses to be retrieved

Return Type

InstanceStatus[]

GetOutputVariablesGeneric

Retrieves all output variable values of a process instance. The values include their values, names, and types.

Parameters

instanceId (Guid)—Process Instance ID in guid format

Return Type

VariableValue[]

GetOutputVariables

Retrieves output variables for a specific process instance. It is recommended that the user retrieving the output know details about the process in order to examine the output.

If a process does not offer any output variables, the web service will not provide process-specific output variable fetching methods. Also, if a process instance has not yet completed, an error indicating that the output variables cannot be read until the process instance's run has finished will display.

Parameters

processInstanceId (Guid)—Process Instance ID in guid format

Return Type

OutputVariables



CHAPTER 4

Create Targets Web Service

The Create Targets web services allows users to create targets for specific TEO target types. All available target types can be updated through the Northbound web service, as well. See [Update Targets Web Service, page 5-1](#).

The WSDL for the Targets web service is `http://<server>:<port>/WS/Target?wsdl`.

This chapter provides the web service methods for the targets that users can create in TEO.

- [CreateEmailIMAPTarget, page 4-2](#)
- [CreateEmailPOP3Target, page 4-2](#)
- [CreateESXTarget, page 4-3](#)
- [CreateNetworkDeviceModuleTarget, page 4-4](#)
- [CreateRemedyServerTarget, page 4-4](#)
- [CreateServiceTarget, page 4-5](#)
- [CreateSnmpAgentTarget, page 4-6](#)
- [CreateSnmpManagerTarget, page 4-6](#)
- [CreateTerminalTarget, page 4-7](#)
- [CreateUnixTarget, page 4-7](#)
- [CreateVCTarget, page 4-8](#)
- [CreateWebTarget, page 4-9](#)
- [CreateWindowsTarget, page 4-10](#)

CreateEmailIMAPTarget

Specifies the connection information to an IMAP email server.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

EmailServer (string)—Email server that relays email to the mailbox

Port (string)—Port number used to override the default port used by the protocol

EmailProtocol (EmailProtocol)—Type of email protocol being used by the email server (IMAP)

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateEmailPOP3Target

Specifies the connection information to a POP3 email server.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

EmailServer (string)—Email server that relays email to the mailbox

Port (string)—Port number used to override the default port used by the protocol

EmailProtocol (EmailProtocol)—Type of email protocol being used by the email server (POP3)

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateESXTarget

Specifies the connection information to an ESX/ESXi server.

VMware ESX and VMware ESXi are "bare-metal" hypervisors, and are installed directly on top of the physical server and partitioned into multiple virtual machines that can run simultaneously, sharing the physical resources of the underlying server.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

VirtualCenterESXServerName (string)—Host name or IP address of the Virtual Center/ESX Server

VirtualCenterESXServerServicePort (int)—Port number used to access the Virtual Center/ESX Server service

IsHttps (bool)—Indicates VMware target is configured for HTTPS

Version (string)—Dot-separated version string of the VMware infrastructure server

APIVersion (string)—Version of the API as a dot-separated string

APIType (string)—Indicates whether or not the service instance represents a standalone host (VirtualCenter or HostAgent)

Build (string)—Build string for the server on which this call is made.

OSType (string)—Operating system type and architecture of the VMware server

ProductLineID (string)—Unique identifier for the product line (gsx, vsx, vpx)

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateNetworkDeviceModuleTarget

Some Cisco network devices are chassis systems that can hold other network devices such as ACE, FWSM, on boards that plug into the chassis.

This method creates a network device module target which can be used as a dependent of a terminal target, as well as, an independent network device target that can be used by network processes for execution.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

SwitchNumber (string)—Switch number for the chassis system

SlotNumber (string)—Slot number on which the network device module resides

ProcessorID (string)—Processor Id on which the network device module resides

ChassisSystem (string)—terminal target on which the network module resides

PromptPrefix (string)—Command prompt prefix that will be used by the device type configurations and expects when issuing commands and connecting to the device. Adding a regex character, such as \$, >, and #, at the end of a prompt in the Prompt Prefix field invalidates the command prompt prefix.

ExpectTemplateNameOrId (string)—Name or ID of the expect template

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateRemedyServerTarget

Specify the connection information to a Remedy server which is used for processes to run against. It is recommended that the Remedy target is defined before attempting to define any Remedy activities. The Remedy target accesses the list of properties on the Remedy server.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

Server (string)—Host name or IP address of the Remedy server

Authentication (string)—String used by the client for authentication, such as domain name

Port (int)—Port number used to access the Remedy server

PollingInterval (int)—Interval used to query the Remedy system

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateServiceTarget

Creates a target that represents an IT or business service. The service target can be used by process authors when creating content within TEO. The Service target is a specialized target that cannot be used against any activities or triggers in TEO.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

ServiceType (string)—Represents a "service" target. String value representing a service type. For example, *Bronze SQL Server* or *HR Portal*.

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateSnmAgentTarget

Configures the host and operation and notification settings for accessing an SNMP agent.

Parameters

GetRuntimeUser (string)—Credential properties which enable reading only from device

SetRuntimeUser (string)—Credential properties which enable writing to device

TrapRuntimeUser (string)—Credential properties which enable traps from the device

ContextName (string)—Context name to be used during SNMP V3 operation

Host (string)—Host name or IP address of the SNMP agent

PortNumber (int)—Listening SNMP port to be used by TEO to execute SNMP GET/SNMP SET activities against the device

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateSnmManagerTarget

Configures the host and security settings for sending traps to a SNMP server.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

Host (string)—Host name or IP address of the SNMP server

PortNumber (int)—Listening port to be used by TEO to send traps to the SNMP server

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateTerminalTarget

Specifies the connection information used to access the device used for processes to run against.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

Host (string)—Host name or IP address of the network device

Port (int)—Port number used to access the the appropriate terminal target port (Default: SSH server: 22, Telnet server: 23)

Protocol (TransProtocolType)—Target protocol which can be either SSH or Telnet

PromptPrefix (string)—Command prompt prefix that will be used by the device type configurations and expects when issuing commands and connecting to the device. Adding a regex character, such as \$, >, and #, at the end of a prompt in the Prompt Prefix field invalidates the command prompt prefix.

ExpectTemplateNameOrId (string)—Name or ID of the expect template

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateUnixTarget

Specifies the connection information for the SSH server used for processes to run against.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

OSName (string)—Name of the operating system on the target

OSVersion (string)—Version of the operating system on the target

NodeName (string)—Node name of the target

Host (string)—Host name or IP address of selected server

Port (int)—Port number used to access the the appropriate terminal target port (Default: SSH server: 22, Telnet server: 23)

Protocol (TransProtocolType)—Target protocol which can be either SSH or Telnet

PromptPrefix (string)—Command prompt prefix that will be used by the device type configurations and expects when issuing commands and connecting to the device. Adding a regex character, such as \$, >, and #, at the end of a prompt in the Prompt Prefix field invalidates the command prompt prefix.

ExpectTemplateNameOrId (string)—Name or ID of the expect template

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateVCTarget

Specifies the connection information to the VMware virtual center server target.

Virtual Center Server provides unified management of all the hosts and VMs in your datacenter from a single console with an aggregate performance monitoring of clusters, hosts and VMs.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

VirtualCenterESXServerName (string)—Host name or IP address of the Virtual Center/ESX Server

VirtualCenterESXServerServicePort (int)—Port number used to access the Virtual Center/ESX Server service

IsHttps (bool)—Indicates VMware target is configured for HTTPS

Version (string)—Dot-separated version string of the VMware infrastructure server

APIVersion (string)—Version of the API as a dot-separated string

APIType (string)—Indicates whether or not the service instance represents a standalone host (VirtualCenter or HostAgent)

Build (string)—Build string for the server on which this call is made

OSType (string)—Operating system type and architecture of the VMware server

ProductLineID (string)—Unique identifier for the product line (gsx, vsx, vpx)

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateWebTarget

Configures a target for execution by a web service activity on which a web site may be hosted on several machines. The target allows an activity to execute against the specified URL address.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

BaseUrl (string)—Target URL to use as a base for execution

IgnoreCertificateErrors (bool)—Indicates whether the target should ignore any certificate errors on the specified web site

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateWindowsTarget

Specifies the connection information for the Windows computer used for processes to run against.

If Windows 2008 is used as the target, then the Windows firewall settings need to be adjusted in order to allow Windows Management Instrumentation (WMI) to pass through.

Parameters

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

ComputerName (string)—The name of the computer (Local computer name, .DNS name, NetBIOS name, IP address)

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

String ID of the new target

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

Update Targets Web Service

This chapter provides the web service methods to be used for updating the properties of existing targets.

Any use of an ambiguous name as the target identifier will result in an error being returned. For example, if two different targets are each named "name," TEO will not be able to choose which target the user intends to update.

- [Delete Targets, page 5-2](#)
- [EnableOrDisableTarget, page 5-2](#)
- [UpdateEmailIMAPTarget, page 5-2](#)
- [UpdateEmailPOP3Target, page 5-3](#)
- [UpdateESXTarget, page 5-3](#)
- [UpdateNetworkDeviceModuleTarget, page 5-4](#)
- [UpdateRemedyServerTarget, page 5-5](#)
- [UpdateServiceTarget, page 5-5](#)
- [UpdateSnmpAgentTarget, page 5-6](#)
- [UpdateSnmpManagerTarget, page 5-6](#)
- [UpdateTerminalTarget, page 5-7](#)
- [UpdateUnixTarget, page 5-7](#)
- [UpdateVCTarget, page 5-8](#)
- [UpdateWebTarget, page 5-9](#)
- [UpdateWindowsTarget, page 5-9](#)

Delete Targets

Deletes any type of defined target in TEO.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

Return Type

None

Exceptions

FaultException—If the server cannot locate the target the user wishes to delete. "No target or target group with the name or id <name> could be found."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

EnableOrDisableTarget

Enables or disables a specified target in TEO using a boolean operator that determines whether the target will be enabled or disabled.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

enable (bool)—*True* or *False* determines whether the target will be enabled or disabled

Return Type

None

UpdateEmailIMAPTarget

Updates the connection information to an IMAP email server target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

EmailServer (string)—Email server that relays email to the mailbox

Port (string)—Port number used to override the default port used by the protocol

EmailProtocol (EmailProtocol)—Type of email protocol being used by the email server (IMAP)

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateEmailPOP3Target

Updates the connection information to a POP3 email server target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

EmailServer (string)—Email server that relays email to the mailbox

Port (string)—Port number used to override the default port used by the protocol

EmailProtocol (EmailProtocol)—Type of email protocol being used by the email server (POP3)

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateESXTarget

Updates the connection information to a VMware ESX server target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

VirtualCenterESXServerName (string)—Host name or IP address of the Virtual Center/ESX Server

VirtualCenterESXServerServicePort (int)—Port number used to access the Virtual Center/ESX Server service

IsHttps (bool)—Indicates VMware target is configured for HTTPS

Version (string)—Dot-separated version string of the VMware infrastructure server

APIVersion (string)—Version of the API as a dot-separated string

APIType (string)—Indicates whether or not the service instance represents a standalone host (VirtualCenter or HostAgent)

Build (string)—Build string for the server on which this call is made.

OSType (string)—Operating system type and architecture of the VMware server

ProductLineID (string)—Unique identifier for the product line (gsx, vsx, vpx)

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateNetworkDeviceModuleTarget

Updates a network device module target which can be used as a dependent of a terminal target

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

SwitchNumber (string)—Switch number for the chassis system

SlotNumber (string)—Slot number on which the network device module resides

ProcessorID (string)—Processor Id on which the network device module resides

ChassisSystem (string)—Terminal target on which the network module resides

PromptPrefix (string)—Command prompt prefix that will be used by the device type configurations and expects when issuing commands and connecting to the device. Adding a regex character, such as \$, >, and #, at the end of a prompt in the Prompt Prefix field invalidates the command prompt prefix.

ExpectTemplateNameOrId (string)—Name or ID of the expect template

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateRemedyServerTarget

Updates the connection information to a Remedy server target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target
defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target
Server (string)—Host name or IP address of the Remedy server
Authentication (string)—String used by the client for authentication, such as domain name
Port (int)—Port number used to access the Remedy server
PollingInterval (int)—Interval used to query the Remedy system
Name (string)—The name of the object
Organization (string)—Name of the company which supports the target
Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."
DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateServiceTarget

Updates a target that represents an IT or business service.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target
defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target
ServiceType (string)—Represents a "service" target. String value representing a service type. For example, *Bronze SQL Server* or *HR Portal*.
Name (string)—The name of the object
Organization (string)—Name of the company which supports the target
Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateSnmAgentTarget

Updates the host and operation and notification settings for accessing an SNMP agent.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

GetRuntimeUser (string)—Credential properties which enable reading only from device

SetRuntimeUser (string)—Credential properties which enable writing to device

TrapRuntimeUser (string)—Credential properties which enable traps from the device

ContextName (string)—Context name to be used during SNMP V3 operation

Host (string)—Host name or IP address of the SNMP agent

PortNumber (int)—Listening SNMP port to be used by TEO to execute SNMP GET/SNMP SET activities against the device

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateSnmManagerTarget

Updates the host and security settings for sending traps to a SNMP server.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

Host (string)—Host name or IP address of the SNMP server

PortNumber (int)—Listening port to be used by TEO to send traps to the SNMP server

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateTerminalTarget

Updates the connection information used to access the device used for a terminal target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

Host (string)—Host name or IP address of the network device

Port (int)—Port number used to access the the appropriate terminal target port (Default: SSH server: 22, Telnet server: 23)

Protocol (TransProtocolType)—Target protocol which can be either SSH or Telnet

PromptPrefix (string)—Command prompt prefix that will be used by the device type configurations and expects when issuing commands and connecting to the device. Adding a regex character, such as \$, >, and #, at the end of a prompt in the Prompt Prefix field invalidates the command prompt prefix.

ExpectTemplateNameOrId (string)—Name or ID of the expect template

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateUnixTarget

Updates the connection information for the SSH server used for processes to run against.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

OSName (string)—Name of the operating system on the target

OSVersion (string)—Version of the operating system on the target

NodeName (string)—Node name of the target

Host (string)—Host name or IP address of selected server

Port (int)—Port number used to access the the appropriate terminal target port (Default: SSH server: 22, Telnet server: 23)

Protocol (TransProtocolType)—Target protocol which can be either SSH or Telnet

PromptPrefix (string)—Command prompt prefix that will be used by the device type configurations and expects when issuing commands and connecting to the device. Adding a regex character, such as \$, >, and #, at the end of a prompt in the Prompt Prefix field invalidates the command prompt prefix.

ExpectTemplateNameOrId (string)—Name or ID of the expect template

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateVCTarget

Updates the connection information to the VMware virtual center server target.

Parameters

targetNameOrId (string) - The display name or unique identifier that will be used to find this target

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

VirtualCenterESXServerName (string)—Host name or IP address of the Virtual Center/ESX Server

VirtualCenterESXServerServicePort (int)—Port number used to access the Virtual Center/ESX Server service

IsHttps (bool)—Indicates VMware target is configured for HTTPS

Version (string)—Dot-separated version string of the VMware infrastructure server

APIVersion (string)—Version of the API as a dot-separated string

APIType (string)—Indicates whether or not the service instance represents a standalone host (VirtualCenter or HostAgent)

Build (string)—Build string for the server on which this call is made

OSType (string)—Operating system type and architecture of the VMware server

ProductLineID (string)—Unique identifier for the product line (gsx, vsx, vpx)

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateWebTarget

Updates the properties used target for execution by a web service activity on which a web site may be hosted on several machines.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

BaseUrl (string)—Target URL to use as a base for execution

IgnoreCertificateErrors (bool)—Indicates whether the target should ignore any certificate errors on the specified web site

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateWindowsTarget

Updates the connection information for the Windows computer target used for processes to run against

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

defaultRuntimeUserNameOrId (string)—The display name or unique identifier of the default runtime user that should be associated with this target

ComputerName (string)—The name of the computer (Local computer name, .DNS name, NetBIOS name, IP address)

Name (string)—The name of the object

Organization (string)—Name of the company which supports the target

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

View Targets Web Service

This chapter provides the web service methods that can be used to review the properties of existing targets.

- [ListTargets](#), page 6-2
- [ViewEmailIMAPTargetProperties](#), page 6-2
- [ViewEmailPOP3TargetProperties](#), page 6-2
- [ViewESXTargetProperties](#), page 6-3
- [ViewNetworkDeviceModuleTargetProperties](#), page 6-3
- [ViewRemedyServerTargetProperties](#), page 6-3
- [ViewServiceTargetProperties](#), page 6-4
- [ViewSnmpAgentTargetProperties](#), page 6-4
- [ViewSnmpManagerTargetProperties](#), page 6-4
- [ViewTerminalTargetProperties](#), page 6-5
- [ViewUnixTargetProperties](#), page 6-5
- [ViewVCTargetProperties](#), page 6-5
- [ViewWebTargetProperties](#), page 6-6
- [ViewWindowsTargetProperties](#), page 6-6

ListTargets

Retrieves the list of defined targets in TEO

Parameters

nameFilter (string)—A filter that will be applied to the display names of these objects. This filter may contain the "*" wildcard character

typeFilter (string)—A filter that will be applied to the type names of these objects. This filter may contain the "*" wildcard character

Return Type

TargetDefinition[]

ViewEmailIMAPTargetProperties

Retrieves the properties to an IMAP email server target

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

EmailIMAPTargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewEmailPOP3TargetProperties

Retrieves the properties to an POP3 email server target

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

EmailPOP3TargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewESXTargetProperties

Retrieves the properties to an ESX/ESXi server target

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

ESXTargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewNetworkDeviceModuleTargetProperties

Retrieves the properties of a network device module target which can be used as a dependent of a terminal target

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

NetworkDeviceModuleTargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewRemedyServerTargetProperties

Retrieves the properties of a Remedy server target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

RemedyServerTargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewServiceTargetProperties

Retrieves properties for a service target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

ServiceTargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewSnmpAgentTargetProperties

Retrieves the settings for accessing an SNMP agent target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

SnmpAgentTargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewSnmpManagerTargetProperties

Retrieves the settings for sending traps to a SNMP server target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

SnmpManagerTargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewTerminalTargetProperties

Retrieves the properties used to access the device used for a terminal target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

TerminalTargetData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewUnixTargetProperties

Retrieves the properties used to connect to a Unix/Linux target

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

UnixTargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewVCTargetProperties

Retrieves the properties used to connect to a VMware virtual center server target.

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find the target

Return Type

VCTargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewWebTargetProperties

Retrieves the properties of a web target for execution by a web service activity

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

Return Type

WebTargetConfigurationData

Exception

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewWindowsTargetProperties

Retrieves the properties used for a Windows computer target

Parameters

targetNameOrId (string)—The display name or unique identifier that will be used to find this target

Return Type

WindowsTargetConfigurationData

Exceptions

If the server cannot locate a target with the given name or id. "No target with an id matching <name> was found so no properties were retrieved."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

Create Runtime User Service

This web service allow users the ability to create specific runtime users in TEO. All available runtime user types can be updated through the Northbound web service, as well. See [Update Runtime User Service, page 8-1](#).

The WSDL for the Runtime User Web Service is `http://<server>:<port>/WS/RuntimeUser?wsdl`.

This chapter provides the web service methods to be used to create runtime user methods:

- [CreateGenericUser, page 7-2](#)
- [CreateIOSUser, page 7-2](#)
- [CreatePublicKeyAdminUser, page 7-3](#)
- [CreateSnmpUser, page 7-3](#)
- [CreateWindowsUser, page 7-4](#)

CreateGenericUser

Specifies the security credentials for a runtime user that can be assigned to processes and activities for different adapters.

In TEO, this web service method is called a Runtime User object.

Parameters

UserName (string)—The user name that will be associated with this user object

Name (string)—The name of the object

Password (string)—The password for this user account

Description (string)—Text that describes the object

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateIOSUser

Specify the user administrative credentials required to access a Cisco IOS Device. The level of access for the Cisco IOS device is dependant upon the type of password used.

In TEO, this web service method is called a Runtime Admin User object.

Parameters

UserName (string)—The user name that will be associated with this user object

Name (string)—The name of the object

Password (string)—The password for this user account

Description (string)—Text that describes the object

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreatePublicKeyAdminUser

Specifies the credentials required to allow public key authentication and an administrative password to perform privileged operations.

If a target has set up public key authentication on the remote SSH server, the private key of the Public-key Authenticated Admin Runtime User will be used to form the SSH authentication request. The request is then authenticated against the stored public key on the remote server.

If the target does not allow public key authentication, the SSH authentication will fail.

Parameters

UserName (string)—The user name that will be associated with this user object

Name (string)—The name of the object

Password (string)—password assigned to access Privileged EXEC mode on the device. The Privileged EXEC mode provides the highest level of commands to users

Description (string)—Text that describes the object

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateSnmpUser

Specifies the credentials for a SNMP runtime user to be used to assign run options for SNMP processes or activities.

Parameters

SnmpVersion (SnmpVersion)—Appropriate SNMP version (SNMPv1, SNMPv2c, SNMPv3)

Community (string)—Indicates the relationship between the SNMP server system and the client system

SecurityLevel (SnmpSecurityLevels)—Security level assigned to the user (noAuthNoPriv, authNoPriv, authPriv)

AuthenticationProtocol (SnmpAuthenticationProtocol)—Protocol used for authentication for *authNoPriv* or *authPriv* security levels (SHA, MD5)

PrivacyProtocol (SnmpPrivacyProtocol)—Format for transmitting encrypting data between the two devices for the security level *authPriv*. (DES, 3DES, AES128, AES256)

EncryptedAuthenticationKey (string)—Password used for authentication

EncryptedPrivacyKey (string)—Password used for encrypting data

UserName (string)—The user name that will be associated with this user object.

Name (string)—The name of the object.

Password (string)—The password for this user account

Description (string)—Text that describes the object

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateWindowsUser

Specify the credentials for a Windows user to be used to assign run options for processes or activities.

Parameters

Domain (string)—Windows domain in which the user account resides

UserName (string)—The user name that will be associated with this user object

Name (string)—The name of the object

Password (string)—The password for this user account

Description (string)—Text that describes the object

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

Update Runtime User Service

This chapter provides the web service methods to be used for updating existing runtime users.

- [DeleteRuntimeUser](#), page 8-2
- [UpdateGenericUser](#), page 8-2
- [UpdateIOSUser](#), page 8-2
- [UpdatePublicKeyAdminUser](#), page 8-3
- [UpdateSnmpUser](#), page 8-3
- [UpdateWindowsUser](#), page 8-4

DeleteRuntimeUser

Deletes a runtime user based on the name or the provided name.

Parameters

runtimeUserNameOrId (string)—The display name or id of the runtime user

Return Type

None

Exceptions

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

UpdateGenericUser

Updates the security credentials for a generic runtime user. In TEO, this web service method is called a Runtime User object.

Parameters

userNameOrId (string)—The display name or unique identifier that will be used to find this user

UserName (string)—The user name that is associated with this user object

Name (string)—The name of the object

Password (string)—The password for this user account

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateIOSUser

Updates the user administrative credentials required to access a Cisco IOS Device. In TEO, this web service method is called a Runtime Admin User object.

Parameters

userNameOrId (string)—The display name or unique identifier that will be used to find this user

UserName (string)—The user name that will be associated with this user object

Name (string)—The name of the object

Password (string)—The password for this user account

Description (string)—Text that describes the object.

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdatePublicKeyAdminUser

Updates the credentials required to allow public key authentication and an administrative password to perform privileged operations.

Parameters

userNameOrId (string)—The display name or unique identifier that will be used to find this user

UserName (string)—The user name that will be associated with this user object

Name (string)—The name of the object

Password (string)—password assigned to access Privileged EXEC mode on the device. The Privileged EXEC mode provides the highest level of commands to users

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateSnmpUser

Updates the credentials for a SNMP runtime user to be used to assign run options for SNMP processes or activities.

Parameters

userNameOrId (string)—The display name or unique identifier that will be used to find this user

SnmpVersion (SnmpVersion)—Appropriate SNMP version (SNMPv1, SNMPv2c, SNMPv3)

Community (string)—Indicates the relationship between the SNMP server system and the client system

SecurityLevel (SnmpSecurityLevels)—Security level assigned to the user (noAuthNoPriv, authNoPriv, authPriv)

AuthenticationProtocol (SnmpAuthenticationProtocol)—Protocol used for authentication for *authNoPriv* or *authPriv* security levels (SHA, MD5)

PrivacyProtocol (SnmpPrivacyProtocol)—Format for transmitting encrypting data between the two devices for the security level *authPriv*. (DES, 3DES, AES128, AES256)

EncryptedAuthenticationKey (string)—Password used for authentication

EncryptedPrivacyKey (string)—Password used for encrypting data

UserName (string)—The user name that will be associated with this user object

Name (string)—The name of the object

Password (string)—The password for this user account

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateWindowsUser

Updates the credentials for a Windows user to be used to assign run options for processes or activities.

Parameters

userNameOrId (string)—The display name or unique identifier that will be used to find this user

Domain (string)—Windows domain in which the user account resides

UserName (string)—The user name that will be associated with this user object

Name (string)—The name of the object

Password (string)—The password for this user account

Description (string)—Text that describes the object

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

View Runtime User Service

This chapter provides the web service methods that can be used to review the properties of existing runtime users.

- [ListRuntimeUsers](#), page 9-2
- [ViewGenericUserProperties](#), page 9-2
- [ViewIOSUserProperties](#), page 9-2
- [ViewPublicKeyAdminUserProperties](#), page 9-3
- [ViewSnmpUserProperties](#), page 9-3
- [ViewWindowsUserProperties](#), page 9-3

ListRuntimeUsers

Retrieves the list of defined runtime users in TEO.

Parameters

nameFilter (string)—A filter that will be applied to the display names of these objects. This filter may contain the "*" wildcard character.

typeFilter (string)—A filter that will be applied to the type names of these objects. This filter may contain the "*" wildcard character.

Return Type

RuntimeUserDefinition[]

ViewGenericUserProperties

Retrieves the properties of a defined runtime user in TEO.

Parameters

userNameOrId (string)—The display name or unique identifier that will be used to find this user

Return Type

GenericRuntimeUserConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewIOSUserProperties

Retrieves the properties of a defined runtime admin user in TEO.

Parameters

userNameOrId (string)—The display name or unique identifier that will be used to find this user

Return Type

IOSUserConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewPublicKeyAdminUserProperties

Retrieves the properties of a defined public key-authentication admin runtime user account in TEO.

Parameters

userNameOrId (string)—The display name or unique identifier that will be used to find this user

Return Type

PublicKeyAdminUserConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewSnmpUserProperties

Retrieves the properties of a defined SNMP runtime user account in TEO.

Parameters

userNameOrId (string)—The display name or unique identifier that will be used to find this user

Return Type

SnmpUserConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewWindowsUserProperties

Retrieves the properties of a defined Windows user account in TEO.

Parameters

userNameOrId (string)—The display name or unique identifier that will be used to find this user

Return Type

WindowsUserConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

Create Tasks Service

The Create Tasks Service provides web service methods which create tasks and perform a limited set of operations. Users can create task subtypes, such as incidents and alerts.

All relevant properties in the task services can be defined, including task parameters. When tasks are defined, the user can create a series of user-defined parameters, using the name and value of the parameters.

All available task types can be updated through the Northbound web service, as well. See [Update Tasks Service, page 11-1](#).

The WSDL for the Task Web Service is located at the following location:
`http://<server>:<port>/WS/Task?wsdl`

This chapter provides the web service methods to be used to define tasks in TEO.

- [CreateAlertTask, page 10-2](#)
- [CreateApprovalTask, page 10-3](#)
- [CreateChangeRequestTask, page 10-4](#)
- [CreateGuidedOperationTask, page 10-5](#)
- [CreateIncidentTask, page 10-6](#)
- [CreateReviewTask, page 10-7](#)
- [CreateSurveyTask, page 10-8](#)

CreateAlertTask

Creates an alert regarding any potential problems.

An alert reflects potential problems that a user may want to investigate and possibly diagnose the problem.

Parameters

AlertClass (int)—The incident identifier for the alert

DuplicateTaskId (Guid)—Task ID of the duplicated alert

ItilStatus (ItilTaskStatus)—Status of the task (New, Assigned, Pending, InProgress, Canceled, Duplicate, Resolved, Closed)

AffectedTargetConfigurationItemId (Guid)—System ID on which the condition was detected

ConfigurationItemId (Guid)—IT component to which the alert pertains

AffectedServices (string)—IT Service affected by the alert or incident

AffectedOrganizations (string)—Organizations that consume the IT service affected by the alert or incident

Severity (ItilTechnicalSeverity)—Severity of the task (Low, Normal, High)

AutomationSummary (string)—File path for the related automation summary

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guids>)—Task ID of the related task

CategoryIds (List<Collection of Guids>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateApprovalTask

Specifies the user or group required to approve a task including the message associated for the approver.

Parameters

Message (string)—Informs the approver what is being requested

ApprovalChoiceIndex (int)—0-based index of the approval choices in the tax

AutomationSummary (string)—File path for the related automation summary

ApprovalChoices (List<Collection of strings>)—Choices available to the approver

ApprovalStatus (ApprovalTaskStatus)—Current status of the task

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guid>)—Task ID of the related task

CategoryIds (List<Collection of Guid>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateChangeRequestTask

Requests a modification to the configuration of an object or system.

The change requests are used to request system enhancements, report problems with a system, or report changes from one system which affects another system.

Parameters

ChangeRequestClass (int)—Identifier for the change request

ChangeStatus (ChangeRequestTaskStatus)—Current status of the task (New, Assigned, AuthorizationPending, AuthorizationDenied, Authorized, ChangeInProgress, ChangeComplete, Canceled, Duplicate)

ChangeRequestIdentifier (string)—TEO generated ID number for the change request task

ReasonForChange (string)—Describes the business justification for the request

ChangeTiming (string)—Deadline date or time for the change

AffectedTargetConfigurationItemId (Guid)—System ID on which the condition was detected

ConfigurationItemId (Guid)—IT component to which the alert pertains.

AffectedServices (string)—IT Service affected by the alert or incident

AffectedOrganizations (string)—Organizations that consume the IT service affected by the alert or incident

Severity (ItilTechnicalSeverity)—Severity of the task (Low, Normal, High)

AutomationSummary (string)—File path for the related automation summary

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guids>)—Task ID of the related task

CategoryIds (List<Collection of Guids>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateGuidedOperationTask

Creates detailed instructions for a user or group to perform a guided operation task.

Parameters

GuidedOperationStatus (GuidedOperationTaskStatus)—Current status of the task (New, Assigned, Pending, InProgress, Waiting, Closed, Bypassed, Canceled, Completed)

Instructions (string)—Step-by-step process for handling a task

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guids>)—Task ID of the related task

CategoryIds (List<Collection of Guids>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateIncidentTask

Creates a task which requires an operator to take action in order to resolve an issue.

Parameters

IncidentClass (int)—Value indicating the class of the incident

IncidentIdentifier (string)—ID of the incident

ReportingUser (string)—User name of the individual who reported the incident and contact information of the user who called IT to report the problem

ReportingUserDetails (string)—Contact information of the individual who reported the incident

OriginatingAlertIds (List<Collection of Guid>)—Alert ID which triggered the incident

ResolveOriginatingAlerts (bool)—Indicates whether Alert ID was resolved using *True/False* value

ItilStatus (ItilTaskStatus)—Status of the task (New, Assigned, Pending, InProgress, Canceled, Duplicate, Resolved, Closed)

AffectedTargetConfigurationItemId (Guid)—System ID on which the condition was detected

ConfigurationItemId (Guid)—IT component to which the alert pertains.

AffectedServices (string)—IT Service affected by the alert or incident

AffectedOrganizations (string)—Organizations that consume the IT service affected by the alert or incident

Severity (ItilTechnicalSeverity)—Severity of the task (Low, Normal, High)

AutomationSummary (string)—File path for the related automation summary

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guid>)—Task ID of the related task

CategoryIds (List<Collection of Guid>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateReviewTask

Submit a document for review as well as provide a message for the reviewer. In TEO, this task is called the Review Request task.

Parameters

ReviewStatus (ReviewTaskStatus)—Status of the task (New, Assigned, Pending, InProgress, Waiting, Canceled, Completed)

DocumentPath (string)—File path for the document to be reviewed

Message (string)—Message that informs the reviewer of why document needs to be reviewed

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guids>)—Task ID of the related task

CategoryIds (List<Collection of Guids>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

CreateSurveyTask

Creates a set of questions requiring a user or group response in order to gather a large set of information. In TEO, this task is called the Input Request task.

Parameters

Message (string)—Introductory message for the input request

SurveyStatus (SurveyTaskStatus)—Status of the task (New, Assigned, Pending, InProgress, Waiting, Canceled, Completed)

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guids>)—Task ID of the related task

CategoryIds (List<Collection of Guids>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

string

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

DeserializationFailed if an improper type of variable parameter is provided to this call.

Update Tasks Service

This chapter provides the web service methods that are used to modify configuration properties of an existing task in TEO.

- [AddNoteToTask](#), page 11-2
- [MarkTaskCompleted](#), page 11-2
- [UpdateAlertTask](#), page 11-2
- [UpdateApprovalTask](#), page 11-3
- [UpdateChangeRequestTask](#), page 11-4
- [UpdateGuidedOperationTask](#), page 11-5
- [UpdateIncidentTask](#), page 11-6
- [UpdateReviewTask](#), page 11-7
- [UpdateSurveyTask](#), page 11-8

AddNoteToTask

Updates an existing task with notes.

Parameters

taskId (Guid)—The Id of the task

noteText (string)—Any notes related to the task

Return Type

None

MarkTaskCompleted

Changes the status of a task to complete.

Parameters

taskId (Guid)—The Id of the task

itilStatus (ItilTaskStatus)—Task is completed and has been either approved or declined (Completed)

Return Type

None

UpdateAlertTask

Updates the properties or status of a defined alert containing potential problems that a user may want to investigate and possibly diagnose the problem.

Parameters

nameOrId (string)—The display name or unique identifier of the task

AlertClass (int)—The incident identifier for the alert

DuplicateTaskId (Guid)—Task ID of the duplicated alert

ItilStatus (ItilTaskStatus)—Status of the task (New, Assigned, Pending, InProgress, Canceled, Duplicate, Resolved, Closed)

AffectedTargetConfigurationItemId (Guid)—System ID on which the condition was detected

ConfigurationItemId (Guid)—IT component to which the alert pertains

AffectedServices (string)—IT Service affected by the alert or incident

AffectedOrganizations (string)—Organizations that consume the IT service affected by the alert or incident

Severity (ItilTechnicalSeverity)—Severity of the task (Low, Normal, High)

AutomationSummary (string)—File path for the related automation summary

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guid>)—Task ID of the related task

CategoryIds (List<Collection of Guid>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateApprovalTask

Updates the properties of a defined approval task.

Parameters

nameOrId (string)—The display name or unique identifier of the task

Message (string)—Informs the approver what is being requested

ApprovalChoiceIndex (int)—0-based index of the approval choices in the tax

AutomationSummary (string)—File path for the related automation summary

ApprovalChoices (List<Collection of strings>)—Choices available to the approver

ApprovalStatus (ApprovalTaskStatus)—Current status of the task

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guids>)—Task ID of the related task

CategoryIds (List<Collection of Guids>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateChangeRequestTask

Updates the properties of a change request task.

Parameters

nameOrId (string)—The display name or unique identifier of the task.

ChangeRequestClass (int)—Identifier for the change request

ChangeStatus (ChangeRequestTaskStatus)—Current status of the task (New, Assigned, AuthorizationPending, AuthorizationDenied, Authorized, ChangeInProgress, ChangeComplete, Canceled, Duplicate)

ChangeRequestIdentifier (string)—TEO generated ID number for the change request task

ReasonForChange (string)—Describes the business justification for the request

ChangeTiming (string)—Deadline date or time for the change

AffectedTargetConfigurationItemId (Guid)—System ID on which the condition was detected

ConfigurationItemId (Guid)—IT component to which the alert pertains.

AffectedServices (string)—IT Service affected by the alert or incident

AffectedOrganizations (string)—Organizations that consume the IT service affected by the alert or incident

Severity (ItilTechnicalSeverity)—Severity of the task (Low, Normal, High)

AutomationSummary (string)—File path for the related automation summary

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guids>)—Task ID of the related task

CategoryIds (List<Collection of Guids>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateGuidedOperationTask

Updates the properties of a guided operation task.

Parameters

nameOrId (string) - The display name or unique identifier of the task

GuidedOperationStatus (GuidedOperationTaskStatus)—Current status of the task (New, Assigned, Pending, InProgress, Waiting, Closed, Bypassed, Canceled, Completed)

Instructions (string)—Step-by-step process for handling a task

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guids>)—Task ID of the related task

CategoryIds (List<Collection of Guids>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateIncidentTask

Updates the properties of a task which requires the assignee to resolve an issue.

Parameters

nameOrId (string)—The display name or unique identifier of the task

IncidentClass (int)—Value indicating the class of the incident

IncidentIdentifier (string)—ID of the incident

ReportingUser (string)—User name of the individual who reported the incident and contact information of the user who called IT to report the problem

ReportingUserDetails (string)—Contact information of the individual who reported the incident

OriginatingAlertIds (List<Collection of Guids>)—Alert ID which triggered the incident

ResolveOriginatingAlerts (bool)—Indicates whether Alert ID was resolved using *True/False* value

ItilStatus (ItilTaskStatus)—Status of the task (New, Assigned, Pending, InProgress, Canceled, Duplicate, Resolved, Closed)

AffectedTargetConfigurationItemId (Guid)—System ID on which the condition was detected

ConfigurationItemId (Guid)—IT component to which the alert pertains

AffectedServices (string)—IT Service affected by the alert or incident

AffectedOrganizations (string)—Organizations that consume the IT service affected by the alert or incident

Severity (ItiTechnicalSeverity)—Severity of the task (Low, Normal, High)

AutomationSummary (string)—File path for the related automation summary

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guids>)—Task ID of the related task

CategoryIds (List<Collection of Guids>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateReviewTask

Updates the properties of the review task which requires a message and a file path for a document for review. In TEO, this task is called the Review Request task.

Parameters

nameOrId (string)—The display name or unique identifier of the task

ReviewStatus (**ReviewTaskStatus**)—Status of the task (New, Assigned, Pending, InProgress, Waiting, Canceled, Completed)

DocumentPath (string)—File path for the document to be reviewed

Message (string)—Message that informs the reviewer of why document needs to be reviewed

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (**TaskPriority**)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (**List<Collection of strings>**)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (**List<Collection of Guid>**)—Task ID of the related task

CategoryIds (**List<Collection of Guid>**)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (**List<NamedParameter>**)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

UpdateSurveyTask

Updates the set of questions requiring a user or group response in order to gather a large set of information. In TEO, this task is called the Input Request task.

Parameters

nameOrId (string)—The display name or unique identifier of the task

Message (string)—Introductory message for the input request

SurveyStatus (**SurveyTaskStatus**)—Status of the task (New, Assigned, Pending, InProgress, Waiting, Canceled, Completed)

Name (string)—The name of the object

Description (string)—Text that describes the object

DueDate (string)—Indicates the time period the task should be resolved. Note that this is the date AND time in UTC when the task is due.

ExpirationDate (string)—When the task expires. Note that this is the date AND time in UTC when the task expired.

CompletedTime (string)—Indicates the time period the task was completed. Note that this is the date AND time in UTC when the task is completed.

Priority (TaskPriority)—Indicates the priority of the task (Low, Medium, High)

NotificationRecipients (List<Collection of strings>)—List of recipients to be notified about the task

WebFormXSLFileName (string)—Name of the source XML text file to transform the task XML into HTML for viewing in the Web Console

ExternalSystem (string)—The external system for the task

ExternalId (string)—The external Id for the task

RelatedTaskIds (List<Collection of Guid>)—Task ID of the related task

CategoryIds (List<Collection of Guid>)—The categories that this task directly belongs to, if any. Note that this does not include categories that the process has an INdirect membership in, such as in the case of a category within a category.

Parameters (List<NamedParameter>)—A collection of named parameters. The named parameter is a generic name/value pair that can be used for any task to add extra information.

Return Type

None

Exceptions

If no display name is provided to the call. "This object is not permitted to have an empty display name."

DeserializationFailed if an improper type of variable parameter is provided to this call.

View Tasks Service

This chapter provides the web service methods to be used to retrieve the configuration properties for defined tasks in TEO.

- [ViewAlertTaskProperties, page 12-2](#)
- [ViewApprovalTaskProperties, page 12-2](#)
- [ViewChangeRequestTaskProperties, page 12-2](#)
- [ViewGuidedOperationTaskProperties, page 12-3](#)
- [ViewIncidentTaskProperties, page 12-3](#)
- [ViewReviewTaskProperties, page 12-3](#)
- [ViewSurveyTaskProperties, page 12-4](#)

ViewAlertTaskProperties

Retrieves the configuration properties of an alert task.

Parameters

taskId (string)—The Id of the task

Return Type

AlertTaskConfigurationData

ViewApprovalTaskProperties

Retrieves the configuration properties of an approval task.

Parameters

taskId (string)—The Id of the task

Return Type

ApprovalTaskConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewChangeRequestTaskProperties

Retrieves the properties of a change request task.

Parameters

taskId (string)—The Id of the task

Return Type

ChangeRequestTaskConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewGuidedOperationTaskProperties

Retrieves the properties of a guided operation task.

Parameters

taskId (string)—The Id of the task

Return Type

GuidedOperationTaskConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewIncidentTaskProperties

Retrieves the properties of an incident task.

Parameters

taskId (string)—The Id of the task

Return Type

IncidentTaskConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewReviewTaskProperties

Retrieves the properties of a review task.

Parameters

taskId (string)—The Id of the task

Return Type

ReviewTaskConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."

ViewSurveyTaskProperties

Retrieves the properties of an input request task.

Parameters

taskId (string)—The Id of the task

Return Type

SurveyTaskConfigurationData

Exception

If an ambiguous name is provided. "The given name matches more than one item. This operation will not be performed."