

# **CA IT Process Automation Manager™**

## **CA Service Desk™ Connector Guide**

**r1**



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# Chapter 1: Overview

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The CA Service Desk™ Connector is a module that allows the integration of CA Service Desk with CA IT Process Automation Manager™ (CA IT PAM) for the purpose of automating CA Service Desk operations.

The CA Service Desk Module supports CA Service Desk r11.2 and r12. The module implements functionality supported by CA Service Desk Web services, including the following:

- Obtain information about a CA Service Desk object
- Create, update or close tickets (issues, requests, change orders)
- Log comments
- Attach change orders to requests

The CA Service Desk Module supports retrieval and updating of CA Service Desk object attributes using a keyword/value paradigm; it also supports the execution of all web service methods.

This section contains the following topics:

[Intended Audiences](#) (see page 7)

[Terminology](#) (see page 8)

## Intended Audiences

The *CA Service Desk Connector Guide* is intended for these primary audiences:

- Administrators who install or maintain the CA Service Desk Connector or a CA IT Process Automation Manager (CA IT PAM) instance
- Administrators, Developers, and Designers of CA IT PAM Processes who want their Processes to interact with CA Service Desk

If you are a CA IT PAM Administrator or a CA Service Desk Administrator, this guide assumes that you have read and understand the content described in both the *CA IT Process Automation Manager Administration Guide* and the *CA Service Desk Administration Guide*.

If you are a CA IT PAM Process Developer, Designer, or Administrator, this guide assumes that you have read and understand these concepts and associated procedures:

- How to create and run CA IT PAM Processes (as described in the *CA IT Process Automation Manager User Guide*)
- How to create Process and Named Datasets (as described in the *CA IT Process Automation Manager User Guide*)
- How to use the Soap Client Call and XML Extraction Operators of the Soap Module (as described in *CA IT Process Automation Manager Reference Guide*)
- How to use CA Service Desk objects and their associated attributes, Business and List/Query Methods, and dotted attribute notation (as described in the *CA Service Desk Technical Reference Guide*)

## Terminology

### **Connector**

A CA IT PAM module that interfaces with software external to CA IT PAM; in this case, CA Service Desk.

### **Module**

A set of functionally related Operators that share a common configuration.

### **Operator**

A software element that implements an action and is one of the building blocks of a CA IT PAM Process.



# Chapter 2: Installing and Configuring the CA Service Desk Module

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This section contains the following topics:

[Installation](#) (see page 9)

[Configuration Options](#) (see page 11)

## Installation

The CA Service Desk Connector software may be installed when installing the CA IT PAM Domain Orchestrator by clicking the check box next to CA Service Desk Connector on the "Choose Connectors to Update\Install" page of the CA IT PAM product installer. See the *CA IT PAM Installation and Configuration Guide* for details about installing the CA IT PAM Domain Orchestrator.

The CA Service Desk Connector software also has a standalone installer. There are two versions of the installer provided:

- IT\_PAM\_connector\_installer\_CA\_Service\_Desk\_1\_0.exe for installing on a Primary Domain Orchestrator running on Windows
- IT\_PAM\_connector\_installer\_CA\_Service\_Desk\_1\_0.sh for installing on a Primary Domain Orchestrator running on Linux and UNIX

Before installing the CA Service Desk Connector software, you must first shut down the Primary Domain Orchestrator.

- In a cluster configuration, the first Orchestrator installed is the Primary Orchestrator, and this can be confirmed by seeing that `oasis.server.isPrimary=true` is set in the `OasisConfig.properties` file found in `<itpam_root_directory>\server\c2o\.config`, where `<itpam_root_directory>` is the directory where CA IT PAM was installed.
- In a non-clustered configuration, the sole Domain Orchestrator is the Primary Domain Orchestrator.

### To install the Connector

1. Log onto the machine and account used to install the CA IT PAM Primary Domain Orchestrator.
2. Run the appropriate version of the installer for your operating system. For Linux and UNIX systems, run the installer as follows to ensure that it is run under the Bourne shell, and to avoid the need to use chmod to set this file as an executable.

```
sh IT_PAM_connector_installer_CA_Service_Desk_1_0.sh
```

3. When the Welcome screen displays, click Next to proceed or click Cancel to exit the installation.

The Licensing terms for this Connector display.

4. If you choose to accept the licensing terms, select "I accept the agreement", and click Next to proceed; otherwise click Cancel to terminate the installation.
5. Specify the directory where the CA IT PAM Primary Domain Orchestrator was installed (if it differs from the default value) by entering the complete path to the directory, or by clicking Browse and locating the directory.
6. Click Next.

The installer will verify that the Primary Domain Orchestrator is down, and a dialog displays where you select the components to install. (You will only have the choice of this Connector.)

7. Click the check box to select this Connector, and click Next to continue.

The installer will deploy the components of the new module to the Primary Domain Orchestrator (this may take a few minutes).

8. Click Finish to complete the installation.
9. Restart the Primary Domain Orchestrator.

The installation.log file is located here: *<itpam\_root\_directory>\server\c2o* where *<itpam\_root\_directory>* is the folder specified in Step 5.

The newly installed module will not be available immediately on any secondary Orchestrators, but all components will be mirrored within the time specified by the mirroring interval for the secondary Orchestrator.

10. After all components have been mirrored, you must stop and restart each Orchestrator and Agent to make the new module available for use.

**Important!** If you installed the Connector software in an existing CA IT PAM r2.1 environment, you must use the Configuration Browser to enable the newly installed module in each environment, on each Orchestrator, and on each Agent where the new module and its Operators will be used.

## Configuration Options

After installing the CA Service Desk Module, you can configure the following properties in the Configuration Browser of the CA IT PAM Client.

### **Maximum result length (bytes)**

Defines the maximum result length that determines the maximum size (in bytes) of the XML value received and stored in CA IT PAM Datasets.

The result is truncated if it exceeds the maximum result length. The default value is: 1048576 bytes.

### **WebService URL**

Defines the default value for the CA Service Desk web service that is: `http://localhost:8080/axis/services/USD_R11_webService`.

This value must be updated with the correct host name and port number. This field may be overridden in the CA Service Desk Operators.

### **Default User ID**

Defines the default user name used to connect to the CA Unicenter Service Desk Web service.

This field can be overridden in the CA Service Desk Operators.

### **Default Password**

Defines the default password used to connect to the CA Unicenter Service Desk web service.

This field may be overridden in the CA Service Desk Operators.

### **Handles Configuration**

Defines the configuration file name (an XML file) for managing the CA Service Desk handles.

An advanced user may change this file to provide different mapping to various CA Service Desk web service call parameters. The user can customize the supplied parameter values at run-time to other translated values to support CA Service Desk customization at various sites.

The CA Service Desk connector is bundled with a default Handles Configuration file. If the user does not specify this property, the default file bundled with the connector is used.

**Note:** The default CA Service Desk Web service URL, the default CA Service Desk User and the Default Password fields specified at the CA Service Desk Module level can be overridden with the values entered in the Service Desk Connect Parameters page for each Operator.



# Chapter 3: Using the CA Service Desk Module

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The CA Service Desk Module has four Operator types:

- Generic Operators
- Issue Operators
- Request Operators
- Change Order Operators

This section contains the following topics:

[Common Input Parameters](#) (see page 13)

[Generic Operators](#) (see page 14)

[Issue Operators](#) (see page 25)

[Request Operators](#) (see page 36)

[Change Order Operators](#) (see page 51)

## Common Input Parameters

### Connection Parameters (Operator Properties Dialog)

In the CA IT PAM Client, the Connection Parameters tab of the Operator Properties dialog is displayed for all Operators *except* the Base ServiceDesk Interface Operator. The tab provides the following connect parameters:

- WebService URL
- User ID
- Password

**Note:** If you do not specify the values for the connect parameters, the default values set during module configuration will be used.

### About Dot Notation Parameters

CA Service Desk uses the dot notation concept to follow references to other objects. In order to handle the dot notation, the attribute data type must be a SREL data type.

Dot notation is allowed in the where clause to search through SREL (foreign key) types. For CA Service Desk Module Operators, the dot notation is supported by all Operators that extract information from the objects.

Dot notation could be used to get more detailed information about an object without additional queries to CA Service Desk. For example, to include the Request assignee's last name in the list of the selected attributes returned by an Operator, you would specify: @`{assignee.last_name}` as the attribute name.

For the Connection Parameters settings in the CA IT PAM Client, you can use the dot-notation convention if the attribute's data type is a SREL data type and if the Operator supports this convention.

An example of dot notation usage is to query the Request ('cr') object in the Request Create Operator in order to return all Requests assigned to contacts with a specific last name. You need to enter `assignee.last_name` like `MyName%` in the Retrieve Fields List.

The *Unicenter Service Desk Modification Guide* (r11.2) and the *CA Service Desk Technical Reference Guide* (r12) provide more information about objects whose attributes are the SREL data type.

## Generic Operators

### Base Object Types Information Operator

The Base Object Types Information Operator retrieves the list of all attribute names for a given object type along with the type information for each attribute.



### Operator Input Parameters

#### Input Parameters

##### **ServiceDesk Object Type**

Defines the object type and can have one of the following values:

- Change Order
- Issue
- Request
- Contact
- Asset
- Workflow (Change Orders or Issues)
- Property
- Property Template

## Connection Parameters

### **WebService URL**

Specifies the CA Service Desk Web service URL.

### **User ID**

Specifies a CA Service Desk User ID.

### **Password**

Specifies the CA Service Desk user password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body.

### **ObjectTypeDataArrayCount**

Defines the size of arrays returning information about the object type attributes and corresponds to the number of attributes returned.

### **ObjectTypeDataNamesArray**

Defines the list of attribute names that belong to an object type specified in ServiceDesk Object Type.

### **ObjectTypeDataTypesArray**

Defines an array of data types corresponding to the attributes that belong to an object type specified in Service Desk Object Type.

### **ObjectTypeDataSizesArray**

Defines an array containing the size of each data type.

### **ObjectTypeDataRequiredArray**

Defines an array specifying whether attributes are required to have an initial value (1) or whether the system will associate a default value (0).

### **ObjectTypeDataFactoryArray**

Defines an array containing the factory names of each data type returned.

## Operator Ports

### Success

Indicates that the Operator executed successfully.

### Failure

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Base Select ServiceDesk Elements Operator

The Base Select ServiceDesk Elements Operator retrieves selected user-supplied fields that match a specific data criterion.



## Operator Input Parameters

### ServiceDesk Select Parameters

#### ServiceDesk Object Type

The Specifies the type of the object to be queried:

- Request
- Issue
- Change Order
- Contact
- Asset
- Workflow (Change Orders)
- Workflow (Issues)
- Property
- Property Template



**Where Clause**

Defines the filter criterion for the selected query to obtain information about only those objects that meet this criterion.

**Example:**

"persistent\_id="+Process["Issue\_Create\_1"].newIssueHandle+" would return only the issues with the handle specified by the variable Process["Issue\_Create\_1"].newIssueHandle

For more information, see the Where Clauses in the *CA Service Desk Technical Reference Guide* (r12).

**Select Rows**

Defines the maximum number of rows to return (-1 to return all rows).

**Note:** CA Service Desk will return a maximum of 250 rows per call regardless of the integer specified.

**Select Fields List**

Defines the list of attribute names for which to get values.

For the list of attribute names see the Objects and Attributes chapter in the *CA Service Desk Technical Reference Guide* (r12) or the *Unicenter Service Desk Modification User Guide* (r11.2).

If this field is blank, all value-based attributes are returned.

**Connection Parameters****WebService URL**

Specifies the CA Service Desk web service URL.

**User ID**

Specifies a CA Service Desk User ID.

**Password**

Specifies the CA Service Desk user password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to the CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body.

### **SelectDataResponse**

Defines a ValueMap containing keyword and pairs of values for the attributes specified in Select Fields List.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Base Update ServiceDesk Elements Operator

The Base Update ServiceDesk Elements Operator updates user specified fields for a specific object handle.



## Operator Input Parameters

### Service Desk Input Parameters

**Object Handle**

Defines an object handle that uniquely identifies a CA Service Desk object.

**Update Fields List**

Defines an array of attribute names for which values will be set in the new object.

For a complete list of attributes, see the sections describing objects and database schema in the *Unicenter Service Desk Modification Guide*.

**Corresponding Values List**

Defines an array containing the values that correspond to the attribute names specified in the Update Fields List.

### Data Parameters

**Retrieve Fields List**

Defines the list of attribute names from the new object for which the values will be retrieved.

For the list of attribute names see the Objects and Attributes chapter in the *CA Service Desk Technical Reference Guide (r12)* and the *Unicenter Service Desk Modification User Guide (r11.2)*.

### Service Desk Connect Parameters

**WebService URL**

Specifies the CA Service Desk web service URL.

**User ID**

Specifies a CA Service Desk User ID.

**Password**

Specifies the CA Service Desk user password.

### Operator Outputs

**ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

**ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

**SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body.

**UpdateObjectResponse**

Defines a ValueMap containing keyword and pairs of values for the attributes specified in Retrieve Fields List.

**Operator Ports**

**Success**

Indicates that the Operator executed successfully.

**Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

**Base Close ServiceDesk Ticket Operator**

The Base Close ServiceDesk Ticket Operator closes a ticket by supplying a ticket handle.



**Operator Input Parameters**

**Input Parameters**

**Ticket Handle**

Defines the handle of the ticket to close.

**Closing Comments**

Defines the operator's note providing the reason for closing the ticket.

This comment will appear in the ticket's activity log.

## Connection Parameters

### **WebService URL**

Specifies the CA Service Desk Web service URL.

### **User ID**

Specifies a CA Service Desk User ID.

### **Password**

Specifies the CA Service Desk user password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **closeTicketResponse**

Defines a well formatted XML string representing the SOAP response body.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Base ServiceDesk Interface Operator

The Base ServiceDesk Interface Operator provides maximum flexibility by exposing all operations of the CA Service Desk web service. This Operator is based on the SOAP Client Operator. Unless there is no Operator that covers the Service Desk operation you need, it is recommended to use the non generic Operators.



## Operator Input Parameters

### Input Parameters

#### **WSDL wizard**

Opens the WSDL explorer wizard that allows you to specify a web service URL.

Once the WSDL is loaded, the web service methods become available in the WSDL operations field.

When you select a method, its parameters and outputs are displayed in the edit box at the bottom of the page.

#### **WebService URL**

Specifies the CA Service Desk web service URL.

**Note:** The Service Desk URL and User-ID and Password are optional and are only used to override the defaults set as part of the module configuration.

#### **ServiceDesk Method**

Specifies the web service method that was selected using the WSDL wizard, or can be entered manually.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user password.

**Input Source**

Specifies the source for the method's input parameters:

**Inline Text**

Specifies the contents of the SOAP request directly in this operator.

The Inline Text is initialized from the WSDL definition of the selected operation. Complete this field only if the Inline Source field is set to Inline Text, otherwise ignore it. The parameters may be entered as a plain text in the contents of the Inline Text or can be specified as Dynamic Parameters.

**Preformatted Filename**

Specifies a preformatted file containing the SOAP request.

Complete this field only if the Inline Source field is set to Preformatted SOAP File, otherwise ignore it. The parameters may be defined in the file or can be specified as Dynamic Parameters.

**Expression**

Specifies that the SOAP request is contained in a CA IT PAM expression.

Complete this field only if the Inline Source field is set to Expression, otherwise ignore it. The values of the parameters are obtained from evaluating specific expressions.

**Save Request File**

Stores the SOAP request as an output file.

**Dynamic Parameters****Parameter style**

Specifies the method with which to update values in a SOAP request.

There are two mechanisms to do this at run time:

**Macro Expansions**

Specifies that macros are used in the Parameter list to update values in the SOAP request.

**XPath Assignments**

Specifies that XPath expressions are used in the Parameter list to update values in the SOAP request.

**Parameters list**

Specifies the parameters that specify unique data entries within the SOAP request.

A list box that keeps a list of parameter values to be passed to the server-side method. Each parameter is identified by the parameter name as Macro name or XPath query, a value, and a type.

## Call Results Parameters

### **Save Response file**

Defines the location where the SOAP response body is saved.

### **Extract SOAP response body to Dataset variable**

Select Yes, to extract values from the Soap response body and to store them to dataset variables.

### **Additional extracted data**

Specify the XPath in the Additional extracted data field to extract values from the SOAP response body.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **SOAP ResponseData**

Defines the data returned by the server-side method.

### **FaultMessage**

Defines the error message generated by the system when the method call fails.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.



# Issue Operators

## Issue Create Operator

The Issue Create Operator creates a Service Desk Ticket of type Issue.



### Operator Input Parameters

#### Basic Parameters

**Issue Creator ID**

Defines the contact responsible for the creation of the issue.

**Summary**

Provides the issue summary.

**Description**

Provides a detailed description of the issue.

**Requestor ID**

Defines the contact responsible for the creation of the issue.

**Priority**

Defines the priority of the issue that can be one of the following:

- None (unassigned priority)
- Low (5)
- Medium-Low (4)
- Medium (3)
- Medium-High (2)
- High (1)

#### Input Parameters

**Update Fields List**

Defines an array of attribute names for which values will be set in the new issue.

For a complete list of issue attributes, see the sections describing objects and database schema in the *Unicenter Service Desk Modification Guide*.

**Corresponding Values List**

Defines an array of values for the attributes specified in Update Fields List.

## Data Parameters

### Retrieve Fields List

Defines the list of attribute names from the new object for which to retrieve values.

For the list of attribute names see the Objects and Attributes chapter in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

Once the Operator executes successfully, the values of the requested attributes can be found in the SoapResponseBody field.

## Connection Parameters

### WebService URL

Specifies the CA Service Desk web service URL.

### User ID

Specifies a CA Service Desk User ID.

### Password

Specifies the CA Service Desk user's password.

## Operator Outputs

### ServiceDeskSessionID

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the Connect Parameters.

### ServiceDeskSessionUserHandle

Defines the contact handle represented by the CA Service Desk User.

### SoapResponseBody

Defines a well formatted XML string representing the SOAP response body.

For details about the information returned, see the createIssue method in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

### newIssueHandle

Defines the new issue handle.

### newIssueNumber

Defines the new issue number.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Issue Log Comments Operator

The Issue Log Comments Operator attaches log comments to an Issue.



## Operator Input Parameters

### Basic Parameters

#### **Issue Number**

Defines the number of the issue where the comments should be logged.

#### **Comments**

Identifies the comment text.

### Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user's password.

## Operator Outputs

#### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identifier is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **Operator Ports**

#### **Success**

Indicates that the Operator executed successfully.

#### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## **Issue Set Assignee Operator**

The Issue Set Assignee Operator sets the Assignee ID for this Issue.



### **Operator Input Parameters**

#### **Basic Parameters**

##### **Issue Number**

Provides the issue number to be transferred to a new analyst.

##### **Assignee**

Defines the new assignee for this issue.

#### **Connection Parameters**

##### **WebService URL**

Specifies the CA Service Desk web service URL.

##### **User ID**

Specifies a CA Service Desk User ID.

##### **Password**

Specifies the CA Service Desk user password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **setAssigneeResponse**

Defines a well formatted XML string representing the SOAP response body.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Issue Set Status Operator

The Issue Set Status Operator sets the status for an Issue.



## Operator Input Parameters

### Basic Parameters

#### **Issue Number**

Provides the issue number for which the status needs to be changed.

#### **New Status**

Defines the new status for this issue and can be one of the following values:

- Open
- Closed
- Approval in progress
- Verification in progress
- Cancelled
- Suspended
- Hold
- Resolved
- Close Requested

#### **Creator ID**

Defines the contact responsible for the activity.

#### **Description**

Provides the description for the activity, that will appear in the activity log.

### Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **setStatusResponse**

Defines a well formatted XML string representing the SOAP response body.

For details about the information returned, see the `changeStatus` method in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Issue Update Ticket Operator

The Issue Update Ticket Operator updates one or more attributes for the specified issue.



## Operator Parameters

### Basic Parameters

#### **Issue Number**

Provides the issue number to be updated.

#### **Update Fields List**

Defines an array of attribute names used to set the initial attribute values for this issue.

#### **Corresponding Values List**

Defines an array containing the values corresponding to the attribute names specified in the Update Fields List.

### Data Parameters

#### **Retrieve Fields List**

Defines the list of attribute names from the new object for which to retrieve values.

For the list of attribute names see the Objects and Attributes chapter in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

### Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user password.

### Operator Outputs

#### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

#### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.



**SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body and containing the updated object's handle along with attribute values specified in the Retrieve Fields List parameter.

If no attributes are specified, all attribute values are returned. List and LREL types are also returned as empty elements.

**UpdateRequestResponse**

Defines a ValueMap containing keyword and values pairs for the attributes specified in the Retrieve Fields List.

**Operator Ports****Success**

Indicates that the Operator executed successfully.

**Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

**Issue Select Ticket Operator**

The Issue Select Ticket Operator retrieves information about a specific request.

**Operator Input Parameters****ServiceDesk Select Parameters****Issue Number**

Defines the number of the issue for which information is queried.

**Select Fields List**

Defines the list of attribute names for which to fetch values

If this field is blank, all value-based attributes are returned. For a complete list of attributes, consult the sections describing objects and database schema in the *Unicenter Service Desk Modification Guide*.

## Connection Parameters

### **WebService URL**

Specifies the CA Service Desk web service URL.

### **User ID**

Specifies a CA Service Desk User ID.

### **Password**

Specifies the CA Service Desk user password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body and containing the updated object's handle along with the attribute values specified in the Retrieve Fields List parameter.

If no attributes are specified, all attribute values are returned. List and LREL types are also returned as empty elements.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Issue Close Ticket Operator

The Issue Close Ticket Operator closes an Issue by supplying an issue number.



## Operator Input Parameters

### Input Parameters

**Issue Number**

Provides the issue number for the issue to be closed.

**Closing Comments**

Provides the reason for closing a request.

This comment will appear in the Service Desk activity log.

### Service Desk Connect Parameters

**WebService URL**

Specifies the CA Service Desk web service URL.

**User ID**

Specifies a CA Service Desk User ID.

**Password**

Specifies the CA Service Desk user's password.

### Operator Outputs

**ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

**ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

**closeIssueResponse**

Defines the handle for the new activity log (0 or more of these can be returned) returned as a well XML formatted string.

### Operator Ports

**Success**

Indicates that the Operator executed successfully.

**Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Request Operators

### Request Create Operator

The Request Create Operator creates a Service Desk ticket of type Request.



#### Operator Input Parameters

##### Basic Parameters

###### **Request Creator ID**

Provides the contact responsible for the creation of the request.

###### **Summary**

Provides the request summary.

###### **Description**

Provides the description of the request.

###### **Customer ID**

Provides the contact requesting a certain service.

###### **Request Type (Incident, Problem, Request)**

Defines the type of the request in case of using the ITIL methodology (used if you are creating an Incident or Problem ticket).

###### **Priority**

Defines the priority of the request and can be one of the following values:

- None
- Low
- Medium-Low
- Medium
- Medium-High
- High

**Severity**

Defines the severity of the request and can be one of the following values:

- Low
- Medium-Low
- Medium
- Medium-High
- High

**Impact**

Provides the business impact of the request and can be one of the following values:

- None
- Low
- Medium-Low
- Medium
- Medium-High
- High

**Urgency**

Defines how urgent it is for the customer to have his request resolved and can be one of the following values:

- Low
- Medium-Low
- Medium
- Medium-High
- High

**Input Parameters****Update Fields List**

Defines an array of names used to set initial attribute values for the request.

**Corresponding Values List**

Defines an array containing the values corresponding to the attribute names specified in the Update Fields List.

## Data Parameters

### Retrieve Fields List

Defines the list of attribute names from the new object for which to retrieve values.

For the list of attribute names see the Objects and Attributes chapter in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

Once the Operator executed successfully, the values of the requested attributes can be found in the SoapResponseBody field.

## Connection Parameters

### WebService URL

Specifies the CA Service Desk web service URL.

### User ID

Specifies a CA Service Desk User ID.

### Password

Specifies the CA Service Desk user password.

## Operator Outputs

### ServiceDeskSessionID

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### ServiceDeskSessionUserHandle

Defines the contact handle represented by the CA Service Desk User.

### SoapResponseBody

Defines a well formatted XML string representing the SOAP response body.

### newRequestHandle

Defines the new request handle associated with the new request created through Service Desk system.

### newRequestNumber

Defines the request number associated to the new request.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Request Log Comments Operator

The Request Log Comments Operator attaches log comments to a Request.



## Operator Input Parameters

### Basic Parameters

#### **Request Number**

Defines the number of the request where the comments should be logged.

#### **Comments**

Defines the comment text.

#### **Internal Use Only**

Provides the internal flag. If set to Yes, then the new comment will be marked as internal. If set to No, then the new comment will be marked as external.

### Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Request Set Assignee Operator

The Request Set Assignee Operator sets the Assignee ID for this Request.



## Operator Input Parameters

### Basic Parameters

#### **Request Number**

Defines the request number to be transferred to a new assignee.

#### **Assignee**

Defines the new assignee for this request.



## Connection Parameters

### **WebService URL**

Specifies the CA Service Desk web service URL.

### **User ID**

Specifies a CA Service Desk User ID.

### **Password**

Specifies the CA Service Desk user's password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **setAssigneeResponse**

Defines a well formatted XML string representing the SOAP response body.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Request Set Status Operator

The Request Set Status Operator sets the status of this Request. This method generates an activity log and sets the status value.



## Operator Parameters

### Basic Parameters

#### **Request Number**

Defines the request number for which the status needs to be changed.

#### **New Status**

Defines the new status for this request and can be one of the following values:

- Open
- Close
- Researching
- Fix in progress
- Close Unresolved
- Problem Open
- Problem Closed,
- Problem Fixed
- Work in progress
- Acknowledged
- Hold
- Resolved
- Close Requested

#### **Creator ID**

Defines the contact responsible for the activity.

#### **Description**

Provides the description for the activity, which will appear in the activity log.

### Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user's password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **setStatusResponse**

Defines a well formatted XML string representing the SOAP response body.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Request Update Ticket Operator

The Request Update Ticket Operator updates one or more attributes for the specified request.



## Operator Input Parameters

### Basic Parameters

#### **Request Number**

Provides the number of the request to be updated.

#### **Update Fields List**

Defines an array of attribute names that is used to set the initial attribute values for the request.

#### **Corresponding Values List**

Defines an array containing the values corresponding to the attribute names specified in the Update Fields List.

For a list of the attribute names see the *Unicenter Service Desk Modification Guide*.

### Data Parameters

#### **Retrieve Fields List**

Defines the list of attribute names from the new object for which to retrieve values.

For the list of attribute names see the Objects and Attributes chapter in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

### Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user's password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body and containing the updated object's handle along with attribute values specified in the Retrieve Fields List parameter.

If no attributes are specified, all attribute values are returned. List and LREL types are also returned as empty elements.

For details about the information returned, see the createRequest method in the *CA Service Desk Technical Reference Guide* (r12) or the *Unicenter Service Desk Modification User Guide* (r11.2).

### **UpdateRequestResponse**

Defines a ValueMap containing keyword and values pairs for the attributes specified in the Retrieve Fields List.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Request Select Ticket Operator

The Request Select Ticket Operator retrieves information about a specific request.



## Operator Input Parameters

### ServiceDesk Select Parameters

#### **Request Number**

Defines the number of the request to be queried for information.

#### **Select Fields List**

Defines the list of attribute names for which to fetch values.

If this field is blank, all value-based attributes are returned.

For the list of attribute names see the Objects and Attributes chapter in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

Once the Operator executed successfully, the values of the requested attributes will be found in the SoapResponseBody field.

### Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user's password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body and containing the updated object's handle along with attribute values specified in the Retrieve Fields List parameter.

If no attributes are specified, all attribute values are returned. List and LREL types are also returned as empty elements.

For details about the information returned, see the doSelect method in Business Methods in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

### **SelectRequestResponse**

Defines a ValueMap containing keyword and value pairs for the attributes specified in the Select Fields List.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Request Close Ticket Operator

The Request Close Ticket closes a Request by supplying a request number.



## Operator Input Parameters

### Input Parameters

#### **Request Number**

Defines the request number of the request to close.

#### **Closing Comments**

Provides the reason for closing a request.

This comment will appear in the Service Desk activity log.

### Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user's password.

### Operator Outputs

#### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

#### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

#### **closeRequestResponse**

Defines the handle for the new activity log (0 or more of these can be returned) returned as a well formatted XML string.

### Operator Ports

#### **Success**

Indicates that the Operator executed successfully.

#### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.



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## Attach Change Order to Request Operator

The Attach Change Order to Request Operator attaches a new or existing Change Order to a Request.



### Operator Input Parameters

#### Basic Parameters

**Creator ID**

Defines the contact responsible for the activity.

**Description**

Provides the description of the activity.

**Request Number**

Defines the request to which you attach the change.

**Change Order Number**

Defines the change to attach to the request.

To create a new change order, pass an empty string in this parameter. The system will create a new change order with values initialized from the request. To override these values or to set additional values, fill in the Update Fields List and the Corresponding Values List. If the change order number is specified, these fields are ignored.

If a new change order is created, the description is used on the new change order's activity log. If an existing change is attached, the description is used on the request's activity log.

#### Input Parameters

**Update Fields List**

Defines the list of attribute names to initialize a new change order in case the change order number was not specified.

For the list of attribute names see the Objects and Attributes chapter in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

**Corresponding Values List**

An array containing the values corresponding to the attribute names specified in the Update Fields List.

## Connection Parameters

### **WebService URL**

Specifies the CA Service Desk web service URL.

### **User ID**

Specifies a CA Service Desk User ID.

### **Password**

Specifies the CA Service Desk user's password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body.

### **changeOrderHandle**

Defines the change order's handle created or attached.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

# Change Order Operators

## Change Order Create Operator

The Change Order Create Operator creates a Service Desk Ticket that is of type Change Order.



### Operator Input Parameters

#### Basic Parameters

**Change Order Creator ID**

Defines the contact responsible for the creation of the change order.

**Summary**

Provides the change order summary.

**Description**

Provides a detailed description of the change order.

**Requestor ID**

The ID of the requestor.

**Priority**

Defines the priority of the issue and can be one of the following values:

- None
- Low
- Medium-Low
- Medium
- Medium-High
- High

### **Impact**

Defines the business impact of the change order issue and can be one of the following values:

- None
- Low
- Medium-Low
- Medium
- Medium-High
- High

### **Input Parameters**

#### **Update Fields List**

Defines an array of attribute names which values will be set in the new change order.

For the list of attribute names see the "Objects and Attributes" chapter in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

#### **Corresponding Values List**

Defines an array containing the values corresponding to the attribute names specified in the Update Fields List.

### **Data Parameters**

#### **Retrieve Fields List**

Defines the list of attribute names from the new object for which to retrieve values.

For a complete list of attributes, consult the sections describing objects and database schema in the *Unicenter ServiceDesk Modification Guide*.

After the Operator executes successfully, the values of the requested attributes are found in the SoapResponseBody field.

### **Connection Parameters**

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user's password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body.

### **newChangeHandle**

Defines the new change order handle.

### **newChangeNumber**

Defines the new change order number.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Change Order Log Comments Operator

The Change Order Log Comments Operator attaches log comments to a Change Order.



## Operator Input Parameters

### Basic Parameters

#### **Change Order Comments**

Defines the number of the change order where the comments should be logged.

#### **Comments**

Identifies the comment text.

### Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user's password.

### Operator Outputs

#### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

#### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### Operator Ports

#### **Success**

Indicates that the Operator executed successfully.

#### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Change Order Set Assignee Operator

The Change Order Set Assignee Operator sets the Assignee ID for this Change Order.



### Operator Input Parameters

#### Basic Parameters

**Change Order Number**

Defines the change order number to be transferred to a new analyst.

**Assignee**

Defines the new assignee for this change order.

#### Connection Parameters

**WebService URL**

Specifies the CA Service Desk web service URL.

**User ID**

Specifies a CA Service Desk User ID.

**Password**

Specifies the CA Service Desk user's password.

#### Operator Outputs

**ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

**ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

**setAssigneeResponse**

Defines a well formatted XML string representing the SOAP response body.

## Operator Ports

### Success

Indicates that the Operator executed successfully.

### Failure

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Change Order Set Status Operator

The Change Order Set Status Operator sets the status of this Change Order. This Operator generates an activity log and sets the status value (it corresponds to the Activities-Update Status command in the Service Desk user interface).



## Operator Input Parameters

### Basic Parameters

#### Change Order Number

Defines the change order number for which the status needs to be changed.

#### New Status

Defines the new status for the change order and can be one of the following values:

- Open
- Closed
- Approval in progress
- Implementation in progress
- Verification in progress
- Cancelled
- Suspended
- Hold
- Resolved



**Creator ID**

Defines the contact responsible for the activity.

**Description**

Provides the description for the activity, that will appear in the activity log.

**Connection Parameters****WebService URL**

Specifies the CA Service Desk web service URL.

**User ID**

Specifies a CA Service Desk User ID.

**Password**

Specifies the CA Service Desk user's password.

**Operator Outputs****ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

**ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

**setStatusResponse**

Defines a well formatted XML string representing the SOAP response body.

The response contains the handle to the activity log object created.

**Operator Ports****Success**

Indicates that the Operator executed successfully.

**Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Change Order Update Ticket Operator

The Change Order Update Ticket Operator updates one or more attributes for the specified issue.



### Operator Input Parameters

#### Basic Parameters

##### **Change Order Number**

Defines the number of the change request to be updated.

##### **Update Fields List**

Defines an array of the attribute names used to set the initial attribute values for this change order.

##### **Corresponding Values List**

Defines an array containing the values corresponding to the attribute names specified in the Update Fields List.

#### Data Parameters

##### **Retrieve Fields List**

Defines the list of attribute names from the new object for which to retrieve values.

For the list of attribute names see the Objects and Attributes chapter in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

#### Connection Parameters

##### **WebService URL**

Specifies the CA Service Desk web service URL.

##### **User ID**

Specifies a CA Service Desk User ID.

##### **Password**

Specifies the CA Service Desk user's password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body, and containing the updated object's handle along with attribute values specified in the Retrieve Fields List parameter.

If no attributes were specified, all attribute values are returned. List and LREL types are also returned as empty elements.

### **UpdateRequestResponse**

Defines a ValueMap containing keyword and values pairs for the attributes specified in the Retrieve Fields List.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Change Order Select Ticket Operator

The Change Order Select Ticket Operator retrieves information about a specific request.



## Operator Input Parameters

### ServiceDesk Select Parameters

#### **Change Order Number**

Defines the number of the change order to be queried.

#### **Select Fields List**

Defines the list of attribute names for which to fetch values.

If this field is blank, all value-based attributes are returned.

For the list of attribute names see the Objects and Attributes chapter in the *CA Service Desk Technical Reference Guide (r12)* or the *Unicenter Service Desk Modification User Guide (r11.2)*.

### Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user's password.

### Operator Outputs

#### **ServiceDeskSessionID**

Defines the unique session identifier (SID).

The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

#### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

#### **SoapResponseBody**

Defines a well formatted XML string representing the SOAP response body, and containing the updated object's handle along with attribute values specified in the Retrieve Fields List parameter.

If no attributes were specified, all attribute values are returned. List and LREL types are also returned as empty elements.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed.

Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

## Change Order Close Ticket Operator

The Change Order Close Ticket Operator closes a Change Order by supplying a ticket number.



## Operator Input Parameters

### Input Parameters

#### **Change Order Number**

Defines the change order number of the change order to close.

#### **Closing Comments**

Provides the reason for closing a request. This comment will appear in the Service Desk activity log.

## Connection Parameters

#### **WebService URL**

Specifies the CA Service Desk web service URL.

#### **User ID**

Specifies a CA Service Desk User ID.

#### **Password**

Specifies the CA Service Desk user's password.

## Operator Outputs

### **ServiceDeskSessionID**

Defines the unique session identifier (SID). The session identified is retrieved from connecting to CA Service Desk web service using the connect parameters.

### **ServiceDeskSessionUserHandle**

Defines the contact handle represented by the CA Service Desk User.

### **closeRequestResponse**

Defines the handle for the new activity log (0 or more of these can be returned) returned as a well formatted XML string.

## Operator Ports

### **Success**

Indicates that the Operator executed successfully.

### **Failure**

Indicates that the Operator execution failed. Details can be found in the Operator Results page of the Operator Dataset, or the CA IT PAM Agent/Orchestrator log.

# Chapter 4: Troubleshooting

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This chapter provides troubleshooting symptoms and solutions for the CA Service Desk Module.

This section contains the following topics:

[A CA Service Desk Operator Fails During Process Execution](#) (see page 63)

## A CA Service Desk Operator Fails During Process Execution

### Valid On Windows

#### Symptom:

If a CA Service Desk Module Operator fails during execution of a Process, follow the solutions and use the tips in this section to help you determine if the CA Service Desk Module is not functioning properly or if there is a problem with either the targeted product software (Unicenter Service Desk) or the system environment (CA IT PAM, the database system, or environment settings).

#### Solution: 1

Check to see if the CA IT PAM Server service is running:

1. Open the Start menu, and click Programs > Administrative Tools > Services.
2. Check to see if the CA IT PAM Server service is running.

If the service is stopped, restart it.

**Note:**After rebooting your machine, you may need to restart the service.

**Solution: 2**

Check to see if the Unicenter Service Desk application is running:

1. Open the Start menu, and click > Programs > Administrative Tools > Services.
2. Check to see if the Unicenter Service Desk Server service is running.  
If the service is stopped, restart it.

**Note:** After rebooting your machine, you may need to restart the service.

**Tip 1**

- Check if you can log in to the CA Service Desk web service.  
You should be able to log in successfully and open the CA Service Desk client in your preferred Web browser.

**Tip 2**

- Check to see if the licensing information is valid.  
Unicenter Service Desk Server must run using a valid license; otherwise, the CA Service Desk Module Operators will fail.

**Tip 3**

- Check if the CA IT PAM user has sufficient privileges to access automation objects and run Processes.  
For more information, see the Directory Server Prerequisites chapter in the *CA IT PAM Installation and Configuration Guide*.



**Solution: 3**

Check if CA IT PAM has been installed properly and you have the proper access rights.

**Tip 1**

- Check to see if the user logged into the system has sufficient privileges to run the CA IT PAM Orchestrator and Agents.

For more information, see the Windows Service Account Prerequisites chapter in the *CA IT PAM Installation and Configuration Guide*.

**Tip 2**

- Ensure that the CA IT PAM database system is running properly.

1. Open a command prompt window.
2. Run the sqlcmd using the following parameters when the CA IT PAM database is installed on a Microsoft Sybase database system:

```
sqlcmd -S <machine name> -U <itpamuser> -P <itpampwd> -d itpam
```

where <itpamuser> and <itpampwd> are the CA IT PAM database user and password.

For other databases types supported by CA IT PAM, you must run the appropriate command:

- For an Oracle database, use SQL Plus to test the connection to the database from a command prompt:

```
sqlplus <username>[/<password>] @connect_identifier
```

where@connect\_identifier consists of an Oracle Net connect identifier. The information about the machine where Oracle is installed is contained in the @connect\_identifier. The exact syntax depends upon the Oracle Net communications protocol your Oracle installation uses. For more information, refer to the Oracle documentation appropriate for your protocol or contact your database administrator.

- For a MySQL Server database, test the database connection from a command prompt:

```
mysql -h<hostname> -u<username> -p<password>
```

3. After connecting successfully to the CA IT PAM database, run a SQL query, for example:
4. Select \* from SOAPClientCall
5. go.

If you are able to connect to the CA IT PAM database and the above statement executed successfully, then the database system is running properly; otherwise, check the database login user name and password and try again. If the database login user name and password are correct, there might be problems with the database system itself.

### Tip 3

- You can get more information about the error by decreasing the logging level for Orchestrators and Agents to WARNING or INFO. Orchestrator issues are debugged using `c2o.log` and `boot.log` located here: `<server_install_path>/server/c2o/log`:
  - `boot.log` contains all messages logged by core components (JBoss, etc) before CA IT PAM starts execution.
  - `c2o.log` contains all messages logged by all components after CA IT PAM has started execution.

Agent issues are debugged using the main log file (`c2o.log`) containing messages from all components. The file is located here: `<agent_install_path>/log`.

In order to get more logging information, you need to do the following:

1. Decrease the default logging level for Agent, `log4j.xml`.
2. This file is located here: `<agent_install_path>/c2orepository/.c2oagentresources/properties`.

FILE and CONSOLE are the logging categories of interest and they are set by default to level ERROR.

To see more information for a category, you need to do the following:

3. Change the "threshold" parameter for the category you are interested and decrease the level from ERROR to WARN or INFO
4. Change the "root" category to include the categories you are interested (such as CONSOLE or FILE) and set the log level to the lowest level specified in any category
5. Decrease the default logging level for Orchestrator, `log4j.xml`.

This file is located here: `<orchestrator_install_path>/server/c2o/conf`.

Similar to changing the Agent logging server, C2OFILE and CONSOLE logging categories can be changed to obtain more logging information.

#### **Solution: 4**

Validate the Service Desk connector Operator parameters.

The parameters could be incorrectly set, thus causing the failure of the Operator.

1. Check the Service Desk Connect Parameters.
2. Check if the following message appears in the agent log:  
[com.optinuity.c2o.service.serviceoperation.casdserviceoperation.CASDWrapper] SOAP call[login] failed: Service Operation succeeded. Fault returned.

If you see the message, then the Service Desk Connect Parameters might be wrong.

First, check if the Service Desk URL points correctly to the Service Desk web service:

- a. Open your preferred web Browser (Internet Explorer, Mozilla Firefox or Opera with JavaScript enabled).
- b. Navigate to Service Desk URL.
- c. You should see the welcome message of the Axis web service.
- d. If not, please check the WebService URL is correct.

Service Desk web service URL has this format: `http://<servername>:CA Portal/axis/services/USD_webServiceSoap`.

- e. Open Service Desk web Client from Start Programs > CA > Unicenter Service Desk and get the correct values for `<servername>` and CA Portal.

Secondly, check the credentials passed in "Connection Parameters":

Start the Service Desk web Client:

1. Open Start > Programs > CA > Unicenter Service Desk menu.
2. Choose Service Desk web Client command.

If Service Desk login page does not appear, check if Unicenter Service Desk Server service is running.

If the login page appears, go to the next step.

3. Enter the user and password specified in Service Desk User and Service Desk Password fields.
4. If you cannot login, the credentials are wrong and you need to specify the proper values in the Operator parameters.

**Solution: 5**

- Check the Execution Settings.

A valid Touchpoint needs to be specified in the Target section. If it is specified as an expression, ensure that the expression evaluates to a valid Touchpoint.

**Solution: 6**

- Validate the Operator's custom parameters by doing one of the following:
  1. Invoke the corresponding Service Desk operation using the BaseServiceInterface Operator with the same parameters passed to the Operator that fails.
  2. Call the corresponding Service Desk operation from the targeted software (Unicenter Service Desk).

For example, if Create Issue Operator fails, open the CA Service Desk web client and create a new issue from File > New Issue.

**Solution: 7**

- Validate the Operator's input parameters.

If the issue is created successfully from the web client but not from the CA IT PAM Client, review the parameters you passed in the input parameters since you must pass the proper codes.

**Tip 1**

- Use the database to validate the field values  
For example, to validate the value you pass in the status field when you have access to the CA Service Desk database system and you are using Microsoft Sybase 2005 as the database system:
  1. Open the Microsoft SQL Server Management System.
  2. Open a New Query window.
  3. Run the following statements:

```
use mdb
select * from issstat
```

The results can be used to map the status code to the display text that you need to choose from the Service Desk interface:

- 9000 issstat:9000 Open OP
- 9001 issstat:9001 Closed CL
- 9002 issstat:9002 Approval in progress APP
- 9003 issstat:9003 Implementation in progress IMPL
- 9004 issstat:9004 Verification in progress VRFY
- 9005 issstat:9005 Cancelled CNCL
- 9006 issstat:9006 Suspended SUSPEND
- 9007 issstat:9007 Hold HOLD
- 9009 issstat:9009 Resolved RE
- 9010 issstat:9010 Close Requested CLREQ

**Tip 2**

- Consult your CA Service Desk and CA IT PAM documentation.
  - Determine if the input parameters are correct is to consult the sections describing the objects attributes and database schema in the *Unicenter Service Desk Modification Guide (r11.2)* or the *CA Service Desk Technical Reference Guide (r12)*.
  - Check to see if the Operator parameters comply with the Limits for CA IT PAM Parameters in the *Administration Guide*.
  - If you are using expressions in the Operator parameters, check the *User Guide* to validate the syntax.