

# HP Operations Orchestration Software

for the Windows operating system

Software Version: 10.01

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## HP Service Manager Integration Guide

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# 1 Overview of Service Manager Integration

With this integration, you can build HP Operations Orchestration (OO) flows that are integrated into HP Service Manager.

This document will explain how this integration has been implemented and how the operations included communicate between OO and SM.

## Use cases and scenarios

The following are the major use cases for the SM integration, and the operations that you can use to implement them.

- Managing changes:
  - Approve Change
  - Create Change
  - Get Change
  - Get Change Category Phases
  - Get Change Subcategories
  - Move Change to Next Phase
  - Update Change
  - Update Change Category
- Managing incidents:
  - Create Incident
  - Get Incident
  - Resolve Incident
  - Update Incident
- Managing problems:
  - Create Problem
  - Get Problem
  - Update Problem
- Closing tickets:
  - Close Ticket
  - Get Ticket Closure Codes

## Installation and configuration instructions

HP Service Manager (SM) comes with a default WSDL configuration. Each ticket type (such as change, incident, and problem) has a service associated with it that makes possible the communication between OO and SM. SM operations communicate with three main services: Change Management, Incident Management, and Problem Management.

Each service has a WSDL that specifies which fields are exposed from the different tables and which actions are allowed to be performed on an SM server. To make sure that SM operations work properly, the server must configure these WSDL files to expose all of the fields needed for the operations.

Each field from an SM operation maps to a field in the Service Manager corresponding WSDL. For example the Update Change operation invokes the Change Management service. The operation invokes the action “Update” providing the service with the appropriate field values from the operation’s inputs. As a result, the service calls the appropriate SM processes to update the change, performs the request, and returns a message with a result or an error.

Before running any of the SM operations, we strongly recommend that you make the following configurations on your SM server as shown in the following sections.

## 2 Service Manager 9.3x configurations

### Change configuration

For the OO operations that work with changes to execute successfully, you must make the following configuration changes to Service Manager:

1. In the System Navigator go to **Menu Navigation**, then **Tailoring**, then **Web Services**, and then **WSDL Configuration**.

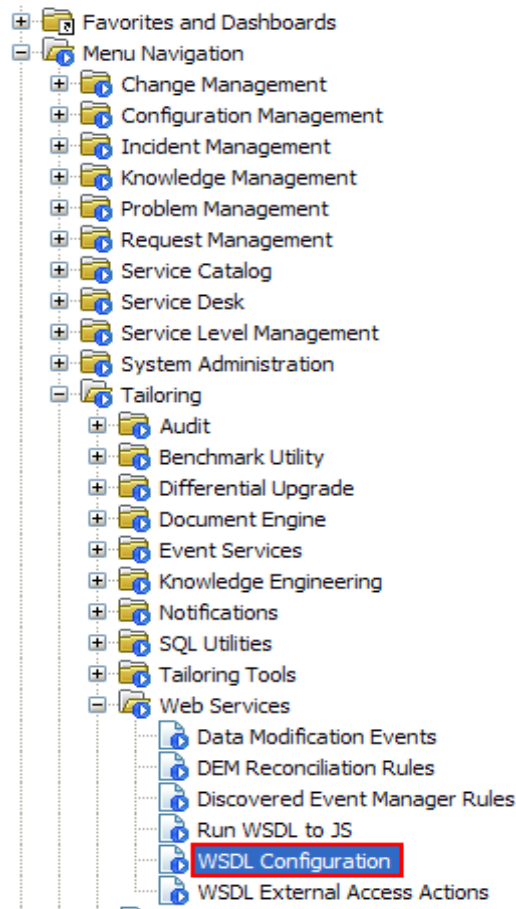


Figure 1 - Location in menu of WSDL Configuration

2. In the **Object Name** field, input the value **Change**, and then click **Search**.



Search External Access Definition Records

Back Add Search Find Fill

No records selected

### External Access Definition

Service Name:

Name:

Object Name:

☐ Released ☐ Deprecated

**Figure 2 - Search for Change External Access Definition**

- Near the top of the window, you can see a list of SM objects. If it's not already selected, choose the **Change** object. Now, your screen should look like this:

OK Cancel Previous Next Add Save Delete Find Fill

### External Access Definition

Service Name:

Name:

Object Name:

☐ Released ☐ Deprecated

Allowed Actions Expressions Fields RESTful

Allowed Actions	Action Names	Action Type	Custom Action To Perform
save	Update		
retract	Retract		
reopen	Reopen		
nextphase	MoveToNextPhase		
deny	Deny		
close	Close		
approve	Approve		
add	Create	Create only	ChM.createRecord

**Figure 3 - Change External Access Definition**

- Look on the **Allowed Actions** tab and check that the available actions are exactly as in the following image. If not, you can add a new action by simply writing in the empty fields.

Allowed Actions Expressions Fields RESTful

Allowed Actions	Action Names	Action Type	Custom Action To Perform
save	Update		
retract	Retract		
reopen	Reopen		
nextphase	MoveToNextPhase		
deny	Deny		
close	Close		
approve	Approve		
add	Create	Create only	ChM.createRecord

**Figure 4 - Change actions**

5. Look on the **Fields** tab and check that the available fields are exactly as in the following image. If not, you can add a new field by writing in the empty fields or change an existing one by retyping the field value.

Allowed Actions	Expressions	Fields	
Field	Caption	Type	
close,closing.comments	ClosingComments		
close,completion.code	ClosureCode		
description.structure,backout.meth...	BackoutMethod		
description.structure,description	Description		
description.structure,justification	OverallAssessment		
header,agreement.id	SLAAgreementID	IntType	
header,approval.status	ApprovalStatus		
header,assigned.to	AssignedTo		
header,backout.duration	BackoutDuration	DurationType	
header,brief.description	Title		
header,category	Category		
header,close.time	CloseTime	DateTimeType	
header,company	Company		
header,coord.phone	CoordinatorPhone		
header,coordinator	ChangeCoordinator		
header,current.phase	Phase		

Allowed Actions	Expressions	Fields	
Field	Caption	Type	
header,date.entered	DateEntered	DateTimeType	
header,foreign.id	ExtProjectRef		
header,number	ChangeID		
header,open	Open	BooleanType	
header,planned.end	PlannedEnd	DateTimeType	
header,planned.start	PlannedStart	DateTimeType	
header,priority.code	Priority		
header,reason	Reason		
header,requested.by	InitiatedBy		
header,risk.assessment	RiskAssessment		
header,status	Status		
header,subcategory	Subcategory		
header,type.level2	RFCType2		
initial.impact	Impact	StringType	
middle,actual.cost	ActualCost		
middle,actual.outage.end	ActualOutageEnd	DateTimeType	

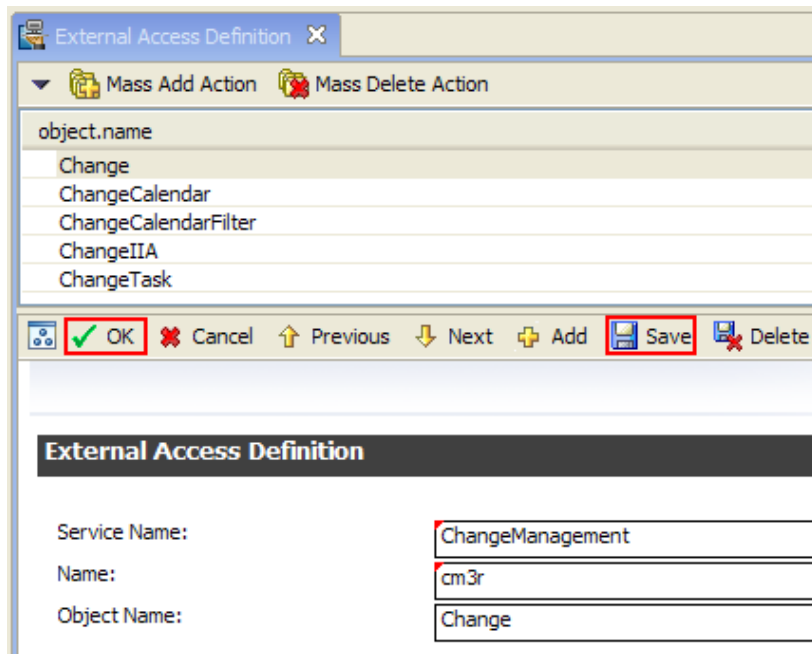
Field	Caption	Type
middle,actual.outage.start	ActualOutageStart	DateTimeType
middle,actual.price	ActualPrice	
middle,assets	Assets	
middle,down.end	ScheduledDowntimeEnd	DateTimeType
middle,down.start	ScheduledDowntimeStart	DateTimeType
middle,estimate.description	EstimateDescription	
middle,estimate.price	EstimatePrice	StringType
middle,location	Location	
middle,logical.name	ConfigurationItem	
middle,misc.array1	MiscArray1	
middle,misc.array2	MiscArray2	
middle,misc.array3	MiscArray3	
middle,misc1	Misc1	
middle,misc10	Misc10	
middle,misc2	Misc2	
middle,misc3	Misc3	

Field	Caption	Type
middle,misc4	Misc4	
middle,misc5	Misc5	
middle,misc6	Misc6	
middle,misc7	Misc7	
middle,misc8	Misc8	
middle,misc9	Misc9	
middle,sched.outage.end	ScheduledOutageEnd	DateTimeType
middle,sched.outage.start	ScheduledOutageStart	DateTimeType
severity	Urgency	StringType
requestedDate	RequestedEndDate	DateTimeType
releaseCandidate	ReleaseCandidate	BooleanType
location.full.name	LocationFullName	StringType
emergency	Emergency	BooleanType
closureComments	ClosureComments	
affected.item	Service	
header,assign.dept	AssignmentGroup	
release.type	ReleaseType	
approvalComments	ApprovalComments	

**Figure 5 - Change fields**

- Click the **Save** button, and then **OK**.

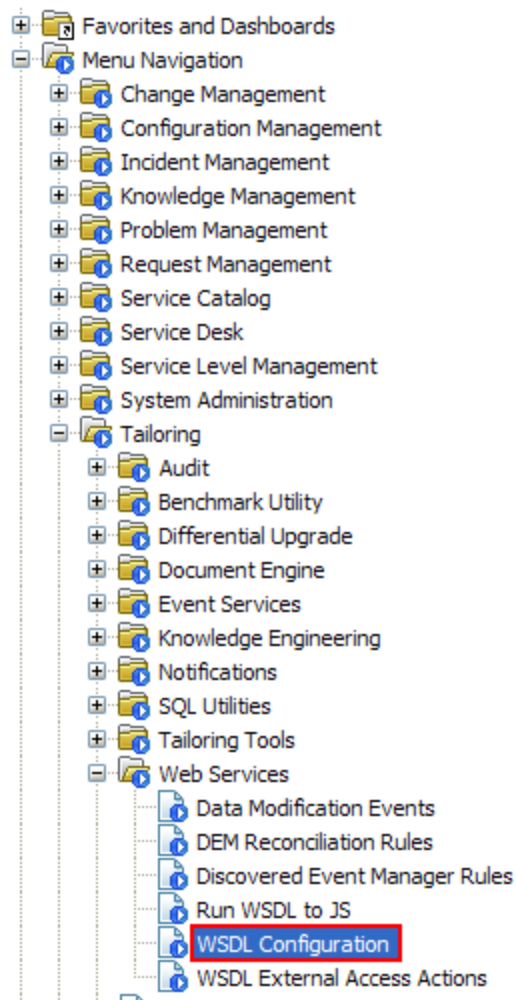


**Figure 6 - Save changes**

## Incident configuration

For the OO operations that work with incidents to execute successfully, you must make the following configuration changes to Service Manager:

1. In the System Navigator go to **Menu Navigation**, then **Tailoring**, then **Web Services**, and then **WSDL Configuration**.



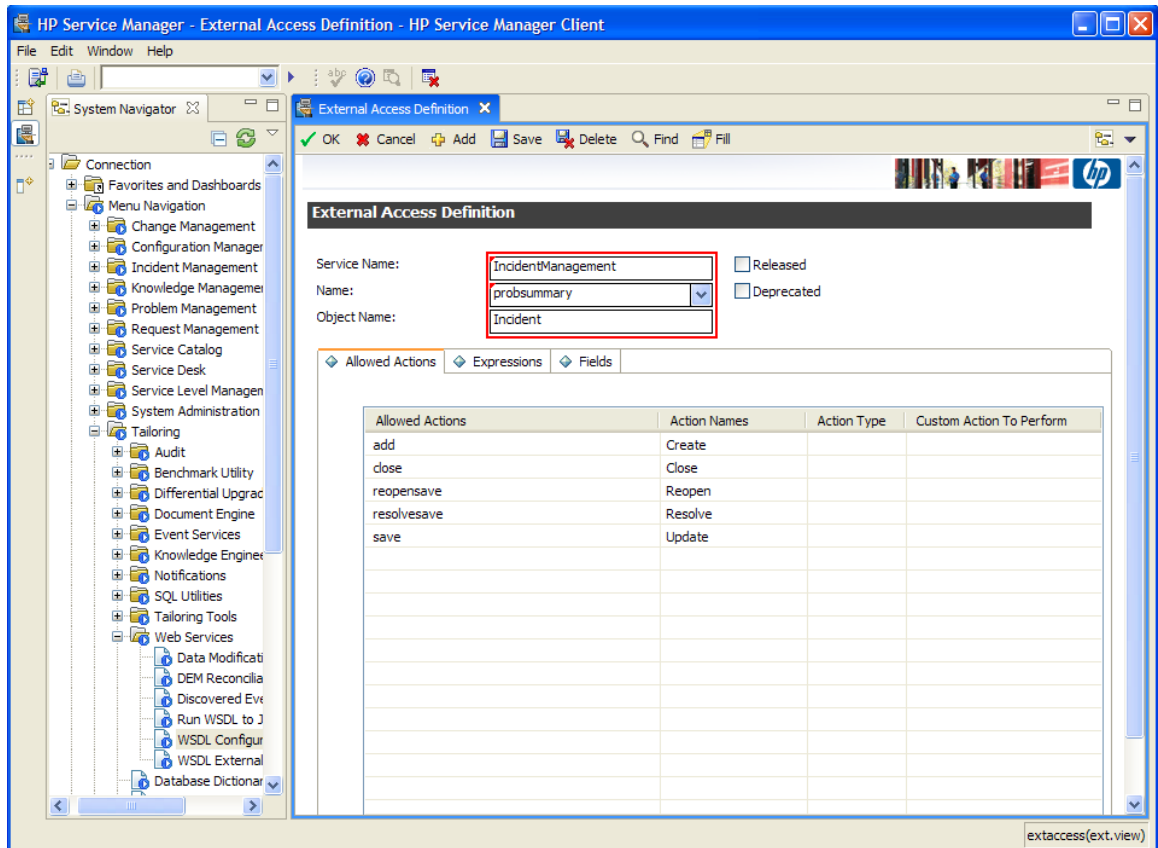
**Figure 7 - Location in menu of WSDL Configuration**

2. In the **Object Name** field, input the value **Incident**, and then click **Search**.

A screenshot of a web application window titled 'Search External Access Definition Records'. The window has a toolbar with buttons for 'Back', 'Add', 'Search', 'Find', and 'Fill'. The 'Search' button is highlighted with a red rectangular box. Below the toolbar, there is a section titled 'External Access Definition'. This section contains three input fields: 'Service Name:', 'Name:', and 'Object Name:'. The 'Object Name:' field is highlighted with a red rectangular box and contains the text 'Incident'.

**Figure 8 - Search for Incident External Access Definition**

Now, your screen should look like this:



**Figure 9 - Incident External Access Definition**

3. Look on the **Allowed Actions** tab and check that the available actions are exactly as in the following image. If not, you can add a new action by simply writing in the empty fields.

Allowed Actions		Expressions	Fields
Allowed Actions	Action Names		
add	Create		
close	Close		
reopensave	Reopen		
resolvesave	Resolve		
save	Update		

**Figure 10 - Incident actions**

4. Look on the **Fields** tab and check that the available fields are exactly as in the following image. If not, you can add a new field by writing in the empty fields or change an existing one by retyping the field value.

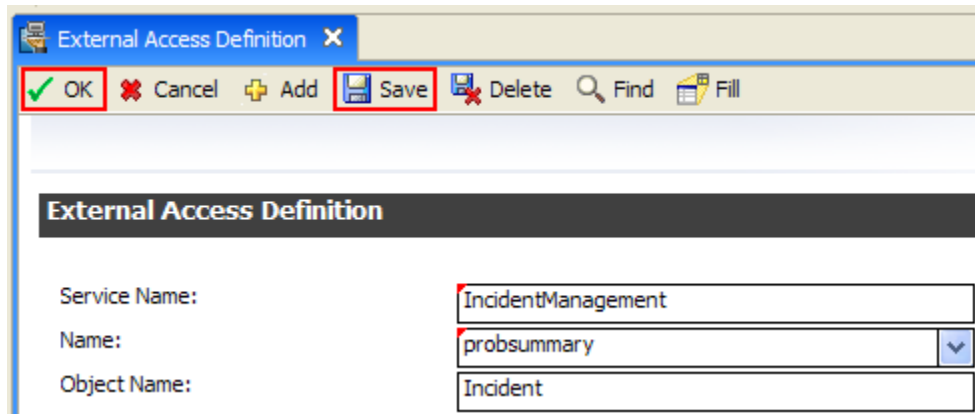
◆ Allowed Actions	◆ Expressions	◆ Fields	
-------------------	---------------	----------	--

Field	Caption	Type
action	IncidentDescription	
agreement.id	SLAAgreementID	
status	AlertStatus	
assignee.name	AssigneeName	
assignment	PrimaryAssignmentGroup	
brief.description	BriefDescription	
category	Category	
close.time	ClosedTime	DateTimeType
closed.by	ClosedBy	
company	Company	
contact.name	Contact	
explanation	Solution	
first.name	ContactFirstName	
fix.type	ResolutionFixType	
folder		
initial.impact	InitialImpact	
last.name	ContactLastName	
location.full.name	Location	
logical.name	AffectedItem	
number	IncidentID	
open.time	OpenTime	DateTimeType
opened.by	OpenedBy	
problem.status	IMTicketStatus	
problem.type	ProblemType	
product.type	ProductType	
resolution	Resolution	
resolution.code	ClosureCode	
severity		
site.category	SiteCategory	
subcategory	Subcategory	
ticket.owner	TicketOwner	
update.action	JournalUpdates	
update.time	UpdatedTime	DateTimeType
updated.by	UpdatedBy	
user.priority	UserPriority	
affected.item	Service	

**Figure 11 - Incident fields**

5. Click the **Save** button, and then **OK**.



External Access Definition

Service Name: IncidentManagement

Name: probsummary

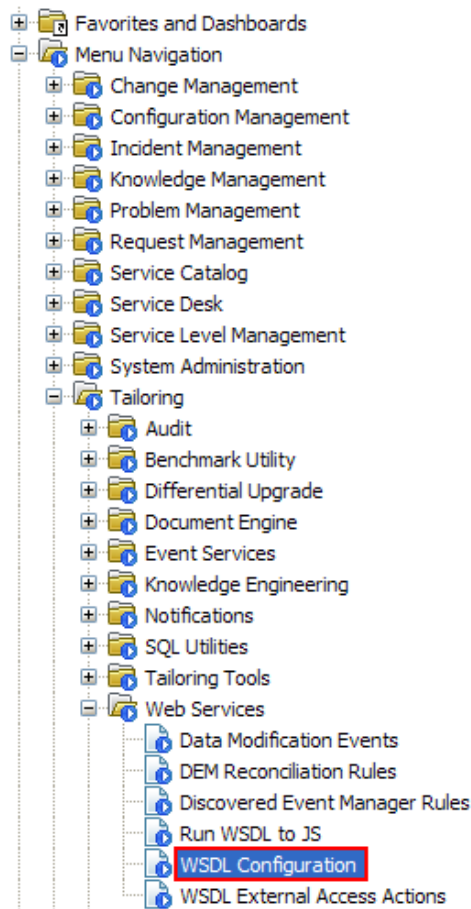
Object Name: Incident

**Figure 12 - Save changes**

## Problem configuration

For the OO operations that work with problems to execute successfully, you must make the following configuration changes to Service Manager:

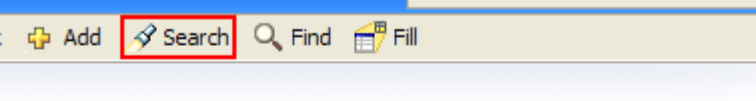
1. In the System Navigator go to **Menu Navigation**, then **Tailoring**, then **Web Services**, and then **WSDL Configuration**.



**Figure 13 - Location in menu of WSDL Configuration**



2. In the **Object Name** field, input the value **Problem**, and then click **Search**.



Search External Access Definition Records

Back Add Search Find Fill

**External Access Definition**

Service Name:

Name:

Object Name:

### Figure 14 - Search for Problem External Access Definition

Now, your screen should look like this:

[illegible]

### Figure 15 - Problem External Access Definition

3. Look on the **Allowed Actions** tab and check that the available actions are exactly as in the following image. If not, you can add a new action by simply writing in the empty fields.

◆ Allowed Actions	◆ Expressions	◆ Fields	
-------------------	---------------	----------	--

Allowed Actions	Action Names
save	Update
reopen	Reopen
closeme	Close
done	
add	Create

**Figure 16 - Problem actions**

4. Look on the **Fields** tab and check that the available fields are exactly as in the following image. If not, you can add a new field by writing in the empty fields or change an existing one by retyping the field value.

Service Name:

Name:

Object Name:

Field	Caption	Type
folder		
assignee.name	Assignee	
category	ProblemCategory	
closed.by	ClosedBy	
description	Description	
brief.description	BriefDescription	
initial.impact	InitialImpact	
close.time	ClosedTime	DateTimeType
assignment	PrimaryAssignmentGroup	StringType
open.time	OpenTime	DateTimeType
opened.by	OpenedBy	
logical.name	ConfigurationItem	
severity	Severity	
updated.by	UpdatedBy	
update.time	UpdateTime	DateTimeType
agreement.id	SLAAgreementID	
ticket.owner	TicketOwner	
problem.type	ProblemType	
product.type	ProductType	
reopen.time	ReopenTime	DateTimeType
reopened.by	ReopenedBy	
subcategory	Subcategory	
current.phase	CurrentPhase	
company	Company	
incident.category	Category	
update	Update	
closure.code	ClosureCode	
affected.item	Service	StringType
rcStatus	Status	

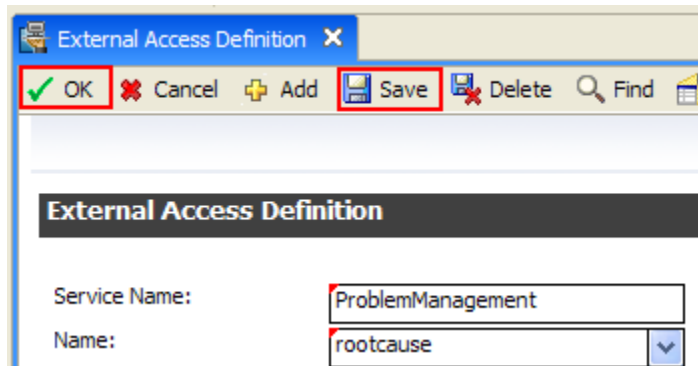
**Figure 17 - Problem fields**

5. Look on the Expression tab and search for the expression:

```
if (not same(update in $L.file, update in $L.file.save)) then
($G.bg.activity.type="External Update";$G.bg.activity.text=update
in $L.file;update in $L.file=update in $L.file.save)
```

Add it if you cannot find it there.

6. Click the **Save** button, and then **OK**.



**Figure 18 - Save changes**

## Adding "Change Category Phases" global list

To run the **Get Change Category Phases** operation from OO, you must create a global list on the server. This global list exposes data from Service Manager needed in the OO operation. The global list can be created in the following way:

1. Go to **Menu Navigation**, then **Tailoring**, and then **Tailoring Tools**.
2. Open **Global Lists**.
3. Fill in the window as in the following screenshot.

The screenshot shows a web application window titled "Search Global List Definition Records". The interface includes a navigation bar with "Back", "Add", and "Search" buttons. The main form contains the following fields and options:

- List Name:** Change Category Phases
- Regen Every:** (empty field)
- Build List on Startup?** ☐
- Times Updated:** (empty field)
- Expiration:** (empty field with a dropdown arrow)
- List Variable:** (empty field)
- Display Variable:** (empty field)
- List Field:** name
- Display Field:** phases
- Filename:** cm3rcategory
- Limiting SQL:** (empty field)
- Sort By:** (empty field)
- Application:** (empty field)
- Server App.:** (empty field)
- Guard Against Duplicates?** ☐
- User Defined List?** ☐
- Use localized list?** ☐
- Value List:** (empty field)
- Display List:** (empty field)
- SM message List:** (empty field)

**Figure 19 - New Global List values**

4. Click the **Add** button.

This screenshot is identical to Figure 19, but the "Add" button in the navigation bar is highlighted with a red rectangular box, indicating the next step in the process.

**Figure 20 - Add new Global List**

Make sure that it generates the global list:

Global List Definition: Change Category Phases

OK Cancel Add Save Delete

List Name: Change Category Phases Times Updated: 2

Regen Every: Expiration: 02/17/10 21:19:50

☒ Build List on Startup?

List Variable: Display Variable: List Field: name Display Field: phases Filename: cm3rcategory Limiting SQL: Sort By: Application: Server App.:

☐ Guard Against Duplicates?

☐ User Defined List?

Value List: {"Release Management", "Hardware", "Maintenance", "Network", "Software", "Default", "CI Group", "Ur"} Display List: {"Assess", "Plan and Design", "Build and Test", "Train", "Distribution and Rollout", "Back Out", "Verificati"} SM message List:

Context Menu:

- OK (F2)
- Cancel (F3)
- Add (F1)
- Save (F4)
- Delete (F5)
- Validity Lookup
- Export/Unload
- Rebuild Global List
- Expand Array

**Figure 21 - Build Global List**

## Adding "Change Subcat" global list

To run the **Get Change Subcategories** operation from OO, you must create a global list on the server. This global list exposes data from Service Manager needed in the OO operation. The global list can be created using the following steps:

1. Go to **Menu Navigation**, then **Tailoring**, and then **Tailoring Tools**.
2. Open Global Lists.
3. Fill in the window as in the following screenshot.

**Search Global List Definition Records** X

Back Add Search

**Global List Definition record deleted.**

List Name:  Times Updated:

Regen Every:  Expiration:

☐ Build List on Startup?

List Variable:  ☐ Guard Against Duplicates?

Display Variable:

List Field:

Display Field:

Filename:

Limiting SQL:

Sort By:

Application:

Server App.:

☐ User Defined List? ☐ Use localized list?

Value List:

Display List:

SM message List:

**Figure 22 - New Global List values**

4. Click the **Add** button.

**Search Global List Definition Records** X

Back **Add** Search

**Global List Definition record deleted.**

List Name:  Title:

Regen Every:  Expiration:

☐ Build List on Startup?

List Variable:

Display Variable:

List Field:

Display Field:

Filename:

**Figure 23 - Add new Global List**

Make sure you rebuild the global list so it updates its content.

Global List Definition: Change Subcat

OK Cancel Add Save Delete

List Name: Change Subcat Times Updated: 1

Regen Every: Expiration: 02/17/10 21:24:05

☒ Build List on Startup?

List Variable: Display Variable: List Field: category Display Field: subcategory Filename: cm3rsubcat Limiting SQL: Sort By: Application: Server App.:

☐ Guard Against Duplicates?

☐ User Defined List? ☐ Use localized list?

Value List: {"CI Group", "CI Group", "Hardware", "Network", "Software", "Software", "Software", "Hardware", "Net

Display List: {"Ad Hoc Group", "Baseline Group", "Configure Hardware", "Configure Network Component", "Configure

SM message List:

Context Menu:

- OK F2
- Cancel F3
- Add F1
- Save F4
- Delete F5
- Validity Lookup
- Export/Unload
- Rebuild Global List
- Expand Array

Figure 24 - Build Global List

## Adding "Problem and Incident Closure Codes" global list

To run the **GetTicketClosureCodes** operation from OO, you must create a global list on the server. This list makes available to OO the closure codes that can be used in order to close a problem/incident ticket. The global list can be created using the following steps:

1. Go to **Menu Navigation**, then **Tailoring**, then **Tailoring Tools**, and then **Global Lists**.
2. Fill in the form and use the same capitalization as in the screenshot:

List Name: Problem and Incident Closure Codes

List Field: cause.code

Display Field: resolution.code

Filename: probcause



The screenshot shows a web application window titled "Search Global List Definition Records". The interface includes a navigation bar with "Back", "Add", and "Search" buttons. The main form is for configuring a global list. The "List Name" is set to "Problem and Incident Closure Codes". Other fields include "Regen Every", "Times Updated", "Expiration", and a checkbox for "Build List on Startup?". A section for list configuration includes fields for "List Variable", "Display Variable", "List Field" (set to "cause.code"), "Display Field" (set to "resolution.code"), "Filename" (set to "probcause"), "Limiting SQL", "Sort By", "Application", and "Server App.". There are checkboxes for "Guard Against Duplicates?", "User Defined List?", and "Use localized list?". At the bottom, there are fields for "Value List", "Display List", and "SM message List".

**Figure 25 - New Global List values**

3. Click the **Add** button.

This screenshot shows the same "Search Global List Definition" window, but the "Add" button in the navigation bar is highlighted with a red box, indicating the next step in the process. The form fields are the same as in Figure 25.

**Figure 26 - Add new Global List**

4. Right-click the form, and then click **Rebuild Global List** to make sure that the Value list is automatically filled with the closure code values.

To Do Queue: My To Do List    Global List Definition: Problem and Incident Closure Codes

☒ OK    ☒ Cancel    ☒ Add    ☒ Save    ☒ Delete

---

List Name:     Times Updated:   
 Regen Every:     Expiration:

☐ Build List on Startup?

List Variable:     ☐ Guard Against Duplicates?  
 Display Variable:   
 List Field:   
 Display Field:   
 Filename:   
 Limiting SQL:   
 Sort By:   
 Application:   
 Server App.:

☐ User Defined List?    ☐ Use localized list?

Value List:

Display List:

SM message List:

☒ OK    F2  
☒ Cancel    F3  
☒ Add    F1  
☒ Save    F4  
☒ Delete    F5  
☒ Validity Lookup  
☒ Export/Unload  
☒ Rebuild Global List  
☒ Expand Array

**Figure 27 - Build Global List**

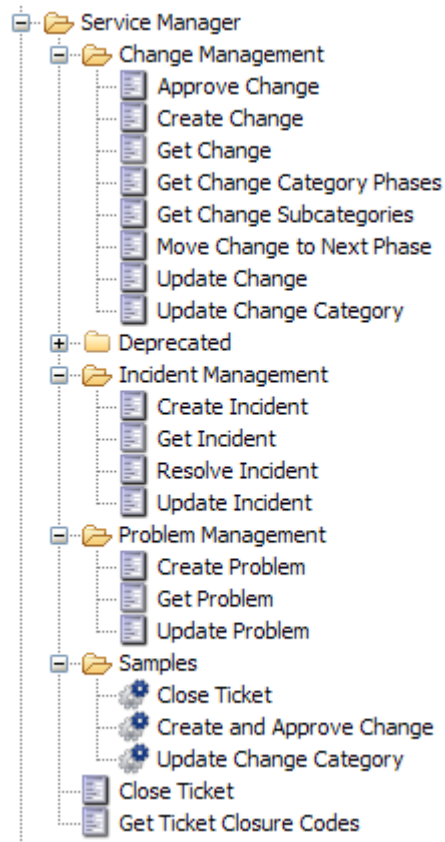
5. Click **Save** and then click **OK**.

### 3 Versions

Operations Orchestration Version	HP Service Manager Version
10.01	9.30, 9.31 and 9.32

## 4 Service Manager integration operation infrastructure

The Service Manager integration includes the following operations in the OO Studio **Library/Integrations/Hewlett-Packard/Service Manager/** folder.



**Figure 1 - Service Manager Integration operation and flow infrastructure**

## 5 Common inputs in the integration

OO flows and operations use inputs to specify how they obtain the data that they need and when the data is obtained. The following inputs are used consistently throughout the HP Service Manager integration's operations and flows.

### **host**

The ServiceManager host server. You can specify the host by using its IP address (for example, 10.2.255.116) or its DNS name (for example, www.smhost.com).

### **port**

The Service Manager server port on which the SM is running. You can use port **13080** for http protocol and **13443** for https secure connections.

### **username**

The username to use to connect to the Service Manager server (e.g. **falcon**).

### **password**

The password for the username.

### **smVersion**

The version number of SM you are using (e.g. **sm700**, **sm701**, **sm710**, **sm711**, **sm920**, **sm930**). **sm930** can support both Service Manager version 9.30, 9.31 and 9.32. The default version number is **sm701**.

## 6 Operation specifics

This section describes the HP Service Manager integration's flows and operations, including any operation- or flow-specific inputs. The flows and operations are grouped by their basic functionality:

- Change Management
- Incident Management
- Problem Management
- Sample flows
- Common operations for all types of tickets

### Change Management Operations

These operations carry out tasks for managing change tickets. They are:

- Approve Change: approves or rejects a change ticket
- Create Change: creates a change
- Get Change: retrieves a change
- Get Change Category Phases: gets the phases of change tickets that belong to a certain category
- Get Change Subcategories: gets the subcategories of change tickets that belong to a certain category
- Move Change To Next Phase: moves a change to the next phase
- Update Change: updates the properties of a change ticket
- Update Change Category: updates the category of a change

### Incident Management Operations

These are operations that can be used for managing incident tickets. They are:

- Create Incident: creates a new incident
- Get Incident: retrieves an incident
- Resolve Incident: resolves an incident ticket
- Update Incident: updates the properties of an incident ticket

## Problem Management Operations

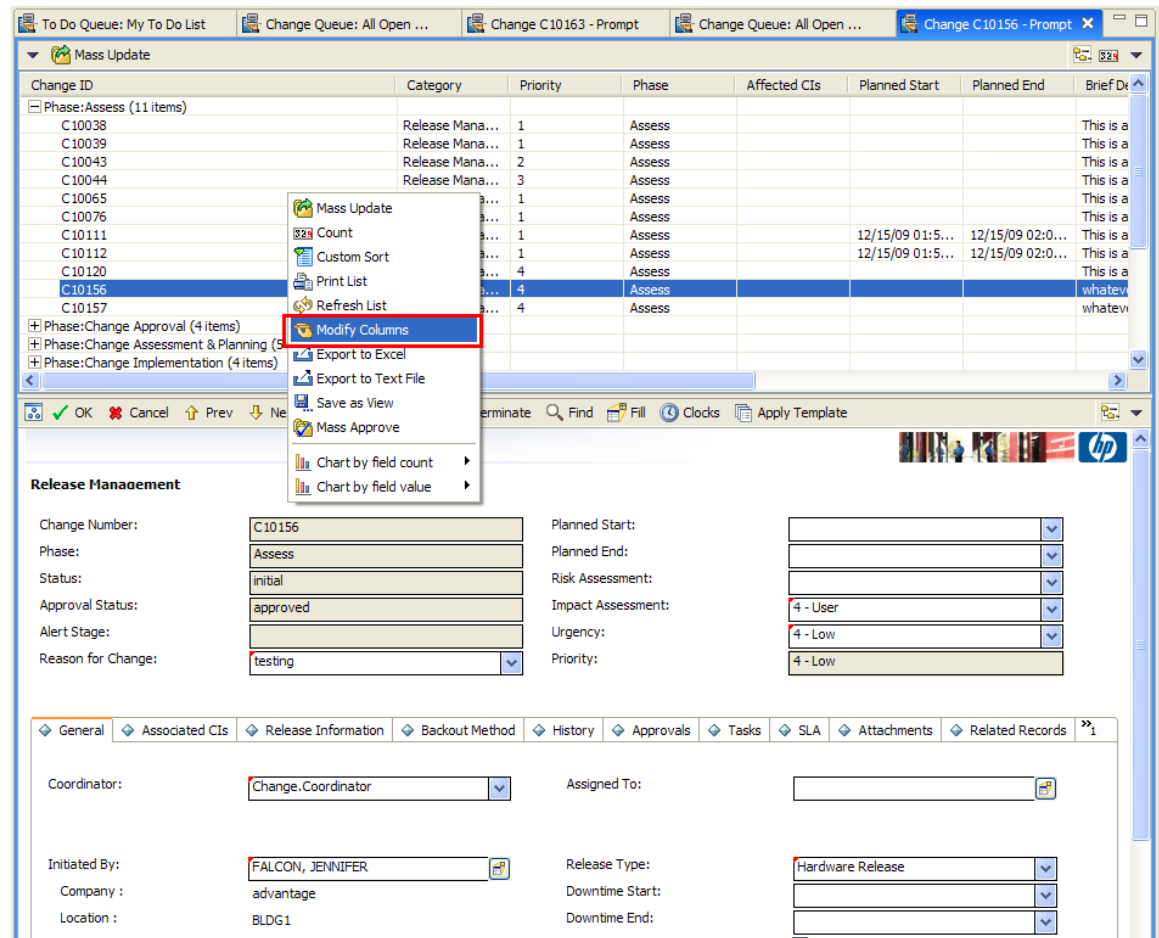
- Create Problem: creates a new problem
- Get Problem: retrieves a problem
- Update Problem: update the properties of a problem ticket

## 7 Troubleshooting

This section provides troubleshooting procedures and tools you can use to solve problems you may encounter while using this integration. It also includes a list of the error messages you may receive while using the integration and offers descriptions and possible fixes for the errors.

### How to display Sched Outage Start and Sched Outage End fields

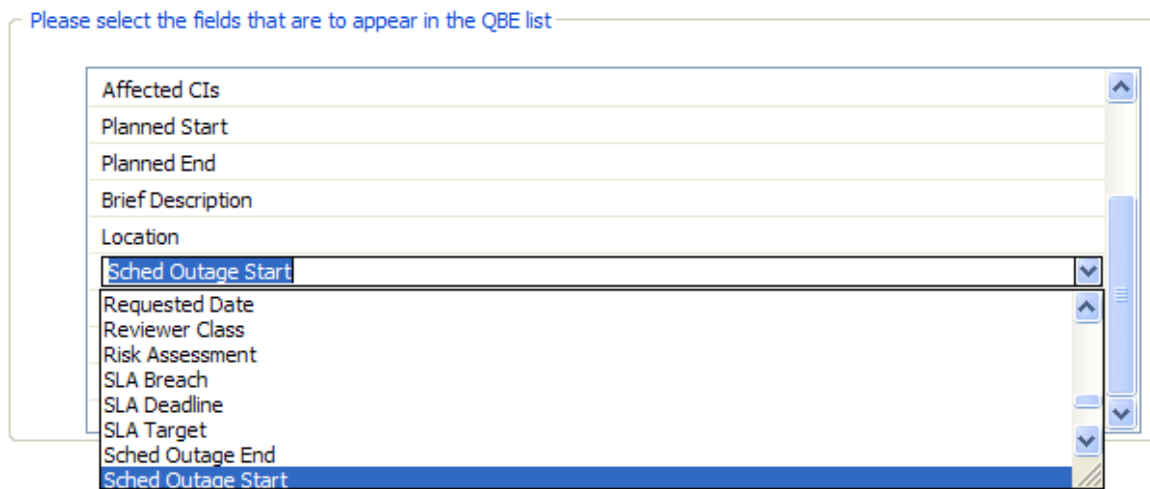
1. Open **Change Queue** and double-click on a change
2. In the changes table from the top of the screen, right-click and choose **Modify Columns**.



**Figure 1 - Modify columns menu option**

You can now see a list of the columns that are displayed in the changes table. Click on the last empty row and choose from the drop-down list **Sched Outage Start**; this will make the attribute available in the changes table. Do the same for **Sched Outage End**.



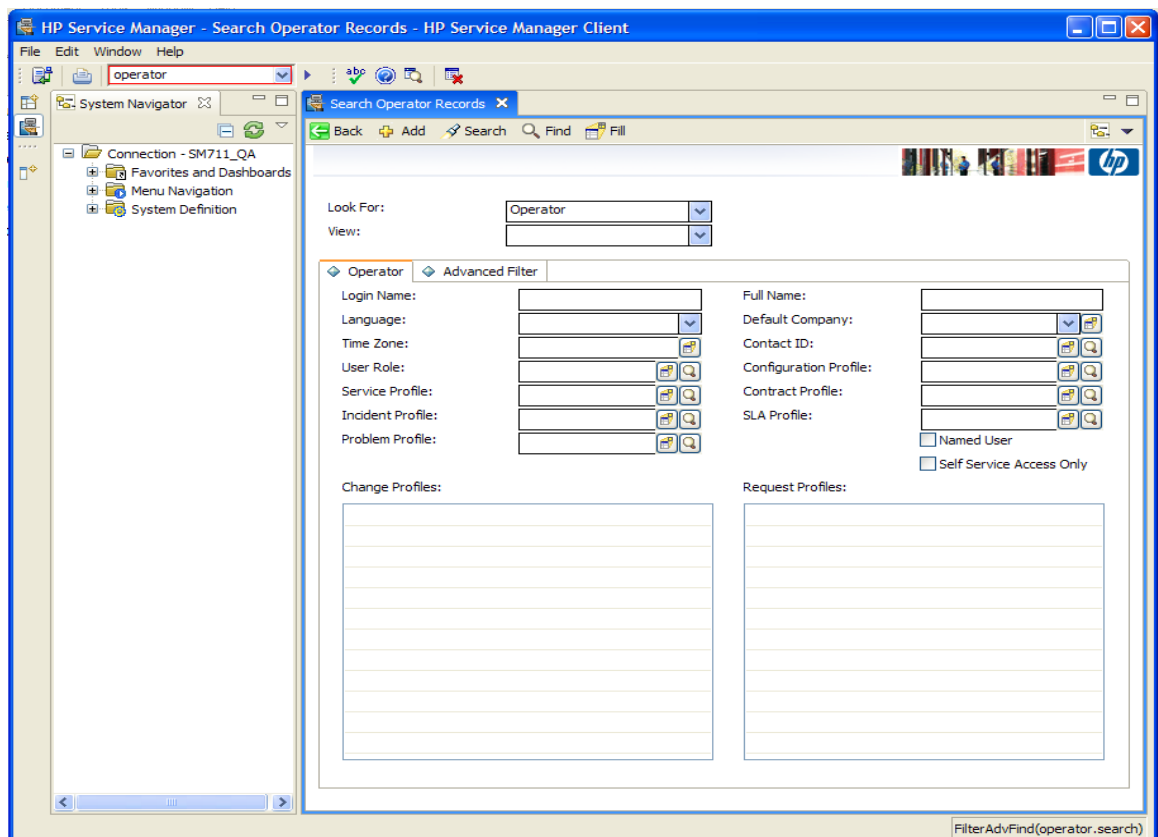


**Figure 2 - Add new column**

3. Click **Proceed** and the new columns should appear in the changes table. If this is not the case, check if the table has rescaled or you need to drag the right margin of the table to the right so that the new columns would be visible.

## How to find user rights and properties (all SM versions)

1. Go to the SM command bar.
2. Enter **operator** and press ENTER.



**Figure 3 - Search for operator**

3. Type the user (e.g. **falcon**) in the **Login Name** text box and press ENTER.

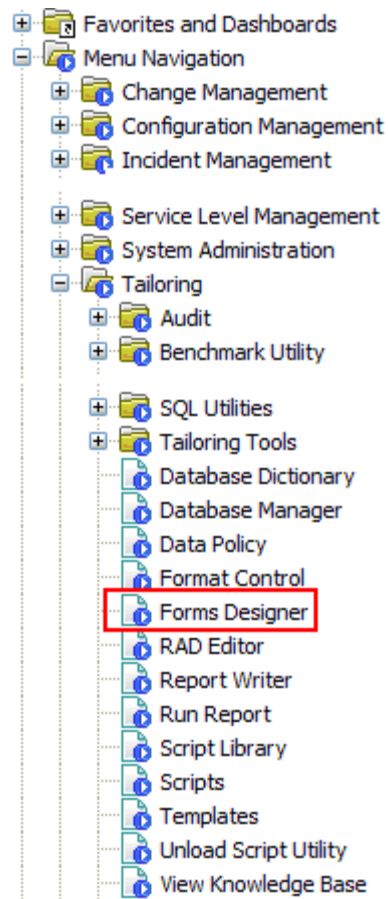
The screenshot displays a web application interface for user management. At the top, there are tabs: General, Security, Login Profiles, Startup, Notification, Security Groups, and Self Service. The 'General' tab is active. Below the tabs, the 'Login Name' field contains the text 'falcon'. To the right, the 'Full Name' field shows 'Jennifer Falcon', 'Default Company' shows 'advantage', and 'Contact ID' shows 'FALCON, JENNIFER'. Below this, there are tabs for 'Application Profiles', 'Data Access', and 'Folder Entitlement', with 'Application Profiles' selected. Under 'Application Profiles', there are fields for 'User Role' (system administrator), 'Service Profile' (sysadmin), 'Incident Profile' (sysadmin), and 'Problem Profile' (sysadmin). To the right of these are fields for 'Configuration Profile' (sysadmin), 'Contract Profile' (sysadmin), and 'SLA Profile' (sysadmin). At the bottom, there are two lists: 'Change Profiles' and 'Request Profiles'. The 'Change Profiles' list includes: sysadmin, change coordinator change, change coordinator tasks, change manager, SD agent/manager, problem manager, and change manager. The 'Request Profiles' list includes: sysadmin, request coordinator, request approver, and request reviewer.

**Figure 4 - Search for a specific user**

## How to view a list of recommended values for siteCategory

For incident tickets, you can see a list of recommended values that can be used in order to update an incident by following the next steps:

1. Go to **Menu Navigation**, then **Form Designer**.



2. In the **Form** field enter **IM.update.incident** and then click **Search**.

A screenshot of the 'Forms Designer' interface. It features three input fields: 'Form:', 'File:', and 'Language:'. The 'Form:' field contains the text 'IM.update.incident' and is highlighted with a red rectangular box. The 'File:' field is empty. The 'Language:' field is set to 'English' with a dropdown arrow. Below the input fields are three buttons: a green square button with a white left-pointing arrow, a blue square button with a white plus sign, and a blue square button with a white magnifying glass icon. The magnifying glass button is highlighted with a red rectangular box and has the word 'Search' written below it.

You can now see the **Update Incident** form. Click **Design** from the top bar menu:

Forms Designer: IM.update.incident

OK Cancel Previous Next Delete Design

Incident Details

Incident ID

Status

Contact

Location

Affected Service

Affected CI

☐ CI is operational (no outage)

Outage Start

Outage End

Service Contract

SLA Target Date

Assignment Group

Assignee

Vendor

Vendor Ticket

Category

Area

Subarea

Impact

Urgency

Priority

- Click the **Site Category** box and in the **Properties** tab, scroll down and look at the **Value List** property. If you can't see the **Properties** tab go to **Window**, then **Show view**, and then **Other** and choose the **Properties** view. The **Value List** property contains the values that can be provided to the **siteCategory** input, and the **Display list** field contains the displayable values associated with the **Value List** content. Each value from Value List has a corresponding value in **Display List**.

Forms Designer: IM.update.incident

OK Cancel

Incident Details

Incident ID

Status

Contact

Location

Affected Service

Affected CI

☐ CI is operational (no outage)

Outage Start

Outage End

Service Contract

SLA Target Date

Assignment Group

Assignee

Vendor

Vendor Ticket

Category

Area

Subarea

Impact

Urgency

Priority

Folder

Site Category

Properties

Combo Box

Maximum Characters	0
Maximum Characters Beep	<input type="checkbox"/>
Case Conversion	0
Decimals	None
Parse	<input type="checkbox"/>
Data Changed Event	0
Value List	A;B;C;D;remote
Value List Condition	
Display List	A - Critical Site;B - Major Site; C - Satellite Site; D - Home Site; Remote
Display List Condition	
Box Lines	8
Select Only	<input checked="" type="checkbox"/>

## Error messages

This section lists the error messages you may receive while using this integration. Each error message includes possible causes and fixes for the error.

### **Error Message: Connection refused**

This error message can be seen if OO can't connect to the SM server host. If the host and credentials are good make sure that SM server machine allows the specified protocol. Service Manager Server installed by default does not support https, therefore check sure your SM host supports the indicated protocol. If you want to enable https on the server then go to %SM Path%/Service Manager 7.xx/Server, execute configure.bat and select to enable https protocol.

### **Error Message: Unauthorized**

This message indicates that the logon information for SM may be incorrect. Check the username and password inputs to make sure that they are correct.

### **Error Message: Not Authorized**

This error message is issued when a user does not have sufficient rights to perform a certain action (e.g. closing a problem ticket). It can be seen even if you specify an existent user from the SM server. Make sure that you entered valid values for inputs and the user has sufficient rights to perform the action (he could be change manager, but not problem manager).

### **Error Message: Resource Unavailable**

This message indicates that the specified resource (change, incident or problem ticket) is used by another application (e.g. HP Service Manager Client). If you encounter this issue check your HP Server Manager Client instance and close the windows that are using your resource.

### **Error Message: A CXmlApiException was raised in native code : error 19 : scxmlapi(19) - Doc Engine call failed with cc -1**

This message appears for some of the Service Manager Operations when they run on SM710 or SM711 servers. Sometimes it is an error given from Service Manager when you try to invoke a service but it does not necessarily mean that the operation did not accomplish its task. A possible workaround is to verify if the operation actually made the requested changes and catch the exception in this case.

### **Error Message: Unspecified error**

This message appears for some of the Service Manager Operations when they run on SM700 or SM701 servers. For some service invocations SM issues this message, but it does not necessarily mean that the operation did not accomplish its task. A possible workaround is to verify if the operation actually made the requested changes and catch the exception in this case.

### **Error Message: Validation failed**

In order to successfully run a SM operation you must pass in valid input values. If your inputs are valid and the operation still fails than make sure your WSDL configuration is the same as specified in Installation and Configuration Instructions.



## 8 Known Issues – Service Manager sessions

Earlier versions of the operation created a new session with the server every time was invoked a web service available on the server. Service Manager interprets each session as a new connection and limits these connections to a well-established number (for example, 50 connections/user). Therefore, after running an operation repeatedly 50 times or more, there were chances to receive an error message caused because of the exceeding maximum number of users.

Current operations normally use eight sessions with the server, one for each service (change, incident, problem, global lists) and protocol used for a host (http or https) so it will not throw an error message if you stress a SM operation more than 50 times in 30 minutes. It could be that sometimes Service Manager status will show more connections than those mentioned above. This is caused because a new session is also created when an operation tries to invoke a SM service and this call fails (not to confuse an invocation failure with an operation failure). Still the Service Manager doesn't close a connection for that user immediately after the session ends.

The operations could also fail sometimes with an error message like "Session no longer valid". This is a known issue caused by the SM server, rarely met and hard to reproduce. Normally a new run of the operation will fix this problem.

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## 9 Security

Service Manager servers are accessed via SOAP over HTTP (or HTTPS, if enabled on the host). The Service Manager server administrator provides logon credentials for connecting with the SOAP. The SOAP client needs the username and password of an integration user defined in the Service Manager server.