



Process Automation Guide for SAP Solution Manager E2E Response

Release 3.0
December 2013

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Text Part Number: OL-30858-01

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

Process Automation Guide for SAP Solution Manager E2E Response
© 2013 Cisco Systems, Inc. All rights reserved.



CONTENTS

Preface vi

Organization	vi
Conventions	vii
Product Documentation	viii
Documentation Formats	viii
Guides and Release Notes	viii
Online Help	viii
Obtaining Documentation and Submitting a Service Request	viii

CHAPTER 1

Importing Automation Packs 1-1

Accessing the Automation Pack Import Wizard	1-2
Opening the Import Wizard After Running Setup Wizard	1-2
Opening the Import Wizard from Console	1-2
Importing the Core Automation for SAP.tap	1-3
Importing the SAP Solution Manager E2E Response.tap	1-4
SAP Solution Manager Adapter Requirements	1-4
Prerequisites	1-4
SAP Solution Manager Add-On	1-5
Importing the Cisco Add-On On SAP Solution Manager	1-5
Configuring SAP Solution Manager Templates	1-5
Configure Custom Templates	1-6
Creating and Scheduling Alert Queue Cleanup Jobs	1-6
Create Variant	1-6
Create Daily Job	1-7
Viewing Deleted Alerts	1-8

CHAPTER 2

Understanding the Automation Pack Content 2-1

Accessing Automation Pack Properties	2-2
Viewing Automation Pack Content and Dependencies	2-3
Viewing Automation Pack Content	2-3
SAP Solution Manager E2E Response Processes	2-4
SAP Solution Manager E2E Response Target Properties	2-5
SAP Solution Manager E2E Response Target Groups	2-5
Viewing Automation Pack Dependencies	2-6

CHAPTER 3

Getting Started Using the Automation Pack 3-1

- Creating an SAP User Account 3-2
- Creating SAP Solution Manager Targets 3-2
- Managing SAP Solution Manager Targets 3-6
 - Enabling a Target 3-6
 - Disabling a Target 3-7
 - Deleting a Target 3-7
 - Modifying Solution Manager Targets 3-8
 - Modifying Display Name and Enabling/Disabling Target 3-8
 - Modifying Connection Information 3-8
 - Modifying Polling and Mapping Information 3-10
 - Viewing Member Of Properties 3-10
 - Viewing Properties 3-11
 - Viewing Used By Properties 3-12
 - Viewing Target History 3-13
- Using Task Rules for Assignments and Notifications 3-14
 - Accessing Task Rules View 3-14
 - Configuring Task Rules 3-15
 - SAP Default Assignment 3-15
 - Creating a New Task Rule 3-17
 - Managing Task Rule Definitions 3-21
 - Enabling a Task Rule 3-21
 - Disabling a Task Rule 3-21
 - Creating a Copy of a Task Rule 3-22
 - Sorting Task Rules 3-22
 - Deleting a Task Rule 3-22
 - Enabling Notification Based on Assignment Processes 3-23
- Managing Target Properties 3-24
 - Accessing Target Properties 3-24
 - Configuring Target Properties 3-24
- Managing Global Variables 3-26
 - Accessing Global Variables 3-26
 - Configuring Global Variables 3-26
 - SAP Alert Suppression Time Properties 3-26

CHAPTER 4

Managing SAP Solution Manager E2E Response Processes 4-1

- Accessing SAP Solution Manager E2E Response Processes 4-2
- Managing SAP Solution Manager Processes 4-3

- Enabling a Process 4-3
- Disabling a Process 4-3
- Modifying Process Instance Archival 4-4
- Creating a Solution Manager Alert Trigger 4-4
- Running Processes 4-8
 - Starting a Process 4-8
 - Viewing Running Process 4-9
- Viewing Process Results 4-9
 - Accessing Process View 4-9
 - Viewing Activity Results 4-10
 - Viewing Incidents 4-10
- Viewing Automation Summary 4-11

APPENDIX A

Understanding the Core Automation for SAP Content A-1

- Automation Pack Content A-1
 - Core Automation for SAP Task Rules A-1
 - Core Automation for SAP Global Variables A-2
 - Core Automation for SAP Processes A-2
 - Core Automation for SAP Target Groups A-3
 - Core Automation for SAP Categories A-4
- Automation Pack Dependencies A-4

INDEX



Preface

The SAP Automation pack files are a collection of Cisco Process Orchestrator (CPO) processes (workflows) authored by subject matter experts that work out-of-the-box to automate best practices for a particular technology. The automation pack files also include configuration objects that are used in the processes, such as variables, categories, target groups and knowledge base articles.

The SAP Automation Pack for SAP Solution Manager E2E Response contains the content used to automate analysis and problem resolution for incidents triggered by SAP Solution Manager alerts.

This guide is intended to provide information on importing and using the SAP Solution Manager E2E Response automation pack in Process Orchestrator.

Organization

This guide includes the following sections:

Chapter 1	Importing Automation Packs	Provides instructions for installing the automation pack during or after the initial installation of Cisco Process Orchestrator.
Chapter 2	Understanding the Automation Pack Content	Provides information on the content included in the automation pack.
Chapter 3	Getting Started Using the Automation Pack	Provides information on configuring the objects in Cisco Process Orchestrator that are referenced by the content in the automation pack—runtime users, targets, task rules, target properties, and global variables.
Chapter 4	Managing SAP Solution Manager E2E Response Processes	Provides information on using and managing the SAP Solution Manager processes.
Appendix A	Understanding the Core Automation for SAP Content	Provides information on the content included in the Core Automation for SAP automation pack.

Conventions

This guide uses the following conventions:

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



Note

Means *reader take note*.



Tip

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



Caution

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



Timesaver

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



Warning

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

Product Documentation

Documentation Formats

Documentation is provided in the following electronic formats:

- Adobe® Acrobat® PDF files
- Online help


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

Guides and Release Notes

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

Online Help

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

- Click the **Help** button on any dialog in the application to open the help topic in a pane to the right of the dialog.
- In the Process Orchestrator console:
 - Click the **Help Pane**  tool on the toolbar to open the help topic in a pane to the right of the console results pane.
 - Click **Help** on the menu bar.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, subscribe to the *What's New in Cisco Product Documentation* as a RSS feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.



CHAPTER 1

Importing Automation Packs

After installing Cisco Process Orchestrator, you can choose to continue to importing the automation packs, or import them later from within the Console. This chapter guides you through importing the Cisco Process Orchestrator Automation Pack for SAP Solution Manager E2E Response automation pack. It includes the following sections:

- [Accessing the Automation Pack Import Wizard, page 1-2](#)
- [Importing the Core Automation for SAP.tap, page 1-3](#)
- [Importing the SAP Solution Manager E2E Response.tap, page 1-4](#)
- [SAP Solution Manager Adapter Requirements, page 1-4](#)
- [Configuring SAP Solution Manager Templates, page 1-5](#)
- [Creating and Scheduling Alert Queue Cleanup Jobs, page 1-6](#)



Note

It is recommended that you review the system requirements and prerequisites before importing automation packs. See the *Intelligent Automation for SAP 3.0 Installation Guide*.

Accessing the Automation Pack Import Wizard

You use the Automation Pack Import Wizard to import the automation packs (.tap files). You can open the wizard immediately after installing Process Orchestrator or from within the Console.

Opening the Import Wizard After Running Setup Wizard

-
- Step 1** After running the Setup wizard to install the product, ensure that the **Launch automation pack import wizard now** check box is checked before closing the wizard.
- Step 2** On the Select Automation Packs dialog box, check the following check boxes and then click **OK** to launch the Automation Pack Import Wizard:
- Core Automation for SAP
 - SAP Solution Manager E2E Response



Note See the *Cisco Process Orchestrator Installation Guide* for instructions on importing and configuring the Core components for the product.

Proceed to [Importing the Core Automation for SAP.tap, page 1-3](#).

Opening the Import Wizard from Console

You can open the Automation Pack Import Wizard from within the Console after installing the product. When importing automation packs from within the Console, you must re-open the Automation Pack Import Wizard for each automation pack that you are importing.

Because the SAP Solution Manager E2E Response automation pack has a dependency on the Core Automation for SAP automation pack, you must import the Core Automation for SAP automation pack first.

-
- Step 1** In the Administration workspace on the Console, click **Automation Packs** in the navigation pane.
- Step 2** Use one of the following methods to open the Automation Pack Import Wizard:
- In the navigation pane, right-click **Automation Packs** and choose **Import**.
 - On the Menu bar, choose **Actions > Import**.
- Step 3** On the Windows Open dialog box, select the **Core Automation for SAP.tap** file and click **Open** to launch the Automation Pack Import Wizard.

Proceed to [Importing the Core Automation for SAP.tap](#).

Importing the Core Automation for SAP.tap

You must first import the Core Automation for SAP automation pack (Core Automation for SAP.tap). If you opened the Automation Pack Import Wizard from the Setup Completed panel, the wizard will guide you through importing each automation pack.

Step 1 On the Automation Pack Import Wizard Welcome panel, click **Next**.



Note If you do not want to display the Welcome panel the next time the wizard is opened, check the **Do not show this page next time** check box.

Step 2 On the General Information panel, review the information about the automation pack.

Step 3 If you want to disable all the processes that are imported with the automation pack, check the **Disable all imported processes** check box.



Note If you disable all the imported processes, you will need to manually enable the processes in the Console before they can execute.

Step 4 Click **Next** to continue.

Use the Default Incidents Assignee Setup panel to specify the default person who should be assigned SAP-related incidents.

Step 5 Click the **Browse** button to specify the user.

Step 6 On the Select User or Group dialog box, click **Location** and choose the location from which the user will be selected.

Step 7 In the text box, enter the user name and click **Check Names**.

If the name is found, the box will be populated with the appropriate email address.

Step 8 Click **OK** to close the Select User or Group dialog box.

Step 9 On the Default Incidents Assignee Setup panel, click **Next**.

The Review Prerequisites panel displays the prerequisites for the automation pack being imported. The green check mark indicates that the prerequisite was found on the computer.

The red X indicates that the prerequisite was not found on the computer. When this occurs, the import process is stopped and cannot continue until all prerequisites have been met.

If all prerequisites are passed, the wizard automatically continues to the next panel.



Note If you opened the Automation Pack Import Wizard from the Setup Completed panel, the wizard displays the General Information panel for the next automation pack.

Step 10 After the objects have been imported, review the information on the Completing the Automation Pack Import Wizard panel to verify that it is correct and then click **Close** to close the wizard.

Importing the SAP Solution Manager E2E Response.tap

If you are importing the automation packs from within the Console, you must re-open the Automation Pack Import Wizard to import the SAP Solution Manager E2E Response automation pack.

-
- Step 1** Use one of the following methods to open the Import Automation Pack Wizard:
- In the navigation pane, right-click **Automation Packs** and choose **Import**.
 - On the Menu bar, choose **Actions > Import**.
- Step 2** On the Windows Open dialog box, select the **SAP Solution Manager E2E Response.tap** file and click **Open** to launch the Automation Pack Import Wizard.
- Step 3** On the Welcome panel, click **Next**.
- Step 4** On the General Information panel, review the information about the automation pack.
- Step 5** If you want to disable all the processes that are imported with the automation pack, check the **Disable all imported processes** check box.



Note If you disable all the imported processes, you will need to manually enable the processes in the Console before they can execute.

- Step 6** Click **Next** to continue.
- The Data Extraction panel is used to specify the destination where the ABAP Transport files will be extracted. The ABAP Transport files must be installed on the SAP Solution Manager systems on which some remote function calls that are used in this automation pack will be executed.



Note If you uncheck the ABAP Transport check box, the files will not be extracted.

- Step 7** Accept the default location or click the **Browse** tool to specify a different location to extract the files and then click **Next**.
- If all prerequisites are passed, the wizard automatically continues to the next panel.
- Step 8** After the objects have been imported, review the information on the Completing the Automation Pack Import Wizard panel to verify that it is correct and then click **Close** to close the wizard.
-

SAP Solution Manager Adapter Requirements

This section describes the requirements that must be met for SAP Solution Manager Adapter functionality.

Prerequisites

The SAP Solution Manager Adapter requires the following prerequisites:

- SAP .NET Connector 3.0 for .NET 4.0 on x64 version 3.0.7.0 or higher. The following dll files must be copied to the Process Orchestrator server:

- sapnco.dll
- sapnco_utils.dll

Before you can configure an SAP Solution Manager target, these files must be installed on the Process Orchestrator server. See the *Cisco Process Orchestrator Online Help* for instructions on installing these files.

- SAP Solution Manager 7.1 SP05 or later
 - The SAP Solution Manager 7.1 system and basic setup must be completed.
 - Managed Objects must be configured.
- SAP ABAP/Netweaver 7.02 SP10

SAP Solution Manager Add-On

The SAP Solution Manager Adapter core functionality in Process Orchestrator is provided by the Cisco Add-On. The SAP Solution Manager Adapter requires the Cisco Add-On file to be installed on SAP Solution Manager.

Importing the Cisco Add-On On SAP Solution Manager

Perform the following procedure to import the Cisco Add-On file into the SAP Solution Manager system using the SAP transaction SAINT.

-
- Step 1** Navigate to the location where the ABAP Transport data was extracted for the SAP version of the systems in your environment. The default location is:
- C:\Users\[username]\Documents\Cisco\Cisco Process Orchestrator\Extracted Data\ABAP Transports\Solution Manager\Add-on\7.1
- Step 2** Copy the SAP Add-On Package file(s) to the following location on the SAP server:
- usr\sap\trans\EPS\in
- Step 3** Log onto client 000 of the SAP system using an administrator account (DDIC or SAP* are not valid accounts) and run the SAP transaction code *SAINT*.
- Step 4** Follow the standard SAP procedures for performing an add-on product installation using *SAINT*.



Note To verify whether the add-on is on the SAP system, use the SAP menu path **System > Status** and review the software component versions for the Cisco software component add-on/CISCOSM/.

Configuring SAP Solution Manager Templates

The SAP Solution Manager Template Settings must be configured to set the Third-Party Connector to use *SAP IT Process Automation by Cisco* for all alerts to be passed to Process Orchestrator for processing. The SAP Solution Manager E2E Response automation pack provides a transport that contains templates that have already been configured with the third party connector set for *SAP IT Process Automation by Cisco*.

Alternatively, if you are using custom templates in your environment, you must manually set the third-party connector to *SAP IT Process Automation by Cisco* so that alerts will be forwarded to Process Orchestrator for processing.

Configure Custom Templates

If you are using custom templates in SAP Solution Manager, the third-party connector must be set to SAP IT Process Automation by Cisco.

-
- Step 1** In Configuration Explorer, navigate to the template and select it.
 - Step 2** On the Template Settings tab, click **Expert Mode**.
 - Step 3** Select the **Third-Party Components** tab and set the third-party connector to *SAP IT Process Automation by Cisco*.
 - Step 4** Save the template.
 - Step 5** Re-activate the template assignment to monitored objects (Technical Monitoring, Step 6).
-

Creating and Scheduling Alert Queue Cleanup Jobs

It is recommended that you create a job in SAP Solution Manager to perform daily cleanup of the event queue table to remove alerts that have exceeded the specified threshold. Perform the following procedure to create and schedule the job.

Create Variant

The first step in creating a job is to run SAP transaction SE38 – Create Variant.

-
- Step 1** Log into the SAP system and run SAP transaction *SE38* or navigate to the ABAP Editor (click **Tools > ABAP Workbench > Development > ABAP Editor**).
 - Step 2** In the Program text field, enter `/CISCOSM/TEO_CLEAR_ALERT_QUEUE`.
 - Step 3** Click the **Variants** radio button and then click **Change**.
 - Step 4** Specify the following information to specify which alerts to be cleared from the queue:
 - Age of oldest record in days—Number of days after which alerts will automatically be deleted.
 - Maximum queue entries—Number of queue entries to maintain before deleting entries.
 - Step 5** Enter a name for the variant and then click **Save**.



Note The suggested name is ALERTQ_STD for standard parameters.

Create Daily Job

The next step is to create a background job to clear the queue daily. You must schedule a daily job with the following (recommended) job name:

/CISCO/SM/CLEAR_ALERT_QUEUE_DLY

If you use a different job name, update the SAP Solution Manager Target properties (Solution Manager tab) with the updated job name. Otherwise, an alert is displayed in the Cisco Process Orchestrator.

-
- Step 1** Run SAP transaction SE36 – Define Background Job.
 - Step 2** Enter a name for the background job in the Job Name field.
 - Step 3** Click **Step** on the menu bar to create the job step.
 - Step 4** Enter the information for the job step.
 - Step 5** Click **Start Condition** on the menu bar to specify the interval at which jobs should be run.
 - Step 6** In the Job start area, specify the Date and Time the job should begin running.
 - Step 7** In the Job frequency area, specify how often the job should run (Daily).
 - Step 8** Click **Save** to save the job.
-

Viewing Deleted Alerts

You can view a summary of the alerts that have been deleted from the alert queue using SAP transaction *SLG1 (Application Log)*.

-
- Step 1** Run SAP transaction *SLG1 (Application Log)*.
- Step 2** Enter the following information:
- Object name—/CISCOSM/LOG
 - Subobject—ALERTQ.
- Step 3** Click **Execute** to review the messages. Messages indicate how many queued entries are removed.



CHAPTER 2

Understanding the Automation Pack Content

The SAP Solution Manager E2E Response automation pack includes the content used to automate best practices for identifying and analyzing performance problems within your SAP Solution Manager environment, and initiating corrective actions to resolve Solution Manager alerts.

This chapter provides information about the content included in the SAP Solution Manager E2E Response automation pack. It contains the following sections:

- [Accessing Automation Pack Properties, page 2-2](#)
- [Viewing Automation Pack Content and Dependencies, page 2-3](#)



Note

See [Appendix A, “Understanding the Core Automation for SAP Content”](#) for information on the content included in the Core Automation for SAP automation pack.

Accessing Automation Pack Properties

Users can access the automation pack properties from the Administration—Automation Packs view in the console. The automation pack properties dialog box displays general information about the automation pack, version number, publish date, list of content (objects), the dependencies of the automation pack, and the history of changes made to the automation pack.

- Step 1** On the Administration workspace, click **Automation Packs** in the navigation pane to display the installed automation packs in the Automation Packs pane.

Information about the automation packs display in the following columns:

Column	Description
Company Name	Name of the company that released the automation pack.
Publish Date	Date the automation pack was created or exported to a file.
Version	Version number of the automation pack.
Display Name	Name of the automation pack.
ID	Identification number of the automation pack.
Import Date	Date the automation pack was imported into the product.
Licensed	Indicates whether the automation is a licensed product in Process Orchestrator.
Description	Text description of the automation pack.

- Step 2** Select the automation pack in the Automation Packs pane, right-click and choose **Properties**.

- Step 3** On the Properties dialog box, click the appropriate tab to view the automation pack properties:

Tab	Description
General	Displays general information about the automation pack.
Objects	Display a list of the content included in the automation pack.
Dependencies	Display a list of automation packs and adapters referenced by the objects in the automation pack.
History	Displays when the automation pack was created or modified, and audit log entries that are relevant to the automation pack.

- Step 4** When you have completed viewing the automation pack properties, click **Close** to close the dialog box.

Viewing Automation Pack Content and Dependencies

Use the automation pack Properties dialog box to view the content (objects) included in the automation packs and the dependencies associated with the automation pack.

Viewing Automation Pack Content

Use the Objects tab to view a list of the content provided by the automation pack.

- Step 1** On the Administration—Automation Packs view, select **SAP Solution Manager E2E Response**, right-click and choose **Properties**.
- Step 2** On the SAP Solution Manager E2E Response Properties dialog box, click the **Objects** tab.
- Step 3** On the Objects tab, review the information about the content included in the SAP Solution Manager E2E Response automation pack.

Columns	Description
Display Name	Name of the object (processes, global variables, knowledge base).
Type	Object type.
Action Required	Action required to successfully import or export the objects.
Customization Setting	Displays the customization setting for the automation pack: <ul style="list-style-type: none"> • No—Indicates the author of the object prefers the object to remain unchanged whenever a new automation pack is imported. • Limited—Indicates the author has granted editing permission to some properties of the object and any changes made will be preserved whenever a new automation pack is imported. • Workflow—Indicates the author has granted editing permission to the process properties and the objects within the process workflow.
Description	Text description of the object.
Version	Object version.

SAP Solution Manager E2E Response Processes

The following table contains the processes that are imported by the SAP Solution Manager E2E Response automation pack.

Process Name	Description
Background Work Process Analysis	Returns a table with the number of background work processes per application server and number of used background work processes per application server.
Dialog Work Process Analysis	Returns a table with the number of dialog work processes per application server and number of used dialog work processes per application server.
Not Enough Update Resources	Raises an incident when a Solution Manager Not Enough Update Resources alert is created.
SM – ABAP Instance Not Available	Raises an incident when a Solution Manager ABAP Instance not available alert is created.
SM – Bad Dialog Response Time	Detects and analyzes the cause of slow dialog response time.
SM – Errors in ABAP System Log	Raises an incident when a Solution Manager Errors in ABAP System Log alert is created
SM – Errors in Java Logs Detected	Raises an incident when a Solution Manager Errors in Java Logs Detected alert is created.
SM – Get Server Name	Parses the server name from a Solution Manager alert.
SM – High CPU Utilization	Raises an incident when a Solution Manager High CPU Utilization alert is created.
SM – High Number of ABAP Short Dumps	Raises an incident when a Solution Manager High Number of ABAP Short Dumps alert is created.
SM – High number of ABAP System Log Messages	Raises an incident when a Solution Manager High Number of ABAP System Log Messages alert is created.
SM – High Update Response Time	Raises an incident when a Solution Manager High Update Response Time alert is created.
SM – High User Load on ABAP System	Raises an incident when a Solution Manager High User Load on ABAP System alert is created.
SM – Locked Users	Raises an incident when a Solution Manager Locked Users alert is created.
SM – Metrics Collection	Retrieves metrics information from Solution Manager alerts.
SM – Not Enough Batch Resources	Raises an incident when a Solution Manager Not Enough Batch Resources alert is created.
SM – Not Enough Dialog Resources	Raises an incident when a Solution Manager Not Enough Dialog Resources alert is created.
SM – Not Enough Spool Resources	Raises an incident when a Solution Manager Not Enough Spool Resources alert is created.
SM – Oracle Tablespace Free Space	Raises an incident when a Solution Manager Oracle Tablespace Free Space alert is created.

Process Name	Description
SM – qRFC Errors	Raises an incident when a Solution Manager qRFC Errors alert is created.
SM – Resolve Locked Users	Triggered by an Resolve Locked Users incident. It attempts to resolve the incident by unlocking the account.
SM – Resolve Not Enough Batch Resources	Triggered by a Not Enough Batch Resources incident. It attempts to resolve the incident by changing the operations mode based on user selection.
SM – Resolve Server Unavailable	Triggered by a SAP server unavailable incident. It attempts to resolve the incident by starting the application server.
SM – tRFC Entries in Status CPICERR	Raises an incident when a Solution Manager – tRFC Entries in Status CPICERR alert is created.
SM – tRFC Entries in Status SYSFAIL	Raises an incident when a Solution Manager – tRFC Entries in Status SYSFAIL alert is created.
Spool Work Process Analysis	Returns a table with the number of spool work processes per application server and number of used spool work processes per application server.
Update Work Process Analysis	Returns a table with the number of update work processes per application server and number of used update work processes per application server.

SAP Solution Manager E2E Response Target Properties

The following table contains the target properties that are imported by the SAP Solution Manager E2E Response automation pack. The target properties that do not have a value defined must be configured by the user prior to using them in processes.

Target Properties	Description	Value Defined?
Solution Manager: Monitored System Log Message Numbers	Enter the system log number and the incident name.	Yes



Note

For information on configuring target properties, see [Managing Target Properties, page 3-24](#).

SAP Solution Manager E2E Response Target Groups

The following target group is imported by the SAP Solution Manager E2E Response automation pack.

Target Group Name	Description
All SAP Solution Managers	Includes all SAP Solution Manager targets.

Viewing Automation Pack Dependencies

Use the Dependencies tab to view the automation packs and adapters referenced by the objects in the automation pack. These object must be installed prior to importing the SAP Solution Manager E2E Response automation pack.

- Step 1** On the Administration—Automation Packs view, select **SAP Solution Manager E2E Response**, right-click and choose **Properties**.
- Step 2** On the SAP Solution Manager E2E Response Properties dialog box, click the **Dependencies** tab.
- Step 3** Review the list of automation packs and adapters referenced by the SAP Solution Manager E2E Response automation pack:

Object Type	Dependency
Automation Packs	<ul style="list-style-type: none"> • Core Automation for SAP • Incident Response for SAP
Adapters	<ul style="list-style-type: none"> • Core Functions Adapter • IBM DB2 Database Adapter • Microsoft SQL Server Database Adapter • Microsoft Windows Adapter • Oracle Database Adapter • SAP ABAP Adapter • SAP Solution Manager Adapter • Terminal Adapter

- Step 4** Click **Close** to close the dialog box.



CHAPTER 3

Getting Started Using the Automation Pack

Before you begin using the content that ships with the automation pack, you must create the objects in Process Orchestrator that are referenced in the processes. These objects include targets, runtime users, task rules for assignments and notifications, and target properties.

This chapter provides basic information on defining the objects. It includes the following sections:

- [Creating an SAP User Account, page 3-2](#)
- [Creating SAP Solution Manager Targets, page 3-2](#)
- [Managing SAP Solution Manager Targets, page 3-6](#)
- [Using Task Rules for Assignments and Notifications, page 3-14](#)
- [Managing Target Properties, page 3-24](#)
- [Managing Global Variables, page 3-26](#)

For additional information about the objects discussed in this chapter, refer to the following documentation:

Document	Description
<i>Process Orchestrator User Guide</i>	General information about Core product features.
<i>Cisco Process Orchestrator Online Help</i>	Information about the objects specific to SAP Solution Manager Adapter (runtime user, target, and activities).
<i>Intelligent Automation for SAP 3.0 Installation Guide</i>	Information about configuring and managing the objects in Process Orchestrator specific to SAP Solution Manager.

Creating an SAP User Account


The SAP User runtime user account is used to connect to the SAP Solution Manager target on which the processes will execute. You can create the SAP User account prior to creating the target or when you create the SAP Solution Manager target and specify the runtime user account.

This section guides you through creating the SAP User account prior to creating the SAP Solution Manager target.

Step 1 In the Definitions workspace, right-click **Runtime Users** and choose **New > SAP User** to open the New SAP User Properties dialog box.

Step 2 On the General tab, specify the following information:



Note The **Required Value**  icon displayed on a tab or page indicates that the field is required and is either missing a value or contains an invalid value.

Field	Description
Display name	Name for the user account that displays in the Console.
User name	User name assigned to the SAP user account that connects to the SAP application server.
Password	Password assigned to the SAP user account that connects to the SAP application server.
Client	SAP client number assigned to the user account.
Description	Information that describes the user account.



Note The Used By tab displays objects used by the runtime user and will remain blank until used by an object.

The History tab displays the history of actions taken against the runtime user and will remain blank until after the initial creation.

Step 3 Click **OK** to close the dialog box.



Note For additional information on creating and managing runtime users, see the *Process Orchestrator User Guide*.

Creating SAP Solution Manager Targets

Before you can create or run processes in your SAP Solution Manager environment, you must create the targets on which the processes will run. You use the New SAP Solution Manager wizard to create SAP Solution Manager targets.

**Note**

The SAP Solution Manager Adapter requires the dll files for SAP .NET Connector 3.0 for .NET 4.0 on x64 version 3.0.7.0 or higher. Before you can configure an SAP Solution Manager target, these files must be installed on the Process Orchestrator server.

See the *Intelligent Automation for SAP 3.0 Installation Guide* for instructions on installing the required files.

**Note**


Prior to creating an SAP Solution Manager target, you must have at least one SAP system that is monitored by Solution Manager. For instructions on creating SAP systems targets, see the *Intelligent Automation for SAP 3.0 Installation Guide*.

This section guides you through creating an SAP Solution Manager target.

Step 1 On the Definitions workspace, right-click **Targets** and choose **New > SAP Solution Manager** to open the New SAP Solution Manager wizard.

Step 2 Click **Next**.



Note The **Required Value**  icon displayed on a tab or page indicates that the field is required and is either missing a value or contains an invalid value.

Step 3 Specify the following information to connect to the SAP Solution Manager system:

Field	Description
Display name	Enter a name for the SAP Solution Manager system. This is the name that will display in the Targets pane.
Organization	Enter the group or organization within the company that owns the target.


Step 4 Click Next.



Note The system information entered on this panel must be unique. Otherwise, an error message displays informing you that the wizard detected another system already registered with the same information.

Step 5 Specify the following information to connect to the SAP Solution Manager target:

Field	Description
Connect using	Choose the connection method from the drop-down list. The fields that display on the panel depend on the connection method selected.
Application server	Choose this option to connect to the SAP Solution Manager target using the SAP application server connection information. Specify the information in the following fields: <ul style="list-style-type: none"> • Server name—Enter the name of the SAP Solution Manager application server. • System number—Enter the SAP Solution Manager system number.

Field	Description
Logon group	<p>Choose this option to establish a connection using a logon group, which contains a group of SAP Solution Manager system instances. When a user logs on to a logon group, the message server directs the users to the server of this group that currently has the lightest load.</p> <p>Specify the information in the following fields:</p> <ul style="list-style-type: none"> • System ID—Enter the SAP Solution Manager system ID (SID). • Message server—Enter the name of the server a user logs on to and that handles the communication between the application servers. For example, transport of update requests and lock requests. • Group name—Enter the name of the Logon Group to be accessed. The name entered in this field is case-sensitive.
Router string (optional)	<p>Enter the router string for accessing the SAP Solution Manager systems via SAPRouter. If you do not specify a router string, Process Orchestrator accesses the SAP Solution Manager system directly.</p> <p>The router string must be formatted as:</p> <p>/H/host01/H/host02/H/</p> <p>where host01 and host02 are the SAP Solution Manager systems that you want to access through the SAPRouter.</p>
Default runtime user	<p>Choose the user account that contains the credentials to connect to the target from the drop-down list.</p> <ul style="list-style-type: none"> • To view the properties for the selected runtime user, click the Properties  tool. • To create a new SAP User, click New > SAP User. See the <i>Intelligent Automation for SAP 3.0 Installation Guide</i>.

Step 6 Click **Next**.

The Options panel is used to specify polling intervals and to map the systems that are being monitored by the Solution Manager target to the SAP System targets configured in Process Orchestrator. The list box displays the systems that are mapped.



Note The matching SAP System targets must already be created in Process Orchestrator.

Step 7 Specify the following information:

Field	Description
Poll Solution Manager alert not older than	Specify the value (in minutes, hours or days) to indicate which SAP Solution Manager alerts to retrieve. Any alerts older than the specified value will be ignored.
Select a system monitored by Solution Manager	Choose the SAP system that is monitored by Solution Manager from the drop-down list.
Select a matching system monitored by Process Orchestrator	Choose the SAP system target that is configured in Process Orchestrator from the drop-down list. This target must already be defined in Process Orchestrator.
Add to List	Click this button to add the mapped configuration to the list of systems to be monitored.
Refresh	Click this button to refresh the list of systems to be monitored.

Step 8 Click **Next**.

Step 9 Verify that the information is correct and click **Finish** to complete the procedure.

The SAP Solution Manager target displays in the Targets pane.

Managing SAP Solution Manager Targets

Use the Definitions—Targets view to manage the SAP Solution Manager targets. From this view, you can enable and disable the target, delete the target, and view and modify the target properties.


Enabling a Target

A target is enabled by default after it is created. If a target is manually disabled, it must be enabled before it is available for execution.

Step 1 On the Definitions—Targets view, use one of the following methods to enable the target:


- In the Targets pane, right-click the target and choose **Enable**.
- In the Targets pane, select the target and then click the **Click here** link in the Details pane.

Step 2 Verify that the status in the Enabled column in the Targets pane is True. If necessary, click the **Refresh**

 tool to update the view.

Disabling a Target

Disabling a target prevents it from being available for execution. However, a disabled target is not removed from the list of targets in the Targets pane.

-
- Step 1** On the Definitions—Targets view, use one of the following methods to disable the target:
- In the Targets pane, right-click the target and choose **Disable**.
 - In the Targets pane, select the target and then click the **Click here** link in the Details pane.
- Step 2** Verify that the status in the Enabled column in the Targets pane is False. If necessary, click the **Refresh**  tool to update the view.
-

Deleting a Target

Before deleting a target, open the SAP Solution Manager Target Properties dialog box and click the **Used By** tab to view where objects are being used by the target. This ensures that deleting the target does not affect any processes or activities.

-
- Step 1** In the Definitions—Targets view, right-click the target and choose **Delete**.
- Step 2** Click **Yes** to confirm the deletion. The target will be removed from the product.
-

Modifying Solution Manager Targets

Use the Definitions—Targets view to display and modify the Solution Manager target properties.

Modifying Display Name and Enabling/Disabling Target

Use the General tab on the Solution Manager Target Properties dialog box to modify the display name of the target, and to enable or disable the target

- Step 1** In the Definitions view, click **Targets** to display the defined targets in the Targets pane.
- Step 2** Double-click the **SAP Solution Manager** target, or right-click and choose **Properties**.
- Step 3** Use the General tab to view or modify the following information:

Field	Description
Display name	Name of the Solution Manager target.
Type	<i>Display only.</i> Type of target.
Owner	User name of the owner of the target. This is typically the person who created the target. Click the Browse <input type="button" value="..."/> tool to change the owner.
Status	<i>Display only.</i> Current status of the target.
Status information	<i>Display only.</i> Information regarding the target status.
Organization	Name of the group within the company that owns the target.
Description	Text description of the target.
Enabled	Check or uncheck the check box to enable or disable the target. The check box is checked by default to indicate the target is enabled.


- Step 4** Click **OK** to save your changes and close the dialog box.

Modifying Connection Information

You can modify the connection information to the SAP Solution Manager target using the Connection tab on the Solution Manager Target Properties dialog box.

- Step 1** In the Definitions view, click **Targets** to display the defined targets in the Targets pane.
- Step 2** Double-click the **SAP Solution Manager** target or right-click and choose **Properties**.
- Step 3** On the SAP Solution Manager Target Properties dialog box, click the **Connection** tab.

Step 4 Modify any of the following information to connect to the Solution Manager system:

Field	Description
Connect using	Choose the connection method from the drop-down list. The fields that display on the panel depend on the connection method selected.
Application server	Choose this option to connect to the SAP Solution Manager system using the SAP application server connection information. Specify the information in the following fields: <ul style="list-style-type: none"> • Server name—Enter the name of the SAP application server. • System number—Enter the SAP system number.
Logon group	Choose this option to establish a connection using a logon group, which contains a group of SAP Solution Manager system instances. When a user logs on to a logon group, the message server directs the users to the server of this group that currently has the lightest load. Specify the information in the following fields: <ul style="list-style-type: none"> • System ID—Enter the SAP system ID (SID). • Message server—Enter the name of the server a user logs on to and that handles the communication between the application servers. For example, transport of update requests and lock requests. • Group name—Enter the name of the Logon Group to be accessed. The name entered in this field is case-sensitive.
Router string (optional)	Enter the router string for accessing the SAP Solution Manager systems via SAPRouter. If you do not specify a router string, Process Orchestrator accesses the SAP system directly. The router string must be formatted as: /H/host01/H/host02/H/ where host01 and host02 are the SAP systems that you want to access through the SAPRouter.
Default runtime user	Choose the user account that contains the credentials to connect to the target from the drop-down list. <ul style="list-style-type: none"> • To view the properties for the selected runtime user, click the Properties  tool. • To create a new SAP User, click New > SAP User. See the <i>Intelligent Automation for SAP 3.0 Installation Guide</i>.

Step 5 Click **OK** to save your modifications and close the dialog box.

Modifying Polling and Mapping Information

You can modify the interval in which the Solution Manager target is polled for alerts using the Options tab on the Solution Manager Target Properties dialog box. You can also view the mappings between systems being monitored by Solution Manager and the SAP systems configured in Process Orchestrator. You can add or remove systems to be monitored.

-
- Step 1** In the Definitions view, click **Targets** to display the defined targets in the Targets pane.
- Step 2** Double-click the **SAP Solution Manager** target, or right-click and choose **Properties**.
- Step 3** On the SAP Solution Manager Target Properties dialog box, click the **Options** tab.
- Step 4** Modify any of the following information:

Field	Description
Solution Manager alert polling interval	Enter the number of seconds in the Solution Manager alert polling interval field that indicates how often the Solution Manager target should be polled for alerts. Note If you change the alert polling interval, you must restart the Process Orchestrator service before the changes are implemented.
Poll Solution Manager alert not older than	Specify the value (in minutes, hours or days) to indicate which SAP Solution Manager alerts to retrieve. Any alerts older than the specified value will be ignored.
Select a system monitored by Solution Manager	Choose the SAP system that is monitored by Solution Manager from the drop-down list.
Select a matching system monitored by Process Orchestrator	Choose the SAP system target that is configured in Process Orchestrator from the drop-down list. This target must already be defined in Process Orchestrator.
Add to List	Click this button to add the mapped configuration to the list of systems to be monitored.
Refresh	Click this button to refresh the list of systems to be monitored.
Remove	To remove a system from being monitored, select the name of the system in the list box and click Remove .

- Step 5** Click **OK** to close the dialog box.
-

Viewing Member Of Properties

You can view the target groups to which a target belongs using the Member Of tab on the SAP Solution Manager Target Properties dialog box.

-
- Step 1** In the Definitions view, click **Targets** to display the defined targets in the Targets pane.
- Step 2** Double-click the **SAP Solution Manager** target, or right-click and choose **Properties**.
- Step 3** On the SAP Solution Manager Target Properties dialog box, click the **Member Of** tab.

- Step 4** In the list box, view the target groups that the target is a member.
 - Step 5** To view the properties of a specific target group, right-click and choose **Properties**.
 - Step 6** Click **OK** to close the dialog box.
-

Viewing Properties

You can view the list of target properties defined for a specific target type using the Properties tab on the Solution Manager Target Properties dialog box.

- Step 1** In the Definitions view, click **Targets** to display the defined targets in the Targets pane.
- Step 2** Double-click the **Solution Manager** target, or right-click and choose **Properties**.
- Step 3** On the Solution Manager Target Properties dialog box, click the **Properties** tab.
- Step 4** In the list box, view the target properties that are assigned to the target.
- Step 5** To modify a target property, right-click and choose **Edit**.



Note For additional information on Target Properties, see the *Process Orchestrator User Guide*.

- Step 6** Click **OK** to close the dialog box.
-

Viewing Used By Properties

You can view the objects that are directly associated with the selected target (for example, an SAP system or process) using the Used By tab on the SAP Solution Manager Target Properties dialog box.

-
- Step 1** In the Definitions view, click **Targets** to display the defined targets in the Targets pane.
 - Step 2** Double-click the **SAP Solution Manager** target, or right-click and choose **Properties**.
 - Step 3** On the SAP Solution Manager Target Properties dialog box, click the **Used By** tab.
 - Step 4** View the objects that are used by the target in the list box.
 - Step 5** To view the properties of a specific object, right-click and choose **Properties**.
 - Step 6** Click **OK** to close the dialog box.
-

Viewing Target History

You can view the history of changes that have been made to the target using the History tab on the SAP Solution Manager Target Properties dialog box.

-
- Step 1** In the Definitions view, click **Targets** to display the defined targets in the Targets pane.
 - Step 2** Double-click the **SAP Solution Manager** target, or right-click and choose **Properties**.
 - Step 3** On the SAP Solution Manager Target Properties dialog box, click the **History** tab.
 - Step 4** View the changes that have been made to the target.
 - Step 5** To view the audit history for a specific action in the list box, right-click the item and choose **Properties**.
 - Step 6** Click **OK** to close the dialog box.
-

Using Task Rules for Assignments and Notifications

Task rules are used to manage task assignments and notifications for tasks, such as incidents and alerts, that are generated from processes. When you import the Core Automation for SAP automation pack, you are prompted to specify the default user or group who should be assigned SAP incidents. By default, this person will receive all assignments unless task rules are created to specify alternate users or groups for specific tasks.

This section guides you through configuring the task rule that ships with the Core Automation for SAP automation pack and provides instructions for creating and managing task rules.

**Note**

If you do not want to create task rules for email notifications, you can use the default notification based on assignment processes that ship with the Core automation pack. These processes are disabled by default and must be enabled if you want notifications to be sent (*see* [Enabling Notification Based on Assignment Processes, page 3-23](#)).

Accessing Task Rules View

The task rule that ships with the Core Automation for SAP automation pack can be accessed from the Definitions—Task Rules view.

-
- Step 1** On the Console, select the Definitions workspace and click **Task Rules** in the navigation pane. By default, all the rules display in the Task Rules pane.
 - Step 2** Click the **Filter by** link and choose **Automation Pack > [Automation Pack Name]** to filter for only the task rules that ship with the specific automation pack.

The following information about the task rules displays by default:

Column	Description
Display Name	The name assigned to the task rule.
Enabled	Indicates whether the task rule is enabled (<i>True</i>) or disabled (<i>False</i>). A disabled task rule is unavailable for execution.
Type	Type of task.
Owner	User name of the person or group who assigned the task rule.
Last Modified Time	The date and time the task rule was last modified.
Last Modified By	The object or user name that last modified the task rule.
Id	Unique ID of the task rule.
Description	Brief description of the task rule.
Type Description	Brief overview of the task rule type.
Created Time	Time at which the task rule was created.
Created Date	Date the task rule was created.
Automation Pack	Name of the automation pack associated with the task rule.



Configuring Task Rules

Use the Task Rules view to configure the task rule that ships with the Core Automation for SAP automation pack.

SAP Default Assignment

The Core Automation for SAP automation pack ships with the Default SAP Assignment task rule, which is used to specify the default user or group who will be assigned all SAP-related incidents unless otherwise specified in task rules. This task rule can be configured during the import process on the Default Incidents Assignee Setup panel or from the Task Rules view in the Console.

- Step 1** In the Definitions workspace, click **Task Rules** in the navigation pane to display the task rules in the results pane.
- Step 2** Click the **Filter by** link and choose **Automation Pack**, and then choose **Core Automation for SAP** from the drop-down list to display the task rules that ship with the automation pack.
- Step 3** Right-click the **SAP Default Assignment** task rule and choose **Properties** to open the SAP Default Assignment Properties dialog box.
- Step 4** Click the **Assign** tab to specify the user or group that should receive assignments for incidents and alerts generated by the processes.
- Step 5** On the Assign tab, click **Add** to open the Select Assignee to Add dialog box.
- Step 6** On the Select Assignee to Add dialog box, specify the assignees using one of the following methods:

- Click the **Reference**  tool to select the appropriate variable reference containing the assignee or list of assignees from the Insert Variable Reference dialog box.
- Click the **Browse**  tool to launch the Select User or Group dialog box to add user to the list of assignees.

Step 7 Click **OK** to add the assignee to the task rule.

Step 8 When you have completed adding assignees to the task rule, click **OK** to close the dialog box.

Creating a New Task Rule

Use the Task Rules view to create a new task rule. The procedure is the same for all types of task rules with the exception of the task-specific tab (Assign, Notify, Update) for the type of task rule you are creating.



Note

Only users with administrative rights can create task rules in Process Orchestrator.

You can create the following types of task rules:

Task Rules	Description
Assign Task Rule	Assigns users to a task.
Notify Task Rule	Notifies users that a task has been created.
Update Task Rule	Specifies the properties to be updated in a task.

Step 1 In the Definitions workspace, right-click **Task Rules** and choose **New > [Task Rule Type]** to open the New Rule Properties dialog box.

Step 2 On the General tab, enter the following information:

Field	Description
Display Name	Name of the task.
Type	<i>Display only.</i> Shows the type of object.
Trigger	<i>Display only.</i> Type of trigger associated with the task rule.
Owner	User name of the owner of the task rule. This is typically the person who created the task rule. Click the Browse <input type="button" value="..."/> tool to launch the Select User or Group dialog box to change the owner.
Description	A brief description of the task rule.
Enabled	The check box is checked by default to indicate that the task rule is available for execution. Uncheck the check box to disable the task rule. If the check box is unchecked, the task rule is disabled and will be unavailable for execution.

Step 3 Click the **Task Types** tab to specify the types of tasks to be executed by the rule.


Step 4 Check the check box for the type of task that will execute the rule.

Task Type	Description
Alert	Alerts reflect potential problems that a user may want to investigate and possibly diagnose the problem.
Approval Request	Specifies the message and choices for the assignee who is approving the task.
Guided Operation	Details the steps a user takes to complete an assigned task.

Task Type	Description
Incident	Task requires an operator to take action in order to resolve an issue.
Input Request	Task requires input from an individual or group.
Review	Task assigns a document for review.



- Step 5** Click the **Conditions** tab to specify the conditions of when the task rule action is to be taken based on an evaluation of the defined conditions.



Note The **Required Value**  icon displayed on a tab or page indicates that the field is required and is either missing a value or contains an invalid value.

- Step 6** On the Conditions tab, define the conditions that must be met for the rule to execute.

Defining a Basic Condition:

- On the Basic page, click **New** to add a new property for the condition that must be met.
- In the Property text field, click the **Reference**  tool to choose a defined variable or reference an object on the Insert Variable Reference dialog box.
- Choose the condition expression from the drop-down list.
- Enter the condition description in the text box or click the **Reference**  tool to choose a defined variable or reference an object on the Insert Variable Reference dialog box.
- Click **New** to define additional properties, if necessary.


Defining an Advanced Condition:

- Click the **Advanced** tab to define a specific type of condition (Compound, Prior Process Instance, Time, or Variable).
- Click the link to modify the option for the condition equation.

Option	Description
AND condition (all conditions must be met)	Click this option if an action is to be taken only when all conditions in the list are <i>true</i> .
OR condition (one condition must be met)	Click this option if an action is to be taken when one condition in the list is <i>true</i> .

- Click **New** and choose the type of condition from the drop-down list.
- Specify the relevant information for the type of condition selected.





Note Click the **Reference**  tool to choose a defined variable or reference an object on the Insert Variable Reference dialog box.

- Click **New** to define additional properties, if necessary.

- Step 7** Click the task rule specific tab (**Assign**, **Notify**, or **Update**) and specify the relevant information for the specific type of rule.

Assign Task Rule



If you are creating an Assign Task Rule, the Assign tab displays on the New Rule Properties dialog box. On the Assign tab, specify the assignees for task rule.

Field	Description
Add	<p>Click this button to launch the Select Assignee to Add dialog box to specify the assignees.</p> <p>On the Select Assignee to Add dialog box, use one of the following methods to specify the assignee:</p> <ul style="list-style-type: none"> • Click the Reference  tool to select the appropriate variable reference containing the assignee or list of assignees from the Insert Variable Reference dialog box. • Click the Browse  tool to launch the Select User or Group dialog box and add user to the list of assignees.
Edit	Select the appropriate assignee in the list and click this button to view or modify the assignee of the task rule.
Remove	Select the appropriate assignee and click this button to remove the assignee from the list.
Remove All	Click this button to remove all specified assignees from the list.

Notify Task Rule

If you are creating a Notify Task Rule, the Notify tab displays on the New Rule Properties dialog box.

On the Notify tab, specify the recipients of the notification that the task rule has executed. You can add individual recipients or include a notification recipient list.

Field	Description
Add notification recipients	<p>Displays list of users to be notified by the task rule.</p> <ul style="list-style-type: none"> • Add—Click this button to launch the Select Notification Recipient to Add dialog box to specify the recipients. <p>On the dialog box, enter the email address for the recipient or click the Reference  tool to select the appropriate variable reference containing the recipient or list of recipients from the Insert Variable Reference dialog box and then click OK.</p> <ul style="list-style-type: none"> • Edit—Select the appropriate recipient in the list and click this button to view or modify the recipient of the task rule. • Remove—Select the appropriate recipient in the list and click this button to remove the recipient from the list. • Remove All—Click this button to remove all specified recipients from the list.
Add notification recipient list	<p>Click the Reference  tool to select the appropriate variable reference containing list of recipients from the Insert Variable Reference dialog box.</p>

Update Task Rule

If you are creating an Update Task Rule, the Update tab displays on the New Rule Properties dialog box.

On the Update tab, specify the properties to be updated after the task rule has executed.

Field	Description
Add	Click this button to add a new property to the Properties to update area.
Remove	Click this button to remove the last property added to the Properties to update area.
Property	From the Property drop-down list, choose the item to update within the task. The properties displayed depend on the selected item.
List action	<p>Choose the appropriate item from the drop-down list to determine which action to take with the selected property:</p> <ul style="list-style-type: none"> • Add Item—Adds item to task. • Remove item—Removes item from task. • Clear—Removes property value from task.
Value	Enter new value for the property.

Step 8 Click **OK** to save the task rule definition and close the dialog box.

Managing Task Rule Definitions

This section provides instructions on modifying task rules in the Definitions—Task Rule view. Only users with administrative rights can modify task rules in Process Orchestrator.



Note


For additional information on managing task rules, see the *Process Orchestrator User Guide*.

Enabling a Task Rule

A task rule is enabled by default. If a task rule is manually disabled, the task rule must be enabled before it is available for execution.

On the Definitions—Task Rules view, select the task rule and then use one of the following methods to enable it:

- On the Results pane, right-click and choose **Enable**.
- or-
- On the Details pane, select **Click here to enable**.


The Enabled column on the Results pane changes to True. If necessary, click the **Refresh**  tool to update the view.

Disabling a Task Rule

Disabling a task rule prevents the item from being available for execution. The disabled task rule is not removed from the list of task rules on the Definitions—Task Rules Results pane.

On the Definitions—Task Rule view, select the task rule and then use one of the following methods to disable it:

- On the Results pane, right-click and choose **Disable**.
- or-
- On the Details pane, select **Click here to disable**.

The Enabled column on the results pane changes to False. If necessary, click the **Refresh**  tool to update the view.

Creating a Copy of a Task Rule

The copy option is used when the user wants to leverage an existing task rule to define a new task rule using existing properties.

-
- Step 1** On the Definitions—Task Rules view, select the appropriate task rule, right-click and choose **Copy**.
- Step 2** On the Results pane, right-click and choose **Paste**.
A copy of the defined task rule is pasted onto the Results pane.
- Step 3** To rename the copied task rule or other properties, right-click and choose **Properties**.
- Step 4** Modify the task rule name, as appropriate, and click **OK** to close the dialog box.
-

Sorting Task Rules

The task rules are executed according to the order they are listed on the Definitions—Task Rules view. You should sort the task rules based on the order in which you want them to execute.

**Note**

All task rules will execute even if there is more than one task rule assigned for the same condition. For example, if you have two assignment rules for the same incident, both rules will be executed in the order listed in the Task Rules view.

On the Definitions—Task Rules view, select the task rule and use one of the following methods to move it to the desired position in the list:

- Drag and drop the task rule into the appropriate position in the list.
- On the Actions toolbar, click **Move Up** or **Move Down**.
- Click the Actions menu and choose **Move Up** or **Move Down**.
- Right-click and choose **Move Up** or **Move Down**.

The list of task rules are sorted according to the selected action.

Deleting a Task Rule

Use the Definitions—Task Rules view to delete task rules that are no longer used.

-
- Step 1** On the Definitions—Task Rules view, select the task rule, right-click and choose **Delete**.
- Step 2** On the Confirm Delete dialog box, click **Yes** to confirm the deletion.
-

Enabling Notification Based on Assignment Processes

If you want to have emails sent to whoever is assigned to a task but do not want to create notification task rules, you can enable the processes that ship with the Core automation pack that send emails based on assignment.

When these processes are enabled, the user or user group who was assigned to tasks will receive the email notification.

-
- Step 1** In the Definitions workspace, click **Processes**.
- Step 2** Click the **Filter by** link and choose **Automation Pack > Core** to filter for the processes that ship with the Core automation pack.
- Step 3** Right-click the appropriate **Notification Based on Assignment** process and choose **Enable**.
- The following processes are for notification based on assignment:

Process Name	Description
Default Alert Notification Based on Assignment	Sends email when an alert gets assigned.
Default Approval Request Notification Based on Assignment	Sends email when an approval request gets assigned.
Default Change Request Notification Based on Assignment	Sends email when an change requests gets assigned.
Default Guided Operation Request Notification Based on Assignment	Sends email when a guide operation request gets assigned.
Default Incident Notification Based on Assignment	Sends email when an incident gets assigned.
Default Input Request Notification Based on Assignment	Sends email when an input request gets assigned.
Default Review Request Notification Based on Assignment	Send email when a review request gets assigned.

Managing Target Properties

The SAP Solution Manager E2E Response processes use target properties to override certain variable properties assigned to targets. For example, target properties can be used to specify a different target when certain conditions occur.

This section provides information on configuring target properties.

Accessing Target Properties

The target properties that ship with the SAP Solution Manager E2E Response automation pack can be accessed from the Definitions—Target Properties view.

- Step 1** On the Console, select the Definitions workspace and click **Target Properties** in the navigation pane. By default, all the properties display in the Target Properties pane.

The following information about the target properties displays by default:

Column	Description
Display Name	Name of the target property.
Description	Text description of the target property.
Value	Value assigned to the target property.
Data Type	Type of value being used for the target property (Boolean, Encrypted String, Identity, Numeric, String, Table).
Automation Pack	Name of the automation pack that provides the target property.
Customizable	Indicates the customization setting for the target property in the automation pack.
Target Types	Indicates the targets associated with the target property.
Last Modified Time	Date and time the variable was last modified.
Last Modified By	Name of the user who last modified the target property.
Id	Unique ID of the target property.
Owner	User name of the owner of the target property. This is typically the person who created the target property.
Created Time	Date and time the target property was created.
Created By	User name of the person who created the target property.

- Step 2** Click the **Filter by** link and choose **Automation Pack > SAP Solution Manager E2E Response** to filter for only the target properties that ship with the specific automation pack.

Configuring Target Properties

You use the Target Properties Properties dialog box to view or modify the target property. You access the properties from the Definitions—Target Properties view.

**Note**

If the Target Properties view is hidden, go to Tools > Options. On the Options dialog box, click the Windows and Layout tab and select the Display target properties definitions node check box.

The following section provides information on configuring target properties that ship with the SAP Solution Manager E2E Response automation pack.

- Step 1** On the Target Properties pane, right-click [**Target Property**] and choose **Properties**.
- Step 2** On the General tab, review the information in the Description field to determine the values that need to be specified for the target property.
- Step 3** Click the **Value** tab to view or modify the default value for all targets.

**Note**

The tab in the second position will depend on the variable type. See the *Process Orchestrator User Guide* for instructions on configuring the different types of target properties.

- Step 4** Click in the cell to specify the default value or change the default value for all targets.
- Step 5** If you want to specify different values to be used on specific targets, click the **Target Values** tab to specify the values to override the default values and the targets on which to use the overrides.
- Step 6** Click **New** to add a new target override.
- Step 7** On the Target Property Value dialog box, click one of the following radio buttons to indicate which target(s) will use the override value:
- Set the value for a single target—Click this radio button to specify only one target that will use the override value.
 - Set the same value for multiple targets—Click this radio button to specify multiple targets that will use the override value.
- Step 8** Click the **Browse** icon to open the Select Target dialog box.
- Step 9** Select the target in the list and click **OK**.
- Step 10** In the Value area, click in the cell to specify the override values to be used for the specified targets and click **OK**.
- The target override displays on the Target Values tab.
- Step 11** Click **OK** to close the dialog box and save your changes.

**Note**

The Target Types tab is only available if you have explicit rights to the object. See the *Process Orchestrator User Guide* for information on using this property page.

Managing Global Variables

The processes use global variables for information that is used on a regular basis to avoid having to specify the same information in several processes or activities. Some of the variables that ship with the automation packs are configured with default values but can be modified to meet the requirements for your specific environment. Other variables do not have default values defined and must be defined by the user before it can be used in the processes.

The Core Automation for SAP automation pack ships with the global variables that must be configured before they can be used in the processes.

Accessing Global Variables

The global variables that ship with the Core Automation for SAP automation pack can be accessed from the Definitions—Global Variables view.

- Step 1** On the Console, select the Definitions workspace and click **Global Variables** in the navigation pane. By default, all the variables display in the Global Variables pane.
- Step 2** Click the **Filter by** link and choose **Automation Pack > Core Automation for SAP** to filter for only the global variables that ship with the specific automation pack.

The following information about the variables displays by default:

Column	Description
Display Name	Name of the global variable.
Description	Brief overview of the global variable.
Value	Value of the variable.
Data Type	Type of value being used for the variable (Boolean, Encrypted String, Identity, Numeric, String, Table).
Automation Pack	Name of the automation pack that provides the object.
Last Modified Time	Time the global variable was last modified.
Last Modified By	Name of the user who last modified the global variable.

Configuring Global Variables

SAP Alert Suppression Time Properties

The SAP Alert Suppression Time global variable contains the length of time (in seconds) that SAP alerts will be suppressed when duplicated. After this time, a new alert and incident will be created.

- Step 1** In the Definitions view, click **Global Variables** in the navigation pane to display the variables in the Global Variables pane.

- Step 2** Click the **Filter by** link and choose **Automation Pack > Core Automation for SAP** to filter for only the global variables that ship with the Core Automation for SAP automation pack.
- Step 3** In the Global Variables pane, right-click the **SAP Alert Suppression Time** global variable and choose **Properties**.
- Step 4** In the Value text field, enter the number of seconds to suppress duplicate alerts and click **OK**.
-



CHAPTER 4

Managing SAP Solution Manager E2E Response Processes

This chapter provides information on using the product, specific to the SAP Solution Manager E2E Response automation pack. It includes information on accessing the SAP Solution Manager E2E Response processes and filtering for specific processes, managing the SAP processes, starting a process, and viewing a running process, its results, and the automation summary generated by the process.

It includes the following sections:

- [Accessing SAP Solution Manager E2E Response Processes, page 4-2](#)
- [Managing SAP Solution Manager Processes, page 4-3](#)
- [Running Processes, page 4-8](#)
- [Viewing Process Results, page 4-9](#)
- [Viewing Automation Summary, page 4-11](#)



Note

Before you can run the SAP Solution Manager E2E Response processes, you must configure the objects that are referenced by the processes and activities. See [Chapter 3, “Getting Started Using the Automation Pack”](#) for information on configuring the SAP-related objects in Process Orchestrator.

Accessing SAP Solution Manager E2E Response Processes

The processes that ship with the product can be accessed from the Definitions—Processes view.

Step 1 On the Console, select the Definitions workspace and click **Processes** in the navigation pane. By default, all the processes display in the Processes pane.

If you have multiple automation packs installed, you can filter the processes to display the processes specific to the automation pack.

Step 2 In the upper portion of the Processes pane, click the **Filter by** link and choose **Automation Pack**.

Step 3 In the drop-down list, choose **SAP Solution Manager E2E Response**.

The processes display in the Processes pane.

Managing SAP Solution Manager Processes


This section provides information on managing the SAP Solution Manager processes, including:

- Enabling and disabling processes
- Enabling and disabling the process archival feature
- Creating a Solution Manager Alert Trigger

Enabling a Process

Some of the processes that ship with the automation packs are disabled by default to reduce the load on the server. These processes must be enabled before they can execute.


Perform the following steps to enable a process.

-
- Step 1** In the Processes view, navigate to the process that you want to enable (disabled processes appear dimmed).
- Step 2** Use one of the following methods to enable the process:
- Right-click the process and choose **Enable** from the submenu.
 - In the Process Editor, click the **General** tab and then check the **Enabled** check box. Click the **Save**  tool to save your changes to the process and close the Process Editor.
-

Disabling a Process

Disabling a process prevents the process from executing. You may want to disable some processes to reduce the load on your server or while you are modifying the process definition.

Perform the following steps to disable a process.

-
- Step 1** In the Processes view, navigate to the process that you want to disable.
- Step 2** Use one of the following methods to disable the process:
- Right-click the process and choose **Disable** from the submenu.
 - In the Process Editor, click the **General** tab and then uncheck the **Enabled** check box. Click the **Save**  tool to save your changes to the process and close the Process Editor.
-

Modifying Process Instance Archival

Process Orchestrator provides an option in the process definition that allows you to choose whether or not to archive process and activity execution in the Process Orchestrator Process database. Disabling the **Archive completed instances** option helps improve performance and minimize the size of the database. It is also useful when debugging the execution of processes.

The automation packs shipped by Cisco normally have the archival functionality disabled by default for the SAP Solution Manager E2E Response processes. If you want to view the execution of a process and its activities, or view the process instances after a process has completed, you must enable the archival functionality in the process definition.

Perform the following steps to enable or disable the archival feature.

-
- Step 1** In the Processes view, navigate to the process you want to flag for archival.
 - Step 2** Right-click the process and choose **Edit** from the submenu.
 - Step 3** On the process Properties dialog box, click the **Options** tab.
 - Step 4** On the **Options** tab, click one of the following radio buttons to indicate how you want to archive the process instance.

Field	Description
Never archive any instances	Click this radio button to indicate that the process should not be stored upon completion.
Only archive failed instances	Click this radio button to indicate that only failed instances should be archived.
Archive all completed instances	Click this radio button to indicate that the process should be stored upon completion.
Archive based on condition	Click this radio button to indicate that the process should be stored based on the condition (True/False) selected. Click the Browse <input type="button" value="..."/> tool to launch the Archive Condition dialog box and select the condition.

Creating a Solution Manager Alert Trigger

Use the Solution Manager Alert trigger to specify the properties in the monitoring tree element (MTE) that must be matched before an alert is generated. When the specified alert is generated, the process is executed.

-
- Step 1** On the Definitions—Processes view, use one of the following methods to open the Process Editor:
 - Select an existing process, right-click and choose **Edit**.
 - Right-click **Processes** in the navigation pane and choose **New > Process**.
 - Step 2** On the Process Editor properties, click the **Triggers** tab.
 - Step 3** On the Triggers tab, click **New > Solution Manager Alert**.

Step 4 On the General tab, enter the following general information about the trigger:


Field	Description
Display name	Name of the trigger that displays in the Processes pane.
Type	<i>Display only.</i> Type of trigger.
Description	Text description of the trigger.
Enabled	Check or uncheck the check box to enable or disable the trigger. The check box is checked by default. If you uncheck the check box, the trigger is disabled and will be unavailable.

Step 5 Click the **Alert** tab to specify the alert criteria.

Step 6 On the Alert tab, check the check box for the criteria to match and then specify the relevant information:

Field	Description
Category	Specify the category in Solution Manager to be matched.
Managed object name	Specify the managed object name in Solution Manager to be matched.
Managed object type	Specify the managed object type in Solution Manager to be matched.
System Id	Specify the SAP system ID for the system that generated the alert.
Alert name	Specify the name of the alert in Solution Manager.
Alert technical name	Specify the technical name of the alert in Solution Manager.
Description	Specify a text description of the alert.
Alert Rating	Check the check box next to the severity level of the alerts to be monitored: <ul style="list-style-type: none"> • Red • Yellow • Green • Unknown









Note Click the **Reference**  tool to choose a defined variable or reference an object on the Insert Variable Reference dialog box.

Click the **Insert Wildcard**  tool to choose a wildcard.

Step 7 Click the **Targets** tab.



Step 8 On the Targets tab, specify the target on which to monitor for alerts that will trigger the process:

Field	Description
Monitor on this target	<p>Click this radio button and then click the Browse  tool to launch the Select Targets dialog box and select a specific target to be monitored for the fault.</p> <p>To view the properties for the target, click the Properties  tool.</p>
Choose a target reference	<p>Click this radio button and then click the Reference  tool to choose a target reference property.</p> <p>You can also click the Browse  tool to launch the Select Target Group dialog box and select a specific target to be monitored for the alert.</p>
Monitor on this target group	<p>Click this radio button and then click the Browse  tool to launch the Select Target Group dialog box and select a specific target group to be monitored for the alert.</p> <p>To view the properties for the target group, click the Properties  tool.</p> <p>If this option is selected, you must also specify which targets to monitor for events:</p> <ul style="list-style-type: none"> • All targets in this group—Click this radio button to monitor events on all targets in the target group. • Choose a target using this algorithm—Click this radio button to choose a target from the eligible target group members and specify the criteria to be met.

Step 9 Click the **Conditions** tab.


Step 10 On the Conditions tab, specify the conditions when the trigger should execute based on an evaluation of the defined conditions.

Defining a Basic Condition:

- On the Basic page, click **New** to add a new property for the condition that must be met.
- In the Property text field, click the **Reference**  tool to choose a defined variable or reference an object on the Insert Variable Reference dialog box.
- Choose the condition expression from the drop-down list.
- Enter the condition description in the text box or click the **Reference**  tool to choose a defined variable or reference an object on the Insert Variable Reference dialog box.
- Click **New** to define additional properties, if necessary.

Defining an Advanced Condition:

- Click the **Advanced** tab to define a specific type of condition (Compound, Prior Process Instance, Time, or Variable).
- Click the AND/OR link to modify the option for the condition equation.
- Click **New** and choose the type of condition from the drop-down list.
- Specify the relevant information for the type of condition selected.

Click the **Reference**  tool to choose a defined variable or reference an object on the Insert Variable Reference dialog box.

- e. Click **New** to define additional properties, if necessary.



Note For additional information on creating Conditions, see the *Process Orchestrator User Guide*.

Step 11 Click **OK** to complete the trigger definition and close the dialog box.


Running Processes

The processes that ship with the product will run based on the trigger that was defined in the process definition. For processes that are triggered by a schedule, you can also manually start a process at any time (ad hoc). This section guides you through starting a process and viewing its progress as it runs.

**Note**

You can only view a running process and the process instances for processes that have the Archive completed instances feature enabled. See [Modifying Process Instance Archival, page 4-4](#) for information on enabling the archival feature on a specific process.

Starting a Process

-
- Step 1** In the Processes view, right-click the process and choose **Start Process** from the submenu. The Confirm Start Process dialog box displays.
- Step 2** On the Confirm Start Process dialog box, click the **Target** or **Target Group** radio button and then click the **Browse**  tool to open the Select Target dialog box.
- Step 3** Select the target in the list and then click **OK**.
- Step 4** On the Confirm Start Process dialog box, click **OK** to start the process. The Start Process Results dialog box displays. Proceed to [Viewing Running Process, page 4-9](#).
-

Viewing Running Process

After starting the process, you can use the Process Viewer to view the process as it runs through each activity.

**Note**

You can only view a running process and the process instances for processes that have the Archive completed instances feature enabled. See [Modifying Process Instance Archival, page 4-4](#) for information on enabling the archival feature on a specific process.

-
- Step 1** On the Start Process Results dialog box, right-click the process and choose **Observe**.
The Process Viewer displays the process workflow.
- Step 2** View the process as it proceeds through the workflow.
The activities within the process workflow will change to green as they complete (succeed). If an activity fails, an incident is created.
- Step 3** When the process completes, close the Process Viewer and proceed to [Viewing Process Results, page 4-9](#).
-

Viewing Process Results

After a process completes, you can view the results in the Operations workspace. This section guides you through viewing the results from running the process.

**Note**

You can only view a running process and the process instances for processes that have the Archive completed instances feature enabled. See [Modifying Process Instance Archival, page 4-4](#) for information on enabling the archival feature on a specific process.

Accessing Process View

-
- Step 1** On the Operations workspace, expand **Process Views** in the navigation pane and click **View Adhoc** (since the process was manually executed).
- Step 2** Using the **Filter by** link, choose **Automation Pack** and then choose **SAP Solution Manager E2E Response** from the drop-down list.
- Step 3** Scroll to the process and select it.
- Step 4** In the View Results pane, expand the process to view each activity in the process workflow.
- Step 5** Review the status of the process and each activity within the process to verify that it has succeeded.
-

Viewing Activity Results

You can view the results of a specific activity within the process using the Activity Instance Properties dialog box.

-
- Step 1** In the View Results pane, scroll to an activity.
 - Step 2** Right-click [**process activity**] and choose **Properties**.
 - Step 3** Click the appropriate tab to view the results. The tab that displays depends on the activity.
 - Step 4** When you have completed reviewing the results, click **Close** to close the dialog box.
-

Viewing Incidents

When a process detects an issue that requires action, an incident is generated. If you have configured the product to send notifications to a specific person in your organization, that person will receive an email notification whenever an incident is generated. You can also view these incidents in the Task Views on the Operations workspace.

-
- Step 1** On the Operations workspace, expand **Task Views** in the navigation pane and click **View Incidents**.
 - Step 2** In the View Incidents pane, choose **View all tasks** from the Task Assignee drop-down list to display all the incidents in the View Results pane.
 - Step 3** To view a specific incident, right-click the incident and choose **Open**.
The Incident Report displays in your web browser.
-

Viewing Automation Summary

When incidents are generated, Process Orchestrator delivers an online Automation Summary that details the analysis that was performed to identify a situation that may require action. It also shows relevant diagnostic and state information captured while performing the situation analysis, and provides a recommended resolution for the situation.

You can access the Automation Summary from the Tasks View on the Operations workspace.

-
- Step 1** On the Operations workspace, expand **Task Views** in the navigation pane and click **View Incidents**.
 - Step 2** In the View Incidents pane, click the **View all tasks** radio button to display the incidents in the View Results pane.
 - Step 3** Right-click [**Incident Name**] and choose **View Automation Summary**.
The Automation Summary displays in your web browser.
-



APPENDIX **A**

Understanding the Core Automation for SAP Content

The Cisco Process Orchestrator Automation Pack for Core Automation for SAP contains content that is used in the other SAP-related automation packs.

This appendix contains the content included in the Core Automation for SAP automation pack. It contains the following sections:

- [Automation Pack Content, page A-1](#)
- [Automation Pack Dependencies, page A-4](#)

Automation Pack Content

Use the automation pack Properties dialog box to view the content (objects) included in the automation pack. For instructions on accessing the automation pack properties, see [Accessing Automation Pack Properties, page 2-2](#).

Core Automation for SAP Task Rules

The following table contains the task rule that is imported by the Core Automation for SAP automation pack.

Task Rule	Description
SAP Default Assignment	Default user or group who will be assigned all SAP-related incidents.

For information on configuring Task Rules, see [Using Task Rules for Assignments and Notifications, page 3-14](#).

Core Automation for SAP Global Variables

The following table contains the global variables that are imported by the Core Automation for SAP automation pack.

Global Variable Name	Description
SAP Alert Suppression Time	Used to specify the time Process Orchestrator SAP alerts will be suppressed when duplicated. After this time, a new alert and incident will be created. Enter the time in seconds.
Transaction Analyzer Report Location	If you have Cisco Transaction Analyzer installed, you use this URL to access Transaction Analyzer reports folder.

For instructions on configuring global variables, see [Managing Target Properties, page 3-24](#).

Core Automation for SAP Processes

The Core Automation for SAP automation pack contains support processes that may be triggered by alerts and incidents from processes in the other SAP automation packs. You must enable the processes that will be used in your environment before the other processes can be successfully executed.

For instructions on enabling processes, see [Chapter 4, “Managing SAP Solution Manager E2E Response Processes.”](#)

The following table contains the processes that are imported by the Core Automation for SAP automation pack.

Process Name	Description
Disable SAP System Monitoring	Allows users to disable the SAP system in Process Orchestrator. This process can be used as an example to create custom processes to disable/enable SAP system monitoring during scheduled downtime.
Enable SAP System Monitoring	Allows users to enable the SAP system in Process Orchestrator. This process can be used as an example to create custom processes to disable/enable SAP system monitoring during scheduled downtime.
Example – Transaction Analyzer Link	Example process for linking to Transaction Analyzer.
Publish SAP Alerts on Windows Event Log	Alerts created by processes in the Automation for SAP BW and BWA automation pack will create events in the Windows event log in the Process Orchestrator server. This is necessary for integration with management frameworks such as Microsoft SCOM 2007 and HP OpenView for Windows. Note This process must be enabled if you have integrated Process Orchestrator with SCOM 2007 or HP OpenView.
Reset SAP System Alerts and Incidents	Closes all the alerts and incidents for the selected SAP system in Process Orchestrator.

Process Name	Description
SAP Adapter Connection Issue	Monitors the health of Process Orchestrator connection to SAP systems.
SAP Process Execution Error	Raises an incident when there are errors in activities executed in SAP processes.

Core Automation for SAP Target Groups

The Core Automation for SAP automation pack provides the target groups that are used by the SAP processes. Most of the target groups are automatically populated with members when the targets are configured. For those that are not automatically populated, you must manually add the members. For information on adding members to target groups, see the *Process Orchestrator User Guide*.

The following table contains the target groups that are imported by the Core Automation for SAP automation pack.

Target Group Name	Description	Automatically Populated with Members
All Cisco UCS Managers (SAP)	All UCS Managers.	Yes
All SAP ABAP	All SAP systems configured with component ABAP.	Yes
All SAP ABAP 46C	All SAP systems configured with component ABAP and version 46C.	Yes
All SAP ABAP non 46C	All SAP systems configured with component ABAP and not version 46C.	Yes
All SAP BI Warehouse	All SAP BI Warehouse targets.	Yes
All SAP Java	All SAP systems configured with component Java.	Yes
All SAP Systems	All SAP systems.	Yes
All SAP Systems – DB2 Mainframe	All SAP systems configured with database DB2 Mainframe.	Yes
All SAP Systems – DB2 UDB	All SAP systems configured with database DB2 UDB.	Yes
All SAP Systems – Oracle	All SAP systems configured with database Oracle.	Yes
All SAP Systems – SQL Server Database	All SAP systems configured with database SQL Server.	Yes
All Unix Servers (SAP)	All Unix servers.	Yes
All Windows Computers (SAP)	All Windows server.	Yes
Location Availability Monitors	Windows computers that have Availability Monitor Utility installed. Availability Monitor is used to monitor location availability. Contact Cisco Systems support to download the utility.	No

Core Automation for SAP Categories

The Core Automation for SAP automation pack ships with categories that are used by the SAP processes. The following categories are imported by the Core Automation for SAP automation pack.

- SAP
- SAP APO
- SAP Application Layer
- SAP Availability
- SAP Background Processing
- SAP BW
- SAP Communication
- SAP Configuration
- SAP Database DB2
- SAP Database DB2 Mainframe
- SAP Database Informix
- SAP Database MS SQL Server
- SAP Database Oracle
- SAP Database SAP DB
- SAP Infrastructure ABAP
- SAP Infrastructure J2EE
- SAP Operating System
- SAP Performance Metrics
- SAP PI
- SAP Spool System
- SAP System Errors
- SAP Update
- SAP Examples
- SAP Operations
- SAP Self Monitoring

Automation Pack Dependencies

Use the Dependencies tab on the automation pack Properties dialog box to view the automation packs and adapters referenced by the objects in the automation pack. These objects must be installed prior to importing the Core Automation for SAP automation pack.

For instructions on accessing the automation pack properties, see [Accessing Automation Pack Properties, page 2-2](#).

Object Type	Dependency
Automation Packs	<ul style="list-style-type: none"> • Core
Adapters	<ul style="list-style-type: none"> • Core Functions Adapter • Microsoft Windows Adapter



INDEX

A

accessing

global variables [3-26](#)

target properties [3-24](#)

task rules [3-14](#)

approver for SAP incidents, specifying [1-3](#)

assignments and notifications [3-14](#)

Assign Task Rule, creating [3-17, 3-19](#)

automation pack content [A-1](#)

Automation Pack Import Wizard

launching [1-2](#)

C

categories

Core SAP Automation [A-4](#)

configuring task rules [3-15](#)

copying task rules [3-22](#)

Core Automation for SAP automation pack

importing [1-1, 1-3](#)

creating

Assign Task Rule [3-17, 3-19](#)

Notify Task Rule [3-20](#)

runtime user [3-2](#)

Update Task Rule [3-20](#)

credentials

SAP User [3-2](#)

D

default

recipient for SAP incidents, specifying [1-3](#)

runtime user, specifying [3-5, 3-9](#)

deleting

SAP Solution Manager targets [3-7](#)

deleting task rules [3-22](#)

disabling

SAP Solution Manager targets [3-7](#)

disabling task rule [3-21](#)

E

email notifications [3-14](#)

enabling

notification based on assignment processes [3-23](#)

SAP Solution Manager targets [3-6](#)

task rule [3-21](#)

F

filtering

global variables [3-26](#)

G

global variables [3-26](#)

accessing [3-26](#)

Core SAP Automation [A-2](#)

filtering [3-26](#)

I

importing

Core Automation for SAP automation pack [1-1, 1-3](#)

M

managing

- global variables [3-26](#)
- SAP Solution Manager targets [3-6](#)
- target properties [3-24](#)
- task rules [3-21](#)

message server, specifying [3-5, 3-9](#)

monitor

- server availability [3-5](#)

N

Notify Task Rule, creating [3-20](#)

O

objects, viewing [2-3](#)

P

processes

- Core SAP Automation [A-2](#)
- notification based on assignment [3-23](#)

properties

- automation packs [2-3](#)
- SAP Solution Manager target [3-8](#)

R

router string, specifying [3-5, 3-9](#)

runtime user

- creating
 - SAP User, creating [3-2](#)

S

SAP incidents and approvals

specifying default [1-3](#)

SAP Solution Manager targets

- disabling [3-7](#)
- enabling [3-6](#)
- managing [3-6](#)

SAP system number [3-4, 3-9](#)

SAP User

credentials, specifying [3-2](#)

server availability

specifying servers [3-5](#)

sorting task rules [3-22](#)

specifying

- application servers, availability monitoring [3-5](#)
- default runtime user [3-5, 3-9](#)
- message server [3-5, 3-9](#)
- router string [3-5, 3-9](#)
- SAP incidents approver [1-3](#)
- SAP incidents recipient [1-3](#)
- SAP system number [3-4, 3-9](#)
- SAP User credentials [3-2](#)

T

target groups

Core SAP Automation [A-3](#)

target properties

- accessing [3-24](#)
- managing [3-24](#)

targets

- deleting [3-7](#)
- history [3-13](#)
- Used by [3-12](#)

task rules [3-14](#)

- accessing [3-14](#)
- assign [3-17](#)
- conditions [3-18](#)
- configuring [3-15](#)
- copying [3-22](#)
- deleting [3-22](#)

disabling [3-21](#)
enabling [3-21](#)
General properties [3-17](#)
managing [3-21](#)
sorting [3-22](#)
task types [3-17](#)

U

Update Task Rule, creating [3-20](#)

V

viewing

automation pack content [A-1](#)
automation pack properties [2-3](#)
Core SAP Automation categories [A-4](#)
Core SAP Automation global variables [A-2](#)
Core SAP Automation processes [A-2](#)
Core SAP Automation target groups [A-3](#)
objects using target [3-12](#)
target history [3-13](#)

