Process Automation Guide for Assessment for SAP BWA

Release 3.0
December 2013

C O N T E N T S

Process Automation Guide for Assessment for SAP BWA

New and Changed Information

New and changed information for the most recent releases of the Cisco Process Automation Guide for Assessment for SAP BWA is as follows:

- Latest Release
- Previous Releases

Latest Release

Table 1 *December 2013— Process Automation Guide for Assessment for SAP BWA 3.0 Changes*

Feature	Location
Revised Text Part Number	Front cover, footers
Updated Trademark and Copyright date	Inside cover page
Updated the product name	All Chapters

Previous Releases

Table 2 *September 2011—Cisco TEO Automation Pack for Assessment for SAP BWA 2.2 Changes*

Feature	Location
Updated guide name, automation pack name and added Text Part Number to document.	All
Changes/Updates to Importing the Automation Pack include: • Disable all imported processes during import feature. • New Default Incidents Assignee Setup panel in Automation Pack Import Wizard (Core Automation for SAP tap).	Chapter 1, "Importing Automation Packs"
Renamed and reorganized content in the Understanding Automation Pack Objects chapter; included reports in this chapter.	Chapter 2, "Understanding the Automation Pack Content"
New chapter on getting started using the automation pack; includes information about runtime users, targets, task rules, target properties, and global variables.	Chapter 3, "Getting Started Using the Automation Pack"
Removed Managing Global Variables chapter; moved information to Getting Started Using the Automation Pack chapter.	Chapter 3, "Getting Started Using the Automation Pack"
Changes to Managing Assessment for SAP BWA Processes chapter: • Removed Modifying Process Schedule • Removed Creating Automation Pack for New Processes **Note** See the *Cisco Process Orchestrator User Guide* for information on these features.	Chapter 4, "Managing Assessment for SAP BWA Processes"
Added appendix for the Core Automation for SAP automation pack content.	Appendix A, "Understanding the Core Automation for SAP Content"

Preface

The SAP Automation pack (tap) 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, target properties, task rules and knowledge base articles.

The SAP Automation Pack for Assessment for SAP BWA contains the content used to generate an assessment report to automate query evaluation and hardware sizing necessary for implementing SAP BWA. This guide is intended to provide information on importing and using the automation pack in CPO.

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 referened by the content in the automation pack—runtime users, targets, task rules, target properties, and global variables.
Chapter 4	Managing Assessment for SAP BWA Processes	Provides information on using and managing the Assessment for SAP BWA 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.
italic font	Document titles, new or emphasized terms, and arguments for which you supply values are in *italic* font.
[ ]	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.
`courier` font	Terminal sessions and information the system displays appear in `courier` font.
< >	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 Cisco 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.

Open Source License Acknowledgements

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

Obtaining Documentation and Submitting a Service Request

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

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

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

1

Importing Automation Packs

The *Cisco Process Orchestrator Installation Guide* provides instructions for installing Cisco Process Orchestrator (CPO) and the core components. During the initial installation of Cisco Process Orchestrator, you can choose to import the automation packs, or import them later from within the Console.

The SAP Automation Pack for Assessment for SAP BWA has a dependency on the Cisco Process Orchestrator Automation Pack for Core Automation for SAP so this automation pack must be imported prior to importing the Assessment for SAP BWA automation pack.

This chapter guides you through importing the automation packs. It contains the following sections:

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 either open the wizard immediately after installing Cisco 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.

The Select Automation Packs dialog box displays the available automation packs. All automation packs are checked by default.

Step 2 Ensure that the following check boxes are checked and then click **OK** to launch the Automation Pack Import Wizard.

- Core Automation for SAP
- Assessment for SAP BWA

> **Note** *See* the *Cisco Process Orchestrator Installation Guide* for instructions on importing the Core automation pack.

Proceed to Importing the Core Automation for SAP.tap, page 1-3.

Opening the Import Wizard in 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 Assessment for SAP BWA automation pack has a dependency on the Core Automation for SAP automation pack, you must first import this automation pack.

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, page 1-3.

Importing the Core Automation for SAP.tap

The Automation Pack Import Wizard guides you through importing the automation packs. 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 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 exit the wizard.

Importing the Assessment for SAP BWA.tap

If you are importing the automation packs from within the Console, you must re-open the Automation Pack Import Wizard to import the Assessment for SAP BWA 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 **Assessment for SAP BWA.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.

Use the Data Extraction panel to specify the destination for the extracted data and the data to be extracted. The Assessment for SAP BWA automation pack provides the following data that can be extracted and the check boxes are checked by default:

- ABAP Transport Files—Extracts the ABAP Transport files that must be installed on the SAP systems to be able to use the RFCs that ship with this automation pack.
- BWA Assessment Files—Extracts the support files used by the Assessment for SAP BWA automation pack.
- SQL Server Reporting Services Reports—Extracts the report files to be imported into SQL Server Reporting Services after the automation pack has been imported.

Step 7   On the Data Extraction panel, accept the default location or click **Browse** to specify a new destination.

Step 8   In the Select data to extract area, verify that the check boxes are checked for the data that you want to extract. If you *do not* want to extract specific data, uncheck the check box.

Step 9   Click **Next**.

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

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 exit the wizard.

Note   After you have completed importing the automation packs, you can import the Assessment for SAP BWA reports from the Console. For instruction on importing reports, *see* the *Cisco Process Orchestrator Installation Guide*.

Importing ABAP Transport or Cisco Add-On

The Assessment for SAP BWA automation pack contains processes that execute RFC calls on the SAP system targets. These RFCs require that require either the *ABAP Transport files* or the *Cisco Add-On file* to be installed on the SAP system targets where the RFCs will be used.

After you have imported the Assessment for SAP BWA automation pack, you must import *one* of the following on the SAP systems where the RFCs will be used:

- ABAP Transport Files (SAP 7.0 or higher systems)
- Cisco Add-On File (SAP 7.0 or higher systems)

Importing the ABAP Transport Files On SAP Systems

You can use the ABAP Transport files that ship with the automation pack on SAP 7.0 or higher systems.

Perform the following procedure to import the ABAP Transport files on all the SAP System targets where the RFCs will be used.

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:\user\[username]\Documents\Cisco\Cisco Process Orchestrator\Extracted Data\ABAP Transports\SAP BW\Transports\7.0 or higher

Step 2   Copy the files to the following locations on the SAP server:

- K files should be copied to usr\sap\trans\cofiles
- R files should be copied to usr\sap\trans\data

Step 3   Log onto the SAP system and run T-code STMS.

Step 4   Follow SAP procedures for performing the transport.

Importing the Cisco Add-On On SAP Systems

Perform the following procedure to import the Cisco add-on file on all SAP System targets where the RFCs will be used.

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:\user\[username]\Documents\Cisco\Cisco Process Orchestrator\Extracted Data\ABAP Transports\SAP BW\Add-on\7.0 or higher

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.

Error Handling, Logging and Tracing for ABAP Add-on

The ABAP Add-On contains API enabled ABAP function modules (RFC's) that are called by the Cisco Process Orchestrator application. This is performed in Process Orchestrator by defining an ABAP adapter step and specifying a method for the SAP Target system in a process. Cisco Process Orchestrator ABAP custom methods perform individual tasks such as updating RFC Destinations, configuring printers, and so on.

In the event the method encounters an error, such as attempting to modify an RFC destination that does not exist, an error result is returned to the Process Orchestrator process. This can then be modeled as an outcome to the activity, and then subsequent actions based on the error returned may be performed.

All RFC activity performed by Process Orchestrator may be traced through SAP Standard RFC tracing functionality. Refer to SAP online help for enabling the trace level for RFC communication on the SAP target system using SAP transaction SM59. The SAP methods that are called may either write log entries to the SAP System Log (SAP Transaction SM21) or to the Application log (SAP Transaction SLG1) depending on the SAP standard application functionality. For instance, the SAP Application log is updated during the BDLS process scenario as this part of the SAP standard application functionality.

Support desk management for ABAP Add-on

SAP Root Cause Analysis ABAP tools can be used to review the performance and execution of the RFC calls performed by the Process Orchestrator system. A read-only SAP Administrator user is used to review the functionality performed by the ABAP methods. The following roles are to be the basis for a composite role that can be adapted to the customer environment:

- SAP_BC_BASIS_MONITORING,

- SAP_BC_SEC_USER_DISPLAY,

- SAP_BC_BTC_DISPLAY,

- SAP_BC_MID_ALE_DISPLAY

C H A P T E R 2

Understanding the Automation Pack Content

The Assessment for SAP BWA automation pack contains the content used to generate an assessment report to automate query evaluation and hardware sizing necessary for implementing SAP BWA.

This chapter provides information on the objects included in the Assessment for SAP BWA automation pack. It contains the following sections:

- Accessing Automation Pack Properties, page 2-2
- Automation Pack Content and Dependencies, page 2-3

Note *See* Appendix A, "Understanding the Core Automation for SAP Content" for information on the Core Automation for SAP Automation Pack Content.

Accessing Automation Pack Properties

You 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 content provided by the automation pack, version number, publish date, the provided 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, select the appropriate tab to view the automation pack properties:

Tab	Description
General	Displays general information about the automation pack.
Objects	Display a list of objects contained 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   Click **Close** to close the dialog box.

Automation Pack Content and Dependencies

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

Note   For information on the content included in the Core Automation for SAP automation pack, *see* Appendix A, "Understanding the Core Automation for SAP Content."

Viewing Automation Pack Content

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

Step 1   On the Administration—Automation Packs view, select **Assessment for SAP BWA**, right-click and choose **Properties**.

Step 2   On the Assessment for SAP BWA Properties dialog box, click the **Objects** tab.

Step 3   On the Objects tab, review the information about the objects provided by the Assessment for SAP BWA 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.
Description	Text description of the object.
Version	Object version.

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

Assessment for SAP BWA Processes

The following table contains the processes that are imported by the Assessment for SAP BWA automation pack.

Process Name	Description
Pulse Check (RSDDSTAT) – BWA Assessment for SAP Systems 7X	Used to generate an assessment report to improve sizing resources for SAP BWA.
Pulse Check (TCT) – BWA Assessment for SAP Systems 7X	Used to generate an assessment report to improve sizing resources for SAP BWA.

For additional information on the processes, see Chapter 4, "Managing Assessment for SAP BWA Processes".

Assessment for SAP BWA Target Properties

The following table contains the target properties that are imported by the Assessment for SAP 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 Property Name	Description	Value Defined?
BWA Pulse Check – Infocube Threshold	Used to specify the infocube threshold by entering the number of rows and ratio in the dimension tables.	Yes
BWA Pulse Check – Queries	Used to specify the most important queries to be used for detail analysis (RSRT) by entering the query technical name in the dimension tables.	No
BWA Pulse Check – Queries – Number of executions	Used to specify the threshold value for query response time. Any queries with response time over this value will be retrieved.	Yes
BWA Pulse Check – Queries – OLAP and DM Times	Used to get the list of queries with response time over the values specified. It will get queries that exceed the value entered for the First Time Check, and if nothing is returned, it will get queries that exceed the value entered for the Second Time Check.	Yes
BWA Pulse Check – Top Queries	Used to specify the number of queries for detail analysis (RSRT) when the query names are not provided in the BWA Pulse Check - Queries target property.	Yes

Assessment for SAP BWA Global Variables

The following table contains the global variables that are imported by the Assessment for SAP BWA automation pack. The variables are used for BWA assessment based on the SAP document, "How to Perform a Pulse Check in BI 7.0". These variables must be configured by the user prior to using them in processes.

Variable Name	Description	Value Defined?
BWA Pulse Check – UCS Architecture File	Used to specify the UCS architecture file path. For example, enter C:\BWA\UCS_Architecture.jpg. The default value is: C:\Documents and Settings\user\My Documents\Cisco\Cisco Process Orchestrator\Extracted Data\BWA Assessment Files\UCS_Architecture.jpg The value specified in this global variable is updated automatically based on the selection when the automation pack is imported. The template is copied to the Process Orchestrator machine during the automation pack import. You can use the current file path or copy it to another directory. Every execution of the Pulse Check process will create a new spreadsheet in the same directory.	Yes

Assessment for SAP BWA Knowledge Base Articles

The knowledge base articles provide information to help understand the results of an activity or process, including a summary of what has occurred, the possible cause of the results, and suggested actions to take to resolve issues with an activity.

The following table provides the knowledge base articles that are provided by the Assessment for SAP BWA automation pack.

Note   To view the knowledge base articles for Assessment for SAP BWA, use the Definitions—Knowledge Base Articles view. *See* the *Cisco Process Orchestrator User Guide* for additional information on knowledge base articles.

Knowledge Base Article Name	Summary Description
Aggregates Analysis	The table displays the number of active and filled aggregates.
Cubes With High Dimension to Fact Table Ratio	The InfoCubes displayed in the table are over size or ratio thresholds, which can indicate performance issues.
InfoCubes With Highest Data Volume	The table displays the InfoCubes with the highest data volume in the system.
Queries With High Database Runtime	The table displays the queries with high database runtime.
Queries With High OLAP Time	The table displays the queries that are performance critical regarding the OLAP time.
RSRT Analysis	The table displays the monitored queries and highlights those that will have a big improvement with BWA.
Total Memory	Displays the total memory used by all infocubes and memory used only by the infocubes that have high response time.

BW Query Time Report

The Assessment for SAP BWA automation pack ships with the BW Query Time Report. This report displays query runtime performance (OLAP and DM) using query statistics metrics from selected RSRT query calls.

Note   For information on using reports, *see* the *Cisco Process Orchestrator User Guide*.

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 Assessment for SAP BWA automation pack.

Step 1   On the Administration—Automation Packs view, select **Assessment for SAP BWA**, right-click and choose **Properties**.

Step 2   On the Assessment for SAP BWA Properties dialog box, click the **Dependencies** tab.

Step 3   Review the list of automation packs and adapters referenced by the Assessment for SAP BWA automation pack. These objects must be installed prior to installing the Assessment for SAP BWA automation pack.

The Assessment for SAP BWA automation pack has the following dependencies:

Object Type	Dependency
Automation Packs	• Core Automation for SAP • Core
Adapters	• Core Functions Adapter • Microsoft Windows Adapter • SAP ABAP Adapter • Generic (Microsoft OLEDB) Database Adapter

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

C H A P T E R **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:

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

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

Creating an SAP User

The Runtime Users feature is used to create a runtime user record to store the information about the user security context. The SAP User runtime user account is used for connecting to SAP ABAP system targets.

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

Perform the following procedure to create an SAP User runtime user account.

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.
User name	User name assigned to the SAP user account that connects to the SAP system or ABAP application server.
Password	Password assigned to the SAP user account that connects to the SAP system or ABAP application server.
Client	SAP client number assigned to the user account.
Description	A description of 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.

Creating SAP System Targets

Before you can create or run processes, you must create the targets on which the processes will run. This section guides you through creating SAP System targets using the New SAP System Wizard.

> **Note** Before you can configure an SAP ABAP system target, the dll files for SAP .NET 3.0 Connector for .NET 4.0 on x64 version 3.0.6.4 or higher must be copied to the Process Orchestrator server. *See* the *Cisco Process Orchestrator Online Help* for instructions on installing these files.

Step 1 In the Definitions view, right-click **Targets** and choose **New > SAP System** from the submenus to open the New SAP System Wizard Welcome panel.

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.

> **Note** You can only create one target for each SAP system. However, for multi-tenant environments, you can create targets for different SAP systems with the same system ID (SID).
>
> When using the same SID for different SAP systems, you must enter the organization for each SAP system so Process Orchestrator can differentiate the alerts and incidents for each system.

Step 3 On the System Setup panel, specify the following information:

Field	Description
Display name	Enter a name for the SAP system. This is the name that will be displayed in the Targets pane.
System Components	
ABAP application servers	Check this check box if the SAP system uses an ABAP connection to the application servers.
Java application servers	*This option is not used for this automation pack.*
SAP database	Check this check box if you want to configure the SAP database that is associated with the SAP system.
Monitor as production system	The check box is checked by default. Certain processes will run only on production systems. If you want to monitor the system as a non-production system (development or sandbox), uncheck the check box.
Organization	Enter the group or organization within the company that owns the target. **Note** If you are configuring multiple SAP systems with the same SID, you must specify the organization for each SAP system target.

Step 4 Click **Next**.

Step 5   On the ABAP Connection panel, specify the connection information for connecting to the SAP ABAP application server.

✎

Note   The system information entered on this panel must be unique.

Field	Description
Connect using:	
Application server	Choose this option to connect to the SAP system using the SAP application server connection information.
Server name	Name of the SAP application server.
System number	SAP system number.
Logon group	Choose this option to establish a connection using a logon group, which contains a group of SAP 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.
System ID	SAP system ID (SID).
Message server	Determines which server a user logs on to and handles the communication between the application servers. For example, transport of update requests and lock requests.
Group name	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 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. • To view the properties for the selected runtime user, click the **Properties** icon. • To create a new SAP User, click **New > SAP User**. *See* Creating an SAP User, page 3-2 for instructions.

Step 6   Click **Next**.

Step 7   On the Server Availability panel, specify the ABAP application servers that you want to monitor for availability and the ability to log in a user:

Field	Description
Servers available for monitoring	All detected servers are selected by default. Verify that the check box next to each server that you want to monitor is checked.
Add	If a server is offline during configuration, it will not be displayed in the list of available servers. To manually add the server, click **Add** and enter the name of the server.
Remove	If you want to remove a server from the list, select the server and click **Remove**.
Select All	If the check boxes have been unchecked and you want all servers to be monitored, click **Select All**.
Deselect All	If all the check boxes are checked and you want to uncheck all of them, click **Deselect All**.

Step 8   Click **Next**.

Step 9   If you selected to monitor the SAP database, on the Database Connection panel, choose the Database type from the drop-down list and enter the information in the appropriate fields:

Field	Description
Server	SAP application server where the database resides.
Database name	Name of the SAP database that is associated with the SAP system.
Database owner	User that owns the rights to the database.
Database source	Data source to connect to the database.
Port Number	Port number used to connect to the database.
Default timeout for Select activity (seconds)	Number of seconds before the activity times out. The default timeout period is 120 seconds.
Default runtime user	Choose the user account that contains the credentials to connect to the database from the drop-down list. • To view the properties for the selected runtime user, click the **Properties** 🖼 tool. • To create a new SAP User, click **New > SAP User**. *See* Creating an SAP User, page 3-2 for instructions.
Connection string	If the database has a custom connection string label appended to the name, check the check box and modify the string in the text field.

Step 10   Click **Next**.

Step 11   On the Completing the New SAP System Wizard panel, verify that the information is correct and click **Finish** to complete the procedure.

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 your 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 3-19).

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 (*True*) or disabled (*False*). 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	*Display only.* Shows the type of object.
Trigger	*Display only.* 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** ... 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.
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:

a. On the Basic page, click **New** to add a new property for the condition that must be met.

b. 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.

c. Choose the condition expression from the drop-down list.

d. 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.

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

Defining an Advanced Condition:

a. Click the **Advanced** tab to define a specific type of condition (Compound, Prior Process Instance, Time, or Variable).

b. 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 *true*.
OR condition (one condition must be met)	Click this option if an action is to be taken when one condition in the list is *true*.

c. Click **New** and choose the type of condition from the drop-down list.

d. Specify the relevant information for the type of condition selected.

> **Note**   Click New. 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.

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	Click this button to launch the Select Assignee to Add dialog box to specify the assignees.
	On the Select Assignee to Add dialog box, use one of the following methods to specify the assignee:
	• 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	Displays list of users to be notified by the task rule. • Add—Click this button to launch the Select Notification Recipient to Add dialog box to specify the recipients. 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**. • 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	Click the **Reference** 🖼 tool to select the appropriate variable reference containing list of recipients from the Insert Variable Reference dialog box.

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.

Field	Description
List action	Choose the appropriate item from the drop-down list to determine which action to take with the selected property: • 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 *Cisco 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 Assessment for SAP BWA 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 Assessment for SAP BWA 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 > Assessment for SAP BWA** to filter for only the target properties that ship with the specific automation pack.

Configuring Target Properties

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

The following section provides information on configuring target properties that ship with the Assessment for SAB BWA 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 *Cisco 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 SAP targets.

Step 5   Click the **Target Values** tab to specify the targets that should be used to override the default value.

Step 6   Click **New** to add a new target override.

Step 7   On the Target Property Value dialog box, click **Add** to choose the target (SAP system) to be used for the override value. This is the SAP system that will be monitored for a value other than the default value.

Step 8   Select the SAP system and click **OK**.

Step 9   On the Target Property Value dialog box, enter the information in the Value area to be used for the specified target and then click **OK**.

The target override displays on the Target Values tab.

Step 10   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 *Cisco 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 Assessment for SAP BWA 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 Assessment for SAP BWA 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 > Assessment for SAP BWA** 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

The Assessment for SAP BWA automation pack contains the BWA Pulse Check – UCS Architecture File. This global variable contains the path to the UCS Architecture file.

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 > Assessment for SAP BWA** to filter for only the global variables that ship with the automation pack.

Step 3   In the Global Variables pane, right-click the global variable and choose **Properties**.

Step 4   In the Value text field, enter the path to the BWA Pulse Check - UCS Architecture file and click **OK**.

CHAPTER **4**

Managing Assessment for SAP BWA Processes

This chapter provides information on using the product, specific to the Assessment for SAP BWA automation pack. It includes information on accessing the Assessment for SAP BWA processes and filtering for specific processes, managing the 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 Assessment for SAP BWA Processes, page 4-2
- Managing SAP Processes, page 4-3
- Running Processes, page 4-5
- Viewing Process Results, page 4-6
- Viewing Automation Summary, page 4-8

Note   Before you can run the Assessment for SAP BWA 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 Assessment for SAP BWA 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 **Assessment for SAP BWA**.

The processes display in the Processes pane.

Managing SAP Processes

This section provides information on managing the Assessment for SAP BWA processes, including:

- Enabling and disabling processes
- Enabling and disabling the process archival feature
- Modifying a process schedule
- Creating an automation pack for new processes

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 the other processes can be successfully executed:

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 OrchestratorProcess database. Disabling the archive option helps improve performance and minimizes 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 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.

✎

Note   The Pulse Check – BWA Assessment process ships with the **Archive completed instances** option enabled.

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** [...] tool to launch the Archive Condition dialog box and select the condition.

Step 5   Click the **Save** tool to save your changes to the process and close the process Editor.

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 the process at any time (adhoc). This section guides you through starting the Pulse Check – BWA Assessment 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 **Pulse Check – BWA Assessment** process and choose **Start Process**.

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 choose the target or target group from the drop-down list.

Step 3   Click **OK** to start the process.

The Start Process Results dialog box displays. Proceed to Viewing Running Process, page 4-5.

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 4-6.

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 Pulse Check – BWA Assessment 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 Console, select the Operations workspace.

Step 2 In the navigation pane, expand **Process Views** and click **View Adhoc** (since the process was manually executed).

Step 3 Using the **Filter by** link, choose **Automation Pack** and then choose **Assessment for SAP BWA** from the drop-down list.

Step 4 Select the process to display the results in the lower pane.

Step 5 In the View Results pane, expand the process to view each activity in the process workflow.

Step 6 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 the activity, right-click and choose **Properties**.

Step 2 On the Activity Instance Properties dialog box, view the state of the activity using the General tab.

Step 3 Click the **Results** tab to view the information that was returned from the activity.

> **Note** The name of the tab where the results display depend on the activity properties.

Step 4 When you have completed reviewing the results, click **Close** to close the dialog box.

Viewing Approval Requests

Some processes require an approval to continue executing once it gets to a certain phase in the process. You can view these approval requests in the Operations workspace.

Step 1   On the Operations workspace, expand **Task Views** in the navigation pane and click **View All**.

Step 2   In the View Results pane, right-click the **Approval Request** and choose **Select Choice**.

The Approval Request displays in the Web Console.

Step 3   Review the information in the Message field to determine how you want to process this request.

Step 4   Click the appropriate radio button to indicate whether you want to **Stop the process** or **Resume the process without RSRT execution**.

Step 5   Click **Complete** to submit the approval and close the Web Console.

Step 6   If the process was waiting for an approval before continuing, you can view the process as it continues to execute.

Viewing Automation Summary

In some processes, 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 All**.

Step 2   In the View All pane, choose **View all tasks** from the Task Assignee drop-down list to display the tasks in the View Results pane.

Step 3   Right-click the object and choose **View Automation Summary**.

The Automation Summary displays in your web browser.

Understanding the Core Automation for SAP Content

The 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 the Automation Pack Import Wizard, page 1-2.

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 3-6.

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 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 Global Variables, page 3-21.

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* Managing SAP Processes, page 4-3.

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 *Cisco 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 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 Examples

- SAP E2E Corrective Actions
- SAP E2E Incident Response
- SAP Infrastructure ABAP
- SAP Infrastructure J2EE
- SAP Operating System
- SAP Performance Metrics
- SAP PI
- SAP Resolution
- SAP Self Monitoring
- SAP Spool System
- SAP System Errors
- SAP Update
- SAP VM
- SAP Operations

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* .

Object Type	Dependency
Automation Packs	- Core
Adapters	- Core Functions Adapter - Microsoft Windows Adapter - SAP ABAP Adapter

Automation Pack Dependencies

INDEX

A

ABAP application server **3-3**

ABAP system connection information **3-4**

accessing

Assessment for SAP BWA processes **2-2**

automation pack properties **2-2**

global variables **3-22**

target properties **3-20**

task rules **3-6**

activity results, viewing **2-6**

approval requests, viewing **2-6**

approver for SAP incidents, specifying **1-3**

Assessment for SAP BWA automation pack

importing **1-4**

Assessment for SAP BWA reports, location **1-5**

assignments and notifications **3-6**

Assign Task Rule, creating **3-9, 3-14**

automation pack content **2-3, A-1**

Automation Pack Import Wizard

launching **1-2**

automation pack properties, accessing **2-2**

automation summary, viewing **2-8**

C

categories

Core SAP Automation **A-4**

configuring

SAP database **3-5**

configuring task rules **3-7**

connection information

SAP ABAP system, specifying **3-4**

connection string **3-5**

copying task rules **3-18**

Core Automation for SAP automation pack

importing **1-3**

creating

Assign Task Rule **3-9, 3-14**

Notify Task Rule **3-15**

Update Task Rule **3-15**

credentials

SAP ABAP system, specifying **3-4**

SAP User **3-2**

D

default

recipient for SAP incidents, specifying **1-3**

runtime user, specifying **3-4**

deleting task rules **3-18**

dependencies

Assessment for SAP BWA, viewing **2-8**

disabling task rule **3-16**

E

email notifications **3-6**

enabling

notification based on assignment processes **3-19**

task rule **3-16**

F

filtering

global variables **3-22**