

HP Operations Orchestration Software

Software Version: 7.51

HP SiteScope Integration Guide

Document Release Date: August 2009

Software Release Date: August 2009



Legal Notices

Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

Restricted Rights Legend

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notices

© Copyright 2009 Hewlett-Packard Development Company, L.P.

Trademark Notices

All marks mentioned in this document are the property of their respective owners.

Finding or updating documentation on the Web

Documentation enhancements are a continual project at Hewlett-Packard Software. You can obtain or update the HP OO documentation set and tutorials at any time from the HP Software Product Manuals web site. You will need an HP Passport to log in to the web site.

To obtain HP OO documentation and tutorials

1. Go to the HP Software Product Manuals web site (<http://support.openview.hp.com/selfsolve/manuals>).
2. Log in with your HP Passport user name and password.

OR

If you do not have an HP Passport, click **New users – please register** to create an HP Passport, then return to this page and log in.

If you need help getting an HP Passport, see your HP OO contact.

3. In the **Product** list box, scroll down to and select **Operations Orchestration**.
4. In the **Product Version** list, click the version of the manuals that you're interested in.
5. In the **Operating System** list, click the relevant operating system.
6. Click the **Search** button.
7. In the **Results** list, click the link for the file that you want.

Where to find Help, tutorials, and more

The HP Operations Orchestration software (HP OO) documentation set is made up of the following:

- Help for Central

Central Help provides information to the following:

- Finding and running flows
- For HP OO administrators, configuring the functioning of HP OO
- Generating and viewing the information available from the outcomes of flow runs

The Central Help system is also available as a PDF document in the HP OO home directory, in the \Central\docs subdirectory.

- Help for Studio

Studio Help instructs flow authors at varying levels of programming ability.

The Studio Help system is also available as a PDF document in the HP OO home directory, in the \Studio\docs subdirectory.

- Animated tutorials for Central and Studio

HP OO tutorials can each be completed in less than half an hour and provide basic instruction on the following:

- In Central, finding, running, and viewing information from flows
- In Studio, modifying flows

The tutorials are available in the Central and Studio subdirectories of the HP OO home directory.

- Self-documentation for operations and flows in the Accelerator Packs and ITIL folders
Self-documentation is available in the descriptions of the operations and steps that are included in the flows.

Support

For support information, including patches, troubleshooting aids, support contract management, product manuals and more, visit the following site: <http://www.hp.com/go/bsaessentialsnetwork>

This is the **BSA Essentials Network** Web page. To sign in:

1. Click **Login Now**.
2. On the **HP Passport sign-in** page, enter your HP Passport user ID and password and then click **Sign-in**.
3. If you do not already have an HP Passport account, do the following:
 - a. On the **HP Passport sign-in** page, click **New user registration**.
 - b. On the **HP Passport new user registration** page, enter the required information and then click **Continue**.
 - c. On the confirmation page that opens, check your information and then click **Register**.
 - d. On the **Terms of Service** page, read the Terms of use and legal restrictions, select the **Agree** button, and then click **Submit**.
4. On the **BSA Essentials Network** page, click **Operations Orchestration Community**.
The Operations Orchestration Community page contains links to announcements, discussions, downloads, documentation, help, and support.

Note: Contact your OO contact if you have any difficulties with this process.

Table of Contents

Warranty	ii
Restricted Rights Legend	ii
Trademark Notices	ii
Finding or updating documentation on the Web	iii
Where to find Help, tutorials, and more	iii
Support	iv
Overview	1
Use cases and scenarios	1
Flows and operations	1
Versions and components	1
Architecture	2
Installation and configuration instructions	2
Operation specifics	2
Enable Monitor	2
Deploy Template	2
Run Monitor	2
Troubleshooting	3
General troubleshooting procedures	3
55713 “SiteScope has encountered a general exception while trying to run monitor named “...”	3
“Unknown Error: Failed to Audit the new created entity: {0} in audit log exception.”	3

Launching flows.....	3
Security	4
Tools.....	4

Overview

This integration enables administrators to build HP Operations Orchestration (OO) flows that are integrated into HP SiteScope and to control OO flows via their SiteScope dashboard.

This document will explain how this integration has been implemented and how to launch flows from within SiteScope. It will also explain the operations that are included for communicating back and forth between OO and SiteScope.

Use cases and scenarios

1. Launch OO flow from within the SiteScope console.

In this scenario, the integration allows administrators to connect specific events or alarms in SiteScope to the starting of OO flows. This type of integration is a simple Incident Management/Runbook use case that includes the following events:

An error is detected by SiteScope and an alarm is raised on the console.

An OO flow is launched to remediate the fault.

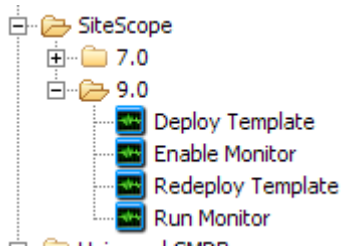
OO automatically acknowledges the event and runs the flow.

OO updates/resets the alarm.

2. Operations that allow the automation of SiteScope administrative tasks. This will include such things as doing automatic SiteScope template deployment. This would allow administrators to tie SiteScope administrative functions to provisioning and maintenance.

Flows and operations

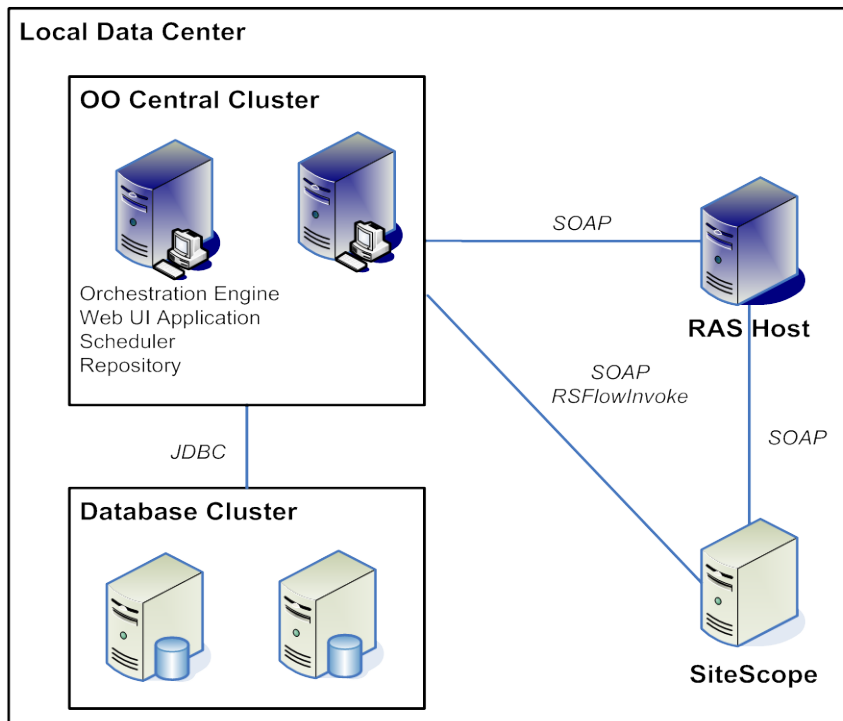
The OO/SiteScope integration includes the following flows and operations in the Studio Library, in the **Integrations** folder.



Versions and components

Operations Orchestration Version	SiteScope Version
7.51	9.00

Architecture



Installation and configuration instructions

Operation specifics

Enable Monitor

This operation can enable OR disable a monitor. Repeatedly enabling or disabling a monitor does not have any side effects (idempotent).

Deploy Template

In SiteScope 9.00, although users are not required to follow the best practice of creating monitors in templates within groups, they must do so before they can deploy the template. In future versions of SiteScope, the best practice is a requirement.

Run Monitor

Due to a validation bug in SiteScope 9.00, monitors that are run via the SOAP API must meet the following path criteria:

3. They must be contained in a parent group with the same name as the monitor. For instance, a monitor named "CPU Monitor ServerName" must have its parent group named "CPU Monitor ServerName."

4. The parent group of the monitor must not be the SiteScope root.

Troubleshooting

General troubleshooting procedures

SiteScope may have a number of errors in its logs indicating that it could not find a resource bundle. This does not adversely affect functional operation and can be safely ignored. Any other error that occurs is numbered or listed as an unknown error. Please report any unmentioned unknown error to OO Support so this can be tracked.

55713 “SiteScope has encountered a general exception while trying to run monitor named “...””

This error typically occurs when trying to run a monitor that does not meet the criteria listed in **Run Monitor**. Please check that the monitor you are trying to run meets these criteria. This error can also occur when the SiteScope path entered is invalid.

“Unknown Error: Failed to Audit the new created entity: {0} in audit log exception.”

This error can occur when attempting to deploy or redeploy a template that fails to meet the criteria mentioned in Enable Monitor.

This operation can enable OR disable a monitor. Repeatedly enabling or disabling a monitor does not have any side effects (idempotent).

Deploy Template.

Launching flows

You can interact with HP Operations Orchestration (OO) by using the various REST based services:

- `https://ooserver:port/PAS/services/http/list`
Retrieves a list of flows from OO.
- `https://ooserver:port/PAS/services/http/execute/<Library Path>`
Used to execute a flow by name (waits for flow to finish before returning).
- `https://ooserver:port/PAS/services/http/execute/<Flow UUID>`
Used to execute a flow by UUID (waits for flow to finish before returning).
- `https://ooserver:port/PAS/services/http/execute_async/<Library Path>`
Used to execute a flow by name (returns immediately after the flow is launched).
- `https://ooserver:port/PAS/services/http/execute_async/<Flow UUID>`
Used to execute a flow by UUID (returns immediately after the flow is launched).

You can launch flows from within SiteScope by hooking an alert action to run a server-side script (bat, vbs, UNIX shell script). You can thus create a batch file that invokes RSFlowInvoke.exe or JRSFlowInvoke.jar to launch a flow in response to an alert. Because alerts do not necessarily need acknowledgements in SiteScope, it is acceptable for the alert to be remedied automatically. You can setup an alert using the **New Alert** wizard.

To force an update of monitors and/or acknowledge alerts, you can use the **Redeploy Template** operation to refresh monitors and reset the status of all alarms in the template.

Security

SiteScope by default does not assign a password to the administrator user and does not have SSL enabled. You can both assign an administrator password and enable SSL on the SiteScope admin console. In the default state, the administrator password is not checked. You must set a password (with the SOAP API), because authentication is not performed with a blank password.

Tools

Following are OO tools that you can use with SiteScope:

- RSFlowInvoke.exe and JRSFlowInvoke.jar
RSFlowInvoke (RSFlowInvoke.exe or the Java version, JRSFlowInvoke.jar) is a command-line utility that substitutes for a Web-browser call in starting a flow. Substituting a command-line for a Web-browser call enables you to start a flow without using Central (although the Central service must be running). RSFlowInvoke (or JRSFlowInvoke) is useful when you want to start a flow from an external system, such as a monitoring application, that can use a command line to start a flow.
- Web Services Wizard
The Web Services Wizard (wswizard.exe) creates OO operations based on the API in the Web Service Definition Language (WSDL) of the Web service that you identify in the wizard. Thus you can use the Web Services Wizard to create operations from your monitoring tool's API.

When you run the Web Services Wizard, you provide it with the WSDL for a given Web service. The WSDL string you provide as a pointer can be a file's location and name or a URL.

These tools are available in the `\%OO_home%\Studio\tools\` folder.