

HP Operations Orchestration

For the Windows and Linux operating systems

Software Version: Content Pack 9

HP SiteScope Integration Guide

Document Release Date: July 2012

Software Release Date: July 2012



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 Notice

© Copyright 2012 Hewlett-Packard Development Company, L.P.

Trademark Notices

Adobe™ is a trademark of Adobe Systems Incorporated.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

UNIX® is a registered trademark of The Open Group.

This product includes an interface of the 'zlib' general purpose compression library, which is Copyright © 1995-2002 Jean-loup Gailly and Mark Adler.

Documentation Updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

To check for recent updates or to verify that you are using the most recent edition of a document, go to:

<http://h20230.www2.hp.com/selfsolve/manuals>

This site requires that you register for an HP Passport and sign in. To register for an HP Passport ID, go to:

<http://h20229.www2.hp.com/passport-registration.html>

Or click the **New users - please register** link on the HP Passport login page.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

Support

Visit the HP Software Support Online web site at:

<http://www.hp.com/go/hpsoftwaresupport>

This web site provides contact information and details about the products, services, and support that HP Software offers.

HP Software online support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the support web site to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract. To register for an HP Passport ID, go to:

<http://h20229.www2.hp.com/passport-registration.html>

To find more information about access levels, go to:

http://h20230.www2.hp.com/new_access_levels.jsp

Contents

HP SiteScope Integration Guide	1
Contents	5
Introduction	6
Purpose of the HP SiteScope Integration	6
Supported Versions	6
Downloading OO Releases and Documents on HP Live Network	6
Getting Started	8
SiteScope Use Cases	8
HP SiteScope Architecture	9
Location of HP SiteScope Integration Operations and Flows in OO Studio	9
Launching HP SiteScope Integration Flows	11
Troubleshooting	12
Troubleshooting Overview	12
General Troubleshooting Procedures and Tools	12
Error Messages	12
Security	14
OO Tools You Can Use with the HP SiteScope – OO Integration	15

Chapter 1

Introduction

This chapter includes:

Purpose of the HP SiteScope Integration	6
Supported Versions	6
Downloading OO Releases and Documents on HP Live Network	6

Purpose of the HP SiteScope Integration

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

This document explains how this integration has been implemented, and how to launch flows from within SiteScope. It also explains the operations that are included in the integration for communicating between OO and SiteScope.

Supported Versions

Operations Orchestration Version	HP SiteScope Version
OO Content Pack 9	7.0, 9.00, 9.5, 10.10, 10.11, 11.00, 11.01, 11.10, 11.11, 11.20

Downloading OO Releases and Documents on HP Live Network

HP Live Network provides an Operations Orchestration Community page where you can find and download supported releases of OO and associated documents.

To download OO releases and documents, visit the following site:

<https://hpln.hp.com/>

Note: This site requires that you register for an HP Passport and sign-in.

To register for an HP Passport ID:

1. Go to: <http://h20229.www2.hp.com/passport-registration.html>

Or

Click the **New users - please register** link on the HP Passport login page.

2. On the HP Live Network page, click **Operations Orchestration**.
3. On the left-hand side, click **Operations Orchestration Content Packs**.
4. In the **Operations Orchestration Content Packs** box, click **Content**. The HP Passport and sign-in page appears.
5. Enter your user ID and Password to access to continue.
6. Click **HP Operations Orchestration 9.00**.
7. Search for the required HP Operations Orchestration Content Pack.

Chapter 2

Getting Started

This chapter includes:

SiteScope Use Cases	8
HP SiteScope Architecture	9
Location of HP SiteScope Integration Operations and Flows in OO Studio	9

SiteScope Use Cases

The following are the major use cases for the SiteScope integration.

1. Launch OO flows from the SiteScope console.

In this scenario, the integration allows administrators to connect specific events or alarms in SiteScope to the execution 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 and resets the alarm.

2. Automate SiteScope administrative tasks.

In this scenario, the integration's operations allow the automation of SiteScope administrative task, allowing administrators to link SiteScope administrative functions to provisioning and maintenance. This includes tasks such as automatic SiteScope template deployment.

3. Delete a remote server.

In this scenario, the integration allows administrators to delete a SiteScope remote server from the list of available remote server configurations.

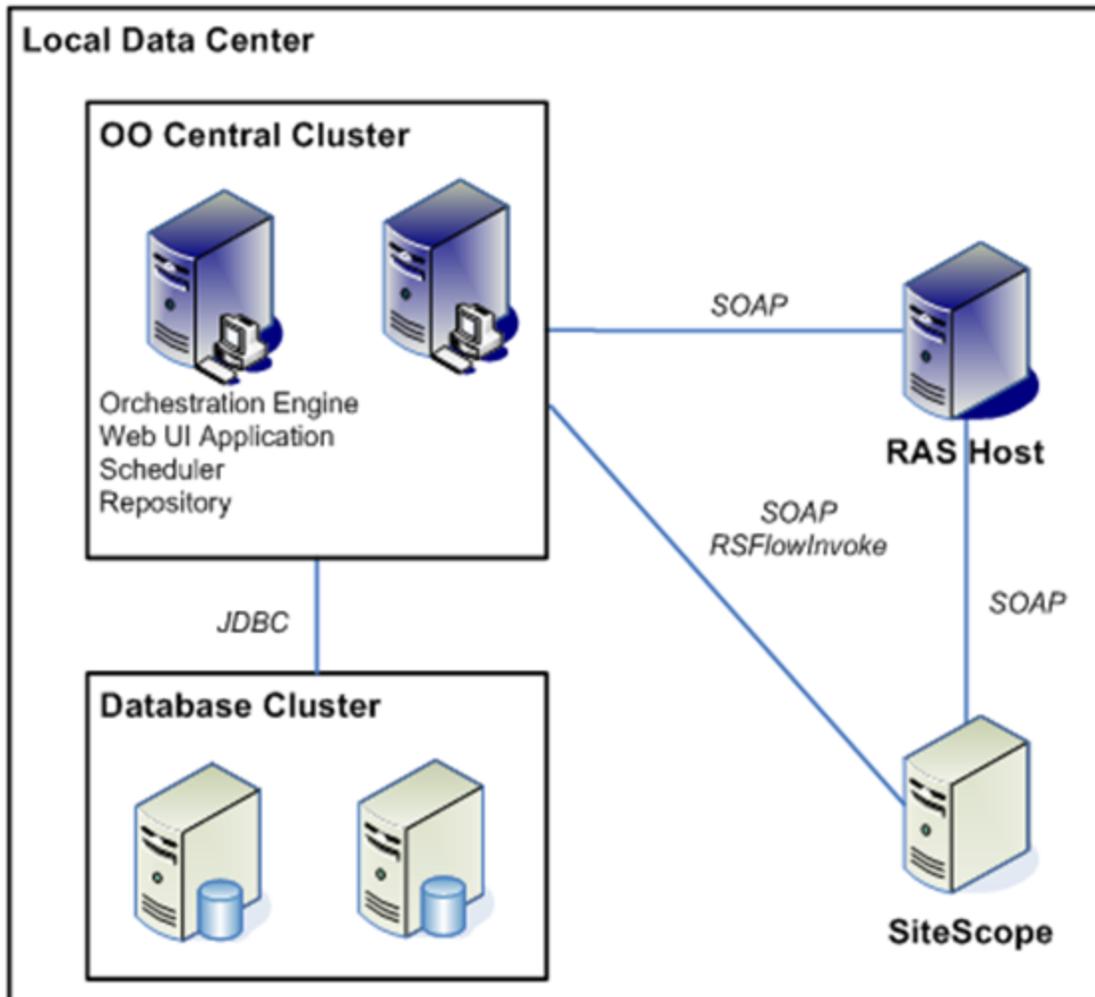
4. Get monitors that are deployed on a specific remote server.

In this scenario, the integration allows administrators to get the list of monitors deployed on a server given by remote server name, IP address, host name, or FQDN.

5. Check if a monitor group is empty.

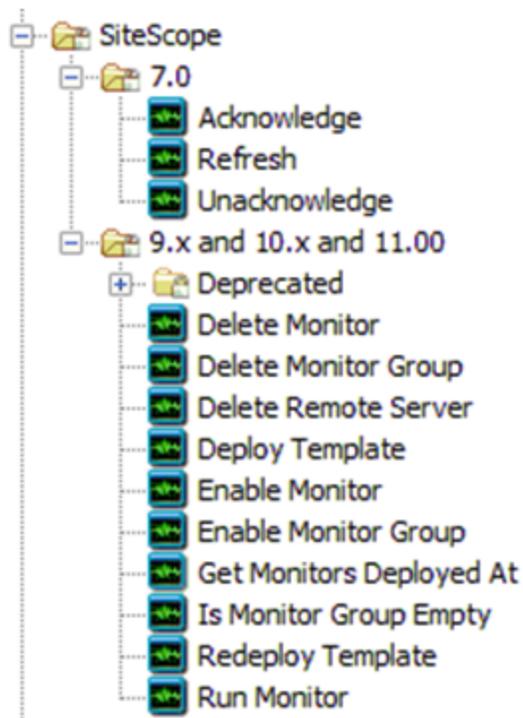
In this scenario, the integration allows administrators to check if a monitor group specified by its path contains monitors or is empty. If the group or any of its subgroups contain any monitors or alerts, the group is not empty.

HP SiteScope Architecture



Location of HP SiteScope Integration Operations and Flows in OO Studio

The HP SiteScope integration includes the following operations in the **OO Studio Library/Integrations/Hewlett-Packard/SiteScope/9.x and 10.x and 11.00/** folder.



Note: The operations in the **Library/Integrations/Hewlett-Packard/SiteScope/9.x and 10.x and 11.00/** folder support HP SiteScope versions 9.00, 9.5, 10.10, 10.11, 11.00, 11.10, 11.11, and 11.20.

Chapter 3

Launching HP SiteScope Integration Flows

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

- **https://ooserver:port/PAS/services/http/execute/<Library Path>**
Executes a flow by name and waits for the flow to finish before returning.
- **https://ooserver:port/PAS/services/http/execute/<Flow UUID>**
Executes a flow by UUID and waits for the flow to finish before returning.
- **https://ooserver:port/PAS/services/http/execute_async/<Library Path>**
Executes a flow by name and returns immediately after the flow is launched.
- **https://ooserver:port/PAS/services/http/execute_async/<Flow UUID>**
Executes a flow by UUID and 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, or UNIX shell script). Then you can create a batch file that invokes **RSFlowInvoke.exe** or **JRSFlowInvoke.jar** (for details, see "[OO Tools You Can Use with the HP SiteScope – OO Integration](#)" on page 15) to launch a flow in response to an alert. Since alerts do not necessarily need acknowledgements in SiteScope, it is acceptable for the alert to be remedied automatically. You can set up 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.

Chapter 4

Troubleshooting

This chapter includes:

Troubleshooting Overview	12
General Troubleshooting Procedures and Tools	12
Error Messages	12

Troubleshooting Overview

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

General Troubleshooting Procedures and Tools

The SiteScope logs may contain errors that indicate that it could not find a resource bundle (which contain locale-specific objects). This does not adversely affect the functional operation and you can safely ignore them. Any other error that occurs is numbered or listed as an unknown error. Please report any unknown errors not shown below to OO Support.

Error Messages

- 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 the **Run Monitor** operation description. Check that the monitor you are trying to run meets these criteria. This error can also occur if you entered an invalid SiteScope path.

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

This error can occur when you attempt to deploy or redeploy a template that fails to meet the criteria mentioned in the **Deploy Template** operation description.

- You must specify the name of the remote server that should be deleted.

In order to delete a remote server, you must specify the name of the server to be deleted as it appears in the SiteScope Web UI.

- The value for the remote server platform is invalid: {0}.

This error appears if the user introduced a value for the remote server platform that is not in the set of valid values.

- You must specify whether the monitor should be enabled (yes, true, 1)
or disabled (no, false, 0).

This error occurs when trying to run the operation **Enable Monitor** without providing a value for the enable input. You must specify whether you want to enable or disable the monitor in order to run the operation.

- You must specify whether the monitor group should be enabled (yes, true, 1)
or disabled (no, false, 0).

This error occurs when trying to run the operation **Enable Monitor Group** without providing a value for the **enable** input. You must specify whether you want to enable or disable the monitor group in order to run the operation.

- The disablePeriod input cannot be a negative value.

To disable a monitor, the given period must be a positive number.

- You must specify a group path in order to run the operation.

This error occurs when running the **Is Monitor Group Empty** operation to check the state of a monitor group without providing the path to the group.

- Invalid path to group. Could not find the group named {0}.

This error occurs when running the **Is Monitor Group Empty** operation to check the state of a monitor group but the group could not be found. This is caused because a group could not be found at the specified path.

- Invalid template parameter list input format (needs to be var=value|var2=value).

This error occurs when the format of the parameter list for deploying or redeploying a template is invalid.

- Failed to delete remote : Remote {0} from type: Windows doesn't exist in the configuration.

This error occurs in SiteScope versions up to and including 11.11 when trying to delete a remote server that doesn't exist. Starting with SiteScope 11.20, if you try to delete a remote server that doesn't exist it will fail with the following message: "Error Code: 55723. Error Description: Failed to get remote : Remote {0} from type: Windows doesn't exist in the configuration."

- Could not find Template name {0} in the configuration.

This error occurs in SiteScope versions up to and including 11.11 when executing the Deploy Template operation with a source that doesn't exist. For the same use case, starting with SiteScope 11.20, it fails with the following message: Error Code: 55636. Error Description: could not find Template name {0} in the configuration.

Chapter 5

Security

By default, SiteScope does not assign a password to the administrator user and does not have SSL enabled. You can assign an administrator password and enable SSL on the SiteScope administrator console. The SOAP API in SiteScope 10.10 and earlier versions do not authenticate. SiteScope 10.11 and later authenticate and require a valid SiteScope username and password for OO SiteScope operation inputs. If SSL is not enabled, the usernames and passwords will be transferred as clear text over the network.

Chapter 6

OO Tools You Can Use with the HP SiteScope – OO Integration

Following are OO tools that you can use with the HP SiteScope integration:

- **RSFlowInvoke.exe and JRSFlowInvoke.jar**

RSFlowInvoke (**RSFlowInvoke.exe** or the Java version, **JRSFlowInvoke.jar**) is a command-line utility that allows you to start a flow without using Central (although the Central service must be running). **RSFlowInvoke** 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 (wswizard.exe)**

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. The Web Services Wizard displays a list of the methods in the API of the Web service that you specify. When you run the wizard, pick the methods you want to use, and with one click for each method you have selected, the wizard creates an HP OO operation that can execute the method. This allows you to use the Web Services Wizard to create operations from your monitoring tool's API.

These tools are available in the Operations Orchestration home folder in **/Studio/tools/**.