

HP Operations Orchestration 10.x

Windows and Linux Operating Systems

OO Base Content Pack Version 1.3.0

Release Notes

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Introduction

This document provides an overview of the HP Operations Orchestration Base Content Pack 1.3.0 release. It contains important information that is not included in the manuals or in the online help.

This release supports the following languages:

- en - English
- fr - French
- de - German
- ja - Japanese
- es - Spanish
- zh_CN - Simplified Chinese

Base Content Pack 1.3.0 is a cumulative Content Pack.

Content Pack Integrations

The following table lists the integrations that the Base Content Pack supports:

Integration Name	Versions
Active Directory	Windows 2000, Windows 2003, Windows 2008, Windows 2008 R2, Windows 2012, Windows 2012 R2
AIX	AIX 5.3
FreeBSD	6.3, 7.0
JDBC	
Email	POP3, IMAP
Excel	1997, 2000, 2003, 2007, 2010
File System	
HP HP/UX	B.11.31
SOAP	

Integration Name	Versions
JVM	5.0, 6.0
MS Cluster	Windows 2003, Windows 2008, Windows 2008 R2
Network	
Red Hat	ES 3, AS 3, ES 4, AS 4, ES 5, ES 6.2
Perl	
PowerShell	1.0, 2.0, 3.0, 4.0
Printing	
Remote Command Execution	
Sharepoint	2003, 2007
SNMP	1, 2, 3
Solaris	10
SUSE Linux	openSUSE 10.0, SUSE Enterprise Server 10 SP1, openSUSE 11.0
Windows	2003, XP, 2008, 2008 R2, 2012, 2012 R2
WMI	1.x
WS-Management	1.0.0

Note: The following integrations contain only basic operations. For more advanced features see the corresponding dedicated Content Pack:

Integration Name	Dedicated Content Pack
JDBC	Databases
FreeBSD, HP-UX, Red Hat, Linux, Solaris, SUSE Linux, Windows	Operating Systems, Infrastructure Orchestration
Email	Business Applications

x509hostnameVerifier

What's New

- **Replace oo-db2jcc:** The Java connector that is used to connect to IBM DB2 databases was removed for license reasons.

For each instance of the DB2 database server that contains the Java connector, find the connector and load it into OO using the instructions in the JDBC folder description under */<Base-CP>/Library/Operations/Databases*. All operations under JDBC folder are affected.

- **HTTP Client ver.2.0:** A new set of HTTP Client operations were added under the **HTTP Client v2.0** folder:

These operations provide new and improved functionalities such as connection pooling, cookies, proxy with authentication and improved form-based authentication.

Under the same folder, sample flows were added that perform form-based and Spring-form based login for authentication into a web application deployed in a Tomcat container.

The previous HTTP Client operations were moved under the **HTTP Client v1.0** folder

- **WS-Management:** Support for HTTPS. WS-Management operations now support web service server communication through HTTPS (one-way HTTPS).
- The **Get Epoch Time** operation was added under */Library/Utility Operations/Date and Time/*. This operation returns the current date and time of the machine running it, as an Epoch (Unix) timestamp.
- An additional output named **commandExitCode** that captures the script's exit return code, saves it in **returnResult** and returns the command state, was added to **SSH Command**.

Enhancements

- The **HTTP Client Patch** operation was updated by adding new input field **chunked**. By setting this parameter to 'true', the **HTTP Client Patch** operation sets the **HTTP Transfer-Encoding** header to "chunked".
- A new input **x509HostnameVerified** was added to the **HTTP Client v1.0** operations under */Library/Operations/HTTP Client/*. This input that checks the identity of the server when connecting through https.

This input is used to check that the server hostname matches a domain name in the subject's Common Name (CN) or **subjectAltName** field of the X.509 certificate.

To skip any checking, set this input to **allow_all**.

For the **browser_compatible** value, the hostname verifier works the same way as Curl and Firefox. The hostname must match either the first CN, or any of the subject alternatives. A wildcard can occur in the CN, and in any of the subject alternatives. The only difference between **browser_compatible** and **strict** is that a wildcard (such as ***.foo.com**) with **browser_compatible** matches all sub-domains, including **a.b.foo.com**.

Default value: **allow_all**

Valid values: **strict, browser_compatible, allow_all**

Note: From security considerations it is recommended to use **strict** hostname verification.

- **Descriptions Improvements**

Flows and Operations descriptions were improved in the following areas: **Active Directory, Email, Databases, HTTP Client, Remote Command Execution** and **Utility Operations**.

Deploying the Base Content Pack

OO platform versions 10.00 and above support Base Content Pack 1.3.0. However, it is recommended to deploy the Base Content Pack 1.3.0 on an existing OO platform version of 10.10 or later.

For details on deploying a content pack, see "Importing Content Packs to a Project" in the *Studio Authoring Guide* and "Deploying a Content Pack" in the *Central User Guide*.

Note: For details on how to uninstall/rollback a content pack, see "Roll back to the last deployment" in the *HP OO Central User Guide*.

Fixed Defects

The reference number for each fixed defect is the ALM Global ID number (QCCR).

For more information about fixed defects, visit HP Software Support Online, or contact your HP Support representative directly.

CR Number	Title	Description
QCCR8C5496	WS-Management: support for HTTPS connection to server	The operations in the WS-Management folder under <i>/Library/Operations/</i> now support all HTTP connections to the server (encrypted and unencrypted).
QCCR8C7461	Operation SNMPv1 returns misleading error message	The error message for the SNMPv1 Get operation under <i>/Library/Operations/SNMP/v1</i> is now correct.
QCCR8C9010	Operation SNMPv1 Get fails	The SNMPv1 Get operation under <i>/Library/Operations/SNMP/v1</i> now works correctly for a device known only to support V1 SNMP agent.
QCCR8C10025	Math Operations return exponential result that can't be used with other Math Operations	The Multiply operation under <i>/Library/Utility Operations/Math and Comparison/Simple Evaluators/</i> now runs correctly.
QCCR8C11005	Windows' Remote Command Execution fails and breaks a flow run	Any null values encountered are now checked and flow run failures are handled accordingly.
QCCR8C23160	Replace Remote Command Execution steps with corresponding operation in OOTB flows	The Remote Command Execution flow under <i>/Library/Operations/Operating Systems/Windows/</i> is no longer used randomly throughout OOTB content.
QCCR8C21320	Add socketTimeout to all HTTP Client-based operations	The Http Client Get operation under <i>/Library//Operations/HTTP Client/</i> in 9.0 has a new input socketTimeout , that is documented. However, none of the other HTTP-based operations under <i>/Library/Operations/HTTP Client/</i> include documentation about socketTimeout .

CR Number	Title	Description
QCCR8C22814	"Result" of "Remote Command Execution" is truncated at about 976,000 bytes	The Result data the Remote Command Execution operation under <i>Operations/Operating System/Windows</i> is no longer truncated.
QCCR8C23183 QCCR8C23184	The HTTP PUT operation fails due to missing Content-Length header	When using the HTTP PUT flow, an "application/json" formatted string body to the HTTP request is sent. The HTTP API server expects the Content-Length header to be set correctly; however, it is not set automatically by the client. When the Content-Length header is set to the byte-length of the 8-bit encoded body it gives an error that the Content-Length header is already set.
QCCR8C23236	Modify operation "Validate XML Document" to support XML namespaces	When using the Validate XML Document operation under <i>Utility Operations/XML Processing</i> with XML documents that contain XML Namespace tags (xmlns), errors are no longer produced.
QCCR8C23719	Ping.Traceroute @Actions don't work with "WMI" protocol for "WINDOWS" remoteOS	The @Action Ping (56c181bc-a763-435c-9561-4ba29d045c86) under <i>/Operations/Network</i> now works with the WMI protocol for a remote Windows operating system.
QCCR8C24598	Security issue.	
QCCR8C24957	HTTP Client - Default location of cacerts	All the HTTP Client operations now use the default location <code><OO_Home>/java/lib/security/cacerts</code> .
QCCR8C25089	Slow performance of the invoke2 operation in CP11 vs CP6	The Invoke method operation was slower in content packs higher than CP7. The operation speed is now faster.
QCCR8C25112	SSH/SharedSessions operations do not work in a multi-threaded environment (parallel split)	SSH/SharedSessions use the object GlobalSessionObject , an object available to all branches in a parallel split or multi-instance. However, access to this object is not synchronized. This resulted in sessions being removed/set at unexpected times and Could not find sessionId in the session context errors. This issue has now been fixed.

CR Number	Title	Description
QCCR8C25230	Http Client trustAllRoots defaults to 'true'	<p>When using HTTP Client operations over HTTPS, it is recommended to set the trustAllRoots input to false to enable a check of the certificate authority that issued the certificate.</p> <p>The descriptions of these operations have been updated accordingly.</p>
QCCR8C25322	Relative paths in OO are relative to the JAVA_HOME environment variable	<p>When using relative paths in OO Content they are defined according to the JAVA_HOME system variable. When executing content on OO 10.x, the JAVA_HOME variables are now consistent between Central, Studio, and RAS executions.</p>

Known Issues

For more information about known issues, visit HP Software Support Online, or contact your HP Support representative directly.

The /Library/Operations/PowerShell/PowerShell Script operation uses JRAS permissions

If a loopback address is provided as **host**, and the operation is run from a service (such as a RAS), the given **username**'s privileges are not updated.

The MySQL JDBC connector needed for the JDBC integration is third party excluded

The MySQL JDBC connector needed for the JDBC integration is 'third party excluded' so it needs to be added by the client. The standard way to add this missing dependency is by deploying a third-party-cp.jar with the artifact. But this has no affect in OO 10.02 if the dependency is not declared in the plugin's POM.

However, the dependency cannot be declared as the JDBC operations also need to work without this dependency (for other databases).

SQL Query used against a Netcool DB should not enforce specifying a database

The **SQL Query** operation under */Library/Operations/Databases/JDBC/SQL Query* requires an input for the database name. When a value is specified, an error is written in the Netcool logs even though the operation completes successfully.

FileSystem: All operations fail for valid paths on mapped drives

Operations fail when invoked on any file located on a mapped drive.

Using "PowerShell Script" in parallel from several runs causes exception

Using PowerShell Script in parallel from several runs sometimes causes an error.

Workaround:

Run the **Acquire Lock** operation before invoking the PowerShell operation and then run the **Release Lock** operation.

SQL query operation for Netcool db does not handle semicolons

The **SQL query** operation under *Operations/Databases/Microsoft SQL* works correctly for the Netcool database unless the data in one of the fields contains a semicolon. If the delimiter in the operation is customized to a pipe, the results remain null. The same operation works correctly when returning data that does not contain a semicolon.

The operation fails if input paused in requestedstatus field in the Change Service Status

The **Change Service Status** operation under *Operations/Operating Systems/Windows/Services* fails if the input of the **requestedstatus** field has the value 'paused'.

Sample Flow "Move Emails" places the object in an incorrect mailbox

The out-of-the-box flow **Move Emails** under *Operations/Exchange/Exchange 2010/Samples/Emails* fails to move the object in the selected mailbox when an account that does not belong to the mailbox owner is selected.

Date parser does not convert a large millisecond value correctly

The Date Parser operation (*/Library/Utility Operations/Date and Time/Date Parser*) does not convert input values of 2^32 or higher correctly. This limits the output date range to 12/7/1969 - 1/25/1970.

Operating System Detector leaves unprintable character at end of ReturnResult

The Operating System Detector operator leaves an unprintable character at the end of ReturnResult. If you try to pass the returned value to the String Comparator operation with a match type of RegEx and a pattern of ".*", a mismatch error occurs.

Using the operation "/Library/Operations/File System/Windows Only/Excel/Get Cell" against an Excel file that contains OLE objects, will result in failure

When running a flow that reads an Excel sheet using the *"/Library/Operations/File System/Windows Only/Excel/Get Cell"* operation, if the Excel file contains OLE objects (for example, checkboxes), the operation fails and displays an error message.

SFTP operations do not work with non-password authentications

SFTP operations do not work with passwordless authentications.

Using passphraseless keys to authenticate to the remote host failed due to empty password input.

Offset Time by operation fails because of unparsable date

The operation */Library/Utility Operations/Date and Time/Offset Time by* produces an error due to an unparsable date.

When the following inputs are set to blank, the operation works correctly:

localeLang =

localeCountry =

Excel 'Get Row Index by Condition' operation throws org.apache.poi.hssf.record.RecordFormatException: Unable to construct record instance.

The **Get Row Index by Condition** operation under */Operations/File System/Windows Only/Excel* fails, an error message displays and an exception is thrown by Apache POI.

SQL Server binary data isn't returned as binary in OO

When performing a query from OO in an SQL Server database with a column of type **binary(16)**, the results do not match what appears in the database.

Apache POI libraries need to be upgraded to the latest stable version available

There are some issues caused by bugs in the Apache POI version shipped with our content pack.

Workaround: Upgrade to a newer version of Apache POI (version 3.8).

OOTB flows that use HTTP client v1 operations have default value for trustAllRoots in the description mentioned false

The description of OOTB flows that use HTTP client v1 shows the default for **trustAllRoots** as False. This is not correct as any http client v1 operation now has the default input of True. This issue impacts all OOTB flows that use HTTP client v1 in the HP Solutions, Cloud and other content packs.

IPv6 Limitations

[IPv6][WMI] - unable to run WMI operations from Java folder with IPv6 addresses

Running a WMI operation from the Java folder fails when using IPv6 addresses. This is due to third-party issues (j-Interop).

Running with IPv4 addresses works for the same operations.

The following Base content pack flows that depend on **Operations/WMI/Java** do not work with IPv6:

- **Get Processes By Name** under */Operations/Operating Systems/Windows/Processes*
- **Get Process PID** under */Operations/Operating Systems/Windows/Processes*
- **Get Windows Processes** under */Operations/Operating Systems/Windows/Processes*
- **Get Process Counters** under */Operations/Operating Systems/Windows/Processes*
- **Get Task List** under */Operations/Operating Systems/Windows/Processes*
- **WMI Query** under */Operations/Operating Systems/Windows/Samples/*

The **WebDAV** operations under */Operations/Remote File Transfer/WebDAV* do not work with IPv6 due to third party issues (Jakarta Slide, Commons HttpClient)

The **Configure Network Adapter** operation under */Operations/Powershell/Network* cannot set IPv6 interfaces for Windows versions up to but not including Windows Server 2012/Windows 8.

The **HP-UX** operating system under */Operations/Operating Systems* has not been validated with IPv6.

The **AIX** operating system under */Operations/Operating Systems* is not validated with IPv6.

The ROSH (Remote Opaware Shell) and GlobalShell (Opaware Global Shell) protocols from the **Remote Command** operation under */Operations/Remote Command Execution* have not been validated with IPv6. These protocols integrate with products from HP Server Automation and these products have not yet been validated for IPv6.

The **rexec** protocol from */Operations/Remote Command Execution/Remote Command* does not support IPv6 as the rexec server (rexecd daemon) does not support IPv6 connections.

Deprecated operations have not been validated for IPv6.

