

HP Operations Orchestration

For Windows and Linux Operating Systems

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System Requirements

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System Requirements

Following are the minimum hardware and software requirements for servers and clients running Hewlett-Packard Software Operations Orchestration (HP OO).

Support for 64-bit architecture is available on Windows configurations for Central, Studio, RAS, and cluster components of HP OO.

Software Requirements

Software Requirements for Central, RAS, and Database

Component	Requirement
Supported operating systems	<ul style="list-style-type: none"> • Microsoft Windows 2008 Server 64 bit • Microsoft Windows 2008 R2 Server 64 bit • Microsoft Windows 2012 Server 64 bit • RedHat Enterprise Linux 5.x 64 bit • RedHat Enterprise Linux 6.x 64 bit • Ubuntu 12.04.x LTS
Supported databases	<ul style="list-style-type: none"> • Oracle 11g R2 • Oracle MySQL 5.5.x • Oracle MySQL 5.6.x • PostgreSQL 9.0.x • PostgreSQL 9.1.x • Microsoft SQL Server 2008 R2 • Microsoft SQL Server 2012
Supported browsers	<ul style="list-style-type: none"> • Microsoft Internet Explorer 9.x, 10.x (latest) • Mozilla FireFox (latest) • Google Chrome (latest)

Software Requirements for Studio

Component	Requirement
Supported operating systems	<ul style="list-style-type: none"><li data-bbox="565 415 906 443">• Microsoft Windows 7 32 bit<li data-bbox="565 478 906 506">• Microsoft Windows 7 64 bit<li data-bbox="565 541 1024 569">• Microsoft Windows 2008 Server 64 bit<li data-bbox="565 604 1065 632">• Microsoft Windows 2008 R2 Server 64 bit<li data-bbox="565 667 959 695">• MS Windows 2012 Server 64 bit

.NET 4 is required for debugging flows with .NET operations. If you don't have .NET 4 , any flows or operations with .NET will marked as invalid in Studio.

Hardware Requirements

The hardware requirements described here are the minimal supported configuration.

Many customers may require more powerful hardware, depending on their load and usage of the system. In some cases, scaling out (adding nodes) is preferable to scaling up (stronger hardware).

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Hardware Requirements for HP OO Central and Database Servers

The minimum hard-drive space requirements differ depending on whether you install Central and the database on the same machine.

These requirements are for on-premise installations where the key components (central servers, RASes) are installed at the customer's site.

Component	Requirement per server (minimum)
CPU	<p>3 Gigahertz (GHz) for single-processor systems or 2 GHz for multi-processor systems</p> <p>Database server:</p> <ul style="list-style-type: none"> • According to the database vendor's recommendations and requirements, but no less than 1 CPU core <p>Central server:</p> <ul style="list-style-type: none"> • Minimum: 1 CPU core • Recommended: 4 CPU cores
Memory (RAM)	<p>Database server:</p> <ul style="list-style-type: none"> • As specified by the vendor, but no less than 2 Gigabyte (GB) <p>Central server:</p> <ul style="list-style-type: none"> • Minimum: 2 GB • Recommended: 4 GB

Hard-drive space	<p>Database server:</p> <ul style="list-style-type: none"> • 500 MB for HP OO installation and base content pack deployment. • 200 KB for each flow executed • Minimum: 2 GB table space <p>Central server:</p> <ul style="list-style-type: none"> • 2 GB
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For off-premise installations, where the key components are installed on a cloud-based virtualized machine, the hardware requirements are:

- Central/RAS: extra small machine
- Database: According to the database vendor’s recommendations and requirements, but no less than a small machine.

Note: In a clustered environment, the clocks on the different machines must be synchronized using some form of time-sync service (daemon) that runs very regularly. The clocks must be within a second of each other. For instructions on how to do this, see <http://www.nist.gov/pml/div688/grp40/its.cfm>.

Hardware Requirements for RAS Installations

Component	Requirement (minimum)
CPU	2 GHz for single- or multi-processor systems Minimum: 1 CPU core Recommended: 4 CPU cores
Memory (RAM)	1 GB
Hard-drive space	2 GB (this includes room for the flows and operations that are included in the installation)

Hardware Requirements for the Central Client

Web client machines for Central must meet the minimum hardware requirements for their web browser.

Hardware Requirements for HP OO Studio Installed on its Own Machine

Machines on which you install Studio must meet the minimum hardware requirements for their Web browser or the following, whichever is higher.

Component	Requirement (minimum)
CPU	2 Gigahertz (GHz) for single- or multi-processor systems 1 CPU core
Memory (RAM)	2 GB (this is the amount of memory that the Studio process requires)
Hard-drive space	2 GB (this includes room for the flows and operations that are included in the installation)

Virtual Systems

Installation of the HP OO components on guest systems hosted by the following hypervisors is supported, as long as the guest systems meet the requirements described in this *System Requirements* document:

- VMware ESX Server, version 3.x or later
- Microsoft Hyper-V (for all supported Windows versions)

Cloud Deployments

HP Operations Orchestration can be installed on cloud computer units. On HP Cloud Services, the server components (Central, RAS) require a small machine, and the database should follow the database vendor's recommendations and requirements, but no less than a small machine.

