

HP Codar

Software Version 1.50



System and Software Support Matrix

Contents

HP Codar software setup	2
HP Codar documentation	2
HP Codar integration pack	2
HP Codar application server system requirements	2
IMPORTANT – HP Codar deployment guidelines	3
HP Codar IPv6 support	3
HP Codar supported platforms	3
Browser support	6
Additional browser support information	7
Screen resolution	7
HP Integrated Process Execution Engine (HP Operations Orchestration)	7
Upgrade from a previous release	7
Adding HP Cloud Service Automation	7
Upgrading with HP Codar and HP CSA licenses	8
Integration pack compatibility	8
Reference web sites and downloads	9
HP Operations Orchestration support requirements	9

© Copyright 2015 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. 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.

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.

Adobe® is a trademark of Adobe Systems Incorporated. Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation. Oracle and Java are registered trademarks of Oracle and/or its affiliates. RED HAT READY™ Logo and RED HAT CERTIFIED PARTNER™ Logo are trademarks of Red Hat, Inc.

The OpenStack word mark and the Square O Design, together or apart, are trademarks or registered trademarks of OpenStack Foundation in the United States and other countries, and are used with the OpenStack Foundation's permission.

HP Codar software setup

This document provides an overview of the setup requirements for HP Codar. The HP Codar software package contains the following:

- HP Codar Cloud Service Management Console (administrative and operational control interface)
- HP Codar Cloud Controller (core solution software)
- HP Codar Cloud Platform

HP Codar documentation

The HP Software Product Manuals website is at softwaresupport.hp.com.

You need to sign-in or register to use this site. Use the **Search** function at the top of the page to find documentation, whitepapers, and other information sources.

For more information or to track updates for all HP Codar documentation, refer to the *HP Codar Documentation List*.

HP Codar integration pack

HP Codar is shipped with pre-developed content archives, which contain service designs and resource offerings that can be customized for your use. You can import and export this integrated “content” developed for specific HP Codar applications and adapt it to your business needs. The out-of-the-box integrations shipped with this version of HP Codar are stored in the CSAKit-42 folder.

You can also download integrations at the HP Live Network website at hpln.hp.com. Access to this site is restricted. HP customers must have an active HP support agreement ID (SAID) for HP Codar and an HP Passport sign-in to access the data on this site. For more sample service designs and sample resource offerings, see your HP Professional Services Representative.

Content shipped with the product can be found at:

Content	Location	Supported version of HP OO
HP Codar 1.00	CSA_HOME/CSAKit-4.2	10.21
HP Codar 1.50	CSA_HOME/CSAKit-4.5 and CSA_HOME/Tools/CSLContentInstaller/	10.21

HP Codar application server system requirements

Table 1. Hardware requirements for the HP Codar application server and database server

	HP Codar application server	HP Codar database server
CPU	4 CPU, 3.0 GHz	8 CPU, 3.0 GHz
RAM	8 GB	16 GB
Hard Drive	20 GB	20 GB

The application and database servers can be deployed on a virtual machine; however, it is recommended that they are on different virtual machines. It is important to reserve CPU and memory resources exclusively for HP Codar on a virtual machine so that the product can function with reasonable throughput.

IMPORTANT – HP Codar deployment guidelines

HP strongly recommends that you install the HP Codar database server on a physical server, and not on a virtual machine, to get good response from HP Codar. If you choose to deploy the HP Codar (one or more nodes with the Management Console) on a virtual machine, you must reserve CPU and memory resources exclusively for HP Codar, so that the product can function with reasonable throughput. Use the guidelines below for resource reservation for an HP Codar instance with the following load characteristics:

CPU: 4 CPUs, 3.0 GHz per CPU

Memory: 8 GB

This configuration for HP Codar application server can support the following load:

- Six simultaneous provisioning requests
- 30 subscriptions generated per hour
- Service components in design processed < 120 per hour
- Total REST API call-back from HP Operations Orchestration to HP Codar for single VM provision of < 18

For higher loads, you may need a system with more hardware resources or additional HP Codar nodes in a cluster. Please refer to the *HP Codar Configuration Guide* and *High Availability Guide* for additional details.

HP Codar IPv6 support

HP Software is committed to providing support for the network Internet Protocol version 6 (IPv6) for our enterprise software products and solutions. HP Codar supports installation on hosts implementing dual-stack (IPv4/IPv6) transport. HP Codar can deploy Cloud Server Services using network Internet Protocol version 6 (IPv6).

Table 2. HP Codar network transport support

HP Codar	HP Codar is supported for installation on the platforms listed below when configured for dual IPv4/IPv6 transport. HP Codar can communicate over both IPv4 and IPv6 transport. See HP Codar supported platforms.
-----------------	--

HP Codar supported platforms

NOTE: To use an Oracle database with HP Codar, you must download Oracle JDBC drivers:

- For Oracle 11g R2 JDBC drivers, go to:
<http://www.oracle.com/technetwork/database/enterprise-edition/jdbc-112010-090769.html>
- For Oracle 12c R1 JDBC drivers, go to:
<http://www.oracle.com/technetwork/database/features/jdbc/default-2280470.html>

HP Codar requires **ojdbc6.jar** and **orai18n.jar** to be downloaded and stored in a common directory prior to product installation.

Table 3. Microsoft Windows 2008 R2 stand-alone

	Supported	Recommended *
Operating System	Microsoft Windows 2008 R2 64-bit	Microsoft Windows 2008 R2 SP1 Enterprise 64-bit
Middleware	Oracle JRE 8 OpenJDK JRE 8	OpenJDK JRE 8
Microsoft SQL Database	Microsoft SQL Server 2008 R2	Microsoft Enterprise SQL Server 2008 R2 SP2
	Microsoft SQL Server 2012	Microsoft Enterprise SQL Server 2012 SP2
Oracle Database	Oracle 11g R2 Standard Edition Oracle 11g R2 Enterprise Edition Oracle 11g R2 Enterprise RAC Oracle 12c R1 Standard Edition Oracle 12c R1 Enterprise Edition Oracle 12c R1 Enterprise RAC	Oracle 12c R1 Enterprise Standalone
Postgres Database	PostgreSQL Server 9. x 64-bit	

* Recommended indicates the specific software version used for solution testing by HP Codar.

Table 4. Microsoft Windows 2012 R2 stand-alone

	Supported	Recommended *
Operating System	Microsoft Windows Server 2012 R2 Standard	Microsoft Windows Server 2012 R2 Standard
	.NET Framework v3.5	.NET Framework v3.5
Middleware	Oracle JRE 8 OpenJDK JRE 8	OpenJDK JRE 8
Microsoft SQL Database	Microsoft SQL Server 2012	Microsoft Enterprise SQL Server 2012 SP2
Oracle Database	Oracle 11g R2 Standard Edition Oracle 11g R2 Enterprise Edition Oracle 11g R2 Enterprise RAC Oracle 12c R1 Standard Edition Oracle 12c R1 Enterprise Edition Oracle 12c R1 Enterprise RAC	Oracle 12c R1 Enterprise Standalone
Postgres Database	PostgreSQL Server 9. x 64-bit	

* Recommended indicates the specific software version used for solution testing by HP Codar.

Table 5. Microsoft Windows 2008 R2 high availability

	Supported	Recommended *
Operating System	Microsoft Windows 2008 R2 SP1 Enterprise 64-bit	Microsoft Windows 2008 R2 SP1 Enterprise 64-bit
Middleware	JBoss Application Clustering	
	Oracle JRE 8 OpenJDK JRE 8	OpenJDK JRE 8
	F5 BIG IP LTM 11.31	F5 BIG IP LTM 11.31

	Apache HTTP server version httpd - 2.2	
Microsoft SQL Database	Microsoft Enterprise SQL Server 2008 R2 SP2, 2012 (Always On) and 2014	Microsoft Enterprise SQL Server 2008 R2 SP2
Oracle Database	Oracle Database 11g R2 Enterprise RAC Oracle Database 12c R1 Enterprise RAC	

* Recommended indicates the specific software version used for solution testing by HP Codar.

Table 6. Microsoft Windows 2012 R2 high availability

	Supported	Recommended *
Operating System	Microsoft Windows Server 2012 R2 Standard	Microsoft Windows Server 2012 R2 Standard
	.NET Framework v3.5	.NET Framework v3.5
Middleware	JBoss Application Clustering (Wildfly 8.2.0 embedded)	
	Oracle JRE 8 OpenJDK JRE 8	OpenJDK JRE 8
	F5 BIG IP LTM 11.31	F5 BIG IP LTM 11.31
	Apache HTTP server version httpd - 2.2	Apache HTTP server version httpd - 2.2
Microsoft SQL Database	Microsoft SQL Server 2012	Microsoft Enterprise SQL Server (Always On) 2012 SP2
Oracle Database	Oracle Database 11g R2 Enterprise RAC Oracle Database 12c R1 Enterprise RAC	

* Recommended indicates the specific software version used for solution testing by HP Codar.

Table 7. Ubuntu Linux

	Supported	Recommended *
Operating System	Ubuntu Linux 12.04 LTS 64-bit or higher	Ubuntu Linux 14.04 LTS 64-bit
	Oracle JRE 8 OpenJDK JRE 8	OpenJDK JRE 8
Microsoft SQL Database	Microsoft SQL Server 2008 R2	
	Microsoft SQL Server 2012	
Oracle Database	Oracle 11g R2 Standard Standalone Oracle 11g R2 Enterprise Standalone	
Postgres Database	PostgreSQL Server 9. x 64-bit	PostgreSQL Server 9.2.4 64-bit

* Recommended indicates the specific software version used for solution testing by HP Codar.

Table 8. Red Hat Enterprise Linux (RHEL)

	Supported	Recommended *
Operating System	RHEL 6.3 or above 64-bit	RHEL 6.6 64-bit
Middleware	Oracle JRE 8 OpenJDK JRE 8	OpenJDK JRE 8
Microsoft SQL Database	Microsoft SQL Server 2008 R2 Microsoft SQL Server 2012	Microsoft Enterprise SQL Server 2008 R2 SP2 Microsoft Enterprise SQL Server 2012 SP2
Oracle Database	Oracle Database 11g R2 Standard Edition Oracle Database 11g R2 Enterprise Edition Oracle Database 11g R2 Enterprise Edition Oracle Database 12c R1 Standard Edition Oracle Database 12c R1 Enterprise Edition Oracle Database 12c R1 Enterprise RAC	Oracle 12c R1 Enterprise Standalone
Postgres Database	PostgreSQL Server 9. x 64-bit	PostgreSQL Server 9.2.4 64-bit

* Recommended indicates the specific software version used for solution testing by HP Codar.

Table 9. RHEL high availability

	Supported	Recommended*
Operating System	RHEL 6. 3 or above 64-bit	RHEL 6.6 64-bit
Middleware	JBoss Application Clustering	
	Oracle JRE 8 OpenJDK JRE 8	OpenJDK JRE 8
	F5 BIG IP LTM 11.31	F5 BIG IP LTM 11.31
	Apache HTTP server version httpd - 2.4.10 mod_cluster version 1.2.6	
Microsoft SQL Database	Microsoft Enterprise SQL Server 2008 R2 SP2	
Oracle Database	Oracle 11g R2 Enterprise RAC Oracle 12c R1 Enterprise RAC	
Postgres Database	PostgreSQL Server 9. x 64-bit	PostgreSQL Server 9.2.4 64-bit

* Recommended indicates the specific software version used for solution testing by HP Codar.

Browser support

The following browsers are supported:

- Microsoft Internet Explorer 10 or higher
Requires <http://support.microsoft.com/kb/2496898> to be installed on the browser machine for displaying the Indian currency sign in proper format.

- Google Chrome 34 or higher
- Mozilla Firefox 26 or higher

Additional browser support information

For HP Codar Management Console only: Requires Adobe Flash Player 12 or higher.

Screen resolution

The minimum recommended screen resolution for the HP Codar Management Console is 1280x1024.

HP Integrated Process Execution Engine (HP Operations Orchestration)

IMPORTANT: HP Codar requires HP Operations Orchestration to support capabilities such as topology service designs.

For content pack requirements, see HP Operations Orchestration support requirements.

Table 10. HP Operations Orchestration support

Product	Supported
HP Operations Orchestration Platform and HP OO Studio	10.21.0001 with hotfix and base content pack 1.4.4

Upgrade from a previous release

The following upgrades are supported.

Table 11. Supported upgrades

HP Codar versions	Upgrade supported?
1.00 to 1.50	Yes

See the *HP Codar Upgrade Guide* for platform and content upgrade information.

Adding HP Cloud Service Automation

HP Cloud Service Automation can be added to an HP Codar installation, working with existing HP Codar functionality to facilitate consumer experience through MPP Elements of the HP Cloud Service Automation core value proposition including the following:

- Sequence based modeling
- Infrastructure as Service (IaaS)
- Consumer experience through MPP
- Various other integrations such as vPV, XS, or ArcSight

If you install HP CSA, you must add an HP CSA license first; if you install HP Codar, you must install an HP Codar license first. After you apply a base license, you can add an upgrade license, if desired.

Upgrading with HP Codar and HP CSA licenses

Table 12. Upgrading to HP Codar 1.50 or HP CSA 4.50

Existing installation	Upgrade steps
HP Codar 1.00	Upgrade using the HP Codar 1.50 installer, and then add an HP CSA 4.50 license.
HP Codar 1.00 with HP CSA 4.20 license	Upgrade using the HP Codar 1.50 installer. The HP CSA license will be automatically upgraded to 4.50.
HP CSA 4.20	Upgrade using the HP CSA 4.50 installer, and then add the HP Codar 1.50 license.
HP CSA 4.20 with HP Codar 1.00 license	Upgrade using the HP CSA 4.50 installer. The HP Codar license will be automatically upgraded to 1.50.

For more information, see the HP Cloud Service Automation System and Software Support Matrix and other documentation available at softwaresupport.hp.com.

Integration pack compatibility

The integrations below have been demonstrated with HP Codar and are supported by the corresponding product teams. Please review each product's release notes and contact the appropriate HP product support team for details.

Table 13. Solution versions for the HP Codar integration pack

Product	Supported	Recommended ⁽¹⁾
Amazon Web Services (AWS)	Supported	
Chef Server ⁽²⁾	11.0.11 or above	11.0.11
Docker	1.4.0.x	1.20
Jenkins	1.55x	1.554
Puppet	3.73	
HP Helion OpenStack Commercial	1.10	1.10
HP Server Automation Premium Edition (SAVA)	10.x	10.10
HP Server Automation (HP SA) Ultimate Edition	10.x	10.20 with DMA 10.21
HP SiteScope	11.x	11.24.2
VMware vCenter Operations Manager ⁽³⁾	4.x, 5.x	5.5

Recommended indicates the specific software version used for solution testing by HP Codar.

Chef Server can be downloaded from <http://www.getchef.com/chef/install/>. HP Codar integration with Chef is supported on a Chef server installed on Ubuntu 12.04 and CentOS 6.4. HP Codar supports deployment of Chef Cookbooks and recipes on VMs running the CentOS or Ubuntu operating systems.

HP Codar leverages the following features in VMware vCenter:

Applying a customization specification when cloning a template

Using a customization specification

Reference web sites and downloads

Table 14. For more information and download locations

Product	Support matrix and system requirements	For more information	Downloads
HP Cloud Service Automation (HP CSA)	HP Software Support	HP Software Support	Go to HP Live Network for downloads provided in addition to out-of-box content.
HP Codar	This document		
HP Helion Public Cloud		HP Helion Public Cloud overview	
HP Operations Orchestration (HP OO)	HP Software Support	HP Software Support	Go to HP Live Network for downloads provided in addition to out-of-box content.
HP Server Automation Premium Edition (SAVA)			
HP Server Automation (HP SA) Ultimate Edition			
HP SiteScope			

HP Operations Orchestration support requirements

Table 15. HP Operations Orchestration content

HP Operations Orchestration version	Content packs
10.21	oo10-base-cp-1.4.4 oo10-cloud-cp-1.4.0 oo10-hp-solutions-cp-1.4.0 oo10-virtualization-cp-1.4.0