Universal CMDB

Software Version: 10.32

Support Matrix

Document Release Date: June 2017 (Third Edition)
Software Release Date: April 2017

Hewlett Packard Enterprise

Legal Notices

Warranty

The only warranties for Hewlett Packard Enterprise 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. Hewlett Packard Enterprise 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 Hewlett Packard Enterprise 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

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.

Documentation Updates

To check for recent updates or to verify that you are using the most recent edition of a document, go to: https://softwaresupport.hpe.com/.

This site requires that you register for an HPE Passport and to sign in. To register for an HPE Passport ID, click **Register** on the HPE Software Support site or click **Create an Account** on the HPE Passport login page.

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

Document Changes

Publication Date	Summary of Changes
10.32 (2nd Edition, May 2017)	Added clarification that Microsoft Windows Server 2008 R2 (Enterprise and Standard editions, 64-bit) is supported for UCMDB server
10.32 (3rd Edition, June 2017)	Added clarification that Windows Server 2012 R2 is supported for Inventory Tools.

Support

Visit the HPE Software Support site at: https://softwaresupport.hpe.com/.

This website provides contact information and details about the products, services, and support that HPE Software offers.

HPE 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 website to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HPE 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 HPE Passport user and to sign in. Many also require a support contract. To register for an HPE Passport ID, click **Register** on the HPE Support site or click **Create an Account** on the HPE Passport login page.

To find more information about access levels, go to: https://softwaresupport.hpe.com/web/softwaresupport/access-levels.

HPE Software Integration Catalog accesses the new HPE Software Integrations and Solutions Catalog website. This site enables you to explore HPE Product Solutions to meet your business needs, includes a full list of Integrations between HPE Products, as well as a listing of ITIL Processes. The URL for this website is https://softwaresupport.hpe.com/km/KM01702731.

Contents

Requirements

This section provides information about the supported hardware and software that you must have to successfully install and run Universal CMDB 10.32.

Supported Upgrade/Downgrade Paths

The table below describes supported upgrade paths for the HPE CMS products:

Supported Upgrade Paths

Supported Upgrade Paths	CMS product supporting upgrades		
	UCMDB	Data Flow Probe	UCMDB Browser[1] [2]
10.30 → 10.32	Yes	Yes	No
10.31 → 10.32	Yes	Yes	No
10.30 FIPS → 10.32 FIPS	Yes	Yes	No
10.31 FIPS → 10.32 FIPS	Yes	Yes	No
10.32 full installer	No	Yes	Yes

Supported Downgrade Paths

Supported Downgrade Paths	UCMDB Server	Data Flow Probe	UCMDB Browser
10.32 → 10.31	Yes	No	No
10.32 → 10.30	Yes	No	No
10.32 FIPS → 10.31 FIPS	Yes	No	No
10.32 FIPS → 10.30 FIPS	Yes	No	No

Note:

1. UCMDB Browser does not support upgrades. You need to deploy the **HPE-Browser-<version_number>.<build_number>-all-in-one-standalone.zip** package for UCMDB Browser version 4.13 in order to perform a fresh deployment.
2. UCMDB server version 10.30 (and later) does not support embedded UCMDB Browser versions older than 4.10. For more details, see "HPE Software Coexistence" in the *HPE Universal CMDB Support Matrix*.

3. Version 10.32 of the HPE Configuration Management System does not include a new release for UCMDB Configuration Manager (CM). The latest release of CM is version 10.22 CUP5, you can use it (or a later CUP on top of version 10.22) in tandem with UCMDB 10.32.

   For supported upgrade path for Configuration Manager, check the Release Notes for version 10.22. For documentation about Configuration Manager, see HPE Universal CMDB Configuration Manager User Guide of version 10.22. To download the *Release Notes* for UCMDB 10.22 CUP5 (or a later CUP), go to Overview of UCMDB 10.2x Releases.

4. Automatic upgrade of Data Flow Probe from version 10.30 or 10.31 to version 10.32 is supported. For details, see "Enhancements to Probe Upgrade Mechanism" in the *HPE Universal CMDB Data Flow Management Guide*. Downgrade of Data Flow Probe is not supported.

5. Automatic downgrade supports downgrading to the previous installed version only. That is to say, automatic downgrade of UCMDB Server from version 10.32 to 10.30 is supported if you upgraded UCMDB server from version 10.30 to 10.32 directly previously. If you upgraded UCMDB server from version 10.30 to 10.31, then to 10.32, then you can only downgrade UCMDB Server to version 10.31. For detailed instructions about how to restore UCMDB server installation, see "Universal CMDB Uninstall Procedure" on page 1.

Hardware

HPE Universal CMDB 10.32 is supported on the following hardware:

<table>
<tr><th>Component</th><th>Requirement</th></tr>
<tr><td>Computer/processor</td><td>
Windows/Linux:
To fulfill the CPU requirements, you must have one of the following:
• Intel Dual Core Xeon Processor 2.4 GHz or later
• AMD Opteron Dual Core Processor 2.4 GHz or later
Recommended: The latest generation of Intel/AMD processors are recommended.
In addition to the above requirements, you must have the following number of CPU Cores, depending on your deployment configuration.
CPU Cores:
<table>
<tr><th>Deployment</th><th>Minimum</th><th>Recommended</th></tr>
<tr><td>Small</td><td>1 Core</td><td>4 Cores</td></tr>
<tr><td>Standard</td><td>4 Cores</td><td>8 Cores</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Component</th><th>Requirement</th></tr>
<tr><td></td><td>
<table>
<tr><th>Deployment</th><th>Minimum</th><th>Recommended</th></tr>
<tr><td>Enterprise</td><td>8 Cores</td><td>24 Cores</td></tr>
</table>
<blockquote>Note: As HPE Universal CMDB performance is dependent upon processor speed, to ensure proper HPE Universal CMDB performance, it is recommended that you use the fastest possible processor speed.</blockquote>
</td></tr>
<tr><td>Memory</td><td>
<table>
<tr><th rowspan="2">Deployment</th><th colspan="2">Windows/Linux:</th></tr>
<tr><th>Minimum</th><th>Recommended</th></tr>
<tr><td>Small</td><td>4 GB RAM</td><td>8 GB RAM</td></tr>
<tr><td>Standard</td><td>8 GB RAM</td><td>16 GB RAM</td></tr>
<tr><td>Enterprise</td><td>16 GB RAM</td><td>32 GB RAM (for more than 40 million CIs and relationships)</td></tr>
</table>
</td></tr>
<tr><td>Memory Swap File</td><td>Windows: The virtual memory for Windows should be at least 1.5 times the size of the physical memory.

Linux: The Linux swap file size should be equal in size to the physical memory.</td></tr>
<tr><td>Free hard disk space</td><td>

Small/Standard/Enterprise: At least 100 GB (for logs, memory dumps, and so on)
If the search functionality is enabled, more hard disk space is required.

For example,

14M CIs + relationships: 30G or more space would be needed for SOLR index files
20M CIs + relationships: Almost 50G space would be needed

</td></tr>
<tr><td>Display</td><td>Windows: Color palette setting of at least 256 colors (recommended: 32,000 colors)</td></tr>
</table>

Operating System

Universal CMDB 10.32 runs on the following operating systems:

Hardware Platform	OS Type	OS Version and Edition	Supported	Recommended
x86-64	Windows Server 2016	Datacenter and Standard, 64-bit (without the **Nano Server** installation option)	Yes	
x86-64	Windows Server 2012 R2	Datacenter and Standard, 64-bit	Yes	Yes
x86-64	Windows Server 2012	Datacenter and Standard, 64-bit	Yes	Yes
x86-64	Windows Server 2008	Enterprise/Standard, R2, 64-bit	Yes	
x86-64	Red Hat Linux Server 5.10 and 5.11	Enterprise/Advanced 64-bit	Yes	
x86-64	Red Hat Enterprise Linux Server 6.4, 6.5, 6.6, 7.0, 7.1, 7.2, and 7.3	64-bit	Yes	
x86-64	Oracle Enterprise Linux Server with Red Hat Compatible Kernel v6.4, v6.5, v6.6, v7.0, v7.1, v7.2, and v7.3	Enterprise/Advanced 64-bit	Yes	
x86-64	Oracle Enterprise Linux Server with Unbreakable Enterprise Kernel v6.4, v6.5, v6.6, v7.0, v7.1, v7.2, and v7.3	Enterprise/Advanced 64-bit	Yes	
x86-64	CentOS 7.0 and 7.1	x86-64	Yes	
x86-64	Red Hat Enterprise Linux Server 6.2, 6.3	x86-64	No	
x86-64	Oracle Enterprise Linux Server with Unbreakable Enterprise Kernel v6.3,	Enterprise/Advanced 64-bit	No	
x86-64	Oracle Enterprise Linux Server with Red Hat Compatible Kernel v6.3,	Enterprise/Advanced 64-bit	No	
x86-64	Windows Server 2003		No	
x86-64	Windows Server 2008	• Enterprise SP2 and	No	

Hardware Platform	OS Type	OS Version and Edition	Supported	Recommended
		R2 SP1 64-bit • Standard R2 SP1, 64-bit		
Any	SUSE Linux Server 9, 10, 11	Enterprise	No	
Sun SPARC	Solaris 8, 9, or 10		No	
Any	Red Hat Linux Server 3, 4	Enterprise	No	
Itanium 64	Red Hat Linux Server 5	Enterprise/Advanced	No	
Itanium 64	Windows Server 2008		No	

Note:

- CMS 10.30 release (and later) does not include HPE Universal CMDB Configuration Manager. For information about operating systems supported for CM 10.22, check the *HPE Universal CMDB Support Matrix* document for version 10.22.
- Unsupported configurations are listed to ensure that there is no ambiguity on the scope of the Support Matrix.
- Windows Server 2003 is no longer supported as of UCMDB 10.01.
- Windows Server 2008 is no longer supported as of UCMDB 10.30.
- Installation of HPE Universal CMDB is not supported on 32-bit machines.

Databases

One of the following supported databases is required to run Universal CMDB 10.32:

- Oracle Server
- Microsoft SQL Server
- PostgreSQL Server

The table below describes hardware requirements for database server:

Deployment	CPU	Memory	Linux Swap	Windows Virtual Memory	Free Disk Space
Enterprise	24 Cores	64 GB	64 GB	96 GB	300 GB

Note:

- It is strongly recommended to host database server (Oracle, Microsoft SQL, or PostgreSQL) on a **physical machine**, and it should be an independent server without other applications (including the UCMDB server) running on it.

  Also, if the database server machine is a virtual machine, the resource MUST be dedicated for the database server.
- Apart from the embedded PostgreSQL database server, installing UCMDB server and database server (Oracle, Microsoft SQL, or PostgreSQL) together on the same machine is not supported.
- The hardware requirements could be the same as those for UCMDB server, but the DB SPACE depends on the data scale. For example, for a data scale of 30 millions CIs, HPE recommends 500 GB or more space for data files and 200 GB or more space for log files.

Oracle System Requirements

The following table lists the Oracle Servers supported for working with HPE Universal CMDB. A supported option means that HPE quality assurance personnel have successfully performed basic tests on that option.

Database Version	Edition	System Type	Supported Products
Oracle 12c * (With or without the Oracle Advanced Security Option enabled)	• Standard • Enterprise	64-bit	• UCMDB • UCMDB Integration Service **Note:** Oracle 12c must be installed without container database (CDB). UCMDB does not support Oracle 12c with CDB.
	• RAC Enterprise		• UCMDB
Oracle 11.2 (11g R2) * (With or without the	• Standard • Enterprise	64-bit	• UCMDB • Configuration Manager

Database Version	Edition	System Type	Supported Products
Oracle Advanced Security Option enabled)			• UCMDB Integration Service
	• RAC Enterprise	64-bit	• UCMDB • Configuration Manager

Note:

- It is strongly recommended to apply the latest critical Oracle patches per your operating system. For details, consult the Oracle documentation.
- The UCMDB server(s) should be located in the same LAN with the database servers (without a proxy and firewalls between them). Otherwise, your system's performance may be impacted.
- For information about how to configure UCMDB to support the Oracle Advanced Security Option (ASO), see the *HPE Universal CMDB Hardening Guide*.
- * Consult the Oracle documentation for supported platforms.

Examples of Tested Deployments

The following table details the deployment environments that have been rigorously tested by HPE quality assurance personnel.

Database Release Version	Edition	System Type	Operating System
Oracle 12.1.0.2.0	Enterprise	64-bit	Windows Server 2012 Standard Edition (64-bit)
Oracle 11.2.0.1.0	Enterprise	64-bit	Windows Server 2012 Datacenter Edition (64-bit)
Oracle 11.2.0.1.0	Enterprise	64-bit	Red Hat Enterprise Linux Server 6.4

Microsoft SQL System Requirements

The following table lists the Microsoft SQL Servers supported for working with HPE Universal CMDB. A supported option means that HPE quality assurance personnel have successfully performed basic tests on that option.

Database Version	Edition	System Type	Service Packs	Supported Products
Microsoft SQL Server 2016	• Standard • Enterprise	64-bit		• UCMDB • UCMDB Integration Service
Microsoft SQL Server 2014	• Standard • Enterprise	64-bit	SP1, SP2	• UCMDB • UCMDB Integration Service
	• High availability mode (AlwaysOn)	64-bit		
Microsoft SQL Server 2012	• Standard • Enterprise	64-bit	SP1, SP2, SP3	• UCMDB • UCMDB Integration Service
Microsoft SQL Server 2012 Failover Cluster	• Enterprise	64-bit	SP1	• UCMDB • UCMDB Integration Service

Note:

- Only supported service packs should be installed, with latest patches.
- Consult the Microsoft documentation for supported platforms.
- The UCMDB server(s) should be located in the same LAN with the database servers (without a proxy and firewalls between them). Otherwise, your system's performance may be impacted.

Examples of Tested Deployments

The following table details the deployment environments that have been rigorously tested by HPE quality assurance personnel.

Database Release Version	Edition	System Type	Service Packs	Operating System
Microsoft SQL Server 2016	Enterprise	64-bit		Windows Server 2012 R2 Datacenter Edition (64-bit)
Microsoft SQL Server 2014	Enterprise	64-bit	SP2	Windows Server 2012 Standard Edition (64-bit)
Microsoft SQL Server 2012	Enterprise	64-bit	SP1	Windows Server 2012 Standard Edition (64-bit)

Database Release Version	Edition	System Type	Service Packs	Operating System
Microsoft SQL Server 2012	Enterprise	64-bit	SP1	Windows Server 2012 Datacenter Edition (64-bit)
Microsoft SQL Server 2012	Standard	64-bit	SP1	Oracle Enterprise Linux Server 6.5
Microsoft SQL Server 2012	Standard	64-bit	SP1	Windows Server 2012 Datacenter Edition (64-bit)
Microsoft SQL Server 2012	Standard	64-bit	SP1	Windows Server 2012 Standard Edition (64-bit)
Microsoft SQL Server 2012 Cluster	Enterprise	64-bit	SP1	Windows Server 2012 Datacenter Edition (64-bit)
Microsoft SQL Server 2012 Cluster	Enterprise	64-bit	SP1	Windows Server 2012 Standard Edition (64-bit)

PostgreSQL System Requirements

The following table lists the PostgreSQL Servers supported for working with HPE Universal CMDB. A supported option means that HPE quality assurance personnel have successfully performed basic tests on that option.

Database Version	Edition	System Type	Supported Products
PostgreSQL 9.6	Enterprise	64-bit	• UCMDB • UCMDB Integration Service
PostgreSQL 9.5	Enterprise	64-bit	• UCMDB • UCMDB Integration Service
PostgreSQL 9.4.8	Embedded *	64-bit	• UCMDB • UCMDB Integration Service
PostgreSQL 9.4	Enterprise	64-bit	• UCMDB • UCMDB Integration Service
PostgreSQL 9.3	Enterprise	64-bit	• UCMDB • UCMDB Integration Service
PostgreSQL Server 9.22	Enterprise	64-bit	• UCMDB

Note:

- Only supported service packs should be installed, with latest patches
- The UCMDB server(s) should be located in the same LAN with the database servers (without a proxy and firewalls between them). Otherwise, your system's performance may be impacted.
- Embedded PostgreSQL is not supported on Enterprise deployments of UCMDB.
- * Embedded PostgreSQL is supported on Linux systems after the local PostgreSQL is uninstalled. Therefore, to be able to use embedded PostgreSQL, make sure you uninstall the local PostgreSQL that comes with the Linux installation.
- To use PostgreSQL 9.6 with UCMDB 10.32, follow the upgrade path below:
  a. Install UCMDB version 10.30 with a supported database (for example, embedded PostgreSQL 9.4.8).
  b. Upgrade UCMDB to version 10.32.
  c. Reconfigure UCMDB to connect to PostgreSQL 9.6.

  For detailed instructions, see "How to Reconfigure UCMDB to Use Another Schema/Database" in the *HPE Universal CMDB Database Guide*.

Examples of Tested Deployments

The following table details the deployment environments that have been rigorously tested by HPE quality assurance personnel.

Database Release Version	Deployment	System Type	Operating System
PostgreSQL Server 9.4.8	Embedded	64-bit	Windows Server 2008 R2 Enterprise Edition Service Pack 1
PostgreSQL Server 9.4	Enterprise	64-bit	Windows Server 2012 Standard Edition
PostgreSQL Server 9.22	External	64-bit	Windows Server 2012 Standard Edition
PostgreSQL Server 9.22	Standalone	64-bit	Red Hat Enterprise Linux Server 6.4
PostgreSQL Server 9.22	Standalone	64-bit	Red Hat Enterprise Linux Server 6.5

Application Servers

Universal CMDB 10.32 does not use an application server.

The following supported application server is required to run HPE Universal CMDB Configuration Manager:

- Apache Tomcat, version 7.0.64

> **Note:** The required application server is included in the HPE Universal CMDB Configuration Manager installation.

Web Servers

The following supported web server is required to run Universal CMDB and Universal Discovery 10.32:

- Jetty, version 9.2.10

> **Note:** The required web server is included in the Universal CMDB installation.

Web Browsers and Plug-ins

One of the following supported web browsers is required to run Universal CMDB 10.32:

Browser	OS Version and Edition	Supported	Recommended
Windows Internet Explorer 9	Consult the Microsoft documentation for supported platforms.	Yes	Yes When using Internet Explorer, it is recommended to use version 9.0 to achieve optimal viewing and application performance
Windows Internet Explorer 10	Consult the Microsoft documentation for supported platforms.	Yes	

Browser	OS Version and Edition	Supported	Recommended
Windows Internet Explorer 11	Consult the Microsoft documentation for supported platforms.	Yes	
Microsoft Edge	Consult the Microsoft documentation for supported platforms. JNLP is required.	Yes	**Note:** To launch UCMDB UI from Microsoft Edge, enable JNLP by following instructions described in "How to Launch UCMDB UI from Chrome 43+, Firefox 48+, Microsoft Edge, or Safari 10+" in the *HPE Universal CMDB Administration Guide*. This is a one-time operation.
Google Chrome	Microsoft Windows JNLP is required.	Yes	**Note:** To launch UCMDB UI from Chrome 43 (or later), enable JNLP by following instructions described in "How to Launch UCMDB UI from Chrome 43+, Firefox 48+, Microsoft Edge, or Safari 10+" in the *HPE Universal CMDB Administration Guide*. This is a one-time operation.
Firefox ESR 17 and later	Microsoft Windows JNLP is required.	Yes	Firefox 31 ESR **Note:** • To launch UCMDB UI from Firefox 48 (or later), enable JNLP by following instructions described in "How to Launch UCMDB UI from Chrome 43+, Firefox 48+, Microsoft Edge, or Safari 10+" in the *HPE Universal*

Browser	OS Version and Edition	Supported	Recommended
			CMDB Administration Guide. This is a one-time operation. • There is a known issue with Mozilla Firefox ESR 38.4 (JavaScript garbage collection crash with Java applet). The plug-in container for Firefox stops working and sometimes, when clicking **Logout**, nothing happens. In this case, use a different supported Firefox version.
Safari	• Mac OS X (for UCMDB UI and UCMDB Browser only) • iPad with iOS 6 or later (for UCMDB Browser only)	Yes	**Note:** • To launch UCMDB UI from Safari 10 (or later), enable JNLP by following instructions described in "How to Launch UCMDB UI from Chrome 43+, Firefox 48+, Microsoft Edge, or Safari 10+" in the *HPE Universal CMDB Administration Guide*. This is a one-time operation. • Only HTTP protocol is supported when launching UCMDB UI from any web browser running on Mac OS X with JNLP enabled.
Internet Explorer 6, 7, 8	Windows	No	
Firefox 10 and higher	Red Hat Enterprise Linux versions 5 and 6,	No	

Browser	OS Version and Edition	Supported	Recommended
	32/64-bit		
Firefox 3.5, 4, 5, 6, 7, 8, 9	Any	No	

The following supported plug-ins are required to run Universal CMDB 10.32:

Screen resolution	Minimal resolution: 1024x768. It is recommended that you use 1280x1024. For wide screens (for example, for 15.4" laptops) the best resolution is 1600x1050.
Java Runtime Environment (for applet viewing)	• **8 family** **Note:** It is recommended to have the latest JRE version. **To change the locally available JRE:** 1. Place a new JRE deployment executable file in: **C:\hp\UCMDB\UCMDBServer\deploy\ucmdb-ui\static\JRE** 2. Restart the server. If you are using Microsoft Internet Explorer, you can download the Oracle JRE from the Java website (**http://www.java.com/download/**). After installation, verify that the browser is using the correct Java version. To do this, open the Java Control Panel (**Control Panel** > **Java**) and then verify the following settings: • In the **Security** tab, the **Enable Java content in the browser** option is selected. • In the **Java** tab, click **View**. In both the **User** and **System** tabs of the **Java Runtime Environment Settings** dialog box, verify that the check box in the **Enabled** column for the correct product is selected. **Note:** A 32-bit version of JRE must be installed to run UCMDB on a 32-bit web browser.
Java caching	To enable Java caching on the client machine, follow these steps: 1. Open the Java Control Panel (**Control Panel** > **Java**). 2. In the **General** tab, click the **Settings** button in the **Temporary Internet Files** section, and then select the **Keep temporary files on my computer** option.
Applet tag support	UCMDB applets support applet tag deployment only. To verify that the client machine supports applet tags, open the Java Control Panel. Click the **Advanced** tab and expand **Default Java for browsers**. Verify that Microsoft Internet Explorer is selected.

Adobe Flash Player (to view charts in reports)	Versions 10.x and later, up to v19
Microsoft Excel (to view exported data)	Versions 2010 and 2013
Adobe Reader (to view exported data)	Versions X and XI

Additional Requirements

Data Flow Probe Requirements

Hardware Requirements

<table>
<tr><td>Computer/processor</td><td>Recommended:The latest generation of Intel/AMD processors (Intel Xeon CPUs or compatible) and the fastest possible processor speed
CPU Cores:
<table>
<tr><th>Deployment</th><th>Minimum</th><th>Recommended</th></tr>
<tr><td>Small</td><td>4 Core</td><td>8 Cores</td></tr>
<tr><td>Standard</td><td>4 Cores</td><td>8 Cores</td></tr>
<tr><td>Enterprise</td><td>8 Cores</td><td>24 Cores</td></tr>
</table></td></tr>
<tr><td>Memory</td><td>
<table>
<tr><th rowspan="2">Deployment</th><th colspan="2">Windows</th><th colspan="2">Linux</th></tr>
<tr><td>Minimum</td><td>Recommended</td><td>Minimum</td><td>Recommended</td></tr>
<tr><td>Small</td><td>4 GB</td><td>8 GB</td><td>4 GB</td><td>8 GB</td></tr>
<tr><td>Standard</td><td>8 GB</td><td>16 GB</td><td>4 GB</td><td>8 GB</td></tr>
<tr><td>Enterprise</td><td>12 GB</td><td>24 GB</td><td>8 GB</td><td>16 GB</td></tr>
</table></td></tr>
<tr><td>Memory swap file</td><td>Windows: The virtual memory for Windows should be at least 1.5 times the size of the physical memory.
Linux: The Linux swap file size should be equal in size to the physical memory.</td></tr>
</table>

Free hard disk space	**Small/Standard:** 100 GB (**Note**: 75 out of 100 GB disk space is required for scan files storage) **Enterprise:** 300 GB (**Note:** 225 out of 300 GB disk space is required for scan files storage)
Display	**Windows/Linux:** Color palette setting of at least 256 colors (32,000 colors recommended)

For more information about data flow probe sizing considerations, see the *HPE Universal CMDB Sizing Guide*.

> **Note:**
>
> - The XML Enricher (with OOTB configuration of two threads) would use a total of 4~5 GB memory for processing scan files on the probe. If scan files are large, you need to add another 1~2 GB memory for the XML Enricher.
> - The XML Enricher must be configured to match the deployment mode of the probe. For details, see How to Configure XML Enricher to Suit the Probe Deployment Mode in the *HPE Universal CMDB Data Flow Management Guide*.

For more information about data flow probe sizing considerations, see the *HPE Universal CMDB Sizing Guide*.

Software Requirements

> **Note:** For Linux platforms, only integrations are supported, not discovery. For details, see How to Run Module/Job-based Discovery in the *HPE Universal CMDB Data Flow Management Guide*.

Hardware Platform	OS Type	OS Version and Edition	Supported	Recommended
x86-64	x86-64	Windows Server 2016	Datacenter and Standard, 64-bit (without the **Nano Server** installation option)	
x86-64	Windows Server 2012 R2	Standard/Datacenter editions, 64-bit	Yes	
x86-64	Windows Server 2012	Standard/Datacenter	Yes	Yes

Hardware Platform	OS Type	OS Version and Edition	Supported	Recommended
		editions, 64-bit		
x86-64	Windows Server 2008	SP2, Standard/Enterprise editions, 64-bit	Yes	
x86-64	Windows Server 2008	R2 and R2 SP1, Standard/Enterprise editions, 64-bit	Yes	
x86-64	Red Hat Linux Server 5.10 and 5.11	Enterprise/Advanced, 64 bit	Yes	
x86-64	Red Hat Enterprise Linux Server 6.4, 6.5, 6.6, 7.0, 7.1, 7.2, and 7.3	64-bit	Yes	
x86-64	Oracle Enterprise Linux with Red Hat Compatible Kernel v6.4, v6.5, v6.6, v7.0, v7.1, v7.2, and v7.3	Enterprise/Advanced 64-bit	Yes	
x86-64	Oracle Enterprise Linux with Oracle Unbreakable Enterprise Kernel v6.4, v6.5, v6.6, v7.0, v7.1, v7.2, and v7.3	Enterprise/Advanced 64-bit	Yes	
x86-64	CentOS 7.0 and 7.1	64-bit	Yes	
x86-64	Red Hat Enterprise Linux Server 6.2, 6.3	x86-64	No	
x86-64	Oracle Enterprise Linux Server with Unbreakable Enterprise Kernel v6.3,	Enterprise/Advanced 64-bit	No	
x86-64	Oracle Enterprise Linux Server with Red Hat Compatible Kernel v6.3,	Enterprise/Advanced 64-bit	No	
	Windows Server 2003	SP2 and R2 SP2, Standard/Enterprise	No	

Hardware Platform	OS Type	OS Version and Edition	Supported	Recommended
		editions, 32-bit or 64-bit		
	Windows 7	Professional/Enterprise	No	
	Windows 2000		No	

Note:

- Windows Server 2003 is no longer supported as of UCMDB 10.00.
- As of UCMDB 10.00, the Data Flow Probe only supports 64-bit platforms.

Supported Databases

Database	Version and Edition	Recommended	Comments
PostgreSQL	• 9.4.8, Embedded		This database comes bundled with the Probe installation

Virtual Environment and Cloud Environment Requirements

Platform	OS Version and Edition	Supported	Recommended
Amazon Web Services (AWS)	All platforms	Yes	
Microsoft Azure	All platforms	Yes	
VMware ESXi ESXi 5.5, 6.0, and 6.5	• Windows Server 2016 Datacenter and Standard, 64-bit (without the **Nano Server** installation option) • Windows Server 2012, 2012 R2, Standard/DataCenter, 64-bit • Windows Server 2008 Standard R2 and R2 SP1 64-bit • Red Hat Enterprise Linux Server 6.x, 7.x, 64-bit		

Platform	OS Version and Edition	Supported	Recommended
	• Red Hat Linux Server 5.x Enterprise/Advanced, 64-bit		
VMware ESXi 5.1	• Windows Server 2012, 2012 R2, Standard/DataCenter, 64-bit • Windows Server 2008 Enterprise SP2, R2, and R2 SP1 64-bit • Windows Server 2008 Standard R2 and R2 SP1 64-bit • Red Hat Linux 5.x Enterprise/Advanced, 64-bit • Red Hat Enterprise Linux Server 6.x, 64-bit		
VMware ESXi 5.0, 5.0 update 1	• Windows Server 2008 Enterprise SP2, R2, and R2 SP1 64-bit • Windows Server 2008 Standard R2 and R2 SP1 64-bit • Red Hat Linux 5.x Enterprise/Advanced, 64-bit • Red Hat Enterprise Linux Server 6.x, 64-bit	Yes	Yes
Microsoft Hyper-V Server 2012, 2012 R2	• Windows Server 2012 and 2012 R2, 64-bit • Windows Server 2008 Enterprise SP2, R2, and R2 SP1 64-bit • Windows Server 2008 Standard R2 and R2 SP1 64-bit • Red Hat Enterprise Linux Server 6.x, 64-bit • Red Hat Linux 5.x Enterprise/Advanced, 64-bit	Yes	
Microsoft Hyper-V Server 2008 R2 SP1	• Windows Server 2008 Standard/Enterprise SP2, R2, and R2 SP1, 64-bit • Red Hat Enterprise Linux Server 6.x, 64-bit • Red Hat Linux Server 5.x Enterprise/Advanced, 64-bit	Yes	
Oracle VM 3.2	See Oracle VM 3.2 Release Notes	Yes	Yes
VMware ESX 4.1 or earlier	All platforms	No	
VMware ESXi 4.1	All platforms	No	

Platform	OS Version and Edition	Supported	Recommended
and earlier			
Xen Hypervisor 3.x	All platforms	No	

Passive Discovery Integration

HPE Real User Monitor (HPE RUM) version 9.20 or later must be installed on a separate server, and must be running and configured to integrate with a Data Flow Probe to run passive Just-In-Time discovery.

The HPE RUM Installation can be downloaded from the HPE Software Support Online Portal (https://softwaresupport.hpe.com/). Search for **Real User Monitor** under **Application Performance Management (BAC)**.

Universal Discovery Client Inventory Tools Software Requirements

The following table displays the software requirements for the Universal Discovery Client Inventory tools:

- SAI editor
- Viewer
- Analysis Workbench

Hardware Platform	OS Type	OS Version and Edition	Supported
x86 or x86-64	Windows Server 2008	any	Yes
x86-64	Windows Server 2008 R2	any	Yes
x86 or x86-64	Windows Server 2012	any	Yes
x86 or x86-64	Windows Server 2012 R2	any	Yes
x86 or x86-64	Windows Vista	any	Yes
x86 or x86-64	Windows 7	any	Yes

Hardware Platform	OS Type	OS Version and Edition	Supported
x86 or x86-64	Windows 8	any	Yes
x86 or x86-64	Windows 10	any	Yes
x86 or x86-64	Windows Server 2016	any	Yes

Note:

- It is not recommended to install the Inventory tools on the same computer that is running the Data Flow Probe due to potential file locking issues.
- When installing the Inventory Tools on a separate machine, the hardware requirements are a dual core CPU with a minimum speed of 1.5 Ghz and 4 GB of RAM

Store and Forward Server Support

The Store and Forward server is supported on the following operating systems and platforms:

Windows

Operating System	Version	Platform
Server	2008	x86-64
Server	2008 R2	
Server	2012	

Linux

Operating System	Version	Platform
Red Hat Enterprise Linux Server/Desktop	5	x86-64
Red Hat Enterprise Linux Server/Workstation	6	
Oracle Linux	4,5,6	

Compatibility

This section provides information about software and configurations that are not required, but which are compatible with Universal CMDB 10.32.

Languages

Documentation

No localized documentation for version 10.32.

Product User Interface

Deliverable	Japanese	Simplified Chinese	German	French	Spanish	Russian	Italian	Brazilian Portuguese
Universal CMDB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
UCMDB Browser	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Internationalization Variances

Universal CMDB 10.32 runs on all locales described in this document. There are no known variances.

Virtualization and Cloud Products

Universal CMDB and Universal Discovery 10.32 can be used with the following virtualization products:

Virtual Environment	OS Version and Edition	Supported	UCMDB Deployments	Recommended
Amazon Web Services (AWS)	All platforms	Yes	• Small • Standard • Enterprise	

Virtual Environment	OS Version and Edition	Supported	UCMDB Deployments	Recommended
VMware ESXi 5.5, 6.0, and 6.5	• Windows Server 2016 Datacenter and Standard, 64-bit (without the **Nano Server** installation option) • Windows Server 2012, 2012 R2, Standard/DataCenter, 64-bit • Windows Server 2008 Standard R2 and R2 SP1 64-bit • Red Hat Enterprise Linux Server 6.x, 7.x, 64-bit • Red Hat Linux Server 5.x Enterprise/Advanced, 64-bit	Yes	• Small • Standard • Enterprise	Yes **Note:** In case of conflict, the VMware Compatibility Guide shall prevail.
VMware ESXi 5.1	• Windows Server 2012, 2012 R2, Standard/DataCenter, 64-bit • Windows Server 2008 Enterprise SP2, R2, and R2 SP1 64-bit • Windows Server 2008 Standard R2 and R2 SP1 64-bit • Red Hat Linux 5.x Enterprise/Advanced, 64-bit • Red Hat Enterprise Linux Server 6.x, 64-bit	Yes	• Small • Standard • Enterprise	Yes **Note:** In case of conflict, the VMware Compatibility Guide shall prevail.
VMware ESXi 5.0, 5.0 update 1	• Windows Server 2008 Enterprise SP2, R2, and R2 SP1 64-bit • Windows Server 2008 Standard R2 and R2	Yes	• Small • Standard • Enterprise	**Note:** In case of conflict, the VMware Compatibili

Virtual Environment	OS Version and Edition	Supported	UCMDB Deployments	Recommended
	SP1 64-bit • Red Hat Linux 5.x Enterprise/Advanced, 64-bit • Red Hat Enterprise Linux Server 6.x, 64-bit			ty Guide shall prevail.
Microsoft Hyper-V Server 2012 R2	• Windows Server 2012 and 2012 R2, 64-bit • Windows Server 2008 Enterprise SP2, R2, and R2 SP1 64-bit • Windows Server 2008 Standard R2 and R2 SP1 64-bit • Red Hat Linux 5.x Enterprise/Advanced, 64-bit • Red Hat Enterprise Linux Server 6.x, 64-bit	Yes	• Small • Standard • Enterprise	For more details, see Hyper-V overview.
Microsoft Hyper-V Server 2012	• Windows Server 2012 and 2012 R2, 64-bit • Windows Server 2008 Enterprise SP2, R2, and R2 SP1 64-bit • Windows Server 2008 Standard R2 and R2 SP1 64-bit • Red Hat Enterprise Linux Server 6.x, 64-bit	Yes	• Small • Standard • Enterprise	For more details, see Hyper-V overview.
Microsoft Hyper-V Server 2008 R2 SP1	• Windows Server 2008 Enterprise SP2, R2, and R2 SP1 64-bit • Windows Server 2008 Standard R2 and R2 SP1 64-bit • Red Hat Linux 5.x Enterprise/Advanced, 64-bit	Yes	• Small • Standard • Enterprise	

Virtual Environment	OS Version and Edition	Supported	UCMDB Deployments	Recommended
	• Red Hat Enterprise Linux Server 6.x, 64-bit			
Oracle VM 3.2	See Oracle VM 3.2 Release Notes	Yes		
Xen Hypervisor 3.x	Any	No		
VMware ESX version 4.x or earlier	Any	No		
VMware ESXi 4.x or earlier	Any	No		

The following product has been tested to perform live migration of VMware ESXi virtual machines:

- VMware vSphere 5.5 vMotion

Recommendations for Deploying HPE CMS System on the Virtual Machines

If virtual servers are being used for a production CMS system:

1. It is strongly recommended that you use physical hardware for UCMDB Database in production environments where performance is a concern. Deploying the UCMDB database on a virtual environment might run into performance issue.
2. Assign dedicated resources (such as vCPU, memory, and disk I/O) to a guest operating system that acts as a UCMDB and Probe Server.
3. Deploy all UCMDB Server HA deployment in the same virtualization resource pool.
4. Use the high performance storage (such like HPE 3PAR) for UCMDB server (If the I/O is not good enough, with some user scenarios, such as SOLR full indexing, it might cause CPU high usage).

Hardware recommendations:

1. It is recommended to use the same number of vCPU and memory as recommended for physical deployment.

2. A Gigabit network card should be used.

High-Availability Products

Universal CMDB 10.32 is compatible with the following high-availability products:

- The **F5 BIG-IP version 10.x** load balancer. (F5 BIG-IP version 11.x is also supported.)

  For details on configuring the load balancer, refer to the High Availability section in the interactive *HPE Universal CMDB Deployment Guide*.

  If you are using a different load balancer, the configuration should be performed by a network administrator who has a wide knowledge about how to configure your load balancer, and similar principles should be applied.

> **Note:** The load balancer used for High Availability must have the ability to insert cookies and must be able to do health checks ("keepalive").

HPE Software Integrations

Information about HPE software that integrates with Universal CMDB 10.32 can be found at the HPE Software Support site. See HPE Software Integrations Catalog.

HPE Software Coexistence

UCMDB Server Compatibility with UCMDB Browser

Product Name	Supported UCMDB Server Version	Comments
UCMDB Browser standalone 4.10 and later	10.01 and later	For details about UCMDB server coverage, see "UCMDB Server Coverage" in the *HPE Universal CMDB Browser Support Matrix*.
UCMDB Browser embedded 4.10 and later	10.30 and later	All functionality listed in the "UCMDB Server coverage" table are also available in the UCMDB Server 10.30 or later versions.

> **Note:** UCMDB server version 10.30 (and later) does not support embedded UCMDB Browser

versions older than 4.10.

Other Software Coexistence

No coexistence information for Universal CMDB 10.32 is available.

Server / Client Compatibility

No compatibility information for older versions of Universal CMDB 10.32 clients or servers is available.

Performance and Sizing

When planning capacity, among other issues, you should consider the ratio of managed nodes in your CMDB to node-related CIs. Node-related CIs include all CIs of types that are subclasses of Application Resource, Node Element, or Running Software.

The following table lists the number of node-related CIs you can discover for each managed node in your environment. This number depends on the size of your deployment and the number of managed nodes—the more managed nodes you maintain in the CMDB, the fewer node-related CIs you can discover for each managed node.

For example, in an Enterprise deployment, if you are running 134,400 managed nodes, you can discover 160 node-related CIs for each managed node. If you are running only 43,200 managed nodes, you can discover 500 resource CIs for each managed node.

Deployment	Number of Managed Nodes/Node-Related CIs
Enterprise	134400/160 – 43200/500
Standard	9000/160 – 3000/500
Small	4500/160 – 1000/500

Note: The numbers in the table include only CIs and not relationships.

For more details about performance and sizing, see the *HPE Universal CMDB Sizing Guide*.

Transparent Technology and Virtualization Support

In recent years, a number of “transparent” hardware and software technologies and virtualization solutions (such as Citrix, Microsoft Cluster Software, and VMware) have become increasingly prevalent. These solutions operate in the technology layers adjacent to the operating systems or, in some cases, as extensions of the operating systems. Similarly, database solutions offer transparent components as supported elements.

HPE supports Universal CMDB running on operating systems and databases on particular platforms as described in the matrix above, not specific hardware and software configurations. HPE will support Universal CMDB customers who run HPE software products on supported operating systems and databases, irrespective of whether they are running transparent or virtualization solutions in their environment. HPE does not support these transparent or virtualization technologies directly. Since the providers of these technologies support a set of certified operating systems and hardware, the customer and the providers of these technologies will be responsible for any interactions or issues that arise at the hardware or operating system layer as a result of their use.

HPE will not require customers to re-create and troubleshoot every issue in a non-transparent environment; however, HPE does reserve the right to request that its customers diagnose certain issues in a native certified operating system environment without the transparent technology. HPE will only make this request when there is reason to believe that the environment is a contributing factor to the reported issue.

While Universal CMDB is expected to function properly with these transparent technologies in place, there may be performance implications, which can invalidate HPE’s typical sizing and recommendations. Analysis must be performed within the context of the specific application to be hosted in a virtual environment to minimize potential resource overload, which can have significant impact on performance and scalability, particularly under peak load.

Obsolescence Plans

As of June 2017 (Third Edition), there are no plans to end support for any currently supported version of Universal CMDB.

To learn the obsolescence plans for previously released versions of Universal CMDB, go to:

https://softwaresupport.hpe.com/web/softwaresupport/obsolescence-migrations

Change Log

The table below lists the changes to this document since the release of UCMDB version 10.01.

Document Date (product version)	Change
March 2017 (10.32)	• **Operating Systems:** ◦ Added support for Red Hat Enterprise Linux Server 7.3 for both UCMDB server and Data Flow Probe ◦ Added support for Oracle Enterprise Linux with Red Hat Compatible Kernel v7.3 for both UCMDB server and Data Flow Probe ◦ Added support for Oracle Enterprise Linux with Oracle Unbreakable Enterprise Kernel v7.3 for both UCMDB server and Data Flow Probe ◦ Added support for Microsoft Windows Server 2008, SP2, R2, and R2 SP1 (Enterprise and Standard editions, 64-bit) for Data Flow Probe ◦ Added support for Microsoft Windows Server 2008 R2 (Enterprise and Standard editions, 64-bit) for UCMDB server • **Databases:** ◦ Added support for Microsoft SQL Server versions 2014 SP2 and 2016 for UCMDB server and UCMDB Integration Service ◦ Added support for PostgreSQL versions 9.5 and 9.6 for UCMDB server and UCMDB Integration Service • **Virtualization:** ◦ Added support for VMware ESXi 6.5 • **Other** ◦ Added Windows Server 2016 support for the Universal Discovery Client Inventory Tools • **Removed support** for the UCMDB Browser embedded in Configuration Manager
December 2016 (10.31)	• **Operating Systems:** ◦ Added support for Microsoft Windows Server 2016, Datacenter and Standard editions, 64-bit (without the **Nano Server** installation option) • **Cloud Environment:** ◦ Added support for Amazon Web Services for both UCMDB Server and Data Flow Probe

Document Date (product version)	Change
	◦ Added support for Microsoft Azure for Data Flow Probe
September 2016 (10.30)	• **Databases:** ◦ Added support for Microsoft SQL Server 2012 SP3 and 2014 SP1 on UCMDB server side ◦ Added support for Microsoft SQL Server 2014 high availability mode (AlwaysOn) ◦ Upgraded the embedded PostgreSQL to version 9.4.8 for both UCMDB Server and Data Flow Probe • **Operating Systems:** ◦ Added support for Red Hat Enterprise Linux Server 7.2 on UCMDB server side, and versions 7.0, 7.1, and 7.2 on probe side ◦ Added support for Oracle Enterprise Linux with Red Hat Compatible Kernel v7.2 on UCMDB server side, and versions 7.0, 7.1, and 7.2 on probe side ◦ Added support for Oracle Enterprise Linux with Oracle Unbreakable Enterprise Kernel v7.2 on UCMDB server side, and versions 7.0, 7.1, and 7.2 on probe side ◦ Added support for CentOS versions 7.0 and 7.1 on both of the UCMDB server and probe sides • **Web Browsers:** ◦ Added support for Firefox 38 ESR • **Plug-ins:** ◦ Added support for Adobe Flash Player versions up to v19 • **Removed Support for the following:** ◦ Microsoft Windows Server 2008 • Enterprise SP2, R2, and R2 SP1, 64-bit • Standard R2 and R2 SP1, 64-bit ◦ Microsoft SQL Server 2008 • 32-bit or 64-bit, SP3 • 64-bit, R2 SP1, R2 SP2 ◦ Microsoft SQL Server 2008 Failover Cluster, Enterprise, 64-bit, SP2, SP3, R2 SP1, R2 SP2 ◦ Red Hat Enterprise Linux Server 6.2 and 6.3 ◦ Oracle Enterprise Linux with Red Hat Compatible Kernel v6.3

Document Date (product version)	Change
	◦ Oracle Enterprise Linux with Oracle Unbreakable Enterprise Kernel v6.3 ◦ VMware ESX 4.0 and 4.1
December 2015 (10.22)	**Databases:** • Added support for PostgreSQL 9.4 • Added support for Microsoft SQL Server 2012 SP2 **Operating Systems:** • Added support for Red Hat Enterprise Linux Server versions 6.6, 7.0, and 7.1 on UCMDB server side, and version 6.6 on probe side • Added support for Oracle Enterprise Linux with Red Hat Compatible Kernel versions 6.6, 7.0, and 7.1 on UCMDB server side, and v6.6 on probe side • Added support for Oracle Enterprise Linux with Oracle Compatible Kernel versions 6.6, 7.0, and 7.1 on UCMDB server side, and v6.6 on probe side **Virtualization:** • Added support for VMware ESXi 6.0 **Web Browsers:** • Added support for Windows Internet Explorer 11 (for Configuration Manager) **Universal Discovery Client Inventory Tools:** • Added support for Windows 10 **Application Server:** • Updated Apache Tomcat version to 7.0.64 **Removed Support for the following:** • Safari on Windows platform
March 2015 (10.21)	**Plug-ins:** • Added support for JRE 8 family. The recommended JRE version is changed from 7u65 to 8u45. **Databases:** • Added support for PostgreSQL 9.3 **Web Browsers:** • Added support for Safari on iPad with iOS 6 or 7 (for UCMDB Browser only)

Document Date (product version)	Change
	De-supported: • Java Runtime Environment 1.6 family
January 2015 (10.20)	**Operating Systems:** • Added support for Oracle Enterprise Linux with Red Hat Compatible Kernel v6.4, v6.5 • Added support for Oracle Enterprise Linux with Oracle Unbreakable Kernel v6.4, v6.5 **Virtualization:** • Added support for Microsoft Hyper-V Server 2012 R2 • Added support for Oracle VM 3.2 **Databases:** • Added support for Oracle 12c, Standard/Enterprise Editions • Added support for Oracle 12c RAC, Enterprise Edition • Added support for Microsoft SQL Server 2014, Standard/Enterprise Editions **Web Browsers:** • Added support for Safari on Windows for UCMDB UI, CM UI, and UCMDB Browser; on Mac OS X for UCMDB UI and UCMDB Browser • Added support for Firefox 31 ESR **Plug-ins:** • Added support for Adobe Flash Player versions up to v15 • Added support for Adobe Reader X and XI
June 2014 (10.11)	**Operating Systems:** • Added support for Windows Server 2012 R2, Datacenter and Standard Editions, for UCMDB and the Data Flow Probe • Added support for Red Hat Enterprise Linux Server 6.5, for UCMDB and the Data Flow Probe **Virtualization:** • Added support for VMware ESXi 5.5 • Added support for VMware vSphere 5.5 vMotion to perform live migration of VMware ESXi virtual machines

Document Date (product version)	Change
	Web Browsers: • Added support for Windows Internet Explorer 11, for UCMDB UI • Added support for Firefox ESR 24, for UCMDB UI
November 2012 (10.01)	**Hardware:** • For Enterprise deployments of UCMDB with more than 40 million CIs and relationships, the required memory is 32 GB RAM **Operating Systems:** • Added support for Windows 2012, Datacenter and Standard Editions, for UCMDB and the Data Flow Probe • Added support for Red Hat Enterprise Linux Server 6.4, for UCMDB and the Data Flow Probe **Databases:** • Discontinued support for Oracle Database 10.2.0.4 • Added support for Microsoft SQL Server Database 2012 SP1, Standard/Enterprise Editions, 64-bit • Added support for Microsoft SQL Server Database 2012 Failover Cluster SP1, Enterprise Edition, 64-bit • Added support for PostgreSQL Server Database 9.2.2, Enterprise Edition, 64-bit in the following modes: ◦ Embedded mode (for Small and Standard UCMDB deployments only) ◦ External mode (for Small, Standard and Enterprise UCMDB deployments) **Web Browsers:** • Added support for Windows Internet Explorer 10 • Discontinued support for Firefox 10 and higher using Red Hat Enterprise Linux, versions 5 and 6, 32/64-bit **Plug-ins:** • The recommended JRE version was changed from 1.7u05 to 1.7u25 • Added support for Adobe Flash Player 11.5 • Added support for Microsoft Excel 2013 **Data Flow Probe:** • Introduced a Small deployment for the Data Flow Probe (in addition to the

<table>
<tr><th>Document Date (product version)</th><th>Change</th></tr>
<tr><td></td><td>
Standard and Enterprise deployments)

The Memory requirements for the Data Flow Probe deployment using Windows changed as follows:

<table>
<tr><td>UCMDB 10.01</td><td>Standard: 4 GB RAM
Enterprise: 8 GB RAM</td></tr>
<tr><td>UCMDB 10.10</td><td>Small: 4 GB RAM
Standard: 8 GB RAM
Enterprise: 12 GB RAM</td></tr>
</table>

The Memory Swap File requirements for the Data Flow Probe deployment using Windows changed as follows:

<table>
<tr><td>UCMDB 10.01</td><td>Standard: 6 GB RAM
Enterprise: 12 GB RAM</td></tr>
<tr><td>UCMDB 10.10</td><td>Small: 6 GB RAM
Standard: 12 GB RAM
Enterprise: 18 GB RAM</td></tr>
</table>

The free hard disk space requirements for Enterprise deployments of the Data Flow Probe changed as follows:

<table>
<tr><td>UCMDB 10.01</td><td>200 GB
Note: 150 out of 200 GB disk space is required for scan files</td></tr>
<tr><td>UCMDB 10.10</td><td>300 GB
Note: 225 out of 300 GB disk space is required for scan files</td></tr>
</table>

Discontinued support for MySQL and MySQL Driver for the Data Flow Probe
Added support for PostgreSQL Server Database 9.2.2 for the Data Flow Probe

Virtualization:

Added support for VMware ESXi 5.1
Added support for Microsoft Hyper-V Server 2012

</td></tr>
</table>

Document Date (product version)	Change
	• Added support for Microsoft Hyper-V Server 2008 R2 SP1 for Enterprise deployments of UCMDB

Send documentation feedback

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on Support Matrix (Universal CMDB 10.32)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to cms-doc@hpe.com.

We appreciate your feedback!