



Configuration Management System (CMS)

Software Version: 2018.08

Support Matrix

Document Release Date: August 2018

Software Release Date: August 2018



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Contents

Requirements	5
Supported Upgrade Paths	5
Hardware	6
Operating System	8
Databases	9
Oracle System Requirements	10
Microsoft SQL System Requirements	11
PostgreSQL System Requirements	13
Application Servers	14
Web Servers	14
Web Browsers and Plug-ins	15
Additional Requirements	18
Data Flow Probe Requirements	18
Hardware Requirements	19
Software Requirements	20
Supported Databases	21
Virtual Environment and Cloud Environment Requirements	22
Passive Discovery Integration	23
Universal Discovery Client Inventory Tools Software Requirements	24
Store and Forward Server Support	25
CMS UI Requirements	25
Hardware	25
Operating Systems	26
Supported Resolutions	28
Open-Source Software Dependencies	28
Databases	28
UCMDB Server Compatibility	28
Application Servers	29
Web Application Servers	29
Web Browsers and Plug-ins	29
Compatibility	31
Languages	31

Internationalization Variances	31
Virtualization and Cloud Products	31
Recommendations for Deploying Micro Focus CMS System on Virtual Machines	35
High-Availability Products	35
Micro Focus Software Integrations	36
Micro Focus Software Coexistence	36
UCMDB Server Compatibility with CMS UI	36
Open Source Software Products	37
Performance and Sizing	37
CMS UI Compatibility	37
Network Level Support	38
Virtualization Products	38
SSO	38
High-Availability Products	39
Micro Focus Software Integrations	39
Product Integrations	39
Widget Integrations	40
UCMDB Server Coverage	41
Micro Focus Software Coexistence	43
Transparent Technology and Virtualization Support	44
Obsolescence Plans	45
Change Log	46
Send documentation feedback	56

Requirements

This section provides information about the supported hardware and software that you must have to successfully install and run Configuration Management System (CMS) 2018.08.

Supported Upgrade Paths

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

Supported Upgrade Paths

Supported Upgrade Paths	CMS product supporting upgrades			
	UCMDB 2018.08	Data Flow Probe 2018.08	Configuration Manager 2018.08	CMS UI Standalone 2018.08 ^[3]
10.20 (with or without a CUP) → 2018.08	Yes	No	Yes	Yes
10.21 (with or without a CUP) → 2018.08	Yes	No	Yes	Yes
10.22 (with or without a CUP) → 2018.08	Yes	Yes ^[1]	Yes	Yes
10.3x → 2018.08	Yes	Yes ^[1]	Yes	Yes
11.0 → 2018.08	Yes	Yes ^[1]	Yes	Yes
2018.05 → 2018.08	Yes	Yes ^[1]	Yes	Yes
2018.08 full installer	Yes	Yes	Yes	Yes

Note:

- Automatic upgrade of Data Flow Probe to version 2018.08 is supported on Windows platform only. For details, see "Data Flow Probe Upgrade Overview" in the *Data Flow Management section of the UCMDB Help*.

Note that automatic upgrade of Data Flow Probe to version 2018.08 is not applicable to the following:

- FIPS mode probes
- Separate mode probes
- Probes on Linux machine

- Integration service
 - Two probes installed on a same Windows machine
2. Version 2018.08 does not support FIPS mode. Do not upgrade if your environment is in FIPS mode.
 3. Before upgrading UCMDB Browser version 11.0 (or earlier) or CMS UI 2018.05 to CMS UI version 2018.08, make sure you have already upgraded UCMDB server to version 2018.08.
 4. Downgrade of any of the above products is not supported.

Hardware

Universal CMDB 2018.08 is supported on the following hardware:

Component	Requirement												
Computer/processor	<p>Windows/Linux:</p> <p>To fulfill the CPU requirements, you must have one of the following:</p> <ul style="list-style-type: none">• Intel Dual Core Xeon Processor 2.4 GHz or later• AMD Opteron Dual Core Processor 2.4 GHz or later <p>Recommended: The latest generation of Intel/AMD processors are recommended.</p> <p>In addition to the above requirements, you must have the following number of CPU Cores, depending on your deployment configuration.</p> <p>CPU Cores:</p> <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><tr><td>Enterprise</td><td>8 Cores</td><td>24 Cores</td></tr></table> <p>Note: As Universal CMDB performance is dependent upon processor speed, to ensure proper Universal CMDB performance, it is recommended that you use the fastest possible processor speed.</p>	Deployment	Minimum	Recommended	Small	1 Core	4 Cores	Standard	4 Cores	8 Cores	Enterprise	8 Cores	24 Cores
Deployment	Minimum	Recommended											
Small	1 Core	4 Cores											
Standard	4 Cores	8 Cores											
Enterprise	8 Cores	24 Cores											

Component	Requirement		
Memory	Deployment	Windows/Linux:	
		Minimum	Recommended
	Small	4 GB RAM	8 GB RAM
	Standard	8 GB RAM	16 GB RAM
	Enterprise	16 GB RAM	32 GB RAM (for more than 40 million CIs and relationships)
Memory Swap File	<p>Windows: The virtual memory for Windows should be at least 1.5 times the size of the physical memory.</p> <p>Linux: The Linux swap file size should be equal in size to the physical memory.</p>		
Free hard disk space	<ul style="list-style-type: none"> • Small/Standard/Enterprise: At least 120 GB (for logs, memory dumps, and so on) • If the search functionality is enabled, more hard disk space is required. <p>For example,</p> <ul style="list-style-type: none"> ◦ 14M CIs + relationships: 30G or more space would be needed for SOLR index files ◦ 20M CIs + relationships: Almost 50G space would be needed <p>Note: Support for Storage Area Network (SAN) is available for usable disk space for UCMDB. You can install UCMDB Server on Storage Area Network (SAN) disk storage attached to a server.</p>		
Display	<p>Windows: Color palette setting of at least 256 colors (recommended: 32,000 colors)</p>		

Operating System

Universal CMDB 2018.08 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	Yes
x86-64	Windows Server 2012 R2	Datacenter and Standard, 64-bit	Yes	
x86-64	Windows Server 2012	Datacenter and Standard, 64-bit	Yes	
x86-64	Windows Server 2008 R2	Enterprise/Standard, SP1, 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 ~ 6.9, 7.0 ~ 7.5	64-bit	Yes	
x86-64	Oracle Enterprise Linux Server with Red Hat Compatible Kernel v6.4 ~ v6.9, v7.0 ~ v7.4	Enterprise/Advanced 64-bit	Yes	
x86-64	Oracle Enterprise Linux Server with Oracle Unbreakable Enterprise Kernel v6.4 ~ v6.9, v7.0 ~ v7.4	Enterprise/Advanced 64-bit	Yes	
x86-64	CentOS 7.0, 7.1, 7.2, 7.3 , and 7.4	x86-64	Yes	
Any	SUSE Linux Enterprise Server 11.3 and 12	Enterprise 64-bit	Yes	

Note:

- 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.
- Installation of Universal CMDB is not supported on 32-bit machines.

Databases

One of the following supported databases is required to run Configuration Management System (CMS) 2018.08:

- 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, we recommended 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 Universal CMDB. A supported option means that Micro Focus quality assurance personnel have successfully performed basic tests on that option.

Database Version	Edition	System Type	Supported Products
Oracle 12.2 (12c R2) * (With or without the Oracle Advanced Security Option enabled)	<ul style="list-style-type: none"> Standard Enterprise 	64-bit	<ul style="list-style-type: none"> UCMDB UCMDB Integration Service
	<ul style="list-style-type: none"> RAC Enterprise ** 		<ul style="list-style-type: none"> UCMDB
Oracle 12c * (With or without the Oracle Advanced Security Option enabled)	<ul style="list-style-type: none"> Standard Enterprise 	64-bit	<ul style="list-style-type: none"> UCMDB UCMDB Integration Service
	<ul style="list-style-type: none"> RAC Enterprise ** 		<ul style="list-style-type: none"> UCMDB
Oracle 11.2 (11g R2) * (With or without the Oracle Advanced Security Option enabled)	<ul style="list-style-type: none"> Standard Enterprise 	64-bit	<ul style="list-style-type: none"> UCMDB Configuration Manager UCMDB Integration Service
	<ul style="list-style-type: none"> RAC Enterprise ** 	64-bit	<ul style="list-style-type: none"> 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 *Hardening section of the UCMDB Help*.

- * Consult the Oracle documentation for supported platforms.
- ** The connection from UCMDB to an Oracle RAC environment is supported only by using the Oracle native drivers. For detailed instructions, see *Database section of UCMDB Help*.

Examples of Tested Deployments

The following table details the deployment environments that have been rigorously tested by Micro Focus 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 12.1.0.2.0	Enterprise	64-bit	Oracle Enterprise Linux with Unbreakable Enterprise Kernel v6.x
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
Oracle 11.2.0.1.0	Enterprise	64-bit	Windows Server 2016

Microsoft SQL System Requirements

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

Database Version	Edition	System Type	Service Packs	Supported Products
Microsoft SQL Server 2017	<ul style="list-style-type: none">• Standard• Enterprise	64-bit		<ul style="list-style-type: none">• UCMDB• UCMDB Integration Service
Microsoft SQL Server 2016	<ul style="list-style-type: none">• Standard• Enterprise	64-bit	SP1 (incl. high availability mode (AlwaysOn))	<ul style="list-style-type: none">• UCMDB• UCMDB Integration Service
Microsoft SQL Server 2014	<ul style="list-style-type: none">• Standard• Enterprise	64-bit	SP2 (incl. high	<ul style="list-style-type: none">• UCMDB• UCMDB Integration

Database Version	Edition	System Type	Service Packs	Supported Products
			availability mode (AlwaysOn))	Service
Microsoft SQL Server 2012	<ul style="list-style-type: none"> Standard Enterprise 	64-bit	SP3	<ul style="list-style-type: none"> UCMDB Configuration Manager UCMDB Integration Service
Microsoft SQL Server 2012 Failover Cluster	<ul style="list-style-type: none"> Enterprise 	64-bit	SP1	<ul style="list-style-type: none"> 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 Micro Focus quality assurance personnel.

Database Release Version	Edition	System Type	Service Packs	Operating System
Microsoft SQL Server 2017	Enterprise	64-bit		Oracle Enterprise Linux with Unbreakable Enterprise Kernel 7.X
Microsoft SQL Server 2017	Enterprise	64-bit		Red Hat Enterprise Linux Server 7.4
Microsoft SQL Server 2016	Enterprise	64-bit		Windows Server 2012 R2 Datacenter Edition (64-bit)
Microsoft SQL Server 2016	Enterprise	64-bit	SP1	Oracle Enterprise Linux with Unbreakable Enterprise Kernel 7.X
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 Universal CMDB. A supported option means that Micro Focus quality assurance personnel have successfully performed basic tests on that option.

Database Version	Edition	System Type	Supported Products
PostgreSQL 10.3	Enterprise	64-bit	<ul style="list-style-type: none">• UCMDB• UCMDB Integration Service
PostgreSQL 9.6	Enterprise	64-bit	<ul style="list-style-type: none">• UCMDB• UCMDB Integration Service
PostgreSQL 9.5	Enterprise	64-bit	<ul style="list-style-type: none">• UCMDB• UCMDB Integration Service
PostgreSQL 9.4.15	Embedded *	64-bit	<ul style="list-style-type: none">• UCMDB• UCMDB Integration Service
PostgreSQL 9.4	Enterprise	64-bit	<ul style="list-style-type: none">• UCMDB• UCMDB Integration Service
PostgreSQL 9.3	Enterprise	64-bit	<ul style="list-style-type: none">• UCMDB• UCMDB Integration Service
PostgreSQL Server 9.22	Enterprise	64-bit	<ul style="list-style-type: none">• 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 only supported for small deployments of UCMDB, it is not supported on Enterprise deployments of UCMDB.
- * Embedded PostgreSQL is supported on Linux systems only after the local PostgreSQL that comes with the Linux installation is uninstalled.

On Linux systems, there is a conflict between the embedded PostgreSQL that comes with UCMDB and the local PostgreSQL that comes with the Linux installation. Therefore, to be able to use the embedded PostgreSQL, make sure you uninstall the local PostgreSQL that comes with the Linux installation.

Examples of Tested Deployments

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

Database Release Version	Deployment	System Type	Operating System
PostgreSQL Server 9.4.8	Embedded	64-bit	Windows Server 2016
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

Configuration Management System (CMS) 2018.08 does not use an application server.

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

- Apache Tomcat, version 8.5.23

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

Web Servers

The following supported web server is required to run Configuration Management System (CMS) and Universal Discovery 2018.08:

- 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 Configuration Management System (CMS) 2018.08:

Browser	OS Version and Edition	Supported	Recommended
Windows Internet Explorer 9	Consult the Microsoft documentation for supported platforms.	Yes	
Windows Internet Explorer 10	Consult the Microsoft documentation for supported platforms.	Yes	Yes
Windows Internet Explorer 11	Consult the Microsoft documentation for supported platforms.	Yes	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 <i>Administer</i> section of the <i>UCMDB Help</i> . This is a one-time operation.
Google Chrome	Microsoft Windows	Yes	Note: To launch

Browser	OS Version and Edition	Supported	Recommended
	JNLP is required for Chrome 43 or later.		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 <i>Administer section of the UCMDB Help</i> . This is a one-time operation.
Firefox ESR 17 and later	Microsoft Windows JNLP is required for Firefox versions 48~51.	Yes	Firefox 31 ESR Note: <ul style="list-style-type: none"> To launch UCMDB UI from Firefox 48 to 51, enable JNLP by following instructions described in "How to Launch UCMDB UI from Chrome 43+, Firefox 48+, Microsoft Edge, or Safari 10+" in the <i>Administer section of the UCMDB Help</i>. 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	<ul style="list-style-type: none"> Mac OS X (for UCMDB UI) 	Yes	Note:

Browser	OS Version and Edition	Supported	Recommended
	<p>and CMS UI only)</p> <ul style="list-style-type: none"> • iPad with iOS 6 or later (for CMS UI only) <p>JNLP is required for Safari 10 or later.</p>		<ul style="list-style-type: none"> • 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 <i>Administer section of the UCMDB Help</i>. 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.

The following supported plug-ins are required to run Configuration Management System (CMS) 2018.08:

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)	<ul style="list-style-type: none"> • 8 family <p>Note: It is recommended to have the latest JRE 8 version.</p> <p>To change the locally available JRE:</p> <ol style="list-style-type: none"> 1. Place a new JRE deployment executable file in: C:\UCMDB\UCMDBServer\deploy\ucmdb-ui\static\JRE 2. Restart the server. <p>If you are using Microsoft Internet Explorer, you can download the Oracle JRE from the Java website (http://www.java.com/download/).</p> <p>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:</p> <ul style="list-style-type: none"> • In the Security tab, the Enable Java content in the browser

	<p>option is selected.</p> <ul style="list-style-type: none">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. <p>Note: A 32-bit version of JRE must be installed to run UCMDB on a 32-bit web browser.</p>
Java caching	<p>To enable Java caching on the client machine, follow these steps:</p> <ol style="list-style-type: none">Open the Java Control Panel (Control Panel > Java).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	<p>UCMDB applets support applet tag deployment only.</p> <p>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.</p>
Adobe Flash Player (to view charts in reports)	Versions 10.x and later, up to v19
Microsoft Excel (to view exported data)	Versions 2010, 2013, and 2016
Adobe Reader (to view exported data)	Versions X and XI
IBM Security Access Manager for Web WebSEAL (single sign-on plugin for web servers)	<p>Version 8.0</p> <p>Web servers in frontend include IIS and Apache. Support UCMDB UI and CMS UI.</p>

Additional Requirements

Data Flow Probe Requirements

- [Hardware Requirements](#)
- [Software Requirements](#)
- [Supported Databases](#)

- [Virtual Environment and Cloud Environment Requirements](#)
- [Passive Discovery Integration](#)

Hardware Requirements

Computer/processor	<p>Recommended:The latest generation of Intel/AMD processors (Intel Xeon CPUs or compatible) and the fastest possible processor speed</p> <p>CPU Cores:</p> <table><tr><th>Deployment</th><th colspan="2">Minimum</th><th colspan="2">Recommended</th></tr><tr><td>Small</td><td colspan="2">4 Core</td><td colspan="2">8 Cores</td></tr><tr><td>Standard</td><td colspan="2">4 Cores</td><td colspan="2">8 Cores</td></tr><tr><td>Enterprise</td><td colspan="2">8 Cores</td><td colspan="2">24 Cores</td></tr></table>					Deployment	Minimum		Recommended		Small	4 Core		8 Cores		Standard	4 Cores		8 Cores		Enterprise	8 Cores		24 Cores					
Deployment	Minimum		Recommended																										
Small	4 Core		8 Cores																										
Standard	4 Cores		8 Cores																										
Enterprise	8 Cores		24 Cores																										
Memory	<table><tr><th rowspan="2">Deployment</th><th colspan="2">Windows</th><th colspan="2">Linux</th></tr><tr><th>Minimum</th><th>Recommended</th><th>Minimum</th><th>Recommended</th></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>	Deployment	Windows		Linux		Minimum	Recommended	Minimum	Recommended	Small	4 GB	8 GB	4 GB	8 GB	Standard	8 GB	16 GB	4 GB	8 GB	Enterprise	12 GB	24 GB	8 GB	16 GB				
Deployment	Windows		Linux																										
	Minimum	Recommended	Minimum	Recommended																									
Small	4 GB	8 GB	4 GB	8 GB																									
Standard	8 GB	16 GB	4 GB	8 GB																									
Enterprise	12 GB	24 GB	8 GB	16 GB																									
Memory swap file	<p>Windows: The virtual memory for Windows should be at least 1.5 times the size of the physical memory.</p> <p>Linux: The Linux swap file size should be equal in size to the physical memory.</p>																												
Free hard disk space	<p>Small/Standard: 100 GB (Note: 75 out of 100 GB disk space is required for scan files storage)</p> <p>Enterprise: 300 GB (Note: 225 out of 300 GB disk space is required for scan files storage)</p> <p>Note: Support for Storage Area Network (SAN) is available for usable disk space for Data Flow Probe. You can install Data Flow Probe on Storage Area Network (SAN) disk storage attached to a server.</p>																												
Display	<p>Windows/Linux: Color palette setting of at least 256 colors (32,000 colors recommended)</p>																												

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 *Data Flow Management section of the UCMDB Help*.

For more information about data flow probe sizing considerations, see [Sizing](#).

Software Requirements

Note: For Linux platforms, only integrations are supported, not discovery. For details, see [How to Run Module/Job-based Discovery](#) in the *Data Flow Management section of the UCMDB Help*.

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	Yes
x86-64	Windows Server 2012 R2	Standard/Datacenter editions, 64-bit	Yes	
x86-64	Windows Server 2012	Standard/Datacenter editions, 64-bit	Yes	
x86-64	Windows Server 2008 R2	SP1, Standard/Enterprise editions, 64-bit	Yes	
x86-64	Windows Server 2008	SP2, Standard/Enterprise editions, 64-bit	Yes	
x86-64	Red Hat Linux Server 5.10 and 5.11	Enterprise/Advanced, 64-bit	Yes (for integration only)	

Hardware Platform	OS Type	OS Version and Edition	Supported	Recommended
x86-64	Red Hat Enterprise Linux Server 6.4 ~ 6.9, 7.0 ~ 7.4	64-bit	Yes (for integration only)	
x86-64	Oracle Enterprise Linux with Red Hat Compatible Kernel v6.4 ~ v6.9, v7.0 ~ v7.4	Enterprise/Advanced, 64-bit	Yes (for integration only)	
x86-64	Oracle Enterprise Linux with Oracle Unbreakable Enterprise Kernel v6.4 ~ v6.9, v7.0 ~ v7.4	Enterprise/Advanced, 64-bit	Yes (for integration only)	
x86-64	CentOS 7.0, 7.1, 7.2, 7.3 , and 7.4	64-bit	Yes (for integration only)	
Any	SUSE Linux Enterprise Server 11.3	SPARC	Yes (for integration only)	

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	<ul style="list-style-type: none"> • 9.4.15, Embedded 		This database comes bundled with the Probe installation

Virtual Environment and Cloud Environment Requirements

Platform	OS Version and Edition	Supported	Recommended
Storage Area Network (SAN)	All platforms	Yes	
Amazon Web Services (AWS)	All platforms	Yes	Yes
Microsoft Azure	All platforms	Yes	Yes
VMware ESXi ESXi 6.0 and 6.5	<ul style="list-style-type: none"> 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	
VMware ESXi ESXi 5.5	<ul style="list-style-type: none"> 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	Yes
VMware ESXi 5.1	<ul style="list-style-type: none"> Windows Server 2012, 2012 R2, Standard/DataCenter, 64-bit Windows Server 2008 Enterprise SP2, R2, 		

Platform	OS Version and Edition	Supported	Recommended
	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	
Microsoft Hyper-V Server 2016	See Microsoft Hyper-V Server 2016	Yes	
Microsoft Hyper-V Server 2012, 2012 R2	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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

Passive Discovery Integration

Micro Focus Real User Monitor (Micro Focus 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 Micro Focus RUM Installation can be downloaded from the Micro Focus Support Online Portal (<https://softwaresupport.softwaregrp.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 Server 2016	any	Yes
x86 or x86-64	Windows Vista	any	Yes
x86 or x86-64	Windows 7	any	Yes
x86 or x86-64	Windows 8	any	Yes
x86 or x86-64	Windows 10	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	

CMS UI Requirements

This section provides information about the supported hardware and software that you must have to successfully install and run CMS UI 2018.08.

Hardware

CMS UI 2018.08 standalone is supported on the following hardware:

Component	Requirement
Computer/processor	Windows/Linux: To fulfill the CPU requirements, you must have one of the following: <ul style="list-style-type: none">• Intel Dual Core Xeon Processor 2.4 GHz or later• AMD Opteron Dual Core Processor 2.4 GHz or later

Component	Requirement											
	<p>Recommended: The latest generation of Intel/AMD processors are recommended.</p> <p>In addition to the above requirements, you must have the following number of CPU Cores, depending on your deployment configuration.</p> <p>CPU Cores:</p> <table><tr><th>Deployment</th><th>Minimum</th><th>Recommended</th></tr><tr><td>Standard</td><td>2 Cores</td><td>4 Cores</td></tr><tr><td>Enterprise</td><td>8 Cores</td><td>More than 8 Cores</td></tr></table> <p>Note: To ensure proper CMS UI performance, it is recommended that you use the fastest possible processor speed.</p>	Deployment	Minimum	Recommended	Standard	2 Cores	4 Cores	Enterprise	8 Cores	More than 8 Cores		
Deployment	Minimum	Recommended										
Standard	2 Cores	4 Cores										
Enterprise	8 Cores	More than 8 Cores										
Memory	<table><tr><th rowspan="2">Deployment</th><th>Windows/Linux:</th><th></th></tr><tr><th>Minimum</th><th>Recommended</th></tr><tr><td>Standard</td><td>8 GB RAM</td><td>16 GB RAM</td></tr><tr><td>Enterprise</td><td>32 GB RAM</td><td>32 GB RAM</td></tr></table> <p>Note: CMS UI is dependent upon memory. To ensure proper CMS UI performance, it is recommended that you allocate memory as much as possible from the machine where Tomcat is installed.</p>	Deployment	Windows/Linux:		Minimum	Recommended	Standard	8 GB RAM	16 GB RAM	Enterprise	32 GB RAM	32 GB RAM
Deployment	Windows/Linux:											
	Minimum	Recommended										
Standard	8 GB RAM	16 GB RAM										
Enterprise	32 GB RAM	32 GB RAM										
Memory Swap File	<p>Windows: The virtual memory for Windows should be at least 1.5 times the size of the physical memory.</p> <p>Linux: The Linux swap file size should be equal in size to the physical memory.</p>											
Free hard disk space	<p>Standard/Enterprise: At least 2.5 GB</p> <p>Note: Support for Storage Area Network (SAN) is available for usable disk space for CMS UI. You can install CMS UI on Storage Area Network (SAN) disk storage attached to a server.</p>											

Operating Systems

CMS UI 2018.08 runs on the following operating systems:

OS	Edition	Platform (bit)
Windows Server 2012, 2012 R2, and 2016	Essentials/Standard	64 bit

OS	Edition	Platform (bit)
Red Hat Linux v5.x	Enterprise/Advanced	64 bit
Red Hat Enterprise Linux Server 6.3, 6.7, 6.8, and 6.9		64 bit

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	Yes
x86-64	Windows Server 2012 R2	Datacenter and Standard, 64-bit	Yes	
x86-64	Windows Server 2012	Datacenter and Standard, 64-bit	Yes	
x86-64	Windows Server 2008 R2	Enterprise/Standard, SP1, 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 ~ 6.9, 7.0 ~ 7.5	64-bit	Yes	
x86-64	Oracle Enterprise Linux Server with Red Hat Compatible Kernel v6.4 ~ v6.9, v7.0 ~ v7.4	Enterprise/Advanced 64-bit	Yes	
x86-64	Oracle Enterprise Linux Server with Oracle Unbreakable Enterprise Kernel v6.4 ~ v6.9, v7.0 ~ v7.4	Enterprise/Advanced 64-bit	Yes	
x86-64	CentOS 7.0, 7.1, 7.2, 7.3 , and 7.4	x86-64	Yes	
Any	SUSE Linux Enterprise Server 11.3 and 12	Enterprise 64-bit	Yes	

Supported Resolutions

CMS UI 2018.08 requires the following screen resolutions:

- Minimum resolution: 1024x768
- Recommended resolution: 1600x1050
- Recommended High Definition resolution: 1920x1080

Open-Source Software Dependencies

CMS UI 2018.08 requires the following open-source software dependencies:

- OpenJDK 8

To download OpenJDK 8, go to the Azul's site at <http://www.azul.com/downloads/zulu/>.

Databases

CMS UI 2018.08 does not use a database.

UCMDB Server Compatibility

Product Name	Supported UCMDB Version	Comments
CMS UI standalone 2018.08	2018.08	The latest version of CMS UI requires the latest released version of UCMDB server.
CMS UI embedded 2018.08	2018.08	The latest version of CMS UI can be embedded only in the latest released version of UCMDB server.

Application Servers

The following supported application server is required to run CMS UI 2018.08:

- Wildfly, version 11
- JBoss EAP, version 6.4.0

Web Application Servers

One of the following supported web servers is required to run CMS UI 2018.08:

- Apache Tomcat, version 8.5.24
- Jetty versions that are included with UCMDB Server version 2018.08

Note: Jetty is not supported in standalone mode, only in embedded mode in UCMDB.

Web Browsers and Plug-ins

One of the following supported web browsers with the following plug-ins is required to run CMS UI 2018.08:

Browser	Client OS	Remarks
Internet Explorer 11	Windows OSs	<p>To enable CMS UI to always retrieve data from UCMDB server instead of loading cached data in IE, make sure you do the following:</p> <ol style="list-style-type: none">1. In IE, go to Settings > Internet Options > General > Settings.2. In the Website Data Settings dialog, go to the Cashes and databases tab.3. Make sure you deselect the Allow website caches and databases check box.4. Click OK twice.

Browser	Client OS	Remarks
Google Chrome latest version	Windows OSs	
Mozilla Firefox latest version	Windows OSs	

Compatibility

This section provides information about software and configurations that are not required, but which are compatible with Configuration Management System (CMS) 2018.08.

Languages

Documentation

No localized documentation for version 2018.08.

Product User Interface

Deliverable	Japanese	Simplified Chinese	Korean	German	French	Spanish	Russian	Italian	Brazilian Portuguese
Universal CMDB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CMS UI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Internationalization Variances

Configuration Management System (CMS) 2018.08 runs on all locales described in this document. There are no known variances.

Virtualization and Cloud Products

Universal CMDB and Universal Discovery 2018.08 can be used with the following virtualization products:

Virtual/Cloud Environment	OS Version and Edition	Supported	UCMDB Deployments	Recommended
Storage Area	All platforms	Yes	<ul style="list-style-type: none">Small	

Virtual/Cloud Environment	OS Version and Edition	Supported	UCMDB Deployments	Recommended
Network (SAN)			<ul style="list-style-type: none"> Standard Enterprise 	
Microsoft Azure	All platforms	Yes	<ul style="list-style-type: none"> Small Standard Enterprise 	Yes
Amazon Web Services (AWS)	All platforms	Yes	<ul style="list-style-type: none"> Small Standard Enterprise 	Yes
VMware ESXi 6.0 and 6.5	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Small Standard Enterprise 	<p>Note: In case of conflict, the VMware Compatibility Guide shall prevail.</p>
VMware ESXi 5.5	<ul style="list-style-type: none"> Windows Server 2016 Datacenter and Standard, 64-bit (without the Nano Server installation option) Windows Server 2012, 2012 R2, Standard/DataCenter, 64-bit 	Yes	<ul style="list-style-type: none"> Small Standard Enterprise 	<p>Note: In case of conflict, the VMware Compatibility Guide shall prevail.</p>

Virtual/Cloud Environment	OS Version and Edition	Supported	UCMDB Deployments	Recommended
	<ul style="list-style-type: none"> 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 			
VMware ESXi 5.1	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Small Standard Enterprise 	Note: In case of conflict, the VMware Compatibility Guide shall prevail.
VMware ESXi 5.0, 5.0 update 1	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Small Standard Enterprise 	Note: In case of conflict, the VMware Compatibility Guide shall prevail.
Microsoft Hyper-V Server 2016	See Microsoft Hyper-V Server 2016	Yes	<ul style="list-style-type: none"> Small Standard Enterprise 	

Virtual/Cloud Environment	OS Version and Edition	Supported	UCMDB Deployments	Recommended
Microsoft Hyper-V Server 2012 R2	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Small Standard Enterprise 	For more details, see Hyper-V overview .
Microsoft Hyper-V Server 2012	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Small Standard Enterprise 	For more details, see Hyper-V overview .
Microsoft Hyper-V Server 2008 R2 SP1	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Small Standard Enterprise 	
Oracle VM 3.2	See Oracle VM 3.2 Release Notes	Yes		

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

- VMware vSphere 5.5 vMotion

Recommendations for Deploying Micro Focus CMS System on 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

Configuration Management System (CMS) 2018.08 is compatible with the following high-availability products:

- The **F5 BIG-IP version 10.x (and later versions)** load balancer

For details on configuring the load balancer, refer to the High Availability section in the interactive *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").

Micro Focus Software Integrations

Information about Micro Focus software that integrates with Configuration Management System (CMS) 2018.08 can be found at the Micro Focus Support site. See [Integrations Catalog](#).

Micro Focus Software Coexistence

UCMDB servers must be installed on dedicated host systems which must not run other Micro Focus applications.

Installing UCMDB servers together with most other Micro Focus products on the same host system may result in port conflicts, performance issues, or other unexpected behavior.

Coexistence of UCMDB servers with Micro Focus Data Flow Probes (including UCMDB Integration Service) and CMS UI is supported. For details about UCMDB Server compatibility with CMS UI, see the table below.

On the same Windows machine, you can have two Data Flow Probes (including UCMDB Integration Service) at most.

Caution: When you have both Data Flow Probe and UCMDB Integration Service installed on the same Windows machine where UCMDB Server is installed, you cannot start the Data Flow Probe and UCMDB Integration Service at the same time.

UCMDB Server Compatibility with CMS UI

Product Name	Supported UCMDB Server Version	Comments
CMS UI standalone 2018.08	2018.08	The latest version of CMS UI requires the latest released version of UCMDB server.
CMS UI embedded 2018.08	2018.08	The latest version of CMS UI can be embedded only in the latest released version of UCMDB server.

Open Source Software Products

The following open source search platform is required for using Configuration Management System (CMS) 2018.08 and CMS UI 2018.08:

- Apache Solr version 7.2.1

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 *Sizing section of the UCMDB Help*.

CMS UI Compatibility

This section provides information about software and configurations that are compatible with CMS UI 2018.08.

Network Level Support

CMS UI supports the following network levels:

- IPv4
- IPv6

Virtualization Products

CMS UI 2018.08 can be used with the following virtualization products:

- VMware ESX 4
- VMware ESX 4.1
- VMware ESXi 5
- VMware ESXi 5 update 1
- Microsoft Hyper-V Server 2008 R2 SP1

SSO

Single Sign On Product	Web Server in Front	Comments
CA Site Minder	IIS	Only a stand-alone CMS UI is supported. When the CMS UI runs on the jetty of the UCMDB server, you can only use the http protocol (the SSL protocol is not available).
	Apache	
IBM WebSeal	IIS	
	Apache	

High-Availability Products

CMS UI 2018.08 is compatible with the following high-availability products:

- The **F5 BIG-IP version 10.x** load balancer

For details on configuring the load balancer, refer to the High Availability section in the interactive *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").

Micro Focus Software Integrations

Product Integrations

Product Name	Supported Version	Comments
UCMDB	2018.08	The latest version of CMS UI requires the latest released version of UCMDB server. The latest version of CMS UI can be embedded only in the latest released version of UCMDB server.
UCMDB Configuration Manager	10.10 and later	
BSM	9.12 and later	
Service Manager	According to UCMDB integration support - 9.30, 9.31, and 9.40	

Product Name	Supported Version	Comments
ALM	11	
Enterprise View	1	
Operations Orchestration	10.51	

Widget Integrations

Widget	Integrated Product
Properties	UCMDB
Environment	UCMDB
Impact	UCMDB
Policy	UCMDB Configuration Manager
Change Requests	Service Manager
Incidents	Service Manager
Monitoring	BSM
Stakeholders	UCMDB
Automation	Operations Orchestration
Security	Enterprise View
Defects	ALM
Problems	Service Manager
History	UCMDB
Discovery Progress	UCMDB
Get Related	UCMDB

Information about Micro Focus software that integrates with CMS UI 2018.08 can be found at the Micro Focus Software Support site (<https://softwaresupport.softwaregrp.com/>).

UCMDB Server Coverage

Functionality	UCMDB Server Version
Properties Widget	2018.08
Environment Widget	2018.08
Impact Simulation Widget	2018.08
Policy Widget	2018.08
Change Request Widget	2018.08
Incidents Widget	2018.08
Monitoring Widget	2018.08
Stakeholder Widget	2018.08
Automation Widget	2018.08
Security Widget	2018.08
Defects Widget	2018.08
Problems Widget	2018.08
History Widget	2018.08
Embeddable Widgets	2018.08
Enterprise Collaboration integration	2018.08
Direct link to external application	2018.08
Lightweight SSO	2018.08
LDAP support	2018.08
Multiple UCMDB Servers support	2018.08
Server side configuration	2018.08
Localization	2018.08
Online Help	2018.08
Data update	2018.08
RTSM certification	2018.08

Functionality	UCMDB Server Version
Plain search	2018.08
Advanced search engine	2018.08
Search Auto-Completion	2018.08
Properties categorization	2018.08
Most Searched	2018.08
Most Visited	2018.08
Assisted Modeling (Lightweight Modeling)	2018.08
Multi-tenancy	2018.08
Reports	2018.08
Notifications	2018.08
Browser CI Access Control	2018.08
Categorization	2018.08
Dynamic Widgets	2018.08
Branding	2018.08
Service Modeling	2018.08
Get Related Widget	2018.08
Discovery Progress Widget	2018.08
Discovery	2018.08
Package Manager	2018.08
LDAP Manager	2018.08
Home	2018.08
Smart Software Analytics	2018.08
Probe Dashboard	2018.08
Integration Studio	2018.08
Resource Manager	2018.08

Micro Focus Software Coexistence

No coexistence information for CMS UI 2018.08 is available.

Transparent Technology and Virtualization Support

In recent years, a number of “transparent” hardware and software technologies, virtualization and infrastructure as a service (IaaS) cloud solutions (such as Citrix, Microsoft Cluster Software and Azure, VMware and Amazon AWS) 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.

Micro Focus supports Configuration Management System (CMS) running on operating systems and databases on particular platforms as described in the matrix above, not specific hardware and software configurations. Micro Focus will support Configuration Management System (CMS) customers who run Micro Focus software products on supported operating systems and databases, irrespective of whether they are running transparent or virtualization/IaaS cloud solutions in their environment. Micro Focus does not support these transparent or virtualization/IaaS cloud 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.

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

While Configuration Management System (CMS) is expected to function properly with these transparent technologies in place, there may be performance implications, which can invalidate Micro Focus’s typical sizing and recommendations. Analysis must be performed within the context of the specific application to be hosted in a virtual/IaaS cloud environment to minimize potential resource overload, which can have significant impact on performance and scalability, particularly under peak load.

Obsolescence Plans

As of August 2018, there are no plans to end support for any currently supported version of Configuration Management System (CMS).

To learn the obsolescence plans for previously released versions of Configuration Management System (CMS), go to [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
August 2018 (2018.08)	<ul style="list-style-type: none">• Operating Systems<ul style="list-style-type: none">◦ Added support for Red Hat Enterprise Linux Server 7.5 for both UCMDB server and Data Flow Probe◦ Added support for Red Hat Enterprise Linux Server 6.8 and 6.9 for CMS UI◦ Added support for SUSE Linux Enterprise Server Enterprise 12 for UCMDB server• Database<ul style="list-style-type: none">◦ Added support for Oracle version 12c R2 (Standard/Enterprise Editions) for UCMDB server and UCMDB Integration Service◦ Added support for Oracle version 12c R2 RAC (Enterprise Edition) for UCMDB server and UCMDB Integration Service• Web Browsers<ul style="list-style-type: none">◦ Added support for Safari with iOS 11 for CMS UI
May 2018 (2018.05)	<ul style="list-style-type: none">• Operating Systems<ul style="list-style-type: none">◦ Added support for CentOS 7.4 for both UCMDB server and Data Flow Probe• Database<ul style="list-style-type: none">◦ Added support for PostgreSQL version 10.3 for UCMDB server and UCMDB Integration Service◦ Updated the embedded PostgreSQL version to 9.4.15 for UCMDB server, UCMDB Integration Service, and Data Flow Probe• Application Server<ul style="list-style-type: none">◦ Updated Apache Tomcat version to 8.5.24 for CMS UI• Open Source Software Products

Document Date (product version)	Change
	<ul style="list-style-type: none"> Updated Apache Solr version to 7.2.1
February 2018 (11.0)	<ul style="list-style-type: none"> Operating Systems <ul style="list-style-type: none"> Added support for Red Hat Enterprise Linux Server 7.4 for both UCMDB server and Data Flow Probe Added support for Oracle Enterprise Linux with Red Hat Compatible Kernel v7.4 for both UCMDB server and Data Flow Probe Added support for Oracle Enterprise Linux with Oracle Unbreakable Kernel v7.4 for both UCMDB server and Data Flow Probe Added support for CentOS 7.2 and 7.3 for both UCMDB server and Data Flow Probe Added support for SUSE Linux Enterprise Server 11.3 for both UCMDB server and Data Flow Probe Database <ul style="list-style-type: none"> Added support for Microsoft SQL Server version 2017 for UCMDB server and UCMDB Integration Service Virtualization <ul style="list-style-type: none"> Added support for Microsoft Hyper-V Server 2016 for both UCMDB server and Data Flow Probe Application Server <ul style="list-style-type: none"> Updated Apache Tomcat version to 8.5.23 Plug-in <ul style="list-style-type: none"> Added support for IBM Security Access Manager for Web WebSEAL version 8 as single sign-on plugin for web servers for UCMDB UI and UCMDB Browser High-Availability Product <ul style="list-style-type: none"> Added support for F5 BIG-IP version 13.x load balancer UCMDB Browser <ul style="list-style-type: none"> Added IBM WebSeal as a Single Sign On product Updated the JBoss from version 7.0 to Wildfly

Document Date (product version)	Change
	<p>version 11</p> <ul style="list-style-type: none"> ◦ Updated Apache Tomcat version to 8.5.23 ◦ Updated the UCMDB Supported Version to 11.0 ◦ Updated the Minimal UCMDB Server Version to 11.0 ◦ Added new supported modules • Removed support for the following <ul style="list-style-type: none"> ◦ Microsoft SQL Server 2012 SP1 ◦ Microsoft SQL Server 2012 SP2 ◦ Microsoft SQL Server 2014 ◦ Microsoft SQL Server 2014 SP1
July 2017 (10.33)	<ul style="list-style-type: none"> • Operating Systems: <ul style="list-style-type: none"> ◦ Added support for Red Hat Enterprise Linux Server 6.7, 6.8, and 6.9 for both UCMDB server and Data Flow Probe ◦ Added support for Oracle Enterprise Linux with Red Hat Compatible Kernel v6.7, v6.8, and v6.9 for both UCMDB server and Data Flow Probe ◦ Added support for Oracle Enterprise Linux with Oracle Unbreakable Enterprise Kernel v6.7, v6.8, and v6.9 for both UCMDB server and Data Flow Probe • Database: <ul style="list-style-type: none"> ◦ Added support for Microsoft SQL Server version 2016 SP1 (including high availability mode (AlwaysOn)) for UCMDB server and UCMDB Integration Service • Virtualization: <ul style="list-style-type: none"> ◦ Added support for Microsoft Azure for UCMDB server (with the standalone version of Microsoft SQL Server installed on Azure virtual machines) • Plug-in <ul style="list-style-type: none"> ◦ Added support for Microsoft Excel 2016 • Removed support for the following <ul style="list-style-type: none"> ◦ Character set WE8ISO8859P1 for Oracle databases

Document Date (product version)	Change
March 2017 (10.32)	<ul style="list-style-type: none"> • Operating Systems: <ul style="list-style-type: none"> ◦ 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 SP1 (Enterprise and Standard editions, 64-bit) for UCMDB server • Databases: <ul style="list-style-type: none"> ◦ 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: <ul style="list-style-type: none"> ◦ Added support for VMware ESXi 6.5 • Other <ul style="list-style-type: none"> ◦ Added Windows Server 2016 support for the Universal Discovery Client Inventory Tools ◦ Added clarification that Windows Server 2012 R2 is supported for the Universal Discovery Client Inventory Tools • Removed support for the UCMDB Browser embedded in Configuration Manager
December 2016 (10.31)	<ul style="list-style-type: none"> • Operating Systems: <ul style="list-style-type: none"> ◦ Added support for Microsoft Windows Server 2016, Datacenter and Standard editions, 64-bit (without the Nano Server installation option) • Cloud Environment:

Document Date (product version)	Change
	<ul style="list-style-type: none"> Added support for Amazon Web Services for both UCMDB Server and Data Flow Probe Added support for Microsoft Azure for Data Flow Probe
September 2016 (10.30)	<ul style="list-style-type: none"> Databases: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 for UCMDB server, and versions 7.0, 7.1, and 7.2 for Data Flow Probe 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 for Data Flow Probe Added support for CentOS versions 7.0 and 7.1 on both of the UCMDB server and for Data Flow Probe Web Browsers: <ul style="list-style-type: none"> Added support for Firefox 38 ESR Plug-ins: <ul style="list-style-type: none"> Added support for Adobe Flash Player versions up to v19 Removed Support for the following: <ul style="list-style-type: none"> Microsoft Windows Server 2008 <ul style="list-style-type: none"> Enterprise SP2, R2, and R2 SP1, 64-bit Standard R2 and R2 SP1, 64-bit Microsoft SQL Server 2008

Document Date (product version)	Change
	<ul style="list-style-type: none"> • 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 ◦ Oracle Enterprise Linux with Oracle Unbreakable Enterprise Kernel v6.3 ◦ VMware ESX 4.0 and 4.1
December 2015 (10.22)	<p>Databases:</p> <ul style="list-style-type: none"> • Added support for PostgreSQL 9.4 • Added support for Microsoft SQL Server 2012 SP2 <p>Operating Systems:</p> <ul style="list-style-type: none"> • 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 for UCMDB server, and v6.6 for Data Flow Probe • Added support for Oracle Enterprise Linux with Oracle Compatible Kernel versions 6.6, 7.0, and 7.1 for UCMDB server, and v6.6 for Data Flow Probe <p>Virtualization:</p> <ul style="list-style-type: none"> • Added support for VMware ESXi 6.0 <p>Web Browsers:</p> <ul style="list-style-type: none"> • Added support for Windows Internet Explorer 11 (for Configuration Manager) <p>Universal Discovery Client Inventory Tools:</p> <ul style="list-style-type: none"> • Added support for Windows 10 <p>Application Server:</p> <ul style="list-style-type: none"> • Updated Apache Tomcat version to 7.0.64

Document Date (product version)	Change
	Removed Support for the following: <ul style="list-style-type: none"> Safari on Windows platform
March 2015 (10.21)	Plug-ins: <ul style="list-style-type: none"> Added support for JRE 8 family. The recommended JRE version is changed from 7u65 to 8u45. Databases: <ul style="list-style-type: none"> Added support for PostgreSQL 9.3 Web Servers <ul style="list-style-type: none"> Updated Jetty version to 9.2.10 Web Browsers: <ul style="list-style-type: none"> Added support for Safari on iPad with iOS 6 or 7 (for UCMDB Browser only) Removed Support for the following: <ul style="list-style-type: none"> Java Runtime Environment 1.6 family
January 2015 (10.20)	Operating Systems: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Added support for Microsoft Hyper-V Server 2012 R2 Added support for Oracle VM 3.2 Databases: <ul style="list-style-type: none"> 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:

Document Date (product version)	Change
	<ul style="list-style-type: none"> 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 <p>Plug-ins:</p> <ul style="list-style-type: none"> Added support for Adobe Flash Player versions up to v15 Added support for Adobe Reader X and XI
June 2014 (10.11)	<p>Operating Systems:</p> <ul style="list-style-type: none"> 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 <p>Virtualization:</p> <ul style="list-style-type: none"> Added support for VMware ESXi 5.5 Added support for VMware vSphere 5.5 vMotion to perform live migration of VMware ESXi virtual machines <p>Web Browsers:</p> <ul style="list-style-type: none"> Added support for Windows Internet Explorer 11, for UCMDB UI Added support for Firefox ESR 24, for UCMDB UI
November 2012 (10.01)	<p>Hardware:</p> <ul style="list-style-type: none"> For Enterprise deployments of UCMDB with more than 40 million CIs and relationships, the required memory is 32 GB RAM <p>Operating Systems:</p> <ul style="list-style-type: none"> 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 <p>Databases:</p>

Document Date (product version)	Change				
	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Embedded mode (for Small and Standard UCMDB deployments only) External mode (for Small, Standard and Enterprise UCMDB deployments) <p>Web Browsers:</p> <ul style="list-style-type: none"> 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 <p>Plug-ins:</p> <ul style="list-style-type: none"> 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 <p>Data Flow Probe:</p> <ul style="list-style-type: none"> Introduced a Small deployment for the Data Flow Probe (in addition to the Standard and Enterprise deployments) The Memory requirements for the Data Flow Probe deployment using Windows changed as follows: <table border="1"> <tr> <td>UCMDB 10.01</td><td> <ul style="list-style-type: none"> Standard: 4 GB RAM Enterprise: 8 GB RAM </td></tr> <tr> <td>UCMDB 10.10</td><td> <ul style="list-style-type: none"> Small: 4 GB RAM Standard: 8 GB RAM Enterprise: 12 GB RAM </td></tr> </table> 	UCMDB 10.01	<ul style="list-style-type: none"> Standard: 4 GB RAM Enterprise: 8 GB RAM 	UCMDB 10.10	<ul style="list-style-type: none"> Small: 4 GB RAM Standard: 8 GB RAM Enterprise: 12 GB RAM
UCMDB 10.01	<ul style="list-style-type: none"> Standard: 4 GB RAM Enterprise: 8 GB RAM 				
UCMDB 10.10	<ul style="list-style-type: none"> Small: 4 GB RAM Standard: 8 GB RAM Enterprise: 12 GB RAM 				

Document Date (product version)	Change								
	<ul style="list-style-type: none"> The Memory Swap File requirements for the Data Flow Probe deployment using Windows changed as follows: <table border="1"> <tr> <td>UCMDB 10.01</td><td> <ul style="list-style-type: none"> Standard: 6 GB RAM Enterprise: 12 GB RAM </td></tr> <tr> <td>UCMDB 10.10</td><td> <ul style="list-style-type: none"> 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 border="1"> <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> Added support for PostgreSQL Server Database 9.2.2 for the Data Flow Probe <p>Virtualization:</p> <ul style="list-style-type: none"> Added support for VMware ESXi 5.1 Added support for Microsoft Hyper-V Server 2012 Added support for Microsoft Hyper-V Server 2008 R2 SP1 for Enterprise deployments of UCMDB <p>Removed Support for the following:</p> <ul style="list-style-type: none"> Removed support for MySQL and MySQL Driver for the Data Flow Probe 	UCMDB 10.01	<ul style="list-style-type: none"> Standard: 6 GB RAM Enterprise: 12 GB RAM 	UCMDB 10.10	<ul style="list-style-type: none"> Small: 6 GB RAM Standard: 12 GB RAM Enterprise: 18 GB RAM 	UCMDB 10.01	200 GB Note: 150 out of 200 GB disk space is required for scan files	UCMDB 10.10	300 GB Note: 225 out of 300 GB disk space is required for scan files
UCMDB 10.01	<ul style="list-style-type: none"> Standard: 6 GB RAM Enterprise: 12 GB RAM 								
UCMDB 10.10	<ul style="list-style-type: none"> Small: 6 GB RAM Standard: 12 GB RAM Enterprise: 18 GB RAM 								
UCMDB 10.01	200 GB Note: 150 out of 200 GB disk space is required for scan files								
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