



Universal CMDB

Software Version: Content Pack 20.00 (CP20)

Release Notes for Universal CMDB/Universal Discovery Content Pack 20

Document Release Date: June 2016

Software Release Date: June 2016



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

© 2002 - 2016 Hewlett Packard Enterprise Development LP

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

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

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

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

Support

Visit the HP Software Support site at: <https://softwaresupport.hp.com>.

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

HP 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 HP 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 HP Passport user and to sign in. Many also require a support contract. To register for an HP Passport ID, click **Register** on the HP Support site or click **Create an Account** on the HP Passport login page.

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

HPSW Solutions Catalog accesses the new HPSW Integrations and Solutions Catalog website. This site enables you to explore HP Product Solutions to meet your business needs, includes a full list of Integrations between HP Products, as well as a listing of ITIL Processes. The URL for this website is <https://softwaresupport.hp.com/km/KM01702710>.

Contents

HPE Universal CMDB Content Pack Release Notes	4
What's New in Content Pack 20	5
Discovered Applications	5
Discovered Operating Systems	5
New Discoveries	5
Integrations	6
Others	6
System Requirements	9
Content Pack Installation	9
Discovery Knowledge Content	12
Accessing Content Pack Documentation	12
Known Issues, Limitations, and Workarounds	13
Service Manager Integration Known Issues and Limitations	18
Enhancement Requests	18
Fixed Defects	21
Send Documentation Feedback	30

HPE Universal CMDB Content Pack Release Notes

This document provides information about HPE Universal CMDB (UCMDB) and Universal Discovery (UD) Content Pack 20.

Important Notes - CMS Content Pack Release Strategy Change

Dear Valued CMS Customer,

Starting with the release of UCMDB/UD Content Pack 17, we are making changes to our CMS content pack release strategy:

- CMS Content Packs will be moving to quarterly release schedule going forward to allow a more agile delivery mechanism for addressing customer needs and adding new functionality.
- Content Packs will be Backward Compatible with the latest minor-minor releases of the immediately preceding last three major/minor releases after UCMDB version 10.11. For example, Content Pack 19 is compatible with UCMDB versions 10.22 and 10.11; Content Pack 20 is compatible with UCMDB versions 10.22 and 10.11.
- Content Packs will be Forward Compatible with the next minor-minor or minor/major release. For example, CP17 will be compatible with the next available minor-minor release of UCMDB.
- Content Packs Updates will be issued only for critical issues.
- Discovery Knowledge Packs containing the Normalization Rules and Software Application Index (SAI) SAI Libraries will continue with the existing monthly release schedule.

On behalf of HPE CMS Product Management, R&D, and Support, we sincerely appreciate you as a CMS customer and value your feedback. We're excited to implement this new format aimed at helping our customers to stay current with the latest content more easily.

Thank you very much,

The HPE Configuration Management System (CMS) Team

What's New in Content Pack 20

This section provides information about new features and enhancements to Content Pack 20.

Discovered Applications

Added support for discovering the following applications:

- Microsoft SharePoint 2016
- Microsoft SQL Server 2016
- VMware vCloud Director 5.5, and 5.6

Discovered Operating Systems

Added support for discovery and inventory (including agent support) for the following operating systems:

- IBM AIX 7.2
- Ubuntu Server/Desktop 16

New Discoveries

Added support for the following discoveries:

- Microsoft Azure Discovery

Note: This discovery requires UCMDB 10.22 or later.

- Cloud Foundry Discovery
- Docker Swarm Discovery
- Huawei Storage Discovery and HDS Storage Discovery

Added support for the new namespace Huawei **root/huawei** and Hitachi **root/smis/current** under the SMI-S discovery jobs.

For more details, see the *HPE UCMDB Discovery and Integrations Content Guide - Discovery Modules*.

Integrations

Important change to HPE Asset Manager Adapters

In alignment with HPE Asset Manager's strategy to streamline and drive rapid improvement of the AM Adapters, starting with Universal Discovery (UD) Content Pack (CP) 20, all UD CPs will not contain artifacts of the three AM Adapters anymore.

The new packages of AM Push Adapter and AM Generic Adapter will be released exclusively under the Asset Manager Integration Content offering on [HPE Live Network](#). The standalone releases of the AM Push Adapter and AM Generic Adapter will be available shortly after the UD CP 20 release.

AM Population Adapter that is released as part of UD CP 19 will be the last official release and there will be no new development effort. Customers are requested to migrate to the AM Generic Adapter. Official Support for existing AM Population adapter installations will continue until the release of the UD CP release following UD CP 20.

Detailed documentation will be made available along with the new AM Adapters release on [HPE Live Network](#).

- Added BMC Remedyforce Integration. This integration consists of two independent, bi-directional parts: Data Push into BMC Remedyforce and Population from BMC Remedyforce.

For details, see the *HPE UCMDB Discovery and Integrations Content Guide - Third Party Integrations*.

- Added a new parameter **processWithBinaryMode** to the **Import from CSV File** job.

This parameter indicates whether to copy the target CSV file to Data Flow Probe and decode it using the value of the **fileEncoding** parameter. The default value of the **processWithBinaryMode** parameter is **false**. Setting **processWithBinaryMode** to **true** only when the **fileEncoding** parameter in the **Import from CSV File** job does not work properly.

Others

- Added logic to make sure that **PrimaryDNSName** is set accurately by the **DNS Resolver** job. For details, see the section *PrimaryDNSName Logic* in the *HPE UCMDB Discovery and Integrations*

Content Guide - General Reference.

- The **Inventory Discovery by Scanner** job discovers Disk Device CIs with their serial numbers.

Note: This requires UCMDB 10.22 CUP2 or later.

- Enhanced the **Inventory Discovery by Scanner** job to support the discovery of Network Cards as follows:
 - Added a new CIT Network Adapter.
 - Added a new Realization relationship between Network Adapter and Interface.
 - Added a new Usage relationship between Network Adapter and Windows Device Driver.

Note: This requires UCMDB 10.22 CUP2 or later.

- Enhanced the SAP Web Dispatcher plug-in in the **Host Resources by Shell** and **Host Applications by Shell** jobs as follows:
 - Added relationship between SAP System and SAP Web Dispatcher.
 - Added relationship between HANA instance and SAP Web Dispatcher.
 - Corrected the name and display label of the SAP Web Dispatcher CI.

Note: New SAP Web Dispatcher CIs cannot be merged with old ones discovered by the previous Content Pack. Old CIs will be deleted by aging.

- The **OS Architecture** attribute can be discovered by the **Host Connection by Shell**, **Inventory Discovery by Scanner**, and **Inventory Discovery by Manual Scanner Deployment** jobs on Apple OS X, HP-UX, IBM AIX, Linux, Oracle Solaris, and Windows.

Note: This requires UCMDB 10.22 CUP2 or later.

- Added the following two new jobs to do the WebSeal discovery triggering on PolicyServer:
 - **Webseal Policy Server Connection by Shell**
 - **Webseal Policy Server Topology by Shell**

These two new jobs are supposed to be used as the complete replacement for the **Webseal Connection by Shell** and **Webseal Topology by Shell** jobs. That is, if these two new jobs are run, no need to run the **Webseal Connection by Shell** and **Webseal Topology by Shell** jobs.

The reasons to use these two new jobs are as follows:

- These two jobs can retrieve all the WebSeal related configurations across the whole customers' environment.
- The performance and decrease of the load to the Policy Server itself.
- Added a new parameter **WebSealShellTimeout** to the **Webseal Policy Server Topology by Shell** and **Webseal Topology by Shell** jobs. This parameter indicates the WebSeal **pdadmin** tool timeout. This value overrides the default protocol timeout settings. The default value of this parameter is **15000**.
- Enhanced Docker Discovery and Docker Swarm as follows:
 - Added a new CI type Docker Image Template.
 - Added a new Resource relationship between Docker Image Template and Docker Image.
 - Added new attributes **Docker Host**, **Docker Labels**, and **Docker Logging Driver** to the Docker Daemon CI.
 - Added new attributes **Docker Entry Points**, **Docker Image Commands**, **Docker Image Labels**, **Docker Image Ports**, and **Docker Image Volumes** to the Docker Image CI.
 - Added new attributes **Docker Container Commands**, **Docker Container Labels**, **Docker Container Logging Driver**, **Docker Container Memory Limit**, **Docker Container Restart Max Count**, and **Docker Container Restart Policy** to the Docker Container CI.
- Added a new CI type IBM CMM that represents IBM Flex System Chassis Management Module. This CI type can be reported by the **IBM PureFlex Topology by Shell** job.
- For IBM FSM CI,
 - Added the **FSM Chassis Slot Number** attribute to represent in which slot the particular hardware is present.
 - Added the **FSM Role** attribute that can be **Active** or **Backup** depending on the configuration.
- Added the Containment relationship between Chassis and Switch for the **IBM PureFlex Topology by Shell** job.
- Enhanced VMware discovery jobs by adding the following attributes:
 - **HyperThreading** on CPU CI. If **true**, the hyper threading is **Active** on CPU.
 - **Power State** on VMWare ESX Server CI. The state of the physical host (as indicated by the host icon and returned by the **PowerState PowerCLI** function).
 - **Connection State** on VMWare ESX Server CI. The state of the connection between the physical host and vCenter Server.

- **Management IP Address** on VMware Host Resource CI. The IP address of the **eth0** on virtual machine as known by vCenter through VMware Tools (when installed on the guest OS).
- Added a new topic *How to Discover IP Addresses in Universal Discovery* in the *HPE UCMDB Discovery and Integrations Content Guide - General Reference*.
- Scanner version: 10.22.000.285
- Universal Discovery Agent version: 10.22.000.285

System Requirements

- CP20 can be installed on:
 - UCMDB 10.11 CUP6 (or a later CUP)
 - UCMDB 10.22 (or with a CUP on top of 10.22)
- You must install UCMDB 10.11 CUP6 (or a later CUP), or 10.22 (or with a CUP on top of 10.22) before installing CP20.

Important Note:

- Before you deploy CP20 on top of version 10.22, you must install version 10.22 on the UCMDB, UD, and CM servers, and deploy version 10.22 Data Flow Probes. Do not deploy CP20 while you are still updating the Data Flow Probes.
- Before you deploy CP20 on top of version 10.11, you must install 10.11 CUP6 (or a later CUP) on the UCMDB, UD, and CM servers, and deploy version 10.11 Data Flow Probes. Do not deploy CP20 while you are still updating the Data Flow Probes.

For a complete list of system requirements, see the *Universal CMDB Support Matrix* document available from the UCMDB Online Help home page.

For more details, see the [Discovery and Integrations Content Guide - Support Matrix](#) on the **HPE Live Network**.

Content Pack Installation

The following procedure explains how to install Content Pack 20.00 for Universal CMDB.

Note: Rolling back the installation is not supported as it can lead to system inconsistencies. If you

are upgrading from earlier versions of the content pack, it is strongly recommended to ensure that you have backed up your database.

1. Prerequisites

- The UCMDB Server must be running when you install the Content Pack.
- During installation, Setup may restart the Probe to load the new content jar file.
- Back up your database.

Note: If you have deployed the **ASM_Enhanced.zip** package, delete all Service Connection Point CIs and undeploy the package before you proceed with the installation.

2. Retrieve the Content Pack 20.00 ZIP file

The name of the installation file is **CP20_installation.zip**. This file is located on the HPE Live Network Web site (<https://hpln.hpe.com/>).

The ZIP file contains the following resources:

- Packages (**CP20.zip**)
- Online help
- The *HPE UCMDB Discovery and Integrations Content Guide* PDF files.
- Permissions.pdf

3. Extract packages from the Content Pack 20.00 ZIP file

Unpack the contents of the **CP20_installation.zip** file to **C:\hp\UCMDB\UCMDBServer**.

4. Back up existing packages

- a. Launch a Web browser and enter the following address:

http://<FQDN or IP address>:8080/jmx-console

where **<FQDN or IP address>** is the machine on which UCMDB is installed. Log in using the JMX console authentication credentials.

- b. Click the **UCMDB:service=Packaging Services** link.
- c. In the JMX MBEAN View page, locate the following JMX function: **exportPackages ()**.
 - In the **customerID** field, enter **1**.
 - In the **packagesNames** field, leave this field empty to export all packages.

- In the **outputDir** field, enter the full path to a directory where UCMDB should place the backed-up packages, for example, **C:\hp\UCMDB\UCMDBServer\content\my_packages_backup**. The directory is created automatically.
 - In the **userOnly** field, select **False** to export all packages (and not only the user-created packages).
- d. Click **Invoke**.
 - e. Verify that all relevant packages have been backed up to the folder mentioned in the previous step, and that there are no errors in the **mam.packaging.log** file, located in **hp\UCMDB\UCMDBServer\runtime\log**.
5. Install Content Pack 20.00

You can install the Content Pack from the Universal CMDB user interface or using the JMX Console.

From Universal CMDB:

- a. Stop UCMDB.
- b. Make sure that **CP20.zip** is in the following directory:
c:\hp\UCMDB\UCMDBServer\content\content_packs
- c. Log in to the UCMDB.
- d. Access the **Package Manager (Administration > Package Manager)**.
- e. On the toolbar, click the **Install Content Pack** button.
- f. In the Install Content Pack dialog box that opens, select the required version of the Content Pack and click **Install**.

Using the UCMDB JMX Console:

- a. Log in to the UCMDB JMX-Console (**<ucmdb-server>:8080/jmx-console**).
 - b. Open **UCMDB > Content Pack Services**.
 - c. Invoke **displayAvailableContentPackVersions** to see available versions of the Content Pack.
 - d. Enter the required version in the version field, and invoke **installContentPack**.
6. **Verify installation**

Verify that there are no errors in the **mam.packaging.log** file, located in **hp\UCMDB\UCMDBServer\runtime\log**.

7. If you are installing the Content Pack on a High Availability system, copy all files from the following folder on the active UCMDb server to the same folder on the passive UCMDb server:
C:\hp\UCMDb\UCMDbServer\runtime\fcmdb\CodeBase\.

Discovery Knowledge Content

Starting from April 2015 to ensure more regular updates to the Normalization Rules and Software Application Index (SAI), the new Inventory Discovery Knowledge Packs are introduced on a monthly schedule.

Normalization Rules contain information to identify hardware devices in your environment. Normalization Rules determine the device's operating system, application, device family, and model. Then, the Normalization Rules Engine assigns a device type to your device model.

SAI files contain information to identify applications on a discovered node. Universal Discovery employs a number of installed software application recognition techniques, including file-based recognition, version data, and installed package rule-based recognition. The data that is required for this recognition to work is stored in the application library files (SAI).

For details about Normalization Rules and SAI Updates, see *Universal CMDB Inventory Discovery Knowledge Pack Release Notes* available at <https://hpln.hpe.com/contentoffering/inventory-discovery-knowledge-pack>.

Recently released content that is currently included in this version of Universal Discovery can be found on the Universal Discovery Community (<https://hpln.hpe.com/product/universal-discovery/content>) website on the HPE Live Network.

Note: You need an HP Passport user name and password to log in to this site.

Accessing Content Pack Documentation

To read the latest versions of the relevant documents, access the following URLs:

- **<http://SERVER_NAME:PORT/ucmdb-ui/docs/DDMContent.jsp>** – Discovery and Integrations Content Guide
- **<http://SERVER_NAME:PORT/ucmdb-ui/docs/permissions.jsp>** – the Permissions document

Known Issues, Limitations, and Workarounds

Content Pack Installation

PROBLEM: If you have deployed the **ASM_Enhanced.zip** package before installing Content Pack (CP) 20, you may see the following error message in the Status Report: "ASM_Enhanced.zip: Package operation has failed".

Workaround: To avoid this error message, do the following:

1. Delete all CIs of the Service Connection Point CI type.
 2. Undeploy the **ASM_Enhanced.zip** package.
 3. Install CP20.
-

PROBLEM: If you deploy CP20 on UCMDB before you upgrade UCMDB to 10.22 (or later), the parent of the ConsumerProvider relationship does not change to Usage but remains as Dependency.

Workaround: To resolve this issue, follow these steps:

1. Extract the **ASM_Enhanced.zip** package from the CP20 package.
 2. Log in to UCMDB, and then go to **Administration > Package Manager**.
 3. Deploy the **ASM_Enhanced.zip** package that you just extracted.
-

Content Pack Upgrade

PROBLEM: When upgrading the Content Pack (CP), if the old CIM driver is not removed, the new CIM driver that is introduced in the new CP will not take effect, causing the Storage Management Initiative Specification (SMI-S) discovery jobs that need the new driver to fail.

Workaround: Manually remove the **sblim-cim-client.jar** file from the **<DataFlowProbe_Home>\content\lib** directory.

PROBLEM: After you upgrade from UCMDB 10.20 to 10.21 or 10.22, the following jobs are moved to the **<<No module>>** group in the **Discovery Modules** tree.

- DB2 Dependencies
- F5 BIG0IP LTM Tunnel Job
- IIS Application dependencies via URL
- IIS Application dependencies via WebService
- J2EE Application Dependencies via Context Root
- J2EE Application Dependencies via JNDI
- J2EE Application Dependencies via WebService
- JEE WebSphere Connections by JMX for Top-down
- JMS Destination Dependencies via JNDI
- MessageQueue Dependencies via JNDI
- Next-Hop Provider for Running Software
- Next-Hop Provider
- Oracle Access Management Dependencies
- Oracle Dependencies
- Oracle Schema Dependencies
- Running Software Dependencies via TCP Connection
- Running Software Dependencies via URL
- SQL Server Dependencies
- Tomcat Application dependencies via URL
- URL Resolver
- Web Server Dependencies via URL

These jobs are no longer useful for any task.

Workaround: You can either delete them manually or leave them in the **Discovery Modules** tree.

Universal Discovery - General

LIMITATION: CP20 does not contain the latest MindTerm JAR file (**mindterm-4.1.5.jar**), which is provided by UCMDB 10.20 and later versions.

Workaround: If you are using UCMDDB 10.11 and want to upgrade your MindTerm from version 4.0beta6 to 4.1.5, contact HPE support and refer to the hotfix for QCCR1H90627.

Universal Discovery - Content

IMITATION: ASM does not support discovering the running software and its related ConsumerProvider relationships on a Solaris Local zone.

Workaround: None.

PROBLEM: (**db2_ipse_only** trigger query only) The **DB2 Universal Database Connection by SQL** job returns "No credentials defined for the triggered IP" error. The triggered CIs that are triggered by the **db2_ipse_only** trigger query have no associated database instance, which is required to establish a connection. Then the job will get a database name from the DB2 credential. When no database name is defined in the DB2 credential, the job returns the error. (QCCR1H99802)

Workaround: When using the **db2_ipse_only** trigger query, it requires a database name in the DB2 credential. Make sure you define a database name in the DB2 credential.

PROBLEM: When running the **Mainframe topology by SNMP** job and the Mainframe by EView discovery jobs, the zOS and Mainframe Logical Partition CI types that are discovered get merged. (QCCR1H97603)

Workaround: Do not use the **Mainframe topology by SNMP** job when you run the Mainframe by EView discovery jobs. If you have run the Mainframe topology by SNMP discovery before installing the EView mainframe agent, HPE recommends you to deactivate this discovery and delete any CIs that are created by this discovery.

LIMITATION: Child CIs are no longer included in reconciliation rules when considering identification for Business Applications. An optional identifier based on the ID (App_ID) can be used to uniquely identify each Business Application CI. Business Applications that are synced from external sources must have a unique name or ID in order to be included during data synchronization. Note that multiple Business Applications with the same name and no ID will not be synchronized.

Additional CI types for which child CIs are no longer included in reconciliation rules are Business Process, Business Service, CI Collection, Business Transaction Flow, and Dynamic Node Group. No optional identifier can be specified for these CI types.

Workaround: None.

LIMITATION: The **vCloud Director by vCloud API** and **vCloud Director URL by vCloud API** jobs do not automatically discover VMware vCloud, because the **httpcore.jar** and **httpclient.jar** files no longer exist in the **<Probe>/content/lib** folder.

Workaround: To fix this issue, copy the **httpcore.jar** and **httpclient.jar** files from the **<Probe>/discoveryResources/http** folder to the **<Probe>/content/lib** folder.

HPE Integrations

PROBLEM: On the first synchronization from Service Anywhere to UCMDB, you may see an error message displayed similar to the following:

```
Integration Point doesn't exist. No adapter for given target.
```

Workaround: To remedy this, do the following:

1. Log in to the UCMDB instance.
 2. Go to **Data Flow Management > Integration Studio**.
 3. Right-click the integration point: **<endpoint name>_<tenant id>**, and click **Edit**. The Edit Integration Point dialog box is displayed.
 4. Deselect **Is Integration Activated**.
 5. Click **OK**.
 6. Reselect **Is Integration Activated**.
 7. Click **OK**.
 8. Go to the job in UCMDB and run a full synchronization.
-

Third Party Integrations

PROBLEM: In UCMDB 10.22 (or later), after deploying the **ServiceNow_pull_integration_patch.zip** patch, the ServiceNow integration does not work anymore.

Workaround: When deploying the **ServiceNow_pull_integration_patch.zip** patch on UCMDB 10.22 (or later), do not overwrite the existing files **httplib.py** and **urllib2.py** in the **<DataFlowProbe_Home>/jython/lib** directory. This is because Jython is upgraded to version 2.7 in UCMDB version 10.22.

LIMITATION: Data population into UCMDB using ServiceNow integration jobs fail because a package called "suds" is missing.

Workaround: To fix this issue, download and install a patch on the Data Flow Probe to supply the missing package as follows:

1. Download the **ServiceNow_pull_integration_patch.zip** file from the **<UCMDB_Server_Home>\DataFlowProbe\runtime\probeManager\discoveryResources\Service-Now-Pull** folder.
2. Extract the patch archive into the Data Flow Probe's installation folder. As a result, the **<DataFlowProbe_Home>/jython/suds** folder is created, and two files (**<DataFlowProbe_Home>/jython/httpLib.py** and **<DataFlowProbe_Home>/jython/urllib2.py**) are updated. You do not need to restart the Data Flow Probe.

FIPS Mode

LIMITATION: When the FIPS mode is on, the Universal Discovery Agent cannot start on the non-FIPS compliant HP-UX HPPA platform. Therefore, the FIPS mode for the Universal Discovery Agent is turned off in order to run the Universal Discovery Agent on the HP-UX HPPA platform. (QCCR1H100684)

Workaround: None.

Inventory Discovery

PROBLEM: When setting the **enableSSHSharedHomeDir** parameter to **true**, running the agentless **Inventory Discovery by Scanner** job fails on Linux platforms. (QCCR1H100769)

Workaround: To run the agentless **Inventory Discovery by Scanner** job successfully on Linux platforms,

1. On your Linux instance, locate and open the **/etc/exports** file.
2. Add the **no_root_squash** parameter to the shared directory information.

For example, if you have the following line in the file:

```
/home *(rw)
```

where **/home** is shared directory, ***** means that everyone has access to it.

Then, add **no_root_squash** into the line as follows:

```
/home *(rw,no_root_squash)
```

3. Save the change.

Service Manager Integration Known Issues and Limitations

Global ID	Description	Workaround
QCCR1E118141	Cannot disable a field that does not have a mapping entry configured in the federation configuration file (smFedConf.xml).	None
QCCR1E119726	Structure fields are not supported for pushing CIs from UCMDB to Service Manager.	None
QCCR1E119141	The 'Ignore on null' option is not supported for data push from UCMDB to Service Manager.	None
QCCR1E117760	The Visual Mapping tool is not disabled for some out-of-the-box XML mapping scripts in which the external class cannot be displayed in the External Class Model pane. Such out-of-the-box mapping scripts include: <ul style="list-style-type: none"> • CLIP Downtime Population mapping script • Relationship push and population mapping scripts • Federation mapping scripts 	None
QCCR1E118871	If a TQL query has different exposed fields for the child CI types of the root, the Visual Mapping tool cannot display all of the exposed fields. As a result, you cannot configure mapping for fields that are not displayed by using a drag and drop in the Visual Mapping interface.	Configure mapping for the fields directly in the XML editor. Alternatively, split the query into multiple ones and then use the Visual Mapping tool.
QCCR1E119548	CI relationship deletions cannot be synchronized to UCMDB through population.	

Enhancement Requests

This release includes the following enhancement type fixes.

Global ID	Problem	Solution
QCCR1H81614	<ul style="list-style-type: none"> • A relationship between SAP System and SAP Web Dispatcher is missing. • A relationship between HANA instance and SAP Web Dispatcher is missing. • Wrong name and display label of the SAP Web Dispatcher CI. 	<ul style="list-style-type: none"> • Added relationship between SAP System and SAP Web Dispatcher. • Added relationship between HANA instance and SAP Web Dispatcher. • Corrected the name and display label of the SAP Web Dispatcher CI. <p>Note: New SAP Web Dispatcher CIs cannot be merged with old ones discovered by the previous Content Pack. Old CIs will be deleted by aging.</p>
QCCR1H82143	Request to add the discovery of Network Cards.	<p>Enhanced the Inventory Discovery by Scanner job to support the discovery of Network Cards as follows:</p> <ul style="list-style-type: none"> • Added a new CIT Network Adapter. • Added a new Realization relationship between Network Adapter and Interface. • Added a new Usage relationship between Network Adapter and Windows Device Driver. <p>Note: This requires UCMDB 10.22 CUP2 or later.</p>
QCCR1H89992	The DNS Resolver job cannot set PrimaryDNSName (primary_dns_name) accurately on the Node.	Added logic to make sure that PrimaryDNSName is set accurately by the DNS Resolver job. For details, see the <i>PrimaryDNSName Logic</i> section of the <i>HPE UCMDB Discovery and Integrations Content Guide - General Reference</i> .
QCCR1H98287	Request to support HDS Storage via the SMI-S discovery.	Added support for the new namespace Huawei root/huawei and Hitachi root/smis/current under the SMI-S discovery jobs.
QCCR1H99062	The OS Architecture attribute cannot be discovered on SunOS hosts.	The OS Architecture attribute can be discovered by the Host Connection

Global ID	Problem	Solution
		<p>by Shell, Inventory Discovery by Scanner, and Inventory Discovery by Manual Scanner Deployment jobs on Apple OS X, HP-UX, IBM AIX, Linux, Oracle Solaris, and Windows.</p> <p>Note: This requires UCMDB 10.22 CUP2 or later.</p>
QCCR1H99536	Request to add support for the discovery of VMware vCloud Director version 5.5.	Added support for VMware vCloud Director 5.5.
QCCR1H102191	The Host Applications by Shell job fails because the profile path of DB2 instances is not set correctly.	Changed the flow to properly set the profile path of DB2 instances. The Host Applications by Shell job can properly discover DB2 instances.
QCCR1H104848	Request to change the format of queries for WebSeal in order to reduce the load to Policy Server.	<p>Added the following two jobs to do the WebSeal discovery triggering on PolicyServer:</p> <ul style="list-style-type: none"> • Webseal Policy Server Connection by Shell • Webseal Policy Server Topology by Shell Job <p>Added a new parameter WebSealShellTimeout to the Webseal Policy Server Topology by Shell and Webseal Topology by Shell jobs. This parameter indicates the WebSeal pdadmin tool timeout. This value overrides the default protocol timeout settings. The default value of this parameter is 15000.</p>
QCCR1H104852	IBM Flex System Chassis Management Module (CMM) devices cannot be reported.	Added a new CI type IBM CMM that represents IBM Flex System Chassis Management Module. This CI type can be reported by the IBM PureFlex Topology by Shell job.
QCCR1H104853	Need to add extra attribute reporting for IBM FSM CI.	<p>For IBM FSM CI,</p> <ul style="list-style-type: none"> • Added the FSM Chassis Slot Number attribute to represent in which slot the particular hardware is

Global ID	Problem	Solution
		<p>present.</p> <ul style="list-style-type: none"> Added the FSM Role attribute that can be Active or Backup depending on the configuration.
QCCR1H104854	Need to add extra attribute and relationship between Chassis and Switch for the IBM PureFlex Topology by Shell job.	Added the Containment relationship between Chassis and Switch for the IBM PureFlex Topology by Shell job.
QCCR1H107341	Request to add docs about IP address discovery.	Added a new topic <i>How to Discover IP Addresses in Universal Discovery</i> in the <i>HPE UCMDB Discovery and Integrations Content Guide - General Reference</i> .
QCCR1H107118	The network device name and ID information cannot be discovered from scanners.	Added the network device ID for Network Adapter in the scan file.
QCCR1H107343	The Storage Devices Topology by CIM job fails because a wrong class is used to discover Physical Volume to Storage Pool relationships.	The Storage Devices Topology by CIM job works properly using the correct class to discover.
QCCR1H107748	UD agent cannot support Ubuntu 16.	UD agent can now support Ubuntu 16.
QCCR1H107965	Service discovery needs to be able to either leverage already discovered resources through standard Host Connection and Host Resource jobs, or the Host Discovery module needs to be able to make Shell connections to IP addresses on the target host that are not the address where the SCP is related.	If the IP address on SCP is not available via the Shell protocol, and this node is discovered by regular jobs before, use the application IP address on Shell CI of this node as the candidate to do discovery.
QCCR1H108225	Automated Service Modeling (ASM) should discover the Oracle instance via plug-in and create the accurate ConsumerProvider relationship between Running Software and the Oracle instance.	Automated Service Modeling (ASM) can now discover the Oracle instance via plug-in and create the accurate ConsumerProvider relationship between Running Software and the Oracle instance.

Fixed Defects

The following table lists the defects that were fixed in HPE UCMDB Content Pack 20.

Global ID	Problem	Solution
QCCR1H90959	The Process Layer2 Saved Files job does not work in a Management Zone with the following error message "Could not find ip_address attribute. Task for trigger CI not created".	The Process Layer2 Saved Files job can now work in a Management Zone activity after the dispatch mechanism configuration is added in processsLayer2File.xml .
QCCR1H101372	The Universal Discovery agent init script discagent does not conform to standard best practices in the exit codes returned by its status method. Specifically it returns zero (SUCCESS) irrespective of whether the service is up or down. Many automation tools rightly assume the LSB conformant behavior when conducting their status checks.	Fixed the issue by modifying the init script to align with the LSB standard.
QCCR1H102008	While running the Inventory Discovery by Scanner job on Itanium 9500 Series servers, the following error message occurs: "one of the bulk failed sending to UCMDB". Due to this error, the scan file of the server is present in the processed folder of the Data Flow Probe but does not appear in Universal Discovery. This is because the CPU types from hwdefinitions.xml are not synchronized to cpu_specifier_enum.xml .	Fixed the issue by synchronizing CPU types from hwdefinitions.xml to cpu_specifier_enum.xml .
QCCR1H103922	The following error message is returned by the MQ by Shell job due to not using the MQVER_PATH parameter: "No queue managers found!".	Fixed the issue by using the MQVER_PATH parameter.

Global ID	Problem	Solution
QCCR1H104669	<p>The changes, which are introduced in the file import script after the CP16 deployment, prevent the correct use of the fileEncoding parameter in the Import from CSV File job. There is no reference for encoding in an open method. If the 16-bit encoding is configured in the job (for example, UTF-16BE), the job fails and no CIs are imported.</p>	<p>Fixed the issue by adding a new parameter processWithBinaryMode to the Import from CSV File job.</p> <p>This parameter indicates whether to copy the target CSV file to Data Flow Probe and decode it using the value of the fileEncoding parameter. The default value of the processWithBinaryMode parameter is false. Setting processWithBinaryMode to true only when the fileEncoding parameter in the Import from CSV File job does not work properly.</p>
QCCR1H105721	<p>XML Enricher fails to parse scanning file integer division or modulo by zero.</p>	<p>In some cases, the CPU counts in the scan file can be zero. If you encounter such a situation, you should ignore any CPU information.</p>
QCCR1H105724	<p>The Inventory Discovery by Scanner job cannot discover IBM Power 5 CPU properly.</p>	<p>Scanners now calculate the CPU core count of IBM Power 5, 6, 7 CPUs correctly.</p>
QCCR1H106019	<p>The NTCMD protocol fails with the following error message: "NTCMD: Internal error. Details: Failed to connect to remote service's pipes". On the HPCMDLL.dll side, GetComputerName() is used to retrieve the NetBIOS name, but on the Data Flow Probe side, DNS name is used. If the computer name is more than 15 characters, the issue occurs.</p>	<p>Fixed the issue by changing to use the DNS name on the HPCMDLL.dll side.</p>
QCCR1H106270	<p>Customer analyzes the scan files and identifies some of the mount points showing "Mount Point volume free space is greater than mount point volume total size".</p>	<p>The free space size of the mount point volume will not be greater than the total size of the mount point volume.</p>

Global ID	Problem	Solution
QCCR1H106358	Some HP desktop or workstations are not identified.	Fixed the issue by adding normalization rules to recognize HP Compaq 6200, HP Compaq dc7900, HP ProDesk 600, HP EliteDesk 800, HP ZBook 15, and Getac S400G2.
QCCR1H106409	The Host Connection by Shell job does not create Shell objects for virtual IP address of LDOM Server.	The Host Connection by Shell job now properly reports Shell objects for virtual IP address of LDOM Server.
QCCR1H106410	The NoneType error is returned by the Host Applications by Shell job in <code>plugins_hp_product_version_by_shell.py</code> .	The Host Applications by Shell job now works properly.
QCCR1H106435	The Host Connection by Shell job fails with the following error message: "interface with name 'vnet0' already exists".	Fixed the issue by using the name list to filter the same named interfaces.
QCCR1H106501	The <code>slot_id</code> attribute for the SCSI Adapter CI that is reported by the VMware vCenter Topology by VIM job is too long.	The <code>slot_id</code> attribute for the SCSI Adapter CI that is reported by the VMware vCenter Topology by VIM job will not exceed the size limitation.
QCCR1H106524	Data Flow Probe constantly crashes when the AM integration is run.	Data Flow Probe will not crash when the AM integration is run.
QCCR1H106533	UD agent and scanner do not support for Windows 7 Embedded on thin clients.	If the Windows NT mode is the Embedded version, change the Windows name from Windows 2008 R2 to Windows 7.
QCCR1H106614	The plug-in for discovering UCMDB creates wrong SQL Server CIs.	This plug-in will not create DB instances if there is no correct configuration for Oracle.
QCCR1H106648	The number of cores for CPU is inconsistent with the actual value.	The number of physical CPUs and cores is consistent with the actual value.
QCCR1H106702	The "Timeout waiting for idle object" exception occurs while running the Inventory Discovery by Manual Scanner Deployment job.	The Inventory Discovery by Manual Scanner Deployment now works properly.

Global ID	Problem	Solution
QCCR1H106727	The DNS discovery does not use all DNS records on dnsList . Additional DNS servers are configured in the adapter configuration but they are not considered when the DNS discovery job runs.	The DNS discovery now works properly.
QCCR1H106750	The WebSphere MQ command returns nothing about the port.	Fixed the issue by skipping the port if it is empty from the command.
QCCR1H106765	The Mainframe TCP by SNMP job fails with a lot of errors. This is because the DB connection is closed too early.	The Mainframe TCP by SNMP job now works properly.
QCCR1H106815	LANG_ENGLISH is not updated in shellutils.py .	Added the missing code on Page 437 to the English language.
QCCR1H106825	The Storage Device Topology by CIM job has a different result on CP18 compared to CP12.	In older versions of the agent, the pool relations class is not there. Added a valid exception handling for this case.
QCCR1H106851	The Host Connection by Shell and Inventory Discovery by Scanner jobs overwrite the DNS field with different values and sort differently.	The Host Connection by Shell and Inventory Discovery by Scanner jobs now retrieve the identical DNS settings.
QCCR1H106852	There is a data flipping issue in the discoveredOsVendor attribute between the Host Connection by Shell job and the Inventory Discovery by Scanner job.	The discoveredOsVendor is now hard-coded to "Oracle" in both jobs.
QCCR1H106853	The Inventory Discovery by Scanner job returns the serial number that is not stripped properly.	The serial number is now stripped properly in scanner.
QCCR1H106963	In the bin folder of Data Flow Probe, there are a lot of left-over temp files created by the Host Resources by Shell and Host Applications by Shell jobs. The issue appears due to the improper exception handling during the copy file function over SFTP if users do not have enough privileges.	Fixed the issue by properly handling the exception.
QCCR1H106995	Veritas Cluster is not supported by the Merge Clustered Software job.	Added support for Veritas Cluster to the Merge Clustered Software job.

Global ID	Problem	Solution
QCCR1H107114	After scanning, some HP-UX servers cannot send scan results to Store and Forward Server.	HP-UX servers can now send scan results to Store and Forward Server.
QCCR1H107140	The IIS Applications by NTCMD or UDA job discovers all the IIS and components except the Web Services. URI Endpoint is not found in the AppCmd mode.	The IIS discovery can now discover URI Endpoint.
QCCR1H107148	Need to change document for the Save result to network (off-site) item on Scanner Options Page.	<p>Added the following note to the <i>Scanner Options Page</i> section of the <i>HPE Universal CMDB Data Flow Management Guide</i>.</p> <div style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> <p>Note: (For Manual Deployment Mode only) If you select Save result to network (off-site) and use HTTPS for the generated scanner in the Windows platform, make sure that the following DLL files from the Universal Discovery agent installation folder (for example, C:\Program Files\Hewlett-Packard\DiscoveryAgent\bin32) are copied to the same folder where the generated scanner locates:</p> <ul style="list-style-type: none"> • libeay64-disc-v09.dll • ssleay64-disc-v09.dll </div>
QCCR1H107181	The installation_date attribute of Installed Software CIs is not populated for nodes Unix and Linux.	Fixed the issue by supporting a new time format.
QCCR1H107186	After pushing the software utilization information to AM, there are too many UserSoftwareUtilization CIs.	Fixed the issue by updating the reconciliation rule of the UserSoftwareUtilization CI.

Global ID	Problem	Solution
QCCR1H107254	The Fibre Channel Switch CI name that is discovered by the Cisco UCS Topology job is different from that is discovered by the Host Connection by SNMP job, and those CIs cannot be merged.	Fixed the issue by removing the name mapping configuration of Fibre Channel Switch for the Cisco UCS Topology job.
QCCR1H107264	VMware jobs do not run on the pre-production environment and fail to check credentials.	Fixed the issue by adding a str-to-int conversion.
QCCR1H107269	The JEE JBoss by Shell job does not properly handle the "Empty content" exception.	Scripts are updated to avoid empty content passed to the XML parser.
QCCR1H107288	This is a request for complete information about the following jobs: <ul style="list-style-type: none"> • Mainframe TCP by SNMP • Mainframe topology by SNMP In the HP_UCMDB_DICG_Discovery_Modules.pdf , there are no details about these jobs.	The Mainframe TCP by SNMP and Mainframe topology by SNMP jobs are legacy ones. The Mainframe by SNMP discovery is replaced by the EView Agent discovery. For details about the EView Agent discovery, see the <i>Mainframe</i> section in the <i>HPE UCMDB Discovery and Integrations Content Guide - Discovery Modules</i> .
QCCR1H107333	The Inventory Discovery by Scanner job cannot always retrieve the consistent serial number of physical disk devices.	The Inventory Discovery by Scanner job can always retrieve the consistent serial number of physical disk devices.
QCCR1H107407	In UD Content Pack 19, there are Usage and ConsumerProvider relationships between httpcontext and configuration_document , but there is no Composition relationship between httpcontext and configuration_document .	Added the Composition relationship between httpcontext and configuration_document .
QCCR1H107484	Some Cisco Nexus 9000 devices are not included in normalization rules.	Fixed the issue by adding related rules.
QCCR1H107526	The sqlfile_path attribute for the CI sqlfile is too small.	Fixed the issue by increasing the size of the sqlfile_path attribute to 400.

Global ID	Problem	Solution
QCCR1H107730	For the CP19 scanner, the information hwPhysicalDiskID is lost. The value is \\.\PhysicalDrive0 , which is incorrect. The previous scanner works fine. It shows a type value of the manufacturer.	Fixed the issue by reverting the change about PhysicalDrive0 , still using the product ID as the prefix of physical disk ID.
QCCR1H107744	The DB2 Topology by SQL job fails if it is started via Management Zone. However, this job works successfully if it is started without Management Zone.	The DB2 Topology by SQL job now works properly via Management Zone.
QCCR1H107761	The Host Resources by Shell job fails to discover Installed Software on Apple OS.	Fixed the issue by supporting the Install Software discovery on Apple OS.
QCCR1H107779	The Storage Devices Topology by CIM job fails to properly link all the discovered data. This is because of the unsupported field value format depicting the relationship between Fibre Channel Port CIs.	Fixed the issue by supporting the comma-separated list of values.
QCCR1H107788	The following error message occurs in the log: "Trying to add a link from type: composition between end1: ABC and end2: DEF when there is no valid link in the class model that matches".	Fixed the issue by adding valid links.
QCCR1H107834	The Inventory Discovery by Scanner job fails with the "class model validation error".	Fixed the issue by increasing the size of the printer_driver attribute of the printer_driver CI type.
QCCR1H107851	The Inventory Discovery by Scanner job fails due to the limited size of the biso_version attribute of the Node CI type.	Fixed the issue by increasing the size of the bios_version attribute of the Node CI type. Note: You can select Auto Truncate in the Edit Attribute dialog box > Advanced tab for the bios_version attribute to avoid the SQL errors.
QCCR1H107910	The VMware vCenter discovery fails with the following error message: "VMware VIM: Internal error. Details: Invalid IP String specified".	Fixed the issue by filtering empty IP addresses.

Global ID	Problem	Solution
QCCR1H108117	The Inventory Discovery by Scanner job fails to populate the deviceName attribute of the new Windows Device Driver CI type (size 100) with strings that are greater than 100, which causes errors.	Fixed the issue by increasing the size of the deviceName attribute of the new Windows Device Driver CI type.
QCCR1H108158	The discovered OS name and OS version for Linux hosts are not accurately discovered by the Host Connection by Shell job.	Fixed the issue by adding a new method checkDistribution to correct the osName , osDescription , and osVersion .
QCCR1H108240	Duplicate SAP ABAP and J2EE Application Servers are created due to the improper regular expression in dns_resolver.py .	Fixed the regular expression issue in dns_resolver.py .
QCCR1H108390	Request to increase the default value for the following attributes: <ul style="list-style-type: none"> • Printer Driver – the printer_driver attribute • Installed Software – the supported_operation_systems attribute 	Increased the attribute size as requested.
QCCR1H108672	After upgrading to 10.22 CUP1 CP19, the manual scanning via scan.exe fails on Windows 2003 R2 SP2 servers with the following error message: "This application has failed to start because ISCSIDSC.DLL was not found."	The scanner will skip the detection of iSCSI devices if the iSCSI Software Initiator is not installed.

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 Release Notes for Universal CMDB/Universal Discovery Content Pack 20
(Universal CMDB Content Pack 20.00 (CP20))**

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!