HP Universal CMDB

Software Version: 10.21

Release Notes

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

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Document Changes

Version	Changes
10.21 (2nd Edition, August 2015)	Added two known issues regarding FIPS migration in "Universal Discovery - Probe Upgrade" and "Integration" respectively.
10.21 (3rd Edition, August 2015)	Added steps for reverting the master key to its default value in "Pre-requisites – UCMDB Server and Data Flow Probes".
10.21 (4th Edition, October 2015)	Added a limitation note that Configuration manager is not supported with Windows Internet Explorer 11.
10.21 (5th Edition, October 2015)	Added a limitation note that all JMX methods that are used for importing or setting credentials are affected by the password policy feature.

Support

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Contents

HP Universal CMDB, HP Universal Discovery, and HP Configuration Manager Release Notes

Software version: 10.21

Publication date: July 2015

This document provides information about version 10.21 of the HP Configuration Management System, which consists of HP Universal CMDB 10.21 (UCMDB), HP UCMDB Universal Discovery 10.21 (UD), and HP Configuration Manager 10.21 (CM). It contains important information that is not included in books or Help. You can find information about the following in this document:

Important Note: The HP Configuration Management System (UCMDB, UD, and CM) version 10.21 is a lightweight and easy to deploy release (similar to a CUP release), where the probes are automatically upgraded as part of the process. HP strongly encourages you to move to UCMDB and Configuration Manager version 10.21 and the accompanying Content Pack 16.00. There will be no further CUP releases on top of UCMDB version 10.20.

Note: Before you deploy Content Pack 16.00, you must install version 10.21 on the UCMDB and Configuration Manager servers, and deploy version 10.21 Data Flow Probes. Do not deploy Content Pack 16.00 while you are still updating the Data Flow Probes.

For information about HP UCMDB Universal Discovery Content Pack 16.00, see the *Release Notes* for HP UCMDB Universal Discovery Content Pack 16.00.

Installation Notes

HP Universal CMDB and Configuration Manager 10.21 Files/Components

HP Universal CMDB (UCMDB), Data Flow Probe, and Configuration Manager (CM) 10.21 are provided with the following files:

	Included Files
Windows	The **UCMDB_00163.zip** includes the following files/components: • **HPUCMDB_Server_Patch_10.21.383.exe.** Launches the installation of the version 10.21 HP UCMDB Server for the Windows platform. • **HPUCMDB_DataFlowProbe_10.21.383.exe.** Launches the installation of the version 10.21 HP UCMDB Data Flow Probe for the Windows platform. This installer can also be used to install the Universal Discovery Inventory Tools in a standalone installation. • **HPCM_10.21.56.exe.** Launches the installation of the version 10.21 HP UCMDB Configuration Manager for the Windows platform. • ***.sha256.** Checksum files.
Linux	The **UCMDB_00164.zip** includes the following files/components: • **HPUCMDB_Server_Patch_10.21.383.bin.** Launches the installation of the version 10.21 HP UCMDB Server for the Linux platform. • **HPUCMDB_DataFlowProbe_10.21.383.bin.** Launches the installation of the version 10.21 HP UCMDB Data Flow Probe for the Linux platform (for integrations only). • **HPCM_10.21.56.bin.** Launches the installation of the version 10.21 HP UCMDB Configuration Manager for the Linux platform. • ***.sha256.** Checksum files. • ***.sig.** Linux code signing files. For detailed instructions about how verify the code signatures, see HP GPG or RPM Signature Verification. **Note:** The current key used in this release is **B564A643**.
Both	• **Read Me** (Read_Me.txt)

> **Note:** Content Pack 16.00 is not bundled with CMS 10.21. If you wish to use Content Pack 16.00, you
> can download the Content Pack 16.00 package from the HP Live Network and manually deploy the
> **HPUDCP_16.00.139.zip** package.

> **Note:** The updated full documentation set (including both online help and PDF files) is available with
> the HP CMS 10.21 release. You can access the documentation from **Help > UCMDB Help** after
> upgrading UCMDB to version 10.21.
>
> To read the *Support Matrix* and the *What's New* document before you proceed with the installation,
> click Support Matrix and What's New.

System Requirements

For a list of system requirements, see the *HP Universal CMDB Support Matrix* document. Check the most
previous Release Notes for any additions or changes to the matrix.

> **Note:** Embedded PostgreSQL is not supported on Enterprise deployments of UCMDB.

Install Version 10.21 on the HP UCMDB and HP Configuration Manager Servers

Version 10.21 uses patch installers for HP Universal CMDB, Data Flow Probe, and Configuration Manager.
The patch installer provides an installation wizard and performs automated installation.

You can still install the Data Flow Probes separately by upgrading the Data Flow Probes using the UCMDB
user interface. For details, see "Upgrade HP Universal CMDB 10.21 Data Flow Probe Manually" on page 9.

> **Note:**
>
> - HP UCMDB 10.21 can be installed on top of HP Universal CMDB version 10.20 or 10.20 CUP1 only.
>
> - HP UCMDB CM 10.21 can be installed on top of HP UCMDB CM 10.20 or 10.20 CUP1 only.
>
> - HP UCMDB CM 9.x supports HP UCMDB 10.x.

Pre-requisites - UCMDB Server and Data Flow Probes

1. Extract **UCMDB_00163.zip** (for Windows) or **UCMDB_00164.zip** (for Linux) to a temporary directory.

2. Stop the HP Universal CMDB 10.20 (with or without CUP1) server and the HP Universal CMDB Integration Service (if running) before starting the 10.21 installation.

    > **Note:** If you have a High Availability configuration, 10.21 must be installed on all the servers in the cluster, and prior to the installation, you must stop all the servers in the cluster.

3. If you have received private patches for the UCMDB server, you must delete these patches before upgrading the UCMDB server.

    Follow these steps to delete a private patch:

    a. Revert the master key to its default value by following the instructions in the *How to Set Master Keys* section in the *HP Universal CMDB Administration Guide*.

    b. Restart the UCMDB Server to check and make sure that the changes were performed correctly before continuing with the next steps.

    c. Stop the UCMDB server.

    d. Delete all private patches that were installed on the system prior to version 10.21 by deleting the following directory:

    \hp\UCMDB\UCMDBServer\classes

4. If you have received private patches for the UCMDB Server or Data Flow Probe, you must delete these patches before upgrading the probe (no matter if you upgrade the probe by using the installation wizard, or you upgrade the probe by using the UCMDB user interface after the installation).

    Follow these steps to delete a private patch:

    a. Delete all private patches from the UCMDB Server.

    i. Stop the version 10.20 UCMDB Server.

    ii. Delete all private patches that were installed on the system prior to version 10.21 by deleting the following directory:

\hp\UCMDB\UCMDBServer\classes

    iii. Start up the version 10.20 UCMDB Server.

  b. Delete all private patches from the Data Flow Probe.

    i. Stop the Data Flow Probe.

    ii. Delete all private patches that were installed on the system prior to version 10.21 by deleting the following directory:

\hp\UCMDB\DataFlowProbe\classes

    iii. Start up the version 10.20 Data Flow Probe.

> **Note:** The upgrade process may take longer than usual when the workload of the probe is heavy. For example, when the probe is busy with running discovery jobs.

Installation

You must first install UCMDB 10.21, start up the UCMDB server, and then install Configuration Manager.

1. For HP Universal CMDB Server, open the installation wizard by using the following method:

   ○ On Windows, double-click the file **HPUCMDB_Server_Patch_10.21.exe**.

   ○ On Linux, run the sh *<path to the installer>*/HPUCMDB_Server_Patch_10.21.bin command.

   For HP Universal CMDB Configuration Manager, open the installation wizard by using the following method:

   ○ On Windows, double-click the file **HPCM_Patch_10.21.exe** (for Windows)

   ○ On Linux, run the sh *<path to the installer>*/HPCM_Patch_10.21.bin command.

   > **Note:** On Linux, make sure the graphic environment is set up before running the command to open the installation wizard.

2. While running the wizard:

- ○ In the **Choose Install Folder** screen, select the installation directory in which UCMDB or CM is already installed.

- ○ For UCMDB, in the **Install Data Flow Probe** screen, select one of the following options:

  - **Automatically update Data Flow Probe** to automatically update during this installation all the Data Flow Probes reporting to this UCMDB.

  - **Update the Data Flow Probe manually** to update the Data Flow Probes reporting to this UCMDB manually after completing the installation on the UCMDB server. For details, see "Upgrade HP Universal CMDB 10.21 Data Flow Probe Manually" below.

- ○ In the **Required Actions** screen, follow the instruction to ensure that the server is stopped.

3. Once the installation wizard for UCMDB is completed, start up the UCMDB server. Go back to step 1 to install CM 10.21.

   Once the CM installation is complete, start up Configuration Manager version 10.21.

Upgrade HP Universal CMDB 10.21 Data Flow Probe Manually

(Applicable only when **Update the Data Flow Probes manually** is selected in the installation wizard.)

The following steps upgrade all Data Flow Probes that are associated with the UCMDB server.

1. If you have received private patches for the Data Flow Probe, perform the steps in the section "Pre-requisites - UCMDB Server and Data Flow Probes" on page 7.

2. In UCMDB, go to **Data Flow Management > Data Flow Probe Setup**, and then click **Deploy Probe Upgrade**.

3. In the Deploy Probe Upgrade dialog box, navigate to the **<SERVER_HOME>\content\probe_ patch\probe-patch-10.21-windows.zip**, and then click **OK**.

4. **Linux only:**

   a. Extract the upgrade package by running the following file:

      /opt/hp/UCMDB/DataFlowProbe/tools/upgrade/extractUpgradePackage.sh

   b. Restart the Data Flow Probe.

5. Verify and make sure that each of your Data Flow Probes has been successfully upgraded to

version 10.21.

To do so,

a. On the probe machine, go to the following directory:

Windows: C:\hp\UCMDB\DataFlowProbe\bin\jre

Linux: /opt/hp/UCMDB/DataFlowProbe/bin/jre

b. Verify if the following folders exist:

jre – contains the latest version of JRE installed by the installer

jre_old – contains the original JRE that resides on your probe machine previously.

- If both folders exist, it means that this probe is successfully upgraded.

- If you see **jre** and **jre_new** folders instead, follow the steps below to rename the folders manually:

    A. Stop the probe.

    B. Rename **jre** to **jre_old**.

    C. Rename **jre_new** to **jre**.

    D. Restart the probe.

    Note: Do not stop the probe unless you find the probe is not upgraded successfully.

c. Repeat step a and step b for each of the remaining probes.

Note: For instructions about deploying a data flow probe CUP on all the connected Data Flow Probes, see the *HP Universal CMDB Data Flow Management Guide*.

Install a New HP Universal CMDB 10.21 Data Flow Probe

This section describes the procedure to install the HP Universal CMDB 10.21 Data Flow Probe on a new machine.

Preparation

The preparation tasks for installing the HP Universal CMDB 10.21 Data Flow Probe are the same as those for 10.20. For details, see the following sections in the *HP Universal CMDB Deployment Guide* for version 10.20:

- *Data Flow Probe - Notes Before you install*

- *Data Flow Probe - Ports*

> **Note:** You can access the *HP Universal CMDB Deployment Guide* for version 10.20 from **Help > UCMDB Help > Navigate the documentation**. You can also download it from here.

Install the Data Flow Probe

The following procedure describes how to install the HP Universal CMDB 10.21 Data Flow Probe on a new machine:

1. Start the Data Flow Probe installation wizard by using the following method:

   - On Windows, double-click **HPUCMDB_DataFlowProbe_10.21.exe**.

   - On Linux, run the following command:

     sh *<path to the installer>*/HPUCMDB_DataFlowProbe_10.21Linux.bin

2. Choose the locale language, and then click **OK**.

3. Click **Next** in the Introduction page.

4. In the **License Agreement** page, accept the terms of the end-user license agreement, and then click **Next**.

5. (Windows only) In the **Setup Type** page, select **Full Data Flow Probe installation**, and then click **Next**.

   > **Note:** Full Data Flow Probe installation installs the Data Flow Probe with all its components, including the Inventory Tools (Analysis Workbench, Viewer, SAI Editor, and MSI Scanner) required for application teaching.

> The **Inventory Tools** option is used to install only the Inventory Tools. For details about application teaching, see the *HP Universal CMDB Data Flow Management Guide*.

6. In the **Select Installation Folder** page, accept the default installation folder, or click **Choose** to select a different installation folder, and then click **Next**.

> **Note:**
>
> ○ The installation folder that you select must be empty.
>
> ○ To restore the default installation folder, after selecting a different folder, click **Restore Default Folder**.
>
> ○ On Linux, you can change the location of the installation, but the folder must be located under **/opt/**.

7. In the **Data Flow Probe Configuration** page, configure the details of the application server to which the Data Flow Probe will report and then click **Next**.

> **Note:** If you do not enter the address of the application server, or if there is no TCP connection to the application server via default ports (8080,8443,80) (possibly because the application server has not fully started yet), a message is displayed. You can choose to continue to install the Probe without entering the address, or return to the previous page to add the address.

○ Under **Application to report to** select **HP Universal CMDB** and in the **Application Server address** box, enter the name or the IP address of the HP Universal CMDB server with which the Probe is to connect.

> **Note:** In a High Availability environment, use the Writer virtual IP address of the load balancer.

○ In the **Data Flow Probe address** box, enter the IP address or DNS name of the machine on which you are currently installing the Probe, or accept the default.

> **Note:** If the Data Flow Probe machine has more than one IP address, enter a specific IP address, and not the DNS name.

8. In the second **Data Flow Probe Configuration** page, configure an identifier for the Probe.

   ○ In the **Data Flow Probe Identifier** box, enter a name for the Probe that is used to identify it in your environment and then click **Next**.

   > **Note:**
   >
   > • The Probe identifier is case sensitive, must be unique for each Probe in your deployment, and it must not exceed 50 characters.
   >
   > • On Windows, when installing the Probe in separate mode (that is, the Probe Gateway and Probe Manager are installed on separate machines), you must give the same name to the Probe Gateway and all its Probe Managers. This name appears in UCMDB as a single Probe node. Failure to give the same name may prevent jobs from running.

   ○ To use the default UCMDB IP address or machine name, as defined in the UCMDB Server installation, select **Use Default CMDB Domain**.

   The Default UCMDB Domain is also configurable in UCMDB's Infrastructure Settings module. For details, see the *HP Universal CMDB Administration Guide*.

9. If you cleared the **Use Default CMDB Domain** box in the previous step, specify the following information in the **HP UCMDB Data Flow Probe Domain Configuration** page, and then click **Next**.

   ○ **Data Flow Probe domain type.** Select the type of domain on which the Probe is to run:

   • **Customer.** Select if you are installing one or more Probes in your deployment.

     > **Note:** Always use this option for new installations.

   • **External.** Select this option for upgraded 6.x systems.

   ○ **Data Flow Probe domain.** If you are not using the default domain defined in UCMDB enter the name of the domain here.

     > **Note:** For external domains, this value must be identical to the **Data Flow Probe Identifier** defined in the previous step.

10. (Windows only) In the **HP UCMDB Data Flow Probe Working Mode** page, specify if the Probe

Gateway and Probe Manager are run as one Java process or as separate processes and then click **Next**.

> **Note:** The Probe can be configured in separate mode in IPv4 environments, and in IPv4/IPv6 environments, but not in pure IPv6 environments.

Select **No** to run the Probe Gateway and Probe Manager as one process.

Select **Yes** to run the Probe Gateway and Probe Manager as two processes on separate machines.

> **Note:** When running the Probe Gateway and Probe Manager as two processes ensure the following:
>
> ○ At least one Probe Gateway component must be installed. The Probe Gateway is connected to the UCMDB Server. It receives tasks from the Server and communicates with the collectors (Probe Managers).
>
> ○ Several Probe Managers can be installed. The Probe Managers run jobs and gather information from networks.
>
> ○ The Probe Gateway should contain a list of attached Probe Managers.
>
> ○ The Probe Managers must know to which Probe Gateway they are attached.

11. In the **HP UCMDB Data Flow Probe Memory Size** page, define the minimum and maximum memory (in megabytes) to be allocated to the Probe, and then click **Next**.

> **Note:** For information about changing the maximum heap size value at a later point in time, see the *HP Universal CMDB Data Flow Management Guide*.

12. In the **PostgreSQL Account Configuration** page, set the password for the PostgreSQL Data Flow Probe account, and then click **Next**.

The PostgreSQL Data Flow Probe account is used by the Data Flow Probe to connect to the PostgreSQL database. This account is less privileged compared to the PostgreSQL root account. Its password is encrypted in the **DataFlowProbe.properties** configuration file.

> **Note:** Changing this password requires an update to the **DataFlowProbe.properties** file.

13. In the second **PostgreSQL Account Configuration** page, set the password for the PostgreSQL root account, and then click **Next**.

    The PostgreSQL root account is the account used to administer the PostgreSQL database. When set, it may need to be provided while executing scripts under the Probe's installation.

    > **Note:** Changing the root account password does not affect operation of the Probe.

14. In the **Account Configuration for Uploading Scan Files** page, configure the user name and password for the account, and then click **Next**.

    This account is used for Manual Scanner Deployment mode, which enables uploading scan files directly to the XML Enricher's **incoming** directory on the Data Flow Probe using HTTP or HTTPS. The default user name is **UploadScanFile**.

15. In the **Pre-Installation Summary** page, review the selections you have made, and then click **Install**.

16. Click **Done** in the **Install Complete** page when the installation is complete.

    > **Note:**
    >
    > ○ Any errors occurring during installation are written to the following file:
    >
    >   On Windows: **C:\hp\UCMDB\DataFlowProbe\HP_UCMDB_Data_Flow_Probe_InstallLog.log**
    >
    >   On Linux: **/opt/hp/UCMDB/DataFlowProbe/HP_UCMDB_Data_Flow_Probe_InstallLog.log**
    >
    > ○ Any database-related errors occurring during installation are written to the following log:
    >
    >   On Windows: **C:\hp\UCMDB\DataFlowProbe\runtime\log\postgresql.log**
    >
    >   On Linux: **/opt/hp/UCMDB/DataFlowProbe/runtime/log/postgresql.log**
    >
    > If you change the default installation directory, the path to these files also change accordingly.
    >
    > After installing the Probe, we recommend disabling virus scanning on the main directory that is used to store your PostgreSQL table data. The default directory is **C:\hp\UCMDB\DataFlowProbe\pgsql\data**.

17. (Windows only) If you installed the Probe on a Windows 2008 machine, perform the following steps:

    a. Locate the **wrapper.exe** file in the **C:\hp\UCMDB\DataFlowProbe\bin** folder.

    b. Right-click the **wrapper.exe** file and select **Properties**.

    c. In the **Compatibility** tab:

        i. Select **Compatibility mode**.

        ii. Select **Run this program in compatibility for**: **Windows XP (Service Pack 2)**.

        iii. Select **Run this program as administrator**.

18. Start the Probe by using one of the following methods:

On Windows:

Click **Start > All Programs > HP UCMDB > Start Data Flow Probe**.

To start the Probe from the console, at the command prompt execute the following script:

`C:\hp\UCMDB\DataFlowProbe\bin\gateway.bat console`

On Linux:

Execute the following command:

`/opt/hp/UCMDB/DataFlowProbe/bin/ProbeGateway.sh start`

To activate the Probe in a console, execute the following command:

`/opt/hp/UCMDB/DataFlowProbe/bin/ProbeGateway.sh console`

> **Note:**
>
> ○ In order for the Probe to connect to the application server, the application server must be fully started.
>
> ○ On Linux, the user running the Probe service must be a member of the Administrators group.
>
> ○ The Probe installed on Windows is displayed in UCMDB in the **Data Flow Management** module, under **Data Flow Probe Setup > <Domain> > Probes**.

> ○ A Probe installed on Linux is displayed when creating a new integration point in the Data Flow Management Integration Studio. For details, see the section describing how to create integration points in the *HP Universal CMDB Data Flow Management Guide*.
>
> ○ A Probe installed on Linux does not appear in the list of Data Flow Probes in the **Data Flow Probe Setup** window.

19. (Windows only) If you selected to run the Probe Gateway and Probe Manager as two processes on separate machines, you must configure the Probe Gateway and Probe Manager components. For details, refer to the **Data Flow Probe - Configure the Gateway and Manager Components** section in the HP Universal CMDB Deployment Guide for version 10.20.

HP Universal CMDB and Configuration Manager 10.21 Uninstall Procedure

The following procedure rolls back the 10.21 version of HP Universal CMDB, Data Flow Probe, and Configuration Manager to 10.20.

This procedure must be performed for both the UCMDB Server and the Data Flow probes, as well as Configuration Manager.

1. Stop the HP Universal CMDB and CM servers, and all running Data Flow Probes before uninstalling version 10.21.

2. For UCMDB:

   ○ Windows: Go to **<CMDB installation folder>\UninstallerCUP** and double-click **Uninstall HP Universal CMDB Server**. After version 10.21 is successfully uninstalled, go to **<CMDB installation folder>\runtime** and delete the **jsp** and **jetty-cache** folders.

   ○ Linux: Go to **<CMDB installation folder/UninstallerCUP** and run **Uninstall HP Universal CMDB Server**. After version 10.21 is successfully uninstalled, go to **<CMDB installation folder>/runtime** and delete the **jsp** and **jetty-cache** folders.

   Note: The uninstaller verifies the status of the UCMDB settings and if any settings are marked sensitive and encrypted (as part of the sensitive settings work), it pops out a warning message asking you to follow the instructions in the UCMDB document to roll back all sensitive settings.

> If you see such a warning message, manually decrypt those encrypted settings by invoking the **markSettingAsNonsensitive** JMX method before proceeding with the uninstall procedure.
>
> Only proceed with the uninstall procedure when the result returned by the **listSensitiveSettings** JMX method is empty. Be aware of the fact that two new OOTB settings are already marked as sensitive. In order to proceed with the uninstall procedure, you should mark them as non-sensitive by invoking the **markSettingAsNonsensitive** JMX method.
>
> For detailed instructions, see the *HP Universal CMDB JMX Reference Guide.*

3. For Configuration Manager:

    ○ Windows: Go to **Start** > **All Programs** > **HP Universal CMDB Configuration Manager 10.21** and click **Uninstall HP Universal CMDB Configuration Manager 10.21.**

    ○ Linux: Go to **<CM installation folder>/_sp_installation/** and run **HPCM_10.21-Uninstall**.

4. Uninstall all existing Probes as follows:

    a. **Start > All Programs > HP UCMDB > Uninstall Data Flow Probe**.

    b. Undeploy the **probeUpdate** package.

5. Reinstall the Probes of the 10.20 version with the same configuration, that is, use the same Probe IDs, domain names, and server names as for the previous Probe installations. Remember that the Probe ID is case sensitive.

    > **Note:** After performing an upgrade and installing the new Data Flow Probe, all the Discovery jobs that were active before the upgrade are automatically run.

6. Start the UCMDB server and once it is up, start the CM server.

Notes

- **UCMDB License**

    This installation comes with an HP Instant-On license that allows the use of all the products (Universal Discovery, Universal CMDB, UCMDB Configuration Manager, and UCMDB Browser) with full feature capabilities for use in a non-production environment for 21 days outside of any support contract. No activation step is required. When the HP Instant-On license expires, users are not able

to access any user interface other than the JMX console. An administrator can use the JMX console to update the license. If a Term or a Perpetual license is applied to the same UCMDB server, it supersedes the Instant-On license.

> **Note:** After upgrading UCMDB to version 10.21, if you are using the HP Instant-On license, in some cases you may read "Expiring in 22 days" instead of "Expiring in 21 days" when hovering the mouse over the License Status ⚠ icon. This is designed to provide you with 21 full days, regardless of the timezone where the license is generated/stored and where it is consumed.

- When upgrading the Data Flow Probe:

  - In a multi-customer environment, if the Data Flow Probe is not automatically upgraded to the latest version, use the manual upgrade procedure to upgrade the Probe manually. For details on the manual upgrade procedure, see "Upgrade HP Universal CMDB 10.21 Data Flow Probe Manually".

  - The automatic upgrade is not available for Data Flow Probes running on Linux. Use the manual upgrade procedure to upgrade the Probe manually. When the automatic upgrade runs on other Probes, it may begin to run for Probes running on Linux. In such a case, stop the upgrade and run the manual upgrade procedure.

  - When operating the Data Flow Probe Manager and the Data Flow Probe Gateway on separate machines (i.e, separate mode), use the manual upgrade procedure to upgrade the Probe manually. For details on the manual upgrade procedure, see "Upgrade HP Universal CMDB 10.21 Data Flow Probe Manually".

Known Problems, Limitations, and Workarounds

The following problems and limitations are known to exist in CMS 10.21 (or later software, as indicated). The problems are categorized by the affected product area. If a problem has an assigned internal tracking number, that tracking number is provided (in parentheses) at the end of the problem descriptions.

DDMI - Inventory Tools

PROBLEM: Importing a custom SAI file (for example, **User.zsai**) into the Software Application Index (SAI) Editor fails with a loading error. (QCCR1H98842)

Workaround: To import the custom SAI file into the SAI Editor properly,

1. Close the Software Application Index (SAI) Editor if it is open.

2. Navigate to the
   ..\hp\UCMDB\DataFlowProbe\runtime\probeManager\discoverySaiResources\saiRuntime
   directory, locate and remove the **auto.zsai** file.

3. Launch the Software Application Index (SAI) Editor again.

4. Import the customer SAI file (in this case, **User.zsai**).

UCMDB Browser

LIMITATION: (Standalone UCMDB Browser only) The standalone UCMDB Browser version 4.02 does not support JRE 8. If you install and use the standalone version of the UCMDB Browser, make sure you download JRE 7 from the Oracle site at
http://www.oracle.com/technetwork/java/javase/downloads/jre7-downloads-1880261.html.

Workaround: None for standalone UCMDB Browser version 4.02.

Configuration Manager

LIMITATION: Configuration Manager 10.21 does not support JRE 8.

Workaround: None for this release.

LIMITATION: Configuration Manager 10.21 is not supported with Windows Internet Explorer 11. (QCCR1H103519)

Workaround: None for this release.

PROBLEM: UCMDB is not accessible after installing Configuration Manager. The UCMDB server is up and running and the status is "green". Login is also possible but after that the java loads forever. This issue is caused by the fact that the TQL query getting the license capacity received a large number of CIs and those needed to be chunked. That issue might be triggered when the CM is installed on the environment with a huge number of CIs. (QCCR1H98426)

Workaround: Increase the values for the following fuses via JMX, **Setting Services > setSettingValue()** where **customerID** is set to **1**:

- **tql.max.result.size.layout.retrieval** to 300000 (current value 200000)

- **tql.resultutils.chunk.maxresultsize** to 300000 (current value 100000)

The changes require restarting of the server.

For detailed instructions, see the *Configuration Manager Best Practices* section in the *HP Universal CMDB JMX Reference Guide.*

LIMITATION: JMX remote access on Configuration Manager is not secure enough. (QCCR1H98139)

Workaround: To secure the JMX remote access on Configuration Manager, do the following on the Configuration Manager machine:

1. Stop the Windows CM service.

2. Open a command prompt console as an Administrator.

3. Navigate to the **<CM_Install_Home>\tomcat\bin** folder.

4. Run the following command:

    `tomcat7w.exe //ES//HPUCMDB1020server0`

5. In the window that pops up, go to the **Java** tab and locate the **Java Options** textbox.

6. In this textbox, remove the following three entries that refer to `jmxremote`:

   `-Dcom.sun.management.jmxremote.authenticate=false`

   `-Dcom.sun.management.jmxremote.ssl=false`

   `-Dcom.sun.management.jmxremote.port=39600`

7. Click **OK**.

8. Start the Windows Configuration Manager service.

Universal CMDB – General

LIMITATION: All JMX methods that are used for importing or setting credentials are affected by the password policy feature.

Workaround: The default password policy requires the UCMDB password to include at least one of each of the four following types of characters:

- Uppercase alphabetic characters

- Lowercase alphabetic characters

- Numeric characters

- Symbol characters ,\:/. _?&%=+-[]()|

It also requires the password to adhere to the minimum length, which is set by the **Password minimum length** setting.

PROBLEM: If the Enrichment rule is active, the calculation is triggered by attribute changes. Then the Enrichment rule will take into consideration only the changed values and constants when concatenating multiple attributes and constants. (QCCR1H97897, QCCR1H98010)

Workaround: To calculate all attributes, make sure that the Enrichment rule is NOT active and use the scheduler to calculate at certain intervals.

LIMITATION: The priority for TQL queries under the pattern-based model are changed from medium on UCMDB 9.05 to inactive on UCMDB 10.xx. The performance might be affected if the TQL queries under the pattern-based model are set to low/medium priority on UCMDB 10.xx. In this case, you might see that the locked gates and calculation for scheduled pattern-based model could take a couple of hours. (QCCR1H98275, QCCR1H95041)

Workaround: None.

LIMITATION: (High Availability environment only) Changes in Global Settings that require the server's restart to take effect may not take effect without restarting all nodes from a cluster. (QCCR1H98228)

Workaround: In order for all changes in Global Settings that require the server's restart to take effect, you must restart all nodes from the cluster (one by one or with the **restartCluster** JMX method).

PROBLEM: After upgrading UCMDB to version 10.21 successfully, some times users may encounter an internal error when trying to launch the UCMDB UI. (QCCR1H101149)

Workaround: In case you encounter an internal error when trying to launch the UCMDB UI, delete the **C:\Users\<user>\AppData\Local\Temp\UcmdbAppletJars** folder and try to launch the UCMDB UI again.

LIMITATION: The new **testDBConnection** JMX method does not support PostgreSQL. (QCCR1H98834)

Workaround: None.

UCMDB Installation

PROBLEM: UCMDB server experiences performance degradation after deploying a CUP, because all discovery jobs send a full result set to the UCMDB server. (QCCR1H99677, QCCR1H99640)

Workaround: The UCMDB Probe normally caches data. Some CUPs require a database schema change and the cache needs to be cleaned to ensure there are no unexpected issues. The probe will re-build the cache during the next discovery cycle. However since the probe no longer has the prior history, all newly discovered results are sent to the UCMDB Server for reconciliation. This causes the additional load on the server.

If you are concerned about the impact of extra load on the server, you can take one or more of the following actions:

- Inform users to expect a system slowdown

- Schedule the CUP installation on weekend

- Schedule the discovery jobs to run on weekend after the CUP installation

- Spread out the normal discovery over a longer period of time by adjusting the discovery job schedule

UCMDB Upgrade

LIMITATION: After upgrading from earlier versions to 10.20 or later, instances of the **Tags** business service attribute and element may not be searchable. (QCCR1H91974)

Workaround: In order to find instances of the **Tags** business service attribute when searching, you must change the indexer and ranking configuration in the JMX console.

- In **UCMDB:Service=Topology Search Services. Method: editIndexerConfiguration**, for the **business_element** class, the **Tags** attribute must be lower case in order to be searchable.

- In **UCMDB:Service=Topology Search Services. Method: editRankingConfiguration**, the **Tags** element should be **tags** in order to be searchable.

PROBLEM: When upgrading from UCMDB version 10.11 with a CP15 update to UCMDB 10.20, the UCMDB server cannot start after upgrade. This is caused by the fact that the current CP version deployed on top of version 10.11 is higher than the CP version bundled in the 10.20 install media. (QCCR1H100431)

Workaround: You can fix this upgrade issue by changing the CP version in the JMX Console manually during the upgrade, and after the upgrade, redeploy the existing CP.

For example, if you are upgrading UCMDB from version 10.11 with CP15 Update 1 to version 10.20, do the following,

1. Perform the minor upgrade from UCMDB 10.11 with CP15.01.142 to UCMDB10.20.

2. Check status and wait for the CP deployment to fail with error in **error.log**:

   [ErrorCode [105005] Content pack downgrade is not allowed]

   Trying to install CP version [15.00.123] which is older than the one already installed [15.01.143] is not support.

3. Log in to the JMX Console and access **UCMDB:service=Settings Services**.

4. Locate the **getInternalSettings** method.

5. Enter customer ID and **cp.version** in the **key** value field, and then click **Invoke**.

   The returned value should be **15.01.142**.

6. Replace the value with **15.00.123** and click **Set**.

7. After that the CP deployment should finish successfully. You can check the status in **mam.packaging.log**.

8. Access UCMDB UI and redeploy CP 15.01.142.

9. Check the CP version from menu **Help > About**. It should be **15.01.142**.

You may also refer to KM01581489 for details.

PROBLEM: When upgrading both UCMDB and Content Pack from previous versions to the latest versions, from example, upgrade UCMDB from 10.11 to 10.20 and Content Pack from CP14 to CP15, if you have customized any Content Pack files, deployment of some Content Pack class model files may fail during the upgrade. (QCCR1H96681)

Workaround: Reinstall the latest Content Pack manually after the upgrade.

PROBLEM: If you have created custom class models on UCMDB version 9.05, after upgrading UCMDB from version 9.05 to 10.20 or later, you might find that your custom class models are not available. For example, when you create a new activity for a management zone, you might find that the Protocol pane in the Define Credentials tab page is empty. (QCCR1H97159)

Workaround: Invoke the JMX method **updateClassModel** to upgrade custom class models. To do so,

1. Launch the Web browser and enter the following address:

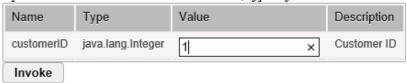   **http://<machine name or IP address>.<domain_name>:1977/**

   where **<machine name or IP address>** is the machine on which the Data Flow Probe is installed. You may have to log in with the user name and password.

2. In the Search field, type **updateClassModel** and press **Enter**.

3. Locate the **updateClassModel** method, in the customerID **Value** field, type **1**, and click **Invoke**.

updateClassModel

Updates the class model with the classes, typedefs and valid links in the xml files

Name	Type	Value	Description
customerID	java.lang.Integer	1 ✕	Customer ID

Invoke

PROBLEM: After upgrading UCMDB to version 10.20 or later, you may encounter some credentials related issues. (97159)

Workaround: To resolve the credentials related issues, do the following:

- **key.bin file**. Check and make sure that the new probe uses the same **key.bin** file as the UCMDB server.

- **Time.** Check and make sure that the probe time is the same as the UCMDB server time. If the probe time is different, it may cause credentials error.

- **Credentials fail on the upgraded environment.**

  Workaround: Install a new probe and copy specified files to override problematic files. To do so,

  a. Install a clean probe on the same machine of UCMDB server, connect it to UCMDB server. Make sure that the new probe can get credentials normally.

b. Go to the clean probe, copy the **Cmcache.bin** and **secured_storage.bin** files from **C:\hp\UCMDB\DataFlowProbe\conf\security** directory.

c. Go to the probe that has get credentials errors, override the two files with yours.

d. Restart the probe and try to get credentials again.

- **Export credentials from the upgraded environment and import them to the fresh install environment, the JMX operation fails.** When the exported credential xml file contains customized class models, or the customized class models are not defined on the UCMDB server that you upgraded, you may encounter credentials import issue.

  Workaround:

  ○ Remove the customized protocol from the exported credential xml file.

  ○ Add the customized class models on the UCMDB server manually via CIT.

  > **Note:** Make sure that the export CIT or import CIT works well. Otherwise it may cause the workaround not working.

  > **Note:** To upgrade customized class models, invoke the JMX method **updateClassModel**. For details, see Invoke JMX Method updateClassModel.

PROBLEM: A user with "create user" permissions loses permission after upgrading the UCMDB from version 9.0x. (QCCR1H93868)

Workaround: None.

PROBLEM: During upgrade from a version earlier than UCMDB 10.00, you might get a **UNIQUE_INDEX** violation exception on the path attribute of discovery modules CIT. In previous versions the column could contain duplications while in the newer version it has a **UNIQUE_INDEX** qualifier. The message means that there were duplications and that the qualifier is not added. (QCCR1H69931)

Workaround: None.

PROBLEM: When upgrading from a previous version to 10.20 or later, the user preferences of a deleted user are not deleted. Warnings appear in the log and the upgrade completes successfully. (QCCR1H75574)

Workaround: None.

PROBLEM: After uninstalling version 10.21 and downgrading UCMDB back to version 10.20, you may receive push back ID's error when starting the UCMDB server. (QCCR1H101181)

Workaround: To resolve the issue, you need manually undeploy and then redeploy the Cmdb10xAdapter. To do so,

1. After downgrading UCMDB from version 10.21 to 10.20, start the UCMDB Server.

2. Log in to the UCMDB JMX console and access **UCMDB:service=Packaging Services**.

3. Locate the **undeployPackages** method.

4. Enter your Customer ID. (**Default: 1**)

5. Enter **Cmdb10xAdapter** in the **packagesNames** field, and click **Invoke**.

6. Locate the **deployPackages** method.

7. Enter **Cmdb10xAdapter.zip** in the **packageNames** field, provide other required values as necessary, and click **Invoke**.

8. Restart the UCMDB server.

PROBLEM: After upgrading UCMDB to a newer version (including CUP), the Normalization rules does not work. (QCCR1H99001)

Workaround: To fix the issue, perform either of the following:

- Deploy a new Content Pack package.

- Manually delete the **<Data Flow Probe Installation>\runtime\probeGateway\maxupdatetime.txt** file and then restart the Data Flow Probe.

PROBLEM: (Automated Service Modeling only) When performing ASM service discovery from the UCMDB Browser, all the errors from the ASM service discovery are not assigned to the correct categories. They are assigned to the **Other** category.

Workaround: If you use ASM, to workaround this issue, make sure you upgrade both your UCMDB Server and Content Pack to the latest versions, that is to upgrade UCMDB Server to version 10.21 and Content Pack to version 16.00.

Universal CMDB - UI

PROBLEM: After upgrading UCMDB to version 10.21 successfully, some times users may encounter an internal error when trying to launch the UCMDB UI. (QCCR1H101149)

Workaround: In case you encounter an internal error when trying to launch the UCMDB UI, delete the **C:\Users\<user>\AppData\Local\Temp\UcmdbAppletJars** folder and try to launch the UCMDB UI again.

LIMITATION: (Chrome only) UCMDB UI applet cannot work in Chrome version 42 or later, because starting from Chrome 42, NPAPI plugins are disabled by default. Chrome displays a gray screen with the following error message when users try to access the UCMDB UI: This site uses a plugin (Java(TM)) that is unsupported.

Workaround: To resolve the issue, you need to enable NPAPI manually and keep Chrome below version 45 to make UCMDB UI client applet work properly. For details, see KM01656540.

LIMITATION: Cannot upload a zip package if the zip file size exceeds the applet available memory. (QCCR1H99579)

Workaround: You can deploy larger packages using the **deployPackages** JMX method (go to the **JMX Console > UCMDB:service=Packaging Services > deployPackages**).

You can also control the maximum size of the packages to be uploaded by setting the value of the infrastructure setting **File upload maximum file size for archive type** to a larger value (default value: 200 MB).

PROBLEM: When clicking **Help > UCMDB Class Model** from the UCMDB UI or clicking **UCMDB Class Model** on the UCMDB login page, the page is not loading. (QCCR1H101882)

Workaround: None for this release.

Universal CMDB - Platform

PROBLEM: The Writer server becomes unresponsive which schedules a restart of the entire HA infrastructure. This impacts the load balancing URL, causing all probes to disconnect. This is caused by the existing Garbage Collector algorithm used in UCMDB. (QCCR1H100329)

Workaround: The problem can be resolved by improving the performance of the Garbage Collector by using G1 algorithm for the Garbage Collector. For enterprise environments where you have more than 16 GB of RAM allocated just for UCMDB (see the **wrapper.java.maxmemory** property value in the

..\UCMDB\UCMDBServer\bin\wrapper-platform.conf file), check and make sure you add the following settings to the **wrapper-custom.conf** file if they are not present:

```
#Enable the following parameters for JVM G1 garbage collector in enterprise
environments
wrapper.java.additional.54=-XX:+ParallelRefProcEnabled
wrapper.java.additional.55=-XX:G1HeapRegionSize=32
wrapper.java.additional.56=-XX:InitiatingHeapOccupancyPercent=70
```

LIMITATION: Because the URM resources are not deployed at the first time a schema is created or modified, you cannot not use the status page.

Workaround: None.

Universal CMDB - Topology

PROBLEM: The priority for TQL queries under the pattern-based model are changed from medium on UCMDB 9.05 to inactive on UCMDB 10.xx. The performance may be affected if the TQL queries under the pattern-based model are set to low or medium priority on UCMDB 10.xx. In this case, you can see that the locked gates and calculation for scheduled pattern-based model can take a couple of hours. (QCCR1H95041)

Workaround: None.

Universal Discovery - General

PROBLEM: If a Management Zone inherits the IP range from a bound probe, after the probe is added to or removed from a probe cluster, the Management Zone loses the IP range setting and the following operations have unexpected results:

- Move this Management Zone from one folder to another folder.

  This operation results in an error message and the Management Zone remains in the original folder.

- Move the folder that contains this Management Zone to another folder.

  This operation moves the folder to the target folder successfully. However, an error message appears and this Management Zone is moved to the Root folder. If there are other Management Zones after this Management Zone in the tree, these Management Zones are also moved to the Root folder.

- Rename the folder that contains this Management Zone.

  This operation renames the folder successfully. However, an error message appears and this Management Zone is moved to the Root folder.

Workaround: To work around this issue, manually set the IP range for the problematic Management Zone, and then move the Management Zone(s) to the target folder.

PROBLEM: The **WebSphere to Web Server Dependencies** job is causing OutOfMemoryError on the probe side. (QCCR1H97710)

Workaround: The probe requires at least 4G memory to run the WebSphere to Web Server Dependencies job. Therefore, allocate at least 4G memory for the probe.

LIMITATION: When the probe is in Separate Mode, the default credentials for basic authentication are not updated automatically. (QCCR1H98271)

Workaround: Update the default credentials for basic authentication manually. To do so,

1. Open the JMX Console of the UCMDB Server side, enter **changeBasicAuthenticationCredential** in the quick search field and click the link that appears.

2. Specify the **userName** and **password** that you want. For example:

> **Note:** Password must contain at least six characters.

3. Click **Invoke**.

4. Encrypt the password by using the JMX Console of the probe side as follows:

a. Open the JMX Console of the probe side, enter **getEncryptedKeyPassword** in the quick search field and click the link that appears.

b. Enter the password that you specified.

getEncryptedKeyPassword

Encrypt a password for use with Keystore/Truststore properties file

Name	Type	Value	Description
Key Password	java.lang.String	123456	

Invoke

c. Click **Invoke** and then the encrypted password is generated.

5. Copy the encrypted password.

6. Edit the **DataFlowProbe.properties** file as follows:

```
appilog.agent.Probe.BasicAuth.User = <the user name that you specified>

appilog.agent.Probe.BasicAuth.Pwd = <the encrypted password that you just copied>
```

7. Save the change and then restart the probe.

LIMITATION: When working in a High Availability environment, if there is a failover to the other UCMDB Cluster, you must first clear the data of the HP Integration Service before running it.

Workaround: To clear the data, run **..\UCMDB\UCMDBServer\integrations\tools\clearProbeData.bat**.

PROBLEM: When using the network ping options available in the new **Check Network Availability** dialog box to troubleshoot network connection issues and/or credential related issues against a **node** type inventory CI in IT Universe Manager, you selected a different credential in the Choose Credential dialog box but changed your mind and clicked the **Cancel** button, **All credentials** show up in the **Credential** field, instead of keeping the original value in the **Credential** field unchanged.

Workaround: None.

PROBLEM: After upgrading UCMDB to version 10.21 and deploying the Content Pack 16.00, the new **Check Network Availability** permission is not available for the out-of-the-box role **Discovery And Integrations Admin**. This is caused by the fact that version 10.21 installer does not run in silent mode, therefore the **Basic_Authorization.zip** package is not deployed. (QCCR1H101124)

Workaround: To make the **Check Network Availability** permission available for the out-of-the-box role **Discovery And Integrations Admin**, you need to manually deploy the **Basic_Authorization.zip** package. To do so,

1. Copy the **Basic_Authorization.zip** package from the **<UCMDB_Server_Home>\content\basic_packages** directory to the machine from where you will deploy the package.

2. Launch UCMDB UI and navigate to **Administration > Package Manager**, and click the **Deploy packages to server** button.

   In the popup dialog, select **Basic_Authorization.zip**, and then click **Deploy**.

3. After the deployment is completed, go to **Security > Roles Manager**, select **Discovery and Integration Admin > CIT Menu Items**, then select **Node** CI type, the **Check Network Availability** action should show up in the Selected Actions pane.

LIMITATION: After upgrading to version 10.21, some jobs cannot run in JVM 8 because the driver JAR files of these jobs only support JVM 7.

Workaround: To work around this issue, you can use a remote process of JVM 7 to run these jobs. For detailed instructions, see KM01746334.

Universal Discovery - Probe Framework

PROBLEM: When the **appilog.collectors.storeDomainScopeDocument** property in the **DataFlowProbe.properties** file is set to **false**, some jobs which run in the remote process mode may fail, because the remote process cannot read the probe memory, thus having no access to the **domainScopeDocument** file stored in the memory. When the setting is false, the file is only stored in the probe memory. (QCCR1H98264)

Workaround: If some jobs run in the remote process mode, make sure that you set the value of the **appilog.collectors.storeDomainScopeDocument** property in the **DataFlowProbe.properties** file to **true**.

LIMITATION: When using PostgreSQL as your database on the Windows platform, the UCMDB_Probe_DB service is not starting as a non-system user. This is a third-party product limitation, because

PostgreSQL is able to "irrevocably give up administrative rights at startup". For details, see this PostgreSQL wiki page. (QCCR1H98262)

Workaround: In order for the UCMDB_Probe_DB service to start properly, you may configure the **Log On** options for the UCMDB_Probe_DB service as follows:

1. Locate the UCMDB_Probe_DB service in the Services window.

2. Right-click **UCMDB_Probe_DB** and select **Properties**.

3. In the UCMDB_Probe_DB Properties window, go to the **Log On** tab, and do either of the following:

    ○ (Recommended) Select the **Local System account** option.

    > **Note:** This is the recommended option, because the SYSTEM account has access to all necessary folders according to the default settings on Windows.

    ○ Select **This account**, and specify the account name and password.

    > **Note:** This option is NOT recommended. Even if you specify an administrator account, it will be treated as a common user account by PostgreSQL, because PostgreSQL is able to "irrevocably give up administrative rights at startup".
    >
    > If you DO need to specify a different account, make sure that the USERS group on your Windows platform has:
    >
    > - **Read** and **Write** access to the **C:/hp/UCMDB/DataFlowProbe/pgsql** folder.
    >
    > - **Read** access to the files in system library (for example, the **C:/Windows/System32** folder) that PostgreSQL needs to access.
    >
    >   For the list of files that PostgreSQL needs to access, see PostgreSQL documentation.

4. Click **OK**.

LIMITATION: Java API **setDiscoveryConfigurationXML** does not support cluster. (QCCR1H98897)

Workaround: None.

Universal Discovery – Probe Upgrade

LIMITATION: Linux does not support automatic upgrade of probes. (QCCR1H99342)

Workaround: To perform manual upgrade of probes on Linux, run the **<DataFlowProbe Installation Folder>/tools/upgrade/extractUpgradePackage.sh** script.

Problem: Some Probes cannot be switched to the FIPS mode if the UCMDB server and the Probe communicate over HTTPS. Additionally, one of the following issues occurs:

- The value of **enable.fips.mode** is **false** in **infrastructureSettings.xml**. However, this value should be **true**.

- Only the **local_policy.jar** file is downloaded on the Probe. The other JAR file **US_export_policy.jar** is not downloaded.

(QCCR1H102100)

Workaround: Perform the following steps:

1. Modify the **ssl.properties** file as follows:

   javax.net.ssl.keyStore=FIPS_HPProbeKeyStore.jks

   javax.net.ssl.trustStore=FIPS_HPProbeTrustStore.jks

2. Restart the probe.

Integration

PROBLEM: When creating an integration point using the Cmdb 9.x Adapter, after clicking the **OK** button to save the integration point, the saving operation may fail after working for some time. This is caused by the long-running task DataAccessAdapterQueryGetSupportedClassConfigs. (QCCR1H91379)

Workaround: Whenever you encounter a similar timeout issue and see DataAccessAdapterQueryGetSupportedClassConfigs in the log, you can go to the JMX console and increase the values for the following two settings:

- **task.DataAccess.Manager.getAdapterClassesConfig.timeOut**. Default value for the setting is 20000.

- **configuration.remote.action.timeout**. Default value for the setting is 35000.

LIMITATION: You cannot create one integration point for both data push and population. (QCCR1H98068)

Workaround: To create an integration point for both data push and population, do the following:

1. Update the value for **Object Root** from **managed_object** to **root**.

    a. Log in to UCMDB with an administrator account and go to **Administration > Infrastructure Settings Manager**.

    b. From the **Filter by column** drop-down list, click **Name**, type **Object Root** in the text box and double-click the **Object Root** entry that is displayed.

    c. In the Properties dialog box, go to the **Current Value** field, change **managed_object** to **root**, and then click **Save**.

    d. Log out of UCMDB and log in to UCMDB again for the change to take effect.

2. Add the **discoverypattern_mdr_type** attribute to **Auto Discovery Pattern definition**.

    a. Go to **Modeling > CI Type Manager > CI Types** pane **> Root** tree **> Data > Object > Configuration**, and click **Auto Discovery Pattern definition**.

    b. In the right pane, click the **Attributes** tab and click the **Add** button.

    c. In the Add Attribute dialog box, type **discoverypattern_mdr_type** in the **Attribute Name** and **Display Name** fields, and click **OK**.

3. If you already create an integration point, delete it and create it again.

4. Open Adapter Source Editor and save.

    a. Go to **Data Flow Management > Adapter Management > Resources** pane, select the adapter that is related to your integration point.

    b. Right-click the adapter, select **Edit adapter source**.

    c. In the Adapter Source Editor dialog box, click **Save**.

LIMITATION: After upgrading from 10.20 to 10.21, manually redeploy the UCMDB 9.x integration adapter package located in the **C:\hp\UCMDB\UCMDBServer\content\adapters** directory. (QCCR1H98251)

If the package is not redeployed, the integration adapter still works, but the reconciliation issue fixed in QCCR1H92320 will re-occur.

Workaround: None.

LIMITATION: When creating a new inherited CI Type in which the parent has identification based on key attributes, it will be by default inherited by the child CI Type, without the possibility of changing it. For example, creating an inherited CI Type from Person will inherit its **identification by key** attribute by default. So if you choose to change the identification with reconciliation rule, the whole identification will be the Person identification by key + identification by rule. (QCCR1H92081)

Workaround: When creating the new CI Type inherited from Person, change first the identification of Person by removing all attributes conditions, so the new identification of the newly created CI Type will be empty.

PROBLEM: When trying to run a remote process using the Integration Service, the following error is returned: `Failed to connect to remote process.` (QCCR1H101639)

Workaround: If you want to use the Integration Service to run a remote process, add the following jars to the **basic_discovery_minimal_classpath** setting in the **<UCMDB_Server_Home>\integrations\conf\DataFlowProbe.properties** file manually:

`../lib/cryptojce.jar;../lib/cryptojcommon.jar;../lib/jcmFIPS.jar;`

Problem: The Integration Service cannot start due to a failure to connect to the database after you change the master key on the UCMDB server. (QCCR1H102098)

Workaround: None.

Enhancements Requests

The following table lists the enhancement requests that were implemented in HP UCMDB, UD, and CM 10.21.

Global ID	Problem	Solution
QCCR1H83305	Invoking the full **reindex** method in JMX console takes hours.	Implemented an enhancement by adding a new JMX method **reindexCiType** in **UCMDB:service=Topology Search Services**. This method selects a subset of data for faster reindexing.
QCCR1H85112	User request to update Jetty to 8, and update Java with every minor minor release.	Both Jetty and JRE versions are upgraded to the latest ones.
QCCR1H89825	Administration of dozens of management zones is challenging. The product lacks the functionality of sorting and ordering Management Zones.	Added the new capability to create, edit, and remove folder in order to group management zones, and can move management zones across folders. For details, see the *HP Universal CMDB Data Flow Management Guide*
QCCR1H90278	When troubleshooting discovery issues, users often need to collect communication logs. Currently it is not possible to rerun a job with the following: * comlog enabled * comlog enabled with results	More debugging options are now available, providing easy access to communication log. For details, see the *More Debugging Options Available* section in the *UCMDB 10.11 Release Notes* or the *HP Universal CMDB Data Flow Management Guide*.
QCCR1H90803	Users request for a server health check dashboard.	Implemented server health check enhancements. For details, see the *UCMDB health check improvements* section in the *What's New in HP CMS 10.21*.
QCCR1H90816	UCMDB Server cannot be configured to save user audit log to a different log server.	UCMDB Server now can be configured to save user audit log to a different log server. For details, see the *Configure UCMDB to Save User Audit Log to a Remote Machine* section in the *HP Universal CMDB Administration Guide*.
QCCR1H90820	Package manager should take resource dependencies into account when creating packages.	Enhanced the Create Custom Package Wizard by adding the **Automatically export dependencies of the checked resources** check box to the Resource Selection page of the wizard. Selecting this check

Global ID	Problem	Solution
		box allows you to automatically export dependencies of the checked resources when creating a package.
QCCR1H91311	UCMDB Browser returns undesired results after conducting a search related to a specific time period.	Implemented an enhancement so that the search results are filtered based on finding and ignoring query matches.
QCCR1H93749	UCMDB jar files stored in the **temp** directory may be deleted if it is required to delete Windows **temp** folder after each shutdown/restart in some organizations, therefore a setting is needed to specify the location for the UCMDB applet files.	In **Administration > Infrastructure Settings Manager > General Settings**, a new setting **Jar files directory** is added, where you can specify the new path for the applet jars.
QCCR1H96231	HP Universal CMDB does not support for Java 8.	Added support for Java 8 in HP Universal CMDB.
QCCR1H96905	Management zones cannot be grouped in a hierarchical structure.	Added the new capability to create, edit, or remove folders to group management zones. You can also move management zones across folders. For details, see the *HP Universal CMDB Data Flow Management Guide*.
QCCR1H96982 QCCR1H97063	Several SAP System CIs with the same name are merged into a single SAP System CI, although they should be different.	Fixed the issue by adding a new attribute **isTopologyRequired**. When the attribute value is **true**, it overrides the UNKNOWN result to FALSE for a validation criterion. For more details, see *What's New in HP CMS 10.21*.
QCCR1H97182	The **All authorized changes** report in Configuration Manager does not contain information regarding: - When a change was authorized - Change description There is also an option to make a comment during authorization, but the comment field is not included in the report.	The requested fields were added to the **All authorized changes** report.
QCCR1H97249	Add in the documentation the recommended settings for	The requested documentation is already provided. For details, see the *DDMI to Universal Discovery*

Global ID	Problem	Solution
	optimal performance of PostgreSQL DB on the Data Flow Probe.	*Migration Walkthrough Guide* for version 10.20.
QCCR1H97407	When logging in to Configuration Manager as an administrator, a user cannot see all reports. The user can only see the reports created by the current user.	For users who have the read permission on a managed view, they now have full access to all reports generated from that view in Configuration Manager. A new column **User** is added to the reports to display which reports were created by which user.
QCCR1H98426	After installing Configuration Manager, UCMDB is not accessible. The server is up and running and the status is "green". Login is also possible but after that the java loads forever.	Added a workaround into the Release Notes. For details, see QCCR1H98426 in "Known Problems, Limitations, and Workarounds" on page 19.
QCCR1H98666 QCCR1H98853	Pattern Based Models (PBMs) created based on existing Instance Base Models (IBMs) in an environment (for example, development) are not available in the Package Manager for exporting to other environments.	Enhanced the Package Manager to provide the capability of exporting all the resources of a Pattern Based Model that is created based on an Instance Base Model, including the business enrichment, TQL, and model CI. Now Pattern Based Models that were created based on existing Instance Based Models are available in the Package Manager for selection when exporting a package.
QCCR1H98825	Users request for a server health check dashboard (discovery throughput statistics data).	Implemented the enhancement by adding a JMX method **exportDiscoveryProcessingStatisticsToExcel** in **UCMDB:service=Reconciliation Services**. After invoking this method, an Excel file named **DiscoveryProcessingStatistics.xlsx** is generated to record discovery throughput statistics data. For details, see the *HP Universal CMDB Administration Guide*.
QCCR1H98833	Users request for thread check as part of the UCMDB server health check.	Implemented the enhancement by adding a JMX supportability handler **Memory and Thread Count Info** to record the UCMDB memory usage and thread count in the **MemoryAndThreadInfo.html** file. The information is displayed in color: green, orange, and red. If the color is not green, it requires attention.
QCCR1H98834	Users request for a server health check dashboard.	Implemented DB checks by adding the new

Global ID	Problem	Solution
		testDBConnection JMX method in **UCMDB:service=DAL services**. Stored procedures for Oracle and MSSQL will be used when invoking the **testDBConnection** method.
QCCR1H98835	The Jetty monitoring mechanism should be enhanced so that each UCMDB instance checks whether Jetty is accessible. When the Jetty Server is stuck, the UCMDB server cluster should respond accordingly.	Enhanced the Jetty monitoring mechanism so that each UCMDB instance checks whether Jetty is accessible. The writer will not update its timestamp if the Jetty Server is not responding. The UCMDB instance only updates its timestamp in the High Availability environment if Jetty is accessible to new connections. In case Jetty is stuck, this will force another UCMDB to become a writer.
QCCR1H98837	Push back of global IDs works for population flows, but not for push flows.	Push back of global IDs for push flows is now working, with similar behavior like that for population flows.
QCCR1H99006	More logs are needed to debug adapter states.	Added more logs on the debug level for Push engine states.
QCCR1H99103	When using Integration Adapter 10.x, the Push creates CIs in wrong Tenant because tenant information was not pushed due to the integration user's default tenant assignment.	Improved the design of the tenant assignment. Now tenant information is also pushed to the other UCMDB.
QCCR1H99174	UCMDB should accept more than one .crl file.	Now UCMDB can accept multiple .crl files when you invoke the **CRLPath** method from the JMX console. You can specify a list of full paths to local CRL files. Multiple CRL files can be specified by using semi-colon (;) as delimiter. For example, **C:\file1.crl;D:\file2.crl**.
QCCR1H99312	When creating packages in Package Manager, resource dependencies shall be taken into account.	Enhanced the Create Custom Package Wizard by adding the **Automatically export dependencies of the checked resources** check box to the Resource Selection page of the wizard. Select this check box allows you to automatically export dependencies of the checked resources when creating a package.
QCCR1H99443	The Jetty monitoring mechanism should be enhanced so that each UCMDB instance checks whether Jetty	Enhanced the Jetty monitoring mechanism so that each UCMDB instance checks whether Jetty is accessible. If the Jetty Server is not responding the writer will not update its timestamp. The UCMDB

Global ID	Problem	Solution
	is accessible. When the Jetty Server is stuck, the UCMDB server cluster should respond accordingly.	instance only updates its HA timestamp if Jetty is accessible to new connections. In case Jetty is stuck, this will force another UCMDB to become a writer.
QCCR1H99447	Push back of global ids works for population flows, but not for push flows.	Push back of global ids for push flows is now working, with similar behavior like that for population flows.
QCCR1H99448	The **Is Candidate for Deletion** status can be synchronized with the population flow. Integration users request for the same capability for the Push flow.	Implemented an enhancement so that the **Is Candidate for Deletion** status can be synchronized with the Push flow as well.
QCCR1H99600	A JMX method is needed to deactivate all the TQLs related to views.	Added a new JMX method **deactivateAllViewsTqls** in **UCMDB:service=New Views Services** to deactivate all the TQL queries related to views.
QCCR1E120911	When using the **AlwaysOn Failover Cluster Instances** and when the failover takes place in the cluster, the AM Push Adapter fails to reconnect to the running DB instance.	Enhanced the adapter reconnection mechanism, so that the AM Push Adapter will try to reconnect when the AM database instance is restarted or network connection is broken.

Fixed Defects for UCMDB, UD, and CM 10.21

The following table lists the defects that were fixed in HP UCMDB, UD, and CM 10.21.

Global ID	Problem	Solution
QCCR1H82974	When installing UCMDB Data Flow Probe 9.05 on Linux (Red Hat) by root user, owner and group of some directories/files were not set to root.	Fixed the issue by setting the owner of the UCMDB Folder to the current USER\GROUP during installation.
QCCR1H83405	The **verifyLDAPCredentials** JMX method is not working since UCMDB version 10.00.	The root cause of the issue is that the Context where the JMX method ran was not initialized. Now the issue is fixed by implementing initialization of the Context prior to executing the **verifyLDAPCredentials** JMX method.
QCCR1H83467	When searching for an object ID in **UCMDB > Search CIs (Simple)**, the **CI Type** field automatically goes to **Object**. When changing the CI type to **Node** and deselect **Object**, the session hangs. This happens only when Object Root is set to Managed Object.	Fixed the issue by implementing a code change. Now when Object Root is set to Managed Object, the simple search in IT Universe Manager after a CI ID works properly when you want to change the CI type.
QCCR1H84819	The zip-log file generated by the **executeLogGrabber** link contains two archive path structures: "C_ hp\UCMDB\UCMDB Server\runtime\logGrabber_ucmdb_ 1368666777928_2013.05.17-10.48.34.zip\C:\hp\UCMDB\UCMDB Server\runtime\log\"	When there is only one server, the zip file will contain just another zip file that contains the zip logs. Fixed the issue by implementing a code change, so that just the child zip will be returned when there is only one UCMDB server.
QCCR1H89207	It is common for fully qualified domain host names within client internal networks to exceed 50 characters. But the default size value was varchar(50) for the **server_id** and **suggested_Server_id** columns in the **ha_writer** table.	Fixed the issue by changing the size of the **server_id** and **suggested_Server_id** columns in the **ha_writer** table to **varchar(255)**.
QCCR1H89676	Negative qualifier is not working in Impact Analysis Manager. The feature is working fine on 9.05 version.	Fixed the issue by implementing a code change on the equals method. Now the negative qualifier is working properly in Impact Analysis Manager.
QCCR1H90149	(Integration with Release Control) Using the Impact Analyzer Rules test facility, users are	The NullPointerException error was triggered because of logging. Now the

Global ID	Problem	Solution
	unable to query nodes using the exact same set up as used in the development environment. Querying business elements works well but getting the NullPointerException error with nodes.	issue is fixed by adding a null check.
QCCR1H90384	Multi-tenant environment allows users to create new customers, although it is an unsupported configuration.	Fixed the issue by applying a code change. Now an exception with error code and message "Action is not permitted" will be thrown to prevent the creation of new customers.
QCCR1H90747	An integration point cannot be created by using the UCMDB 9.x adapter.	Fixed the issue by providing the **configuration.remote.action. timeout** and **task.DataAccess. Manager.getAdapterClassesConfi g.timeOut** settings to increase the default timeout. For more details, click here.
QCCR1H91974	String list attribute are not searchable in the UCMDB Browser after upgrading from earlier versions to 10.20 or later.	Search indexer is case sensitive and the attribute for the **business_element** class name should be **tags**. For detailed workaround, click here.
QCCR1H92081	When federating a CI from GDBA, the error is seen in UCMDB: Caused by: java.lang.IllegalArgumentException: Unsupported type for IN operator.	Provided a workaround for the issue. For details, click here.
QCCR1H92547	Invalid Layout Errors on UCMDB server with reported sap_app_server CIs by different jobs.	Fixed the TQL layout issue by implementing a code change.
QCCR1H93195	The **Remove Probes from Cluster** button on the Associated Probes toolbar is always available even if none of the probes are selected.	The **Remove Probes from Cluster** button on the Associated Probes toolbar is unavailable if none of the probes are selected.
QCCR1H94507	The **getProbeFromHost()** method in the job dispatch randomly fetches the **probeName** attribute value of an IP address without checking if this IP address is configured in the management zone range.	Now the **getProbeFromHost()** method checks the management zone range configuration before using the **probeName** attribute of an IP address.
QCCR1H94686	Editing a service tree fails with the following error: "Pattern existing ci TQL has identical names for its (Node or Link) Elements".	Fixed the issue by implementing a code change so that editing a service tree works properly.

Global ID	Problem	Solution
QCCR1H94690	Users with the admin role assigned are not able to delete relationships.	Fixed the issue by implementing a code change. Now users with admin role can delete relationships.
QCCR1H95041	During heavy data-in processes, the UCMDB server stops responding sometimes for an hour or more.	Documented the limitation in the Release Notes. For details, click here.
QCCR1H95235	After changing the SAP Server icons in CI Type Manager, the changes do not appear in the CI Type tree or anywhere else.	Now SAP Server icons in CI Type Manager can be changed and the changes appear as expected.
QCCR1H95277	A discovery job takes more than one hour to prepare triggered CIs when it is activated. This is because the pattern-based model calculation is stuck caused by an issue related to TQL Gates that remain in a locked state.	Fixed the issue by implementing code changes and this fix also avoids an unresponsive UCMDB Server.
QCCR1H95558	After upgrading from 10.01 CUP4 to 10.01 CUP10, discovery probes in non-union mode cannot run discovery jobs.	Now discovery probes in non-union mode can run discovery jobs.
QCCR1H95691	When the probe is in Separate Mode, the default credentials for basic authentication are not updated automatically.	This limitation and a workaround about how to change the default credentials for basic authentication manually are added into the Release Notes. For details, click here.
QCCR1H95852	Client hosts report many "Cannot invoke trigger" error messages on the user interface (UI).	Fixed the issue by adding a new JMX setting **appilog.collectors.ShowCanNotInvokeError** in the **getInternalSetting** method. This new key allows you to show or hide the "Cannot invoke trigger" error message on UI. The default value for the setting is **true**. For detailed instructions, see the *HP Universal CMDB JMX Reference Guide*.
QCCR1H96037	Importing a custom SAI file (for example, **User.zsai**) into the Software Application Index (SAI) Editor fails with a loading error.	The workaround about how to import the custom SAI file into the SAI Editor properly is added into the Release Notes. For details, click here.
QCCR1H96039	When working with UCMDB (clustered) and 9 remote probes and performing a Managment Zone Discovery, the Basic Network job does not run in the last	Fixed the issue by applying a code change to keep **JobExecuterThread** alive when exceptions happened in the whole job scheduling mechanism.

Global ID	Problem	Solution
	discovery run.	
QCCR1H96208	When attempting to run the **UCMDB_Probe_DB** service as a non-system account, permission is denied and the service does not start.	This is a third-party product limitation. Users can configure the Log On option for the **UCMDB_PROBE_DB** service as a workaround to run the service with a non-system account. The documentation about how to configure the **Log On** option for the **UCMDB_PROBE_DB** service is added into the Release Notes. For details, click here.
QCCR1H96251	UCMDB is running on a PostgreSQL DB and CM on Oracle (as CM is not supported on PostgreSQL yet). Both UCMDB and CM are up and running and integrated with each other. In CM users can see the views and other and they are being updated properly. However, when users want to authorize any CI, the authorization fails with errors.	Fixed the issue by adding code inside the **AlignCustomerDataModelSchemaWithDbIntegrityEnforcementCommand** class for creating the list attributes table for the PostgreSQL DB.
QCCR1H96241	Windows users who cannot access Microsoft SQL Server Database are not able to take the CSV files updated with user settings while running **loggrabber.bat**. Therefore, an error is returned.	Fixed the issue by bypassing the update of the user settings file from Microsoft SQL Server Database.
QCCR1H96504	Generating a CI Change report takes too much time. The load time for CI History is too long.	Fixed the issue by modifying the SQL query. Now a CI Change report can be generated quickly.
QCCR1H96659	When an integration point job running on a Data Flow Probe fails, the return message is the same regardless of whether the probe is disconnected or simply busy.	Now different messages are returned when the Data Flow Probe is disconnected or busy.
QCCR1H96660	The push adapter do not check credentials when a job is started.	The UCMDB 9.x and UCMDB 10.x adapters have changed. After installing the CUP, manually redeploy the UCMDB 9.x integration adapter package located in the **C:\hp\UCMDB\UCMDBServer\content\adapters** directory.
QCCR1H96687 QCCR1H99316	A large number of CIs cannot be touched in the touch window.	Fixed the issue by improving the touch performance so that many CIs can be touched in the touch window.
QCCR1H96717	The remote process kills itself because it	Fixed the issue by implementing a code

Global ID	Problem	Solution
	fails to communicate with the probe	change to make concerning APIs robust.
QCCR1H96783	The push to DB integration is triggered at each server restart and the scheduled job fails because the connection to the probe is not ready.	The push to DB integration jobs will not be run when the UCMDB server restarts.
QCCR1H96845	The Data Push job fails with the "NullPointerException" error for attributes of type DATE and BYTES.	Fixed the issue to avoid the null pointer exception.
QCCR1H96944	Reconciliation causes BSM EUM model problems.	To fix this issue, manually redeploy the Cmdb9xAdapter.
QCCR1H97099	The Number of Changes report fails on the database selection with the following error: "Failed to load report".	The Removed CI instances for the Database CI type can be displayed on the Number of Changes report.
QCCR1H97157	Each integration point consumes one Management Data Repositories (MDR) license. One integration point cannot be created for both data push and population, and therefore two integration points are needed with two MDR licenses.	Fixed the issue by creating a new mechanism so that one integration point can be created for both data push and population. For more details, see the current Release Notes. Note: Deployment of the Universal Discovery Content Pack 15.00 is required for this defect fix to work.
QCCR1H97168	Discovery jobs fails with the following error: "Can't add to DataContainer because its size larger than the fuse 200000 which defined by reconciliation.internal.data.container.size.fuse". This happens when Identification by key attributes is triggered with no condition objects.	Fixed the issue by changing the query from Root to the Identification type that is identified.
QCCR1H97197	The error message "collection error -1(-1)" occurs in the Analysis Workbench after you perform a software teaching and use the "Unload Scan File" function.	Now the scan file can be unloaded correctly in the Analysis Workbench after you perform a software teaching.
QCCR1H97356	When running the NNMi pull topology integration, UCMDB Pull from NNMi fails with the "Failed to send ping message to probe" error message.	Fixed the issue by implementing a code change to make concerning APIs robust.
QCCR1H97374	A cross-site tracing vulnerability with HTTP TRACE or TRACK methods is detected on the Data Flow Probe.	Fixed the issue by disabling the HTTP TRACE or TRACK methods on the Data Flow Probe.

Global ID	Problem	Solution
QCCR1H97464	In Modeling Studio, after opening a perspective-based view and hide a CI from View Results, the unhide button no longer works due to a missing variable instantiation.	Fixed the issue by applying a code change to instantiate the variable in the proper code sequence.
QCCR1H97512	The UCMDB-NNMi integration fails with reconciliation errors on Non-SNMP nodes.	Now the UCMDB-NNMi integration works as expected for Non-SNMP nodes.
QCCR1H97566	Many triggers for several discovery jobs fail randomly with the "Java.lang.NullPointerException" error.	Fixed the issue by a code change so that discovery jobs can successfully run.
QCCR1H97709	The **WebSphere to Web Server Dependency** job causes OutOfMemoryError on the probe side.	The probe requires at least 4G memory to run the **WebSphere to Web Server Dependency** job. Therefore, allocate at least 4G memory for the probe.
QCCR1H97779	A database inconsistency issue occured at minor upgrade from UCMDB 10.01 to UCMDB 10.1x. The links were not migrated correctly from the ROOT table to the ROOT_LINK table during the minor upgrade procedure.	Fixed the database inconsistency issue by applying a code change. Now the upgrading process works as expected. However, the following note shall be added to the Notes section in the Release Notes, so that users know what to do with their own case: **Note:** If you plan to upgrade from UCMDB 10.01 to UCMDB 10.1x, it is recommended that you proceed with upgrading directly to UCMDB 10.11 CUP 3 (or a later CUP). That is to say, after UCMDB 10.11 is installed, do NOT start the UCMDB server yet. Only after UCMDB 10.11 CUP 3 (or a later CUP) is applied, start the UCMDB Server, which will trigger the minor upgrade.
QCCR1H97790	The recognition engine incorrectly reported applications after importing a new user SAI file in the Software Library in UCMDB.	Now applications do not have ID conflicts between auto SAI and other user SAI files.
QCCR1H97904	False restarts of the UCMDB writer server happened occasionally.	Fixed the issue by applying a code change. However, note the following: **Important:** Before starting the UCMDB server, open the **\UCMDBServer\bin\wrapper.conf** file,

Global ID	Problem	Solution
		locate the following settings and modify their values as indicated below: ``` wrapper.cpu.timeout=60 wrapper.ping.timeout=320 wrapper.ping.interval=30 wrapper.stop.timeout=320 wrapper.shutdown.timeout=320 wrapper.jvm_exit.timeout=320 ```
QCCR1H97871	The last_use date value from the discovered software (for example, Microsoft PowerPoint) is not correct	Fixed the issue by implementing a code change, including adding two attributes **usagelastused** and **usagelastusedfoc**. The new attributes can be found in the scanfile processed by the XML Enricher. **Note:** Content Pack 15 Update 1 (or later) is required for this fix to work properly.
QCCR1H97897	Active Enrichment rules triggered by attribute changes take consideration of the changed values and constants only when concatenating multiple attributes and constants.	Provided the following workaround note in the UCMDB 10.11 CUP3 Release Notes: To calculate all attributes, make sure that the Enrichment rule is NOT active and use the scheduler to calculate at certain intervals.
QCCR1H97882	Population from external data store into authorized state is not possible.	Population in authorized state is now available by setting **customerId** in the **DataFlow.properties** file to an authorized state one (for example, 100001).
QCCR1H97888	The NNMi synchronization takes a long time to insert data into UCMDB.	Running a full NNMi synchronization now takes less than 24 hours.
QCCR1H97941	Infrastructure Service instances cannot be created without a Name attribute value.	Now Infrastructure Service instances can be created without a Name attribute value. You can use your own identifiers as key attributes when selecting an Identification rule by key attributes in CI Type Manager. Also, you can still use the Name attribute if you want.
QCCR1H97925	The tenantOwner attribute is wrong for some CIs.	Fixed the issue by implementing a code change. Now Call Home can return the

Global ID	Problem	Solution
		correct tenant owner ID for CIs.

QCCR1H97950	When using Java API **setDiscoveryConfigurationXML** to update Probe IP address ranges, all jobs are restarted because **setDiscoveryConfigurationXML** contains the following parameter that enables or disables all jobs in the group:
	
	`<DiscoveryGroup name="Network">`
	`    <IsEnabled>True</IsEnabled>`
		Fixed the issue by adding a new method **void setDiscoveryConfigurationXML(String xmlString, boolean includeGroup)**. If you want to update IP address ranges and credentials only, you can use this new method by setting the **includeGroup** parameter to false.

QCCR1H97978	Running the **Host Resources and Applications by Shell** job takes a lot of time.	Fixed the issue by improving the **cleanLOA** performance from JMX.
QCCR1H98037	The values of normalized fields are not in a user-friendly format.	Fixed the issue by unifying the result content when Data Flow Probe sends the result to UCMDB.
QCCR1H98095	Browser search stops working because of changes in the snapshot CI type instances.	Fixed the issue by implementing a code change. Now UCMDB Browser search works as expected.
QCCR1H98116	The following error message is returned in the management zone: "Failed to initialize CM client (sleep interrupted)".	Fixed the issue by implementing a code change. Now credentials can be fetched from the Confidential Manager Client.
QCCR1H98117	Many unsent results exist on probes.	Fixed the issue by reducing the unsent results on probes.
QCCR1H98180	After you invoke the **reindex()** method in the JMX console, the attributes of type **string_list** are deleted from the CSV files.	Fixed the issue by implementing a code change. Administrators can now use a new JMX settting **cmdb.search.batch.size.list.attributes** to configure the batch size of data to be sent to Solr when executing the **reindex()** method. For details, see the *What's New* document in HP CMS 10.21.
QCCR1H98290	Custom jobs are stuck with zero working threads, for example, no triggers on one probe are running.	Fixed the issue by implementing a code change. Now custom jobs can run as expected.
QCCR1H98458	The "NullPointerException" error is thrown when discovery results are being processed.	Fixed the issue to avoid processing null objects.

Global ID	Problem	Solution
QCCR1H98485	Identification by key attributes is not working for certain types of attributes (for example, long) when you create an InfrastructureService model.	Now InfrastructureService models work with the following types of custom key attributes used for identification (without the Name attribute): boolean, date number, double number, float number, integer, list of integers, list of strings, long number, string. However, the following types of attributes are not supported: bytes, xml, some custom lists (such as lists of dates).
QCCR1H98610	After implementing a new security policy about usage of self-signed certificates SHA-1 in the software, SHA-1/MD-5 is no longer allowed in the environment and there is a need for SHA-2 to be implemented.	Fixed the issue by implementing support for SHA2 to generate UDA credential certificate.
QCCR1H98611	The SCCM population job fails with the "ClassCastException" error.	Fixed the issue by correcting logic to use proper child type, now the SCCM population job runs successfully.
QCCR1H98675	Some information from the *Data Flow Management Web Service API* chapter in the *HP Universal CMDB Developer Reference Guide* is outdated.	Fixed the issue by updating the *HP Universal CMDB Developer Reference Guide* with the latest information.
QCCR1H98737	When a Full Synchronization is completed, running a differential synchronization with NNMi pull integration sends Layer 2 Connection CIs without the required reconciliation information.	Fixed the issue by implementing a code change. After a Full Synchronization, a differential synchronization can be run as expected.
QCCR1H98794	When the memory usage exceeds 2GB, the Viewer and the SAI Editor fail with "out of memory" fatal error.	Fixed the issue by enabling support for large address for the Viewer and the SAI Editor. Now they will not run out of memory when 2GB usage is reached.
QCCR1H98826	Existing LDAP users cannot log in after upgrading to UCMDB 10.20.	Fixed the issue by implementing a code change to update existing users from UCMDB. Now existing LDAP users can log in to UCMDB 10.20.
QCCR1H98869	When the credentials for the **PushDBExample** adapter are missing, the return message is meaningless.	Now the returned message contains more detailed and meaningful information when the credentials for the **PushDBExample** adapter are missing.

Global ID	Problem	Solution
QCCR1H98947	The reader server restarts in the High Availability environment because the writer server sends the revisions in an incorrect order. The log shows the following error message: "Server had to be restarted because of a missing revision".	Fixed the issue by creating an ordered queue to place the revisions in the expected order.
QCCR1H98952	After importing some VMWare ESX Servers using an Excel file where in the name of the sheet "vmware_esx_Server" is used instead of "vmware_esx_server", CIs were created with a wrong CIType name, users are are having issues to view, modify or delete those CIs from the UI.	Fixed the issue by applying a code change. Now users will be able to view CIs regardless of uppercase characters.
QCCR1H98963	The SSH credential is changed after being saved and reopened in the UCMDB user interface.	Fixed the issue by applying a code change. The SSH credentials now can be saved successfully.
QCCR1H99113	The upgrade from UCMDB 9.05 to UCMDB 10.20 fails with the following error message: "[ErrorCode [110] class model validation error]".	Fixed the issue so that the upgrade can be done successfully.
QCCR1H99154	Long full Garbage Collector shows in **wrapper.log** and JVM hangs or restart because Solr logging is causing big objects on the heap.	Fixed the issue by adding a new setting **cmdb.search.use.query.syntax .tree** to control if syntax tree is logged or not.
QCCR1H99206	In a custom CI Type the ":" character is used for the calculation of Display Label. The **Name** was not part of the Display Label Calculation, so whenever a new Model is created this character was added to the name. In UCMDB Browser, Service Modeling, CIs cannot load due to this special character. A perspective based view can contain ":", but the folding pattern is not allowed to contain this character.	Fixed the issue by replacing "**:**" with "**_**" for the folding pattern, the view will still contain the original character.
QCCR1H99331	UCMDB to UCMDB Push created duplicated CIs. Identifier criteria was taking into consideration the calculated_id_attribute when identifying objects. Since global_id was changing during push, the calculated ID was also changing and it created duplicated data.	Fixed the issue by adding special setting **reconciliation.calculated.id.attri bute** to take into consideration of calculated ID. By default this setting is set to **false**. If the setting is not present, it is also treated as false by default.
QCCR1H99345	When pushing data between two UCMDB	Fixed the issue by adding a check

Global ID	Problem	Solution
	servers, the owner for pushed data is still the owner from the source system even if you select a different default owner name from the Integration Point wizard.	mechanism in the AbstractSynchronizer*.java classes. Now the default owner name selected from the Integration Point wizard has priority over the owner from the source system.
QCCR1H99439	When the Changed CI filter is on, some changes related to CIs are not displayed.	Fixed the issue by applying a code change.
QCCR1H99425	The **VMware vCenter Topology by VIM** job fails with the following error message: "Failed to connect to remote process: details: Software caused connection abort: socket write error".	Fixed the issue to avoid the socket error when running the **VMware vCenter Topology by VIM** job.
QCCR1H99511	The timeout for getting the Data Flow Probe status is not configurable.	Added a new infrastructure setting Max time out for getting probe status (in **Administration > Infrastructure Settings Manager > View Settings**) so that you can change the maximum timeout for getting the Data Flow Probe status. Default value: 30,000 (in milliseconds).
QCCR1H99559	When adding a CI to a job that is currently stopped by using IT Universe Manager, the probe limit changes to disabled and the job does not start. This is a regression that occurs in the 10.11 CUP3, because this issue does not exist in the 10.11 CUP2.	Fixed the issue by rolling back the change made in 10.11 CUP3. Now CIs can be added to a job that is currently stopped by using IT Universe Manager as in the 10.11 CUP2.
QCCR1H99647	Information on verification or validation criterion results was not present into the logs.	Implemented logging for showing the result of each verification and validation criterion. However, you need to set the **cmdb.reconciliation.datain.multiple match** log to **TRACE** level in order to enable this.
QCCR1H99640	UCMDB server experiences performance degradation after deploying a CUP, because all discovery jobs send a full result set to the UCMDB server.	Added the limitation into the Release Notes. For details, click here.
QCCR1H99724	Writer server is unresponsive as a result of increased log levels for a longer period of time.	Added the following note in Chapter 5 of the *HP Universal CMDB Administration Guide*: **Note:** UCMDB log levels should be

Global ID	Problem	Solution
		set to the OOTB values. They may be increased when investigating issues. However, after obtaining the required information the log levels should be reverted. Increased log levels for a longer period of time may have an impact over performance.
QCCR1H99914	Integration Point activates automatically after refresh, even if it was saved as inactive.	Fixed the issue by applying a code change. Now an integration point saved as inactive does not activate automatically after refresh.
QCCR1H99918	The integration between Service Manager and UCMDB that is based upon Connect-IT creates CIs of the Infrastructure Element CI type with the qualifier Abstract Class. This means that no CIs of this type may be created. This results in errors with the UCMDB to BSM integration.	Fixed the issue by applying a code change, so that no update type change is allowed when Abstract Class is the type to update to.
QCCR1H99939	Missing the "enricherver" stamp in enriched scan files.	Fixed the issue by restoring the code for writing the 'enricherver' attribute, also changing the code to read 'Implementation-Version' from manifest.mf as enricherver.
QCCR1H100066	The reader server restarts in the High Availability environment because of the following error on the writer server: "java.util.ConcurrentModificationException".	Fixed the issue by applying a code change. Now the reader server works properly in the High Availability environment.
QCCR1H100102	After changing the value of a system type that has been used by a CIT, an incorrect error message is returned: "Delete action is not allowed...".	Fixed the issue by changing the error message to match multiple operations.
QCCR1H100103	The **Restore Default** button in the **Create Configuration Item Type – Default Label** window works as the **Clear All** button, instead of restoring the "name|root_class" to the default. The **Create Configuration Item Type** window is accessible from **Modeling > CI Type Manager > Create Configuration Item**	Now the **Restore Default** button works as expected.

Global ID	Problem	Solution
	Type.	
QCCR1H1001 19	The **Add Parameter** button in the **Menu Item Method** section of the **Create Configuration Item Type – Attached Menu** window does not work as expected. The **Create Configuration Item Type** window is accessible from **Modeling > CI Type Manager > Create Configuration Item Type**.	Fixed the issue by implementing changes in the **CITypeEdit** class. Now the **Add Parameter** button for the URL method works as expected.
QCCR1H1000 56	After an upgrade to UCMDB 10.20, duplicated CIs are created for the "InstalledSoftware" CIs.	Fixed the issue so that no duplicated CIs will be created for the **InstalledSoftware** CIs.
QCCR1H1001 45	Writer server became unresponsive which schedules a restart of the entire HA infrastructure. This impacted the load balancing URL causing all probes to disconnect	Fixed the issue by changing GC algorithm from CMS to G1.
QCCR1H1001 44	The reader server in the High Availability environment restarts because of the JGroups cluster recreation.	Fixed the issue by changing the JGroups configuration.
QCCR1H1001 32	A very long dispatch queue is seen on the Universal Discovery server and almost no new jobs are scheduled. The dispatch queue should be reduced to zero till new jobs get activated if you restart the server.	Added logs to show the time that is spent on each step of the dispatch for analysis purposes.
QCCR1H1002 69	All Tenant IDs coming from the automatic deletion process are returned as the System Default Tenant although a specific tenant is set on the Data Flow Probe.	Fixed the issue by applying a code change. Now the automatic deletion process sends the proper Tenant ID to the server.
QCCR1H1003 43	No email is received even if a Scheduler job was created with success for the Compare Archives Report, the Compare CIs Report, or the Compare Snapshot Report. This was caused by an older version of the UI apache.poi jar file.	Fixed the issue by upgrading the UI apache.poi jar to a later version.
QCCR1H1003 55	CP15 cannot be deployed on UCMDB 10.21 that is connected to a new schema.	Fixed the issue by implementing a code on the server side. Now CP15 can be deployed on UCMDB 10.21 that is connected to a new schema.
QCCR1H1004	When upgrading from UCMDB version 10.11	Fixed the issue by applying a code, now

Global ID	Problem	Solution
31	with a CP15 update to UCMDB 10.20, the UCMDB server cannot start after upgrade. This is caused by the fact that the current CP version deployed on top of version 10.11 is higher than the CP version bundled in the 10.20 install media.	the UCMDB Server can start properly after upgrade.
QCCR1H100565	When running the **initializeHistoryDBFromMode** JMX method on MSSQL or PostgreSQL, an error message is returned.	Fixed the issue by removing the "H" alias used in the DB query. The "H" alias is not supported by the MSSQL and PostgreSQL database.
QCCR1H100629	Currently the documentation lacks full re-index required steps.	Added the *How to perform a full re-index of all CIs* section. For details, see "How to Perform a Full Reindex of All CIs" on page 61.
QCCR1H100691	Creating an attribute with a custom type that has baseline with more than 50 characters, the properties tab does not display any information.	Fixed the issue by limiting the size of each entry of the **String List** type to the DB default limit, which is 50 characters.
QCCR1H100808	When running the **Migrate DDMI Agent** job to upgrade some DDMI agents to UD, the communication log says that is a successful connection; however, no CI is created for performing Inventory Discovery.	Fixed the issue by applying a code. When the probe detects the node that is a dummy node and out-of-scope, the probe will not add the license tag to it.
QCCR1H100940	Universal Discovery Control Panel is not opening. There is no error in the UI, nothing happens when users trying to open it. Only NullPointerException found in the client logs. The root cause is that when initializing the Universal Discovery Control Panel, all activities and their data (for example, templates being used) need to be loaded. If users happen to delete a template which is being used by some activities, NullPointerException will be raised during the control panel initialization.	Now if a template is deleted by users accidentally, activities that are created with this template are corrupted. When loading the control panel, activities are checked, and missing templates are handled, so the control panel still works, and users will see a warning message when accessing a corrupted activity.

Documentation Errata

The following items are listed incorrectly in the documentation.

HP Universal CMDB Administration Guide

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setGlobalSettingValue needs to be used instead of setSettingValue to change setting value of "cmdb.search.enabled"

Location: *HP Universal CMDB Administration Guide*, version 10.20, original edition, page 54

Error: Step 1 in the *Enable/Disable the Enhanced Search Engine* section mentions the **setSettingValue** method. However, the **setGlobalSettingValue** method needs to be used instead of **setSettingValue** to change the value of the **cmdb.search.enabled** setting.

Correction: Replace the **setSettingValue** method with the **setGlobalSettingValue** method.

Important note about a user's CIT Menu Items permissions when both custom and Out Of the Box roles are assigned to the user

Location: *HP Universal CMDB Administration Guide*, version 10.20, original edition, page 222

Error: When multiples roles are assigned to a user, the user's permission level is set to the role with the minimum permissions. This is the desired behavior, but it is not explained in full details, thus causing confusion. (QCCR1H98529)

Correction: Under the current bullet as follows,

- For **CIT Menu Items**, you select a CIT from the tree and then select specific actions from the Available Actions pane and move them to the Selected Actions pane. You can also right-click a CIT and select the actions from the pop-up dialog box. If no permissions are assigned for any CIT, all the menu items are permitted by default (in accordance with the permissions granted in the General Actions tab).

The following important note shall be added to clarify the desired behavior:

Note: The above principle remains valid when there are multiple roles with menu items permissions/general actions. Both the menu items permissions and the general actions are accumulated. If there are NO menu items permissions accumulated from all the user's roles, all the menu items are permitted by default (in accordance with the permissions granted by accumulating

all the General Actions from all the user's roles). In the opposite way, if there are menu items permissions accumulated from all the user's roles, they will be taken into account and the UI will enforce them, even in the case when a role with no CIT Menu Items is aggregated with a role with CIT Menu Items.

HP Universal CMDB JMX Reference Guide

setGlobalSettingValue needs to be used instead of setSettingValue to change setting value of "cmdb.search.enabled"

Location: *HP Universal CMDB JMX Reference Guide*, version 10.20, original edition, page 43

Error: Step 1 in the *How to Enable/Disable the Search Engine* section mentions the **setSettingValue** method. However, the **setGlobalSettingValue** method needs to be used instead of **setSettingValue** to change the value of the **cmdb.search.enabled** setting.

Correction: Replace the **setSettingValue** method with the **setGlobalSettingValue** method.

HP Universal CMDB and Configuration Manager Hardening Guide

No instructions about enabling secure login for the JMX console

Location: *HP Universal CMDB and Configuration Manager Hardening Guide*, 10.20

Error: The document does not contain instructions about enabling secure login for the JMX console. (QCCR1H95713)

Correction: Add the instructions into the document. For details, see "Enable Secure Login for the JMX Console" on page 59.

The capitalization of the file name hpprobeTrustStore.jks is incorrect

Location: *HP Universal CMDB and Configuration Manager Hardening Guide*, 10.20, page 39, 48,90, 93, and 102

Error: The capitalization of the file name **hpprobeTrustStore.jks** is incorrect.

Correction: Update the file name from **hpprobeTrustStore.jks** to **HPProbeTrustStore.jks**.

HP Universal CMDB Deployment Guide

Documentation about migration from Windows to Linux and vice versa not available

Location: *HP Universal CMDB Deployment Guide*, version 10.20

Error: Documentation about migration from Windows to Linux and vice versa is not available in the guide.

Correction: Add the instructions into the document. For details, see "Migrate UCMDB Server from Windows to Linux and Vice Versa".

HP Universal CMDB Configuration Manager User Guide

No need to import a UNL File into Service Manager when the Service Manager is version 9.30 or later

Location: *HP Universal CMDB Configuration Manager User Guide*, version 10.20, page 141

Error: There is no need to import a UNL File into Service Manager when the Service Manager version is 9.30 or later. (QCCR1E101797)

Correction: Add the following note under the *Import a UNL File into Service Manager* heading:

> **Note:** Skip this task if your Service Manager is on version 9.30 or later.

HP Universal CMDB Developer Reference Guide

Missing or outdated information in the *Data Flow Management Web Service API* section

Location: *HP Universal CMDB Developer Reference Guide*, version 10.20, page 418

Error: The following information is missing or outdated:

- The information about how to create the Web Service client is missing.

- The information of several methods in the **Managing Trigger Methods** chapter is outdated or missing.

- The code sample is outdated.

Correction: Add the missing information and update the outdated information. For details about the new content, see the *Data Flow Management Web Service API* section in the *HP Universal CMDB Developer Reference Guide* for version 10.21.

HP Universal CMDB Support Matrix

Incorrect note about PostgreSQL support on Linux platforms

Location: *HP Universal CMDB Support Matrix*, version 10.20, page 11; version 10.11, page 11; version 10.10, page 10

Error: The note "PostgreSQL is not supported on Linux systems" is incorrect.

Correction: Only the embedded PostgreSQL is not supported on Linux systems. Therefore, the note should be modified to the following:

- Embedded PostgreSQL is not supported on Linux systems.

Enable Secure Login for the JMX Console

To enable secure login for the JMX console,

1. Access the UCMDB JMX console: Launch a Web browser and enter the following address: **http://<UCMDB machine name or IP address>:8080/jmx-console**. You may have to log in with a user name and password (default is sysadmin/sysadmin).

2. Locate **UCMDB:service=Ports Management Services** and click the link to open the Operations page.

3. Locate the **mapComponentToConnectors** operation.

4. To enable secure login for the JMX console, invoke the **mapComponentToConnectors** method with the following parameters:

   ○ **componentName**: jmx-console

   ○ **isHTTPS**: true

   ○ All other flags: false

5. Restart the server.

6. Log in to the JMX console using **https://** and port **8443** (default) or the one for https if it was changed.

   For example, **https://mymachine:8443**.

> **Note:** HP also recommends you setting a strong password for the **sysadmin** user and any other user that can access the JMX console.

For more enhanced security, you can restrict JMX Console to run on local machine only. To do so,

1. Access the UCMDB JMX console, and go to **UCMDB:service=Settings Services**.

2. Locate the **setGlobalSettingValue** method.

3. Provide values for the following parameters:

   ○ **name:** restrict.jmx.to.localhost

   ○ **value:** true

4. Click **Invoke**.

> **Note:** The JMX Console cannot be accessed over HTTP anymore. Any HTTP request made to the JMX Console will be redirected over to HTTPS.

Migrate UCMDB Server from Windows to Linux and Vice Versa

To migrate UCMDB server from Windows to Linux,

1. Stop UCMDB on the current machine (Windows).

2. From the **c:\hp\UCMDB\UCMDBServer\conf\cmdb.conf** file, get the name of the UCMDB schema.

3. Install UCMDB server on the new machine (Linux).

4. Go to the **/opt/hp/UCMDB/UCMDBServer/bin/** directory on the Linux machine, run **configure.sh** and connect to an existing schema.

5. Enter the name of the schema and the credentials you obtained from the old machine in step 2.

6. Start UCMDB server on the new machine.

To migrate UCMDB server from Linux to Windows,

1. Stop UCMDB on the current machine (Linux).

2. From the **/opt/hp/UCMDB/UCMDBServer/conf/cmdb.conf** file, get the name of the UCMDB schema.

3. Install UCMDB server on the new machine (Windows).

4. Start the HP Universal CMDB Server Configuration Wizard and connect to an existing schema.

5. Enter the name of the schema and the credentials you obtained from the old machine in step 2.

6. Start UCMDB server on the new machine.

How to Perform a Full Reindex of All CIs

Perform a Full Reindex of All CIs

Use either of the following approaches to perform a full reindex of all CIs available for search in the UCMDB Browser:

- Go to **JMX Console > UCMDB:service=Topology Search Services** and invoke the **reindex()** method.

  This method removes all CIs information stored inside the SOLR index files without removing any internal SOLR files.

  > **Note:** You can also invoke the **reindexCiType()** method to re-index all the CIs of a given CI type from the CMDB model database. For more information, refer to the *HP Universal CMDB JMX Reference Guide*.

- Stop the UCMDB server, delete the ***<UCMDB_Server_Home>*/search** folder, and then start the UCMDB server.

  The deletion of the folder forces a full reindex for all UCMDB customers and reverts the SOLR configuration to the out of the box values. This process removes all internal SOLR files and hence takes longer time than the previous one.

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Feedback on Release Notes (Universal CMDB 10.21)

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@hp.com.

We appreciate your feedback!