



# Universal CMDB & Configuration Manager

Software Version: 10.22 CUP1

## Release Notes

Document Release Date: May 2016 (Second Edition)  
Software Release Date: March 2016



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#### Document Changes

Version	Changes
10.22 CUP1 (2nd Edition, May 2016)	Added one more fixed defect <a href="#">QCCR1H107745</a> .

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# HP Universal CMDB & Configuration Manager Release Notes

Keep your system up to date with the most recent cumulative update package (CUP) for UCMDB 10.22. This package contains all of the UCMDB 10.22 hotfixes that have been released since the initial release of UCMDB 10.22.

## Installation Notes

### Universal CMDB and Configuration Manager 10.22 CUP1

#### Files/Components

HP UCMDB 10.22 CUP1 is packaged in one .zip file.

The **UCMDB\_00179.zip** (for Windows) includes the following files/components:

- **HPUCMDB\_Server\_Patch\_10.22.260.exe**. The installation of the version 10.22 CUP1 HP UCMDB Server and Data Flow Probe for Windows.
- **HPCM\_Patch\_10.22.58.exe**. The installation of version 10.22 CUP1 HP UCMDB Configuration Manager for Windows.
- **Read\_Me\_10.22\_CUP.txt**

The **UCMDB\_00180.zip** (for Linux) includes the following files/components:

- **HPUCMDB\_Server\_Patch\_10.22.260.bin**. The installation of the version 10.22 CUP1 HP UCMDB Server and Data Flow Probe for the Linux platform.
- **HPCM\_Patch\_10.22.58.bin**. The installation of version 10.22 CUP1 HP UCMDB Configuration Manager for the Linux platform.
- **Read\_Me\_10.22\_CUP.txt**

## System Requirements

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

**Note:** If you are using an Oracle version that is prior to 10.2.0.5, you must apply the Oracle patch that fixes Oracle defect # 5866410. For details, go to the Oracle website and find the information regarding this defect number.

## Install 10.22 CUP1 on the Universal CMDB and Configuration Manager Servers

CUP Installation for both HP Universal CMDB and Configuration Manager is performed through an automated procedure using the installation wizard.

You can still install the Data Flow Probes separately by upgrading the Data Flow Probes using the UCMDDB user interface. For details, see "[Installation Notes](#)" on the [previous page](#).

**Note:**

- HP UCMDDB 10.22 CUP1 can be installed only on top of an HP Universal CMDB version 10.22.
- HP UCMDDB CM 10.22 CUP1 can be installed only on top of HP UCMDDB CM 10.22.
- The UCMDDB CUP version and the CM CUP version must be the same.

### Pre-requisites - UCMDDB Server and Data Flow Probes

1. Extract **UCMDDB\_00179.zip** (for Windows) or **UCMDDB\_00180.zip** (for Linux) to a temporary directory.
2. Stop the Universal CMDB 10.22 server and the HP Universal CMDB Integration Service (if running) before starting the 10.22 CUP1 installation.

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

3. If you have received private patches for the Data Flow Probe, you must delete them before performing the upgrade. These steps for deleting a private patch must be followed whether you are upgrading the probes during the installation wizard, or if you upgrading the probes using the UCMDDB user interface after installation is complete.

- a. Stop the Data Flow Probe.
- b. Delete all private patches that were installed on the system prior to this CUP by deleting the following directory:

**\\hp\UCMDB\DataFlowProbe\classes directory**

- c. Start up the version 10.22 Data Flow Probe.

## CUP Installation

You must first install the UCMDB CUP, start up the server, and then perform the Configuration Manager (CM) CUP installation.

1. For UCMDB: Double-click the file **HPUCMDB\_Server\_Patch\_10.22.260.exe** (for Windows) or **sh HPUCMDB\_Server\_Patch\_10.22.260.bin** (for Linux) to open the HP Universal CMDB Server CUP Installation Wizard.

For Configuration Manager: Double click the file **HPCM\_Patch\_10.22.58.exe** (for Windows) or **sh HPCM\_Patch\_10.22.58.bin** (for Linux) to open the HP Universal CMDB Configuration Manager CUP Installation Wizard.

2. While running the wizard:
  - In the Choose Install Folder screen, select the installation directory in which UCMDB/CM is already installed.
  - For UCMDB, in the Install Data Flow Probe CUP screen, select the following option:
    - **Automatically update Data Flow Probe with the new CUP version** 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 using the UCMDB user interface after completing the installation of this CUP on the UCMDB server. For details, see "[Installation Notes](#)" on page 4.
    - In the Required Actions screen, follow the instruction to ensure that the server is down.
3. Once the installation wizard for UCMDB is completed, start up the version 10.22 server per the instructions in the Deployment Guide for version 10.22. Go back to step 1 to install the CM CUP.  
  
Once the CM CUP installation is completed, start up Configuration Manager version 10.22 per the instructions in the Deployment Guide for version 10.22.
4. (CyberArk integration only) Check if new hash value is the same as the one you configured in the CyberArk server. If different, re-generate the hash value using the following command:

```
java -Xms500m -Xmx1200m -jar JavaAIMGetAppInfo.jar GetHash  
/AppExecutablesPattern="C:\hp\UCMDB\DataFlowProbe\lib"  
/OnlyExecutablesWithAIMAnnotation=yes /LogFileDirectory="c:\temp"
```

And then fill in the newly generated hash value in the CyberArk server.

## HP Universal CMDB 10.22 CUP1 Manual Data Flow Probe

### Installation

**Linux:** Always required.

**Windows:** Applicable only when **Update the Data Flow Probes manually** is selected in the CUP installation wizard.

To install the Data Flow Probe CUP upgrade using the UCMDB user interface, follow these steps.

**Note:** All Data Flow Probes that are associated with the UCMDB are upgraded.

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 5.
2. In UCMDB, go to **Data Flow Management > Data Flow Probe Setup**, and click **Deploy Probe Upgrade**.
3. In the Deploy Probe Upgrade dialog box, navigate to the **<SERVER\_HOME>\content\probe\_patch\probe-patch-10.22.CUP1-windows/linux.zip** and click **OK**.
4. **Linux only:**
  - a. Stop the Data Flow Probe.
  - b. Extract the upgrade package by running the following file:  

```
/opt/hp/UCMDB/DataFlowProbe/tools/upgrade/extractUpgradePackage.sh
```
  - c. Restart the Data Flow Probe.
5. (CyberArk integration only) Check if new hash value is the same as the one you configured in the CyberArk server. If different, re-generate the hash value using the following command:

```
java -Xms500m -Xmx1200m -jar JavaAIMGetAppInfo.jar GetHash  
/AppExecutablesPattern="C:\hp\UCMDB\DataFlowProbe\lib"
```

```
/OnlyExecutablesWithAIMAnnotation=yes /LogFileDirectory="c:\temp"
```

And then fill in the newly generated hash value in the CyberArk server.

## Uninstall Universal CMDB and CM 10.22 CUP1

When performing the uninstall procedure, this procedure must be performed for both the UCMDB Server and the Data Flow probes, as well as Configuration Manager.

1. Stop the Universal CMDB and Configuration Manager servers, and all running Data Flow Probes before uninstalling the version CUP.
2. For UCMDB:
  - o Windows: Go to **<CMDB installation folder>\UninstallerCup** and double-click **Uninstall HP Universal CMDB Server**. After the CUP is successfully uninstalled, go to **<CMDB installation folder>\runtime** and delete the **jsp** and **jetty-cache** folders.
  - o Linux: Go to **<CMDB installation folder>/UninstallerCup** and run **Uninstall HP Universal CMDB Server**. After the CUP is successfully uninstalled, go to **<CMDB installation folder>/runtime** and delete the **jsp** and **jetty-cache** folders.
3. For Configuration Manager:
  - o Windows: Go to **Start menu > Programs > HP Universal CMDB Configuration Manager 10.22** and double click **Uninstall HP Universal CMDB Configuration Manager 10.22 CUP1**.
  - o Linux: Go to **<CM installation folder>/\_sp\_installation/** and run **HPCM\_10.22\_CUP1-Uninstall**.
4. Uninstall all existing Probes as follows:
  - a. **Start > All Programs > HP UCMDB > Uninstall Data Flow Probe**.
  - b. Start the server.
  - c. Undeploy the **probeUpdate** package.
5. Reinstall the Probes 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.



## Notes

- When upgrading the Data Flow Probe:
  - In a multi-customer environment, if the Data Flow Probe is not automatically upgraded to the latest CUP version, use the manual upgrade procedure to upgrade the Probe manually. For details on the manual upgrade procedure, see "How to Deploy a Data Flow Probe CUP Manually" in the *Universal CMDB Data Flow Management Guide*.
  - The automatic upgrade is not available for Data Flow Probes running on Linux. Use the manual upgrade procedure to upgrade the Probe manually.
  - The Data Flow Probe upgrade is only available for upgrades for minor-minor releases or upgrades between CUP releases. When performing an upgrade to a major or minor release, you must reinstall the Probe.
- If you encounter an error when installing the CUP under Linux on the **/tmp** directory because the **/tmp** directory is configured not to run executables, set the IATEMPDIR environment variable to a location with sufficient permissions and disk space. The IATEMPDIR variable is recognized by InstallAnywhere.

## Known Problems, Limitations, and Workarounds

The following problems and limitations are known to exist in CMS 10.22 CUP1. 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.

### Configuration Manager

---

**PROBLEM:** If Configuration Manager was running in FIPS mode before the installation of UCMDB 10.21 CUP1, the LW-SSO FIPS configuration is lost after installing the CUP.

**Workaround:** To revert to a working configuration, edit the **servers\server-0\webapps\cnc\WEB-INF\classes\cnclwssofmconf.xml** file relative to your CM installation folder and update the crypto tag with the following tag:

```
<crypto cryptoSource="jce"
cipherType="symmetricBlockCipher"
engineName="AES"
paddingModeName="CBC"
keySize="256"
pbeDigestAlgorithm="SHA1"
encodingMode="Base64Url"
jceProviderName="JsafeJCE"
jcePbeAlgorithmName="AES"
jcePbeMacAlgorithmName="AES"
macType="hmac"
macAlgorithmName="SHA1"
directKeyEncoded="true"
directKeyEncoding="Base64Url"
algorithmPaddingName="PKCS5Padding"
pbeCount="20"
macKeySize="256"
macPbeCount="20"
initString="12gHERamY1mD8LfeBp6FwxE8FU6B1abS"></crypto>
```

### FIPS Deployment

---

**PROBLEM:** After adding a new probe to the UCMDB server that was already switched to the FIPS mode, the automatic FIPS switch process for the new probe might fail. This is because once the newly installed probe is started, it downloads all the resources from the UCMDB server, and when the probe

gets the probe upgrade package, it would schedule a restart, which blocks the automatic FIPS Switch process. (QCCR1H106144)

**Workaround:** Once you find that the automatic FIPS Switch process for a new probe failed,

1. Copy the jar files of JCE Unlimited Strength Jurisdiction Policy Files 8 into the `%\DataFlowProbe_HOME%\bin\jre\lib\security` directory on the Data Flow Probe machine.

For more information about how to obtain the files, refer to the *Universal CMDB FIPS Deployment Guide*.

2. Add the following line into the `DataFlowProbe.properties` file on the Data Flow Probe machine, and then save the file.

```
probe.fips.status=1
```

3. Restart the Data Flow Probe.

**Note:** If the Data Flow Probe is in separate mode, you need to perform the above steps for both the Probe Manager and Probe Gateway instances.

---

## Universal CMDB - General

---

**PROBLEM:** Displaying a specific view may crash the UCMDB server. This is because too many nodes were returned by the view that caused many more number of meta links generation and crashed the system with OutOfMemory error. (QCCR1H106088)

**Workaround:** In addition to the fix provided in UCMDB 10.22 CUP1, for views with huge number of nodes and relations, you may also increase the memory of the UCMDB server and the applet. For detailed instructions, see ["How to Increase the Java Heap Memory Used by the UCMDB UI Java Applet" on page 27](#).

---

**PROBLEM:** Cannot deploy Probe Update on UCMDB 10.21 CUP1 Server, and then cannot close the Deploy Probe Update pop-up window when clicking **Close** or **Cancel**. (QCCR1H103164)

**Workaround:** To resolve the UI performance issue, increase Java memory. For detailed instructions, see ["How to Increase the Java Heap Memory Used by the UCMDB UI Java Applet" on page 27](#).

---

**PROBLEM:** Version 10.10 probes appear to corrupt the PostgreSQL database under normal discovery loads. The root cause is that when Anti-Virus is scanning the PostgreSQL data folder, it could corrupt the PostgreSQL tables. (QCCR1H105605)

**Workaround:** To resolve the issue, perform the following:

- Always make sure that the PostgreSQL data directory is added into the anti-virus software exclusion list. The exclusion of data files will not introduce any potential security risk. By default, the PostgreSQL data directory is **C:\hp\UCMDB\DataFlowProbe\Postgresql\Data**.
- If you need to run weekly-based scan, monitor the **probeerror.log** file, and if a database error shows up (for example, a database error related to the Discovery\_result table), do the following:
  - a. Clean the probe log folder.
  - b. Run **Clear Probe Results Cache** from **UCMDB UI > Data Flow Management > Universal Discovery > Discovery Modules/Jobs** to clean the problematic table.

This should resolve the issue.

---

**LIMITATION:** The UCMDB Push Engine does not support the following TQL queries:

- TQL queries containing SubGraphs
- TQL queries containing Full Path Compound links

**Workaround:** None.

---

**LIMITATION:** The **Schedule Report** window and the **Job List** window may show different time for a scheduled report when the local machine is in a different time zone than the UCMDB server.

**Workaround:** None.

---

**LIMITATION:** Currently it is not possible to create two **Pattern Based Models** with the same name and different tenants in a multi-tenant UCMDB environment with the tenant aware setup. This is because the enrichments and the queries created behind the **Pattern Based Models** must have a unique name. (QCCR1H103293)

**Workaround:** You may use a unique naming convention, with unique prefixes for pattern names for each tenant.

When relating to pattern based models, this workaround also applies to other resources, such as queries and views.

---

**PROBLEM:** On Linux, when you downgrade UCMDB 10.22 CUP1 to 10.22 by running the **<CMDB installation folder>/UninstallerCup/Uninstall HP Universal CMDB Server.sh** file, multiple "Unable to remove file" error messages appear during the uninstallation. However, these errors do not affect the functionality of the UCMDB server.

**Workaround:** None.

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## Universal CMDB - Topology

---

**PROBLEM:** The View result in **Browse Views** is not consistent with the result in the **Modeling Studio**, when creating a New Pattern View with the attribute condition **NOT Node Is Virtual Equal "True"**. (QCCR1H100696)

**Workaround:** To avoid this issue, create a New Pattern View and define the following attribute conditions in the **Query Node Properties** window: **Node Is Virtual Equal "False" AND Node Is Virtual Is null**.

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## Integrations

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**LIMITATION:** SiteMinder with AJP does not work any more starting from UCMDDB 10.21, because Jetty does not support it. That is why after upgrading to UCMDDB version 10.21, the UCMDDB integration with SiteMinder with IIS as front-end will fail. (QCCR1H105819)

**Workaround:** None.

---

**PROBLEM:** After upgrading UCMDDB to the latest CUP, an integration job using a Database connection may fail due to performance issues. (QCCR1H98428)

**Workaround:** To resolve this issue, close the communication logs for the integration job.

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## Universal Discovery

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**PROBLEM:** (CyberArk integration only) If you have already configured the hash value in the CyberArk Server as the authentication method, you might encounter the following errors when you install a different version data flow probe or upgrade the data flow probe to a different version.

- Can not get the credential when running the discovery job
- Checking credential failed

And in the **probe-error.log**, you should find an error message similar to the following:

```
... Failed quering password from CyberArk Vault. ... Failed to verify
```

```
application authentication data: Hash "XXX" is unauthorized ...
```

**Workaround:** To resolve the issue, re-generate the hash value using the following command:

```
java -Xms500m -Xmx1200m -jar JavaAIMGetAppInfo.jar GetHash  
/AppExecutablesPattern="C:\hp\UCMDB\DataFlowProbe\lib"  
/OnlyExecutablesWithAIMAnnotation=yes /LogFileDirectory="c:\temp"
```

Then check if the new hash value is the same as the one you configured in the CyberArk server. If different, fill in the newly generated hash value in the CyberArk server.

---

**PROBLEM:** (PostgreSQL only) Some SQL statements are observed running more than 30 minutes, which causes Probe database to crash. The root cause is that the default value of the **statement\_timeout** setting in the **postgresql.conf** file is **0**. (QCCR1H101769)

**Workaround:** To workaround the issue, locate and open the **hp\UCMDB\DataFlowProbe\pgsql\data\postgresql.conf** file in a text editor, and then modify the default value of the **statement\_timeout** setting from **0** to **3600000**.

---

## Enhancements Requests

The following table lists the enhancement requests that were implemented in the HP UCMDB 10.22 CUP1 release.

Global ID	Problem	Solution
QCCR1H105579	The Windows scanner was enhanced to discover Windows device driver data, so the XML Enricher should also be enhanced to be support it.	Implemented the enhancement by adding support for the Windows device driver data to the XML Enricher.
QCCR1H105221	This is a request to provide support for the application signature to include SHA1 hash checking on the CyberArk calling class.	Implemented the enhancement by adding annotation into classes for the CyberArk password vault to provide support for the application signature using annotation in CyberArk integration class. For more details, see <a href="#">"How to Calculate Hash Code for JARs with Annotation"</a> .
QCCR1H104253	When the integration with Service Manager invokes the general Web service of UCMDB in SM to get the actual state of UCMDB CIs, and the response content only has the enum key, it needs an enhancement on the UCMDB web part to return enum values as well for the field.	Implemented the enhancement by adding a new method <b>getCIsByIdWithEnumValues</b> which returns the value of an enum property.
QCCR1H97075 QCCR1H104928	When there are many enrichments based on a query that has a Changed or Unchanged During 24 hours condition on some CI Types, each time the query gets calculated, because the starting point is a link and the number of links is huge, the calculation time is high due to a fuse. The fuse is broken when the starting point is being determined but the TQL query is calculated eventually with another starting point. Therefore, the following error is found in the <b>error.log</b> : "Query result exceeded size limit".	<p>Implemented the enhancement by defining link classes for which a count (SQL in DB) should be performed before the iteration to check if fuse exception needs to be thrown, thus reducing the calculation time.</p> <p>To enable this feature, invoke the <b>setInternalSetting</b> JMX method to set the <b>dal.link.condition.citypes.to.count.for.max.result</b> setting to the desired value with the name of the links for which to verify the count (comma separated values).</p> <p>For example, if the link name is <b>membership</b>, invoke</p>

Global ID	Problem	Solution
		<b>setInternalSetting</b> with name = "dal.link.condition.citypes.to.count.for.max.result" and value = "membership".

## Fixed Defects for UCMDB 10.22 CUP1

The following table lists the defects that were fixed in the HP UCMDB 10.22 CUP1 release.

Global ID	Problem	Solution
QCCR1H99940 QCCR1H100476	In certain circumstances, database deadlock occurs in log files when multiple threads try to update records in different orders.	Fixed the issue by using row locks so that no deadlock occurs.
QCCR1H100082	Some jobs are scheduled to send reports via email, the job history seems perfect, but the emails users received have no attachments.	Fixed the issue by implementing a code change. Now before sending an email to recipients, empty email addresses are removed, and then the email will be sent to the remaining email addresses.
QCCR1H100903	Displaying a specific view crashes the UCMDB server. This is because too many nodes were returned by the view that caused many more number of meta links generation and crashed the system with OutOfMemory.	Fixed the issue by implementing a code change to calculate inter layer links only if the view's objects count is less then the maximum value that the map can show (Max Object Count GUI For TS).  In case of views with huge number of nodes and relations, you may also increase the memory of the UCMDB server and the applet. For more details, see <a href="#">QCCR1H106088</a> .
QCCR1H101054	After saving a view using the "Save As" option, the view becomes not editable.	Fixed the issue by implementing a code change to drop the automatic open after save as action. Users can manually open the saved views without any issue.
QCCR1H101061	When using a time period of around one week for the change report, it seems like one of the end points does not exist in the history table, and the change report fails.	Fixed the issue by implementing a code change to display an ERROR message in the log file that the CI Change Report contains inconsistent CIs.  To display the ERROR message with IDs of inconsistent CIs, set



Global ID	Problem	Solution
		<b>loglevel=INFO</b> in the <b>&lt;UCMDB_Server_Home&gt;\conf\log\ui-server.properties</b> file.
QCCR1H103374	Without granting the user the Administration rights, the user couldn't see the scheduler tasks in the Scheduler. It's empty.	Fixed the issue by implementing a code change, now the user without the Administration rights is able to see the Scheduler and the scheduled tasks.
QCCR1H103549	After applying the TCP package to support the ASM feature, probes crash when creating core dumps and getting disconnected with the UCMDB server.	Fixed the issue by applying a code change.
QCCR1H104139	When accessing a CI from UCMDB UI, the last item on the context menu for the CI is Open UCMDB Browser. This should open UCMDB Browser and details to that CI should appear. When using a corporate proxy to connect to the UCMDB web pages this menu item is not working and a "Ucmdb Browser is not connected to the server" message pops up.	Fixed the issue by implementing a code change to use HTTPS connection for the socket to detect if the URL is available. This is applicable only when the UCMDB Browser is configured to use HTTPS.
QCCR1H104234	Users see many <b>handlers.SecurityHandlersException</b> messages in the <b>probe-error.log</b> for one of their probes.	Fixed the issue by implementing a code change so that the <b>handlers.SecurityHandlersException</b> messages are not shown in the probe log anymore.
QCCR1H104237	NNMi Pull_Layer2 Topology Import from NNMi fails with NullPointerException.	Fixed the issue by implementing a code change. Added null check to avoid NullPointerException. The population now works properly.
QCCR1H104375	XML Enricher does not properly process scan files without executable signatures. When processing the scan files, many normalized applications are not reported in the Installed Software CIs list.	Fixed the issue by implementing a code change to the XML Enricher logic.
QCCR1H104584	In the Discovery Status, total and detailed counts for warnings and errors do not match, more errors are in the main view than in the detailed view.	Fixed the issue by implementing a code change to display correct amount of errors.
QCCR1H104730	<b>The Inventory Discovery by Scanner</b>	Fixed the issue by implementing a code

Global ID	Problem	Solution
	<p>job cannot be triggered, and there is no information about the Inventory Discovery by Scanner job in the ViewJobStatuses output in the UCMDB UI. The root cause for the issue is that incomplete CIs are imported into UCMDB Server.</p>	<p>change to allow the Inventory discovery by scanner job to trigger properly.</p>
<p>QCCR1H104793</p>	<p>The UCMDB-SM integration is not bringing federated CIs if the reconciliation CIT is not specified in <b>serviceDeskConfiguration.xml</b>.</p>	<p>Fixed the issue by implementing a code change. For the fix to work properly, make sure you add the following line into the <b>serviceDeskConfiguration.xml</b> file manually:</p> <pre data-bbox="927 772 1370 940">                     &lt;reconciliationClassConfiguration&gt;ucmdbClassName="nt"                     &lt;/reconciliationClassConfiguration&gt;                 </pre>
<p>QCCR1H104917</p>	<p>Saving a view with a new name results in loss of Report Layout for Group by CI Type.</p>	<p>Fixed the issue by implementing a code change to keep the report layout while saving a view.</p>
<p>QCCR1H105023</p>	<p>The UCMDB <b>error.log</b> often shows the "Unauthorized access at entry point" error (but not only for this user). However the user is not aware of any user authentication related problems.</p>	<p>Fixed the issue by implementing a code change. Now all users have the access right if they passed the authentication.</p>
<p>QCCR1H105030</p>	<p>The probe manager in separate mode cannot be switched to the FIPS mode automatically.</p>	<p>Fixed the issue by implementing a code change. Now in separate mode, after the probe gateway finishes downloading jars, a notification will be sent to the probe manager automatically.</p>
<p>QCCR1H105110</p>	<p>Version 10.10 probes appear to corrupt the PostgreSQL database under normal discovery loads. The root cause is that when Anti-Virus is scanning the PostgreSQL data folder, it could corrupt the PostgreSQL tables.</p>	<p>Added the workaround into the Release Notes. For details, see <a href="#">QCCR1H105605</a>.</p>
<p>QCCR1H105257</p>	<p>Users experience poor performance, especially the Generic Database Adapter (GDBA) integrations running in full synchronization mode take</p>	<p>Fixed the issue by implementing a code change to improve and enhance the performance.</p>

Global ID	Problem	Solution
	extremely long time to finish.	
QCCR1H105269	Slow performance with scheduled reports. If the client and the server are in different time zones then the reports are wrongly inserted in the Job List Window.	Fixed the issue by implementing a code change. Now a new method was added in order to properly convert server time zone into client time zone.
QCCR1H105294	Running multiple AM computer push jobs in parallel completes with failure rate of 6% to 8%, while less than 1% failure rate on running a single push job at a time. Most of the failures are caused by the following <b>java.lang.RuntimeException</b> error:  ... 'execAql' exception: 'Error (12,011): Oracle error: ORA-00001: unique constraint (ACAPP.ASGMT_CMDBID) violated  Index error: A record in table 'Portfolio items (amPortfolio)' with the value '<hidden>' for field 'uCMDB identifier (CMDBId)' already exists in the database.'	Fixed the issue by implementing a code change to made the code thread safe.
QCCR1H105314	The discovery analyzer does not work. During startup, it shows error: Failed creating DBServices for ProbeMgrDBServicesFactory!!	Fixed the issue by implementing a code change to the cmd script.
QCCR1H105315	The <b>Show Properties</b> button is available even though the Properties Menu Item is disabled in Roles for that CIT in some UI modules.	Fixed the issue by implementing a code change to ensure that the <b>Show Properties</b> button is disabled if the user does not have the right permissions for the selected CI.
QCCR1H105591	The installation of the UCMDB Browser 4.03 on the UCMDB server causes a performance issue for both the UCMDB Server and the UCMDB Browser.	Fixed the issue by adding the following line to the <b>&lt;UCMDB_Server_Home&gt;\bin\wrapper.conf</b> file:  <pre>wrapper.java.additional.120=-Dcom.sun.xml.bind.v2.bytecode.ClassTailor.noOptimize=true</pre>
QCCR1H105593	The <b>getDestinationDataMap</b> method of the Environment interface introduced	Fixed the issue by implementing a code change to fix the logic. Now the

Global ID	Problem	Solution
	for content validators to access job parameters did not work correctly.	<b>getDestinationDataMap</b> method of the Environment interface works as expected.
QCCR1H105623	When trying to create a VMware Host Report, it fails with a NullPointerException and the report is not generated.	Fixed the issue by implementing a code change. Now the VMware Host Report can be properly generated.
QCCR1H105639	Once started running the host resources discovery jobs, the HPROF files are created in the <b>&lt;UCMDB_Server_Home&gt;\bin</b> directory. The History service tried to log a huge size of hash map which caused JVM OutOfMemoryError.	Fixed the issue by implementing a code change, now the OutOfMemoryError message will not appear in the log and the HPROF files will not be created anymore.
QCCR1H105818	SiteMinder with AJP does not work any more starting from UCMDB 10.21, because Jetty does not support it. That is why after upgrading to UCMDB version 10.21, the UCMDB integration with SiteMinder with IIS as a front-end will fail.	Documented this limitation in the Release Notes. See <a href="#">Known Problems, Limitations, and Workarounds</a> .
QCCR1H105821	(Oracle database only) Duplicated Java processes are found after running the discovery job.	Fixed the issue by implementing a code change to increase the Oracle DB type CREATE OR REPLACE TYPE VARCHAR2_TABLE IS TABLE OF VARCHAR2(3950) from 300.
QCCR1H105888	When Configuration Manager is implemented with an F5 LB and WebSEAL junction, login to CM via WebSEAL server fails for LDAP accounts with MDSSO and WebSEAL errors. If CM is behind a proxy and the external URL differs from the internal URL, connection to CM does not work for HTTPS.	Fixed the issue by implementing a code change to adjust the internal URL.
QCCR1H106092	After implementing manual High Availability Cluster (HAC) failover of platform, an HTTP 503 Issue (Service Unavailable) was received. The HAC services successfully moved and started on the backup DPS server (and RTSM service as well), but RTSM on	Fixed the issue by implementing a code change to provide support for manual HAC failover.

Global ID	Problem	Solution
	gateway still tried to connect to the primary DPS which was no longer running HAC services (RTSM was down).	
QCCR1H106398	When multiple threads try to modify the same domain document concurrently, credentials mappings saved in the domain document might get removed.	Fixed the issue by implementing a code change to fix the logic.
QCCR1H107745	When processing discovery results, all datain operation failed with java.lang.StackOverflowError, causing UCMDB Server restart.	Fixed the issue by implementing a code change. Now there is no such UCMDB server performance issue.

## Documentation Errata

The following items are listed incorrectly in the documentation.

### ***Universal CMDB and Configuration Manager Hardening Guide***

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#### **No information about the UCMDB-API client certificate key size**

**Location:** *Universal CMDB and Configuration Manager Hardening Guide*, version 10.21, page 30 (QCCR1H102759)

**Error:** There is no information about the minimum key size for the UCMDB-API client certificate.

**Correction:** Add the following note under the *Enable Mutual Certificate Authentication for SDK* section:

**Note:** The UCMDB-API client certificate must have the minimum key size of no less than 2048 bits.

## Appendixes

This appendix includes:

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### How to Enable CI Type Tenant Owner Verification during the Matching Phase of Identification

You can dynamically add a verification criterion based on the **TenantOwner** attribute during the matching phase of the identification process for CIs by using the new JMX setting **reconciliation.tenantaware.citypes**. If, compared to the other CI, there is a different value among the CI attribute values defined in this setting, the verification process stops and the match is rejected.

The following example explains how this setting works:

- If you have two node CIs:
  - Node1 with **TenantOwner=t1** and **name=n**
  - Node2 with **TenantOwner=t2** and **name=n**
  - **reconciliation.tenantaware.citypes** set to **node**

This scenario will result in the two nodes not matching.

- If Node1 does not have **TenantOwner** set, the default Tenant will be provided.

**Note:** If you add a node CIT, UNIX for example, you do not have to add it since it is inherited by identification rule. Only if you change the UNIX CIT identification rule, you need to add it explicitly.

**To enable TenantOwner attribute verification for CITs that are identified by key attributes,**

1. Add the **ID\_ATTRIBUTE** qualifier for the **TenantOwner** attribute of the **managed\_object** CIT.

**Note:** The **TenantOwner** attribute will be inherited to all the child classes. Make sure that a child class does not override it.

- a. Go to the **JMX console > UCMDB:service=URM Services**.
- b. Invoke the **listResourceTypes** method.
- c. On the returned page, click **CM\_CLASS**, then click **managed\_object**.
- d. In the Resource XML box, add the following attribute qualifier to the **TenantOwner** attribute:

```
<Attribute-Qualifier name="ID_ATTRIBUTE" is-factory="false"
version="15">
  <Data-Items/>
</Attribute-Qualifier>
```

- e. Click **Save resource**.
2. Reload the class model from persistency (go to the **JMX console > UCMDB:service=Class Model Services**, and invoke the **reloadClassModelFromPersistency** method).
  3. Go to **JMX console > UCMDB:service=Model Services**, invoke the **recalculateID** method with **classname** field empty.

This may take a while as it updates the calculated IDs for all instances of the classes with key attributes identification.

**To enable the reconciliation.tenantaware.citypes setting for specific CITs (separated by comma) that are identified based on identification rules,**

1. Go to **JMX Console > UCMDB:service=Settings Services > setSettingValue**.
2. In the **name** field, enter **reconciliation.tenantaware.citypes**.
3. In the **value** field, enter names of the CITs, separated by comma.

**Note:** To disable this setting, leave the **value** field empty.

4. Click **Invoke**.

**To enable the `reconciliation.tenantaware.citypes` setting for all the CITs that are identified based on identification rules,**

1. Go to **JMX Console > UCMDB:service=Settings Services > setSettingValue**.
2. In the **name** field, enter **`reconciliation.tenantaware.citypes`**.
3. In the **value** field, enter **\***.
4. Click **Invoke**.

**Note:**

- If you changed the Tenant ID on the Data Flow Probe, make sure you clear the probe cache as well by performing either of the following:
  - Log in to the probe server, run the following script:  
**Windows:**`\hp\UCMDB\DataFlowProbe\tools\clearProbeData.bat`  
**Linux:**`\hp\UCMDB\DataFlowProbe\tools\clearProbeData.sh`
  - Log in to the UCMDB server UI, go to **Data Flow Management > Universal Discovery > Discovery Modules/Jobs**. For each of the jobs that run on the probe, right-click the job and select **Clear Probe Results Cache**.
- In a multi-tenant aware environment, a tenant must be specified for the Data Flow Probe.

## Tenant Owner Related Known Issues, Problems, and Workaround

- **PROBLEM:** After switching to Tenant aware reconciliation, the **OwnerTenant** attribute becomes read-only in the Configuration Item Properties dialog.

**Workaround:** Use **Assign Tenants** functionality from the CI's context menu.

- **PROBLEM:** After removing the Key Attributes qualifier from the **OwnerTenant** attribute of the Managed Object, sometime no properties are displayed for the CIs in UI.

**Workaround:** If you want to switch back (to disable Tenant aware reconciliation), do the following:

- a. Remove the **ID\_ATTRIBUTE** qualifier for the **TenantOwner** attribute on the **managed\_object** CIT.
- b. Remove the value of the **`reconciliation.tenantaware.citypes`** setting.
- c. Reload the class model from persistency (go to the **JMX console > UCMDB:service=Class Model Services**, and invoke the **`reloadClassModelFromPersistency`** method).



- d. Go to **JMX console > UCMDB:service=Model Services**, invoke the **recalculateID** method with **classname** field empty.
  - e. Go to **JMX console > UCMDB:service=Model Services**, invoke the **updateClasModel** method.
- **LIMITATION:** Enrichment is not invoking the Reconciliation on Update **OwnerTenant** via **Associate Tenant Rule**. As a result, you may have duplicated data in the system in case if you update the **OwnerTenant**'s CI to a tenant that already has this CI.

**Workaround:** None.

- **LIMITATION:** CIs with Identification rule would be duplicated in case if the user is updating the **OwnerTenant** CI to a tenant that already has this CI from **Update OwnerTenant** in the **Assign Tenants** module.

**Workaround:** None.

- **PROBLEM:** When adding Consumer Tenants to a CI, the System Default Tenant appears in the list of Consumers after saving, even if it was not selected. This issue occurs only when changing the Owner Tenant or the Consumer Tenant.

**Workaround:** None.

- **PROBLEM:** When removing all Consumer Tenants from a CI (from the IT Universe), an error is thrown and the Owner Tenant is overwritten with the System Default Tenant.

**Workaround:** To avoid removing the System Default Tenant from the Consumer Tenants list, make sure you set the System Default Tenant as consumer.

Only when the System Default Tenant is not set as consumer, the Owner Tenant will be overwritten with the System Default Tenant when trying to save.

- Import topology from Excel Workbook adapter cannot import the CIs of the CI Type with reconciliation **By key attributes** if the **OwnerTenant** value is not defined in the Excel file and it is set as Key attribute.

**Workaround:** Specify **TenantOwner** value in the Excel spreadsheet.

- **PROBLEM:** Error message received when setting up a tenant aware environment, for the OOTB enrichments which are adding CIs. (QCCR1H104949)

**Workaround:** If there are enrichments which are creating new CIs, after setting the environment as tenant aware, the attribute **Owner tenant** should be set for those CI Types which are being created through enrichments.

## How to Calculate Hash Code for JARs with Annotation

Starting from UCMDB version 10.22 CUP1, it is possible to provide support for the application signature using the annotation in the CyberArk integration class.

To calculate the Hash Code for JARs with annotation,

1. Generate the application hash value by running the following command.

```
java -Xms500m -Xmx1200m -jar JavaAIMGetAppInfo.jar GetHash  
/AppExecutablesPattern="C:\hp\UCMDB\DataFlowProbe\lib"  
/OnlyExecutablesWithAIMAnnotation=yes /LogFileDirectory="c:\temp"
```

Note that the above command is an example, which might need to be updated according to your environment, the installation location of the UCMDB Server, and so on.

2. Add the newly generated hash value to the application authentication.

### Troubleshooting

**PROBLEM:** When running discovery jobs or checking credentials, the following error occurs: "Failed to verify application authentication data: Hash XXX is unauthorized." This is caused by inconsistent hash values between UCMDB and CyberArk Server.



**Workaround:** Check if the hash value is the same as the one you configured on the CyberArk server. If different, regenerate the hash value and then fill the new hash value in the CyberArk server.

# How to Increase the Java Heap Memory Used by the UCMDB UI Java Applet

This can be done using one of the following two methods:

- [Editing the JSP File](#)
- [Editing the Control Panel Java Settings](#)

## Editing the JSP File

This change affects all applets launched from the Internet browsers on all different computers from where the UCMDB UI is accessed.

To perform the change on the UCMDB server computer, do the following:

1. Stop the UCMDB Server.
2. Increase UCMDB server's memory.
  - a. Open the **<UCMDB\_Server\_Home>\bin\wrapper-platform.conf** file.
  - b. Change the values for **wrapper.java.initmemory** and **wrapper.java.maxmemory** to 4GB or greater as follows:

```
wrapper.java.initmemory=4096  
wrapper.java.maxmemory=4096
```

- c. Save the file.
3. Increase UCMDB Applet's memory.
    - a. Open the **<UCMDB\_Server\_Home>\deploy\ucmdb-ui\applet\applet.jsp** file.
    - b. Change the **java\_arguments** parameter value to specify the amount of memory in megabytes, for example, to use 1280 MB, change it as follows:

```
<param name="java_arguments" value="-Xmx1280m -Xms1280m">
```

- c. Delete all files in the following folders:
  - **<UCMDB\_Server\_Home>\runtime\jetty-cache\**

- <UCMDB\_Server\_Home>\runtime\jsp\

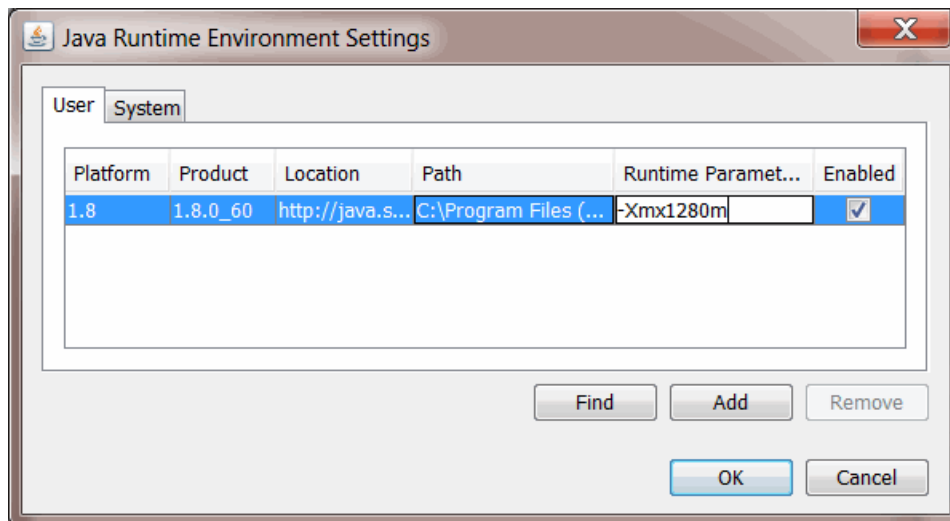
4. Start the UCMDB Server.

## Editing the Control Panel Java Settings

This change only takes effect on the computer on which the Internet browser that is used to access the UCMDB UI is run.

To perform the change on the computer which is used for accessing the UCMDB UI, do the following:

1. From the **Start** menu, search **Java**.
2. Click **Configure Java**.
3. In the Java Control Panel, go to the **Java** tab, and click **View**.
4. In the Java Runtime Environment Settings dialog, double-click the value field for the **Runtime Parameters** column, and enter the amount of memory in megabytes in the `-Xmx` command line switch, for example, `-Xmx1280m`.



5. Click **OK**.
6. Click **Apply** and then click **OK**.
7. Close all open Internet browser windows and restart the UCMDB UI.

## Send Documentation Feedback

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**Feedback on Release Notes (Universal CMDB & Configuration Manager 10.22 CUP1)**

Just add your feedback to the email and click send.

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