



Upgrading Maximo 6.2.4 to CCMDB 7.1.1.5

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CCMDB Upgrade Overview

This guide provides execution details for upgrading Maximo® 6.2.4 to CCMDB 7.1.1.5.

Ensure the following prerequisites have been considered or completed prior to upgrade.

- The CCMDB 7.1.1.5 deployment must use the same database type and level as the Maximo 6.2.4 deployment.

- Verify that the Domain ID value and tablespace names are consistent for the Maximo database.

To verify that the database storage value and tablespace names are consistent, execute the following SQL statements against the database of your existing Maximo deployment:

```
select * from user_tablespaces;
select domainid,value from alndomain where domainid='DBSTORAGEPARTITION';
```

The values returned for the database storage value and tablespace name should match. If they do not, refer to http://www-1.ibm.com/support/docview.wss?rs=3214&context=SSLKT6&q1=storagepartition&uid=swg21262981&loc=en_US&cs=utf-8&lang=en for corrective actions.

- These procedures provide details for upgrading a Maximo 6.2.4 deployment. If you have an earlier version of Maximo deployed in your environment, you must upgrade it to 6.2.4 prior to using these instructions.

To determine the version level, execute the following SQL statement against the database of your existing Maximo deployment:

```
select * from maxvars where varname='MAXUPG';
```

This command should result in **one** of the following responses:

```
Result:      V600-502   (at 6.2.0 level)
Result      V600-530   (at 6.2.1 level)
Result      V600-609   (at 6.2.2 level)
Result      V600-664   (at 6.2.3 level)
Result      V600-694   (at 6.2.4 level)
```

If the result is not V600-694, you must apply the necessary upgrades to get the deployment to the 6.2.4 level. Be advised that patches are not cumulative. Each patch must be applied in succession to get to the 6.2.4 level prior to proceeding with the CCMDB upgrade. Refer to the following URL for more information.http://www-1.ibm.com/support/docview.wss?rs=3214&context=SSLKT6&dc=D400&uid=swg24018871&loc=en_US&cs=UTF-8&lang=en&rss=ct3214tivoli

- If the upgrade is being performed on a DB2 8 environment, complete the following steps prior to beginning the upgrade process:

1. Increase the log file size for the DB2 Instance.

During the upgrade process, there are a large number of uncommitted changes that accumulate. If the log file size limit is too low, the upgrade could fail.

Increase the log file size by completing the following steps:

- a. Open DOS command prompt and run the following command:

```
C:\> db2cmd db2 connect to <db_name> user db2admin using db2admin
```

- b. From the db2cmd prompt, run the following command to view database configuration information:

```
db2 get db cfg for <db_name>
```

Ensure the following parameter is set to a value of 10

```
Number of primary log files (LOGPRIMARY) = 10
```

- c. Run the following command to set the log size:

```
db2 UPDATE DATABASE CONFIGURATION FOR <db_name> USING LOGPRIMARY 10
```

```
db2 connect reset
```

```
db2 connect to <db_name>
```

2. Ensure the System Tools Schema is present:
 - a. Open the DB2 Command Center.
 - b. Using the Navigation Tree, locate the database used with Maximo.
 - c. Right-click on the database, and select **Refresh**.
 - d. In the Schemas folder nested underneath the database entry, verify the existence of a schema named SYSTOOLS.

This procedure can be environment-specific. If the System Tools Schema is not present, you will receive a systemtools error message when the Integrity Checker is first initiated.

- You must have an active TADDM server available prior to starting the CCMDB 7.1.1 installation.

These procedures will frequently refer to the *IBM Maximo 6 to Version 7 Products Upgrade Guide* for planning, pre-upgrade, and post-upgrade task information. The latest version of the *IBM Maximo 6 to Version 7 Products Upgrade Guide* can be found at http://www-1.ibm.com/support/docview.wss?rs=3224&context=SSLL2E&dc=DB520&dc=DB560&uid=swg21266217&loc=en_US&cs=UTF-8&lang=en&rss=ct3224tivoli. You can find more information about upgrading at the Maximo Upgrade Resources Web page. The IBM® Maximo Support Web site provides an extensive, continually updated knowledge base on upgrade topics.

Upgrading CCMDB

This section contains information about upgrading an existing Maximo 6.2.4 deployment to CCMDB 7.1.1.5. These instructions also apply for the CCMDB 7.1.1.5 fixpack.

Upgrading Maximo 6.2.4 to CCMDB 7.1.1.5 involves the following high-level steps:

1. Installing CCMDB 7.1.1 on a new system (System A).
2. Installing the CCMDB 7.1.1.5 fixpack on the new system (System A).
3. Using the CCMDB 7.1.1.5 upgrade tools to update the Maximo 6.2.4 database.
4. Installing CCMDB 7.1.1 on a different system (System B), using the upgraded 6.2.4 database as the target database for the CCMDB 7.1.1.5 deployment.
5. Installing the CCMDB 7.1.1.5 fixpack on the (System B) system.

Note that the first time you install CCMDB 7.1.1 and the 7.1.1.5 fixpack, you are doing so only to allow you to access the correct level of database upgrade tooling. The second time you install CCMDB 7.1.1 and the 7.1.1.5 fixpack, you are doing so in order to deploy it using the Maximo 6.2.4 database that was upgraded.

Upgrading Maximo 6.2.4 to CCMDB 7.1.1.5

To upgrade Maximo 6.2.4 to CCMDB 7.1.1.5, complete the following steps:

1. Ensure you have met all the prerequisite requirements listed in “CCMDB Upgrade Overview,” on page 1.

2. Gather the following information from your Maximo 6.2.4 deployment in order to use these values during the CCMDB 7.1.1 installation:

- Database Type

The type of database used for the CCMDB 7.1.1 installation must be the same as the one used for the Maximo 6.2.4 deployment.

- Database Server Hostname
- Database Instance
- Tablespace Name
- Temp Tablespace Name
- Schema Owner
- Database User ID
- Database password

3. Install CCMDB 7.1.1 middleware.

For details on installing CCMDB 7.1.1 middleware, refer to the *Planning and Installing Change and Configuration Management Database* guide for CCMDB 7.1.1. You must use the same type and level of database during the CCMDB 7.1.1 installation as is currently used in the Maximo 6.2.4 installation.

The second time you install CCMDB 7.1.1, it must be deployed using middleware that has not been exposed to the first installation. CCMDB 7.1.1 will not install correctly with middleware that was used in a previous CCMDB 7.1.1 deployment.

4. Install CCMDB 7.1.1.

For details on installing CCMDB 7.1.1, refer to the *Planning and Installing Change and Configuration Management Database* guide for CCMDB 7.1.1.

During the installation, provide the host name of the system where the CCMDB 7.1.1 database will be created. The values for the database instance name, owner, password, database tablespace, and temporary tablespace, all should be the same values used in the Maximo 6.2.4 deployment.

After the CCMDB installation completes, log into the Maximo console to verify a successful deployment.

After the initial CCMDB 7.1.1 deployment, once you have updated the Maximo 6.2.4 database, you can create a backup of the <CCMDB_HOME>\tools directory. The tooling from this installation can be reused if there is a need to repeat the upgrade process.

5. Apply the CCMDB 7.1.1.5 fixpacks.

If the Release process manager is going to be deployed, the Release process manager and Release process manager fixpack should be installed **prior** to the upgrade.

The CCMDB 7.1.1.5 fixpack is available on the product support site. The CCMDB 7.1.1.5 fixpack contains critical updates to the CCMDB upgrade tools. This fixpack should be applied prior to using the CCMDB upgrade tools using instructions contained in the fixpack readme.

After the fixpack installation completes, log into Maximo console once again to verify a successful installation. You can use the solutioninstaller.bat utility with the showinstalled parameter to verify the list of packages that have been installed. Refer to the *Planning and Installing Change and Configuration Management Database* guide for CCMDB 7.1.1 for more information about the showinstalled.bat utility.

6. Back up critical elements of the Maximo 6.2.4 deployment.

- a. Create a backup of the production database at the 6.2.4 level.

- b. Create an instance in a backup environment and import the 6.2.4 database.
 - c. Copy the appropriate Maximo Version 6 application folders to a test environment.
7. Transfer Maximo property files.

Make copies of Maximo property files, edit them, and then copy the new files from Maximo 6.2.4 application folders to the CCMDB 7.1.1 administrative workstation.

- a. Make copies of the following Maximo property files using the following names:

- Copy maximo.properties to a file called upgmaximo.properties.
- Copy logging.properties to a file called upglogging.properties.
- Copy doclink.properties to a file called upgwebclient.properties.
- Copy settings.properties to a file called upgsettings.properties.

These files can be found in the %V6%\applications\maximo\properties folder of the Maximo administrative workstation.

- b. Edit the upgmaximo.properties file so it only contains the following entries:

```
mxe.db.format.nullvalue=<value for db type>
mxe.db.systemdateformat=<value for db type>
```

- c. Place these upg*.properties files in the following folder on the CCMDB 7.1.1 administrative workstation.

```
C:\ibm\SMP\maximo\tools\maximo\classes\psdi\upgrade\V600
```

Consult the *IBM Maximo 6 to Version 7 Products Upgrade Guide* for more information on preparing properties files for the upgrade process.

8. Edit the maximo.properties file found on the CCMDB administrative workstation so it uses the same parameters as the Maximo 6.2.4 database. Ideally, if you have deployed CCMDB using the same database parameters as used by the Maximo 6.2.4 deployment, you will only have to change the mxe.db.url property to point to the Maximo 6.2.4 database URL.

```
mxe.db.driver=oracle.jdbc.driver.OracleDriver
mxe.db.schemaowner=maximo
mxe.name=MXServer
mxe.db.url=jdbc:oracle:thin:@mymachine.mydomain.com:1521:maximo
mxe.db.user=maximo
mxe.rmi.port=0
mxe.encrypted=true
mxe.registry.port=13400
```

```
mxe.encrypted=true
```

The maximo.properties file is located in the C:\ibm\SMP\maximo\applications\maximo\properties folder of the CCMDB administrative workstation.

9. Migrate users and groups.

CCMDB 7.1.1 requires the use of a directory server such as IBM Tivoli® Directory Server or Microsoft® Active Directory for application security and authentication purposes. For Maximo 6.2.4 installations that did not include a directory server as part of the deployment, a tool is provided to migrate user registry information. Users are exported from the Maximo 6.2.4 database to the CCMDB directory server using the LDAP User Registry Utility. This tool exports user and group information from the Maximo registry into an LDIF file, which can be imported into your directory server. Refer to the Toolkit Master Integration Guide at <http://catalog.lotus.com/wps/portal/topal/details?NavCode=1TW10CC1P> for more information.

10. If change or release extensions were installed as part of your Maximo 6.2.4 deployment, you will have to identify naming conflicts between Maximo 6.2.4 and CCMDB 7.1.1 using the conflictchecker tool. Refer to “Using the conflictchecker tool” on page 15 for more information about the conflictchecker.

11. Launch the upgrade tool on the CCMDB 7.1.1 administrative workstation:

```
C:\ibm\SMP\maximo\tools\maximo\upgradeui.bat
```

This will launch a user interface that contains the Integrity Checker, Validity Checker, and Upgrade tools. Verify that a message appears showing a successful connection to the Maximo 6.2.4 database.

12. Run the Integrity Checker:

- a. Select the Check Integrity tab from the upgrade tool interface.
- b. Ensure that the Repair Mode check box is **not** selected.
- c. Click **Run Integrity Checker**.

The Integrity Checker will run and report errors and warnings it encounters. Errors and warnings are recorded in the C:\ibm\SMP\maximo\tools\maximo\logs directory in the following file:

```
integrityyyyymmdd.log
```

where *yyyymmdd* is a timestamp from when the log was created.

Errors must be corrected prior to proceeding with the upgrade effort. Product support Flash reports, that are accessible from the product support page located at <http://www-306.ibm.com/software/sysmgmt/products/support>, can be helpful in troubleshooting a subset of errors reported by the Integrity Checker. Navigate to the product support URL and then enter the Flash number in the Search box located at the top of the page for the database platform being upgraded:

- 1305603 - Workarounds for various integrity checker errors found before upgrading to Maximo 7. Instructions for resolving errors found for several database types are provided.
- 1305591 - Workaround for ‘not a valid data type’ error during CCMDB installation on an upgraded 6.2.4 SQLServer database)
- 1305598 - Workaround for CCMDB install failure on a 6.2.4 upgraded DB2® database “CTGIN2252I: Cannot connect to base services web application”

In addition, the Troubleshooting section of the *IBM Maximo 6 to Version 7 Products Upgrade Guide* contains information on manually troubleshooting errors discovered by the Integrity Checker that cannot be addressed by running the integrity Checker in Repair Mode.

The Integrity Checker will run and report errors and warnings it encounters. Errors and warnings are recorded in the C:\ibm\SMP\maximo\tools\maximo\logs directory in the following files:

```
integrityyyyyymmdd.log  
integrityyyyyymmdd.lis
```

where *yyyyymmdd* is a timestamp from when the log was created.

When the Integrity Checker has completed its evaluation, you will might be prompted to perform database configuration in certain cases.

13. To run the database configuration tool from the Maximo 6.2.4 application folders, open a command prompt and run the following command:

```
<MAXIMO_HOME>\tools\maximo > configdb.bat
```

You must run the configdb.bat file from the Maximo 6.2.4 administrative workstation at this point because the database that you are upgrading is still a Maximo 6 database.

Ensure that you receive the message that the configuration was completed successfully.

14. Run the Integrity Checker from the CCMDB 7.1.1 administrative workstation to verify that there are no further errors.
 - a. Select the Check Integrity tab from the upgrade tool interface.
 - b. Ensure that the Repair Mode check box is **not** selected.
 - c. Click **Run Integrity Checker**.

Running the Integrity Checker at this point should result in no errors being returned. If you encounter errors, resolve them using the instructions provided earlier. You cannot proceed with the upgrade process until you can perform an integrity check that results in no errors.

15. Run the Validation Checker.
 - a. Select the Validate tab from the upgrade tool interface.
 - b. Click **Run Validation**.

If you do encounter errors, they will be logged in the C:\ibm\SMP\maximo\tools\maximo\logs directory in the following files: .

```
validateyyyyymmdd.log  
validateyyyyymmdd.lis
```

where *yyyyymmdd* is a timestamp from when the log was created. You must resolve these errors before you can continue with the upgrade process. Consult the *IBM Maximo 6 to Version 7 Products Upgrade Guide* for information on debugging these errors and obtaining support

After you have resolved errors reported from the Validation Checker, re-run the tool to verify that you receive no more errors.

16. Run the Database Upgrade tool.
 - a. Select the Upgrade tab from the upgrade tool interface.
 - b. Provide values for the fields listed.

Default for all COMPTYPE values that are not V, M, C or I

Enter a default company type. Refer to the *IBM Maximo 6 to Version 7 Products Upgrade Guide* for details.

Person ID for E-mail Listener Staging

Specify an e-mail address to receive e-mail listener staging messages. Refer to the *IBM Maximo 6 to Version 7 Products Upgrade Guide* for details.

Name for the EVERYONE Security Group

Specify the name of the security group containing all users. Refer to the *IBM Maximo 6 to Version 7 Products Upgrade Guide* for details.

Log file name

The default value of the Log File Name field is a system-generated name for the upgrade utility log file. You can edit the value in this field.

- c. Click **Set**.
 - d. Click **Upgrade**.

The duration of the upgrade process is dependant upon the database type. When the database upgrade is complete, a message indicating success will be displayed.

- e. Verify that the database was upgraded successfully by executing the following SQL statements against the database:

```
select * from maxvars where varname='MAXUPG';
```

You should receive the following result which indicates that the database is at a version 7.1:

```
V7100-001
```

- 17. Backup critical log and customization files by copying the C:\ibm\SMP\maximo directory to another system. Contents of this directory include log files useful for auditing and historical purposes, and application screen customizations that can be imported back into the application interface once upgrade has completed.

After the initial CCMDB 7.1.1 deployment, once you have updated the Maximo 6.2.4 database, you can create a backup of the <CCMDB_HOME>\tools directory. The tooling from this installation can be reused if there is a need to repeat the upgrade process or for future upgrades.

In addition, make a backup of the database. If you encounter a failure during installation, you will be able to restore the database from this backup to avoid having to perform the database upgrade tasks again.

- 18. If the upgrade is being conducted on a deployment that includes Microsoft SQL Server, you must run the following SQL command. This command modifies the length of a column in the database so it can accommodate the database url that is generated within the maximo.properties file.

```
alter table maxpropvalue alter column propvalue varchar(150)
```

- 19. Install CCMDB 7.1.1 using the upgraded Maximo 6.2.4 database.

As a reminder, remember to start this install in a clean environment that has not been exposed to the initial CCMDB 7.1.1 installation that was used to access the upgrade tools. For further details on installing CCMDB 7.1.1, refer to the CCMDB 7.1.1 *Planning and Installing Change and Configuration Management Database* guide.

- a. Login to the CCMDB administrative workstation as Administrator.
- b. Launch the CCMDB installation program

Launchpad

- 1) On the DVD titled “ Tivoli Change and Configuration Management Database V7.1.1 Launchpad for all Platforms”, navigate to the root directory of the product disc or the downloaded installation image, and run the following command: launchpad.exe.
- 2) In the launchpad navigation pane, click **Install CCMDB**.
- 3) Click **Install Change and Configuration Management Database**.

Command line

Alternatively, you can launch the CCMDB installation program directly by navigating to the \CCMDB\, directory and running install.exe for 32-bit systems or install_win64.exe for 64-bit systems.

- c. Select a language for the installation and click **OK**.
- d. From the Introduction panel, click **Next**.
- e. The CCMDB program license agreement window is displayed. Read the license information and select **I accept the terms in the license agreement** if you agree with the terms. Click **Next**.

- f. From the Import Middleware Input Information panel, deselect the Import Middleware Install Data option, and then click **Next**.
- g. From the Choose Deployment panel, select the **Custom** deployment topology, and then click **Next**.
- h. From the Choose Install Folder panel, specify the directory you will use to install CCMDB, and then click **Next**.
- i. From the IBM Tivoli Application Dependency Discovery Manager information panel, enter the information about a previously deployed IBM Tivoli Application Dependency Discovery Manager (TADDM) server that you will be using with CCMDB, and then click **Next**.

The CCMDB installation program will attempt to connect to the TADDM server and validate the input values when you click **Next**. If the connection can not be made to the TADDM server because it is not currently running or the credentials provided failed authorization by the TADDM server, a dialog box will be displayed, providing an error message.

- j. From the Maximo Database Type panel, select the product that you will be using for the maximo database, and then click **Next**.

DB2 Select this choice if the Maximo 6.2.4 deployment used IBM DB2 as the Maximo database.

Oracle Select this choice if the Maximo 6.2.4 deployment used Oracle as the Maximo database.

SQL Server

Select this choice if the Maximo 6.2.4 deployment used MS SQL Server as the Maximo database.

Each database will have its own unique set of configurable parameters and values.

- k. From the Maximo Database panel, enter configuration information about the database that was upgraded from the Maximo 6.2.4 deployment, and then click **Next**.

All default values should be replaced by the values used in the Maximo 6.2.4 deployment.

DB2

Host name

Enter the host name of the machine hosting the upgraded DB2 database.

The host name must be fully qualified.

Port Enter the port being used by the upgraded DB2 instance.

Database Name

Enter the name of the upgraded database.

Instance

Enter the name of the database instance value of the upgraded DB2 database.

The user and its associated home directory must already exist on the DB2 server.

Database user ID

Enter the user ID used for the upgraded DB2 database.

This user ID cannot be the same one used as the instance administrator user ID.

Database Password

Enter the password for the user ID used to access the upgraded DB2 database.

Oracle**Host name**

Enter the host name of the machine hosting the upgraded database.

The host name must be fully qualified.

Port Enter the port used by the upgraded database.

Instance

Enter the name of the database instance of the upgraded database.

Database user ID

Enter the user ID used for Maximo to access the upgraded database.

Database Password

Enter the password for the user ID used to access the upgraded database

SQL Server**Host name**

Enter the host name of the machine hosting the upgraded SQL Server database.

The host name must be fully qualified.

Port Enter the port being used by the upgraded SQL Server database.

Database Name

Enter the name of the upgraded SQL Server database.

Database user ID

Enter the user ID used to access the upgraded SQL Server database.

Database Password

Enter the password for the user ID used to access SQL Server.

After you have entered configuration information for the database that was selected, the CCMDB installation program will connect to the database server to validate the information you have entered.

- l. From the Automate Database Configuration panel, select **Do not automate database configuration**, and then click **Next**.

This step is critical to the update process. The upgrade will fail if you allow the installation program to attempt to configure the database automatically.

- m. From the Database Tablespace panel, enter information about the tablespace of the database, and then click **Next**.

This information should be copied over from the Maximo 6.2.4 deployment.

DB2

Data tablespace name

Enter the name of the tablespace that was created in the Maximo 6.2.4 database.

Temporary tablespace name

Enter the name for the temporary tablespace that was created in the Maximo 6.2.4 database.

Temporary tablespaces holds data during sorting or collating actions.

Index tablespace name

Enter a name for the index tablespace that was created in the Maximo 6.2.4 database.

Oracle**Instance Location**

Enter the path where the database instance was created for Maximo 6.2.4.

Tablespace name

Enter the name of the tablespace that was created in the Maximo 6.2.4 database.

Temporary tablespace name

Enter the name for the temporary tablespace that was created in the Maximo 6.2.4 database.

Temporary tablespaces holds data during sorting or collating actions.

Index tablespace name

Enter a name for the index tablespace that was created in the Maximo 6.2.4 database.

The CCMDB installation program will now connect to the database server and validate all of the information you have entered.

- n. Once the database validation task has completed, from the WebSphere® Connectivity panel, enter host information about the WebSphere Application Server, and then click **Next**.

Host name

Enter the fully-qualified host name of the system hosting WebSphere Application Server.

Alternatively, you can provide the IP address for the system.

SOAP port

Enter the SOAP port of the WebSphere Application Server system.

The default value for this field is 8879.

- o. From the Remote Access Authorization panel, enter authorization information for WebSphere Application Server configuration, and then click **Next**.

Operating system user ID

Enter a valid user ID that will allow the CCMDB installation program to access the system that is hosting WebSphere Application Server.

This user ID should have administrative rights on the machine you are accessing.

Operating system password

Enter the password for the system user ID.

- p. From the Automate WebSphere Configuration panel, select **Automate WebSphere configuration**, and then click **Next**.

This allows the CCMDB installation program to automatically configure WebSphere Application Server for use by CCMDB.

- q. From the WebSphere Deployment Manager configuration panel, enter values for the following fields, and then click **Next**.

WebSphere installation directory

Enter the directory where WebSphere Application Server is installed on the host system.

Windows®

On Windows, this value might be C:\Program Files\IBM\WebSphere\AppServer

Linux®

On Linux, this value might be /opt/IBM/WebSphere/AppServer

AIX®

On AIX, this value might be /usr/IBM/WebSphere/AppServer

User ID

Enter the administrative user ID used to access the WebSphere server.

Default for all platforms is wasadmin.

Password

Enter the password for the administrative user ID used to access the WebSphere Application Server.

Profile name

Enter the name of the WebSphere Application Server profile.

Default for all platforms is ctgDmgr01.

- r. From the WebSphere Application Server Configuration panel, enter the following information, and then click **Next**.

Web server port

Enter the Web server port used by WebSphere Application Server.

Default for all platforms is 80

Web server name

Enter the name of the Web server.

Default for all platforms is webserver1

Node name

Enter the name of the WebSphere Application Server node containing the application server.

Default for all platforms is ctgNode01.

Cluster name

Enter the name of the WebSphere Application Server cluster containing the application server.

Default for all platforms is MAXIMOCLUSTER.

- s. From the Security panel, specify the distinguished names of the user and group base entities you are using, choose how CCMDB users are created, and then click **Next**.

User base entry

If you do not plan to use the default LDAP schema provided with CCMDB, enter the user base entry you intend to use in this field.

The default LDAP schema user base entry is
ou=users,ou=SWG,o=IBM,c=US

Group base entry

If you do not plan to use the default LDAP schema provided with CCMDB, enter the group base entry you intend to use in this field.

The default LDAP schema group base entry is
ou=groups,ou=SWG,o=IBM,c=US

Create the required users

Keep this option selected to allow the CCMDB installation program to create default users in WebSphere Application Server Virtual Member Manager (VMM).

This operation requires write access to VMM.

If you do not want to have the users created by the CCMDB installation program, you will have to create them manually before continuing the CCMDB installation from this point.

- t. From the Integration Adapter JMS Configuration panel, enter the following information, and then click **Next**.

JMS DataSource name

A JMS server requires a DB2 data repository to be configured to maintain messages. Enter the name of the database to be used by JMS.

Select whether the JMS datastore should be persisted.

Persist JMS messages

Select this option if you want the CCMDB installation program to set the JMS implementation to persist messages.

Do not persist JMS messages

Select this option if you do not want the CCMDB installation program to set the JMS implementation to persist messages automatically. A database will not be used to persist messages. If you later decide that you would like to persist JMS messages, you will have to configure the JMS implementation manually.

The default is Do not persist JMS messages.

- u. From the Run Configuration Step panel, select **Do not run the configuration step now**, and then click **Next**.
- v. From the Choose Shortcut Folder panel, select the type of shortcut you would like to arrange for CCMDB, and then click **Next**.
- w. From the Input Summary panel, review the information you have provided to the CCMDB installation program, and then click **Next**.
Use the Previous button to return to previous panels to make any changes.
- x. From the Pre-Installation Summary panel, review the installation information presented, and then click **Install**.

The installation task will begin. Progress can be monitored by viewing messages displayed above the progress bar.

- y. From the Language Pack Information panel, select **No** and click **Next** to defer adding language support to CCMDB. .

You can add language support at any time following a successful CCMDB deployment by using the CCMDB language pack installation program.

- z. From the Install Complete panel, click **Done**.

Once the CCMDB installation program has completed installation tasks, it will exit.

Logs can be found in the following locations:

- <CCMDB_Home>/logs
- <CCMDB_HOME>/solutions/logs
- <CCMDB_HOME>/maximo/tools/maximo/log
- C:\program files\ibm\common\acsi\logs.

In addition, examine the logs in the log directories for the WebSphere Application Server application server, deployment manager, and node agent.

20. Extract the CCMDB 7.1.1.5 fixpack to a temporary directory.
21. In the base_services_7.1.1.5.zip PSI package, extract the HarrierEAMPatch7115.zip patch into the maximo directory, for example, c:\ibm\smp\maximo.
22. Invoke the taskrunner utility:
c:\IBM\SMP\Scripts TASKRUNNER.bat

This installs CCMDB 7.1.1 to the upgraded environment with the updated files from the 7.1.1.5 base services fixpack.

23. Modify the case of the user maxadmin:
 - a. Log into the WebSphere administrative console.
 - b. Navigate to **Users and Groups** → **Manage users**.
 - c. Conduct a search for the maxadmin user.
 - d. If you locate any instances of maxadmin in uppercase (MAXADMIN), note the groups associated with this user.
 - e. Delete the MAXADMIN user.
 - f. Create a new maxadmin user in lowercase, and assign it to the groups noted earlier.
 - g. Restart the MXServer server.
24. Verify that the upgrade was successful:
 - a. Verify that solution logs for the process managers have been generated. Ensure that there are no errors generated in the .err log files. Log files are found in the C:\IBM\SMP\solutions\logs\ directory. refer to the CCMDB 7.1.1 *Planning and Installing Change and Configuration Management Database* guide for more information.
 - b. Verify that the MXServer server is running and that the CCMDB EAR Files are deployed and started on the WebSphere Application Server.
 - 1) Invoke a browser window and open the Administrative Console by typing in the browser address bar: http://<machine_name>:9060/admin. This URL address depicts the default port number (9060) and context (admin) for the Administrative Console. Enter a username to login.

- 2) Navigate to the Servers link in the tree view of the WebSphere Administrative Console, and click **Application servers**. Verify that the MXServer server is running.
 - 3) Navigate to the Applications link in the tree view of the WebSphere Administrative Console, and click **Enterprise Applications**. Verify that the MAXIMO and MAXIMOHELP applications have started.
25. Optionally add languages to those supported by CCMDB using the language pack installation program.
 26. Apply the CCMDB 7.1.1.5 fixpack, according to the instructions provided in the fixpack readme.
The fixpack is available on the product support site. After fixpack installations are complete, log into Maximo console once again to verify a successful installation.

Post upgrade tasks

There are several tasks to complete or consider at the conclusion of a successful upgrade.

- Complete post upgrade tasks contained in the *IBM Maximo 6 to Version 7 Products Upgrade Guide* and the *CCMDB 7.1.1 Planning and Installing Change and Configuration Management Database* guide. Note that you will not have to complete all tasks listed because the installation was performed using a database that has already been populated.
- For deployments that include Microsoft SQL Server, you might experience difficulties running BIRT Reports: If do you encounter issues related to BIRT reports, refer to the Flash report numbered 1306929 located on the product support site at <http://www-306.ibm.com/software/sysmgmt/products/support>.
- After a successful upgrade, you might find it useful to link Maximo assets with CCMDB CIs, if you wish to continue working with assets. Refer to the Toolkit Master Integration Guide at <http://catalog.lotus.com/wps/portal/topal/details?NavCode=1TW10CC1P> for more information.
- There is a significant difference between the groups that were used to provide access to applications in Maximo 6.2.4 and the set of groups used in CCMDB 7.1.1. Listed below are the groups and roles used in CCMDB 7.1.1.

Table 1. CCMDB 7.1.1 groups and roles

Group	Roles
PMCIOWNER	CI Owner
PMCFGADM	Configuration Administrator
PMCFGAUD	Configuration Auditor
PMCFGLIB	Configuration Librarian
PMCFGMGR	Configuration Manager
PMCHANGEADMIN	Change Administrator
PMCHANGEANALYST	Change Analyst
PMCHANGEAPPROVER	Change Approver
PMCHANGEIMPL	Change Implementer
PMCHANGEMGR	Change Manager
PMCHANGEOWNER	Change Owner
PMREQUESTER	Process Management Requester

Table 1. CCMDB 7.1.1 groups and roles (continued)

Group	Roles
PMRELEASEADMIN	Release Administrator
PMRELEASEMGR	Release Manager
PMRELEASEOWNER	Release Owner
PMRELEASESPECIALIST	Release Specialist

CCMDB 7.1.1 groups were designed to adhere to ITIL® specifications.

You will have to plan and execute the migration of users that were previously assigned to groups in Maximo 6.2.4 to groups provided in CCMDB 7.1.1 that are applicable to their role and their need to access particular applications within the Maximo console.

For more information, you can access ITIL best practice information from each application within the Maximo console made available through its integration with the IBM Tivoli Unified Process tool.

Using the conflictchecker tool

If you have the change and release extensions installed on Maximo 6.2, you must run the conflictchecker tool to determine if there are any name conflicts between the 6.2 and 7.1 database content. Before you run the tool, you must obtain the change and release meta doc files from the installation media. It is a good idea to copy these files from the media to a subdirectory within the CCMDB installation.

Change extension

If you have the change extension installed, then run the conflict tool to determine any conflicts for change. For example, in a command window, run the following:

```
cd <CCMDB_HOME>\maximo\tools\maximo
mkdir upgrade-pmp
copy <CCMDB_MediaPath>\UpdateTools\changeMetaDoc.xml <CCMDB_HOME>\maximo\tools\maximo\upgrade-pmp
.\conflictchecker -yupgrade-pmp -nchangeMetaDoc.xml
```

In this example, <CCMDB_HOME> is the directory where CCMDB 7.1 is installed and <CCMDB_MediaPath> is the drive or directory that contains the CCMDB installation media. The output from running the conflictchecker command will be contained in a log file named <CCMDB_HOME>\maximo\tools\maximo\log\ConflictCheckerTimeStamp.log where *TimeStamp* is a numeric time stamp value.

The following example represents sample data generated from running the conflictchecker command against the changeMetaDoc.xml file. The data shown in the sample log is generated when the change extension is installed, even if there are no user-created conflicts. You should not correct the data shown in the sample for the MAXPRESENTATION, MAXLABELS, MAXVARS, and KPIMAIN tables. That data is automatically changed and corrected during the normal upgrade installation process.

```
ConflictChecker started for schema MAXIMO Thu Jun 12 14:48:35 CDT 2008
ConflictChecker connected to database jdbc:db2://myserver.mydomain.com:50000/maxdb62
Thu Jun 12 14:48:35 CDT 2008
Input file: C:\ibm\smp\maximo\tools\maximo\upgrade-pmp\changeMetaDoc.xml Thu Jun 12
14:48:35 CDT 2008
```

*** CONFLICTS:

A conflict is caused when a row in the target database has the same unique index

value as a row in the installable data. The colliding indexes are listed below for each conflicting table.

TABLE MAXPRESENTATION

APP : ACTIVITY
APP : CALENDR
APP : CHANGE
APP : JOBPLAN
APP : LIBRARY
APP : LOOKUPS
APP : MENUS

TABLE KPIMAIN

KPINAME : PMCHGALLACTIVE

TABLE MAXLABELS

APP : CHANGE, ID : actuals_children_table_1_children_details1_1, PROPERTY : label
APP : CHANGE, ID : actuals_children_table_tablebody_3, PROPERTY : label
APP : CHANGE, ID : costs_help, PROPERTY : innerhtml
APP : CHANGE, ID : showplan_showplan_showallplanlabor_grid1_1_1_showallplanlabor_table_1_grid7_1, PROPERTY : label
APP : CHANGE, ID : showplan_showplan_showallplanlabor_grid1_1_1_showallplanlabor_table_tablebody_2, PROPERTY : label
APP : CHANGE, ID : showplan_showplan_showallplanmaterial_grid1_1_1_showallplanmaterial_table_1_grid7_1, PROPERTY : label
APP : CHANGE, ID : showplan_showplan_showallplanmaterial_grid1_1_1_showallplanmaterial_table_tablebody_2, PROPERTY : label
APP : CHANGE, ID : showplan_showplan_showallplanservice_grid1_1_1_showallplanservice_table_1_grid7_1, PROPERTY : label
APP : CHANGE, ID : showplan_showplan_showallplanservice_grid1_1_1_showallplanservice_table_tablebody_2, PROPERTY : label
APP : CHANGE, ID : showplan_showplan_showallplantool_grid1_1_1_showallplantool_table_1_grid7_1, PROPERTY : label
APP : CHANGE, ID : showplan_showplan_showallplantool_grid1_1_1_showallplantool_table_tablebody_2, PROPERTY : label
APP : CHANGE, ID : actuals_children_table_2_2, PROPERTY : label
APP : CHANGE, ID : plans_children_table_2_2, PROPERTY : label

TABLE MAXVARS

VARNAME : DBCHANGE_PMP, ORGID : NULL, SITEID : NULL

*** TABLES THAT DO NOT EXIST IN THE TARGET DATABASE:

The following tables to be installed cannot be found in the target database. This likely means that they are new tables, and as such will have no conflicts.

SECURITYRESTRICT
REPORTDESIGN
MAXLOGGER
REPORTPARAM
REPORTAPPAUTH
MAXROWSTAMP
MAXWSREGISTRY
MAXPROPVALUE
MAXDOMAINLINK
CONDITION
JOBPLANCLASS
JPTASKRELATION
SIGOPTFLAG
MAXPROP
REPORTDEPEND
DMDEPENDENCY
CLASSUSEWITH
DMCFGOBJECT
SERVICEOBJECT
CRONTASKHISTORY

*** COLUMNS THAT DO NOT EXIST IN THE TARGET DATABASE:

The following columns cannot be found in the target database. However, they make up part of the unique index of some of the installable data. This means that you cannot check for conflicts in the tables that the columns belong to because there is no basis for comparison. This does not mean that there is a problem with these tables, but rather that the unique index for the table has been altered to include a new column, and therefore the old and new data cannot be compared.

```
KPITRENDCFG.CONTENTUID  
REPORTLOOKUP.APPNAME  
SYNONYMDOMAIN.VALUEID  
MAXINTOBJDETAIL.OBJECTID  
SCTEMPLATE.CONTENTUID  
ESCSNOTIFICATION.ESCALATION  
DOCINFO.CONTENTUID
```

```
Conflict checking failed. Thu Jun 12 14:49:07 CDT 2008  
ConflictChecker completed Thu Jun 12 14:49:07 CDT 2008
```

The following example represents information shown in the conflictchecker log related to two name conflicts that might exist in the 6.2.4 database between the change extension and the 7.1 Change process manager function.

```
TABLE PERSONGROUP  
PERSONGROUP : PMCHGMA
```

```
TABLE MAXGROUP  
GROUPNAME : PMCHANGEADMIN
```

If you find similar entries in your conflictchecker log file, it would mean the following:

- You created a person group named PMCHGMA for Maximo 6.2, and this person group name conflicts with one that will be created for the 7.1 product.
- You created a security group named PMCHANGEADMIN for Maximo 6.2, and this security group name conflicts with one that will be created in the 7.1 product.

To resolve conflicts for the person group

1. Go to the person group application, and select the person group named PMCHGMA.
2. Duplicate the PMCHGMA person group.
3. Name the duplicated person group something other than PMCHGMA and save it.
4. Delete the person group named PMCHGMA.

To resolve conflicts for the security group

1. Go to the security group application, and select the security group named PMCHANGEADMIN.
2. Duplicate the PMCHANGEADMIN security group.
3. Name the duplicated security group something other than PMCHANGEADMIN and save it.
4. Delete the security group named PMCHANGEADMIN.

After you have resolved all conflicts, rerun the conflictchecker tool and verify that the only remaining conflicts are those documented in the sample log file above.

Release extension

If you have the release extension installed, then run the conflict tool to determine if there are any conflicts for release. For example, in a command window, run the following:

```
cd <CCMDB_HOME>\maximo\tools\maximo
copy <Release_MediaPath>\UpdateTools\releaseMetaDoc.xml <CCMDB_HOME>\maximo\tools\maximo\
upgrade-pmp
.\conflictchecker -yupgrade-pmp -nreleaseMetaDoc.xml
```

<CCMDB_HOME> is the directory where CCMDB 7.1.1 is installed and <Release_MediaPath> is the drive or directory that contains the Release Process Manager installation media. The output from running the conflictchecker command shown above will be contained in a log file named <CCMDB_HOME>\maximo\tools\maximo\log\ConflictChecker*TimeStamp*.log where *TimeStamp* is a numeric timestamp value.

The following example represents sample data generated from running the conflictchecker command against the releaseMetaDoc.xml file. The data shown in the sample log is generated when the release extension is installed even if there are no user created conflicts. You should not remediate the data shown in the sample for the MAXPRESENTATION, MAXLABELS, MAXVARS, and KPIMAIN tables. That data is automatically changed and remediated during the normal upgrade installation process.

```
ConflictChecker started for schema MAXIMO Thu Jun 12 14:49:52 CDT 2008
ConflictChecker connected to database jdbc:db2://myserver.mydomain.com:50000/maxdb62
Thu Jun 12 14:49:52 CDT 2008
Input file: C:\ibm\smp\maximo\tools\maximo\upgrade-pmp\releaseMetaDoc.xml Thu Jun 12
14:49:52 CDT 2008
```

*** CONFLICTS:

A conflict is caused when a row in the target database has the same unique index value as a row in the installable data. The colliding indexes are listed below for each conflicting table.

TABLE MAXPRESENTATION

```
APP : LOOKUPS
APP : MENUS
APP : RELEASE
```

TABLE KPIMAIN

```
KPINAME : PMCHGALLACTIVE
KPINAME : PMRELAVGTIME
KPINAME : PMRELCANCREL
KPINAME : PMRELLATETSK
KPINAME : PMRELOPENREL
KPINAME : PMRELSUCCREL
KPINAME : PMRELWAPPRREL
```

TABLE MAXLABELS

```
APP : RELEASE, ID : actuals_children_table_1_children_details1_1, PROPERTY : label
APP : RELEASE, ID : actuals_children_table_tablebody_3, PROPERTY : label
APP : RELEASE, ID : showplan_showplan_showallplanlabor_grid1_1_1_showallplanlabor_
table_1_grid7_1, PROPERTY : label
APP : RELEASE, ID : showplan_showplan_showallplanlabor_grid1_1_1_showallplanlabor_
table_tablebody_2, PROPERTY : label
APP : RELEASE, ID : showplan_showplan_showallplanmaterial_grid1_1_1_showallplanmaterial_
table_1_grid7_1, PROPERTY : label
APP : RELEASE, ID : showplan_showplan_showallplanmaterial_grid1_1_1_showallplanmaterial_
table_tablebody_2, PROPERTY : label
APP : RELEASE, ID : showplan_showplan_showallplanservice_grid1_1_1_showallplanservice_
table_1_grid7_1, PROPERTY : label
```

```
APP : RELEASE, ID : showplan_showplan_showallplanservice_grid1_1_1_showallplanservice_
table_tablebody_2, PROPERTY : label
APP : RELEASE, ID : showplan_showplan_showallplantool_grid1_1_1_showallplantool_table_1_
grid7_1, PROPERTY : label
APP : RELEASE, ID : showplan_showplan_showallplantool_grid1_1_1_showallplantool_table_
tablebody_2, PROPERTY : label
APP : RELEASE, ID : actuals_children_table_2_2, PROPERTY : label
APP : RELEASE, ID : plans_children_table_2_2, PROPERTY : label
```

```
TABLE MAXVARS
VARNAME : DBRELEASE_PMP, ORGID : NULL, SITEID : NULL
```

*** TABLES THAT DO NOT EXIST IN THE TARGET DATABASE:
The following tables to be installed cannot be found in the target database.
This likely means that they are new tables, and as such will have no conflicts.

```
REPORTDESIGN
MAXLOGGER
REPORTPARAM
REPORTAPPAUTH
MAXROWSTAMP
JOBTASKSPEC
MAXWSREGISTRY
MAXPROPVALUE
MAXDOMAINLINK
CONDITION
LNKCLAUSEATRNAME
JOBPLANCLASS
JPTASKRELATION
MAXPROP
REPORTDEPEND
DMDEPENDENCY
PMRELDEPACTNS
CLASSUSEWITH
MAXPROPISTANCE
CLASSSPECUSEWITH
DMCFGOBJECT
SERVICEOBJECT
CRONTASKHISTORY
```

*** COLUMNS THAT DO NOT EXIST IN THE TARGET DATABASE:
The following columns cannot be found in the target database. However, they make up part
of the unique index of some of the installable data. This means that you cannot check for
conflicts in the tables that the columns belong to because there is no basis for comparison.
This does not mean that there is a problem with these tables, but rather that the unique
index for the table has been altered to include a new column, and therefore the old and new
data cannot be compared.

```
KPITRENDCFG.CONTENTUID
REPORTLOOKUP.APPNAME
SYNONYMDOMAIN.VALUEID
MAXINTOBJDETAIL.OBJECTID
WFNOTIFICATION.UNIQUEID
SCTEMPLATE.CONTENTUID
ESCNOTIFICATION.ESCALATION
DOCINFO.CONTENTUID
LONGDESCRIPTION.CONTENTUID
```

```
Conflict checking failed. Thu Jun 12 14:50:25 CDT 2008
ConflictChecker completed Thu Jun 12 14:50:25 CDT 2008
```

After you resolve any conflicts other than those shown in the sample above, rerun
the conflictchecker tool. Verify that the only remaining conflicts are those
documented in the sample log.