Cisco Unified Web and E-Mail Interaction Manager Upgrade Guide
For Unified Contact Center Enterprise

Release 9.0(1)
September 2014
Chapter 3: Upgrade Process

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Preface

- Audience
- Document Conventions
- Other Learning Resources
Welcome to Cisco® Interaction Manager™, multichannel interaction software used by businesses all over the world to build and sustain customer relationships. A unified suite of the industry’s best applications for web and email interaction management, it is the backbone of many innovative contact center and customer service helpdesk organizations.

Cisco Interaction Manager includes a common platform and one or both of the following applications:

- Cisco Unified Web Interaction Manager (Unified WIM)
- Cisco Unified E-Mail Interaction Manager (Unified EIM)

**Audience**

This *Cisco Unified Web and E-Mail Interaction Manager Upgrade Guide* describes the various tasks required to upgrade your Unified EIM and WIM 4.4(1) application to Unified EIM and WIM 9.0(1). This guide is intended for installation engineers, system administrators, and database administrators who are responsible for installing and maintaining Cisco Interaction Manager installations that are either standalone or integrated with Cisco Unified Contact Center Enterprise (Unified CCE).

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**Important:** If your Unified EIM and WIM 4.4(1) system includes customizations, contact Cisco before upgrading to Unified EIM and WIM 9.0(1).

**Document Conventions**

This guide uses the following typographical conventions.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bold</strong></td>
<td>Labels of items on the user interface, such as buttons, boxes, and lists. Or text that must be typed by the user.</td>
</tr>
<tr>
<td><code>Monospace</code></td>
<td>The name of a file or folder, a database table column or value, or a command.</td>
</tr>
<tr>
<td><em>Variable</em></td>
<td>User-specific text; varies from one user or installation to another.</td>
</tr>
</tbody>
</table>

*Document conventions*
Other Learning Resources

Various learning tools are available within the product, as well as on the product CD, and our web site. You can also request formal end-user or technical training.

Online Help

The product includes topic-based as well as context-sensitive help.

<table>
<thead>
<tr>
<th>Use</th>
<th>To view</th>
</tr>
</thead>
<tbody>
<tr>
<td>🟢 <strong>Help</strong> button</td>
<td>Topics in <em>Cisco Unified Web and E-Mail Interaction Manager Help</em>; the Help button appears in the console toolbar on every screen.</td>
</tr>
<tr>
<td>F1 keypad button</td>
<td>Context-sensitive information about the item selected on the screen.</td>
</tr>
</tbody>
</table>

*Online help options*

Document Set

The latest versions of all Cisco documentation can be found online at http://www.cisco.com

- All Unified EIM documentation can be found online at http://www.cisco.com/en/US/products/ps7236/tsd_products_support_series_home.html
- All Unified WIM documentation can be found online at http://www.cisco.com/en/US/products/ps7233/tsd_products_support_series_home.html
- In particular, Release Notes for these products can be found at http://www.cisco.com/en/US/products/ps7236/prod_release_notes_list.html
- For general access to Cisco Voice and Unified Communications documentation, go to http://www.cisco.com/en/US/products/sw/voicesw/tsd_products_support_category_home.html

The document set contains the following guides:

- *Hardware and System Software Specification for Cisco Unified Web and E-Mail Interaction Manager*
- *Cisco Unified Web and E-Mail Interaction Manager Installation Guide*
- *Cisco Unified Web and E-Mail Interaction Manager Browser Settings Guide*

**User guides for agents and supervisors**

- *Cisco Unified Web and E-Mail Interaction Manager Agent’s Guide*
- *Cisco Unified Web and E-Mail Interaction Manager Supervisor’s Guide*

**User guides for Knowledge Base managers and authors**

- *Cisco Unified Web and E-Mail Interaction Manager Knowledge Base Author’s Guide*
User guides for administrators

- *Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Administration Console*
- *Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Routing and Workflows*
- *Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Chat and Collaboration Resources*
- *Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Email Resources*
- *Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Data Adapters*
- *Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Offers Console*
- *Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Reports Console*
- *Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to System Console*
- *Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Tools Console*
Planning

- Planning the Upgrade
- Running Pre-Upgrade Utilities
- Planning Downtime
- Verifying Available Disk Space on Unified EIM and WIM Servers
- Getting Started
To upgrade to Unified EIM and WIM 9.0(1), you need to complete a number of tasks, which include planning for new hardware, potential infrastructural upgrades, and completing certain pre-upgrade, upgrade, and post-upgrade tasks.

This chapter can help you to plan your upgrade, and make decisions about certain configuration options available in Unified EIM and WIM 9.0(1).

The Unified EIM and WIM 9.0(1) Upgrader supports upgrade from Unified EIM and WIM 4.4.0.0 or higher to Unified EIM and WIM 9.0(1).

Planning the Upgrade

- Read this guide before upgrading to Unified EIM and WIM 9.0(1). The chapter “Pre-Upgrade Tasks” on page 14 contains a set of tasks that must be completed before beginning the upgrade.
- It is highly recommended that you run the Pre Upgrade utilities before running the actual Upgrader. For details, see “Running Pre-Upgrade Utilities” on page 12.
- While upgrading from Unified EIM and WIM 4.4(1) to Unified EIM and WIM 9.0(1), you need to first install Unified EIM and WIM 9.0(1), and then run the Upgrader on the Unified EIM and WIM 9.0(1) file server and services server.

Planning the Unified EIM and WIM 9.0(1) Installation

- Acquire new hardware for installing Unified EIM and WIM 9.0(1) (page 15).
- Acquire new license files if you are buying new products for Unified EIM and WIM 9.0(1) (page 15).
- Except for a few things, your Unified EIM and WIM 9.0(1) installation does not have to exactly match the Unified EIM and WIM 4.4(1) installation. While installing Unified EIM and WIM 9.0(1), you have the option to change the following:
  - Change your configuration from single, split, or distributed to any desired configuration.
  - Use the MSSQL server cluster capabilities.
  - Move from MSSQL Standard to MSSQL Enterprise and get a new reports database.
  For details about these options, see the Cisco Unified Web and E-Mail Interaction Manager Installation Guide.
- Some of the things that should match exactly between the two installations are the database authentication and the database collation setting. For details, see “Installing Unified EIM and WIM 9.0(1)” on page 15.

Planning the Reports Database

- Installations that use the MSSQL Server Enterprise version automatically get a reports database. Skip this section if your Unified EIM and WIM 4.4(1) installation is on MSSQL Server Enterprise version and your installation has a Reports databases. The Unified EIM and WIM 4.4(1) installations that are on MSSQL Server Standard version should install their Unified EIM and WIM 9.0(1) installation with the MSSQL Server Enterprise version if they wish to have a Reports database.
Planning the Integration

- If your Unified EIM and WIM 4.4(1) installation was integrated with Unified CCE 7.5, you must upgrade it to Unified CCE 8.0, 8.5, or 9.0. For details about the upgrade process, see the Unified CCE documentation.

Running Pre-Upgrade Utilities

- The Upgrader comes with two utilities, DB PreCheck Utility and DB DryRun Utility, that can be run before doing the actual upgrade. These utilities should be always run on the copies of databases, and not on the actual databases.

  - The DB PreCheck Utility checks if there is any data in the databases that will cause the upgrade to fail. If any such issues are found, it logs them in a file. All these issues can be fixed before running the actual upgrader.

  - The DB DryRun Utility actually upgrades the standalone copies of the databases and will report if the upgrade can fail because of any database issues.

  For details about running these utilities, see “Appendix: Pre-Upgrade Utilities” on page 41.

**Important:** It is highly recommended that you run these utilities before running the actual Upgrader on your installation.

Planning Downtime

The time required to upgrade your installation will depend on a number of factors. This section lists all those factors and helps you determine the downtime required for your installation.

The task of installing Unified EIM and WIM 9.0(1) can be done independent of this downtime.

- **Time to back-up and restore Unified EIM and WIM 4.4(1) databases** (page 19): This time will vary based on the size of your databases. You can do a standalone back-up and restore of your databases and see how much time your databases will take.

- **Time to partition databases and move attachments**: The script `partition_attachment_downtime.sql` available at the following location can be used to determine this time: Upgrade_Package\Utilities

  The time to partition the databases applies only if your installation uses the Enterprise Edition of MSSQL.

  - Run the `partition_attachment_downtime.sql` script on the active database. It will help you determine the time the upgrader will need to partition the active database and move the attachments for open activities (tasks, emails, custom activities) and knowledge base articles to the database.

  - Run the `partition_attachment_downtime.sql` script on the reports database. It will help you determine the time the upgrader will need to partition the reports database.

  After running successfully, the script will show the time calculated in minutes.
Time to copy the storage and reports folders (page 18): This time will vary based on the size of these folders. You can also do this task before the actual downtime. However, you must ensure that at the time you run the upgrader, all the contents of these folders have been copied over to the Unified EIM and WIM 9.0(1) file server.

Four hours to do other upgrade tasks.
Add all these times to determine the downtime required for your installation.

Verifying Available Disk Space on Unified EIM and WIM Servers

While acquiring new hardware (page 15) for installing Unified EIM and WIM 9.0(1), in addition to following the sizing guidelines provided in the Cisco Unified Web and E-Mail Interaction Manager Solution Reference Network Design Guide, make sure that following disk space is available on the servers:

- In a distributed-server installation, ensure that the space available on the file server and services server is more than the current size of the Unified EIM and WIM home directory. On the file server, ensure that there is additional 5 GB space available.

- On the database server, the free disk space available should be the sum of the following numbers:
  - Active database:
    - Current size of the database + 10% of the size of the current database. For example, if your database size is 100 GB, you should have at least 110 GB space available.
    - Size of the attachments folders: Cisco_Home\eService\storage\1\mail\attachments and Cisco_Home\eService\storage\1\kb\attachments
    - Additional 4 GB space is required if your installation uses the Enterprise edition of MSSQL.
  - Reports database:
    - Current size of the database + 10% of the size of the current database. For example, if your database size is 100 GB, you should have at least 110 GB space available.
    - Additional 4 GB space is required if your installation uses the Enterprise edition of MSSQL.

Getting Started

The installation process involves completing the following activities, in sequence:

- **Pre-upgrade tasks:** To be performed before you begin the upgrade. For detailed instructions, refer to “Pre-Upgrade Tasks” on page 14.

- **Upgrade tasks:** Running the Upgrader on the file server and the services server. Details are in “Upgrade Process” on page 21.

- **Post-upgrade tasks:** To be performed after completing the upgrade. For details, refer to “Post-Upgrade Tasks” on page 29.
Pre-Upgrade Tasks

- Verifying Release Version
- Acquiring Licenses
- Acquiring Hardware
- Installing Unified EIM and WIM 9.0(1)
- Removing Aliases From Retriever Instances
- Stopping the Application
- Copying Folders from Unified EIM and WIM 4.4(1) File Server
- Recompiling Custom Java Code
- Renaming Files on the Unified EIM and WIM 4.4(1) File Server
- Moving Custom Classes Files on the Unified EIM and WIM 4.4(1) File Server
- Restoring Databases on Unified EIM and WIM 9.0(1) Database Machines
- Updating Service Instances in the Database
This chapter describes pre-upgrade procedures that need to be completed before beginning the upgrade process.

### Verifying Release Version

The Unified EIM and WIM 4.4(1) installation should be on version 4.4.0.0 or higher to be able to upgrade to Unified EIM and WIM 9.0(1).

**To verify the release version:**

1. Open the Unified EIM and WIM 4.4(1) Login window and click the **About** button.
2. Click the History tab and verify that the current version is 4.4.0.0 or higher.

### Acquiring Licenses

- You need new license files only if you are buying new products for Unified EIM and WIM 9.0(1). Make sure you have the Unified EIM and WIM 9.0(1) licenses ready with you before you begin the upgrade. You will need them to complete the upgrade process.

  Contact your account manager for the licenses.

### Acquiring Hardware

- Acquire new hardware for installing Unified EIM and WIM 9.0(1). See the *Hardware and System Software Specification for Cisco Unified Web and E-Mail Interaction Manager* and *Cisco Unified Web and E-Mail Interaction Manager Solution Reference Network Design Guide* for details about the type of hardware and software needed for installing these servers. Make sure that the servers have the additional disk space available as mentioned in “Verifying Available Disk Space on Unified EIM and WIM Servers” on page 13.

### Installing Unified EIM and WIM 9.0(1)

Your Unified EIM and WIM 9.0(1) installation does not have to exactly match the Unified EIM and WIM 4.4(1) installation. For details about the things that you can change, see “Planning the Unified EIM and WIM 9.0(1) Installation” on page 11.

- Follow the instructions in the *Cisco Unified Web and E-Mail Interaction Manager Installation Guide* to install Unified EIM and WIM 9.0(1). Some things to note while doing the installation are:
  - If your Unified EIM and WIM 4.4(1) installation was integrated with Unified CCE, you do not need to run the Cisco Interaction Manager Integration wizard while installing Unified EIM and WIM 9.0(1). If the Unified EIM and WIM 4.4(1) installation was not integrated with Unified CCE, and you plan to integrate the upgraded installation, do not run the Cisco Interaction Manager Integration wizard while
installing Unified EIM and WIM 9.0(1). The integration wizard must be run only after the Upgrader has been run.

- If Cisco Media Blender was not configured in the Unified EIM and WIM 4.4(1) installation and you plan to use it in Unified EIM and WIM 9.0(1), you must do the Cisco Media Blender configuration after upgrading your installation to Unified EIM and WIM 9.0(1).

- You must use the same domain user account to install Unified EIM and WIM 9.0(1) as was used for Unified EIM and WIM 4.4(1). To find out the domain account used for Unified EIM and WIM 4.4(1), go to the messaging, services, or application server and in the Windows Services panel, locate the Cisco service. Check the Log on parameters used for the service.

- Unified EIM and WIM 9.0(1) must be installed using the context root “system”. You cannot use any other name.

- The database authentication in Unified EIM and WIM 9.0(1) should match the database authentication that was selected in Unified EIM and WIM 4.4(1). Check the egpl_ds_connpool_map.xml to find out the database authentication used for Unified EIM and WIM 4.4(1).
  
  i. On the Unified EIM and WIM 4.4(1) file server, open the Cisco_Home\eService\config\dataaccess\egpl_ds_connpool_map.xml file in a text editor.

  ii. Locate the conn_pool_list section and for the Master_MSSQL_Pool connection pool, check the value of the URL property. If the IntegratedSecurity is set to false, the database authentication is SQL Authentication. If the IntegratedSecurity is set to true, the database authentication is Windows Authentication.

- If Unified EIM and WIM 4.4(1) was installed on MSSQL Enterprise, Unified EIM and WIM 9.0(1) has to be installed on MSSQL Enterprise. However, if Unified EIM and WIM 4.4(1) was on MSSQL Standard, you can change to MSSQL Enterprise.

  Run the following query to find out the current version of your Unified EIM and WIM 4.4(1) database:

  select @version

- The database collation setting in Unified EIM and WIM 9.0(1) should match the database collation setting that was selected in Unified EIM and WIM 4.4(1). To find out the collation setting of the Unified
EIM and WIM 4.4(1) databases, run the following query on one of the databases: 

```sql
select databasepropertyex('Database_Name','collation')
```

- If you were using SSL for your Unified EIM and WIM 4.4(1) installation, you can use the same certificate that you had acquired for Unified EIM and WIM 4.4(1) for the Unified EIM and WIM 9.0(1) installation.
- Any updates released for Unified EIM and WIM 9.0(1) should be installed only after running the Upgrader.

### Removing Aliases From Retriever Instances

Before running the Upgrader, remove the association of the email aliases from all the Retriever Service instances on the Unified EIM and WIM 4.4(1) installation. Perform this task only if your installation includes Unified EIM.

**To remove aliases from a retriever instance:**

1. Log in to the application as a partition administrator and go to the System Console.
2. In the Tree pane, browse to `System > Partition > Partition_Name > Services > Email > Retriever`.
3. In the List pane, select a retriever instance.
4. In the Properties pane, go to the Input tab and remove the aliases associated with the instance.
5. Click the `Save` button.

Stop the retriever instance. The retriever will stop picking emails from the alias only after you stop the retriever instance.

### Stopping the Application

Make sure that the application is stopped on the Unified EIM and WIM 4.4(1) machines and the Unified EIM and WIM 9.0(1) machines.

**To stop Unified EIM and WIM:**

- In single-server installations:
  - In the Windows Services panel, stop the Cisco service to stop all Cisco services.
- In a distributed-server installation:
  a. On each application server machine, stop the Cisco Windows service from the Windows Services panel.
  b. On the messaging server machine, stop the Cisco Windows service from the Windows Services panel.
  c. On the services server machine, stop the Cisco Windows service from the Windows Services panel.
  d. On the services server machine, open the Windows Task Manager and verify that none of the javaw and java processes (the services) are running.
Copying Folders from Unified EIM and WIM 4.4(1) File Server

Before the upgrade, the storage and the reports history folders have to be copied manually from the Unified EIM and WIM 4.4(1) file server to the Unified EIM and WIM 9.0(1) file server.

To copy the folders:

- From the Unified EIM and WIM 4.4(1) file server, copy the contents of the
  \Cisco_Home\eService\storage\1 folder and paste them on the existing
  \Cisco_Home\eService\storage\1 folder on the Unified EIM and WIM 9.0(1) file server.

- From the Unified EIM and WIM 4.4(1) file server, copy the contents of the
  \Cisco_Home\eService\reports\1\history folder and paste them on the existing
  \Cisco_Home\eService\reports\1\history folder on the Unified EIM and WIM 9.0(1) file server.

Recompiling Custom Java Code

- If your Unified EIM and WIM 4.4(1) installation includes any custom java code, like, custom rules or custom conditions in workflows, or custom Java data adapters, recompile the custom Java code for these objects with JDK 1.7.

Renaming Files on the Unified EIM and WIM 4.4(1) File Server

- In Unified EIM and WIM 9.0(1), all custom query and schema files are added to the eService.ear file. Only the XML files ending with "_query" or "_schema" and with the extension ".xml" are automatically picked by the upgrader and added to the eService.ear file. If you have any files that do not meet this naming convention, you must rename them before running the upgrader. For example, if your custom query file is named CustomQueries.xml, rename it to CustomQueries_query.xml. If your schema file is named CustomSchema.xml, rename it to CustomSchema_schema.xml.

- To find the names and locations of such files, do the following:
  a. On the Unified EIM and WIM 4.4(1) file server, browse to &Cisco_Home\eService\config. Open the egpl_general.properties in a text editor.
  b. In the file, locate dataaccess.schemafile. This section lists all the product and custom schema files. Check the names of the custom schema files to make sure they meet the naming guidelines. If a file name does not meet the guidelines, go to the location of the file and rename the file.
  c. Next, locate dataaccess.queryfile. This section lists all the product and custom query files. Check the names of the custom query files to make sure they meet the naming guidelines. If a file name does not meet the guidelines, go to the location of the file and rename the file.
Moving Custom Classes Files on the Unified EIM and WIM 4.4(1) File Server

If you have added any custom classes in the `customclasses\routing\rules` folder that are not for custom rules or custom conditions, they need to be moved before running the Upgrader.

To move custom classes files on the Unified EIM and WIM 4.4(1) file server:

1. Remove the custom class files that are not for custom rules or custom conditions from the following locations:
   - `Cisco_Home\eService\lib\ext\customclasses\routing\rules`
   - `Cisco_Home\eService\lib\ext\customclasses\routing\conditions`

2. Add the files removed in Step 1 to the following location:
   - `Cisco_Home\eService\lib\ext\customclasses\cb`

Restoring Databases on Unified EIM and WIM 9.0(1) Database Machines

- Take a backup of the Unified EIM and WIM 4.4(1) databases and restore them on the machines where the respective Unified EIM and WIM 9.0(1) databases are installed. Some things to note are:
  - While restoring the Unified EIM and WIM 4.4(1) databases, ensure that the names of the restored databases are different than the Unified EIM and WIM 9.0(1) databases.
  - If you have moved from the Standard edition of MSSQL Server to the Enterprise Edition, restore a copy of the active database on the machine where the Unified EIM and WIM 9.0(1) reports database is installed. The Upgrader will automatically convert this copy of the active database to the reports database.
  - Installations using Enterprise Edition of MSSQL server, do not need the archive database.
  - In deployments using the Enterprise Edition of MSSQL server, while restoring the active and reports databases, make sure that the names of all the file names are unique. You can check this from the Options section of the Restore As window.

Updating Service Instances in the Database

The following task must be completed to prepare service instances for the CIM 4.4 to 9.0(1) upgrade. Perform this task on the restored master database.

1. Browse to the following location:
   - `Temporary_Folder\PreupgradeUtilities\updateInstance.sql`

2. Open SQL Management Studio and connect to the 4.4 Master database. This is the database restored for the upgrade (page 19).
3. In the `updateInstance.sql` script, locate `<Active_DB_Name>` and replace it with the name of the Unified EIM and WIM active database.

4. Run `updateInstance.sql`.

5. This updates the instance IDs in the 4.4 database and makes them compatible with the 9.0(1) database.
Upgrade Process

- Upgrade Overview
- Upgrading the File Server
- Upgrading the Services Server
This chapter describes the process of upgrading from Unified EIM and WIM 4.4(1) version 4.4.0.0 or higher to Unified EIM and WIM 9.0(1). Before beginning the upgrade, ensure that you have complied with all the prerequisites listed in “Pre-Upgrade Tasks” on page 14.

Upgrade Overview

In single-server installations, run the Upgrader on the file server. In distributed server installations, run the Upgrader on the file server and the services server. Always run the Upgrader on the file server first.

Important: Make sure you have the Unified EIM and WIM 9.0(1) licenses ready with you before you begin the installation. You will need them to complete the installation process.

Upgrading the File Server

Run the Upgrader on the Unified EIM and WIM 9.0(1) file server.

To upgrade the file server:
1. Create a temporary folder, Temporary_Folder.
2. From the upgrade files, copy setup_windows.exe, setup_windows.properties, and CiscoService.zip into Temporary_Folder.
3. Double-click setup_windows.exe to launch the Unified EIM and WIM 9.0(1) Upgrader.
4. When the Introduction window appears, read the installation instructions. Click Next.
5. In the License Agreement window, review the licensing terms and select the I accept the terms of the License Agreement option. Click Next.

Read and accept the terms of the License Agreement
6. In the File Server Parameters window, type the name of the Unified EIM and WIM 9.0(1) file server. Click Next.

![File Server Parameters window](image)

*Provide the name of the Unified EIM and WIM 9.0(1) file server*

7. In the Cisco Interaction Manager Home Directory window, type the path or browse to the folder where Unified EIM and WIM 9.0(1) is installed. Click Next.

![Cisco Interaction Manager Home Directory window](image)

*Provide the location of the Cisco Interaction Manager home directory*
8. In the CIM 4.4 File Server Parameters window, type the name of the Unified EIM and WIM 4.4(1) file server. Click **Next**.

Provide the name of the Unified EIM and WIM 4.4(1) file server

9. In the Database Parameters window, provide the username and password of the master and active database administrator, the archive database administrator or the reports database administrator. Click **Next**. This screen appears only if you are using the SQL Authentication mode to connect to the MSSQL Server.

Provide the Unified EIM and WIM 9.0(1) database parameters

10. In the Restored Cisco Interaction Manager Database Parameters window, provide the names of the Unified EIM and WIM 4.4(1) databases that you had restored on the Unified EIM and WIM 9.0(1) database machines (page 19). Also provide the usernames and passwords to be created for connecting to these databases. Make sure that the usernames that you are using for the restored databases do not exist on the Unified EIM and WIM 9.0(1) database servers. To verify, open the Microsoft SQL Server Management Studio, browse to `Database_Server\Security\Logins` and check the database usernames that are already being used.
Click **Next**.

11. In the Product Information window, check the current version of Unified EIM and WIM 4.4(1) installed. The current version should be 4.4.0.0 or higher. Click **Next**.

12. In the Upgrade Summary window, verify the version being installed. It should be 9.0.1. The screen also notifies you if you need to run the Upgrader on additional servers. Click **Next**.

13. In the Active Database Filegroup Parameters window, provide the name and location of the filegroups to be created for the active database. Click **Next**.

   This screen appears only if your installation uses the Enterprise edition of Microsoft SQL.

   ![Active Database Filegroup Parameters](image1)

   *Provide the names and locations for the active database filegroups*

14. In the Reports Database Filegroup Parameters window, provide the name and location of the filegroups to be created for the reports database. Click **Next**.

   ![Reports Database Filegroup Parameters](image2)

   *Provide the restored EIM and WIM 4.4(1) database parameters*
This screens appears only if your installation uses the Enterprise edition of Microsoft SQL.

15. In the User Input Summary window, verify the information entered by you during the upgrade process. Click Install.

After you click Install, the Detecting Customizations window is displayed. It detects and lists all the customized files.

16. In the Customized Files window, verify the list of customized files. Select the I have noted the customized files. After the upgrade, I will update my customizations as per Cisco Interaction Manager guidelines. option.

Click Install.

The upgrader creates a backup of the file system at Cisco_Home\Patches\Backup\Pre_Upgrade_Version\File Server and starts installing the update.

17. In the Installation Status window, click the Close button to complete the upgrade process.

**Upgrading the Services Server**

In distributed-server installations, the Upgrader needs to be run on the Unified EIM and WIM 9.0(1) services server.

**To upgrade the services server:**

1. Follow Steps 1–4 in “To upgrade the file server:” on page 22.
2. In the License Agreement window, review the licensing terms and select the **I accept the terms of the License Agreement** option. Click **Next**.

![License Agreement](image1.png)

*Read and accept the terms of the License Agreement*

3. In the File Server Parameters window, type the name of the Unified EIM and WIM 9.0(1) file server. Click **Next**.

![File Server Parameters](image2.png)

*Provide the location of the Unified EIM and WIM 9.0(1) file server*

4. In the Cisco Interaction Manager Home Directory window, type the path or browse to the folder where Unified EIM and WIM 9.0(1) is installed. Click **Next**.

![Home Directory](image3.png)
Provide the location of the Unified EIM and WIM 9.0(1) home directory

5. In the Product Information window, verify the Unified EIM and WIM 9.0(1) components installed on the machine. Click Next.

6. In the Upgrade Summary window, verify the version being installed. It should be 9.0(1). The screen also notifies you if you need to run the Upgrader on additional servers. Click Next.

7. In the User Input Summary window, verify the information entered by you during the upgrade process. Click Install.

   The upgrader creates a backup of the Cisco home directory at Cisco_Home\Patches\Backup\Pre_Upgrade_Version\File Server and starts installing the update.

8. In the Installation Status window, click the Close button to complete the upgrade process.
Post-Upgrade Tasks

- Copying Files to Unified EIM and WIM 9.0(1) Web Server
- Copying Unified EIM and WIM 9.0(1) License Files
- Configuring Cisco Media Blender
- Updating the Application Hostname Configuration in Unified CCE
- Starting Unified EIM and WIM 9.0(1)
- Reviewing Log File for Missing Attachments
- Managing Attachments for Product Catalogs
- Moving Attachments for Completed Activities to Database
- Assigning Licenses to Users
- Adding Aliases to Retriever Instances
- Updating Chat Links on Websites
- Creating Data Adapters to Access Archive Database
- Setting up User Desktops
- Cleaning up the Database Servers
- Troubleshooting Procedures
- Uninstalling the Upgrade
This chapter guides you through the tasks to be performed after upgrading the system. It also describes the process of restoring the Unified EIM and WIM 9.0(1) installation if the upgrade fails.

**Copying Files to Unified EIM and WIM 9.0(1) Web Server**

After upgrade, some files need to be copied from the file server to the web server. If the web server and the file server are installed on the same machine, then perform these tasks on the same machine.

**To copy the folders:**

1. From the Unified EIM and WIM 9.0(1) file server, copy the contents of the following folder:

   `Cisco_Home\eService\installation\custom\web_server_files`.

2. On each Unified EIM and WIM 9.0(1) web server, paste these copied files to the following location:

   `Cisco_Home\eService`.

**Copying Unified EIM and WIM 9.0(1) License Files**

You need to copy the new license files only if you are buying new products for Unified EIM and WIM 9.0(1) (page 15). Perform this task on the file server.

**To copy the license file:**

- Copy the license files provided by Cisco to the following location:

  `Cisco_Home\eService\config\license`

**Configuring Cisco Media Blender**

- If Cisco Media Blender was not configured in the Unified EIM and WIM 4.4(1) installation and you wish to use it after upgrading to Unified EIM and WIM 9.0(1), you must do the Cisco Media Blender configuration after running the Upgrader. For details about doing these tasks, see the “Preparing Cisco Media Blender for the Integration” section in the *Cisco Unified Web and E-Mail Interaction Manager Deployment and Maintenance Guide*.

- If Cisco Media Blender was configured in the Unified EIM and WIM 4.4(1) installation, perform the following tasks after running the Upgrader.
  a. Open a web browser and launch the URL: `http://Cisco Media Blender Server Name:8080/cmb`
     The Cisco Media Blender Administration page appears.
  b. In the Cisco Media Blender Administration page, browse to **Media Blender > Server > Properties**.
  c. Go to the Collaboration tab, and set the following properties.
Remote Host: Provide the name of machine where the Unified EIM and WIM 9.0(1) services server is installed.

d. Copy the CiscoMB folder from the Cisco Media Blender server and paste it on the Unified EIM and WIM services server. Make sure you paste the CiscoMB folder on the same drive on the services server where it existed on the Cisco Media Blender server. For example, if the CiscoMB folder on the Cisco Media Blender server was on C drive, then paste it on the C drive of the Unified EIM and WIM services server.

e. On the Cisco Media Blender server, stop and restart the Cisco Media Blender Service.

Updating the Application Hostname Configuration in Unified CCE

After the upgrade is complete, you must update the Application Hostname that is configured for the Media Routing Peripheral Interface Manager (MR PIM) associated with Unified EIM and WIM.

To update the application hostname:

1. On any UCCE component server, go to the Cisco Unified CCE Tools folder and open the Peripheral Gateway Setup application.

2. When presented with the Instance Components, select the MR PG associated with the Unified EIM and WIM installation. Click Edit.

3. Navigate to the Peripheral Interface Manager properties.

4. Select the PIM associated with Unified EIM and WIM. Click Edit.

5. On the configuration screen for the PIM, update the Application Hostname to the hostname of the new Unified EIM and WIM 9.0(1) services server.

6. Ensure that the Application Connection Port configuration is correct.

7. Click Ok.
Starting Unified EIM and WIM 9.0(1)

To start Unified EIM and WIM 9.0(1):

- In single-server installations:
  - In the Windows Services panel, start the Cisco Service to start all Cisco services.

- In a distributed-server installation:
  
  Ensure that all the machines in the configuration are available and connected to the network.
  
  a. Start Cisco Service on the messaging server by starting the Cisco Service from the Windows Services panel.
  
  b. On the services server, start the application by starting the Cisco Service from the Windows Services panel.
  
  c. On each application server, start the application by starting the Cisco Service from the Windows Services panel.

Reviewing Log File for Missing Attachments

During upgrade, if any files attached to the knowledge base articles, email activities, or task activities cannot be moved to the database, a message is logged in the missingattachments.log file. Also, a text file with the message “This attachment has been removed from the system.” is attached with all such emails, tasks, and knowledge base articles. The name of the text file is the complete name of the missing attachment appended with .txt, for example, loan.pdf.txt.

To review the log file for missing attachments:

1. On the Unified EIM and WIM 9.0(1) file server, browse to Cisco_Home\eService\logs and locate the log file missingattachments.log.

2. All the missing attachments will be listed in this file. The format of the log messages is:

   Attachment type: kb; attachment_id: Attachment_ID; attachment_file name: Filename

   Attachment type: email; attachment_id: Attachment_ID; attachment_file name: Filename

   Attachment type: task; attachment_id: Attachment_ID; attachment_file name: Filename

3. Run the following query on the active database to identify the activity IDs for the missing email attachments.

   ```sql
   SELECT eml.ACTIVITY_ID, dept.DEPARTMENT_NAME FROM EGML_EMAIL eml
   INNER JOIN EGML_EMAIL_ATTACHMENT_LINK lnk
   ON eml.EMAIL_ID = lnk.EMAIL_ID
   INNER JOIN EGML_EMAIL_ATTACHMENT att
   ON att.EMAIL_ATTACHMENT_ID = lnk.EMAIL_ATTACHMENT_ID
   INNER join EGPL_CASEMGMT_ACTIVITY act on act.activity_id = eml.activity_id
   inner join egpl_department dept on dept.department_id = act.department_id
   ```
WHERE `lnk.EMAIL_ATTACHMENT_ID` = `Attachment_ID`

Where `Attachment_ID` is the ID of the missing attachment identified from the `missingattachments.log` file.

4. Run the following queries on the active database to identify the activity IDs for the missing task attachments.

```sql
SELECT task.ACTIVITY_ID, dept.DEPARTMENT_NAME FROM EGPL_CASEMGMT_TASK_ATTACHMENT task
inner join EGPL_CASEMGMT_ACTIVITY act on act.ACTIVITY_ID = task.ACTIVITY_ID
inner join EGPL_DEPARTMENT dept on dept.DEPARTMENT_ID = act.DEPARTMENT_ID
WHERE TASK_ATTACHMENT_ID = Attachment_ID
```

Where `Attachment_ID` is the ID of the missing attachment identified from the `missingattachments.log` file.

5. Run the following queries on the active database to identify the article names for the missing article attachments. The query will give you the article ID, article name, folder name, and department name.

```sql
SELECT DISTINCT ver.ARTICLE_ID, ARTICLE_NAME, FOLDER_NAME, DEPARTMENT_NAME FROM EGPL_KB_ARTICLE art
INNER JOIN EGPL_KB_ARTICLE_VERSION ver ON art.ARTICLE_ID = ver.ARTICLE_ID
INNER JOIN EGPL_KB_ARTICLE_DATA dat ON ver.ARTICLE_REFERENCE_ID = dat.ARTICLE_REFERENCE_ID
INNER JOIN EGPL_KB_ARTICLE_ATTACHMENT att ON ver.ARTICLE_REFERENCE_ID = att.ARTICLE_REFERENCE_ID AND att.ATTACHMENT_ID = Attachment_ID
INNER JOIN EGPL_KB_LINKS on ver.ARTICLE_ID = EGPL_KB_LINKS.CHILD_ID and LINK_TYPE = 2
INNER JOIN EGPL_KB_FOLDER on EGPL_KB_LINKS.PARENT_ID = EGPL_KB_FOLDER.FOLDER_ID
INNER JOIN EGPL_KB_FOLDER_DATA on EGPL_KB_FOLDER_DATA.FOLDER_ID = EGPL_KB_FOLDER.FOLDER_ID
INNER JOIN EGPL_DEPARTMENT on EGPL_KB_FOLDER.DEPT_ID = EGPL_DEPARTMENT.DEPARTMENT_ID
```

Where `Attachment_ID` is the ID of the missing attachment identified from the `missingattachments.log` file.

6. For emails and tasks, login to the Agent Console and search for the emails or tasks identified in Step 3 and Step 4 and remove the placeholder attachments.

7. For article attachments, login to the Knowledge Base Console and search for the articles identified in Step 5 and remove the placeholder attachments. If needed, attach the missing files to the articles again.

## Managing Attachments for Product Catalogs

In Unified EIM and WIM 9.0(1), the Attachments tab for the Product Catalogs (available in the Administration Console) has been removed from the User Interface. If you had added attachments to product catalogs in Unified
EIM and WIM 4.4(1), after the upgrade to Unified EIM and WIM 9.0(1), you can create new articles and attach the product catalogs attachments to these articles. The articles can then be associated with the product catalogs.

**To manage attachments for product catalogs:**

1. Get the files attached to product catalogs in Unified EIM and WIM 4.4(1) from the following location on the Unified EIM and WIM 9.0(1) file server:
   
   ```
   Cisco_Home\eService\storage\1\prodcat\attachments.
   ```
   
   You would have copied these files as a pre-upgrade task (page 18).

2. From the Knowledge Base Console, create new articles with the product catalog attachments. For details about doing this task, see the *Cisco Unified Web and E-Mail Interaction Manager Knowledge Base Author's Guide*.

3. From the Administration Console, associate the articles with the product catalogs. For details about doing this task, see the *Cisco Unified Web and E-Mail Interaction Manager Administrator's Guide to Administration Console*.

**Moving Attachments for Completed Activities to Database**

As a part of the upgrade, attachments for the open activities are automatically moved to the active database. For completed activities, use the following Attachments utilities to move attachments to the database:

- `emailAttachmentsUtility.bat` utility: For moving attachments for completed email activities to the active database.

- `taskAttachmentsUtility.bat` utility: For moving attachments for completed task activities to the active database.

These utilities can be run anytime after the upgrade and can be stopped and restarted. It is recommended that you run these utilities during off-peak hours. The application does not need to be stopped while running these utilities. These utilities move approximately 80,000 attachments in 30 minutes.

**Configuring the Utilities**

**To configure the utilities:**

- On the services server, open the `Cisco_Home\Utilities\attachments\emailAttachmentsUtility.bat` file in a text editor and verify that the following properties are configured correctly.

  - Locate the `SET JAVA_HOME` property and verify that the value is set to the location where JDK 1.7 Update 2 or higher is installed on your machine. For example, `C:\Java\jdk1.7.0_02`.

  - Locate the `SET PL_HOME_LOCAL` property and verify that the value is set to the location where Unified EIM and WIM 9.0(1) is installed. For example, `c:\Cisco\eService`.

  - Locate the `SET PL_HOME` property and verify that the value is set to the location where Unified EIM and WIM 9.0(1) file server is installed. For example, `\w10s5\Cisco\eService`. 
Repeat these steps for the taskAttachmentsUtility.bat utility.

Running the Utilities

To run the utilities:

--- Important: The attachments utilities are run on the services server. ---

1. First, configure the utilities (page 35).
2. To find out the number of attachments that need to be moved, run the following queries:

   For email attachments, run the following query on the active database:
   ```sql
   select count(1) "Pending Email Attachments" from egml_email_attachment attach, egml_email mail, egml_email_attachment_link link, egpl_casemgmt_activity act
   where attach.email_attachment_id = link.EMAIL_ATTACHMENT_ID
   AND link.EMAIL_ID = mail.EMAIL_ID
   AND mail.ACTIVITY_ID = act.ACTIVITY_ID
   AND act.ACTIVITY_STATUS = 9000
   AND attach.CONTENT is null
   ```

   For task attachments, run the following query on the active database:
   ```sql
   select count(1) "Pending Task Attachments" from EGPL_CASEMGMT_TASK_ATTACHMENT task, egpl_casemgmt_activity act
   where task.CONTENT IS NULL
   AND task.ACTIVITY_ID = act.ACTIVITY_ID
   AND act.ACTIVITY_STATUS=9000
   ```

3. Double-click the taskAttachmentsUtility.bat or emailAttachmentsUtility.bat file to launch the utility.

4. To stop the utility, press CTRL+C on the command window. When prompted to stop the utility, click the Y button.

5. You can restart the utilities at any time by repeating Step 3.
Assigning Licenses to Users

- If you have acquired new product licenses for Unified EIM and WIM 9.0(1) (page 15), you will need to assign the new licenses to the users from the Administration Console. For details about doing this task, see the Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Administration Console.

Adding Aliases to Retriever Instances

After running the Upgrader, add the email aliases to the Retriever Service instances on the Unified EIM and WIM 9.0(1) installation. Perform this task only if your Unified EIM and WIM 9.0(1) installation includes Unified EIM.

To add aliases to a retriever instance:
1. Log in to the application as a partition administrator and go to the System Console.
2. In the Tree pane, browse to System > Partition > Partition_Name > Services > Email > Retriever.
3. In the List pane, select the retriever instance.
4. In the Properties pane, go to the Input tab and select the aliases to be associated with this instance.
5. Click the Save button.
6. Stop and start the retriever instance. The retriever picks emails from the alias only after you restart the retriever instance.

Updating Chat Links on Websites

Perform this task only if your Unified EIM and WIM 4.4(1) installation included Unified WIM.
- After upgrading from Unified EIM and WIM 4.4(1) to Unified EIM and WIM 9.0(1), you will need to update the chat links at all places on your website where you had added the chat link. Log in to the Administration Console, and from the Chat Entry Point, copy the new links. For details, see the Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Chat and Collaboration Resources.

Creating Data Adapters to Access Archive Database

- For installations using MSSQL Server Enterprise Edition, the archive database is no longer available after the upgrade to Unified EIM and WIM 9.0(1). If you want to access the archived data from the archive database, create a JDBC type of data adapter to fetch such data. For details about creating data adapters, see the Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Data Adapters.
Setting up User Desktops

Unified EIM and WIM 9.0(1) requires you to update the JRE version on each desktop. You must also clear the web cache and the Java cache before logging in to the application.

To set up user desktops:

1. Ensure that the user desktop meets the requirements outlined in *Hardware and System Software Specification for Cisco Unified Web and E-Mail Interaction Manager*.

2. Install JRE 1.6.0 (Update 30 or higher) on each user desktop. See the *Cisco Unified Web and E-Mail Interaction Manager Browser Settings Guide* for details.

3. Clear the web browser cache on every user desktop. See the *Cisco Unified Web and E-Mail Interaction Manager Browser Settings Guide* for details.

4. Clear the Java cache on every user desktop, by doing the following:
   a. Go to Start > Settings > Control Panel.
   b. Double-click Java.
   c. In the Java Control Panel window, on the General tab, in the Temporary Internet Files section, click the Settings button.
   d. In the Temporary Files Settings window, click the Delete Files button.
   e. In the Delete Temporary Files window, select the Applications and Applets option and click the OK button.

Cleaning up the Database Servers

After upgrading your installation successfully, you can clean up the Unified EIM and WIM 9.0(1) database servers by deleting the following from the database server machines:

- The following Unified EIM and WIM 9.0(1) databases that were installed while installing Unified EIM and WIM 9.0(1): active database, master database, and archive database or reports database.

- The user names associated with the following Unified EIM and WIM 9.0(1) databases that were created while installing Unified EIM and WIM 9.0(1): active database, master database, and archive database or reports database.

- The SQL jobs associated with the following Unified EIM and WIM 9.0(1) databases that were created while installing Unified EIM and WIM 9.0(1): active database, master database, and archive database or reports database.
Troubleshooting Procedures

Viewing Log Files

- If any error occurs while upgrading the installation, error messages are logged in the following files on the file server:
  - `Cisco_Home\eService\installation\logs\eg_log_File_Server_Name_upgrade_installer.log`
  - `Cisco_Home\eService\installation\logs\eg_log_Services_Server_Name_upgrade_installer.log`

Restoring Unified EIM and WIM 9.0(1) Installation

If you encounter any problems while upgrading, you can restore the Unified EIM and WIM 9.0(1) installation and run the Upgrader again. No tasks need to be performed on the Unified EIM and WIM 4.4(1) installation as the Upgrader does not change anything on the Unified EIM and WIM 4.4(1) machines.

If the upgrade completed successfully, and you want to uninstall the upgrade, follow the steps in the section “Uninstalling the Upgrade” on page 39.

To restore the Unified EIM and WIM 9.0(1) installation:

- Restore the Unified EIM and WIM 9.0(1) installation. The backup copies are available at `Cisco_Home\Patches\Backup\Pre_Upgrade_Version\File_Server`. Perform this task on the file server and the services server.

Uninstalling the Upgrade

Before you begin the uninstallation process, make sure you stop Unified EIM and WIM 9.0(1). Run the uninstallation program on the file server and the services server.

Preparing to Uninstall

Stopping the Application

- Make sure that the application is stopped on the Unified EIM and WIM 9.0(1) machines. For details, see “Stopping the Application” on page 17.

Stopping IIS

- Stop IIS (World Wide Web Publishing Service) on all web servers in the installation.
Uninstalling the Upgrade

To uninstall the upgrade:

1. On the file server or the services server, browse to Cisco_Home\Uninstaller\Patches.
2. Double-click update_uninstaller.exe to launch the uninstallation program.
3. In the Introduction window, read the information carefully and select the I have reviewed the information provided on this screen and would like to proceed with the uninstallation option. Click the Uninstall button.
4. In the Uninstall Complete window, click the Close button to close the uninstallation program.

Repeat these tasks on the services server.

Performing Post Uninstallation tasks

Starting IIS

- Start IIS (World Wide Web Publishing Service) on all web servers in the installation.

Starting the Application

- For details about starting the application, see “Starting Unified EIM and WIM 9.0(1)” on page 33.
Appendix: Pre-Upgrade Utilities

- About the Utilities
- Restoring Databases
- Preparing to Run the Utilities
- Running DB Pre-Check Utility
- Running DB DryRun Utility
About the Utilities

The Upgrader comes with two utilities, DB PreCheck Utility and DB DryRun Utility, that can be run before doing the actual upgrade. These utilities should be always run on the copies of the databases.

- The **DB PreCheck Utility** checks if there is any data in the databases that will cause the upgrade to fail. If any such issues are found, it logs them in a file. All these issues can be fixed before running the actual upgrader. For details about running this utility, see “Running DB Pre-Check Utility” on page 48.

- The **DB DryRun Utility** actually upgrades the standalone copies of the databases and will report if the upgrade can fail because of any database issues. The DB PreCheck Utility is also run as a part of the DB DryRun Utility. For details about running this utility, see “Running DB DryRun Utility” on page 50.

---

**Important:** It is highly recommended that you run these utilities before running the actual Upgrader on your installation.

---

Restoring Databases

The pre-upgrade utilities should always be run on copies of databases and not on the actual databases for your installation. While restoring the databases on the MSSQL 2008 database server, make sure that edition of MSSQL 2008 database server matches the edition of your MSSQL 2005 database server. For example:


- As part of the upgrade process, if you are changing the edition of the database from Standard to Enterprise edition, you must still restore the databases on the Standard edition of MSSQL 2008 for the purpose of running the pre-upgrade utilities.

**To restore the databases:**

- Create a copy of the following databases to be used by the utilities:
  - Master database
  - Active Database
  - Reports Database (For installations using Enterprise Edition of MSSQL)
  - Archive Database (For installations using Standard Edition of MSSQL)
Preparing to Run the Utilities

Installing JDK

- Install JDK 1.7 or higher on the machines from where you are going to run the utilities.

Configuring Database URLs

To be able to run the utility, you have to configure database URLs for the restored databases. This section describes the format of these URLs. You will require these URLs while configuring the utilities (page 48 and page 50).

To configure the database URLs:

The database URLs are configured in the format:

```
njdbc:sqlserver://Server_Name:Port_Number;instanceName=Instance_Name;integratedSecurity=true_or_false;databaseName=Database_Name
```

Where:

- `Server_Name`: Name of the server where you have restored the database.
- `Port_Number`: The port number for the MSSQL server. The default port is 1433.
- `Instance_Name`: The name of the MSSQL instance used to restore the database. The default instance is `MSSQLSERVER`.
- `integratedSecurity`: Set the value to `true` if you are using Windows Authentication to connect to the database. Set the value to `false` if you are using the SQL Server Authentication mode.
- `Database_Name`: Name of the restored database.

For example, the database URL will look like:

```
njdbc:sqlserver://productDB:1433;instanceName=mssqlserver;integratedSecurity=true;databaseName=ActiveDB
```

Configuring Database Link from Active Database to Archive Database

Important: You need to perform these tasks only if the installation uses the Standard Edition of MSSQL and the active and archive databases are restored on different machines.

To configure the database link from the archive database to the active database:

1. Open the SQL Server Management Studio and connect to the server where the active database is restored.
2. In the SQL Server Management Studio window, in the Object Explorer, browse to `Server Objects > Linked Servers`.
3. Right-click on Linked Server and select `New Linked Server`.
4. In the New Linked Server window, do the following:
a. In the General section, provide the following details:

- **Linked Server:** Provide a name for the link. This is the link name used while configuring the utility (page 51).
- **Provider:** Set the value as **Microsoft OLE DB Provider for SQL Server**.
- **Product Name:** Set the value as **SQLOLEDB**.
- **Data Source:** Set the value as **Archive_Database_Server_Name\Instance_Name**. Where **Archive_Database_Server_Name** is the name of the server where archive database is restored. And **Instance_Name** is the name of the MSSQL instance used to restore the archive database. For example, **archivedbservename\mssqlserver**.

![Linked Server Configuration](image)

*Set the general properties*

b. In the Security section, provide the following details:

- **Be made using this security context:** Select the option.
- **Remote login:** User name of the database administrator for the MSSQL Server where the active database is restored. Any database administrator with the following roles can be used: **db_owner**.
• **With password**: Password of the database administrator.

![Image of server options](image)

*Provide the login details*

c. In the Server Options section, set the following:

- **RPC**: Set the value as **true**.
- **RPC Out**: Set the value as **true**.

![Image of server options](image)

*Set the server options*
Configuring Database Link from Active Database to Reports Database

To configure the database link from the active database to the reports database:

1. Open the SQL Server Management Studio and connect to the server where the Reports database is restored.
2. In the SQL Server Management Studio window, in the Object Explorer, browse to **Server Objects > Linked Servers**.
3. Right-click on Linked Server and select **New Linked Server**.
4. In the New Linked Server window, do the following:
   a. In the General section, provide the following details:
      - **Linked Server**: Provide a name for the link. This is the link name used while configuring the utility (page 50).
      - **Provider**: Set the value as **Microsoft OLE DB Provider for SQL Server**.
      - **Product Name**: Set the value as **SQLOLEDB**.
      - **Data Source**: Set the value as **Active_Database_Server_Name\Instance_Name**. Where **Active_Database_Server_Name** is the name of the server where active database is restored. And **Instance_Name** is the name of the MSSQL instance used to restore the active database. For example, **activedbserver\mssqlserver**.
   
   ![Linked Server Configuration](image)
   
   *Set the general properties*

   b. In the Security section, provide the following details:
      - **Be made using this security context**: Select the option.
- **Remote login**: User name of the database administrator for the MSSQL Server where reports database is restored. Any database administrator with the following roles can be used: `db_owner`.
- **With password**: Password of the database administrator.

Provide the login details

c. In the Server Options section, set the following:
- **RPC**: Set the value as `true`. 
**RPC Out:** Set the value as **true.**

---

**Running DB Pre-Check Utility**

To **run the DB Pre-Check utility:**

1. Create a temporary folder, `Temporary_Folder`.
2. From the upgrade files, copy the `PreupgradeUtilities` folder into `Temporary_Folder`.
3. Open the `Temporary_Folder\PreupgradeUtilities\standalone.properties` file in a text editor and set the following properties.
   - **ACTIVE_DATABASE_URL:** Provide the active database URL. For the format of the URL, see “Configuring Database URLs” on page 43.
   - **MASTER_DATABASE_URL:** Provide the master database URL. For the format of the URL, see “Configuring Database URLs” on page 43.

Set the following two properties only if you are using SQL Server Authentication to connect to the active database.

- **ACTIVE_ADMIN_USER:** User name of the database administrator for MSSQL Server. Any database administrator with the following roles can be used: `dbcreator, securityadmin, sysadmin`.
- **ACTIVE_ADMIN_PASS:** Password of the database administrator.

Set the following two properties only if you are using SQL Server Authentication to connect to the master database.

- **MASTER_ADMIN_USER:** User name of the database administrator for MSSQL Server. Any database administrator with the following roles can be used: `dbcreator, securityadmin, sysadmin`.

---

Set the server details
○ MASTER_ADMIN_PASS: Password of the database administrator.

Set the following archive database properties only if your installation uses the Standard Edition of MSSQL:

Important: If your installation uses the Enterprise Edition of MSSQL, you must comment out the archive database properties before running the utility. Prefix the property names with “#” to comment them.

○ ARCHIVE_DATABASE_URL: Provide the archive database URL. For the format of the URL, see “Configuring Database URLs” on page 43.

Set the following two properties only if you are using SQL Server Authentication to connect to the database.
○ ARCHIVE_ADMIN_USER: User name of the database administrator for MSSQL Server. Any database administrator with the following roles can be used: dbcreator, securityadmin, sysadmin.
○ ARCHIVE_ADMIN_PASS: Password of the database administrator.

Set the following reports database properties only if your installation uses the Enterprise Edition of MSSQL:

Important: If your installation uses the Standard Edition of MSSQL, you must comment out the reports database properties before running the utility. Prefix the property names with “#” to comment them.

○ REPORTS_DATABASE_URL: Provide the reports database URL. For the format of the URL, see “Configuring Database URLs” on page 43.

Set the following two properties only if you are using SQL Server Authentication to connect to the database.
○ REPORTS_ADMIN_USER: User name of the database administrator for MSSQL Server. Any database administrator with the following roles can be used: dbcreator, securityadmin, sysadmin.
○ REPORTS_ADMIN_PASS: Password of the database administrator.

4. Open the Temporary_Folder\PreupgradeUtilities\DBPrecheck.bat file in a text editor and set the following properties:
   ○ Locate the SET JAVA_HOME property and set the value to the location where JDK 1.7 or higher is installed on your machine (page 43). For example, C:/Java/jdk1.7.0_02.

5. Double-click DBPrecheck.bat to launch the utility. You will be notified when the pre-check finishes.
   ○ If the utility fails to execute because of any configuration issues, error messages are logged in the upgrade_db.log. Fix the properties configured in the standalone.properties and DBPrecheck.bat files and try to run the utility again.
   ○ If the DB pre-check utility identifies any issues, all the log messages are logged in the log file egpl_precheck.log. Please contact Cisco if any issues are identified by the utility.

The log files are created at the same location from where you launch the utility.
Running DB DryRun Utility

To run the DB DryRun utility:

1. Create a temporary folder, `Temporary_Folder`.
2. From the upgrade files, copy the `PreupgradeUtilities` folder into `Temporary_Folder`.
3. Open the `Temporary_Folder\PreupgradeUtilities\standalone.properties` file in a text editor and set the following properties:
   - ACTIVE_DATABASE_URL: Provide the active database URL. For the format of the URL, see “Configuring Database URLs” on page 43.
   - MASTER_DATABASE_URL: Provide the master database URL. For the format of the URL, see “Configuring Database URLs” on page 43.

Set the following two properties only if you are using SQL Server Authentication to connect to the database.
   - ACTIVE_ADMIN_USER: User name of the database administrator for MSSQL Server. Any database administrator with the following roles can be used: dbcreator, securityadmin, sysadmin.
   - ACTIVE_ADMIN_PASS: Password of the database administrator.

Set the following two properties only if you are using SQL Server Authentication to connect to the database.
   - MASTER_ADMIN_USER: User name of the database administrator for MSSQL Server. Any database administrator with the following roles can be used: dbcreator, securityadmin, sysadmin.
   - MASTER_ADMIN_PASS: Password of the database administrator.

Set the following reports database properties only if your installation uses the Enterprise Edition of MSSQL:
   - REPORTS_DATABASE_URL: Provide the reports database URL. For the format of the URL, see “Configuring Database URLs” on page 43.
   - REPORTS_ACTIVE_DB_LINK: Provide the URL in the format `Link_Name_Archive_Database_Name` where `Link_Name` is the name configured while creating the database link (page 43) and `Active_Database_Name` is the name of the active database restored for running the utility (page 42).

Set the following two properties only if you are using SQL Server Authentication to connect to the database.
   - REPORTS_ADMIN_USER: User name of the database administrator for MSSQL Server. Any database administrator with the following roles can be used: dbcreator, securityadmin, sysadmin.
   - REPORTS_ADMIN_PASS: Password of the database administrator.

Set the following reports database filegroup properties only if your installation uses the Enterprise Edition of MSSQL:
   - REPORTS_DB_FG1_NAME: Provide the name of the first file group to be created for the reports database.
   - REPORTS_DB_FG2_NAME: Provide the name of the second file group to be created for the reports database.

**Important:** If your installation uses the Standard Edition of MSSQL, you must comment out the reports database properties before running the utility. Prefix the property names with “#” to comment them.
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- **REPORTS_DB_FG3_NAME**: Provide the name of the third file group to be created for the reports database.
- **REPORTS_DB_FG4_NAME**: Provide the name of the fourth file group to be created for the reports database.
- **REPORTS_DB_FG1_DATAFILE_PATH**: Provide the location of the first file group to be created for the reports database. For example, \E:\Data
- **REPORTS_DB_FG2_DATAFILE_PATH**: Provide the location of the second file group to be created for the reports database. For example, \E:\Data
- **REPORTS_DB_FG3_DATAFILE_PATH**: Provide the location of the third file group to be created for the reports database. For example, \E:\Data
- **REPORTS_DB_FG4_DATAFILE_PATH**: Provide the location of the fourth file group to be created for the reports database. For example, \E:\Data

Set the following active database filegroup properties only if your installation uses the Enterprise Edition of MSSQL:

- **ACT_DB_FG1_NAME**: Provide the name of the first file group to be created for the active database.
- **ACT_DB_FG2_NAME**: Provide the name of the second file group to be created for the active database.
- **ACT_DB_FG3_NAME**: Provide the name of the third file group to be created for the active database.
- **ACT_DB_FG4_NAME**: Provide the name of the fourth file group to be created for the active database.
- **ACT_DB_FG1_DATAFILE_PATH**: Provide the location of the first file group to be created for the active database. For example, \D:\Data
- **ACT_DB_FG2_DATAFILE_PATH**: Provide the location of the second file group to be created for the active database. For example, \D:\Data
- **ACT_DB_FG3_DATAFILE_PATH**: Provide the location of the third file group to be created for the active database. For example, \D:\Data
- **ACT_DB_FG4_DATAFILE_PATH**: Provide the location of the fourth file group to be created for the active database. For example, \D:\Data

Set the following archive database properties only if your installation uses the Standard Edition of MSSQL:

- **ARCHIVE_DATABASE_URL**: Provide the archive database URL. For the format of the URL, see “Configuring Database URLs” on page 43.
- **ACTIVE_ARCHIVE_DB_LINK**: Provide the URL in the format `Link_Name.Active_Database_Name` where `Link_Name` is the name configured while creating the database link (page 46) and `Archive_Database_Name` is the name of the archive database restored for running the utility (page 42).

Set the following two properties only if you are using SQL Server Authentication to connect to the database:

- **ARCHIVE_ADMIN_USER**: User name of the database administrator for MSSQL Server. Any database administrator with the following roles can be used: dbcreator, securityadmin, sysadmin.
- **ARCHIVE_ADMIN_PASS**: Password of the database administrator.

4. Open the `Temporary_Folder\PreupgradeUtilities\DBUpgrade.bat` file in a text editor and set the following properties:
Locate the `SET JAVA_HOME` property and set the value to the location where JDK 1.7 or higher is installed on your machine (page 43). For example, `C:/Java/jdk1.7.0_02`.

5. Double-click `DBUpgrade.bat` to launch the utility. You will be notified when the upgrade finishes.

- If the utility fails to execute because of any configuration issues, error messages are logged in the `upgrade_db.log`. Fix the properties configured in the `standalone.properties` and `DBPrecheck.bat` files and try to run the utility again.

- If the DB pre-check utility, which is run as part of the DB DryRun Utility, identifies any issues, all the log messages are recorded in the log file: `egpl_precheck.log`. Please contact Cisco if any issues are identified by the utility.

- If the upgrade fails, all the log messages are logged in the log file `upgrade_db.log`. Please contact Cisco if the upgrade fails.

The log files are created at the same location from where you launch the utility.