Cisco Unified Web and E-Mail Interaction Manager Upgrade Guide, Release 11.0(3)
For Unified Contact Center Enterprise

November 2016
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Preface

- Audience
- Obtaining Documentation and Submitting a Service Request
- Documentation Feedback
- Field Alerts and Field Notices
- Document Conventions
- Other Learning Resources
Welcome to Cisco® Unified EIM & WIM™, 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.

Unified EIM & WIM 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 - Release 11.0(3)* describes the various tasks required to upgrade your Unified EIM & WIM 11.0(x) application to Unified EIM & WIM 11.0(3). This guide is intended for installation engineers, system administrators, and database administrators who are responsible for installing and maintaining Unified EIM & WIM installations that are either standalone or integrated with Cisco Unified Contact Center Enterprise (Unified CCE).

To assist you with the upgrade process, this guide includes a check list that you can use to track your progress. Find “Appendix B: Check List” on page 62. Use this list to mark off items as you progress through the upgrade process.

**Important:** If your Unified EIM & WIM 11.0(x) system includes customizations, contact Cisco before upgrading to Unified EIM & WIM 11.0(3).

**Obtaining Documentation and Submitting a Service Request**


Subscribe to *What’s New in Cisco Product Documentation*, which lists all new and revised Cisco technical documentation as an RSS feed and delivers content directly to your desktop using a reader application. The RSS feeds are a free service.
Documentation Feedback

To provide comments about this document, send an email message to the following address: contactcenterproducts_docfeedback@cisco.com

We appreciate your comments.

Field Alerts and Field Notices

Cisco products may be modified or key processes may be determined to be important. These are announced through use of the Cisco Field Alerts and Cisco Field Notices. You can register to receive Field Alerts and Field Notices through the Product Alert Tool on Cisco.com. This tool enables you to create a profile to receive announcements by selecting all products of interest.

Log into www.cisco.com and then access the tool at http://www.cisco.com/cisco/support/notifications.html

Document Conventions

This guide uses the following typographical conventions.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italic</td>
<td>Emphasis. Or the title of a published document.</td>
</tr>
<tr>
<td>Bold</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>Monospace</td>
<td>The name of a file or folder, a database table column or value, or a command.</td>
</tr>
<tr>
<td>Variable</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>Help 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](http://www.cisco.com)


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*
Cisco Unified Web and E-Mail Interaction Manager Knowledge Manager’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
- Verifying Unified EIM and WIM Release Version
- Running Pre-Upgrade Utilities
- Planning Downtime
- Getting Started
To upgrade to Unified EIM and WIM 11.0(3), you need to complete a number of tasks, which include potential infrastructural upgrades, and completing certain pre-upgrade, upgrade, and post-upgrade tasks. This chapter will help you to plan your upgrade.

The Unified EIM and WIM 11.0(3) Upgrader supports upgrade from Unified EIM and WIM 11.0(1) or higher to Unified EIM and WIM 11.0(3).

Planning the Upgrade

- Read this guide before upgrading to Unified EIM and WIM 11.0(3). The chapter “Pre-Upgrade Tasks” on page 14 contains a set of tasks that must be completed before beginning the upgrade.

- To assist you with the upgrade process, this guide includes a check list that you can use to track your progress. Find “Appendix B: Check List” on page 62 and print it. Use this list to mark off items as you progress through the upgrade process. It is especially important to use this list if you are upgrading from Unified EIM and WIM 11.0(1).

- If you are upgrading from Unified EIM and WIM 11.0(1) you must run the Pre-Upgrade utilities before running the actual Upgrader. For details, see “Running Pre-Upgrade Utilities” on page 12.

- If you are upgrading from Unified EIM and WIM 11.0(1), the report summarization job on the Unified EIM and WIM 11.0(1) databases should be up to date before the upgrade is performed (page 15). You must perform this task before taking backups of the databases for the upgrade.

- While upgrading from Unified EIM and WIM 11.0(1) to Unified EIM and WIM 11.0(3), you need to run the Upgrader on the Unified EIM and WIM 11.0(1) file server, services server, all web servers, all application servers, and messaging server.

Verifying Unified EIM and WIM Release Version

The Unified EIM and WIM 11.0(1) installation should be on version 11.0.(1) or higher to be able to upgrade to Unified EIM and WIM 11.0(3).

To verify the release version:

1. Open the Unified EIM and WIM Login window and click the About button.
2. Click the History tab and verify that the current version is 11.1.0 or higher.

Running Pre-Upgrade Utilities

Important: Skip this section if you are upgrading from Unified EIM and WIM 11.0.(2)
The Upgrader comes with two utilities, DB PreCheck Utility and DBUpdate Utility, that can be run before doing the actual upgrade. DB PreCheck utility can be run on Unified EIM and WIM 11.0(1) production databases. The DBUpdate Utility must always be run on copies of databases, and not on the actual Unified EIM and WIM 11.0(1) databases.

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

- The DB PreCheck Utility checks if there is any data in the databases that can cause the upgrade to fail. If any such issues are found, it logs them in a file. All these issues must be fixed before running the actual upgrader. This is a read only utility and does not make any modifications on the databases.
- The DBUpdate Utility actually upgrades the standalone copies of the databases and reports if the upgrade can fail because of any database issues. The utility can also help you estimate the disk space required on the database servers.

For details about running these utilities, see “Appendix A: Pre-Upgrade Utilities” on page 48.

Planning Downtime

- Time to back-up Unified EIM and WIM 11.0(x) databases (page 17): This time will vary based on the size of your databases. You can do a standalone back-up and restore of your databases to estimate the required time.

Getting Started

The upgrade 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**: Run the Upgrader on the file server, services server, messaging server, all application servers, and all web servers in the deployment. Details are in “Upgrade Process” on page 23.

- **Post-upgrade tasks**: To be performed after completing the upgrade. For details, refer to “Post-Upgrade Tasks” on page 40.
Pre-Upgrade Tasks

- Verifying Status of Reports Summarization Job in Unified EIM and WIM 11.0(1)
- Opening Ports Between Servers
- Configuring Spam Filters on Mail Server
- Installing IIS URL Rewrite Module on Web Servers
- Stopping the Application
- Stopping IIS
- Backing up Unified EIM and WIM 11.0(x) Installation
- Backing up Unified EIM and WIM 11.0(x) Databases
- Preparing Reports Server for Supporting Custom Attributes in Reports
- Installing JDK
- Installing WildFly
This chapter describes the pre-upgrade procedures that need to be completed before beginning the upgrade process.

Verifying Status of Reports Summarization Job in Unified EIM and WIM 11.0(1)

The report summarization job on the Unified EIM and WIM 11.0(1) databases should be up to date before the upgrade is performed. You must perform this task before taking backups of the databases for the upgrade.

To check the status of reports summarization job:

- Run the following query on the Unified EIM and WIM 11.0(1) reports database to find when the job was last run. If your installation uses MSSQL Standard Edition, then run the query on the Unified EIM and WIM 11.0(1) active database:

  ```sql
  select * from egplr_scheduled_task_status
  ```

  The query will give you the date and time of the last successful run of the job which must not be older than 24 hours. Ignore the date and time conditions for the job `usp_arch_event_hist_case_mgmt` as this is the archiving job and may show last run data older than 24 hours. However, the last run of other jobs should not be older than 24 hours. Contact Cisco TAC for assistance to fix this issue.

Opening Ports Between Servers

- With support for WildFly 8.2.0, ports 9001 and 9002 are required to be open between the following servers. If you do not want to use the default ports, you can use other available ports. You will be asked to provide the port numbers while running the upgrader on the messaging server (page 32) and application server (page 35).

<table>
<thead>
<tr>
<th>From Server</th>
<th>To Server</th>
<th>Default Destination Ports and Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Server</td>
<td>Messaging Server</td>
<td>5445</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9001, 9002 [Protocol: TCP]</td>
</tr>
</tbody>
</table>
Configuring Spam Filters on Mail Server

Starting with Release 11.0(3), the application does not do special handling of spam emails. Before updating your application to 11.0(3), you must configure the spam filter on your IMAP or POP3 mail server to handle spam emails coming in the system. For the list of blocked addresses and domains that are configured in the application, go to the Administration Console and browse to Administration > Departments > Department_Name > Email > Blocked Addresses.

The following partition level settings will no longer be available in the application:

- Spam Mails SMTP Server
- Spam Mails SMTP Protocol
- Spam Mails SMTP Port
- Spam Mails SMTP User Name
- Spam Mails SMTP Password
- Spam Mails Auto BCC
- Action on Spam Emails
- Spam Mail Maximum File Size (MB)
- Spam Mail Redirection SMTP Preference
- Spam Mail Redirection From Address
- Spam Mail Redirection to Address

Installing IIS URL Rewrite Module on Web Servers

The IIS URL Rewrite module must be installed on all web servers in the deployment. Download and install the module from the Microsoft website. The installation program is also available in the Environment\URL Rewrite folder of the upgrade package.

After installing the module, restart IIS.
Stopping the Application

Make sure that the application is stopped on the Unified EIM and WIM 11.0(x) 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.

Stopping IIS

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

Backing up Unified EIM and WIM 11.0(x) Installation

Take a back-up of the Unified EIM and WIM 11.0(x) installation home directories on the following servers:

- File server
- Services servers
- Application servers
- Web servers
- Messaging Servers

Backing up Unified EIM and WIM 11.0(x) Databases

You should back up the master, active, archive (SQL Standard Edition installations), and reports (SQL Enterprise Edition installations) databases. These backup copies will enable you to restore the system if you encounter any problems while upgrading.

1. Back up the master database.
2. Back up the active database.
4. Back up the reports database. (SQL Enterprise Edition installations)
5. Take a backup of the report job. The name of the job will be like `populatesmy_Reports_Database_Name`. For example, `populatesmy_eGReportsDB`. A backup of the job can be taken by creating a backup script using the SQL Management Studio.

### Preparing Reports Server for Supporting Custom Attributes in Reports

*Note: Skip this section if you are upgrading from Unified EIM and WIM 11.0(2)*

This task is required in deployments that use the Enterprise Edition of MS SQL Server and must be completed before applying Release 11.0(3).

There are six parts to completing this task:

1. First, create a domain user account. This is required only if you are using SQL Authentication for the databases. (page 18).
2. Next, install the SQL Server Integration service on the reports database server machine (page 18).
3. Then, create the SSISDB catalog (page 19).
4. Next, configure the recovery model for SSISDB (page 20).
5. Then, assign specific permissions to the domain user running the installer to allow them to make updates to this catalog and the schema (page 20).
6. Verify **Replace a process-level token** privilege has been enabled for the server (page 23).
7. Finally, create a folder on the machine where all data files that will be created by the application (page 23).

### Creating Domain User Account

- Skip this task if you are using Windows Authentication or you are upgrading from Release 11.0(2). If you plan to use SQL Authentication for the databases, then integration services will require a domain user. See the “**Setting Up Domain Account**” section in the *Cisco Unified Web and E-Mail Interaction Manager Installation Guide* for details about creating a domain user.

### Installing SQL Server Integration Service

*Note: Skip this section if you are upgrading from Unified EIM and WIM 11.0(2)*
Install the SQL Server Integration Service on the reports database server machine. To install and configure the SQL Server Integration Service, follow the instructions in the Microsoft SQL Server 2012 documentation. For details, go to http://msdn.microsoft.com and search for SQL Server Integration Service.

Creating Integration Services Catalog

**Note:** Skip this section if you are upgrading from Unified EIM and WIM 11.0(2)

Before you begin, ensure that the SQL Server Integration Service is installed on the reports database server machine.

**To create the Integration Services Catalog:**

1. From SQL Server Management Studio, log into the reports database server with the domain user that you used for installing the Unified EIM and WIM database with Windows Authentication. If the setup is using SQL Authentication, then use the domain account created in “Creating Domain User Account” on page 18.

2. Locate the **Integration Services Catalogs** node in the Tree pane and use the context menu to create catalog. While creating the catalog, ensure that **Enable CLR Integration** and **Enable automatic execution of Integration Services stored procedure at SQL Server startup** options are selected.

3. After the catalog is created, you should see when you expand the SSISDB in the **Integration Services Catalogs** node.

4. Right-click SSISDB and from the context menu, select **Properties**, and configure the following properties:
   - **Clean Logs Periodically**: Set this value to **True**.
   - **Retention Period (days)**: Set this value as **30** days.
   - **Periodically Remove Old Versions**: Set this value to **False**.

![Configure SSIS properties](image)
Configuring Recovery Model for SSIS Database

Note: Skip this section if you are upgrading from Unified EIM and WIM 11.0(2)

Change the recovery model for the SSIS database to Simple.

To configure the recovery model for SSIS database:
1. From SQL Server Management Studio, log into the reports database server.
2. Browse to Databases > SSISDB.
3. Right-click SSISDB and from the context menu, select Properties.
4. In the Database Properties window, go to the Options section and change the Recovery model to Simple and click OK.

Set the recovery model for the database

Configuring Permissions for the Domain User

Note: Skip this section if you are upgrading from Unified EIM and WIM 11.0(2)

Ensure that the domain user updating the Unified EIM and WIM application has the required permissions.

To configure permissions:
1. From SQL Server Management Studio, log into the reports database server as a database administrator.
2. Browse to Security > Logins > New login and do the following:
a. Add the new domain login (page 18) and set the default database as $SSISDB$. You need to perform this task if your domain account is not already mapped to the SQL logins.

Add the new domain user

b. From the Server Roles section, assign the following server roles:
   - public
   - bulkadmin

Set the server roles
c. In the User Mapping section, do the following:
   - Select the **Map** option for **SSISDB** select the default schema as **catalog**.
   - In the Database role membership for: SSISDB section assign the **ssis_admin** role.

3. Now, browse to **Databases > SSISDB > Security > Users**, and do the following:
   a. Right-click the domain user and select **Properties**.
   b. In the Database User window, go to the Membership section and select **db_owner** and **ssis_admin**. Click **OK**.
Verifying Server Privileges

Ensure the “Replace a process level token” privilege is enabled for the NT Service\MSSQL Server.

To verify server privileges:
1. On the database server where the Reports DB is installed, open the command prompt and run `gpedit.msc`. The Local Group Policy Management Editor opens.
3. From the policy list, double-click Replace a process level token.
4. In the window that opens, click the Add User or Group... button.
5. Add the NT Service\DB_Instance_Name service account to the privilege.
   - If you are using the default instance name for the reports database, it will be NT_SERVICE\MSSQLSERVER.
   - If the reports database is installed with a named instance, add the service account NT_SERVICE\MSSQLDB_Instance_Name. If you are using MSSQL Server clustering, provide the name of the Virtual SQL Service Instance.
6. To apply your changes, reboot the SQL servers of that environment. If the privileges were already enabled on the service account, a reboot is not necessary.

Creating Directory for Data Files

Create a directory on the reports server machine, for example, `D:\sis_data` and ensure that the domain user has write permissions on this folder.

Installing JDK

If you have not already done so, install JDK 1.8 Update 65 (64-bit) on the machines where the application server, services server, and messaging server components are installed. The installation program for JDK 1.8 Update 65 is included in the Environment\Server Side Java folder of the installation package.
Installing WildFly

Note: Skip this section if you are upgrading from Unified EIM and WIM 11.0(2)

Deployments must install version WildFly 8.2.0 on all application servers and the messaging server.

To install WildFly:


2. Use a zip file extraction tool like WinZip to extract the files from the `wildfly-8.2.0.Final.zip` file to the location where WildFly is to be installed (WildFly_Home), for example, `C:\wildfly-8.2.0.Final`.

3. Open the folder to verify that the following folders have been extracted: `appclient`, `bin`, `docs`, `domain`, `modules`, `standalone`, and `welcome-content`. The following files should also be present: `copyright.txt`, `jboss-modules.jar`, `license.txt`, and `readme.txt`. You have now installed WildFly 8.2.0.

4. Take a back-up of the `WildFly_Home\standalone` directory.

5. Once WildFly is installed, the `wildfly-8.2.0.Final.zip` file can be deleted from the temporary folder.
Upgrade Process

- Upgrading the File Server
- Upgrading the Services Server
- Upgrading the Messaging Server
- Upgrading the Application Servers
- Upgrading the Web Servers
This chapter describes the process of upgrading to Unified EIM and WIM 11.0(3). Before beginning the upgrade, ensure that you have complied with all the prerequisites listed in “Pre-Upgrade Tasks” on page 14.

In single-server installations, run the Upgrader on the file server. In distributed server installations, run the Upgrader on the file server, services server, messaging server, all web servers, and all application servers in the deployment.

---

**Important:** Always run the Upgrader on the file server first. If the file server is installed on a NAS device, run the upgrader on any of the components and the file server will be upgraded along with that component.

---

## Upgrading the File Server

Run the Upgrader on the Unified EIM and WIM 11.0(x) file server.

---

**Important:** When running the upgrade you must be logged on to the server using the same domain account that was used for installing Unified EIM and WIM.

---

**To upgrade the file server:**

1. Check to see that you have closed all the application files before you begin the upgrade. For example, eService.ear or any other files opened from any other application folders should be closed.

2. Create a temporary folder, `Temporary_Folder` and from the upgrade package, copy the upgrade files into `Temporary_Folder`.

3. Double-click `setup_windows.exe` to launch the Unified EIM and WIM 11.0(3) 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**.

![License Agreement](image1.jpg)

*Read and accept the terms of the License Agreement*

6. In the Cisco Unified EIM & WIM Home Directory window, type the path or browse to the folder where Unified EIM and WIM 11.0(x) is installed. Click **Next**.

![Home Directory](image2.jpg)

*Provide the location of the Unified EIM & WIM home directory*
7. In the Unified EIM & WIM 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 MSSQL Authentication mode to connect to the MSSQL Server.

![Provide the Unified EIM and WIM 11.0(1) database parameters](image)

8. In the Product Information window, check the current version of Unified EIM and WIM 11.0(x) installed. The current version should be 11.0.1 or higher. Click Next.

9. In the Upgrade Summary window, verify the version being installed. It should be 11.0.3. The screen also notifies you if you need to run the Upgrader on additional servers. This information only appears while running the Upgrader on the file server. If using NAS, this information is displayed on the first component where you run the Upgrader. Click Next.
10. In the Reports database SSIS Parameters window, provide the path of the SSIS Directory created on the reports database server. See “Creating Directory for Data Files” on page 23. This step is only required while upgrading from Release 11.0(1).

![Provide the path of the SSIS Directory](image)

11. In the User Input Summary window, verify the information provided by you during the upgrade process. Click **Install**.

The Upgrader creates a backup of the file system at `Cisco_Home\Patches\Backup\Pre_Upgrade_Version\FileServer` and starts upgrading the application.

12. 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 11.0(x) services server.

**Important:** When running the upgrade you must be logged on to the server using the same domain account that was used for installing Unified EIM and WIM 11.0(1).

**To upgrade the services server:**

1. Check to see that you have closed all the application files before you begin the upgrade.
2. Create a temporary folder, `Temporary_Folder` and from the upgrade package, copy the upgrade files into `Temporary_Folder`.
3. Double-click `setup_windows.exe` to launch the Unified EIM and WIM 11.0(3) 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**.

6. In the Cisco Unified EIM & WIM Home Directory window, type the path or browse to the folder where Unified EIM and WIM 11.0(x) is installed. Click **Next**.
7. In the File Server Parameters window, type the name of the Unified EIM and WIM 11.0(x) file server or the UNC path to NAS. Click Next.

8. In the Product Information window, verify the Unified EIM and WIM 11.0(x) components installed on the machine. Click Next.

9. In the Upgrade Summary window, verify the version being installed. It should be 11.0(3). The screen also notifies you if you need to run the Upgrader on additional servers. Click Next.

10. In the JDK Home Directory window, provide the path of JDK 1.8 update 65 home directory. Click Next.

11. 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\FileServer` and starts upgrading the installation.

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

---

**Upgrading the Messaging Server**

In distributed-server installations, the Upgrader needs to be run on the Unified EIM and WIM 11.0(x) messaging server.

**Important:** When running the upgrade you must be logged on to the server using the same domain account that was used for installing Unified EIM and WIM 11.0(1).

**To upgrade the messaging server:**

1. Check to see that you have closed all the application files before you begin the upgrade. For example, `eService.ear` or any other files opened from any other application folders must be closed.
2. Create a temporary folder, `Temporary_Folder` and from the upgrade package, copy the upgrade files into `Temporary_Folder`.
3. Double-click `setup_windows.exe` to launch the Unified EIM and WIM 11.0(3) 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 Cisco Unified EIM & WIM Home Directory window, type the path or browse to the folder where Unified EIM and WIM 11.0(x) is installed. Click **Next**.

![Cisco Unified EIM & WIM Home Directory](image1)

*Provide the location of the Unified EIM & WIM home directory*

7. In the File Server Parameters window, type the name of the Unified EIM and WIM 11.0(x) file server or the UNC path to NAS. Click **Next**.

![File Server Parameters](image2)

*Provide the location of the Unified EIM and WIM 11.0(x) file server*

8. In the Product Information window, verify the Unified EIM and WIM 11.0(x) components installed on the machine. Click **Next**.

9. In the Upgrade Summary window, verify the version being installed. It should be 11.0(3). The screen also notifies you if you need to run the Upgrader on additional servers. Click **Next**.
10. In the JDK Home Directory window, provide the path of JDK 1.8 update 65 home directory. Click Next.

![Provide the JDK home](image1)

11. In the WildFly Parameters windows, provide the path of Wildfly 8.2.0 home directory and port numbers. Click Next.

![Provide WildFly parameters](image2)

12. 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\FileServer` and starts upgrading the installation.

13. In the Installation Status window, click the Close button to complete the upgrade process.
Upgrading the Application Servers

In distributed-server installations, the Upgrader needs to be run on all Unified EIM and WIM 11.0(x) application servers.

**Important:** When running the upgrade you must be logged on to the server using the same domain account that was used for installing Unified EIM & WIM 11.0(1).

To upgrade the application server:

1. Check to see that you have closed all the application files before you begin the upgrade.
2. Create a temporary folder, `Temporary_Folder` and from the upgrade package, copy the upgrade files into `Temporary_Folder`.
3. Double-click `setup_windows.exe` to launch the Unified EIM and WIM 11.0(3) 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**.

![License Agreement window](image)

*Read and accept the terms of the License Agreement*
6. In the Cisco Unified EIM & WIM Home Directory window, type the path or browse to the folder where Unified EIM and WIM 11.0(x) is installed. Click Next.

7. In the File Server Parameters window, type the name of the Unified EIM and WIM 11.0(x) file server or the UNC path to NAS. Click Next.

8. In the Product Information window, verify the Unified EIM and WIM 11.0(x) components installed on the machine. Click Next.

9. In the Upgrade Summary window, verify the version being installed. It should be 11.0(3). The screen also notifies you if you need to run the Upgrader on additional servers. Click Next.
10. In the JDK Home Directory window, provide the path of JDK 1.8 update 65 home directory. Click Next.

![Provide the JDK home directory]

11. In the WildFly Parameters windows, provide the path of Wildfly 8.2.0 home directory and port numbers. Click Next.

![Provide WildFly parameters]

12. 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\FileServer and starts upgrading the installation.

13. In the Installation Status window, click the Close button to complete the upgrade process.
Upgrading the Web Servers

In distributed-server installations, the Upgrader needs to be run on all Unified EIM and WIM 11.0(x) web servers.

To upgrade the web server:

1. Check to see that you have closed all the application files before you begin the upgrade. For example, eService.ear or any other files opened from any other application folders must be closed.

2. Create a temporary folder, Temporary_Folder and from the upgrade package, copy the upgrade files into Temporary_Folder.

3. Double-click setup_windows.exe to launch the Unified EIM and WIM 11.0(3) 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.

Important: When running the upgrade you must be logged on to the server using the same domain account that was used for installing Unified EIM & WIM.
6. In the Cisco Unified EIM & WIM Home Directory window, type the path or browse to the folder where Unified EIM and WIM 11.0(x) is installed. Click **Next**.

![Provide the location of the Unified EIM & WIM home directory](image)

7. In the Product Information window, verify the Unified EIM and WIM 11.0(x) components installed on the machine. Click **Next**.

8. In the Upgrade Summary window, verify the version being installed. It should be 11.0(3). The screen also notifies you if you need to run the Upgrader on additional servers. Click **Next**.

9. 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\FileServer` and starts upgrading the installation.

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

- Updating Custom Chat Templates
- Updating Finesse Files
- Updating Name of Session Management Cookie
- Starting IIS
- Starting Unified EIM and WIM 11.0(3)
- Managing Integration with Unified CCE
- Setting up User Desktops
- Troubleshooting Procedures
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 11.0(x) installation if the upgrade fails.

**Updating Custom Chat Templates**

You need to perform these tasks only if your installation includes Unified WIM and you want to use the new features introduced in the newer releases of the product. Perform these tasks on all Unified EIM and WIM 11.0(3) web servers in your deployment.

To benefit from the newest features added in 11.0(3), your custom templates must have been created using the Kiwi template, the new template set included in Release 11.0.(2).

Perform these tasks on all web servers in your deployment. Steps for updating the template files vary based on the starting point of your custom templates:

- For updating templates created using Kiwi template, see page 41.
- For templates created using Sunburst template, see page 43.

**For Custom Templates Created From Kiwi Template**

**To update the custom chat template files:**

1. Merge the updates in the following files from the Kiwi template folder with the files in the custom template folder. If a file doesn’t exist in the customer template folder, copy it and paste it in:

   - `Cisco_Home\eService\templates\chat\kiwi`:
     - chat.html
     - eGainLiveConfig.js
   - `Cisco_Home\eService\templates\chat\kiwi\chat\js`:
     - attachment.js
     - chat.js
     - connection.js
     - core.js
     - deflection.js
     - editor.js
     - header.js
     - login.js
     - messenger.js
     - multiselect.js
     - survey.js
     - video.js
   - `Cisco_Home\eService\templates\chat\kiwi\cobrowse\js`:
     - cobrowse.js
   - `Cisco_Home\eService\templates\chat\kiwi\chat\less`:
     - chat-main.less
   - `Cisco_Home\eService\templates\chat\kiwi\properties:`
• chat_da_DA.properties
• chat_de_DE.properties
• chat_en_US.properties
• chat_es_ES.properties
• chat_fr_CA.properties
• chat_fr_FR.properties
• chat_it_IT.properties
• chat_ja_JP.properties
• chat_ko_KR.properties
• chat_nl_NL.properties
• chat_pt_BR.properties
• chat_pt_PT.properties
• chat_ru_RU.properties
• chat_sv_SV.properties
• chat_zh_CN.properties
• messaging_da_DA.properties
• messaging_de_DE.properties
• messaging_en_US.properties
• messaging_es_ES.properties
• messaging_fr_CA.properties
• messaging_fr_FR.properties
• messaging_it_IT.properties
• messaging_ja_JP.properties
• messaging_ko_KR.properties
• messaging_nl_NL.properties
• messaging_pt_BR.properties
• messaging_pt_PT.properties
• messaging_ru_RU.properties
• messaging_sv_SV.properties
• messaging_zh_CN.properties

2. Copy and paste the following image files from the Kiwi template folder to your custom template folder:

- Cisco_Home\eService\templates\chat\kiwi\chat\img:
  • chat_cust_attachment_icon.png
  • icon_attachment.png
  • icon_attachment_32.gif
  • icon_attachment_64.gif
  • icon_attachment_button.gif
  • icon_close.gif
  • icon_info.gif
  • icon_reject.gif
  • icon_reject_16.gif
  • icon_reject_24.gif
  • icon_reject_32.gif
  • icon_upload_32.gif
  • icon_upload_64.gif
For Custom Templates Created From Sunburst Template

Important: Skip this section if your system does not use Sunburst templates or if you are updating from Release 11.0.2.

To update the custom chat template files:

1. Merge the updates in the following files from the Sunburst template folder with the files in the custom template folder. If a file doesn’t exist in the customer template folder, copy it and paste it in:

   ○ Cisco_Home\eService\templates\chat\sunburst\chat\js:
     - altEngmt.js
     - chat.js
     - connection.js
     - core.js
     - deflection.js
     - editor.js
     - header.js
     - login.js
     - session.js
     - survey.js
     - thanks.js
     - video.js

   ○ Cisco_Home\eService\templates\chat\sunburst\chat\less:
     - chat-main.less

   ○ Cisco_Home\eService\templates\chat\sunburst:
     - chat.html
     - eGainLiveConfig.js

   ○ Cisco_Home\eService\templates\chat\sunburst\properties:
     - chat_da_DA.properties
     - chat_de_DE.properties
     - chat_en_US.properties
     - chat_es_ES.properties
     - chat_fr_CA.properties
     - chat_fr_FR.properties
     - chat_it_IT.properties
     - chat_ja_JP.properties
     - chat_ko_KR.properties
     - chat_nl_NL.properties
     - chat_pt_BR.properties
     - chat_pt_PT.properties
     - chat_ru_RU.properties
     - chat_sv_SV.properties
     - chat_zh_CN.properties
     - messaging_da_DA.properties
     - messaging_de_DE.properties
- messaging_en_US.properties
- messaging_es_ES.properties
- messaging_fr_CA.properties
- messaging_fr_FR.properties
- messaging_it_IT.properties
- messaging_ja_JP.properties
- messaging_ko_KR.properties
- messaging_nl_NL.properties
- messaging_pt_BR.properties
- messaging_pt_PT.properties
- messaging_ru_RU.properties
- messaging_sv_SE.properties
- messaging_zh_CN.properties

2. Copy and paste the following image files from the Sunburst template folder to your custom template folder:

   - Cisco_Home\eService\templates\chat\sunburst\chat\img:
     - go-off-record-isolated-webview-btn.png
     - go-on-record-isolated-webview-btn.png
   - Cisco_Home\eService\templates\chat\sunburst\chat\img\toolbar
     - icon_menu.png
   - Cisco_Home\eService\templates\chat\sunburst\chat\img\toolbar\active
     - mic.png
     - video.png
     - end_call.png
   - Cisco_Home\eService\templates\chat\sunburst\chat\img\toolbar\default
     - fontbig.png
     - fontsmall.png
     - mic.png
     - print.png
     - save.png
     - video.png
   - Cisco_Home\eService\templates\chat\sunburst\chat\img\toolbar\hover
     - fontbig.png
     - fontsmall.png
     - mic.png
     - print.png
     - save.png
     - video.png

**Updating Finesse Files**

You need to perform this task only if you are accessing the Unified EIM and WIM application through Cisco Finesse.
To update the finesse file:

1. On the Finesse server, locate the `eim_wim_server_url.js` file.

2. In the file locate the Unified EIM and WIM URL and update the URL by adding 
   `&finesse=1&layout=narrow` to the end of the URL. For example, the URL will look like:

   ```javascript
   var eim_wim_server_url = "http://<Web_Server_FQDN>/<Context_Root_Name>/web/view/platform/common/login/top.js
   p?partitionId=1&finesse=1&layout=narrow";
   ```

## Updating Name of Session Management Cookie

With Unified EIM and WIM 11.0(2) the name of Unified EIM and WIM’s session management cookie has been changed from `egain_stc` to `X-egain-session`.

- If you are using this cookie to maintain session persistence—also known as sticky sessions—you must update the configuration on your load balancer, or the component where you have configured session persistence, to use `X-egain-session` as the name of session management cookie. Please note that the cookie name is case sensitive.

## Verifying Ports Between Components

In addition to the ports identified in the Unified EIM and WIM Installation Guide, and the Upgrade Guide for Release 11.0(2), ensure that the following ports are open.

<table>
<thead>
<tr>
<th>From Server</th>
<th>To Server</th>
<th>Default Destination Ports and Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Server</td>
<td>Messaging Server</td>
<td>9001 [Protocol: Remote], 5445*</td>
</tr>
<tr>
<td>Services Server</td>
<td>Messaging Server</td>
<td>9001*, 5445 [Protocol: Remote]</td>
</tr>
</tbody>
</table>

## Starting IIS

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

## Starting Unified EIM and WIM 11.0(3)

To start Unified EIM & WIM:

- 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.

Managing Integration with Unified CCE

After the upgrade, the integration as well importing of new users, skill groups, and Media Routing Domains is managed from the Administration Console. For details, see the Cisco Unified Web and E-Mail Interaction Manager Administrator’s Guide to Administration Console.

Setting up User Desktops

You must clear the web cache and the Java cache before logging in to the application.

To set up user desktops:

1. Ensure that the user desktops meet the requirements outlined in Hardware and System Software Specification for Cisco Unified Web and E-Mail Interaction Manager. If you are changing the Internet Explorer on the user desktops, follow the instructions in the Cisco Unified Web and E-Mail Interaction Manager Browser Settings Guide to configure the user desktops.

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

3. Clear the Java cache on every user desktop by doing the following:
   a. If you are using 64-bit Internet explorer, Go to Start > Settings > Control Panel and double-click Java.
   b. If you are using 32-bit Internet explorer, open the Java Control Panel window by double-clicking the javacpl.exe file available at the following location: C:\Program Files (x86)\Java\jre8\bin.
   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. Click OK to close the window.
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 11.0(x) Installation

If you encounter any problems while upgrading, you can restore the Unified EIM and WIM 11.0(x) installation and run the Upgrader again.

**To restore the Unified EIM and WIM 11.0(x) installation:**

- Restore the Unified EIM and WIM 11.0(x) installation. The backup copies are available at `Cisco_Home\Patches\Backup\Pre_Upgrade_Version\File Server`. Perform this task on the file server and all services servers.
- Restore the back-up copies of the databases and the reports job (page 17).
Appendix A: Pre-Upgrade Utilities

- About the Utilities
- Database Pre-Check Utility
- Database DBUpdate Utility
About the Utilities

The Upgrader comes with two utilities, DB PreCheck Utility and DBUpdate Utility, that can be run before doing the actual upgrade.

Important: It is highly recommended that you run these utilities before running the actual Upgrader on your installation. Please contact Cisco TAC if any issues are identified by these utilities.

- 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. This utility also detects the disk space required on the databases servers to run the upgrader successfully. For details about running this utility, see “Running DB Pre-Check Utility” on page 50.

- The DBUpdate 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 this utility, see “Running DBUpdate Utility” on page 60.

Database Pre-Check Utility

Preparing to Run the Utility

Installing JDK

- Install JDK 1.8 Update 65 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 Unified EIM & WIM 11.0(1) databases. This section describes the format of these URLs. You will require these URLs while configuring the utilities (page 50).

Configure URLs for the following databases:

- Master database
- Active database
- Reports database (For installations using Enterprise Edition of MSSQL)
- Archive database (For installations using Standard Edition of MSSQL)
To configure the database URLs:

The database URLs are configured in the format:
```
jdbc:sqlserver://Server_Name:Port_Number;instanceName=Instance_Name;integratedSecurity=true_or_false;databaseName=Database_Name
```

Where:
- `Server_Name`: Name of the server where the Unified EIM & WIM 11.0(1) databases are installed.
- `Port_Number`: The port number for the MSSQL server. The default port is 1433.
- `Instance_Name`: The name of the MSSQL instance for 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 Unified EIM & WIM 11.0(1) database.

For example, the database URL will look like:
```
jdbc:sqlserver://productDB:1433;instanceName=mssqlserver;integratedSecurity=true;databaseName=ActiveDB
```

Running DB Pre-Check Utility

This utility needs to be run on the actual Unified EIM & WIM 11.0(1) databases. The application does not have to be stopped to run the DB Pre-check utility. You need to have access to the Unified EIM & WIM 11.0(1) database servers from the machine you are trying to run this utility.

To run the DB Pre-Check utility:

1. Create a temporary folder, `Temporary_Folder`.
2. From the upgrade files, copy the `Utilities\DBPrecheck\windows-mssql` folder into `Temporary_Folder`.
3. Open the `Temporary_Folder\Utilities\DBPrecheck\windows-mssql\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 53.
   - `MASTER_DATABASE_URL`: Provide the master database URL. For the format of the URL, see “Configuring Database URLs” on page 53.
   - Set the following four 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.
     - `ACTIVE_USER`: Database username of the active database.
     - `ACTIVE_PASS`: Database password of the active database.
   - Set the following four 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.

MASTER_ADMIN_PASS: Password of the database administrator.

MASTER_USER: Database username of the master database.

MASTER_PASS: Database password of the master database.

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 53.

Set the following four 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.

- ARCHIVE_USER: Database username of the archive database.

- ARCHIVE_PASS: Database password of the archive database.

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 53.

Set the following four 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.

- REPORTS_USER: Database username of the reports database.

- REPORTS_PASS: Database password of the reports database.

4. Open the `Temporary_Folders\Utilities\DBPrecheck\windows-mssql\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 1.8 Update 65 or higher is installed on your machine (page 49). For example, `C:/Java/jdk1.8.0_65`.

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.

**Database DBUpdate Utility**

**Preparing to Run the Utility**

**Installing JDK**

- Install JDK 1.8 Update 65 or higher on the machines from where you are going to run the utilities.

**Restoring Databases**

The DBUpdate utility should always be run on copies of databases and not on the actual databases for your installation. While restoring the databases, make sure that edition of MSSQL 2012 database server matches the edition of the Unified EIM & WIM databases. For example:

- If your Unified EIM and WIM 11.0(1) installation is using the Enterprise Edition of MSSQL 2012, restore your databases on the Enterprise Edition of MSSQL 2012.

**To restore the databases:**

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

**Creating Database Users for Unified EIM and WIM Databases**

- Create database users for the restored Unified EIM and WIM 11.0(1) databases. This information will be required while configuring the DBUpdate Utility (page 60). Scripts and instructions to create the users are available in the upgrade package in the `Utilities\DBUpdate\LoginCreationScripts` folder.
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 60).

Configure URLs for the following databases:

- Master database
- Active database
- Reports database (For installations using Enterprise Edition of MSSQL)
- Archive database (For installations using Standard Edition of MSSQL)

To configure the database URLs:

The database URLs are configured in the format:

```
jdbc: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:

```
jdbc: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.

If you plan to use Windows Authentication for creating these links, you have to setup user accounts and permissions and do some configurations on the database servers. For details about doing these tasks see the following sections in the *Cisco Unified Web and E-Mail Interaction Manager Installation Guide – Setting Up User Accounts and Permissions* and *Configuring Database Servers*.

To configure the database link from the active database to the archive 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. The link name should not contain any spaces or special characters. This is the link name used while configuring the utility (page 61).
   - **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, `archivedbserver\myinstance`. If you are using the default instance (`mssqlserver`), then just provide the name of the server. For example, `archivedbserver`.

   ![Linked Server Window](image)

   *Set the general properties*

   b. In the Security section, provide the following details if you are planning to run the utility with Windows Authentication, or skip to Step c.
In the For a login not defined in the list above, connections will section, select the Be made using the login’s current security context option.

Set the security option

c. In the Security section, provide the following details if you are planning to run the utility with SQL Authentication:
   i. In the Local server login to remote server mapping section, click Add.
   ii. Set the Local Login as the active database user name, and the Remote User as the archive database user name and Remote Password as the archive database user password.
   iii. Click Add again.
   iv. Set the Local Login as the currently logged in sa user name, and the Remote User as the archive database user name and Remote Password as the archive database user password.
v. In the **For a login not defined in the list above, connections will** section, select the **Not be made** option.

Set the security option

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

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

Set the server options

e. Click **OK**.
Configuring Database Link from Reports Database to Active Database

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

If you plan to use Windows Authentication for creating these links, you have to setup user accounts and permissions and do some configurations on the database servers. For details about doing these tasks see the following sections in the Cisco Unified Web and E-Mail Interaction Manager Installation Guide – Setting Up User Accounts and Permissions and Configuring Database Servers.

To configure the database link from the reports database to the active 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. The link name should not contain any spaces or special characters. This is the link name used while configuring the utility (page 60).
      - **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\myinstance`. If you are using the default instance (`mssqlserver`), then just provide the name of the server. For example, `activedbserver`.

Set the general properties

b. In the Security section, provide the following details if you are planning to run the utility with Windows Authentication, or skip to Step c.

- In the For a login not defined in the list above, connections will section, select the Be made using the login’s current security context option.
c. In the Security section, provide the following details if you are planning to run the utility with SQL Authentication:

i. In the **Local server login to remote server mapping** section, click **Add**.

ii. Set the **Local Login** as the reports database user name, and the **Remote User** as the active database user name and **Remote Password** as the active database user password.

iii. Click **Add** again.

iv. Set the **Local Login** as the currently logged in \$a user name, and the **Remote User** as the active database user name and **Remote Password** as the active database user password.

v. In the **For a login not defined in the list above, connections will** section, select the **Not be made** option.

Set the security option

d. In the Server Options section, set the following and click **OK**.

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

Set the server details
Running DBUpdate Utility

To run the DBUpdate utility:

1. Create a temporary folder, Temporary_Folder.
2. From the upgrade files, copy the Utilities\DBUpdate\windows-mssql folder into Temporary_Folder.
3. Open the Temporary_Folder\Utilities\DBUpdate\windows-mssql\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 53.
   - MASTER_DATABASE_URL: Provide the master database URL. For the format of the URL, see “Configuring Database URLs” on page 53.
   - ACTIVE_ADMIN_USER: User name of the database administrator for MSSQL Server. Any database user with the following roles can be used: dbcreator, securityadmin, sysadmin.
   - ACTIVE_ADMIN_PASS: Password of the database administrator.
   - ACTIVE_USER: Database username of the active database (page 52).
   - ACTIVE_PASS: Database password of the active 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.
   - MASTER_USER: Database username of the master database (page 52).
   - MASTER_PASS: Database password of the master database.

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 53.
   - REPORTS_ACTIVE_DB_LINK: Set this property only if the active and reports databases are restored on different machines. Provide the link name configured in “Configuring Database Link from Reports Database to Active Database” on page 57.

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.
   - REPORTS_USER: Database username of the reports database (page 52).
   - REPORTS_PASS: Database password of 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.
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 53.
- **ACTIVE_ARCHIVE_DB_LINK**: Set this property only if the active and archive databases are restored on different machines. Provide the link name configured in “Configuring Database Link from Active Database to Archive Database” on page 53.

Set the following four 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.
- **ARCHIVE_USER**: Database username of the archive database (page 52).
- **ARCHIVE_PASS**: Database password of the archive database.

4. Open the `Temporary_Folder\Utilities\DBUpdate\windows-mssql\DBUpdate.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 1.8 Update 65 or higher is installed on your machine (page 52). For example, `C:/Java/jdk1.8.0_65`.

5. Double-click `DBUpdate.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 `DBUpdate.bat` files and try to run the utility again.
   - 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.
# Appendix B: Check List

## Preparing for Upgrade

<table>
<thead>
<tr>
<th>#</th>
<th>Task</th>
<th>Completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Schedule downtime for upgrading (<a href="#">page 13</a>).</td>
<td>☐</td>
</tr>
</tbody>
</table>

## Before Scheduled Downtime

### Tasks on Unified EIM and WIM 11.0.1(1) Installation

<table>
<thead>
<tr>
<th>#</th>
<th>Task</th>
<th>Completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Check Unified EIM &amp; WIM 11.0(1) version. Unified EIM &amp; WIM must be on 11.0.1 or higher (<a href="#">page 12</a>).</td>
<td>☐</td>
</tr>
<tr>
<td>2.</td>
<td>Run the <strong>DB PreCheck</strong> Utility. It identifies any data and DB schema related issues that may cause the upgrade to fail (<a href="#">page 49</a>).</td>
<td>☐</td>
</tr>
<tr>
<td>3.</td>
<td>Check the status of the report summarization job to make sure it is up to date (<a href="#">page 15</a>).</td>
<td>☐</td>
</tr>
<tr>
<td>4.</td>
<td>Open ports between servers (<a href="#">page 15</a>).</td>
<td>☐</td>
</tr>
</tbody>
</table>

### Tasks on any Windows 2012 Machine With SQL Server 2012

<table>
<thead>
<tr>
<th>#</th>
<th>Task</th>
<th>Completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Create a back-up of the Unified EIM and WIM 11.0.1(1) databases and restore them for running the <strong>DBUpdate</strong> utility (<a href="#">page 52</a>).</td>
<td>☐</td>
</tr>
<tr>
<td>2.</td>
<td>Run the <strong>DBUpdate</strong> Utility. It upgrades the restored Unified EIM &amp; WIM 11.0(1) databases and identifies any issues that can cause the upgrade to fail (<a href="#">page 60</a>).</td>
<td>☐</td>
</tr>
</tbody>
</table>
## During Scheduled Downtime

<table>
<thead>
<tr>
<th>#</th>
<th>Task</th>
<th>Completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Configure spam filter on mail servers</td>
<td>❑</td>
</tr>
<tr>
<td>2.</td>
<td>Install IIS URL Rewrite Module on Web Servers</td>
<td>❑</td>
</tr>
<tr>
<td>3.</td>
<td>Stop the application on the Unified EIM &amp; WIM 11.0(1) servers (page 17). On the services server machine, from the Windows Task Manager verify that none of the java and javaw processes (the services) are running.</td>
<td>❑</td>
</tr>
<tr>
<td>4.</td>
<td>Stop IIS on all web servers (page 17).</td>
<td>❑</td>
</tr>
<tr>
<td>5.</td>
<td>Take a backup of the Unified EIM &amp; WIM 11.0(x) directories (page 17).</td>
<td>❑</td>
</tr>
<tr>
<td>6.</td>
<td>Take a backup of the Unified EIM &amp; WIM 11.0(x) databases (page 17).</td>
<td>❑</td>
</tr>
<tr>
<td>8.</td>
<td>Install JDK (page 23).</td>
<td>❑</td>
</tr>
<tr>
<td>10.</td>
<td>Run the upgrader on the Unified EIM &amp; WIM 11.0(1) file server (page 24).</td>
<td>❑</td>
</tr>
<tr>
<td>11.</td>
<td>Run the upgrader on the Unified EIM &amp; WIM 11.0(1) services servers. (page 27).</td>
<td>❑</td>
</tr>
<tr>
<td>12.</td>
<td>Run the upgrader on the messaging server. (page 27).</td>
<td>❑</td>
</tr>
<tr>
<td>13.</td>
<td>Run the upgrader on all the application servers. (page 33).</td>
<td>❑</td>
</tr>
<tr>
<td>14.</td>
<td>Run the upgrader on all the web servers. (page 36).</td>
<td>❑</td>
</tr>
<tr>
<td>15.</td>
<td>Chat templates: Merge files from the Unified EIM &amp; WIM 11.0(x) templates with your custom templates to use new Unified EIM &amp; WIM 11.0(3) features (page 41) (Applies to installations using Unified WIM).</td>
<td>❑</td>
</tr>
<tr>
<td>16.</td>
<td>Update Finesse files (page 44). (Applies only if you use Cisco Finesse)</td>
<td>❑</td>
</tr>
<tr>
<td>17.</td>
<td>Update name of session management cookie (page 45).</td>
<td>❑</td>
</tr>
<tr>
<td>18.</td>
<td>Start IIS on all web servers (page 45).</td>
<td>❑</td>
</tr>
<tr>
<td>19.</td>
<td>Start the application on Unified EIM &amp; WIM 11.0(3) (page 45).</td>
<td>❑</td>
</tr>
</tbody>
</table>