



## **Cisco Unified Web and E-Mail Interaction Manager Upgrade Guide, Release 11.0(2)**

**For Unified Contact Center Enterprise**

February 2016

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# Contents

- Preface .....6**
  - Audience ..... 7
  - Obtaining Documentation and Submitting a Service Request ..... 7
  - Documentation Feedback ..... 8
  - Field Alerts and Field Notices ..... 8
  - Document Conventions..... 8
  - Other Learning Resources..... 9
    - Online Help ..... 9
    - Document Set ..... 9
  
- Chapter 1: Planning .....11**
  - Planning the Upgrade ..... 12
  - Verifying Unified EIM and WIM Release Version ..... 12
  - Running Pre-Upgrade Utilities ..... 12
  - Planning Downtime..... 13
  - Getting Started ..... 13
  
- Chapter 2: Pre-Upgrade Tasks .....14**
  - Verifying Status of Reports Summarization Job in Unified EIM and WIM 11.0(1) . . . . 15
  - Stopping the Application ..... 15
  - Stopping IIS ..... 16
  - Backing up Unified EIM and WIM 11.0(1) Installation..... 16
  - Backing up Unified EIM and WIM 11.0(1) Databases ..... 16
  - Preparing Reports Server for Supporting Custom Attributes in Reports ..... 16
    - Creating Domain User Account ..... 17
    - Installing SQL Server Integration Service ..... 17
    - Creating Integration Services Catalog..... 17
    - Configuring Permissions for the Domain User..... 18
    - Verifying Server Privileges..... 21
    - Creating Directory for Data Files ..... 21
  - Installing JDK ..... 21

Installing WildFly . . . . .	21
Configuring Port Number Between Components . . . . .	22
<b>Chapter 3: Upgrade Process . . . . .</b>	<b>25</b>
Upgrading the File Server . . . . .	26
Upgrading the Services Server . . . . .	29
Upgrading the Messaging Server . . . . .	32
Upgrading the Application Servers . . . . .	35
Upgrading the Web Servers . . . . .	38
<b>Chapter 4: Post-Upgrade Tasks . . . . .</b>	<b>40</b>
Updating Custom Chat Templates . . . . .	41
Updating Finesse Files . . . . .	42
Updating Name of Session Management Cookie . . . . .	42
Starting IIS . . . . .	42
Starting Unified EIM and WIM 11.0(2) . . . . .	42
Managing Integration with Unified CCE . . . . .	43
Setting up User Desktops . . . . .	43
Troubleshooting Procedures . . . . .	44
Viewing Log Files . . . . .	44
Restoring Unified EIM and WIM 11.0(1) Installation . . . . .	44
<b>Appendix A: Pre-Upgrade Utilities . . . . .</b>	<b>45</b>
About the Utilities . . . . .	46
Database Pre-Check Utility . . . . .	46
Preparing to Run the Utility . . . . .	46
Installing JDK . . . . .	46
Configuring Database URLs . . . . .	46
Running DB Pre-Check Utility . . . . .	47
Database DBUpdate Utility . . . . .	49
Preparing to Run the Utility . . . . .	49
Installing JDK . . . . .	49
Restoring Databases . . . . .	49
Creating Database Users for Unified EIM and WIM Databases . . . . .	49

Configuring Database URLs . . . . .	50
Configuring Database Link from Active Database to Archive Database . . . . .	50
Configuring Database Link from Reports Database to Active Database . . . . .	54
Running DBUpdate Utility . . . . .	57

**Appendix B: Check List . . . . . 59**

Preparing for Upgrade. . . . .	59
Before Scheduled Downtime . . . . .	59
During Scheduled Downtime . . . . .	60

# 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

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This *Cisco Unified Web and E-Mail Interaction Manager Upgrade Guide* describes the various tasks required to upgrade your Unified EIM & WIM 11.0(1) application to Unified EIM & WIM 11.0(2). 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 59](#). Use this list to mark off items as you progress through the upgrade process.



**Important:** If your Unified EIM & WIM 11.0(1) system includes customizations, contact Cisco before upgrading to Unified EIM & WIM 11.0(2).

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## Obtaining Documentation and Submitting a Service Request

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For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation*, at: <http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html>.

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.

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To provide comments about this document, send an email message to the following address:  
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We appreciate your comments.

## Field Alerts and Field Notices

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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](http://www.cisco.com) and then access the tool at <http://www.cisco.com/cisco/support/notifications.html>

## Document Conventions

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This guide uses the following typographical conventions.

Convention	Indicates
<i>Italic</i>	Emphasis. Or the title of a published document.
<b>Bold</b>	Labels of items on the user interface, such as buttons, boxes, and lists. Or text that must be typed by the user.
Monospace	The name of a file or folder, a database table column or value, or a command.
<i>Variable</i>	User-specific text; varies from one user or installation to another.

*Document conventions*




## Other Learning Resources

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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.

Use	To view
 <b>Help</b> button	Topics in <i>Cisco Unified Web and E-Mail Interaction Manager Help</i> ; the Help button appears in the console toolbar on every screen.
<b>F1</b> keypad button	Context-sensitive information about the item selected on the screen.

*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](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](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](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](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*

- ▶ *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*

# 1 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(2), 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(2) Upgrader supports upgrade from Unified EIM and WIM 11.0(1) or higher to Unified EIM and WIM 11.0(2).

## Planning the Upgrade

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- ▶ Read this guide before upgrading to Unified EIM and WIM 11.0(1). 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 59](#) and print it. Use this list to mark off items as you progress through the upgrade process.
- ▶ You *must* run the Pre-Upgrade utilities before running the actual Upgrader. For details, see [“Running Pre-Upgrade Utilities” on page 12](#).
- ▶ 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(2), 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(2).

### 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

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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 45](#).

## Planning Downtime

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- ▶ **Time to back-up Unified EIM and WIM 11.0(1) databases** ([page 16](#)): 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

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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 24](#).
- ▶ **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\(1\)](#)
- ▶ [Stopping the Application](#)
- ▶ [Stopping IIS](#)
- ▶ [Backing up Unified EIM and WIM 11.0\(1\) Installation](#)
- ▶ [Backing up Unified EIM and WIM 11.0\(1\) Databases](#)
- ▶ [Preparing Reports Server for Supporting Custom Attributes in Reports](#)
- ▶ [Installing JDK](#)
- ▶ [Installing WildFly](#)
- ▶ [Configuring Port Number Between Components](#)

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.



**Important:** This task does not need to be done during the scheduled downtime for 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:

```
select * from egplr_scheduled_task_status
```

The query will give you the date and time of the last successful run of the job, which should 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

## Stopping the Application

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

## Stopping IIS

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

## Backing up Unified EIM and WIM 11.0(1) Installation

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Take a back-up of the Unified EIM and WIM 11.0(1) 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(1) Databases

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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.
3. Back up the archive database. (SQL Standard Edition installations)
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

---

This task is required in deployments that use the Enterprise Edition of MS SQL Server and must be completed before applying Release 11.0(2).

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 17](#)).
2. Next, install the SQL Server Integration service on the reports database server machine ([page 17](#)).



3. Then, create the SSISDB catalog ([page 17](#)).
4. Then, assign specific permissions to the domain user running the installer to allow them to make updates to this catalog and the schema ([page 18](#)).
5. Verify **Replace a process-level token** privilege has been enabled for the server ([page 21](#)).
6. Finally, create a folder on the machine where all data files that will be created by the application ([page 21](#)).

## Creating Domain User Account

- ▶ Skip this task if you are using Windows Authentication. 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

- ▶ 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.

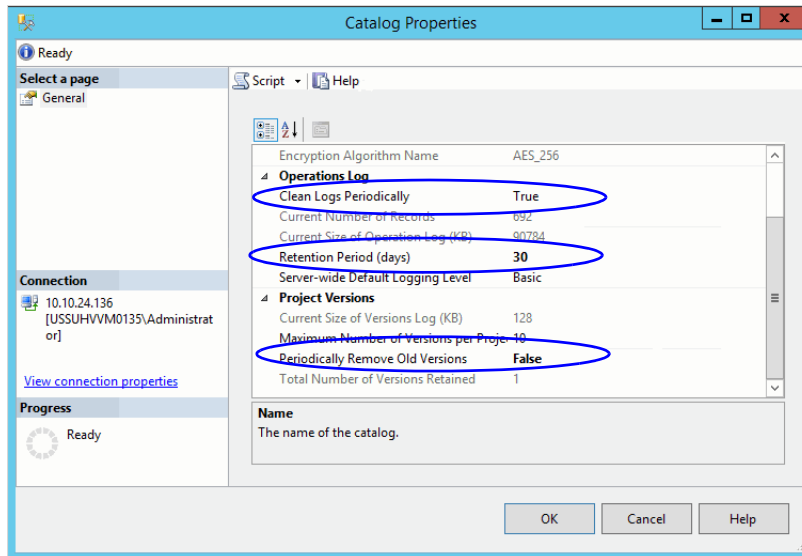
## Creating Integration Services Catalog

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 17](#).
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*

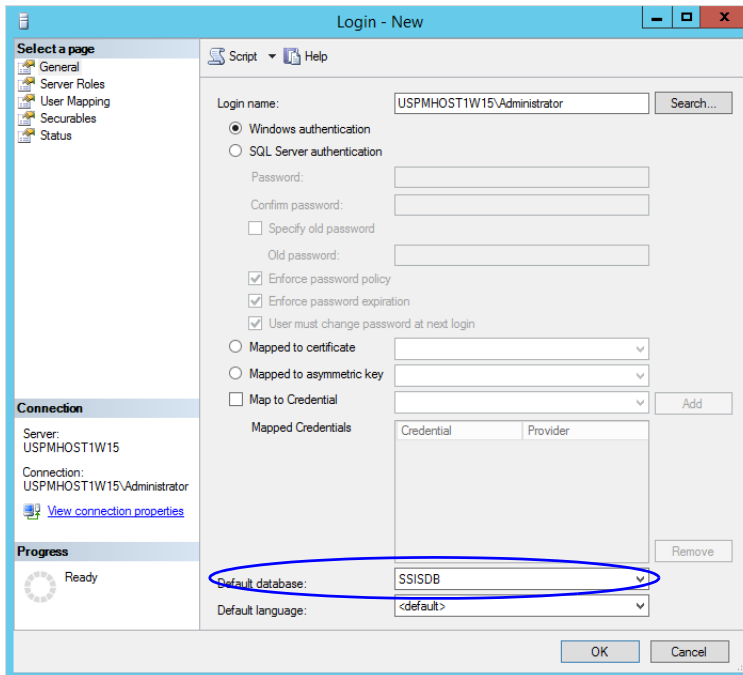
## Configuring Permissions for the Domain User

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:

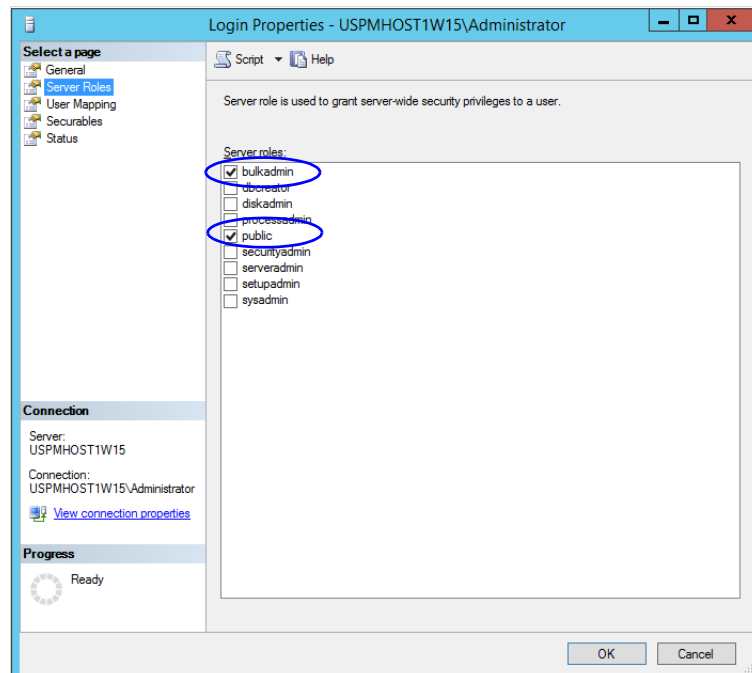
- a. Add the new domain login (page 17) and set the default database as `SSISDB`. You need to perform this task if your domain account is not already mapped to the SQL logins.



*Add the new domain user*

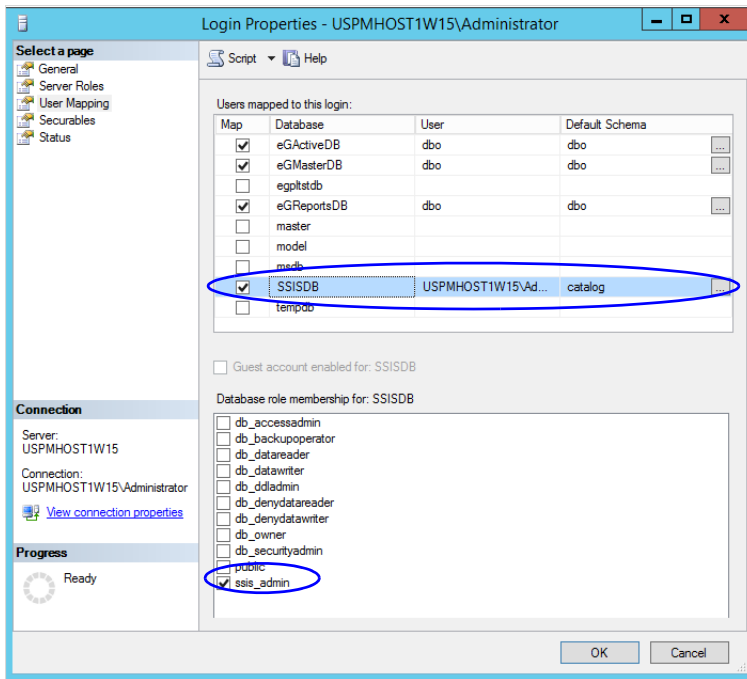
- b. From the Server Roles section, assign the following server roles:

- public
- bulkadmin



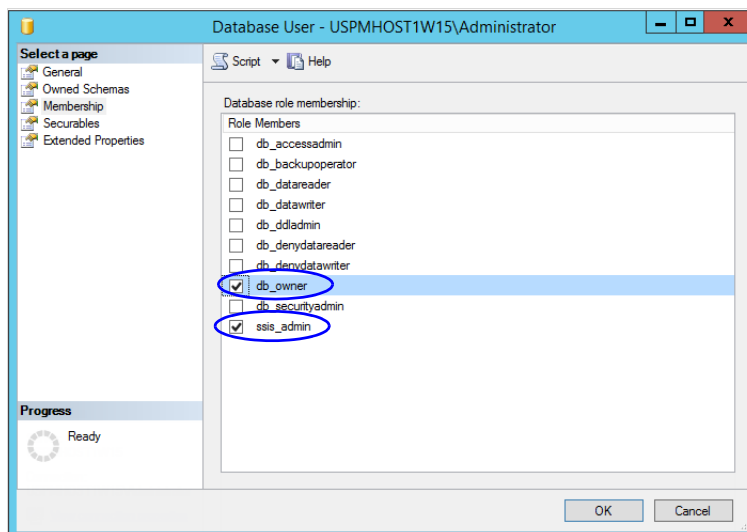
*Set the server roles*

- 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.



Set user mapping

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**.



Set membership

## 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.
2. Navigate to **Local Computer Policy > Windows Settings > Security Settings > Local Policies > User Right Assignment > Replace a process level token**.
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:\ssis\_data* and ensure that the domain user has write permissions on this folder.

## Installing JDK

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- ▶ 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

---

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

### To install WildFly:

1. Copy the `wildfly-8.2.0.Final.zip` file from the **Environment > WildFly** folder of the upgrade package to a temporary location on the hard drive.

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.

## Configuring Port Number Between Components

This section describes the ports that need to be opened for the flow of requests between the various components. The following table lists the inbound and outbound ports that need to be opened. The default port numbers are

listed here. Ports that can be modified at the time of installation, or by editing property files are identified with an asterisk \*.

From Server	To Server	Default Destination Ports and Protocols
Workstation (Internet)	Web Server	<ul style="list-style-type: none"> <li>▶ 80 [Protocol: HTTP]</li> <li>▶ 443 [Protocol: HTTPS]</li> </ul>
Application Server	Services Server	<ul style="list-style-type: none"> <li>▶ 15099 (RMI Registry port) [Protocol: RMI]*</li> <li>▶ 49152 – 65535 (Dynamic port range used by RMI server objects) [Protocol: TCP]</li> </ul>
Application Server	File Server	139 or 445 [Protocol: NETBIOS - TCP]
Application Server	Database Server	1433 [Protocol: TCP] *
Application Server	Messaging Server	5445* 9001, 9002 [Protocol: TCP]*
Application Server	SMTP Server	25 [Protocol: SMTP]
Application Server	SMTP or ESMTP Server (with SSL enabled)	587 [Protocol: SMTP or ESMTP]
Web Server	Application Server	15006 [Protocol: TCP] *
Messaging Server	File Server	139 or 445 [Protocol: NETBIOS - TCP]
Services Server	File Server	139 or 445 [Protocol: NETBIOS - TCP]
Services Server	Database Server	1433 [Protocol: TCP] *
Services Server	Messaging Server	5445, 9001, 9002 [Protocol: TCP]*,
Services Server	SMTP or ESMTP Server	25 [Protocol: SMTP or ESMTP]
Services Server	SMTP or ESMTP Server (with SSL enabled)	587 [Protocol: SMTP or ESMTP]
Services Server	POP3 Server	110 [Protocol: POP3]
Services Server	POP3 Server (with SSL enabled)	995 [Protocol: POP3]
Services Server	IMAP Server	143 [Protocol: IMAP]
Services Server	IMAP Server (with SSL enabled)	993 [Protocol: IMAP]
Active Database Server	File Server	Not applicable
Active Database Server	Archive Database Server	<ul style="list-style-type: none"> <li>▶ 1433 [Protocol: TCP]*</li> <li>▶ 135 [Port for Remote Procedure Call (RPC)]</li> <li>▶ 5000-5020 (Port range for RPC ports required for MSDTC to work across firewall)</li> </ul>
Reports Database Server	Active Database Server	<ul style="list-style-type: none"> <li>▶ 1433 [Protocol: TCP]*</li> <li>▶ 135 [Port for Remote Procedure Call (RPC)]</li> <li>▶ 5000-5020 (Port range for RPC ports required for MSDTC to work across firewall)</li> </ul>
Unified EIM & WIM Services Server	Primary CTI Server	42027*

<b>From Server</b>	<b>To Server</b>	<b>Default Destination Ports and Protocols</b>
Unified EIM & WIM Services Server	Secondary CTI Server	42028*
MR Interface	Unified EIM & WIM Services Server	38001*
Unified EIM & WIM Application Server	Primary Administration Workstation Database	1433 [Protocol: TCP]*
Unified EIM & WIM Application Server	Secondary Administration Workstation Database	1433 [Protocol: TCP]*
Unified EIM & WIM Services Server	Primary Administration Workstation Database	1433 [Protocol: TCP]*
Unified EIM & WIM Services Server	Secondary Administration Workstation Database	1433 [Protocol: TCP]*



# 3 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 from Unified EIM and WIM 11.0(1) to Unified EIM and WIM 11.0(2). 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(1) file server.



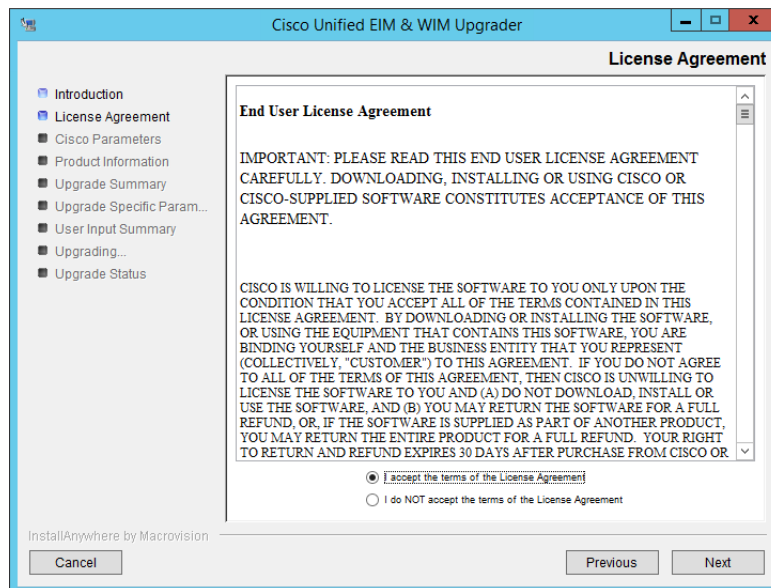
**Important:** When running the upgrade you must be logged on to the server using the same domain account that was used for installing Unified EIM and WIM.

---

### To upgrade the file server:

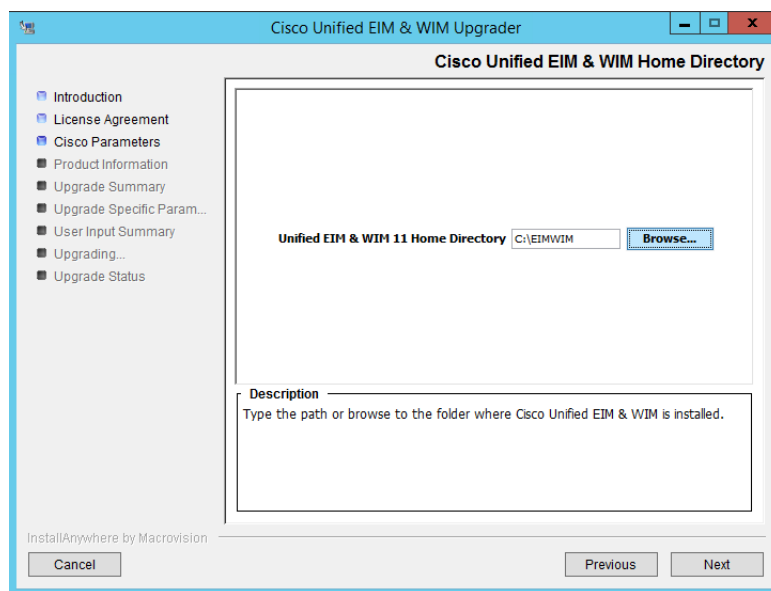
1. Check to see that you have closed all the application files before you begin the upgrade. For example, `eService.ear` or any other files opened from any other application folders should be closed.
2. Create a temporary folder, *Temporary\_Folder* and from the upgrade package, copy the upgrade files into *Temporary\_Folder*.
3. Double-click `setup_windows.exe` to launch the Unified EIM and WIM 11.0(2) 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**.



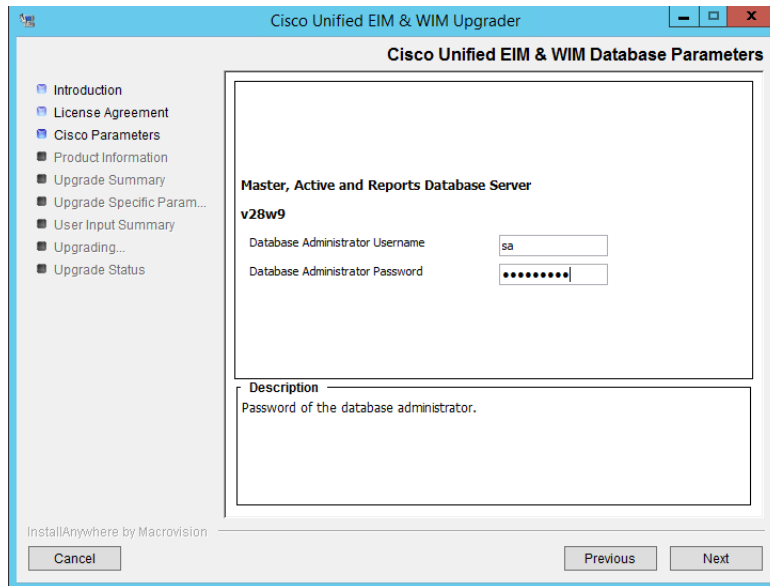
*Read and accept the terms of the License Agreement*

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(1) is installed. Click **Next**.



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

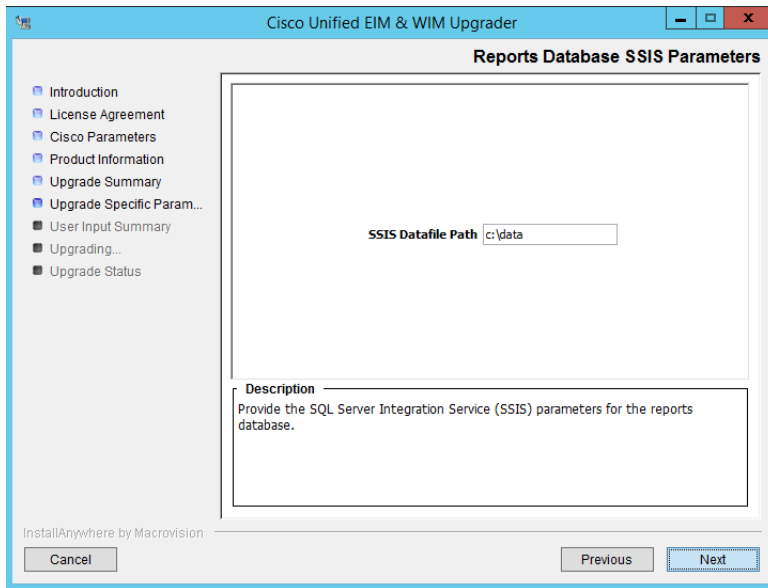
7. In the Unified EIM & WIM Database Parameters window, provide the username and password of the master and active database administrator, the archive database administrator or the reports database administrator. Click **Next**. This screen appears only if you are using the MSSQL Authentication mode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



*Provide the Unified EIM and WIM 11.0(1) database parameters*

8. In the Product Information window, check the current version of Unified EIM and WIM 11.0(1) 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 11.0.2. 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 21.



*Provide the path of the SSIS Directory*

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(1) services server.

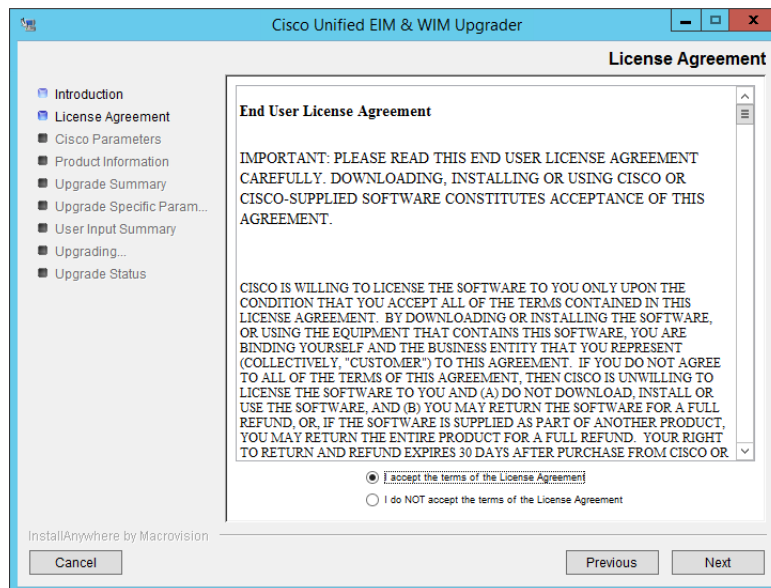


**Important:** When running the upgrade you must be logged on to the server using the same domain account that was used for installing Unified EIM and WIM 11.0(1).

### To upgrade the services server:

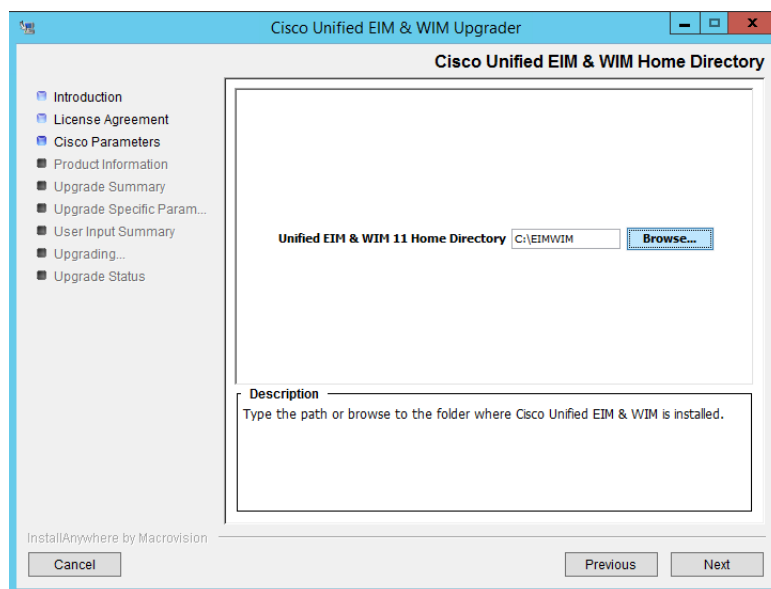
1. Check to see that you have closed all the application files before you begin the upgrade.
2. Create a temporary folder, *Temporary\_Folder* and from the upgrade package, copy the upgrade files into *Temporary\_Folder*.
3. Double-click `setup_windows.exe` to launch the Unified EIM and WIM 11.0(2) Upgrader.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



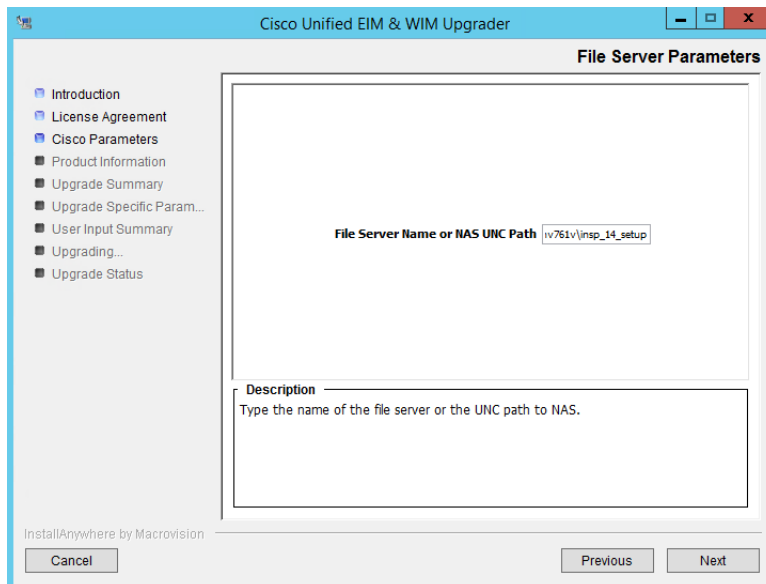
*Read and accept the terms of the License Agreement*

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(1) is installed. Click **Next**.



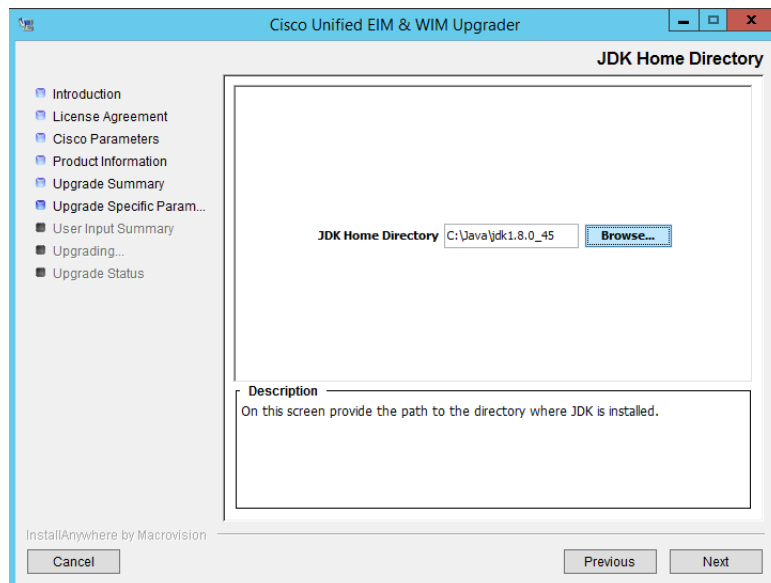
*Provide the location of the Unified EIM & WIM home directory*

7. In the File Server Parameters window, type the name of the Unified EIM and WIM 11.0(1) file server or the UNC path to NAS. Click **Next**.



*Provide the location of the Unified EIM and WIM 11.0(1) file server*

8. In the Product Information window, verify the Unified EIM and WIM 11.0(1) components installed on the machine. Click **Next**.
9. In the Upgrade Summary window, verify the version being installed. It should be 11.0(2). 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*

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

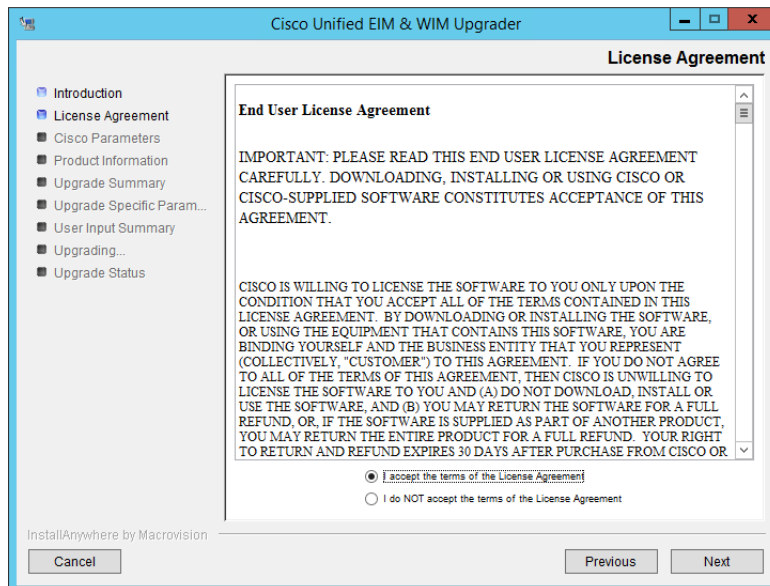
In distributed-server installations, the Upgrader needs to be run on the Unified EIM and WIM 11.0(1) messaging server.



**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:

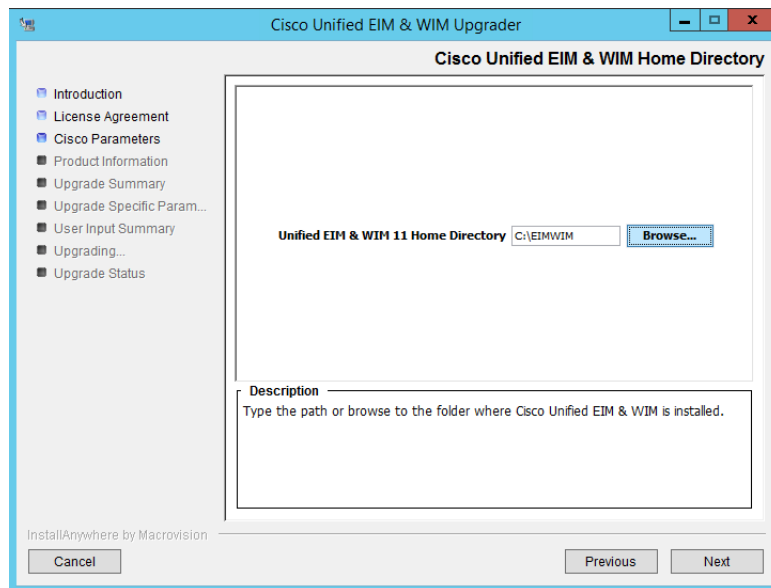
1. Check to see that you have closed all the application files before you begin the upgrade. For example, `eService.ear` or any other files opened from any other application folders must be closed.
2. Create a temporary folder, `Temporary_Folder` and from the upgrade package, copy the upgrade files into `Temporary_Folder`.
3. Double-click `setup_windows.exe` to launch the Unified EIM and WIM 11.0(2) 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*

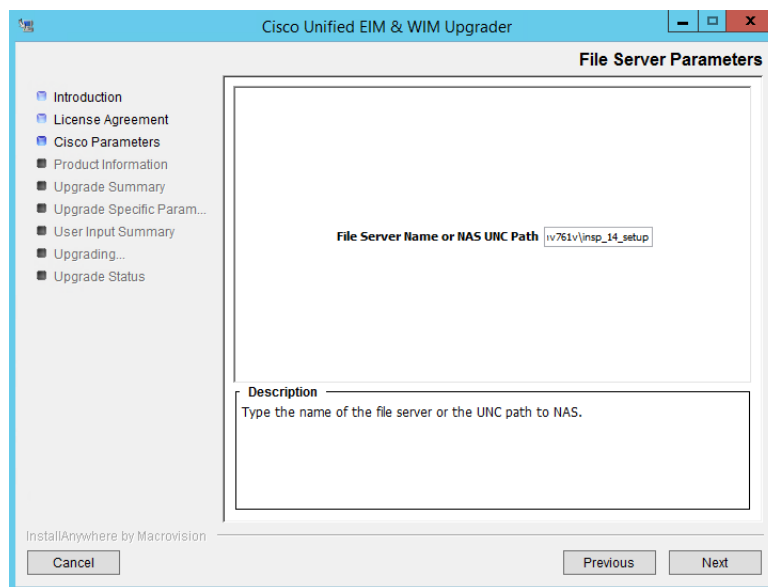


6. In the Cisco Unified EIM & WIM Home Directory window, type the path or browse to the folder where Unified EIM and WIM 11.0(1) is installed. Click **Next**.



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

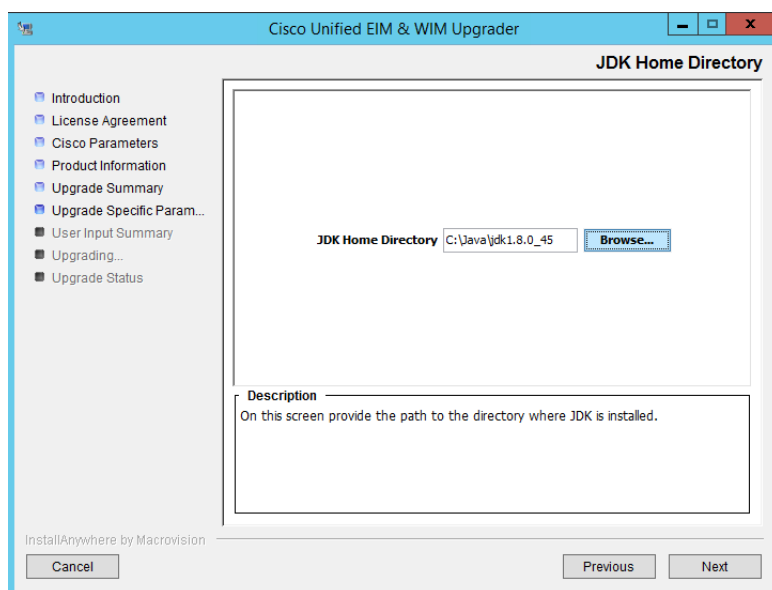
7. In the File Server Parameters window, type the name of the Unified EIM and WIM 11.0(1) file server or the UNC path to NAS. Click **Next**.



*Provide the location of the Unified EIM and WIM 11.0(1) file server*

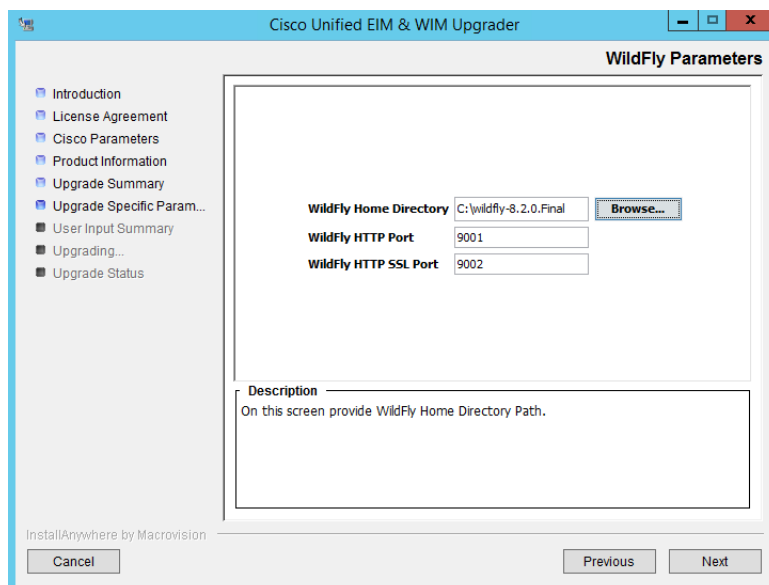
8. In the Product Information window, verify the Unified EIM and WIM 11.0(1) components installed on the machine. Click **Next**.
9. In the Upgrade Summary window, verify the version being installed. It should be 11.0(2). The screen also notifies you if you need to run the Upgrader on additional servers. 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*

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 Application Servers

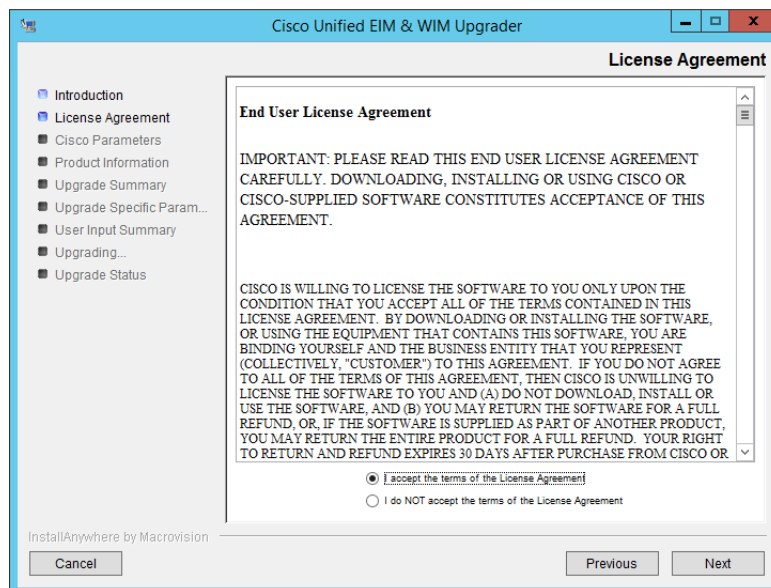
In distributed-server installations, the Upgrader needs to be run on all Unified EIM and WIM 11.0(1) application servers.



**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).

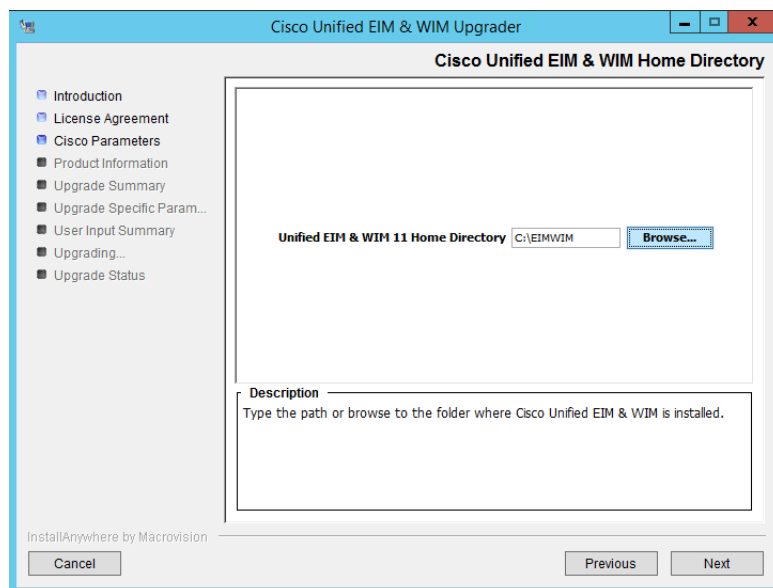
## To upgrade the application server:

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(2) 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**.



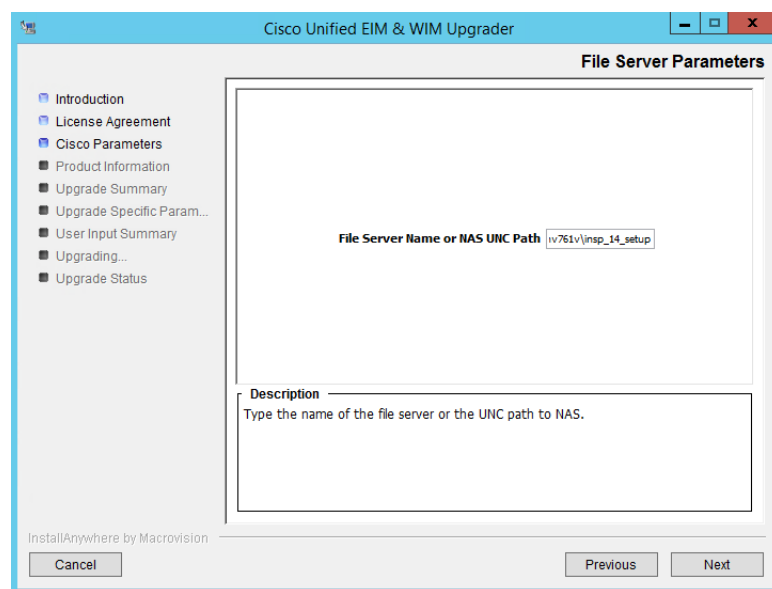
*Read and accept the terms of the License Agreement*

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(1) is installed. Click **Next**.



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

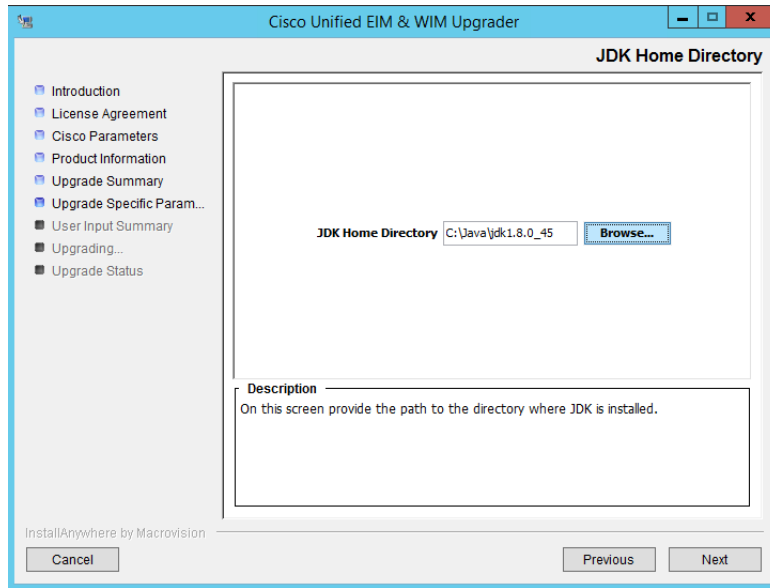
7. In the File Server Parameters window, type the name of the Unified EIM and WIM 11.0(1) file server or the UNC path to NAS. Click **Next**.



*Provide the location of the Unified EIM and WIM 11.0(1) file server*

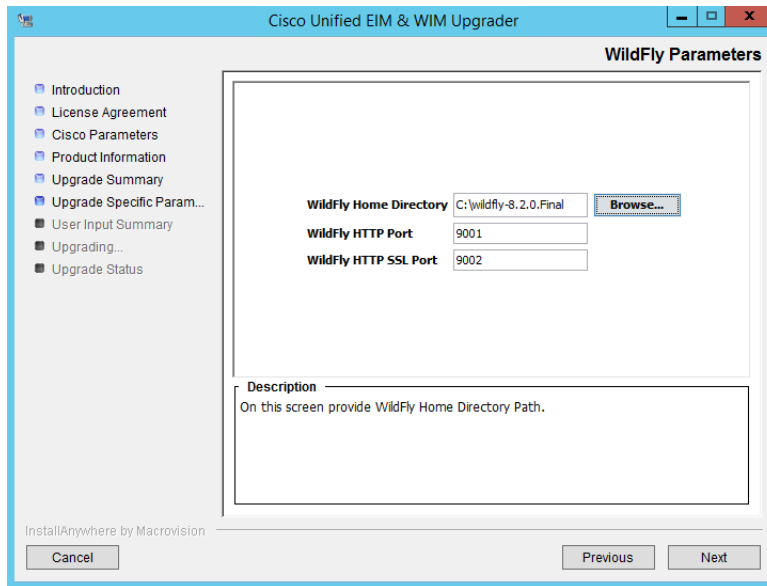
8. In the Product Information window, verify the Unified EIM and WIM 11.0(1) components installed on the machine. Click **Next**.
9. In the Upgrade Summary window, verify the version being installed. It should be 11.0(2). The screen also notifies you if you need to run the Upgrader on additional servers. 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

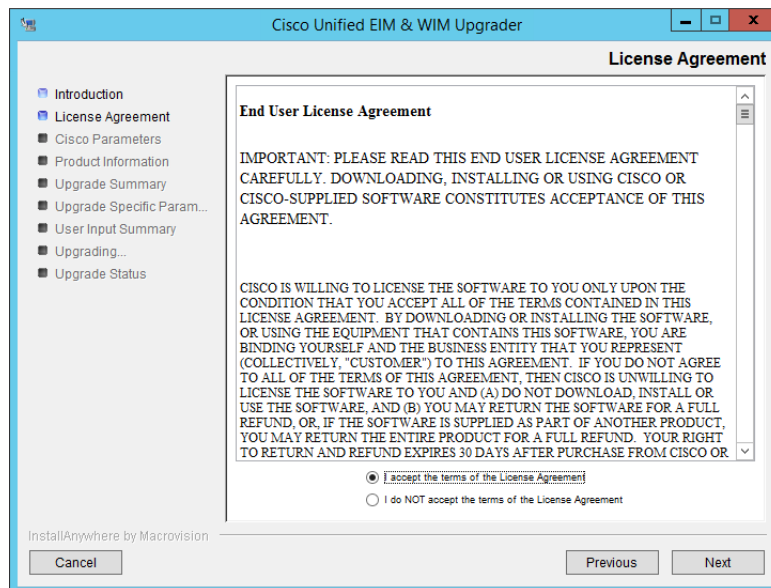
In distributed-server installations, the Upgrader needs to be run on all Unified EIM and WIM 11.0(1) web servers.



**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.

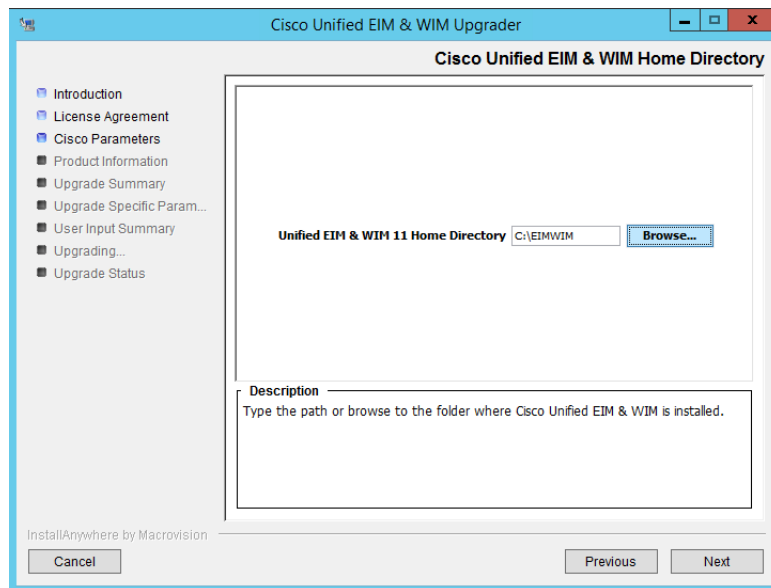
## To upgrade the web server:

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(2) 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(1) is installed. Click **Next**.



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

7. In the Product Information window, verify the Unified EIM and WIM 11.0(1) components installed on the machine. Click **Next**.
8. In the Upgrade Summary window, verify the version being installed. It should be 11.0(2). 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\(2\)](#)
- ▶ [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(1) 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 Unified EIM and WIM 11.0(2). Perform these tasks on all Unified EIM and WIM 11.0(2) web servers in your deployment.

### To update the custom chat template files:

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 the appropriate folder:

- ▶ *Cisco\_Home*\eService\templates\chat\sunburst\chat\js:
  - chat.js
  - connection.js
  - core.js
  - editor.js
  - header.js
  - login.js
  - session.js
  - survey.js
- ▶ *Cisco\_Home*\eService\templates\chat\sunburst\chat\less
  - chat-main.less
- ▶ *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:

```
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.

## Starting IIS

---

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

## Starting Unified EIM and WIM 11.0(2)

---

### To start Unified EIM & WIM 11.0(2):

- ▶ 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(1) Installation

If you encounter any problems while upgrading, you can restore the Unified EIM and WIM 11.0(1) installation and run the Upgrader again.

### **To restore the Unified EIM and WIM 11.0(1) installation:**

- ▶ Restore the Unified EIM and WIM 11.0(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 all services servers.
- ▶ Restore the back-up copies of the databases and the reports job ([page 16](#)).

# 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 47](#).
- ▶ 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 57](#).

## 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 47](#)).

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 50](#).
  - `MASTER_DATABASE_URL`: Provide the master database URL. For the format of the URL, see [“Configuring Database URLs” on page 50](#).

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.



**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 50](#).

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:



**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 50](#).

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\_Folder*\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 46](#)). 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.
- ▶ If your Unified EIM and WIM 11.0(1) installation is using the Standard Edition of MSSQL 2012, restore your databases on the Standard 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 57](#)). 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 57](#)).

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.

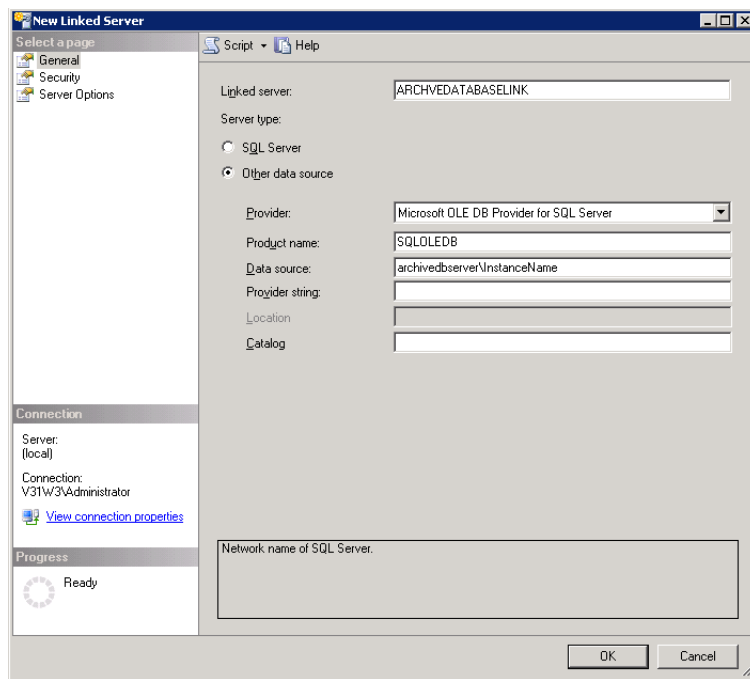
---

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**.

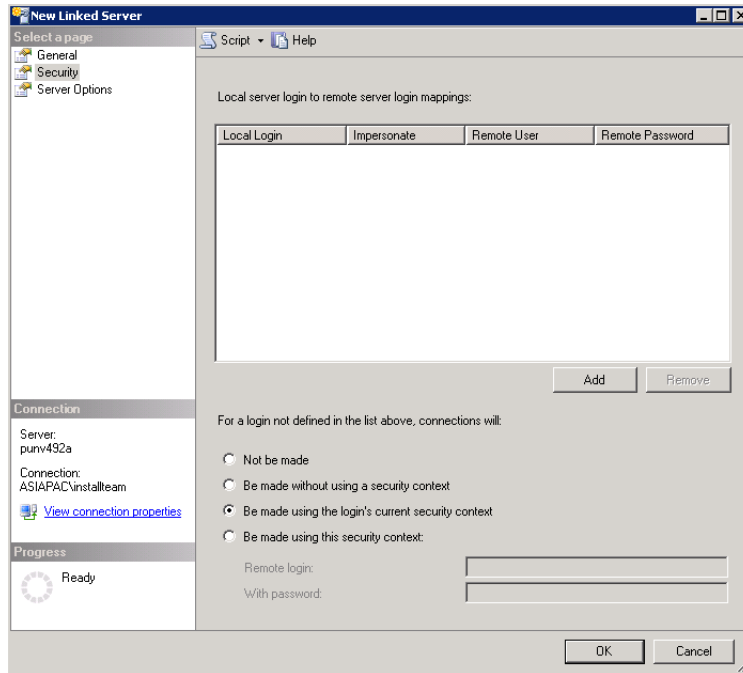
4. In the New Linked Server window, do the following:
  - a. In the General section, provide the following details:
    - **Linked Server:** Provide a name for the link. The link name should not contain any spaces or special characters. This is the link name used while configuring the utility ([page 58](#)).
    - **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*.



*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](#).

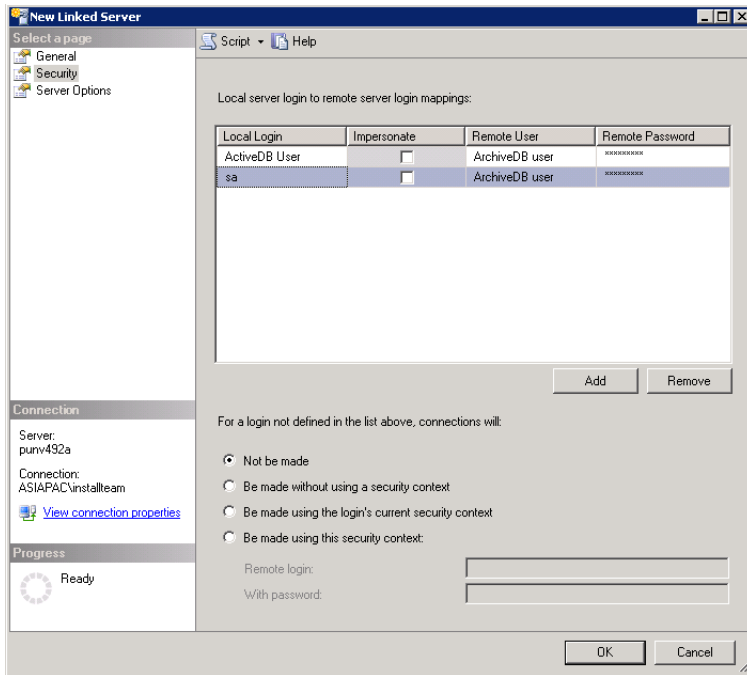
- In the **For a login not defined in the list above, connections will** section, select the **Be made using the login's current security context** option.



*Set the security option*

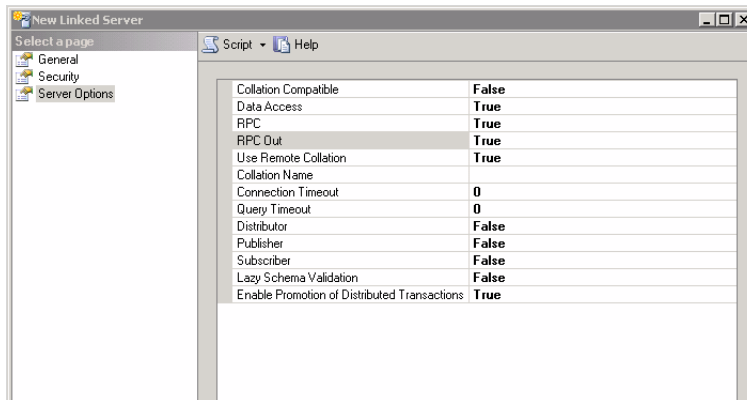
- In the Security section, provide the following details if you are planning to run the utility with SQL Authentication:
  - In the **Local server login to remote server mapping** section, click **Add**.
  - Set the **Local Login** as the active database user name, and the **Remote User** as the archive database user name and **Remote Password** as the archive database user password.
  - Click **Add** again.
  - 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



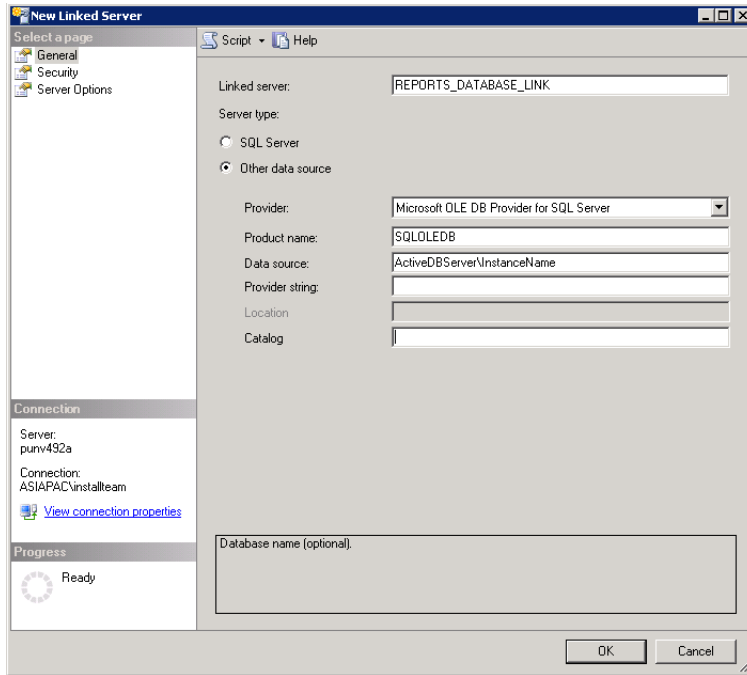
**Important:** You need to perform these tasks only if the installation uses the Enterprise Edition of MSSQL and the active and reports databases are restored on different machines.

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:

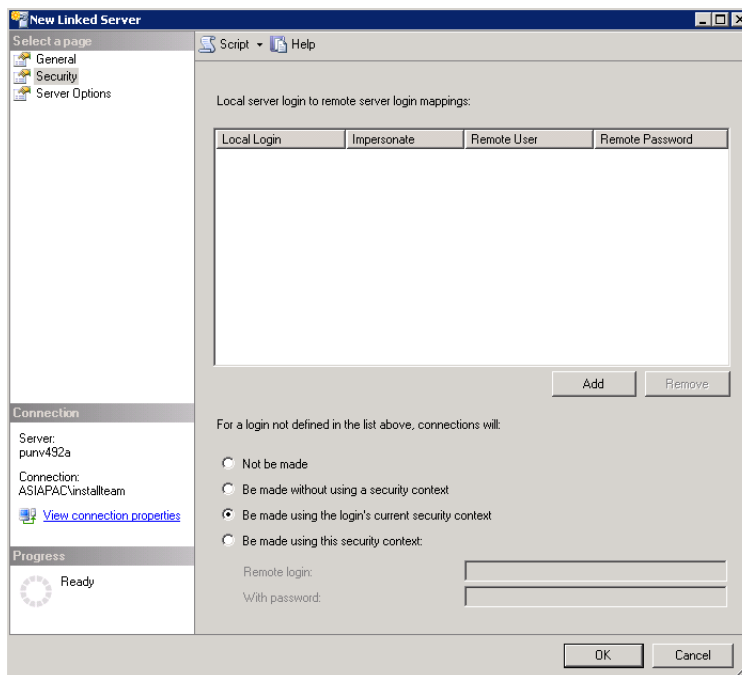
1. Open the SQL Server Management Studio and connect to the server where the Reports database is restored.
2. In the SQL Server Management Studio window, in the Object Explorer, browse to **Server Objects > Linked Servers**.
3. Right-click on Linked Server and select **New Linked Server**.
4. In the 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 57](#)).
    - **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`.



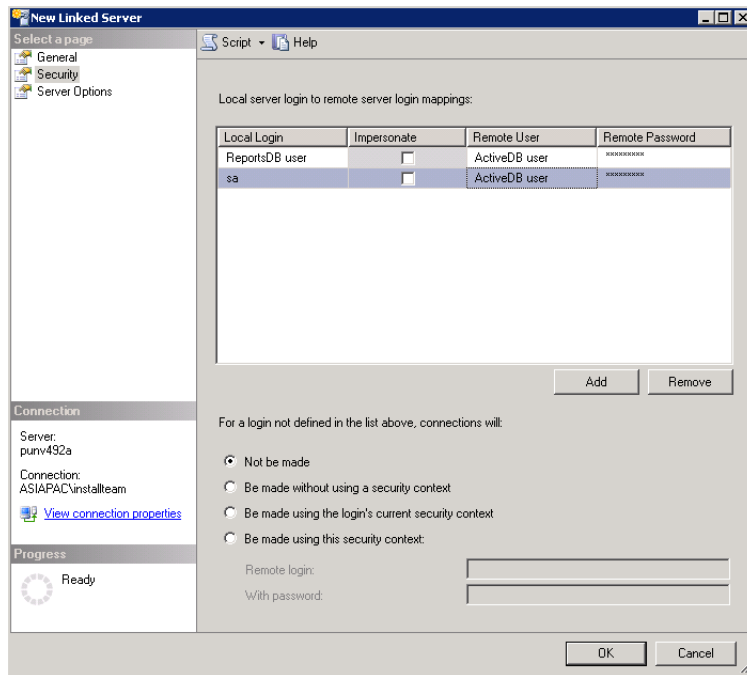
*Set the general properties*

- 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.



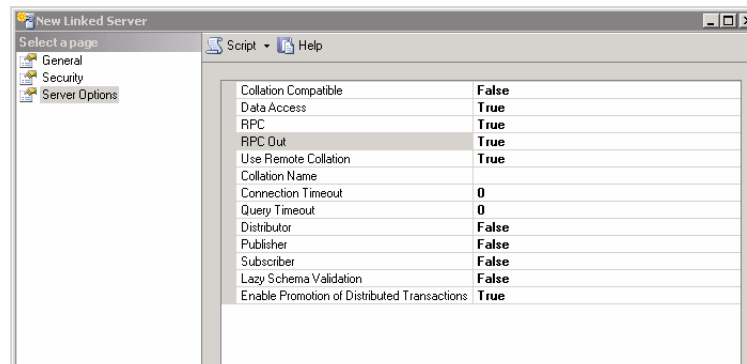
*Set the security option*

- 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 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 **sa** 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 50](#).
  - `MASTER_DATABASE_URL`: Provide the master database URL. For the format of the URL, see [“Configuring Database URLs” on page 50](#).

Set the following four 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 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 49](#)).
- `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 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 49](#)).
- `MASTER_PASS`: Database password of the master database.

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 50](#).
- `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 54](#).

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 49](#)).
- `REPORTS_PASS`: Database password of the reports database.

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 50.
- 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 50.

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 49](#)).
  - 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 49](#)). 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

---

#	Task	Completed?
1.	Schedule downtime for upgrading ( <a href="#">page 13</a> ).	<input type="checkbox"/>

## Before Scheduled Downtime

---

#	Task	Completed?
<b>Tasks on Unified EIM and WIM 11.0.1(1) Installation</b>		
1.	Check Unified EIM & WIM 11.0(1) version. Unified EIM & WIM must be on 11.0.1 or higher ( <a href="#">page 12</a> ).	<input type="checkbox"/>
2.	Run the <b>DB PreCheck</b> Utility. It identifies any data and DB schema related issues that may cause the upgrade to fail ( <a href="#">page 46</a> ).	<input type="checkbox"/>
3.	Check the status of the report summarization job to make sure it is up to date ( <a href="#">page 15</a> ).	<input type="checkbox"/>
<b>Tasks on any Windows 2012 Machine With SQL Server 2012</b>		
1.	Create a back-up of the Unified EIM and WIM 11.0.1(1) databases and restore them for running the <b>DBUpdate</b> utility ( <a href="#">page 49</a> ).	<input type="checkbox"/>
2.	Run the <b>DBUpdate</b> Utility. It upgrades the restored Unified EIM & WIM 11.0(1) databases and identifies any issues that can cause the upgrade to fail ( <a href="#">page 57</a> ).	<input type="checkbox"/>

## During Scheduled Downtime

#	Task	Completed?
1.	Stop the application on the Unified EIM & WIM 11.0(1) servers ( <a href="#">page 15</a> ). On the services server machine, from the Windows Task Manager verify that none of the <code>javaw</code> and <code>java</code> processes (the services) are running.	<input type="checkbox"/>
1.	Stop IIS on all web servers ( <a href="#">page 16</a> ).	<input type="checkbox"/>
2.	Take a backup of the Unified EIM & WIM 11.0(1) directories ( <a href="#">page 16</a> ).	<input type="checkbox"/>
3.	Take a backup of the Unified EIM & WIM 11.0(1) databases ( <a href="#">page 16</a> ).	<input type="checkbox"/>
4.	Prepare reports server for supporting custom attributes in reports. ( <i>Applies only for installations using SQL Enterprise Edition.</i> ) ( <a href="#">page 16</a> ).	<input type="checkbox"/>
5.	Install JDK ( <a href="#">page 21</a> ).	<input type="checkbox"/>
6.	Install WildFly ( <a href="#">page 21</a> ).	<input type="checkbox"/>
7.	Run the upgrader on the Unified EIM & WIM 11.0(1) file server ( <a href="#">page 25</a> ).	<input type="checkbox"/>
8.	Run the upgrader on the Unified EIM & WIM 11.0(1) services servers. ( <a href="#">page 28</a> ).	<input type="checkbox"/>
9.	Run the upgrader on the messaging server. ( <a href="#">page 28</a> ).	<input type="checkbox"/>
10.	Run the upgrader on <i>all</i> the application servers. ( <a href="#">page 34</a> ).	<input type="checkbox"/>
11.	Run the upgrader on <i>all</i> the web servers. ( <a href="#">page 37</a> ).	<input type="checkbox"/>
12.	Chat templates: Merge files from the Unified EIM & WIM 11.0(2) templates with your custom templates to use new Unified EIM & WIM 11.0(2) features ( <a href="#">page 41</a> ) ( <i>Applies to installations using Unified WIM</i> ).	<input type="checkbox"/>
13.	Update Finesse files ( <a href="#">page 42</a> ). ( <i>Applies only if you use Cisco Finesse</i> )	<input type="checkbox"/>
14.	Update name of session management cookie ( <a href="#">page 42</a> ).	<input type="checkbox"/>
15.	Start IIS on all web servers ( <a href="#">page 42</a> ).	<input type="checkbox"/>
16.	Start the application on Unified EIM & WIM 11.0(2) ( <a href="#">page 42</a> ).	<input type="checkbox"/>