Enterprise Chat and Email Upgrade Guide, Release 12.6(1)

For Packaged & Unified Contact Center Enterprise

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Welcome to the Enterprise Chat and Email (ECE) feature, which provides multichannel interaction software used by businesses all over the world as a core component to the Unified Contact Center Enterprise product line. ECE offers a unified suite of the industry's best applications for chat and email interaction management to enable a blended agent for handling of web chat, email and voice interactions.

About This Guide

Enterprise Chat and Email Upgrade Guide describes the process of upgrading your ECE system to ECE 12.6. This guide is intended for installation engineers, system administrators, database administrators, and others who are responsible for installing and configuring Enterprise Chat and Email (ECE) installations that are integrated with Cisco Unified Contact Center Enterprise (Unified CCE) or Cisco Packaged Contact Center Enterprise (PCCE).

Related Documents

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

Subject	Link
Complete documentation for Enterprise Chat and Email, for both Cisco Unified Contact Center Enterprise (UCCE) and Cisco Packaged Contact Center Enterprise (PCCE)	https://www.cisco.com/c/en/us/support/customer-collaboration/cisco-enterprise-chat-email/tsd-products-support-series-home.html

Change History

This table lists changes made to this guide. Most recent changes appear at the top.

Change	See	Date
Added a note	"Collocated Server Installation" on page 26	November, 2023
Added a note	"Upgrade Overview" on page 26	October, 2023
Updated Step 12	page 31	
Updated Step 10	page 63	

Change	See	Date
Added a prerequisite and updated the Important note.	"Prerequisites" on page 27	July, 2023
Updated the important note by providing a sample DFS path for the File Server Parameters window.	"Upgrading the Services Server" on page 37, "Upgrading the Messaging Server" on page 42 & "Upgrading the Application Servers" on page 46	
Added a new section: **Prerequisites** for Upgrading HA Installations on new servers.	"Prerequisites" on page 54	
Added a task for obtaining the DFS path	"General Tasks before Initiating the Upgrade" on page 24	
Added the **Change History** section to the Preface.	"Change History" on page 7	

Communications, Services, and Additional Information

- ▸ To receive timely, relevant information from Cisco, sign up at Cisco Profile Manager.
- ▸ To get the business impact you're looking for with the technologies that matter, visit Cisco Services.
- ▸ To submit a service request, visit Cisco Support.
- ▸ To discover and browse secure, validated enterprise-class apps, products, solutions and services, visit Cisco Marketplace.
- ▸ To obtain general networking, training, and certification titles, visit Cisco Press.
- ▸ To find warranty information for a specific product or product family, access Cisco Warranty Finder.

Cisco Bug Search Tool

Cisco Bug Search Tool (BST) is a web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software.

Field Alerts and Field Notices

Cisco can modify its products or determine key processes to be important. These changes 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.

Sign in www.cisco.com and then access the tool at
https://www.cisco.com/cisco/support/notifications.html.

Documentation Feedback

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

We appreciate your comments.

Document Conventions

This guide uses the following typographical conventions.

Convention	Indicates
Italic	Emphasis. Or the title of a published document.
Bold	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.
Variable	User-specific text; varies from one user or installation to another.

Document conventions

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Planning

To upgrade to ECE 12.6(1), you need to complete a number of tasks, which include potential infrastructural upgrades, and completing certain pre-upgrade, upgrade, and post-upgrade tasks. Upgrading to ECE 12.6(1) is broking up into four parts. This chapter guides you in planning and preparing for the upgrade.

Getting Started

The entire upgrade process involves completing the following activities, in sequence:
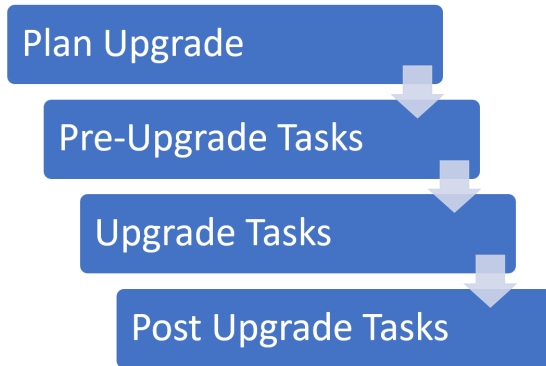
- ▶ **Planning for the upgrade:** Verify release eligibility for upgrade, potential infrastructure upgrade tasks, and database readiness.

- ▶ **Pre-upgrade tasks**: To be performed before when you are ready to being upgrading but just before initiating the upgrade. For detailed instructions, refer to "Pre-Upgrade Tasks" on page 20.

- ▶ **Upgrade tasks**: Initiating and performing the upgrade. Details are in "Process for Upgrade on New Servers" on page 52 and "Process for In-Place Upgrades" on page 25.

- ▶ **Post-upgrade tasks**: To be performed after completing the upgrade. For details, refer to "Post-Upgrade Tasks" on page 66.

Planning the Upgrade

Planning for the ECE 12.6(1) upgrade involves multiple steps including reading this guide in its entirety before beginning.
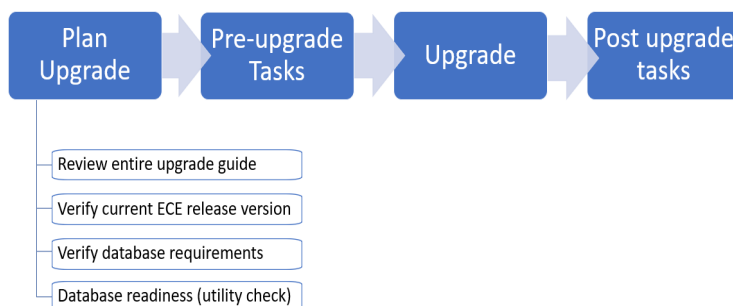
▸ Read this entire guide before upgrading to ECE 12.6(1) (recommended).

There are two types of upgrade procedures defined in this document:

❍ In-place upgrade (same server)

❍ New server upgrade

When planning your upgrade, be sure to use the appropriate procedures for your instance of ECE.

▸ Verify the current ECE release version to ensure it can be upgraded. See "Verifying ECE Release Version" on page 12.

▸ Verify the database requirements and upgrade to SQL 2019 and Windows 2019 if needed. See "Database Requirements" on page 12.

▸ Run the Pre-Upgrade utilities check before performing the actual upgrade. This is required to ensure a successful upgrade. See "Verify Database Readiness—Pre-Upgrade Utilities" on page 13.

Verifying ECE Release Version

The ECE installation should be on ECE 12.0(1), 12.5(1) or higher to be able to upgrade to ECE 12.6(1).

To verify the release version:

1. Open the ECE Login window and click the **About** button.

2. Click the History tab and verify that the current version is ECE 12.0(1), 12.5(1) or higher.

3. Note the current version as this is needed to initiate the upgrade.

Database Requirements

ECE 12.6(1) requires SQL 2019 and Windows 2019.

Verify the current versions for your installation and upgrade if necessary before continuing with the ECE 12.6(1) upgrade.

▸ **Windows 2019**

You can move to Windows 2019 by:

❍ upgrading existing server to Windows 2019 during the ECE 12.6(1) upgrade process.

❍ moving to a new Windows 2019 server for all the components prior to upgrading to ECE 12.6(1).

The pre-upgrade, upgrade, post-upgrade tasks for these options are different and are described in this guide.

▸ **SQL 2019**

Use the appropriate instructions in this section if you need to update to SQL 2019:

❍ "In-place Upgrade to SQL 2019" on page 13

❍ "New Server Install of SQL 2019" on page 13

Important: **Always take a backup of your VM(s) prior to upgrading. Shutdown the VMs prior to taking the backup.**

In-place Upgrade to SQL 2019

For upgrading your SQL version to **SQL 2019**. You have two options:

▸ Install SQL 2019 on the same machine where SQL 2016 is installed.

If you plan to use the same VM, ensure that it has enough CPU, Memory and Disk space to accommodate both installations of SQL and an additional copy of the ECE databases.

▸ Upgrade SQL 2016 to SQL 2019.

If you plan to do this, you must take a backup of the VM in the event you need to revert the installation. The VMs must be shutdown before taking backups.

New Server Install of SQL 2019

▸ Install SQL 2019 on the new Windows 2019 machines.

If you want, you can change the **Authentication mode** from **SQL Authentication** to **Windows Authentication** or vice versa.

Verify Database Readiness—Pre-Upgrade Utilities

The ECE Upgrader comes with two utilities, DB PreCheck Utility and DBUpdate Utility. These utility checks should be run before performing the actual upgrade. The DB PreCheck utility can be run on the ECE production databases. The DBUpdate Utility must always be run on *copies* of databases, and *not* on the actual ECE databases.

> **Important:** **It is highly recommended that you run these utilities before performing the actual upgrade on your installation.**

▸ The **DB PreCheck Utility** checks if there is any data in the databases that can cause the upgrade to fail and generates a log file. Correct all errors before running the actual upgrade on your system.

This is a read only utility and does not make any modifications on the databases.

▸ The **DBUpdate Utility** must be run on a copy of your database. The 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.

Continue with the utility checks:

▸ "DB PreCheck Utility" on page 14.

▸ "DBUpdate Utility" on page 16

DB PreCheck Utility

The DB PreCheck utility can be run on the ECE production databases.

In order to run the database check utility, first prepare the environment and then initiate the utility. Do the following:

▸ "Install JDK" on page 14

▸ "Configure Database URLs" on page 14

▸ "Run the DB Pre-Check Utility" on page 15

Install JDK

▸ From the upgrade files folder, copy and extract `jdk.zip` from the `Environment\Server Side Java` folder into a *Temporary_Folder* on the machines from where you are going to run the utilities.

Configure Database URLs

To be able to run the utility, configure database URLs for the ECE databases. This section describes the format of these URLs and are used when configuring the utilities (page 15).

Configure URLs for the following databases:

▸ Master database

▸ Active database

▸ Reports database

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 ECE 12.0(1) or 12.5(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 ECE 12.0(1) or 12.5(1) database.

For example, the database URL will look like:

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

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Footer:

Run the DB Pre-Check Utility

This utility needs to be run on the *actual* ECE 12.0(1) or 12.5(1) databases. The application does not have to be stopped to run the DB Pre-check utility. You need to have access to the ECE 12.0(1) or 12.5(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 "Configure Database URLs" on page 14.

   ❍ MASTER_DATABASE_URL: Provide the master database URL. For the format of the URL, see "Configure Database URLs" on page 14.

   ❍ REPORTS_DATABASE_URL: Provide the reports database URL. For the format of the URL, see "Configure Database URLs" on page 14.

   If you are using SQL Server Authentication to connect to the **active database**, set the following four properties:

   ❍ 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.

   If you are using SQL Server Authentication to connect to the **master database,** set the following four properties.

   ❍ 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.

   If you are using SQL Server Authentication to connect to the **database**, set the following four properties.

   ❍ 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 is available on your machine (page 14). For example, `C:/Java/jdk.`

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 TAC if any issues are identified by the utility.

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

DBUpdate Utility

To run the Database Update Utility you must first prepare replicate your installation as this utility MUST be run on copies of the of the ECE databases. and *not* on the actual ECE databases.

Complete the following:

Installing JDK

▸ From the upgrade files, Copy and extract `jdk.zip` from the `Environment\Server Side Java` folder into a *Temporary_Folder* on the machines from where you are going to run the utility.

Restoring Databases

The DBUpdate utility should always be run on copies of databases and not on the actual databases for your installation. When restoring the databases, make sure that edition of MSSQL 2019 database server matches the edition you plan to use for ECE 12.6(1).

To restore the databases:

▸ Create a copy of the following databases to be used by the utility:

❍ Master database

❍ Active database

❍ Reports database

Creating Database Users for ECE Databases

‣ Create database users for the restored ECE databases.

This information is required while configuring the DBUpdate Utility (page 17). Scripts and instructions to create the users are available in the upgrade package in the `Utilities\DBUpdate\windows-mssql\LoginCreationScripts` folder.

Configuring Database URLs

To run the utility, you have to configure database URLs for the restored databases. This section describes the format of these URLs. These URLs are required when configuring the utilities (page 17).

Configure URLs for the following databases:

‣ Master database

‣ Active database

‣ Reports database

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. If you are using **Always On** clustering and have restored the databases on a node of the cluster, provide the Listener name instead of the server name.

‣ *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`

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 17.

❍ MASTER_DATABASE_URL: Provide the master database URL. For the format of the URL, see "Configuring Database URLs" on page 17.

❍ REPORTS_DATABASE_URL: Provide the reports database URL. For the format of the URL, see "Configuring Database URLs" on page 17.

> Important: **Make sure you provide information for all four file groups for the active DB and the reports DB.**

❍ ACT_DB_FG1_NAME: Provide the name of the first file group to be created for the active database.

❍ ACT_DB_FG1_DATAFILE_PATH: Provide the location for the first filegroup.

❍ ACT_DB_FG2_NAME: Provide the name of the second file group to be created for the active database.

❍ ACT_DB_FG2_DATAFILE_PATH: Provide the location for the second filegroup.

❍ ACT_DB_FG3_NAME: Provide the name of the third file group to be created for the active database.

❍ ACT_DB_FG3_DATAFILE_PATH: Provide the location for the third filegroup.

❍ ACT_DB_FG4_NAME: Provide the name of the fourth file group to be created for the active database.

❍ ACT_DB_FG4_DATAFILE_PATH: Provide the location for the fourth filegroup.

❍ REPORTS_DB_FG1_NAME: Provide the name of the first file group to be created for the Reports database.

❍ REPORTS_DB_FG1_DATAFILE_PATH: Provide the location for the first filegroup.

❍ REPORTS_DB_FG2_NAME: Provide the name of the second file group to be created for the reports database.

❍ REPORTS_DB_FG2_DATAFILE_PATH Provide the location for the second filegroup.

❍ REPORTS_DB_FG3_NAME Provide the name of the third file group to be created for the reports database.

❍ REPORTS_DB_FG3_DATAFILE_PATH: Provide the location for the third filegroup.

❍ REPORTS_DB_FG4_NAME: Provide the name of the fourth file group to be created for the reports database.

❍ REPORTS_DB_FG4_DATAFILE_PATH: Provide the location for the fourth filegroup.

If you are using SQL Server Authentication to connect to the active database, set the following four properties.

❍ 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 17).

❍ ACTIVE_ PASS: Database password of the active database.

If you are using SQL Server Authentication to connect to the master database, set the following four properties.

- ❍ 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 17).
- ❍ MASTER_ PASS: Database password of the master database.

If you are using SQL Server Authentication to connect to the reports database, set the following four properties.

- ❍ 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 17).
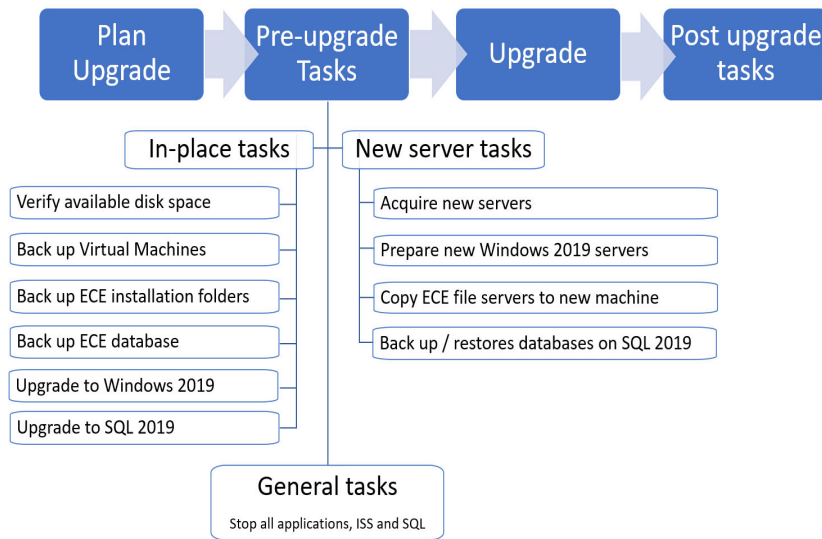- ❍ REPORTS_ PASS: Database password of the reports database.

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 is available on your machine (page 16). For example, `C:/Java/jdk.`

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 TAC if the upgrade fails.

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

Pre-Upgrade Tasks

▸ Tasks Specific to In-place Upgrades

▸ Tasks Specific for New Server Upgrades

▸ General Tasks before Initiating the Upgrade

This chapter describes the pre-upgrade procedures that need to be completed before initiating the upgrade.

```
Plan          Pre-upgrade         Upgrade        Post upgrade
Upgrade          Tasks                              tasks
```

```
        In-place tasks              New server tasks

  Verify available disk space        Acquire new servers

  Back up Virtual Machines           Prepare new Windows 2019 servers

  Back up ECE installation folders   Copy ECE file servers to new machine

  Back up ECE database               Back up / restores databases on SQL 2019

  Upgrade to Windows 2019

  Upgrade to SQL 2019

                    General tasks
                    Stop all applications, ISS and SQL
```

Follow the appropriate instructions for your installation (in-place or new server) along with the general tasks before initiating the upgrade:

▸ "Tasks Specific to In-place Upgrades" on page 22

▸ "Tasks Specific for New Server Upgrades" on page 23

▸ "General Tasks before Initiating the Upgrade" on page 24

Tasks Specific to In-place Upgrades

Perform the following tasks for in-place upgrade environment. Do this prior to initiating the upgrade.

✓	Task	Description
	Verify available disk space	Make sure ample space is available for the upgrade. Required: 10 GB more than the size of the ECE_Home\eService folder.
	Back up VMs	Make a backup of the VMs where the ECE components are installed. Additionally, if you perform an upgrade of Windows 2016 to Windows 2019, and SQL 2016 to SQL 2019, make a backup before the upgrade and after the update. Keep both back ups in reserve. Important: The VM must be shutdown before taking any backup.
	Back up ECE Installation Folders	If you are doing an in-place upgrade of Windows 2016 to Windows 2019, you must take a backup of the VMs where the ECE components are installed. The VM must be shutdown before taking a backup. ▶ File server ▶ Services servers ▶ Application servers ▶ Web servers ▶ Messaging servers
	Back up ECE Databases	Back up the following databases: ▶ Master database ▶ Active database ▶ Reports database Important: These backup copies enable you to restore the system in the event any problems arise during the upgrade.
	Upgrade Windows 2016 to Windows 2019	Before upgrading the application to ECE 12.6(1), you must update the Operating System on all the VMs to Windows 2019. Ensure that you have the copy of the Windows upgrader and check that the servers have the required resources for the Windows upgrade. Refer to the Microsoft documentation for details. While doing the upgrade, make sure you select the following options: ▶ Server with Desktop Experience ▶ Keep personal files and apps
	Upgrade SQL 2016 to SQL 2019	Before upgrading the application to ECE 12.6(1), you must update the SQL version on all the database VMs to SQL 2019. You can either choose to: ▶ Upgrade the existing SQL 2016 installation to SQL 2019, or ▶ Install SQL 2019 on the same machine where SQL 2016 is installed (page 10). Verify that you have the copy of the SQL installer or upgrader and check to make sure that the servers have the required resources for the SQL upgrade. Please check the Microsoft documentation for details.

Tasks Specific for New Server Upgrades

Perform the following tasks for new server upgrades. Do this prior to initiating the upgrade.

✓	Task	Description
	Acquire new servers	Acquire new VMs and Windows 2019 for installing all ECE components.
	Prepare new Windows 2019 Servers	Perform all the pre-installation tasks on the new servers. For details, see the Enterprise Chat and Email Installation and Configuration Guide. Note: Make sure you only perform the pre-installation tasks. Do not install the new components yet.
	Copy files from existing ECE file server to new Windows 2019 machine	Copy the ECE installation directory from the existing ECE file server to the Windows 2019 server where you want to host the 12.6(1) file server. When copying, make sure that new installation directory name and location is exactly the same as the existing one. For example, if installation directory on existing server is c:\ece then it must be the same on the new Windows 2019 server.
	Back up and restore copies of Databases on SQL 2019	If you are using Always On Availability Group clustering, restore the databases only on the primary node. These databases must not be added to the availability group before running the upgrade. Important: Always ensure that you restore the latest backup copies of databases. These copies should be pristine and should not have been used to run the DB Update utility (page 13). To backup and restore databases: 1. Back up the existing master, active, and reports databases. 2. Restore the backed up copies of the existing ECE active, master, and reports databases on the machine where SQL 2019 for ECE 12.6(1) is installed.

General Tasks before Initiating the Upgrade

Just before initiating the upgrade, the following applications or services must be stopped as listed in this checklist.

✓	Task	Description
	Obtain installation information	▸ Installed version: _____ ▸ Domain account used ECE installation _____
	Stop the application(s)	Make sure that the application is stopped on the ECE machines. To stop the application: In collocated installations: ▸ On the server where application, web, messaging, services, file, and database components are installed, stop the Cisco Service from the Windows Services panel. Open the Windows Task Manager and verify that none of the java processes are running. In a distributed-server installation: 1. On each application server VM, stop the Cisco Service from the Windows Services panel. Open the Windows Task Manager and verify that none of the java processes are running. 2. On the messaging server VM, stop the Cisco Service from the Windows Services panel. If you have installed a cluster of messaging servers, you would need to stop the application on all the servers in the cluster. Open the Windows Task Manager and verify that none of the java processes are running. 3. On each services server VM, stop the Cisco Service from the Windows Services panel. If you have installed two services servers, stop the application on both servers. Open the Windows Task Manager and verify that none of the java processes (the services) are running.
	Stopping IIS	Stop IIS (World Wide Web Publishing Service) on all web servers in the installation.
	Stopping the SQL Jobs	Perform this task on the ECE reports and active database server machines. To stop the jobs: 1. On the reports database, ensure that the Reports job is not running. The name of the job will be like `populatesmy_`*Reports_Database_Name*. 2. On the active database, ensure that the `populatesmy_`*Active_Database_Name* job is not running. 3. Disable the jobs before running the upgrader.
	Add or Update the Registry setting	Disable the value for SMB metadata caching using the registry setting: `HKLM\System\CurrentControlSet\Services\LanmanWorkstation\Parameters\DirectoryCacheLifetime=0 (DWORD).`
	Obtain DFS Path information	For HA installation, provide the DFS path in the file server input parameter for application, services and messaging server component upgrade.

After stopping all applications, IIS and SQL jobs, you can begin the upgrade.

Process for In-Place Upgrades

This chapter describes the process of upgrading to ECE 12.6(1) on an existing server. For the upgrade process on new servers, see "Process for Upgrade on New Servers" on page 52. Before beginning the upgrade, ensure that you have complied with all the prerequisites listed in "Pre-Upgrade Tasks" on page 20.

Upgrade Overview

There are two installation types that are identified for upgrade:

‣ Collocated (in-place) server installations — ECE is installed on a single server.

‣ Distributed server installations — ECE is installed on multiple servers.

```
Pre-upgrade        Pre-upgrade                       Post upgrade
   Tasks      →      Tasks       →     Upgrade   →      tasks

              In-place server              Distributed server
                 upgrade                       upgrade

              Overview                    Overview

              Upgrade file server         Upgrade file server

              Upgrade Web servers         Upgrade Web servers

                                          Upgrade services server

                                          Upgrade messaging server

                                          Upgrade application servers
```
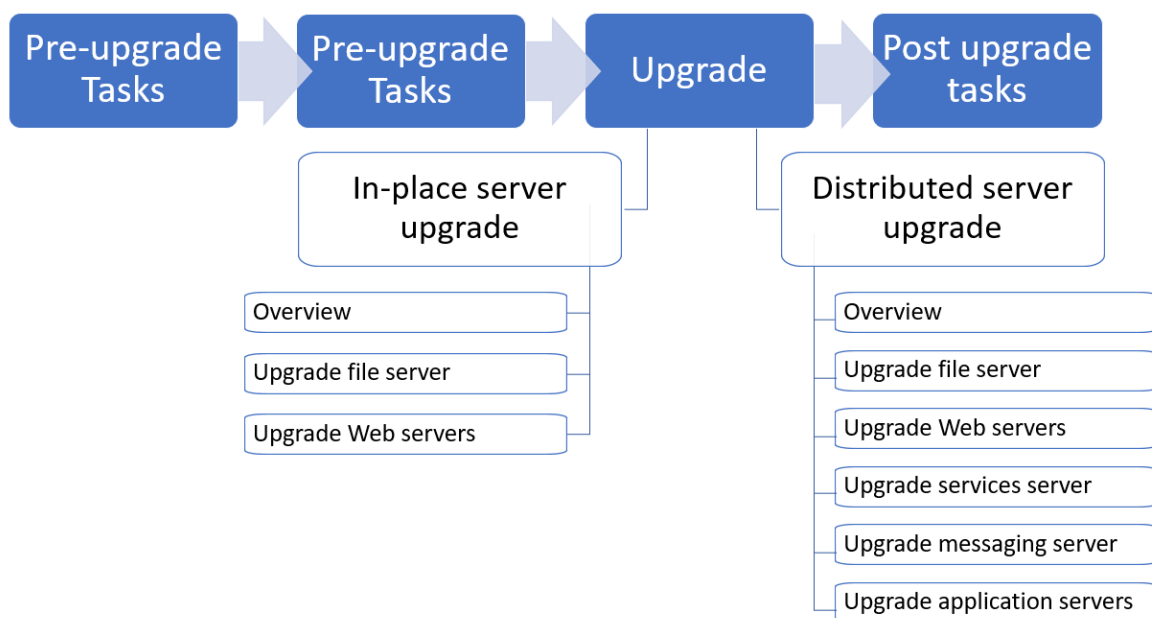
Run the Upgrade based on the installation type:

Collocated Server Installation	Distributed Server Installation
1. File server see "Upgrading the File Server" on page 28 2. Web server see "Upgrading the Web Servers" on page 33 **Note:** Collocated deployments do not require the installation of the Services, Application and Messaging servers. However, the Web server needs to be installed using the new install ISO.	1. File server see "Upgrading the File Server" on page 28 2. Web server see "Upgrading the Web Servers" on page 33 3. Services server see "Upgrading the Services Server" on page 37 4. All messaging servers see "Upgrading the Messaging Server" on page 42 5. All application servers in the deployment see "Upgrading the Application Servers" on page 46

Always run the upgrade on the file server first. If the file server is installed on a NAS device/ DFS, run the upgrade on any of the components and the file server is upgraded along with that component. The database is upgraded along with the file server. The upgrade can be run on all other servers in any order.

Note: NAS is supported on non-HA environment while DFS is supported on HA environment.

Upgrading Non HA Installations

1. Run the Upgrader on the file server machine. (page 28)

2. Use the ECE 12.6(1) installation program and install the rest of the components: Upgrading the Web Servers, Upgrading the Services Server, Upgrading the Messaging Server, and Upgrading the Application Servers.

Upgrading HA Installations

Prerequisites

Perform the following tasks before upgrading the HA installations:

- Stop the Cisco Services on the Application, Messaging and Service servers.

- Stop the Distributed File System (DFS) Replication service on the file server on Side A.

- In the DFS Management Console, disable the target folder for the file server on Side B.

- Stop the DFS Name Space and Replication service for the file server on Side B.

Important: **After upgrading the File Server, in the DFS Management Console, enable the target folder for the file server on Side B, restart the DFS Name Space and Replication service on file servers for Side A and Side B and wait for both the file servers to be synchronized.**

- Ensure that the DFS and Failover Clustering features have been configured properly. For more information, see the "Appendix A: Distributed File System Configuration" and the "Appendix B: SQL Always-On Configuration" section of the *Enterprise Chat and Email Installation and Configuration Guide.*

On Side A

1. Run the Upgrader on the file server machine. (page 28)

2. Use the ECE 12.6(1) installation program and install the rest of the components: Upgrading the Web Servers, Upgrading the Services Server, Upgrading the Messaging Server, and Upgrading the Application Servers.

On Side B

3. After the side A is upgraded, use the ECE 12.6(1) installation program and install the rest of the components: Upgrading the Web Servers, Upgrading the Services Server, Upgrading the Messaging Server, and Upgrading the Application Servers.

Upgrading the File Server

Run the upgrade on the ECE file server. The database is upgraded along with the 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 ECE.**

To upgrade the ECE file server:

1. Download the ECE 12.6(1) upgrade file if you have not done so yet.

2. Ensure all pre-upgrade tasks are complete (see "Pre-Upgrade Tasks" on page 20) including:
   ○ Verifying available disk space
   ○ Backing up virtual machines, ECE installation folders and database
   ○ Upgrading to Windows 2019 and SQL to 2019.

3. Verify that all applications, and IIS are stopped/closed (see "General Tasks before Initiating the Upgrade" on page 24) and that all the application files are closed before you begin. For example, `eService.war` or other files opened from any other application folders should be closed.

4. Create a temporary folder with a name of your choosing, *Temporary_Folder*.

5. From the upgrade package, copy the upgrade files into newly created *Temporary_Folder*.

6. Double-click `setup_windows.exe` to launch the ECE 12.6(1) upgrade.

7. In the Introduction window, review the instructions and when ready, click **Next.**
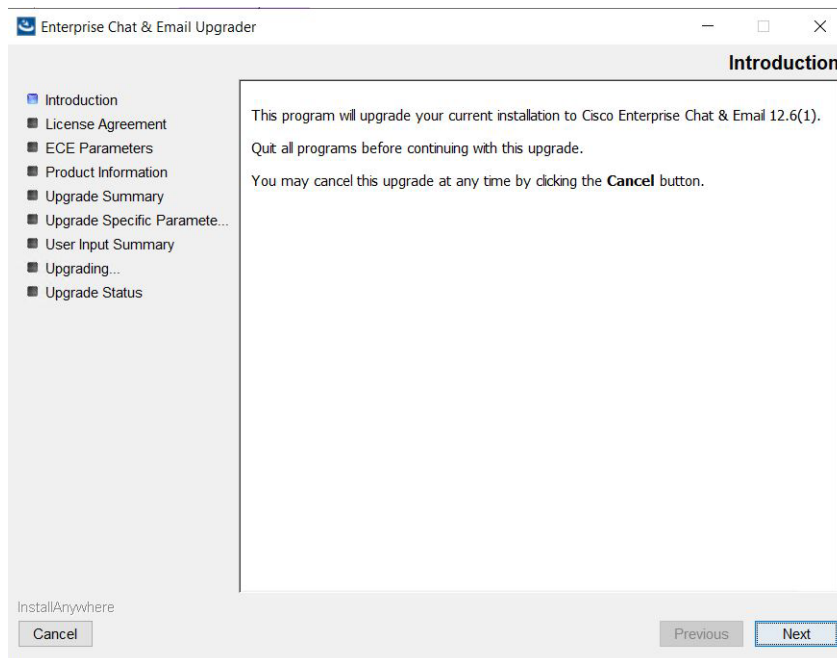
8. In the License Agreement window, review the licensing terms. Check **I accept the terms of the License Agreement** and click **Next.**
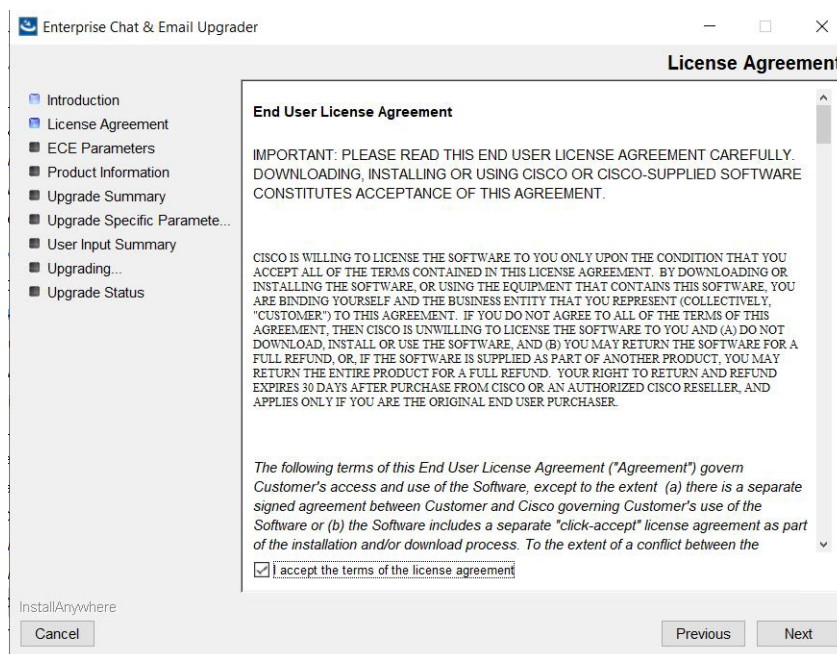
9. In the Upgrade Type window, choose **In-place upgrade**. Click **Next**.

10. Define ECE Parameters which include the following two windows:

❍ **Enterprise Chat & Email Home Directory**: Type the path or browse and select the folder where ECE is installed. Click **Next.**
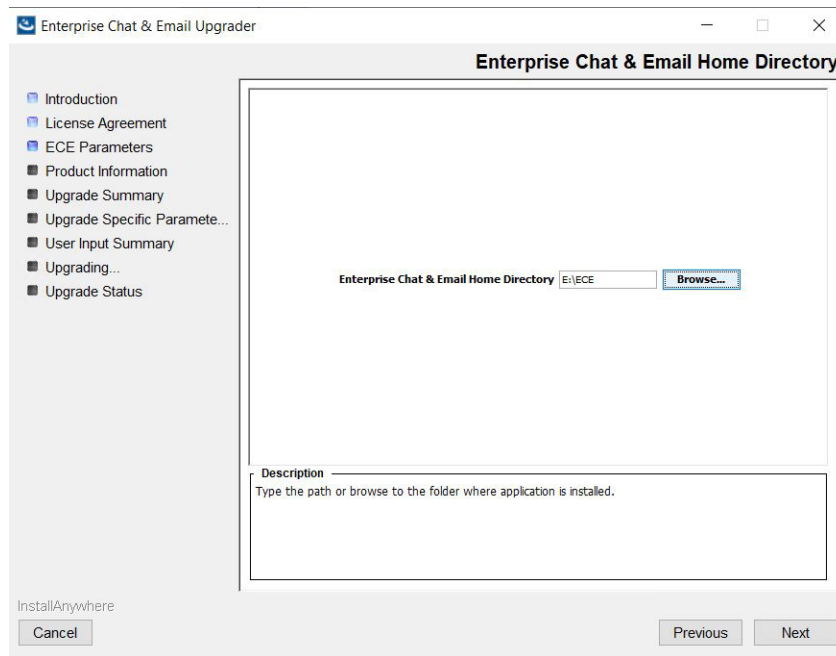
❍ **File Server Parameters:** Type the name of the file server or the NAS UNC path and click **Next.**
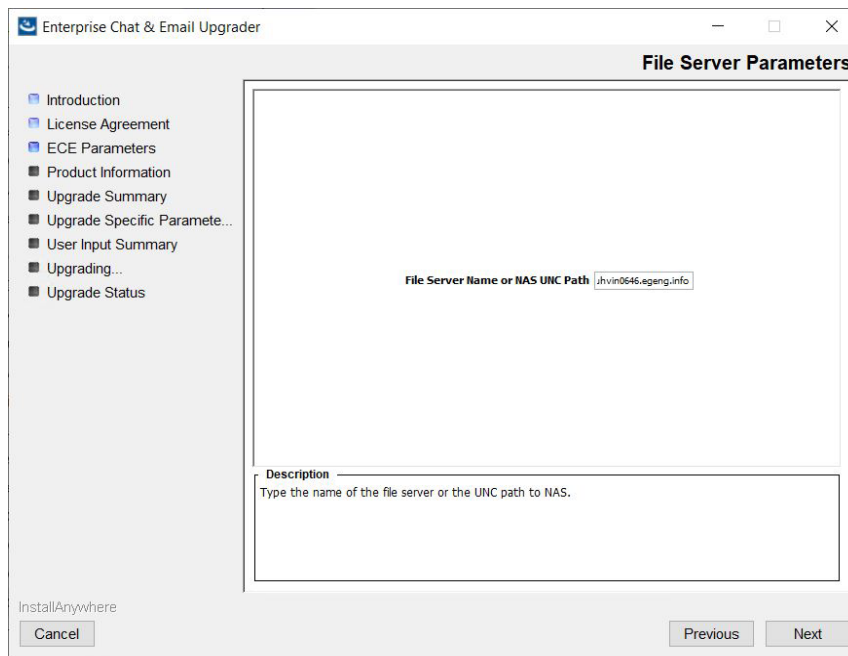
11. In the Product Information window, verify the ECE components installed.

For an in-place installation, a list of installed components display. These components are to be upgraded as part of the upgrade process automatically. If upgrading a distributed installation, only components on the server currently being updated are processed. You must then call the upgrade on each machine where the various components are installed.

If all components are correct, click **Next**.
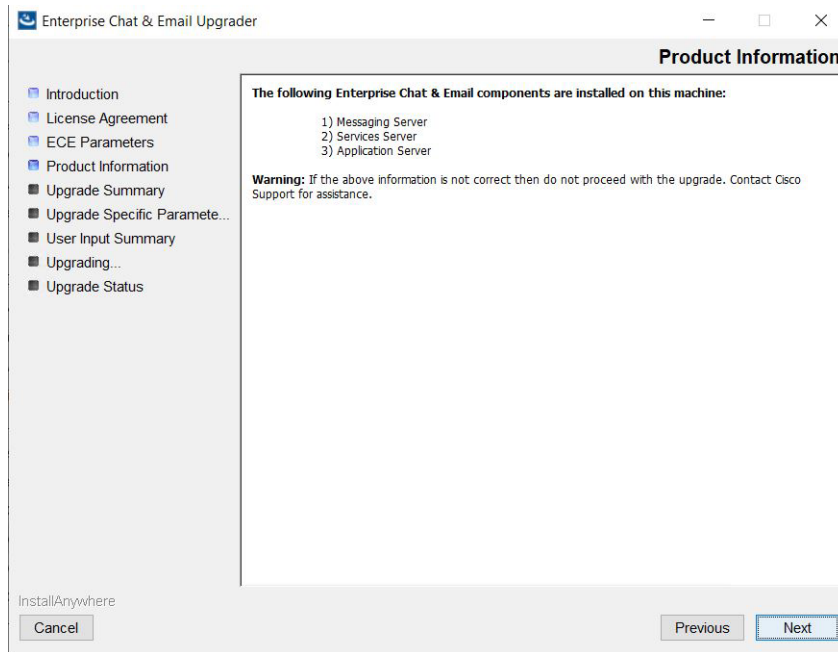
12. In the Upgrade Summary window, verify the version being installed. It should be ECE 12.6(1).
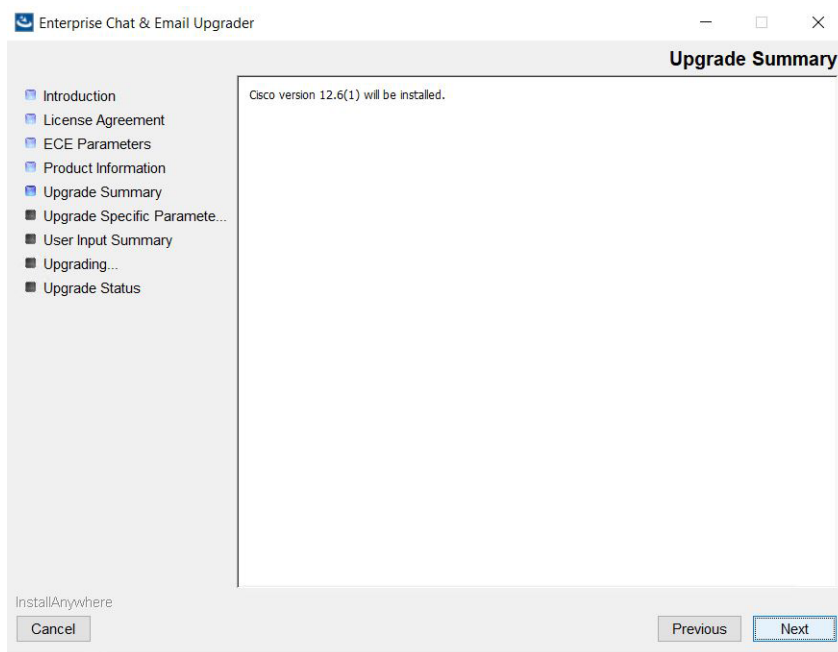
For distributed installations, the summary indicates any additional servers to be upgraded. This information only displays while running the upgrade on the file server. If using NAS/ DFS, this information is displayed on the first component where you run the upgrade. Note any additional servers if indicated so you can apply the upgrade to those servers as well.

Click **Next**.

13. In the User Input Summary window, verify the information you provided during the upgrade process. Click **Install.**
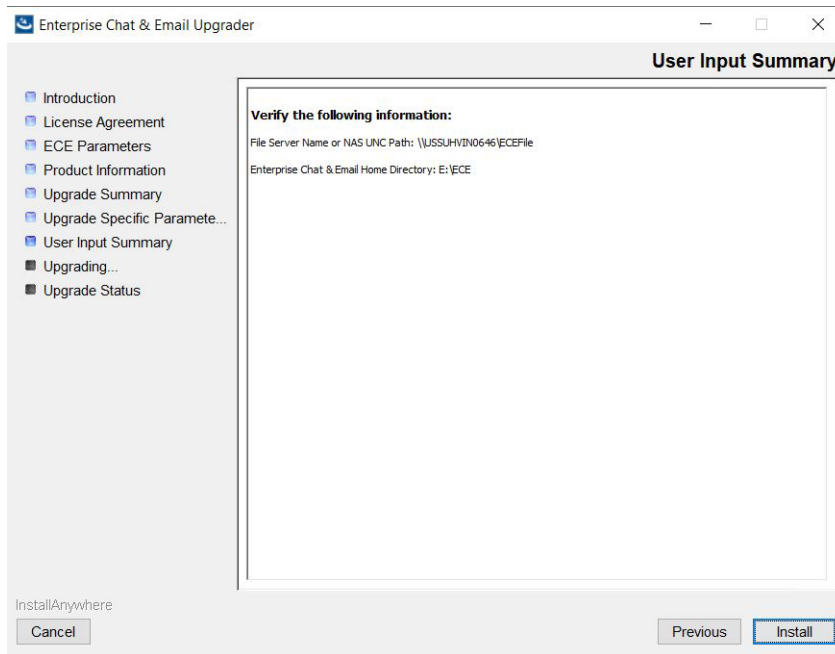
The upgrade creates a backup of the file system at
ECE_Home\`Patches`\`Backup`*Pre_Upgrade_Version*\`FileServer` and starts upgrading the application.

The Upgrade window opens when the program begins.

14. One of the following windows opens:

   ❍ The I**nstallation Status** window opens when the upgrade is complete. Click **Close** to complete the file server upgrade process and continue with "Upgrading the Web Servers" on page 33.

○ The **Unsupported Customization Detected** opens if the upgrade finds that any of the out-of-the-box product libraries have been modified and if there are any unsupported customizations made to the master and active databases. You cannot proceed with the upgrade process.

In this window, the location of a log file displays which list all customizations related issues that require fixing before you can run the upgrade again. For example, *ECE_Home*\eService\installation\logs\unsupported_customizations_*ServerName*.txt) Click **Cancel** to exit the upgrade and contact Cisco TAC for assistance.

Upgrading the Web Servers

The Web Server upgrade needs to be run for all instances of ECE 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 ECE.**

To upgrade the web server:

1. Verify that IIS is still stopped/closed (see) and that all the application files are closed before you begin. For example, eService.war 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 ECE 12.6(1) upgrade.

4. When the Introduction window opens, read the installation instructions and click **Next.**
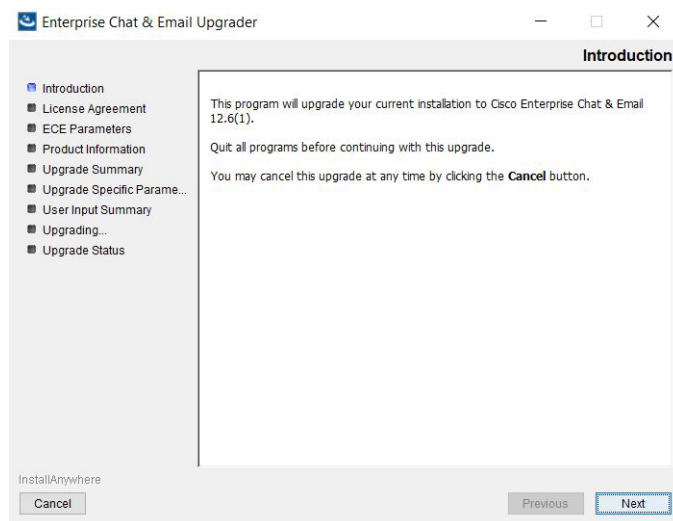
5. In the License Agreement window, review the licensing terms. Check **I accept the terms of the License Agreement** and click **Next.**
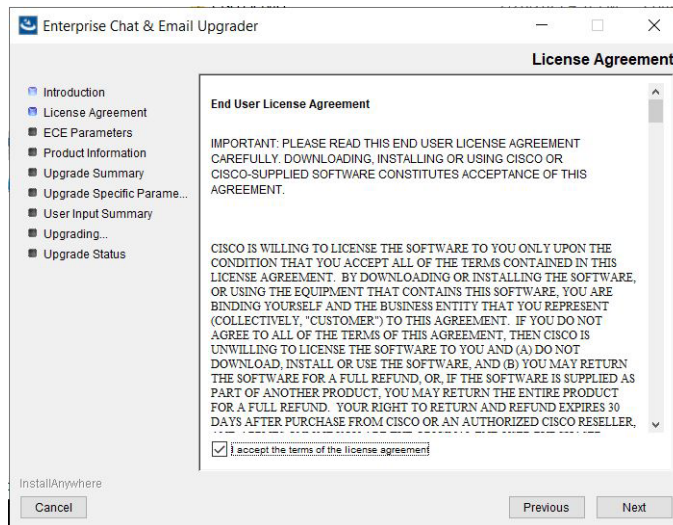

6. Define ECE Parameters which include the following window:

   ○ **Enterprise Chat & Email Home Directory:** Type the path or browse and select the folder where ECE is installed. Click **Next.**
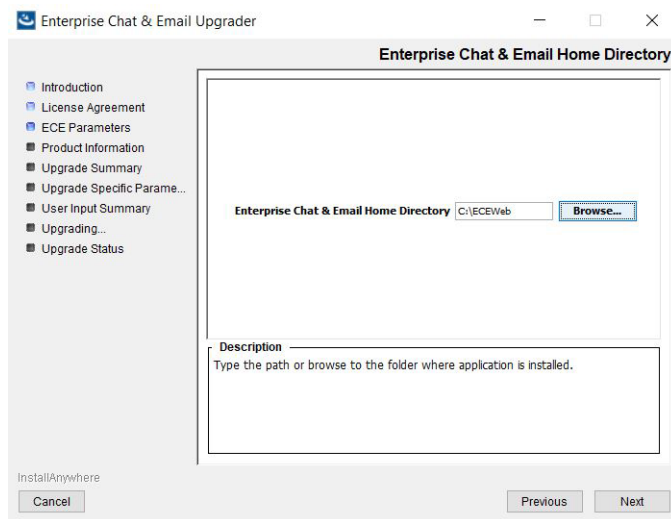

7. In the Application Server Parameter window, provide the application server name and the Jetty HTTP port. The port value should be same as the Jetty HTTP port value provided for the Application Server (page 50). Click **Next**.

8. In the Product Information window, verify the Web Server component is listed on the machine to be updated. Click **Next**.
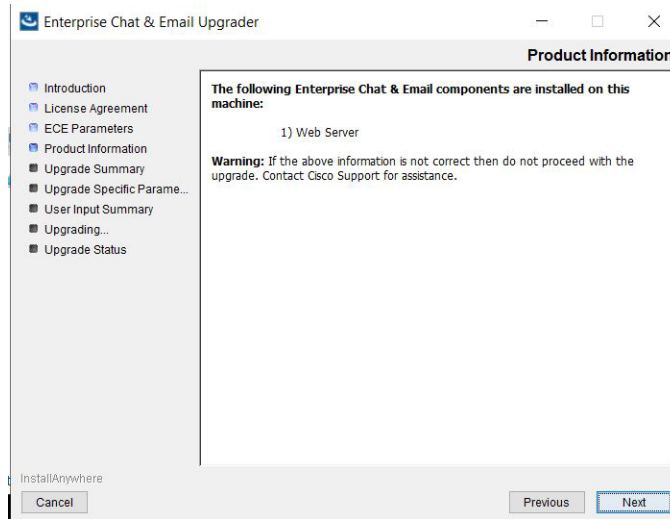
9. In the Upgrade Summary window, verify the version being installed. It should be ECE 12.6(1). As needed the screen displays a list of additional servers that require an upgrade. Click **Next**.
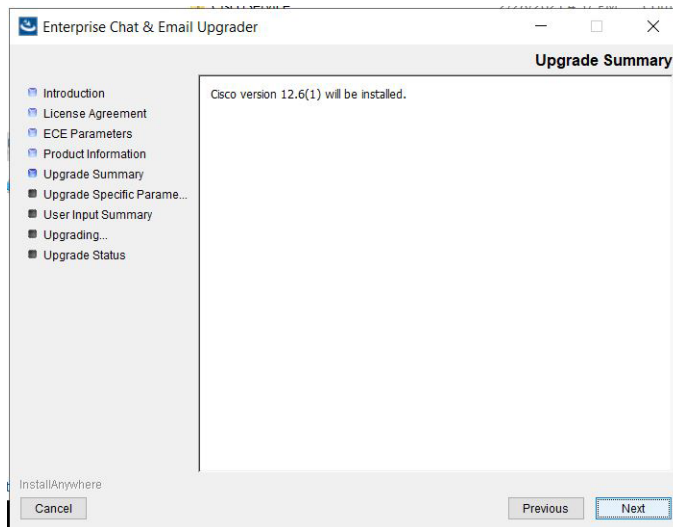

10. Define the Upgrade Specific Parameter which includes the following window:

○ **IIS Web Site Parameters.** Select the name of website from the drop down. Click **Next**.
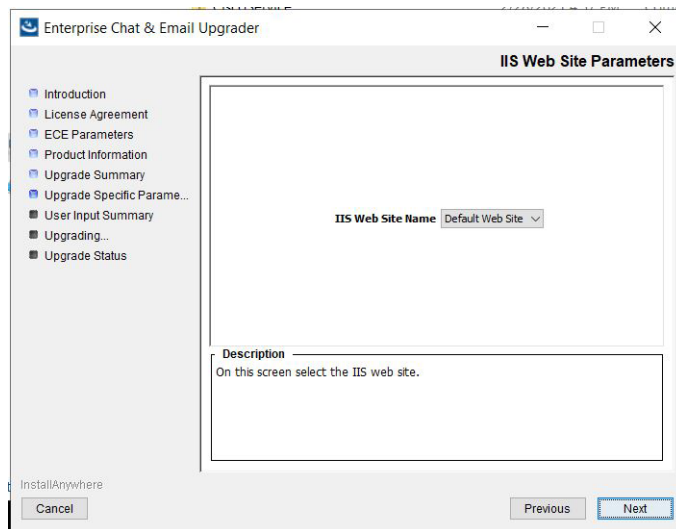
11. In the Domain User Account Parameters window, provide the domain user name and password. Click **Next**.

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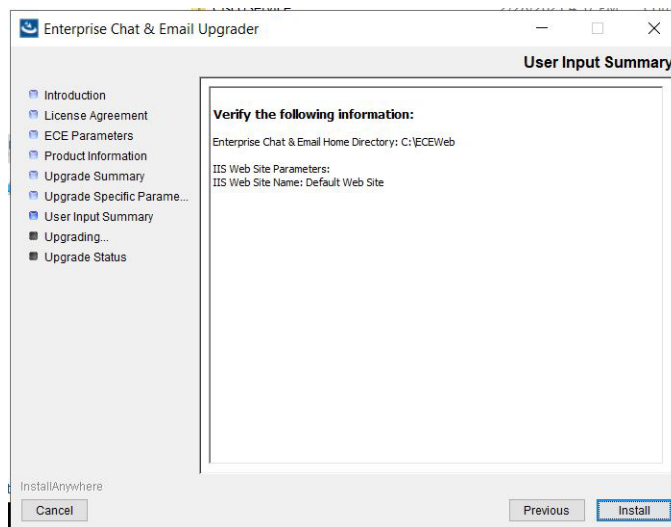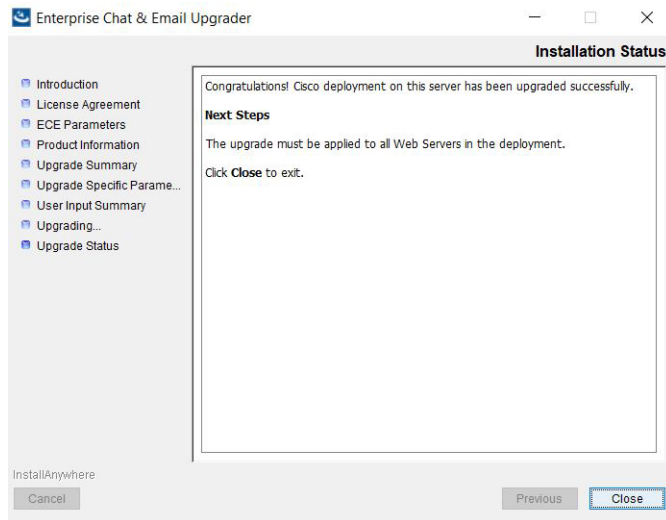

The upgrade creates a backup of the ECE home directory at
ECE_Home\Patches\Backup*Pre_Upgrade_Version*\FileServer and starts upgrading the installation.

The Updating window opens after the upgrade is initiated.

13. One of the following windows opens:

❍ The Installation Status window opens when the upgrade is complete. Click **Close** to complete the upgrade process.

❍ The Unsupported Customization Detected opens if the upgrade finds that any of the out-of-the-box product libraries have been modified and if there are any unsupported customizations made to the master and active databases. You cannot proceed with the upgrade process.

In this window, the location of a log file displays which list all customizations related issues that require fixing before you can run the upgrade again. For example, *ECE_Home*\eService\installation\logs\unsupported_customizations_*ServerName*.txt) which lists all customizations related issues you need to fix before running the upgrade.

Click **Close** to exit the upgrade and contact Cisco TAC for assistance.

Upgrading the 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 ECE.**

To upgrade the services server:

1. Check to see that you have closed all the application files before you begin the upgrade. For example, eService.war 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 ECE 12.6(1) upgrade.

4. When the Introduction window appears, read the installation instructions. Click **Next.**
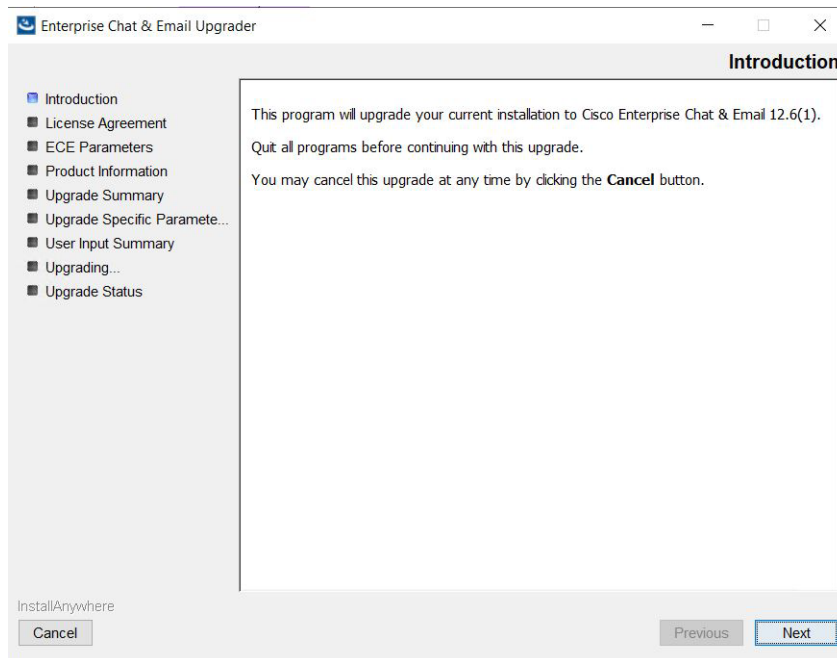

5. In the License Agreement window, review the licensing terms and check **I accept the terms of the License Agreement** and click **Next.**
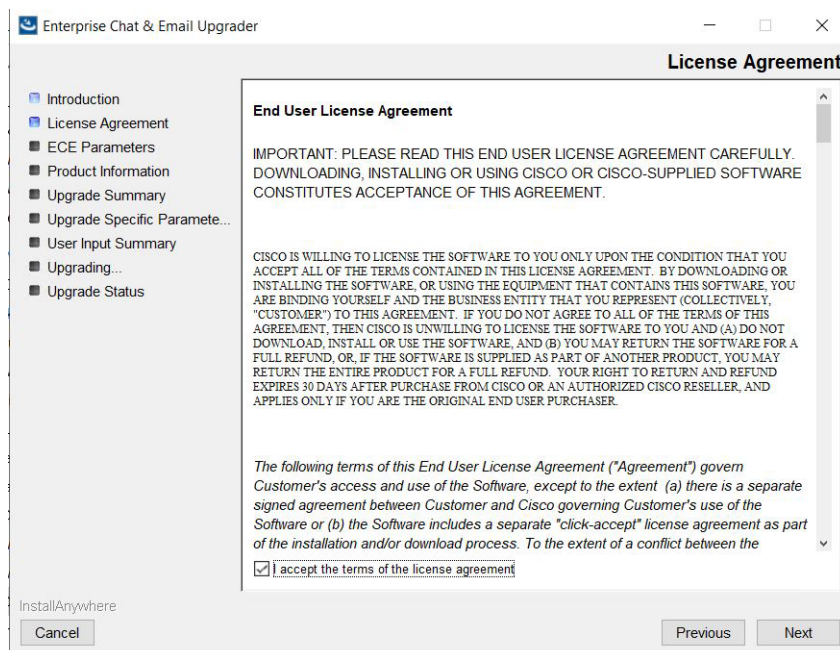
6. In the Upgrade Type window, select the **Upgrade on new servers** option. Click **Next.**

7. Define ECE Parameters which include the following two windows:

○ **Enterprise Chat & Email Home Directory:** Type the path or browse and select the folder where ECE is installed. Click **Next.**
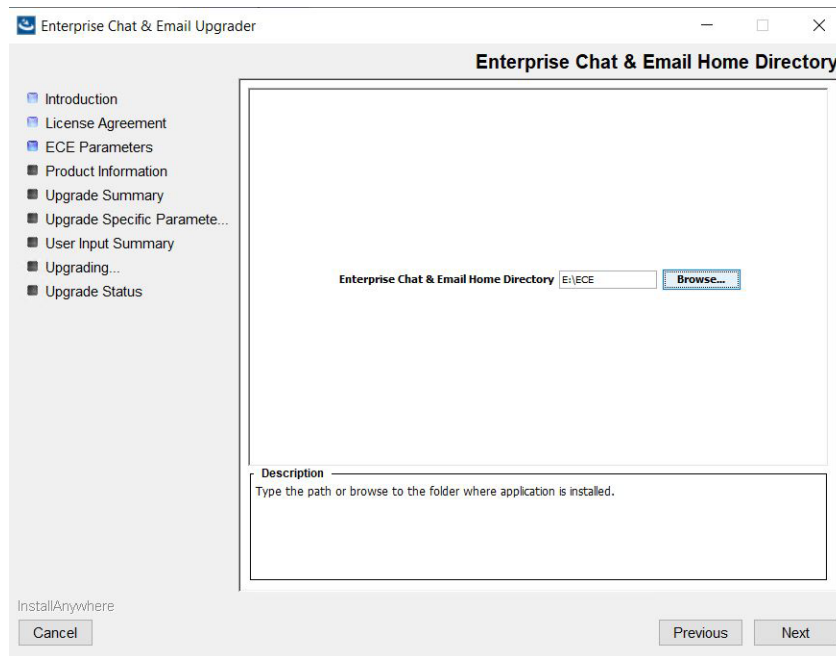
○ **File Server Parameters:** Type the name of the file server or the NAS UNC path and click **Next.**
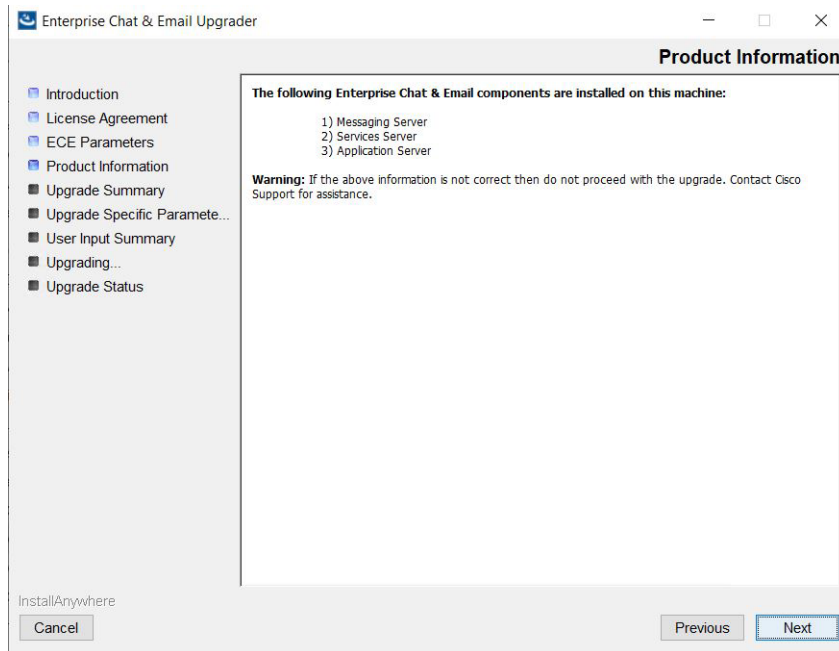
> Note: For the HA installations, provide the DFS path in the **File Server Parameters** window. For example, `egeng.info\disha\scion`.
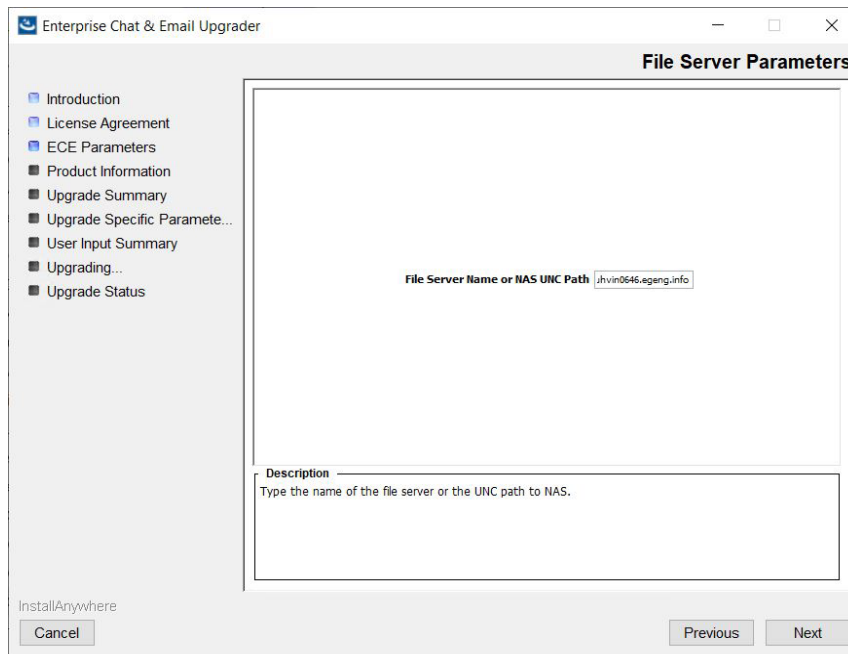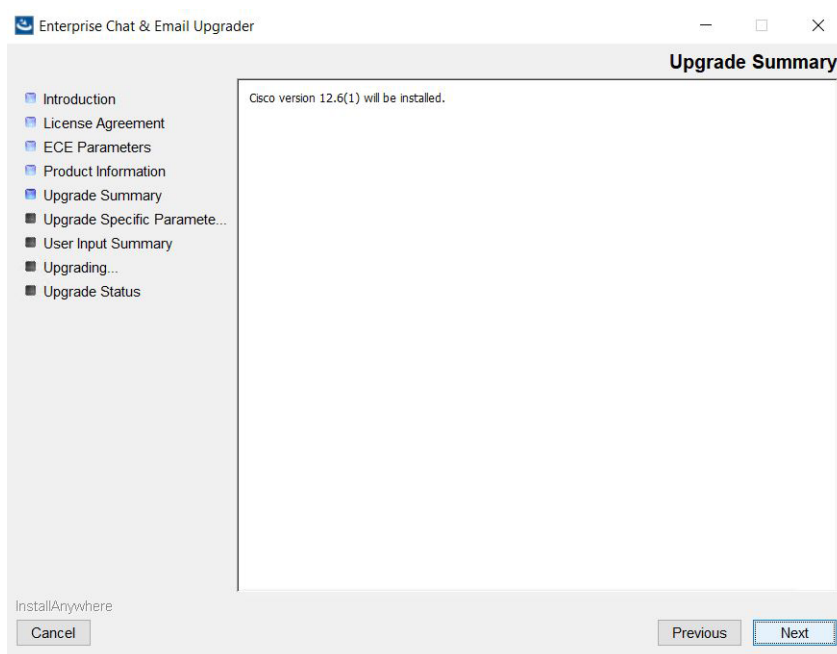

8. In the Domain User Account Parameters window, provide the domain user name and password. Click **Next**.
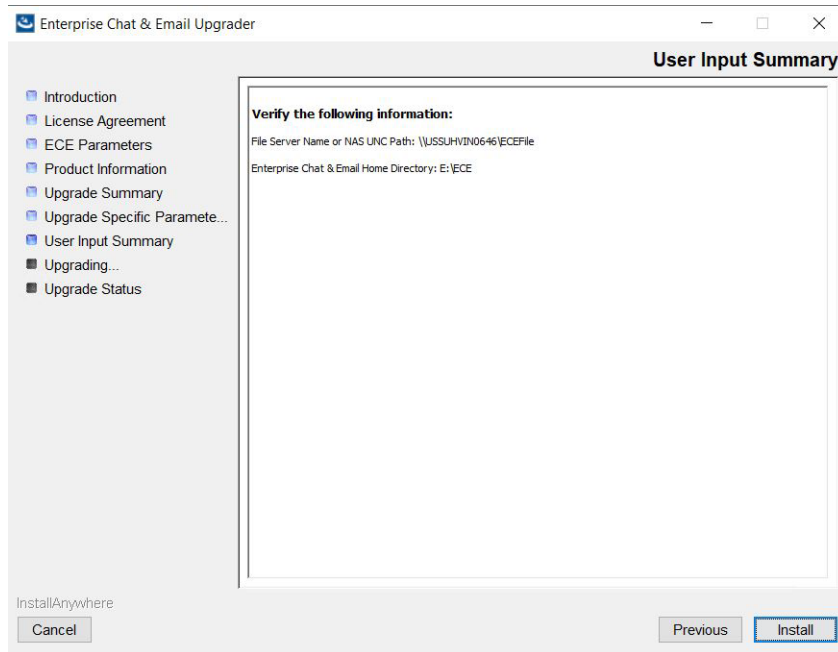
9. In the Product Information window, verify the ECE components installed on the machine. Click **Next**.

10. In the Upgrade Summary window, verify the version being installed. It should be ECE 12.6(1). As needed the screen displays a list of additional servers that require an upgrade. Click **Next**.
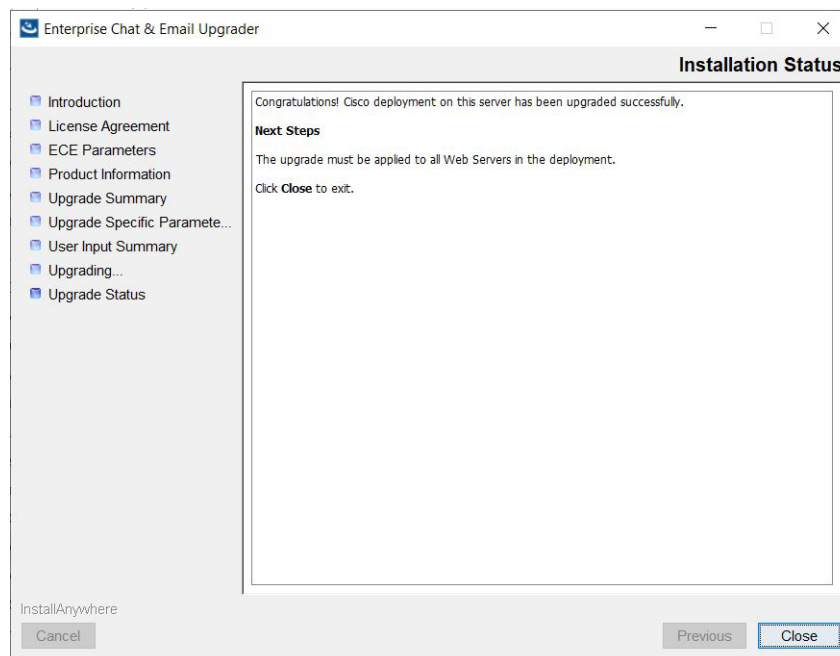
11. In the User Input Summary window, verify the information you provided during the upgrade process. Click **Install**.

The upgrade creates a backup of the Enterprise Chat & Email home directory at *ECE_Home*\`Patches`\`Backup`*Pre_Upgrade_Version*\`FileServer` and starts upgrading the installation.

12. One of the following windows opens:

   ❏ The Installation Status window opens when the upgrade is complete. Click **Close** to complete the file server upgrade process and continue with "Upgrading the Web Servers" on page 33.

○ The Unsupported Customization Detected opens if the upgrade finds that any of the out-of-the-box product libraries have been modified and if there are any unsupported customizations made to the master and active databases. You cannot proceed with the upgrade process.

In this window, the location of a log file displays which list all customizations related issues that require fixing before you can run the upgrade again. For example, *ECE_Home*\eService\installation\logs\unsupported_customizations_*ServerName*.txt) Click **Cancel** to exit the upgrade and contact Cisco TAC for assistance.
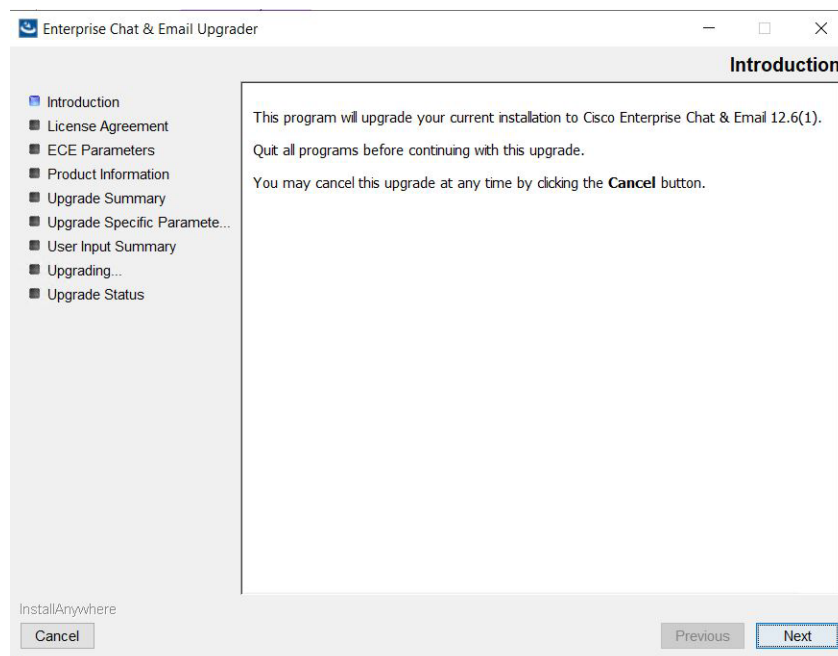
Upgrading the Messaging Server

In distributed-server installations, the Upgrader needs to be run on all ECE messaging servers.
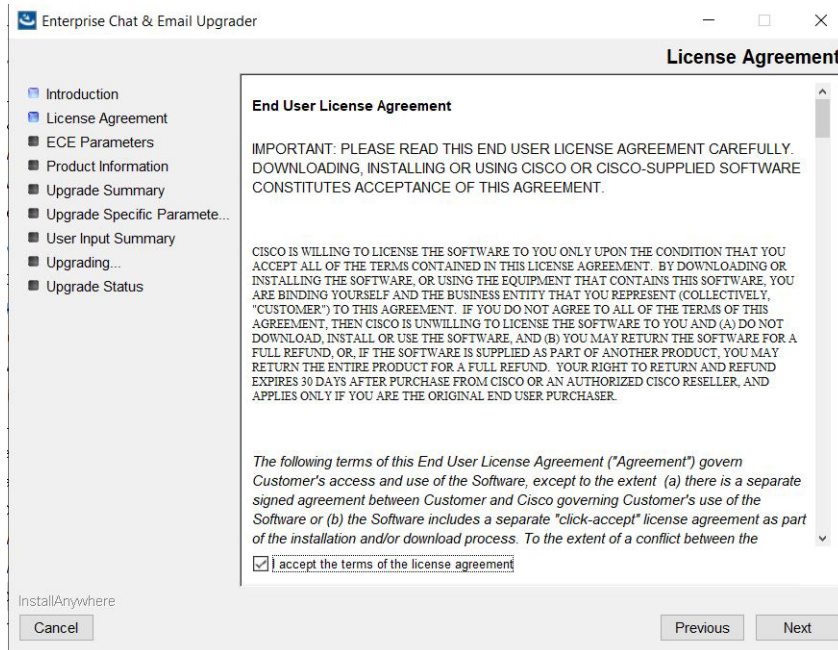
> Important: **When running the upgrade you must be logged on to the server using the same domain account that was used for installing ECE.**

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.war 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 ECE 12.6(1) Upgrader.

4. In the Introduction window, read the installation instructions and click **Next.**
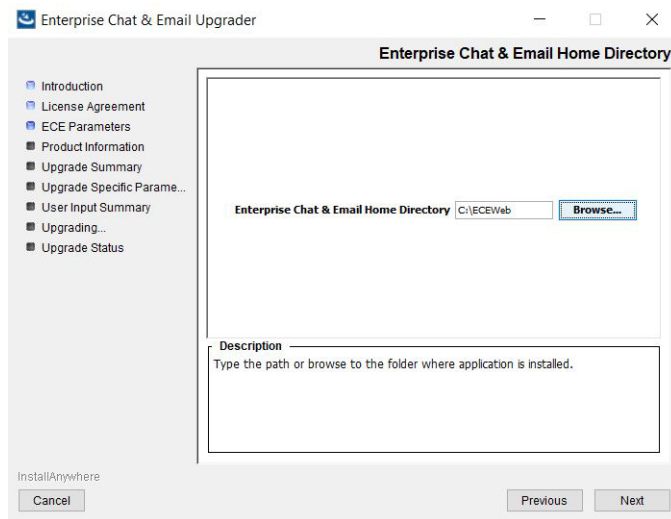
5. In the License Agreement window, review the licensing terms and select the **I accept the terms of the License Agreement** option. Click **Next.**

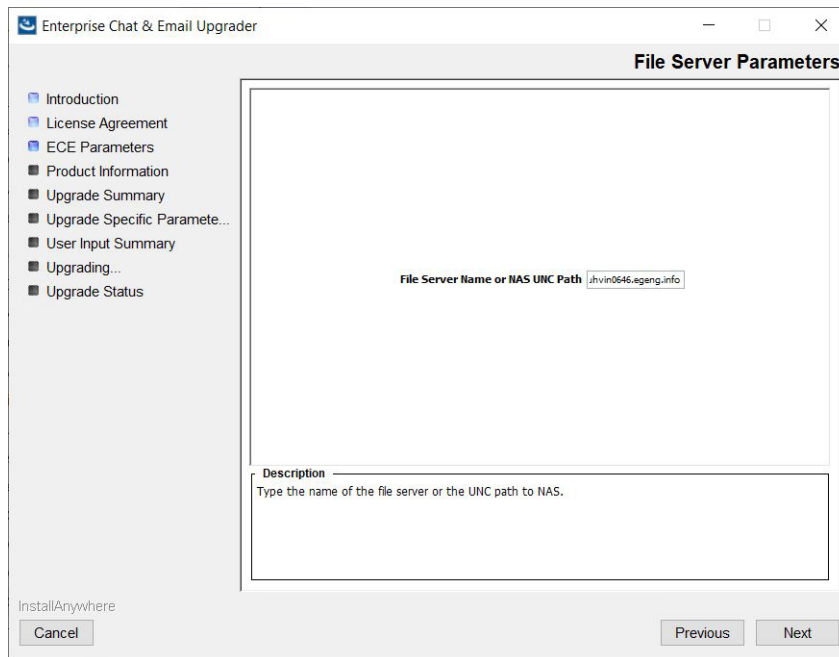6. Define ECE Parameters which include the following window:
   ❍ **Enterprise Chat & Email Home Directory**: Type the path or browse and select the folder where ECE is installed. Click **Next.**

❍ **File Server Parameters:** Type the name of the file server or NAS UNC path and click **Next**.
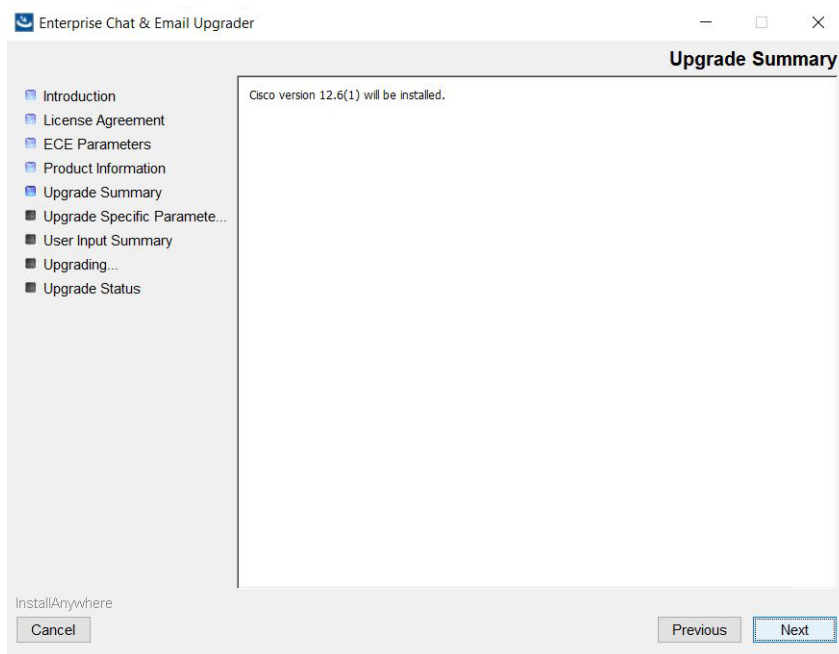
> **Note:** For the HA installations, provide the DFS path in the **File Server Parameters** window. For example, `egeng.info\disha\scion`.

7. In the Domain User Account Parameters window, provide the domain user name and password. Click **Next**.

8. In the Product Information window, verify the ECE components installed on the machine. Click **Next**.

9. In the Upgrade Summary window, verify the version being installed. It should be ECE 12.6(1). As needed the screen displays a list of additional servers that require an upgrade. Click **Next**.

10. In the User Input Summary window, verify the information you provided during the upgrade process. Click **Install**.
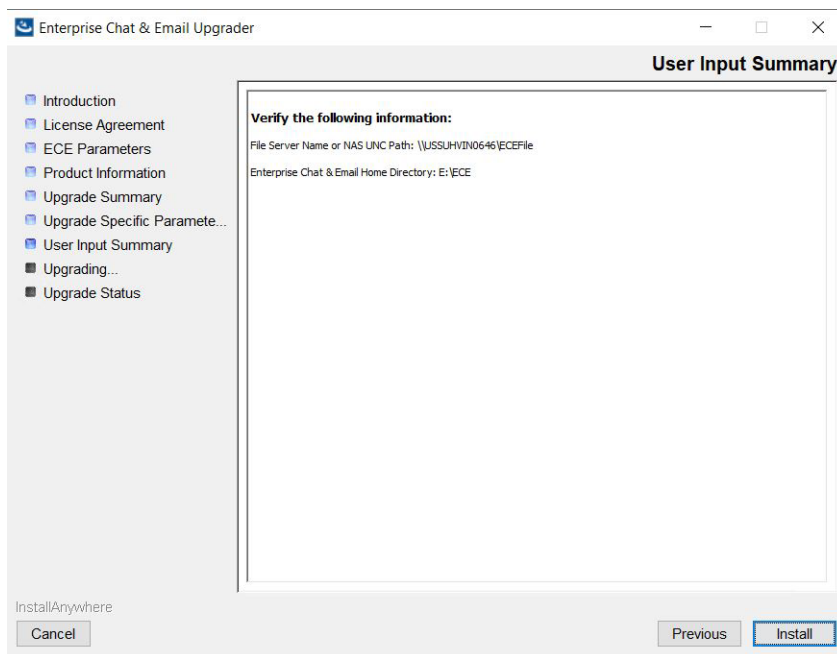
The upgrader creates a backup of the ECE home directory at *ECE_Home*\\`Patches`\\`Backup`*Pre_Upgrade_Version*\\`FileServer` and starts upgrading the installation.

11. One of the following windows opens:

❍ The Installation Status window opens when the upgrade is complete. Click **Close** to complete the file server upgrade process and continue with .
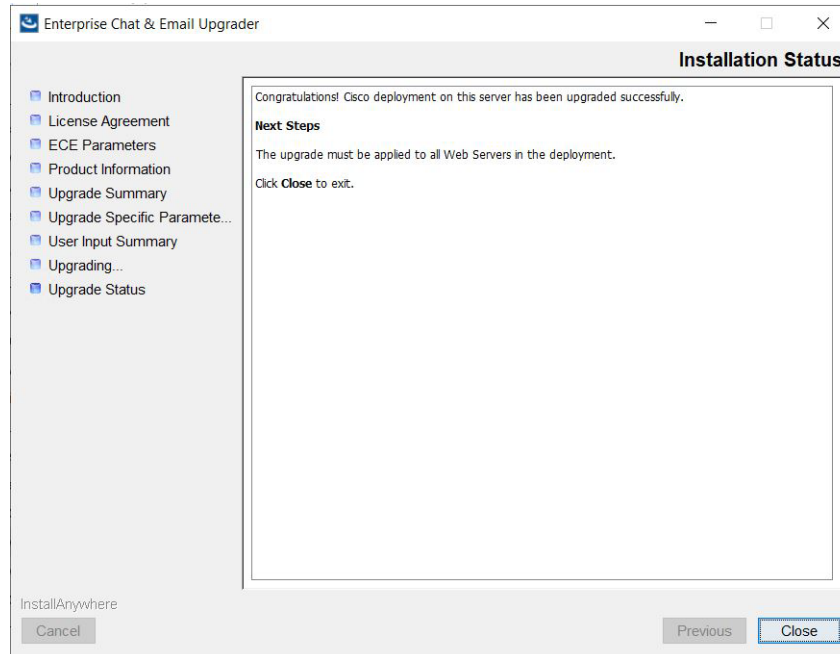
```
Enterprise Chat & Email Upgrader                         —    □    ×

                                              Installation Status

  ▪ Introduction              Congratulations! Cisco deployment on this server has been upgraded successfully.
  ▪ License Agreement
  ▪ ECE Parameters            Next Steps
  ▪ Product Information
  ▪ Upgrade Summary           The upgrade must be applied to all Web Servers in the deployment.
  ▪ Upgrade Specific Parameter…   Click Close to exit.
  ▪ User Input Summary
  ▪ Upgrading…
  ▪ Upgrade Status




  InstallAnywhere
  Cancel                                         Previous      Close
```

❍ The Unsupported Customization Detected opens if the upgrade finds that any of the out-of-the-box product libraries have been modified and if there are any unsupported customizations made to the master and active databases. You cannot proceed with the upgrade process.

In this window, the location of a log file displays which list all customizations related issues that require fixing before you can run the upgrade again. For example,
_ECE_Home_\`eService\installation\logs\unsupported_customizations_`_ServerName_`.txt`)
Click **Cancel** to exit the upgrade and contact Cisco TAC for assistance.

Upgrading the Application Servers

In distributed-server installations, the Upgrader needs to be run on all ECE application servers.
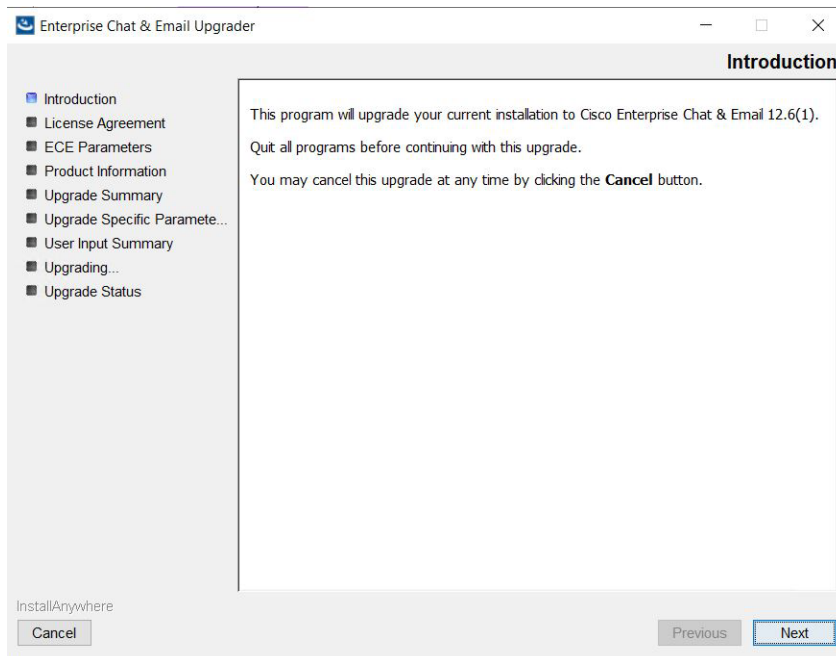
> **Important:** **When running the upgrade you must be logged on to the server using the same domain account that was used for installing ECE.**
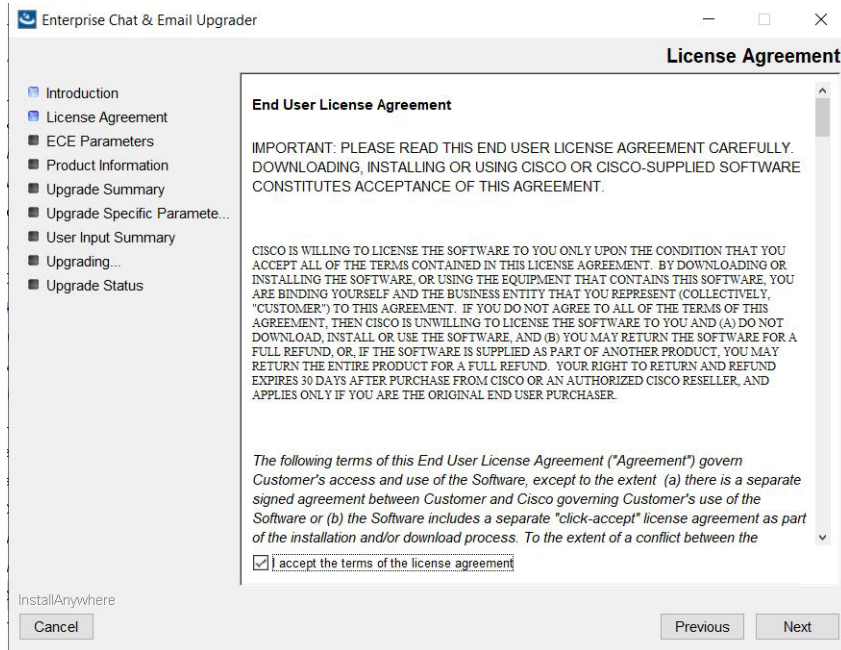
To upgrade the application server:

1. Check to see that you have closed all the application files before you begin the upgrade. For example, `eService.war` 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 ECE Upgrader.

4. In the Introduction window, read the installation instructions and click **Next.**
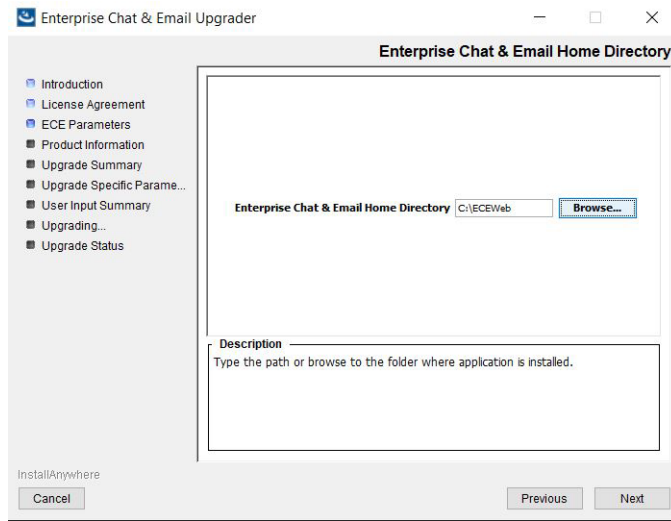

5. In the License Agreement window, review the licensing terms and select the **I accept the terms of the License Agreement** option. Click **Next.**

6. Define ECE Parameters which includes the following windows:

❍ **Enterprise Chat & Email Home Directory:** Type the path or browse and select the folder where ECE is installed. Click **Next.**

]

❍ **File Server Parameters:** Type the name of the file server or NAS UNC path and click **Next**.

> Note: For the HA installations, provide the DFS path in the **File Server Parameters** window. For example, `egeng.info\disha\scion`.

7. In the Domain User Account Parameters window, provide the domain user name and password. Click **Next**.

8. In the Product Information window, verify the ECE components installed on the machine. Click **Next**.

9. In the Upgrade Summary window, verify the version being installed. It should be ECE 12.6(1). As needed the screen displays a list of additional servers that require an upgrade. Click **Next**.

10. In the User Specific Parameters, verify the information and click **Next**.

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

The upgrader creates a backup of the ECE home directory at
ECE_Home\`Patches\Backup\`*Pre_Upgrade_Version*\`FileServer` and starts upgrading the installation.

12. One of the following windows opens:

   ❍ The Installation Status window opens when the upgrade is complete. Click **Close** to complete the file server upgrade process and continue with .

❍ The Unsupported Customization Detected opens if the upgrade finds that any of the out-of-the-box product libraries have been modified and if there are any unsupported customizations made to the master and active databases. You cannot proceed with the upgrade process.

In this window, the location of a log file displays which list all customizations related issues that require fixing before you can run the upgrade again. For example, *ECE_Home*\eService\installation\logs\unsupported_customizations_*ServerName*.txt) Click **Cancel** to exit the upgrade and contact Cisco TAC for assistance.

Process for Upgrade on New Servers

This chapter describes the process of upgrading to ECE 12.6(1) on new servers. For the in-place upgrade process, see "Process for In-Place Upgrades" on page 25. Before beginning the upgrade, ensure that you have complied with all the prerequisites listed in "Pre-Upgrade Tasks" on page 20.

```
Pre-upgrade        Pre-upgrade         Upgrade          Post upgrade
   Tasks              Tasks                                 tasks
                                           │
                                ┌──────────┴──────────┐
                                │ New Server Upgrade  │
                                │   and Installation  │
                                └──────────┬──────────┘
                                           ├── Gather Information
                                           ├── Upgrade Overview for HA
                                           │   and Non HA Installations
                                           ├── Upgrade file server
                                           └── Installing Services, Web,
                                               Application, Messaging
                                               Servers
```
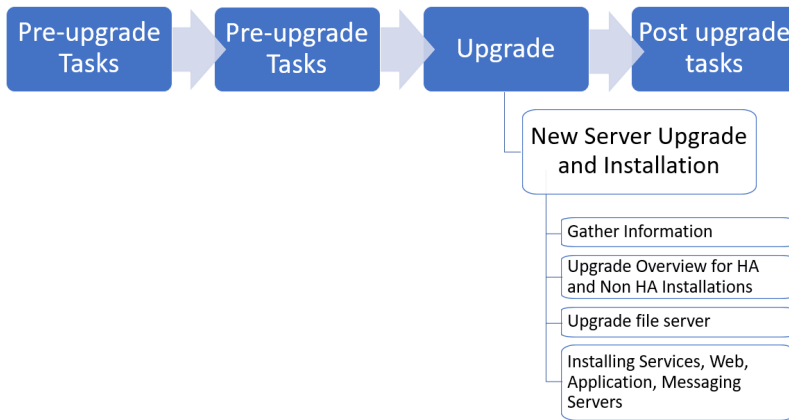
Gather Upgrade Information

Gather the following information before you begin the upgrade/installation process. We recommend noting all this information in Notepad or another on-line document so you can easily copy and paste the information into the various fields during the upgrade.

For more details about the items in this table, refer to step 8 and step 9 in "Upgrading the File Server" on page 55.

Important: **Make sure you retain the information in this table for future upgrades.**

✓	For	Information required
	Restored ECE Master Database	▶ Database server name or Listener name if using MSSQL server always on availability group - _____ ▶ Master database name _____ ▶ Database server instance name or Listener instance if MSSQL server is always on availability group _____ ▶ Database server listen port _____ If using the SQL Server Authentication mode: ▶ Master database username _____ ▶ Master database password _____
	ECE Active Database	▶ Active database name _____ If using the SQL Server Authentication mode: ▶ Active database username _____ ▶ Active database password _____

✓	For	Information required
	ECE Reports Database	▸ Database server name or Listener name if using MSSQL server always on availability group - _____ ▸ Restored reports database name _____ ▸ Database server instance name or Listener instance if MSSQL server is always on availability group _____ ▸ Database server listen port (no port needed is using the named instance) _____ If using the SQL Server Authentication mode: ▸ Database administrator username _____ ▸ Database administrator password _____ ▸ Reports database username _____ ▸ Reports database password _____
	Domain User Account	▸ Domain username _____ ▸ Domain password _____
	Database Domain User	▸ Domain username _____

Upgrade Overview

Upgrading Non HA Installations

1. Run the Upgrader on the new Windows 2019 file server machine. (page 55)

2. Use the ECE 12.6(1) installation program and install the rest of the components on the new Windows 2019 servers. (page 64)

Upgrading HA Installations

Prerequisites

Perform the following tasks before upgrading the HA installations:

▸ Stop the Cisco Services on the Application, Messaging and Service servers.

▸ Stop the Distributed File System (DFS) Replication service on the file server on Side A.

▸ Stop the DFS Name Space and Replication service for the file server on Side B.

> Important: **After upgrading the File Server, start the DFS Name Space and Replication service on file servers for Side A and Side B.**

▸ Ensure that the DFS and Failover Clustering features have been configured properly. For more information, see the "Appendix A: Distributed File System Configuration" and the "Appendix B: SQL Always-On Configuration" section of the *Enterprise Chat and Email Installation and Configuration Guide.*

On Side A

1. Run the Upgrader on the new Windows 2019 file server machine. (page 55)

2. Use the ECE 12.6(1) installation program and install the rest of the components on the new Windows 2019 servers. (page 64)

On Side B

▸ After the side A is upgraded, follow the steps in the "Appendix C: Convert Existing Deployment to HA" section of the *Enterprise Chat and Email Installation and Configuration Guide* to convert your installation of ECE 12.6 to an HA installation.

Upgrading the File Server

Run the Upgrader on the ECE 12.6(1) file server. The database is upgraded along with the 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 ECE.**


To upgrade the file server:

1. Download the ECE 12.6(1) upgrade file if you have not done so yet.

2. Ensure all pre-upgrade tasks are complete (see "Pre-Upgrade Tasks" on page 20) including:
   ❍ Verifying available disk space
   ❍ Backing up virtual machines, ECE installation folders and database
   ❍ Upgrading to Windows 2019 and SQL to 2019.

3. Verify that all applications, ISS and SQL are stopped/closed (see "General Tasks before Initiating the Upgrade" on page 24) and that all the application files are closed before you begin. For example, `eService.ear` or other files opened from any other application folders should be closed.

4. Create a temporary folder with a name of your choosing, *Temporary_Folder*.

5. Double-click `setup_windows.exe` to launch the ECE 12.6(1) Upgrader.

6. In the Introduction window, read the installation instructions. Click **Next.**
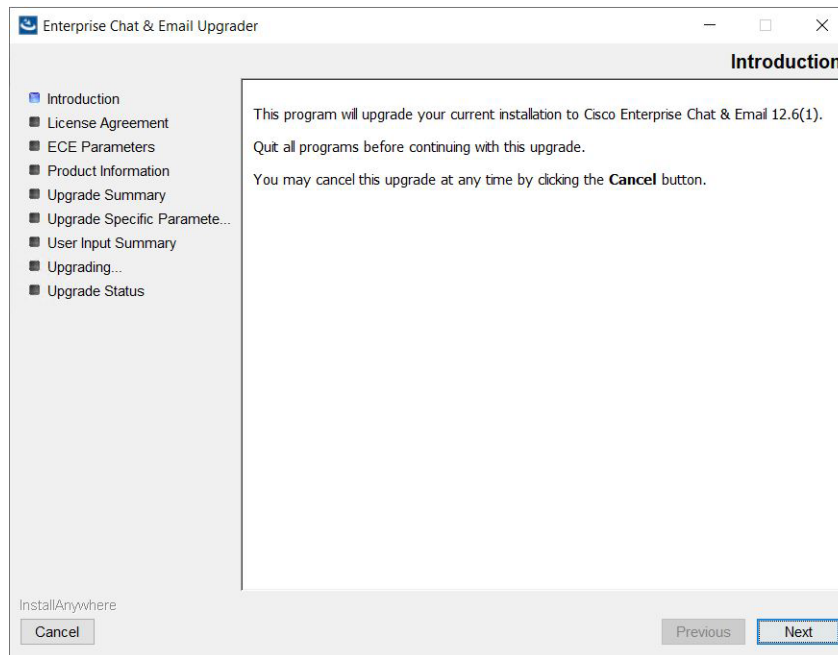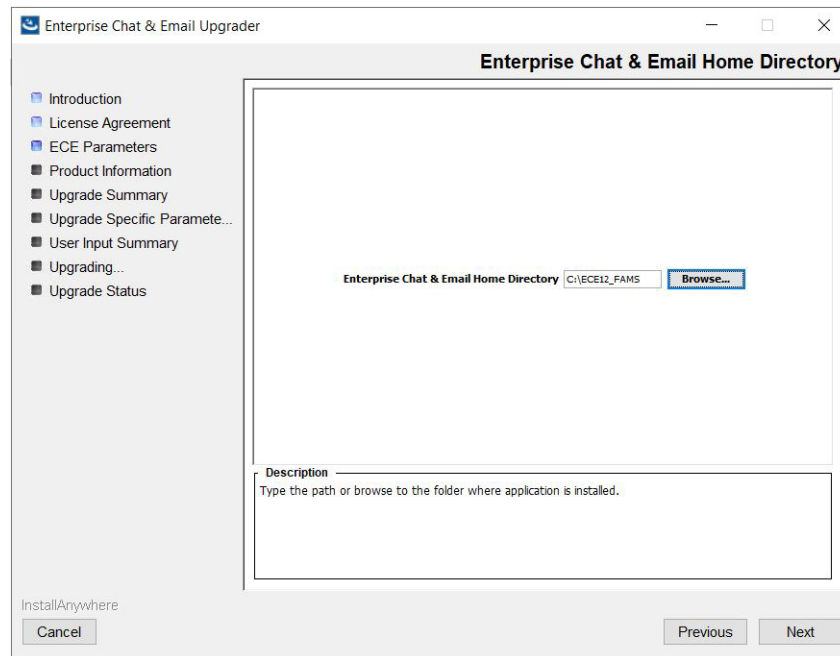

7. In the License Agreement window, review the licensing terms and select **I accept the terms of the License Agreement**. Click **Next.**
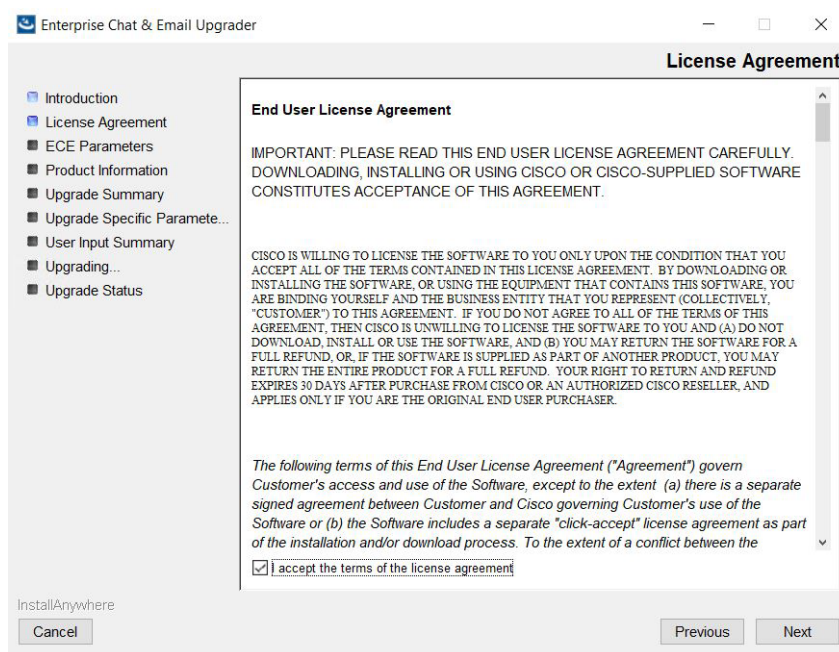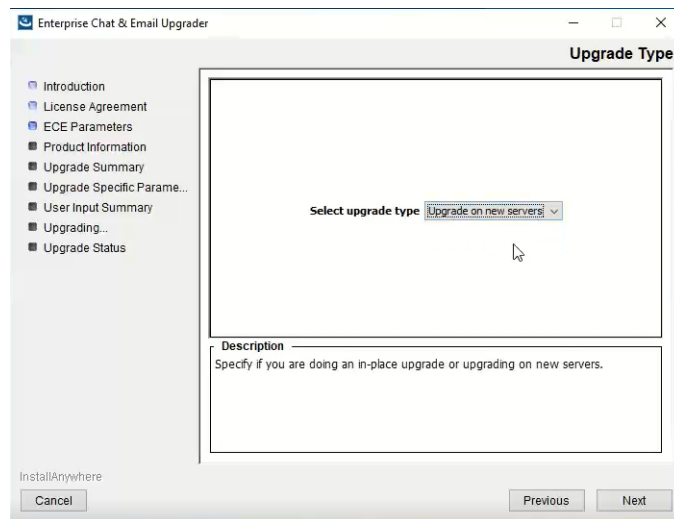

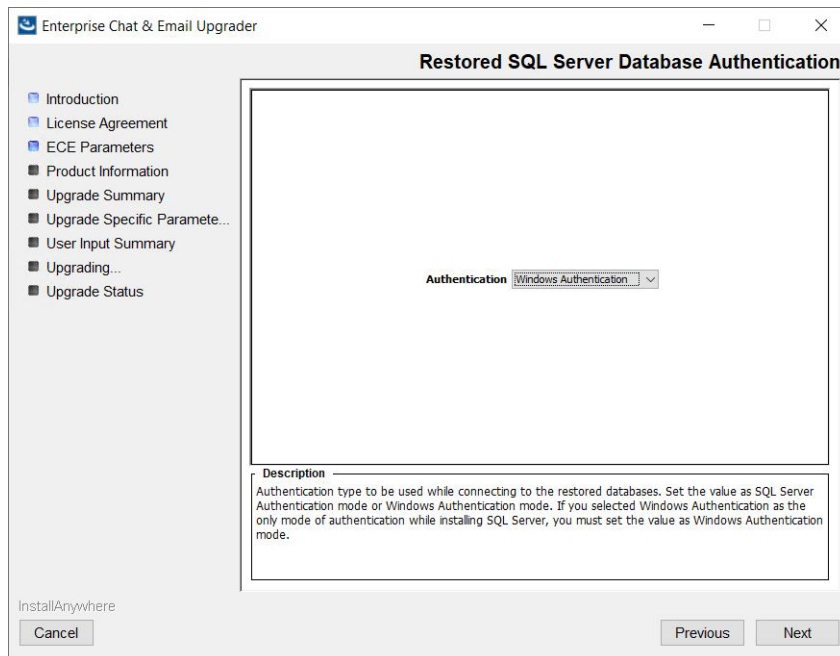8. Define the **ECE Parameters** in the following windows:

❍ **Enterprise Chat & Email Home Directory.** Type the path or browse to the folder where ECE 12.0(1) or 12.5(1) files are copied on the new Windows 2019 system (page 23) and click **Next.**

❍ **Upgrade Type.** Select the **Upgrade on new servers** option and click **Next.**

❍ **Restored SQL Server Database Authentication.**

Select the appropriate authentication type for your installation to be used while connecting to the databases and click **Next**.

Set the value as either:

● **SQL Server Authentication mode** or

● **Windows Authentication mode**.

If you are using MSSQL Server **Always On Availability Group** Clustering, select the authentication type as **Windows Authentication**.

❍ **Restored ECE Master Database Parameters.**

Provide the following details and click **Next**.

- **Database Server Name:** Name of the MSSQL 2019 database server where the master database is restored. If you are using MSSQL Server **Always On Availability Group** clustering, specify the Listener name.

- **Master Database Name:** Provide the name of the restored master database.

- **Database Server Instance Name:** Provide the name of the MSSQL server instance used to connect to the restored active and master databases. Set the value only if you used a named instance, and not the default instance. If you are using MSSQL Server **Always On Availability Group** clustering, provide the name of the Listener instance name.

- **Database Server Listen Port:** Provide the port to connect to the restored active and master databases. If you are using the named instance, then you do not need to set the port number.

The following fields display only if you are using the SQL Server Authentication mode.

- **Database Administrator Username:** User name of the database administrator for MSSQL Server. If you have created a separate user for installing ECE databases, provide the name of that user.

- **Database Administrator Password:** Provide password of the database administrator.

- **Master Database Username:** Provide username for the restored database.

- **Master Database Password:** Provide password of the user.

- **Database Verify Password:** Verify the password.

○ **Restored ECE Active Database Parameters**.

Provide the following details and click **Next**.

- **Database Server Name:** This field is pre-filled and value cannot be changed.
- **Active Database Name:** Provide the name of the restored active database.
- **Database server Instance Name:** This field is pre-filled and value cannot be changed.
- **Database Server Listen Port:** This field is pre-filled and value cannot be changed.

The following fields appear only if you are using the SQL Server Authentication mode.

- **Database Administrator Username:** This field is pre-filled and value cannot be changed.
- **Database Administrator Password:** This field is pre-filled and value cannot be changed.
- **Active Database Username:** Provide username for the restored database.
- **Active Database Password:** Provide password of the user.
- **Database Verify Password:** Verify the password.

○ **Restored ECE Reports Database Parameters.**
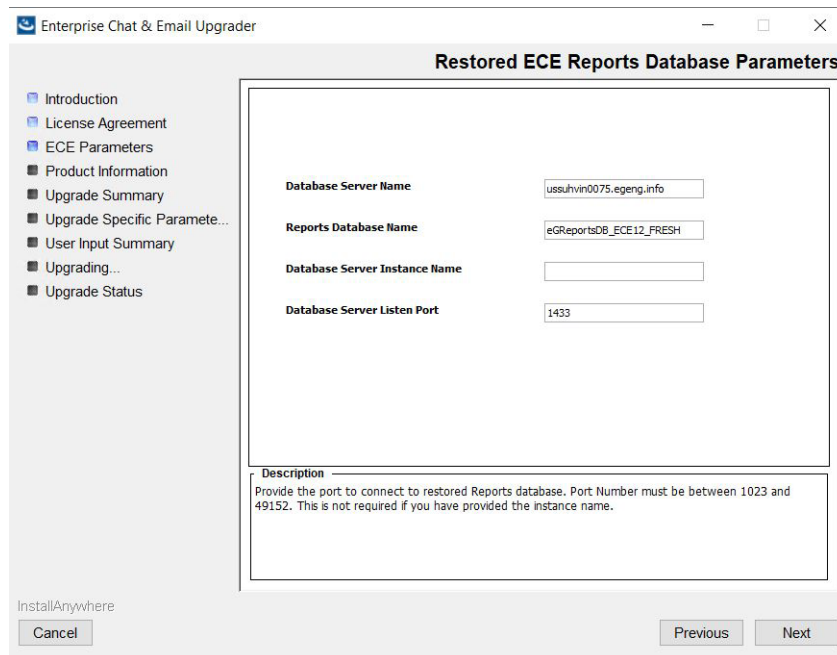
Provide the following details and click **Next**.

- **Database Server Name:** Name of the MSSQL 2019 database server where the reports database is restored. If you are using MSSQL Server **Always On Availability Group** clustering, specify the Listener name.

- **Reports Database Name:** Provide the name of the restored reports database.

- **Database server Instance Name:** Provide the name of the MSSQL server instance used to connect to the restored reports database. Set the value only if you used a named instance, and not the default instance. If you are using MSSQL Server **Always On Availability Group** clustering, provide the name of the Listener instance name.

- **Database Server Listen Port:** Provide the port to connect to the restored reports database. If you are using the named instance, then you do not need to set the port number.

The following fields appear only if you are using the SQL Server Authentication mode.

- **Database Administrator Username:** User name of the database administrator for MSSQL Server. If you have created a separate user for installing ECE databases, provide the name of that user.

- **Database Administrator Password:** Provide password of the database administrator.

- **Reports Database Username:** Provide username for the restored database.

- **Reports Database Password:** Provide password of the user.

- **Database Verify Password:** Verify the password.

9. Define the **Product Information** in the following windows:

❑ **Product Information window:** Check that the current version of ECE installed is 12.0(1) or 12.5(1) or higher and click **Next.**
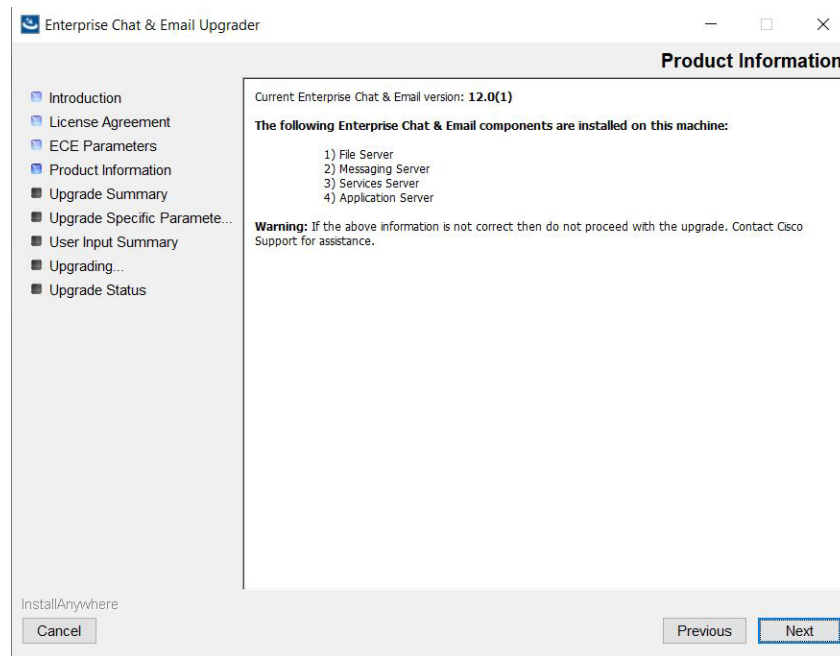
❑ **Domain User Account Parameters**: Provide the domain user name and password. Click **Next**.
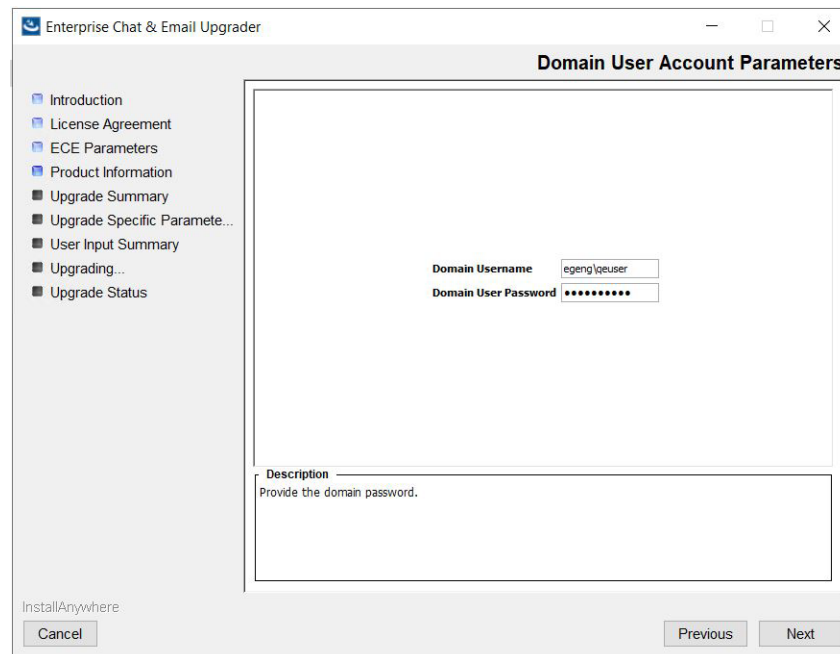
10. In the Upgrade Summary window, verify the version being installed is ECE 12.6(1). Click **Next**.
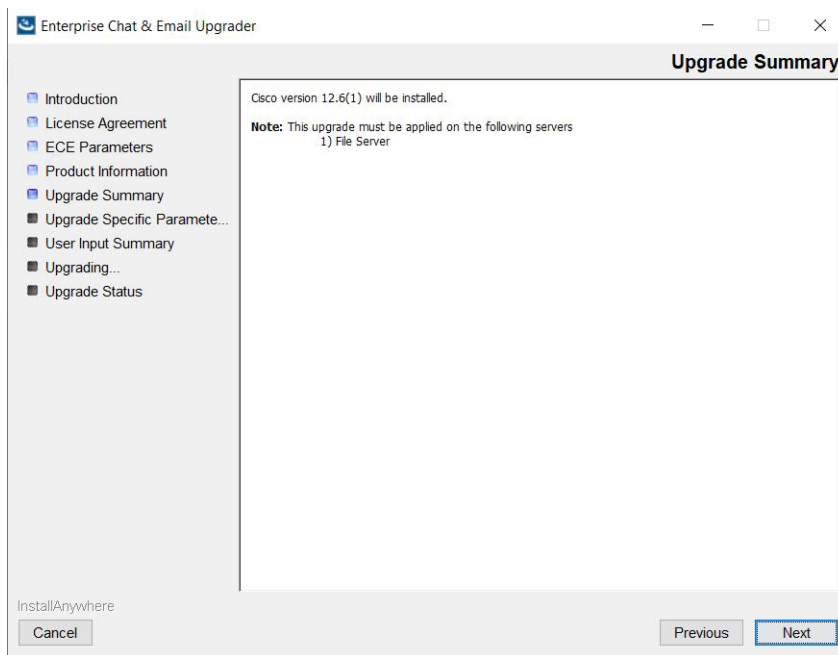
Additional servers needing to be updated are identified on this screen. This information only appears when running the Upgrader on the file server. If using NAS/ DFS, this information is displayed on the first component where you run the Upgrader.

11. Define Upgrade Specific Parameters and click **Next**. Type the user name of the domain user account created on the Active and Reports database server.
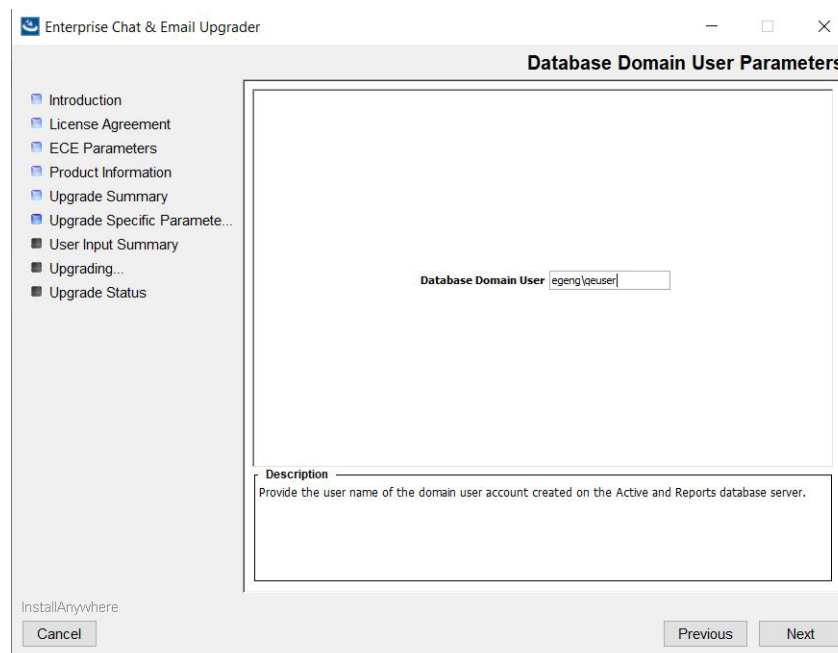
12. In the User Input Summary window, verify the information provided by you during this upgrade process. Click **Install.**
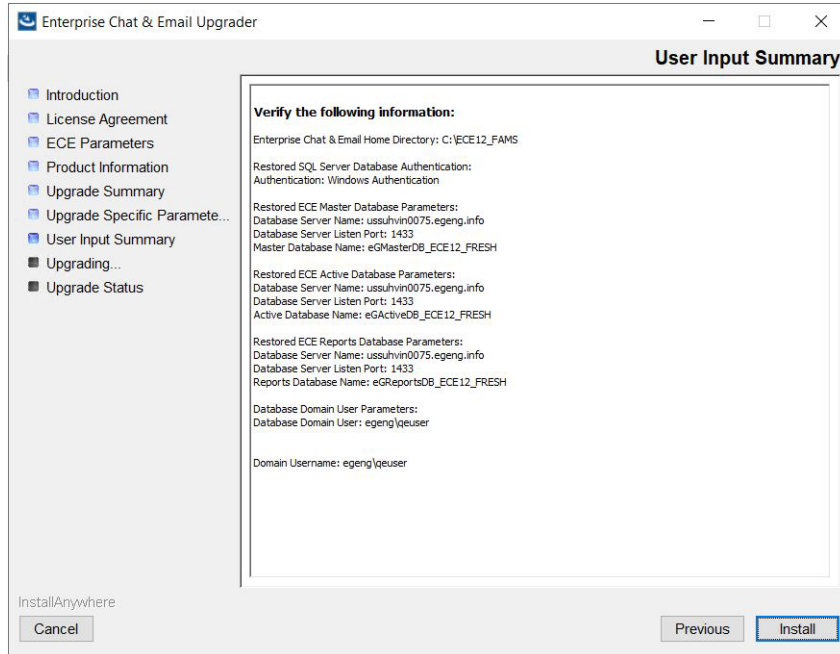
The Installing window opens and the upgrade/installation begins.

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

13. One of the following windows opens:

❍ The Installation Status window opens when the upgrade is complete. Click **Close** to complete the file server upgrade process and continue with .

❍ The Unsupported Customization Detected opens if the upgrade finds that any of the out-of-the-box product libraries have been modified and if there are any unsupported customizations made to the master and active databases. You cannot proceed with the upgrade process.

In this window, the location of a log file displays which list all customizations related issues that require fixing before you can run the upgrade again. For example, *ECE_Home***eService\installation\logs\unsupported_customizations_***ServerName***.txt**) Click **Cancel** to exit the upgrade and contact Cisco TAC for assistance.

Installing Services, Web, Application, Messaging Servers

‣ Install these components on the new servers by using the ECE 12.6(1) installation program. In the File server window, select the server on which you upgraded the ECE file server ().

‣ Complete post-installation tasks on all servers where the new components are installed.

For details about doing all these tasks, see the *Enterprise Chat and Email Installation and Configuration Guide.*

Post-Upgrade Tasks

This chapter guides you through the tasks to be performed after upgrading the system.
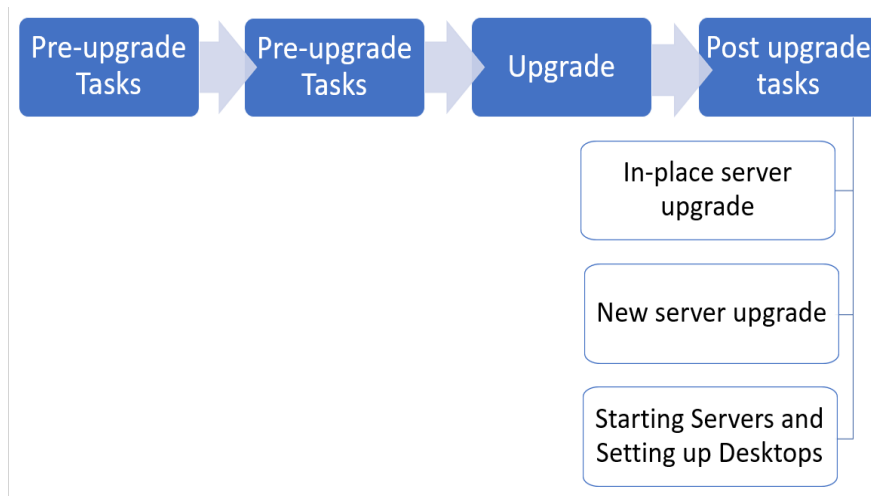
Tasks Specific to In-Place Upgrades

Updating Custom Chat Templates

Perform these tasks on all ECE 12.6(1) web servers in your deployment.

To update the custom chat template files:

1. Merge the updates in the following files from the Aqua template folder with the files in the custom template folder. If a file does not exist in the customer template folder, copy it and paste it in:

   ❍ *ECE_Home*\eService\templates\chat\aqua\components:

      ● alternate-contact-options
      ● alternate-engagement-options
      ● article-content
      ● article-toolbar
      ● attachment
      ● attachment-review
      ● chat-attach
      ● chat-initialize
      ● chat-unavailable-message
      ● cobrowse
      ● error-message
      ● escalation-search-results-list
      ● footer-small

- header-small
- launch-button
- message-input-horizontal
- post-chat-survey
- pre-chat-params-list
- status-bar
- thanks-message
- transcript
- video
- wait-screen
- *ECE_Home*\eService\templates\chat\aqua\css:
  - application.css
  - iframe-style.css
  - chat-main.less
- *ECE_Home*\eService\templates\chat\aqua\l10n:
  - da-DA.json
  - de-DE.json
  - en-US.json
  - es-ES.json
  - fr-CA.json
  - fr-FR.json
  - it-IT.json
  - ja-JP.json
  - ko-KR.json
  - nl-NL.json
  - pt-BR.json
  - pt-PT.json
  - ru-RU.json
  - sv-SV.json
  - zh-CN.json
  - 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

○ *ECE_Home*\eService\templates\chat\aqua\libs:
- angular-bundle.min.js
- angular-simple-sidebar.min.js
- application.min.js
- egain-angular-services.chat.min.js
- egain-chat-kiwi-template-controllers.min.js
- egain-chat-kiwi-template-factories.min.js
- egain-client-library.min.js
- egain-va-library.js
- handlebars.js
- jquery-2.1.3.min.js
- lokijs.min.js
- onetagutil.js

○ *ECE_Home*\eService\templates\chat\aqua\libs\css:
- angular-multi-select.min.css
- angular-simple-sidebar.min.css
- animate.min.css
- bootstrap.min.css
- ng-scrollbar.min.css

○ *ECE_Home*\eService\templates\chat\aqua\libs\videochat:
- OpenTok.js

○ *ECE_Home*\eService\templates\chat\aqua\libs\pages:
- chat-attach
- chat-deflection
- chat-initialize
- chat-landing
- chat-main
- chat-unavailable
- error
- interaction
- post-chat
- pre-chat
- thanks-message
- va-landing
- wait-screen

o *ECE_Home*\eService\templates\chat\aqua\transcript:

  - transcript.properties

o *ECE_Home*\eService\templates\chat\aqua:

  - index.html

Tasks Specific to New Server Upgrades

Copying and Updating Custom Chat Templates

Perform these tasks on all ECE 12.6(1) web servers in your deployment.

Copying Chat Templates

▸ From the existing ECE web server, copy the existing custom chat templates folders to the 12.6(1) web servers.

> Important: **Make sure you** *do not copy* **the out-of-the-box Aqua chat template from the existing ECE web server to the 12.6(1) system.**

Updating Custom Chat Templates

To update the custom chat template files:

1. Merge the updates in the following files from the Aqua template folder with the files in the custom template folder. If a file does not exist in the customer template folder, copy it and paste it in:

   o *ECE_Home*\eService\templates\chat\aqua\components:

     - alternate-contact-options
     - alternate-engagement-options
     - article-content
     - article-toolbar
     - attachment
     - attachment-review
     - chat-attach
     - chat-initialize
     - chat-unavailable-message
     - cobrowse
     - error-message
     - escalation-search-results-list
     - footer-small
     - header-small
     - launch-button
     - message-input-horizontal

- post-chat-survey
- pre-chat-params-list
- status-bar
- thanks-message
- transcript
- video
- wait-screen

○ *ECE_Home*\eService\templates\chat\aqua\css:

- application.css
- iframe-style.css
- chat-main.less

○ *ECE_Home*\eService\templates\chat\aqua\l10n:

- da-DA.json
- de-DE.json
- en-US.json
- es-ES.json
- fr-CA.json
- fr-FR.json
- it-IT.json
- ja-JP.json
- ko-KR.json
- nl-NL.json
- pt-BR.json
- pt-PT.json
- ru-RU.json
- sv-SV.json
- zh-CN.json
- 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

○ *ECE_Home*\eService\templates\chat\aqua\libs:

- angular-bundle.min.js
- angular-simple-sidebar.min.js
- application.min.js

- egain-angular-services.chat.min.js
- egain-chat-kiwi-template-controllers.min.js
- egain-chat-kiwi-template-factories.min.js
- egain-client-library.min.js
- egain-va-library.js
- handlebars.js
- jquery-2.1.3.min.js
- lokijs.min.js
- onetagutil.js

○ *ECE_Home*\eService\templates\chat\aqua\libs\css:
- angular-multi-select.min.css
- angular-simple-sidebar.min.css
- animate.min.css
- bootstrap.min.css
- ng-scrollbar.min.css

○ *ECE_Home*\eService\templates\chat\aqua\libs\videochat:
- OpenTok.js

○ *ECE_Home*\eService\templates\chat\aqua\libs\pages:
- chat-attach
- chat-deflection
- chat-initialize
- chat-landing
- chat-main
- chat-unavailable
- error
- interaction
- post-chat
- pre-chat
- thanks-message
- va-landing
- wait-screen

○ *ECE_Home*\eService\templates\chat\aqua\transcript:
- transcript.properties

○ *ECE_Home*\eService\templates\chat\aqua:
- index.html

Starting IIS

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

Starting ECE 12.6(1)

> **Important:** **Note that as part of the start-up process, the application runs a self-scan to validate signatures of all application binaries and application databases. If the binary files or application databases are altered in anyway, the application will not start.**

To start ECE 12.6(1):

▸ In collocated installations:

   ○ On the server where application, messaging, services, file, and database components are installed, start the Cisco Service from the Windows Services panel.

▸ 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 Windows service from the Windows Services panel. If you have installed a cluster of messaging servers, you would need to start the application on all the servers in the cluster.

   b. On each services server, start the application by starting the Cisco Windows service from the Windows Services panel.

   c. On each application server, start the application by starting the Cisco Windows service from the Windows Services panel.

Setting up User Desktops

▸ Clear the web browser cache on every user desktop.

For New Server Upgrades

▸ Since the existing ECE servers are not touched as part of the upgrade, no specific tasks need to be performed on those servers to start using the application again.

For In-Place Upgrades

To uninstall ECE 12.6(1):

1. Ensure that you have a backup of the VMs that was taken before updating the OS from Windows 2016 to Windows 2019 (page 22).

2. Stop all the VMs.

3. Restore the backed up copies of the VMs (page 22)

4. Start the VMs.

5. Start the ECE application.

Appendix A
Troubleshooting

▸ Viewing Log Files

▸ Restoring ECE Installation

▸ Uninstalling ECE 12.6(1)

This section describes troubleshooting steps and the process of restoring the ECE 12.6(1) installation if the upgrade fails.

Viewing Log Files

▸ If any error occurs while upgrading the installation, error messages are logged in the following:

   ❍ *ECE_Home*\eService\installation\logs\eg_log_*File_Server*_upgrade-installer.log

   ❍ *ECE_Home*\eService\installation\logs\eg_log_*Web_Server*_upgrade-installer.log

   ❍ *ECE_Home*\eService\installation\logs\eg_log_*Services_Server*_upgradeinstaller.log

   ❍ *ECE_Home*\eService\installation\logs\eg_log_*Application_Server*_upgradeinstaller.log

   ❍ *ECE_Home*\eService\installation\logs\eg_log_*Messaging_Server*_upgradeinstaller.log

Restoring ECE Installation

If you encounter any problems while upgrading, you can restore the ECE installation and run the Upgrader again.

For New Server Upgrades

To restore the ECE installation:

1. Restore the copy of the file server from the existing ECE file server. (page 23)

2. Restore the copies of the existing ECE databases. (page 23)

3. If you had installed the other components on the new Windows 2019 servers, uninstall those using the uninstallation program available with ECE 12.6.

For In-Place Upgrades

To restore the ECE installation:

1. Restore the copy of the files from the existing ECE backups. (page 22)

2. Restore the backup copies of the existing ECE databases. (page 22)

Uninstalling ECE 12.6(1)

You should perform these tasks only if you need to uninstall ECE 12.6(1) and start using your previous installation of ECE. If you ran into an issue while upgrading, and want to restore the installation and reattempt the upgrade, see "Restoring ECE Installation" on page 75.

For New Server Upgrades

▸ Since the existing ECE servers are not touched as part of the upgrade, no specific tasks need to be performed on those servers to start using the application again.

For In-Place Upgrades

To uninstall ECE 12.6(1):

1. Ensure that you have a backup of the VMs that was taken before updating the OS from Windows 2016 to Windows 2019 (page 22).

2. Stop all the VMs.

3. Restore the backed up copies of the VMs (page 22)

4. Start the VMs.

5. Start the ECE application.