



# Technology Refresh Upgrade

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## Preupgrade Overview

The preupgrade process ensures that your systems have the necessary software to support your contact center. These tasks prepare the way for a successful upgrade of your Cisco contact center components to the new release.



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**Note** During Unified CCE installation on to Windows Server 2019 and SQL Server 2019, SQL Server Security Hardening optional configuration should not be selected as part of installation. SQL Security Hardening should be applied post Unified CCE installation using Security Wizard tool.

Unified CCE services should be started only after 12.6(1) and mandatory 12.6(1) ES for Windows Server 2019 and SQL Server 2019 support is installed.

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### Preupgrade Tools

During the preupgrade process, use the following tools as required:

- **User Migration Tool**—A standalone Windows command-line application used for all upgrades that involve a change of domain. The tool exports all existing user accounts (config/setup and supervisors) from the source domain to a `.bin` file. The file is used in the target domain during the upgrade.

You can download the User Migration Tool from [Cisco.com](https://www.cisco.com) by clicking **ICM User Migration Tool Software**.

- **ICM12.6.1.exe**—The Unified CCE patch installer. It copies all files into relevant folders, updates the registries, and installs needed third-party software such as JRE, Apache Tomcat, and Microsoft .NET Framework.
- **Regutil Tool**—Used in Technology Refresh upgrades, the tool exports the Cisco Systems, Inc. registry from the source machine during the preupgrade process. The output of the tool is required on the destination machine when running the Unified CCE Installer during the upgrade process.

You can download the Regutil Tool from [Cisco.com](https://www.cisco.com) by clicking **Contact Center Enterprise Tools**.

- Cisco Unified Intelligent Contact Management Database Administration (ICMDBA) Tool—Used to create new databases, modify or delete existing databases, and perform limited SQL Server configuration tasks.

The ICMDBA Tool is delivered with the main installer.

- Domain Manager—Used to provision Active Directory.

The Domain Manager Tool is delivered with the main installer.

- Upgrade.exe—Used to upgrade the schema of the logger, AW DB, HDS DB, and BA databases to a version compatible with the current Unified CCE software version. It is typically used when the installer fails to automatically upgrade the schema.

Perform the following steps to use the tool:

```
<ICM install directory>:\icm\bin>upgrade.exe -s <Server Name> -d
<Database name> -dt <Database Type> -i <Instance Name>
```

Where

<Database Type> - can be either "**logger**" or "**hds**" or "**aw**" or "**ba**", depending on the database that requires the schema to be upgraded.

## Technology Refresh Preupgrade Task flow

### Disable Configuration Changes

Perform this step on one side only. It is automatically replicated to the other side.

#### Procedure

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- Step 1** To disable configuration changes during the upgrade, set the following registry key to 1 on the Side A Call Router: **HKEY\_LOCAL\_MACHINE\SOFTWARE\Cisco Systems, Inc.\ICM\<instance name>\Router A\Router\Current Version\Configuration\Global\DBMaintenance**.
- Step 2** Confirm that configuration changes are disabled by attempting to save a configuration change.
- When you try to save the change, a message is displayed confirming the change failure.
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### Export the Server Registry

Export the Cisco registry on each source machine that is involved in a Technology Refresh upgrade.

During the upgrade process, you are prompted for the path to the exported registry file location. Perform the following procedure and note the location of the resulting file for later in the upgrade process.

Each time you run the RegUtil with the export option, if a RegUtil\_<hostname>.dat file exists, the utility renames that file to RegUtil\_<hostname>.dat.bak<number>.

## Procedure

- Step 1** Open a command prompt and change the directory to the location where the RegUtil.exe resides.
- Step 2** Run the RegUtil tool to export the Cisco Systems, Inc. registry using the following command: **RegUtil -export [target directory]**, for example, <ICM install directory>:\icm\bin>RegUtil -export C:\RegUtil
- The target directory must have write access. Therefore, you cannot select the install media on a DVD. The target directory is optional. If it is not specified, the tool outputs the result of the Registry export to the current directory. The output filename is of the format RegUtil\_<hostname>.dat, where hostname is the name of the source machine.

# Technology Refresh Upgrade Task Flow

For the Unified CCE core components, there is a general flow for redundant systems; Sides A and B are brought down, upgraded, tested, and brought back up in sequence. That sequence ensures the operation of the Cisco Contact Center during the entire upgrade process.



**Note** For coresident configurations, upgrade CUIC/LiveData/IdS server along with the Unified CCE Central Controller upgrade.

For Technology Refresh upgrades, perform the following upgrade tasks:

Task	See
<b>Cloud Connection Components</b>	
Install Cloud Connect	<a href="#">Install Cloud Connect</a> If you have Cloud Connect in your environment, refer the <b>Update VM Properties</b> section in <a href="#">Upgrade Overview</a> for Cloud connect upgrade prerequisite to increase the hard disk and RAM before you upgrade the component. If you don't have Cloud Connect in your environment, and you use any Hybrid feature or Orchestration, fresh install Cloud Connect. For fresh install instructions, see the <i>Cisco Unified Contact Center Enterprise Installation and Upgrade Guide</i> at <a href="https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-installation-guides-list.html">https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-installation-guides-list.html</a>
<b>Queuing and self-service components</b>	
Upgrade Cisco Unified Customer Voice Portal <sup>1</sup>	<i>Installation and Upgrade Guide for Cisco Unified Customer Voice Portal</i> at <a href="https://www.cisco.com/c/en/us/support/customer-collaboration/unified-customer-voice-portal/products-installation-guides-list.html">https://www.cisco.com/c/en/us/support/customer-collaboration/unified-customer-voice-portal/products-installation-guides-list.html</a>
<b>Infrastructure and media resource components</b>	
Upgrade voice and data gateways	<a href="#">Upgrade Voice and Data Gateways</a>

Task	See
<b>Identity Service/SSO</b>	
Identity Service (IdS) /Single Sign-On(SSO)	SSO is an optional feature and exchanges authentication and authorization details between an identity provider (IdP) and an identity service (IdS).  For more information, see <a href="#">Upgrade Flowcharts</a>  For IdS upgrade, refer to the same steps as documented in the upgrades section of Unified Intelligence Center Installation and Upgrade Guide at:  <a href="https://www.cisco.com/c/en/us/support/customer-collaboration/unified-intelligence-center/products-installation-guides-list.html">https://www.cisco.com/c/en/us/support/customer-collaboration/unified-intelligence-center/products-installation-guides-list.html</a>
Upgrade Enterprise Chat and Email (ECE)	For ECE installation or upgrade instructions, see the <i>Enterprise Chat and Email Installation and Configuration Guide for Unified Contact Center Enterprise</i> at <a href="https://www.cisco.com/c/en/us/support/customer-collaboration/cisco-enterprise-chat-email/products-installation-guides-list.html">https://www.cisco.com/c/en/us/support/customer-collaboration/cisco-enterprise-chat-email/products-installation-guides-list.html</a>
Upgrade Finesse	For more information, see <i>Cisco Finesse Installation and Upgrade Guide Cisco Finesse Installation and Upgrade Guide</i> at  <a href="https://www.cisco.com/c/en/us/support/customer-collaboration/finesse/products-installation-guides-list.html">https://www.cisco.com/c/en/us/support/customer-collaboration/finesse/products-installation-guides-list.html</a>
<b>Reporting server</b>	
Upgrade Cisco Unified Intelligence Center server	<i>Installation and Upgrade Guide for Cisco Unified Intelligence Center</i> at  <a href="https://www.cisco.com/c/en/us/support/customer-collaboration/unified-intelligence-center/products-installation-guides-list.html">https://www.cisco.com/c/en/us/support/customer-collaboration/unified-intelligence-center/products-installation-guides-list.html</a>
<b>Unified CCE Central Controller and Administration &amp; Data Server components</b>	
Bring down Side A Logger, migrate Logger database, and upgrade Logger	<a href="#">Migrate the Logger Database and Upgrade the Logger, on page 6</a>
Bring down Side A Call Router, and upgrade	<a href="#">Upgrade Unified CCE Call Router, on page 8</a>
Upgrade Administration & Data Server connected to Side A.	<a href="#">Migrate the HDS Database and Upgrade the Unified CCE Administration &amp; Data Server, on page 9</a>
Bring Side A Logger and Call Router into service, bring down Side B Logger and Call Router	<a href="#">Bring Upgraded Side A into Service</a>
Migrate Side B Logger database and upgrade Logger	<a href="#">Migrate the Logger Database and Upgrade the Logger, on page 6</a>

Task	See
Upgrade Side B Call Router	<a href="#">Upgrade Unified CCE Call Router, on page 8</a>
Bring Side B Call Router into service and verify operation	<a href="#">Verify Operation of Upgraded Side B Call Router and Logger</a>
Bring Side B Logger into service and verify operation.	
Upgrade Administration & Data Server connected to Side B.	<a href="#">Migrate the HDS Database and Upgrade the Unified CCE Administration &amp; Data Server, on page 9</a>
Upgrade Cisco Unified Intelligence Center reporting templates	<i>Installation and Upgrade Guide for Cisco Unified Intelligence Center</i> at <a href="https://www.cisco.com/c/en/us/support/customer-collaboration/unified-intelligence-center/products-installation-guides-list.html">https://www.cisco.com/c/en/us/support/customer-collaboration/unified-intelligence-center/products-installation-guides-list.html</a>
Upgrade Cisco Unified Contact Center Management Portal	<i>Upgrading Dual Sided Unified CCMP</i> at <a href="http://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-installation-guides-list.html">http://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-installation-guides-list.html</a>
Upgrade Administration Client	<a href="#">Upgrade Unified CCE Administration Client, on page 14</a>
Database Performance Enhancement	<a href="#">Database Performance Enhancement</a>
<b>Unified CCE Peripheral Gateways and associated components</b>	
Upgrade PGs	<a href="#">Upgrade Peripheral Gateways, on page 12</a>
Upgrade Customer Collaboration Platform	<i>Cisco Customer Collaboration Platform User Guide</i> at <a href="http://www.cisco.com/c/en/us/support/customer-collaboration/socialminer/products-installation-guides-list.html">http://www.cisco.com/c/en/us/support/customer-collaboration/socialminer/products-installation-guides-list.html</a> .
Upgrade Outbound Option Dialer	<a href="#">Upgrade Outbound Option Dialer, on page 13</a>
Upgrade CTI OS server	<i>CTI OS System Manager Guide for Cisco Unified ICM</i> at <a href="https://www.cisco.com/c/en/us/support/customer-collaboration/computer-telephony-integration-option/products-installation-guides-list.html">https://www.cisco.com/c/en/us/support/customer-collaboration/computer-telephony-integration-option/products-installation-guides-list.html</a>
<b>Desktop Client components</b>	
Upgrade CTI OS Agent and Supervisor Desktops	<i>CTI OS System Manager Guide for Cisco Unified ICM</i> at <a href="https://www.cisco.com/c/en/us/support/customer-collaboration/computer-telephony-integration-option/products-installation-guides-list.html">https://www.cisco.com/c/en/us/support/customer-collaboration/computer-telephony-integration-option/products-installation-guides-list.html</a>
<b>Call Processing components</b>	

Task	See
Upgrade Cisco Unified Communications Manager	<i>Upgrade Guide for Cisco Unified Communications Manager</i> at <a href="https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-management-portal/tsd-products-support-install-and-upgrade-technotes-list.html">https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-management-portal/tsd-products-support-install-and-upgrade-technotes-list.html</a>
(Install) the JTAPI client on the Cisco Unified Communications Manager PG	<a href="#">Upgrade Cisco JTAPI Client on PG</a>

<sup>1</sup> If you are using Unified IP IVR for self-service and queuing, see [Getting Started with Cisco Unified IP IVR](#).

## Technology Refresh Upgrade Tasks

The following section provides instructions about upgrading Unified CCE components. For instructions about upgrading non-Unified CCE components in a Unified CCE solution, see the links to component-specific documents in the [Technology Refresh Upgrade Task Flow](#), on page 3.

### Migrate the Logger Database and Upgrade the Logger

To upgrade the Logger, do the following tasks:

- Migrate the Logger database.
- If you use Outbound Option High Availability, do the following:
  - Migrate the Outbound Option database.
  - For the enhancements in Outbound Option High Availability to work effectively, Outbound Option High Availability must be disabled before the logger upgrade and then enabled after the upgrade. For more information, see [Disable Outbound Options High Availability \(If Applicable\)](#).
- Install the new software.

#### Before you begin

- Create a shared folder in any desired location. Ensure that:
  - In the **Properties** window > **Sharing** tab > **Advanced Sharing**, the **Share this folder** check box is checked.
  - In the **Properties** window > **Security** tab > **Advanced Sharing** > **Permission**, the permission level is set as **Full control** for the user group **everyone**.




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**Note** If the user group **everyone** is not available, add it using the **Add** button.

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## Procedure

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- Step 1** Use **Unified CCE Service Control** to stop all Unified CCE services on the Logger.
- Step 2** (Optional) If Outbound Option High Availability is deployed, disable Outbound Options High Availability. For details, see [Disable Outbound Options High Availability \(If Applicable\)](#).
- Step 3** Download the EDMT tool from [Cisco.com](#), and ensure prerequisites for the same are installed on the target/destination system, before launching EDMT. These include the ODBC Driver 17 for SQL Server, and Visual C++ Redistributable for Visual Studio 2015.
- Step 4** Run the **EDMT** from the server that will host the destination Logger and click **Next**.
- Step 5** Select **Technology Refresh** and click **Next**.
- Step 6** Under **Source Database Connection**, in the **HostName\IP Address** field, type the Source IP and click **Refresh Database List**.
- Step 7** Select the **Logger Database** name, and click **Next**.
- Step 8** In the **Windows Share Name** field, type the name of the shared folder that you created.
- Step 9** In the **Windows Share Password** field, type the password of the destination machine, and click **Next**.
- Step 10** Review or change the information as required and click **Start Migration**.
- Step 11** Exit the EDMT.
- Step 12** (Optional) If Outbound Option High Availability is deployed, repeat steps 1 through 12 to migrate the BA database.
- Step 13** Launch the ICM-CCE-Installer and click **Next**.
- Step 14** Select **Technology Refresh** and click **Next**.
- Step 15** Click **Browse** and specify the path for the RegUtil file you exported from the source machine during the preupgrade process.
- Step 16** To apply any 12.6Minor Release, click **Browse** and navigate to the Minor Release software. Click **Next**.
- Note** You can also proceed with the installation of Unified ICM 12.5(1) without selecting the Unified ICM 12.6(1) installer in this step. After installing Unified ICM 12.5(1), double-click the Unified ICM 12.6(1) installer, and proceed from step 22.
- Step 17** (Optional) Select **SQL Server Security Hardening** and click **Next**.
- Note** SQL Security Hardening shouldn't be applied during installation of Windows Server 2019 and SQL Server 2019. SQL Security Hardening can be applied post installation using the Security Wizard tool.
- Step 18** Click **OK** on any informational messages that display.
- Step 19** Click **Install**.
- Step 20** Select **Yes** or **No** to restart the system and complete the installation. If Unified ICM 12.6(1) Minor Release is selected in Step 16, you must select **Yes** to restart the system.
- Note** If Unified ICM 12.6(1) Minor Release is not selected in Step 16, then select **Yes** or **No** to restart. If you select **No**, then restart the system manually after installing Unified ICM 12.5(1). Manual restart is required before double-clicking the Unified ICM 12.6(1) installer and proceeding from Step 22.
- Step 21** Log in to your system using domain credentials with administrative privileges.

- Step 22** Wait for the Unified CCE 12.6(1) installation wizard to launch. Click **Next** to proceed.
- Step 23** Select the radio button to accept the license agreement and click **Next**.
- Step 24** Click **Install** to begin the installation.
- Step 25** Select the radio button to restart the system and click **Finish**.
- Step 26** Open the **Web Setup** tool from the desktop shortcut.
- Step 27** Edit the instance as necessary.
- Step 28** (Optional) In case of Cross Domain upgrade, launch **Web Setup**, select instance and click on **Change Domain** to use the new domain for destination Unified CCE.
- Edit instance and you might need to change the facility or instance number if required.
- Step 29** (Optional) If you use Outbound Option High Availability, enable Outbound Option High Availability in the Web Setup tool. For details, see the *Configure the Logger for Outbound Option* topic in the *Outbound Option Guide for Unified Contact Center Enterprise* at <https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-user-guide-list.html>.
- Step 30** Edit the **Logger** component as necessary.
- Edit the **Logger** component. In the **Summary** window, update the service account management section, with a pre-existing domain user that the Logger service would run under.
- If there are references to out-of-date network interface names or IP addresses for the public and private networks for the Logger, update this information.
- Note** Ensure that the domain user is created in the new domain to perform the service operation of **Loggers and Administration & Data Servers** component.
- Caution** Use the same domain user account for all the distributor and logger services. If you want to use different domain accounts for the logger and the distributor, ensure that the distributor service user account is added to the local logger `UcceService` groups on Side A and Side B.
- Step 31** (Optional) If it's a Cross Domain upgrade, use the User Migration tool to import the users and OU information which you exported from the source machine during the pre-upgrade process. See **User Migration Tool** in [Preupgrade Overview](#).
- Step 32** Use Unified CCE Service Control to set all Unified CCE services on the new Logger to Manual Start.

## Upgrade Unified CCE Call Router

To upgrade the Call Router, do the following tasks:

- Import the Cisco registry information.
- Install the new software.
- Set up the new Call Router using the Web Setup tool.

### Procedure

- Step 1** Launch the ICM-CCE-Installer and click **Next**.
- Step 2** Select **Technology Refresh** and click **Next**.



- Step 3** Click **Browse** and specify the path for the RegUtil file you exported from the source machine during the preupgrade process.
- Step 4** To apply the Unified ICM 12.6 Minor Release, click **Browse** and navigate to the Minor Release software. Click **Next**.
- Note** You can also proceed with the installation of Unified ICM 12.5(1) without selecting the Unified ICM 12.6(1) installer in this step. After installing Unified ICM 12.5(1), double-click the Unified ICM 12.6(1) installer, and proceed from step 9.
- Step 5** Click **OK** on any informational messages that display.
- Step 6** Click **Install**.
- Step 7** Select **Yes** or **No** to restart the system and complete the installation. If Unified ICM 12.6(1) Minor Release is selected in Step 4, you must select **Yes** to restart the system.
- Note** If Unified ICM 12.6(1) Minor Release is not selected in Step 4, then select **Yes** or **No** to restart. If you select **No**, then restart the system manually after installing Unified ICM 12.5(1). Manual restart is required before double-clicking the Unified ICM 12.6(1) installer and proceeding from Step 9.
- Step 8** Log in to your system using domain credentials with administrative privileges.
- Step 9** Wait for the Unified CCE 12.6(1) installation wizard to launch. Click **Next** to proceed.
- Step 10** Select the radio button to accept the license agreement and click **Next**.
- Step 11** Click **Install** to begin the installation.
- Step 12** Select the radio button to restart the system and click **Finish**.
- Step 13** Open the Web Setup tool from the desktop shortcut.
- Step 14** Edit the instance as necessary.
- For a domain change, change the domain of the instance. Additionally, you might need to change the facility or instance number as required.
- Step 15** Edit the Call Router component as necessary.
- If there are references to out-of-date network interface names or IP addresses for the public and private networks for the Router, update this information.
- Step 16** Use Unified CCE Service Control to set all Unified CCE services on the new Call Router to Manual Start.
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## Migrate the HDS Database and Upgrade the Unified CCE Administration & Data Server

To upgrade the Administration & Data Server, do the following tasks:

- Migrate the HDS database (if applicable. Non-HDS configurations do not require this action.)
- Import the Cisco registry information.
- Install the new software.
- Set up the new Administration & Data Server through the Web Setup tool.

The Installer upgrades the AW database that is associated with the Administration & Data server. The EDMT does not upgrade the AW database.

### Before you begin

- Create a shared folder in any desired location. Ensure that:
  - In the **Properties** window > **Sharing** tab > **Advanced Sharing**, the **Share this folder** check box is checked.
  - In the **Properties** window > **Security** tab > **Advanced Sharing** > **Permission**, the permission level is set as **Full control** for the user group **everyone**.




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**Note** If the user group **everyone** is not available, add it using the **Add** button.

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### Procedure

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- Step 1** Use **Unified CCE Service Control** to stop all Unified CCE services on the server.
  - Step 2** Download the EDMT tool from [Cisco.com](http://Cisco.com), and ensure pre-requisites for the same have been installed on the target/destination system, prior to launching EDMT. These include the ODBC Driver 17 for SQL Server, and Visual C++ Redistributable for Visual Studio 2015.
  - Step 3** Launch the EDMT tool on the destination server that hosts the **Administration and Data Server with HDS database** and click **Next**. For non-HDS Server configurations, skip to step 11.
  - Step 4** Select **Technology Refresh** and click **Next**.
  - Step 5** Under **Source Database Connection**, in the **HostName\IP Address** field, type the Source IP, and click **Refresh Database List**.
  - Step 6** Under **Destination Database Connection**, in the **SQL Server Port Number** field, enter the destination SQL server port number, and then click **Next**.
  - Step 7** Select the **HDS Database** name, and click **Next**.
  - Step 8** In the **Windows Share Name** field, type the name of the shared folder that you created.
  - Step 9** In the **Windows Share Password** field, type the password of the destination machine, and click **Next**.
  - Step 10** Review or change the information as required, highlight the HDS database, and click **Start Migration**.
  - Step 11** Exit the **EDMT**.
  - Step 12** Launch the ICM-CCE-Installer and click **Next**.
  - Step 13** Select **Technology Refresh** and click **Next**.
  - Step 14** Click **Browse** and specify the path for the `RegUtil` file you exported from the source machine during the preupgrade process.
  - Step 15** To apply the Unified ICM 12.6 Minor Release, click **Browse** and navigate to the Minor Release software. Click **Next**.

**Note** You can also proceed with the installation of Unified ICM 12.5(1) without selecting the Unified ICM 12.6(1) installer in this step. After installing Unified ICM 12.5(1), double-click the Unified ICM 12.6(1) installer, and proceed from step 21.

- Step 16** (Optional) Select **SQL Server Security Hardening** and click **Next**.
- Note** SQL Security Hardening should not be applied during installation of Windows Server 2019 and SQL Server 2019. SQL Security Hardening can be applied post installation using the Security Wizard tool.
- Step 17** Click **OK** on any informational messages that display.
- Step 18** Click **Install**.
- Step 19** Select **Yes** or **No** to restart the system and complete the installation. If Unified ICM 12.6(1) Minor Release is selected in Step 15, you must select **Yes** to restart the system.
- Note** If Unified ICM 12.6(1) Minor Release is not selected in Step 15, then select **Yes** or **No** to restart. If you select **No**, then restart the system manually after installing Unified ICM 12.5(1). Manual restart is required before double-clicking the Unified ICM 12.6(1) installer and proceeding from Step 21.
- Step 20** Log in to your system using domain credentials with administrative privileges.
- Step 21** Wait for the Unified CCE 12.6(1) installation wizard to launch. Click **Next** to proceed.
- Step 22** Select the radio button to accept the license agreement and click **Next**.
- Step 23** Click **Install** to begin the installation.
- Step 24** Select the radio button to restart the system and click **Finish**.
- Step 25** Open the **Web Setup** tool from the desktop shortcut.
- Step 26** Edit the instance as necessary.
- Step 27** (Optional) In case of Cross Domain upgrade, launch **Websetup**, select the instance and click on **Change Domain** in order to use the new domain for destination Unified CCE. Edit the instance. You might need to change the facility or instance number if required.
- Step 28** Edit the **Administration & Data Server** component as necessary and in the **Summary** window, update the Service Account manager with the domain user to perform the service operation. If there are references to out-of-date network interface names or IP addresses for the public and private networks for the Logger, update this information.
- Note** Ensure that the domain user is created in the new domain to perform the service operation of **Loggers and Administration & Data Servers** component.
- Caution** Use the same domain user account for all the distributor and logger services. If you want to use different domain accounts for the logger and the distributor, ensure that the distributor service user account is added to the local logger `UcceService` groups on Side A and Side B.
- For more information about configuring permissions in your local machine, see [Configure Permissions in the Local Machine](#).
- Step 29** Use **Unified CCE Service Control** to set all Unified CCE services on the new Administration & Data Server to Manual Start.
- Step 30** Start the Unified CCE services for Logger and Router on both Side A and Side B. Also, start the Distributor service for the all sites. Then, launch the Configuration Manager tool to check if it is working fine.
- Note** During Unified CCE installation on to Windows Server 2019 and SQL Server 2019, Unified CCE services should be started only after 12.6(1) and mandatory 12.6(1) ES for Windows Server 2019 and SQL Server 2019 support is installed.

- Note** The time required to complete a data migration varies in a direct relationship to the database size (the larger the database size, the longer it takes to migrate) and the server hardware performance level.
- Note** If Outbound Options High Availability was disabled on source machines prior to the upgrade, you can enable it on Side A and Side B Destination machines if both the sides have been migrated successfully.

## Synchronizing or Updating Configuration and Historical Data from Production Server to Staged Server During Cut Over

The EDMT tool can also be used to migrate data from a Logger or HDS production server, to the one that has already been staged on version 12.6(x). These two pronged upgrade steps are typically performed to reduce the downtime needed during cut-over to the new version.

While the parallel 12.6(x) systems are staged and tested, the 12.0(1)/12.5(x) production servers continue to process calls. On the day of the cut-over, the data in the 12.6(x) staged servers, can be updated or synchronized with that of the production server, by running the 12.6(x) EDMT tool, for each of the Logger and HDS database.

## Upgrade Peripheral Gateways

You can upgrade different Peripheral Gateways (PG) within a contact center at different times within different maintenance windows. However, upgrade all PGs that reside on the same virtual machine and redundant PGs (Side A and corresponding Side B) during the same maintenance window.

The following dependencies occur when upgrading the Unified Communications Manager PG:

- If your contact center uses the CTI OS component, upgrade the CTI OS server at the same time as the associated Unified Communications Manager PG.
- If your contact center uses Outbound Option, upgrade any Outbound Option Dialers associated with Unified Communications Manager PGs at the same time.
- If the Unified Communications Manager application is upgraded, upgrade the JTAPI client associated with the Unified Communications Manager PG at the same time.

### Procedure

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- Step 1** Use Unified CCE Service Control to stop all Unified CCE and CTI OS (if applicable when upgrading the Unified Communications Manager PG) services on the PG server. Change the services to Manual Start.
- Step 2** Launch the ICM-CCE-Installer and click **Next**.
- Step 3** To apply the Unified ICM 12.6 Minor Release, click **Browse** and navigate to the Minor Release software. Click **Next**. You can also proceed with the installation of Unified ICM 12.5(1) without selecting the Unified ICM 12.6(1) installer in this step. After installing Unified ICM 12.5(1), double-click the Unified ICM 12.6(1) installer, and proceed with installation.
- Step 4** Select **Technology Refresh** and click **Next**.

- Step 5** Click **Browse** and specify the path for the RegUtil file you exported from the source machine during the preupgrade process.
- The registry information for the Unified Communications Manager PG also contains information for the CTI OS server (if applicable).
- Step 6** Click **OK** on any informational messages that display.
- Step 7** Click **Install**.
- Step 8** Reboot the system after the upgrade completes.
- Step 9** After reboot, open the Peripheral Gateway Setup tool from the desktop shortcut and make any necessary changes. See the "Install" section of this document for specific information.
- If there are references to out-of-date network interface names or IP addresses for the public and private networks for the Logger, update this information.
- Step 10** Open the Peripheral Gateway Setup tool from the Installer dialog box or desktop shortcut and edit the Dialer as required.
- Note** During Peripheral Gateway installation on Windows Server 2019, Unified CCE services to be set to Automatic Start in Step-11 only after 12.6(1) and mandatory 12.6(1) ES for Windows Server 2019 and SQL Server 2019 support is installed.
- Step 11** Use Unified CCE Service Control to set all Unified CCE services to Automatic Start.
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## Upgrade Outbound Option Dialer

To upgrade the Outbound Option Dialer, import the Cisco registry information, install the new software, and set up the new Dialer using the PG Setup tool.

### Before you begin

You must have previously migrated the Outbound Option database during the Logger upgrade.

### Procedure

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- Step 1** Launch the ICM-CCE-Installer and click **Next**.
- Step 2** To apply the Unified ICM 12.6 Minor Release, click **Browse** and navigate to the Minor Release software. Click **Next**. You can also proceed with the installation of Unified ICM 12.5(1) without selecting the Unified ICM 12.6(1) installer in this step. After installing Unified ICM 12.5(1), double-click the Unified ICM 12.6(1) installer, and proceed with installation.
- Step 3** Select **Technology Refresh** and click **Next**.
- Step 4** Click **Browse** and specify the path for the RegUtil file you exported from the source machine during the preupgrade process.
- Step 5** Click **OK** on any informational messages that display.
- Step 6** Click **Install**.
- Step 7** Reboot the system after the upgrade completes.

**Step 8** Open the Peripheral Gateway Setup tool from the Installer dialog box or desktop shortcut and edit the Dialer as required.

**Note** During Unified CCE installation on Windows Server 2019, Unified CCE services to be set to Automatic Start in Step 9 only after Unified ICM 12.6(1) and mandatory Unified ICM 12.6(1) ES for Windows Server 2019 and SQL Server 2019 support is installed.

**Step 9** Use Unified CCE Service Control to set all Unified CCE services to Automatic Start.

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## Upgrade Unified CCE Administration Client

There is no support for Administration Clients to be upgraded via Technology Refresh upgrade. Either perform an in-place common ground upgrade of Administration Clients, and make edits as necessary using the Administration Client setup, or perform a fresh installation of Administration Client on a new system.