



Technology Refresh Upgrade

- [Preupgrade Overview](#), on page 1
- [Technology Refresh Preupgrade Task flow](#), on page 2
- [Upgrade Overview](#), on page 3
- [Technology Refresh Upgrade Task Flow](#), on page 5
- [Technology Refresh Upgrade Tasks](#), on page 9

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.

Upgrade 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) in the source domain into a flat 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**.

- **Regutil Tool**—Used in Technology Refresh upgrades, 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**.

- **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 CCE Software version. It is typically used when the installer fails to automatically upgrade the schema.

Perform the following steps to use the tool:

```
<Install Drive>: \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

-
- 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\CurrentVersion\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.
-

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, C:\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.
-

Upgrade Overview

Unified CCE Redundant Central Controller Upgrade Flow

The Unified CCE central controller consists of the Logger, Router, and Administration & Data Server. When upgrading the Unified CCE portion of your contact center, the central controller is upgraded before the other Unified CCE components. While one side (Side A or B) of the redundant system is being upgraded, the other side (Side A or B) operates in stand-alone mode.

For redundant systems, the general flow for upgrading the Unified CCE central controller is as follows:

1. Upgrade the Logger, Router, and Administration & Data Server on Side A.
2. Bring Side A into service and verify the operation. Side B is brought down as Side A is coming into service.
3. Upgrade the Logger, Router, and Administration & Data Server on Side B.
4. Bring Side B into service and verify that duplexed operation begins.

Update VM Properties

Rather than recreate the VMs from the new version of the OVA, you can manually update the VM properties to match the new OVA. After you upgrade the vSphere ESXi and before you upgrade the Unified CCE components, update the properties of each VM to match the appropriate OVA, as follows:

1. Determine the version of the OVA from which you created the VM.
2. Update the properties of each VM to match the properties of the appropriate OVA. Check the *Virtualization for Unified Contact Center Enterprise* at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/virtualization-unified-contact-center-enterprise.html for descriptions of each OVA.
3. Stop the VM.
4. Edit the properties of the VM to match the properties from the new version of the OVA. Save your changes.
5. Restart the VM.



Caution

Be careful when you upgrade the virtual machine network adapters. Done incorrectly, this upgrade can compromise the fault tolerance of your contact center.

For version-specific information on the VM properties in an OVA, Check the *Virtualization for Unified Contact Center Enterprise* at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/virtualization-unified-contact-center-enterprise.html for descriptions of each OVA.

SQL Security Hardening

You can optionally apply SQL security hardening when running the installer. If your company employs custom security policies, bypass this option. Most other deployments benefit from SQL security hardening.

For more information about SQL security hardening, see the *Security Guide for Cisco Unified ICM/Contact Center Enterprise* at <http://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-installation-and-configuration-guides-list.html>.

Upgrade Tools

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

- 11.0(1) ICM-CCE-CCHInstaller—The main Unified CCE Installer. It copies all files into relevant folders, creates the base registries, and installs needed third-party software such as JRE, Apache Tomcat, and Microsoft .NET Framework.



Note Optionally, update the JRE installed by the Unified CCE Installer with a later version of the JRE. See [Update the Java Runtime Environment \(Optional\)](#).

Optionally, update the Apache Tomcat software. See [Upgrade Tomcat](#).

You cannot run the installer remotely. Mount the installer ISO file only to a local machine.

- Domain Manager—Used to provision Active Directory.
 - Web Setup—Used to set up the Call Routers, Loggers, and Administration & Data Servers.
 - Peripheral Gateway Setup—Used to set up PGs, the CTI server, and the Outbound Option dialer.
- 11.0(1) AdminClientInstaller—Installs the Administration Client on a system that is not running other Unified CCE components.
The AdminClientInstaller is delivered on the installation media with the installer.
 - ICM11.6(1).exe Installer - The Minor Release 11.6(1) installer which needs to be applied on 11.x base version.
 - Administration Client Setup—Used to add, edit, or remove Administration Clients and Administration Client Instances.
The Administration Client Setup is delivered on the installation media with the installer.
 - Enhanced Database Migration Tool (EDMT)—A wizard application that is used for all upgrades to migrate the HDS, Logger, and BA databases during the upgrade process.

Back up your databases before running this tool. The EDTM displays status messages during the migration process, including warnings and errors. Warnings are displayed for informational purposes only and do not stop the migration. On the other hand, errors stop the migration process and leave the database in a corrupt state. If an error occurs, restore the database from your backup, fix the error, and run the tool again.



Note If you are configuring SQL services to run as Virtual account (NT SERVICE) or Network Service account (NT AUTHORITY\NETWORK SERVICE), you must run EDTM as an administrator.

You can download the EDTM from Cisco.com by clicking **Cisco Enhanced Data Migration Tool Software Releases**.



Note The installer, not the EDMT, upgrades the AW database for the Administration & Data Server.

- **User Migration Tool**—A standalone Windows command-line application that is used for all upgrades that involve a change of domain. The tool imports the previously exported user accounts into the target domain during the upgrade.

You can download the User Migration tool from Cisco.com.



Note User Migration Tool cannot be used for migrating users that are SSO enabled.

- **Regutil Tool**—Used in Technology Refresh upgrades, 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.

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 contact center during the entire upgrade process.

For Technology Refresh upgrades, perform the following upgrade tasks:

Task	See
Agent and supervisor desktops	
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). If you upgrade to 11.6(1) from 11.5(x) with SSO enabled then upgrade the standalone Cisco IdS server before upgrading other components like Cisco Unified Intelligence Center (CUIC), and Finesse. For co-resident configurations, CUIC must be at the same version as Finesse. Upgrade both, CUIC and Finesse in the same maintenance window. Install the Identity Service. See the Installation Task Flow for Cisco Identity Service section in the <i>Cisco Unified Contact Center Enterprise Features Guide</i> at https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-feature-guides-list.html

Task	See
Upgrade Finesse	<p><i>Cisco Finesse Installation and Upgrade Guide</i> at http://www.cisco.com/en/US/products/ps11324/prod_installation_guides_list.html</p> <p>Note ES65 provides the ability to connect a maximum of two versions of Finesse to the same PG during the upgrade or migration process to facilitate the migration of agents and supervisors to the new Finesse version. However, this mode of operation is not supported for production use beyond the upgrade or migration phase.</p>
Upgrade SocialMiner	<p><i>Cisco SocialMiner User Guide</i> at http://www.cisco.com/c/en/us/support/customer-collaboration/socialminer/products-installation-guides-list.html.</p>
Queuing and self-service components	
Upgrade Cisco Unified Customer Voice Portal*	<p><i>Installation and Upgrade Guide for Cisco Unified Customer Voice Portal</i> at http://www.cisco.com/en/US/products/sw/custcosw/ps1006/prod_installation_guides_list.html</p>
Infrastructure and media resource components	
Upgrade voice and data gateways	Upgrade Voice and Data Gateways
Reporting server	
Upgrade Cisco Unified Intelligence Center server	<p><i>Installation and Upgrade Guide for Cisco Unified Intelligence Center</i> at http://www.cisco.com/en/US/products/ps9755/prod_installation_guides_list.html</p>
Unified CCE Central Controller and Administration & Data Server components	
Bring down Side A Logger, migrate Logger database, and upgrade Logger	Migrate the Logger Database and Upgrade the Logger, on page 9
Bring down Side A Call Router, and upgrade	Upgrade Unified CCE Call Router, on page 10

Task	See
Upgrade Administration & Data Server connected to Side A.	Migrate HDS Database and Upgrade Unified CCE Administration & Data Server, on page 11
Bring Side A Logger and Call Router into service, bring down Side B Logger and Call Router	Bring Upgraded Side A into Service
Migrate Side B Logger database and upgrade Logger	Migrate the Logger Database and Upgrade the Logger, on page 9
Upgrade Side B Call Router	Upgrade Unified CCE Call Router, on page 10
Bring Side B Call Router into service and verify operation	Verify operation of upgraded Side B Call Router and Logger
Bring Side B Logger into service and verify operation.	
Upgrade Administration & Data Server connected to Side B.	Migrate HDS Database and Upgrade Unified CCE Administration & Data Server, on page 11
Upgrade Cisco Unified Intelligence Center reporting templates	Installation and Upgrade Guide for Cisco Unified Intelligence Center at http://www.cisco.com/en/US/products/ps9755/prod_installation_guides_list.html

Task	See
Upgrade Cisco Unified Contact Center Management Portal	<i>Upgrading Dual Sided Unified CCMP</i> at http://www.cisco.com/en/US/products/ps7076/tsd_products_support_install_and_upgrade_technotes_list.html
Upgrade Administration Client	Upgrade Unified CCE Administration Client
Database Performance Enhancement	Database Performance Enhancement
Unified CCE Peripheral Gateways and associated components	
Upgrade PGs	Upgrade Peripheral Gateways, on page 13
Upgrade Outbound Option Dialer	Upgrade Outbound Option Dialer, on page 14
Upgrade CTI server	<i>CTI OS System Manager Guide for Cisco Unified ICM/Contact Center Enterprise</i> at http://www.cisco.com/en/US/products/sw/custcosw/ps14/prod_installation_guides_list.html
Desktop Client components	
Upgrade CTI OS Agent and Supervisor Desktops	<i>CTI OS System Manager Guide for Cisco Unified ICM/Contact Center Enterprise</i> at http://www.cisco.com/en/US/products/sw/custcosw/ps14/prod_installation_guides_list.html
Call Processing components	
Upgrade Cisco Unified Communications Manager	<i>Upgrade Guide for Cisco Unified Communications Manager</i> at http://www.cisco.com/en/US/support/unifiedcommunications/unifiedcommunications-manager-callmanager/products/installation_guides_list.html
(Install) the JTAPI client on the Cisco Unified Communications Manager PG	Upgrade Cisco JTAPI Client on PG
Media Recording components	
Upgrade MediaSense ¹	<i>Installation and Administration Guide for Cisco MediaSense</i> at http://www.cisco.com/en/US/products/ps11389/prod_installation_guides_list.html

Task	See
*If you are using Unified IP IVR for self-service and queuing, see Getting Started with Cisco Unified IP IVR .	

¹ UCCE 11.6(1) supports only Cisco MediaSense 11.5.

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](#).

Migrate the Logger Database and Upgrade the Logger

To upgrade the Logger, you do the following tasks:

- Migrate the Logger database.
- if you use Outbound option, migrate the outbound option database.
- 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, the permission level is set as full control for everyone .

Procedure

-
- Step 1** Use Unified CCE Service Control to stop all Unified CCE services on the Logger.
 - Step 2** Run the EDMT from the server that hosts the destination Logger and click **Next**.
 - Step 3** Select **Technology Refresh** and click **Next**.
 - Step 4** Under **Source Database Connection**, in the **HostName\IP Address** field, type the Source IP and click **Refresh Database List**.
 - Step 5** Select the Logger Database name, and click **Next**.
 - Step 6** In the Windows Share Name field, type the name of the shared folder that you created.
 - Step 7** In the Windows Share Password field, type the password of the destination machine, and click **Next**.
 - Step 8** Review or change the information displayed as required and click **Start Migration**.
 - Step 9** Exit the EDMT.
 - Step 10** If Outbound Option is deployed, to migrate the BaA database, reopen the EDMT and click **Next**.
 - Step 11** Select **Technology Refresh** and click **Next**.
 - Step 12** Under **Source Database Connection**, in the **HostName\IP Address** field, type the Source IP and click **Refresh Database List**.

- Step 13** Select the Outbound Database name, and click **Next**.
- Step 14** In the Windows Share Name field, type the name of the shared folder that you created.
- Step 15** In the Windows Share Password field, type the password of the destination machine, and click **Next**.
- Step 16** Review or change the information displayed as required and click **Start Migration**.
- Step 17** Exit the EDMT.
- Step 18** Launch the ICM-CCE-Installer 11.0(1) and click **Next**.
- Step 19** Select **Technology Refresh** and click **Next**.
- Step 20** Click **Browse** and specify the path for the RegUtil file you exported from the source machine during the preupgrade process.
- Step 21** (Optional) To apply any 11.5(1) Minor Releases, click **Browse** and navigate to the Minor Release software. Click **Next**.
- Step 22** (Optional) To apply any 11.6(1) Minor Releases, click **Browse** and navigate to the Minor Release software. Click **Next**.
- Step 23** (Optional) Select **SQL Server 2014 Security Hardening** and click **Next**.
- Step 24** Click **OK** on any informational messages that display.
- Step 25** Click **Install**.
- Step 26** Reboot the system after the upgrade completes.
- Step 27** Open the Web Setup tool from the Installer dialog box or desktop shortcut.
- Step 28** Edit the instance as necessary.
- Step 29** (Optional) In case of Cross Domain upgrade, launch Websetup , select instance and click on "Change Domain" in order to use the new domain for destination UCCE.
Edit instance and you might need to change the facility or instance number if required.
- Step 30** Edit the Logger component as necessary.
If the registry now references out-of-date network interface names or IP addresses for the public and private networks for the Logger, update this information.
- Step 31** (Optional) If it is a Cross Domain upgrade, use User Migration tool to export 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, you 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** (Optional) To apply any 11.5(1) Minor Release or Maintenance Releases, click **Browse** and navigate to the Maintenance or Minor Release software. Click **Next**.
- Step 3** (Optional) To apply any 11.6(1) Minor Release or Maintenance Releases, click **Browse** and navigate to the Maintenance or Minor Release software. Click **Next**.
- Step 4** Select **Technology Refresh** and click **Next**.
- Step 5** Specify the path for the RegUtil file you exported from the source machine during the preupgrade process.
- Step 6** Click **OK** on any informational messages that display.
- Step 7** Click **Install**.
- Step 8** Reboot the server when the upgrade completes.
- Step 9** Open the Web Setup tool from the Installer dialog box or desktop shortcut.
- Step 10** 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 11** Edit the Call Router component as necessary.
- If the registry now references out-of-date network interface names or IP addresses for the public and private networks for the router, update this information.
- Step 12** Use Unified CCE Service Control to set all Unified CCE services on the new Call Router to Manual Start.
-

Migrate HDS Database and Upgrade 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** checkbox is checked.
- in the Properties window > Security tab, the permission level is set as full control for everyone .

Procedure

- Step 1** Use Unified CCE Service Control to stop all Unified CCE services on the server.
- Step 2** For Administration & Data Server configurations with an HDS database, open the EDMT and click **Next**. For non-HDS Server configurations, go to [Migrate HDS Database and Upgrade Unified CCE Administration & Data Server, on page 11](#).
- Step 3** Select **Technology Refresh** and click **Next**.
- Step 4** Under **Source Database Connection**, in the **HostName\IP Address** field, type the Source IP and click **Refresh Database List**.
- Step 5** Select the HDS Database name, and click **Next**.
- Step 6** In the Windows Share Name field, type the name of the shared folder that you created.
- Step 7** In the Windows Share Password field, type the password of the destination machine, and click **Next**.
- Step 8** Review or change the information displayed as required, highlight the HDS database, and click **Start Migration**.
- Step 9** Exit the EDMT.
- Step 10** Launch the ICM-CCE-Installer 11.0(1) and click **Next**.
- Step 11** (Optional) To apply any Minor Releases or other Maintenance Releases, click **Browse** and navigate to the Minor Release software. Click **Next**.
- Step 12** (Optional) Select **SQL Server 2014 Security Hardening** and click **Next**.
- Step 13** Select **Technology Refresh** and click **Next**.
- Step 14** Specify the path for the RegUtil file you exported from the source machine during the preupgrade process.
- Step 15** Click **OK** on any informational messages that display.
- Step 16** Click **Install**.
- Step 17** Reboot the server when the upgrade completes.
- Step 18** Open the Web Setup tool from the Installer dialog box or desktop shortcut.
- Step 19** Edit the instance as necessary.
- Step 20** (Optional) In case of Cross Domain upgrade, launch Websetup, select instance and click on "Change Domain" in order to use the new domain for destination UCCE.
Edit instance and you might need to change the facility or instance number if required.
- Step 21** Edit the Administration & Data Server component as necessary.
If the registry now references out-of-date network interface names or IP addresses for the public and private networks for the server, update this information.
- Step 22** Use Unified CCE Service Control to set all Unified CCE services on the new Administration & Data Server to Manual Start.
- 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.
-

Synchronizing or Updating Data from Logger or HDS Production Server to Staged 11.6(1) 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 11.6(1). These two pronged upgrade steps are typically performed to reduce the downtime needed during cut-over to the new version.

While the parallel 11.6(1) systems are staged and tested, the 10.x production servers continue to process calls. On the day of the cut-over, the data in the 11.6(1) staged servers, can be updated or synchronized with that of the production server, by running the 11.0 EDMT tool, for each of the Logger and HDS database.

This will synchronize the database with 11.0 schema. However, due to the 11.6(1) database schema version (188, 1, and 1)[#] being different from its base 11.0 version (181, 3, and 3), the synchronized database will be incompatible with 11.6(1). The administrator would have to manually use **upgrade.exe** utility to upgrade the database schema before starting the **CCE Logger** or **Distributor service**.



Note EDMT is not required while upgrading from 11.0 to 11.6 as the 11.6 installer is capable of performing the backup.

The utility is present in the `icm\bin` folder, and needs to be run against each of the database that was updated / synchronized from the production server.

Perform the following steps to use the tool:

```
<Install Drive>: \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**", depending on the database that requires the schema to be upgraded.

For Example `C:\icm\bin>upgrade -s PRGR-A -d abc_sideA -dt logger -i abc`

- The value as stored in **columns Major, CCMajor**, and **AWMinor** of Version table in the CCE database.



Note Stop the Logger, AW-HDS, and Apache Tomcat services on 11.6 staged systems, before running the EDMT tool while changing over to synchronize.

Upgrade Peripheral Gateways

You can upgrade different Peripheral Gateways (PGs) 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

- 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** (Optional) To apply any 11.5(1) Minor Releases or other Maintenance Releases, click **Browse** and navigate to the Maintenance Release software. Click **Next**.
- Step 4** (Optional) To apply any 11.6(1) Minor Releases or other Maintenance Releases, click **Browse** and navigate to the Maintenance Release software. Click **Next**.
- Step 5** Select **Technology Refresh** and click **Next**.
- Step 6** 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 7** Click **OK** on any informational messages that display.
- Step 8** Click **Install**.
- Step 9** Reboot the system after the upgrade completes.
- Step 10** After reboot, open the Peripheral Gateway Setup tool from the Installer dialog box or desktop shortcut and make any necessary changes. See the "Install" section of this document for specific information.
- If the registry now references out-of-date network interface names or IP addresses for the public and private networks for the PG, update this information.
-

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

- Step 1** Launch the ICM-CCE-Installer and click **Next**.
- Step 2** (Optional) To apply any Maintenance Releases, click **Browse** and navigate to the Maintenance Release software. Click **Next**.
- 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** Run the mandatory update before applying any ES, if you have a fresh install or Technology Refresh upgrade planned for PCCE or UCCE 12.0(1), on the Windows Server 2016. You can download the CCE 12.0 Mandatory Update for Fresh Install/Tech Refresh from [https://software.cisco.com/download/home/268439622/type/280840583/release/12.0\(1\)](https://software.cisco.com/download/home/268439622/type/280840583/release/12.0(1)).
- Step 9** Open the Peripheral Gateway Setup tool from the Installer dialog box or desktop shortcut and edit the Dialer as required.
- Step 10** Use Unified CCE Service Control to set all Unified CCE services to Automatic Start.

Related Topics

[Migrate the Logger Database and Upgrade the Logger](#), on page 9

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.

Related Topics

[Install Unified CCE Administration Client](#)

