Manage Tool for Auto-Registered Phones Support (TAPS)

This chapter provides information about installing, configuring, and using the Tool for Auto-Registered Phones Support (TAPS).

TAPS Overview

The Tool for Auto-Registered Phones Support (TAPS) enables phone users to call the TAPS directory number and download the preconfigured phone settings for the user's directory number. TAPS works in conjunction with Cisco Unified Communications Manager Administration to provide these capabilities:

- Configure TAPS—Allows you to enable TAPS usage for all phones that use auto-registration or to limit TAPS to only phones that are added through BAT with dummy MAC addresses.

- Secure TAPS—Allows you to keep some directory numbers from being updated through TAPS.

- User Locales for TAPS—Allows you to choose the languages for TAPS prompts.

TAPS components get installed on the Cisco Unified Communications Manager first node as part of the Cisco Unified Communications Manager installation. You must enable auto-registration in Cisco Unified Communications Manager for TAPS to function. In addition, you must enable the CallManager service on the first node, even if the first node is not being used to register phones.

Note When you use TAPS, it leads to the depletion of auto-registration range on the Cisco Unified Communications Manager. After update through TAPS, the auto-registered directory number (DN) of the phone becomes an unassigned DN. You should delete unassigned DNs using BAT periodically to free up the auto-registration range.

You must install TAPS application on the Cisco Unified Contact Center Express (Cisco UCCX) server. TAPS requires the Cisco IP Interactive Voice Response (IP IVR) application that runs on the Cisco UCCX server for the user interface and prompts.

Administrators need to provide instructions to tell end users how to use TAPS to configure their new phones.

Note Cisco recommends that you stop the TAPS service when you are not using TAPS to add phones to Cisco Unified Communications Manager database.

Related Topics

TAPS Auto-registration Options

You can set the following options for using TAPS to update auto-registering phones.

- Update MAC addresses and download a predefined configuration for new phones.

- Reload the configuration for replacement phones.

TAPS with New Phone Examples

After BAT has added the new phone configurations with dummy MAC addresses in Cisco Unified Communications Manager Administration, you can plug the phones into the network. You or the phone user can dial a TAPS directory number that causes the phone to download its configuration. At the same time, the phone gets updated in Cisco Unified Communications Manager Administration with the correct MAC address. You must make sure that Auto-registration is enabled in Cisco Unified Communications Manager Administration for TAPS to function.

Note When you use TAPS, it leads to the depletion of auto-registration range on the Cisco Unified Communications Manager. After update through TAPS, the auto-registered directory number (DN) of the phone becomes an unassigned DN. You should delete unassigned DNs using BAT periodically to free up the auto-registration range.

Example

You have 100 new-hire employees starting on Monday. You must add these users and their new phones to Cisco Unified Communications Manager Administration. You can use BAT to create a phone template for these 100 phones and a CSV data file for phones and users. By using the dummy MAC address option in the CSV data file, you do not need to add the individual MAC addresses for the new phones. With auto-registration enabled in Cisco Unified Communications Manager, you can plug the phones directly into the network. You or the new employee can load the configuration by dialing the TAPS directory number and following the voice-prompt instructions.

Reloading Configurations Using TAPS

When you must replace an existing phone that is not functioning, you can use TAPS to download the existing phone configuration to the new phone. After the user receives the new phone and plugs the phone into the network, the user dials the TAPS directory number to download configuration for the previous phone. The user makes no configuration changes during this process.

In Cisco Unified Communications Manager Administration, you must enable auto-registration. You must ensure that you configure TAPS usage for all phones to enable a user to download an existing phone configuration.

Note When you use TAPS, it leads to the depletion of auto-registration range on the Cisco Unified Communications Manager. After update through TAPS, the auto-registered directory number (DN) of the phone becomes an unassigned DN. You should delete unassigned DNs using BAT periodically to free up the auto-registration range.

For more information, see the *Cisco Unified Communications Manager Online Help*.

Example

John's Cisco Unified IP Phone model 7940 gets short-circuited during a lightning storm. He receives a new Cisco Unified IP Phone model 7940 and plugs it into the network. John can dial the TAPS directory number, and the new phone will download the configuration that was previously used for the damaged phone. TAPS automatically updates device information in Cisco Unified Communications Manager Administration.

Related Topics

Secured Directory Numbers

Because TAPS can replace a directory number, you can protect certain directory numbers from being overwritten. To protect important directory numbers, you can use the Secure TAPS option.

Example

The directory number 5000 provides voice-messaging access for your system. You do not want a new user to mistakenly configure 5000 on the new phone. The Secure TAPS option allows you to specify that TAPS cannot access directory number "5000."

Related Topics

Language Prompts for TAPS Users

You can configure user prompts for TAPS to play in several languages. Administrators can choose the languages to make available to users.

If you need to use language prompts other than English prompts, before you install, upgrade, or configure TAPS, run the Cisco Unified Communications Manager Locale Installer on each cluster node and restart each node.

Using the locale installer ensures that you have the latest translated text, translated voice prompts, country-specific phone tones, and country-specific gateways tones available for the phones. For more information on the Cisco Unified Communications Manager Locale Installer, refer to the specific locale installer documentation.

Note You can use the **file get tftp <AAR file name>** CLI command the get the AAR file the Cisco Unified Communications Manager TFTP directory.

Related Topics

Install TAPS

This section provides information about installing, reinstalling, and uninstalling TAPS. TAPS interfaces with both Cisco Unified Communications Manager server and Cisco Customer Response Solution server. This installation procedure involves installing TAPS on the UCCX server.

Note Refer to the Cisco Unified Contact Center Express (Cisco Unified CCX) Software and Hardware Compatibility Guide to find out the Cisco UCCX version compatible to the TAPS version you are installing.

Before you begin

The following prerequisites apply to TAPS installation for BAT:

- Make sure that the Cisco Unified Communications Manager first node is configured and running.
- Have the IP address for the Cisco Unified Communications Manager first node server.
- Ensure the Cisco UCCX server is configured. The Cisco UCCX application can reside on its own dedicated server.
- Be sure to use the locale installer to create the country-specific TAPS prompts.

Install TAPS on the UCCX application server.

Procedure

Step 1	Log on with administrator privileges to the system that is running the Cisco Unified Communications Manager first node database.
Step 2	Choose **Applications** > **Plugins**. The **Find and List Plugins** window displays.
Step 3	Find the TAPS link and click **Download** to save the TAPS_AAR.aar plugin to your local machine.
Step 4	Log in to the UCCX App admin page through **Applications** > **AAR Management** as TAPS user and Upload the TAPS_AAR.aar from AAR Management page.
Step 5	Go to **Applications** > **Application Management**. The Application Management page displays.
Step 6	Click on the TAPS application.
Step 7	Select the **Cisco_Unified_CM_IP_Address** check box and specify the Cisco Unified Communications Manager IP address, enclosed in double quotes.

> **Note** By default the IP address will be " ", you must enter the IP address between the quotes.

Step 8	Restart Tomcat and Cisco Unified CCX Cluster View Daemon using the following commands

- utils service "Cisco Tomcat" stop/start
- utils service "Cisco Unified CCX Cluster View Daemon" stop/start

> **Note** Refer to the Cisco Unified Contact Center Express Administration Guide for more information on managing the TAPS_AAR.aar.

Related Topics

TAPS Application Configuration in UCCX Applications Server

You can review the Cisco UCCX application server documentation by browsing to Cisco Voice Applications and Tools at www.cisco.com. See the *Cisco Unified Contact Center Express Administration Guide* for instructions on how to configure an application.

> **Note** The TAPS application does not work with a Cisco UCCX Standard license. You must use either an Enhanced or Premium license.

Related Topics

Activate TAPS Service

You can activate and deactivate TAPS service using Cisco Unified Communications Manager Serviceability after you access it using the appropriate URL.

Procedure

Step 1   Access Cisco Unified Communications Manager Serviceability.

Step 2   Choose **Tools** > **Service Activation**.
The **Service Activation** window displays.

Step 3   Choose the appropriate server from the drop-down list box. Click **Next**.

Step 4   Choose **TAPS Service** from **Database and Admin Services of the Unified CMServices** list and click **Save**.

> **Note**   If the service is already activated, the Activation Status will display as Activated.

The service gets activated, and the Activation Status column displays the status as Activated.

Start Stop and Restart TAPS

The TAPS service starts automatically after it is activated by using Cisco Unified Communications Manager Serviceability. This section describes the procedures to stop or restart the TAPS service.

Procedure

Step 1   In Cisco Unified Communications Manager Serviceability, choose **Tools** > **Control Center - Feature Services**.

The Control Center–Feature Services window displays.

Step 2   Choose the Cisco Unified Communications Manager server from the Servers drop-down list box.

TAPS Service displays in list under Database and Admin Services column, in the Unified CMServices.

> **Note**   If TAPS is already activated, the Status displays as Activated.

Step 3   Check the check box that corresponds to TAPS Service.

Step 4   If you want to restart the TAPS service, click **Restart**.

The service restarts, and the message, Service Successfully Restarted, displays.

Step 5   If you want to stop the TAPS service, click **Stop**.

The service stops, and the message, Service Successfully Stopped, displays.

Step 6   If you want to start a stopped TAPS service, click **Start**.

The service starts, and the message, Service Successfully Started, displays.

Related Topics

TAPS Option Settings

Administrators can choose how to use TAPS in their Cisco Unified Communications Manager system. These TAPS feature options provide more flexibility when allowing users to update phones or download phone profiles. TAPS options include auto-registration, TAPS secure directory number, and user locales for auto-registered phone support.

Configure TAPS Auto-Registration

The Configure TAPS option provides two ways to use TAPS to update phones that auto-register with the Cisco Unified Communications Manager database.

- For phones that are added by using BAT and have a dummy MAC address.
- For existing phones in Cisco Unified Communications Manager Administration

The default setting limits use of TAPS to phones that have a dummy MAC address with a device name that starts with the prefix "BAT."

You can set the Configure TAPS option to allow any phone to auto-register in the Cisco Unified Communications Manager system, including phones that have a standard MAC address.

Note When you use TAPS, it leads to the depletion of auto-registration range on the Cisco Unified Communications Manager. After update through TAPS, the auto-registered directory number (DN) of the phone becomes an unassigned DN. You should delete unassigned DNs using BAT periodically to free up the auto-registration range.

Procedure

Step 1 In the Cisco Unified Communications Manager Administration window, choose **System** > **Service Parameters**. The Service Parameter Configuration window displays.

Step 2 From the Server drop-down list, choose the appropriate server.

Step 3 From the Service drop-down list, choose **TAPS Service**.

Step 4 Choose one of these two options from the Parameter Value drop-down list box, and click **Save**.

a) **Allow Auto-Registered phones to reset with a profile with a dummy MAC address**.

TAPS updates auto-registered phones with a profile that have the dummy MAC address only.

b) **Allow Auto-Registered phones to reset with any profile.**

TAPS updates auto-registered phones with any profile.

A status message indicates that the update is successful.

What to do next

To return to the TAPS Options window, click **Back**.

Related Topics

TAPS Secure Directory Number Option

The Secure TAPS options let you specify directory numbers that TAPS cannot access. Use this capability when you want to protect directory numbers from being accidentally assigned to another phone.

Note When you use TAPS, it leads to the depletion of auto-registration range on the Cisco Unified Communications Manager. After update through TAPS, the auto-registered directory number (DN) of the phone becomes an unassigned DN. You should delete unassigned DNs using BAT periodically to free up the auto-registration range.

Use the following sections to find restricted directory numbers or to add restrict more directory numbers:

Related Topics

Find Secure Directory Numbers

You can find and list the directory numbers that have been restricted.

Procedure

Step 1 Choose **Bulk Administration** > **TAPS** > **Secure TAPS**.
The **Find and List Directory Numbers to Secure** window displays.

Step 2 Enter the appropriate search criteria and click **Search**.
If there are secured numbers available, then the list displays those numbers.

What to do next

You can proceed to restrict directory numbers or lift the restriction for a directory number.

Related Topics

Restrict Directory Numbers

You can block TAPS from using directory numbers that you specify. TAPS cannot use any directory number that you include in the list of secured directory numbers.

Procedure

Step 1	Choose **Bulk Administration** > **TAPS** > **Secure TAPS**. The **Find and List Directory Numbers To Secure** window displays.
Step 2	Click **Add New**. The **Secure Directory Numbers Configuration** window displays.
Step 3	In the **Directory Number** field, enter the number(s) that you want to protect from TAPS, and click Save.

> **Tip** To enter multiple Directory Numbers, use one line for each Directory Number entry.

Step 4	To return to **Find and List Directory Numbers** window, choose **Back to Find/List** from the **Related links** drop-down list box on the right, top corner of the window and click **Go**.

TAPS cannot use the directory numbers that are shown in this list. If a user tries to update a device profile by entering one of the directory numbers in this list, TAPS will refuse the request.

Related Topics

Remove Directory Number Restriction

You can remove a directory number from the list of directory numbers that TAPS cannot access.

Procedure

Step 1	Choose **Bulk Administration** > **TAPS** > **Secure TAPS**. The **Find and List Secure Directory Numbers** window displays.
Step 2	Find the directory numbers you want to delete.
Step 3	Choose the directory numbers that you want to remove from the secure directory number list and click **Delete**.

Related Topics

View TAPS Log Files

Use BAT to view TAPS log files. Each row of the log file represents each TAPS transaction.

Procedure

Choose **Bulk Administration** > **TAPS** > **View Taps Log File**.
The **View TAPS Log File** window displays.

Related Topics

Related Topics