



Working with TAPS

Use the tool for auto-registered phones support (TAPS) in conjunction with BAT to provide two features:

- Update MAC addresses and download predefined configuration for new phones
- Reload configuration for replacement phones

When adding new phones to Cisco CallManager, TAPS works in conjunction with BAT to update phones that were added to BAT using dummy MAC addresses. After the phones with dummy MAC addresses have been bulk-added to Cisco CallManager Administration using BAT, you can plug the phones into the network. You or the phone's user can dial a TAPS directory number that causes the phone to download its configuration. At the same time, the phone is updated in Cisco CallManager Administration with the correct MAC address. Auto-registration must be enabled in Cisco CallManager Administration (**System > Cisco CallManager**) for TAPS to function.

For example, you have 100 new hires starting on Monday. You must add these users and their new phones to Cisco CallManager Administration. You can use BAT to create a phone template for these 100 users and a CSV file for phones and users. By using the dummy MAC address option in the CSV file, you do not need to input the individual MAC addresses for the 100 new phones. Now, as long as auto-registration is enabled, the phones can be plugged directly into the network, and simply dialing the TAPS directory number (by you or the new hire) configures the phones.

When replacing an existing phone (due to damage, for example), use Configure TAPS so that the user can receive a new phone, plug it into the network, and dial the TAPS directory number to download the configuration used by the previous

phone. Auto-registration must be enabled for Configure TAPS to work. No configuration changes need to be made by the user or in Cisco CallManager Administration.

For example, John's Cisco IP Phone 7940 gets short-circuited during a lightning storm. He receives a new Cisco IP Phone 7940 and plugs it into the network. John can dial the TAPS directory number, and the new phone will download the configuration previously used for the damaged phone. No need exists to change directory numbers or update device information in Cisco CallManager Administration — it is done automatically by TAPS. See the [“Configuring TAPS” section on page 6-69](#) for more information.

You must enable auto-registration in Cisco CallManager Administration (**System > Cisco CallManager**) for TAPS to function. If auto-registration is not enabled in Cisco CallManager Administration (**System > Cisco CallManager**), TAPS will not function.

Because TAPS can replace a directory number, you may want to protect certain directory numbers from being overwritten. You can protect important numbers by using the SecureTAPS application. See the [“Securing TAPS” section on page 6-69](#) for more information.

The TAPS application, which is installed on a Cisco IP IVR/IP AA server, also requires components to be installed on the server running the Cisco CallManager Publisher database.

Do not use TAPS if you are specifying each phone's MAC address during the bulk-add.

Related Topics

- [Changing the Logon ID, page 6-66](#)
- [Configuring TAPS, page 6-69](#)
- [Securing TAPS, page 6-69](#)
- [Stopping TAPS, page 6-70](#)

Installing TAPS

TAPS requires a two-part installation. The first part stems from the BAT installation, where you have the choice to install TAPS along with BAT on the server running the Publisher databases for Cisco CallManager. The second part is installed on the Cisco IP IVR/IP AA server. See [Chapter 2, “Installing BAT”](#) for more information about the BAT installation process.

Prerequisites

The following prerequisites apply to the TAPS installation for BAT Release 4.1(1):

- Make sure the Publisher database for Cisco CallManager is configured and running. The Publisher database can be on its own server or on the same server as Cisco CallManager.
- Make sure a Cisco Application Server (Cisco IP IVR/IP AA server) is configured.
- Make sure the Windows 2000 Services window is closed.



Note

Before running TAPS install on Cisco CallManager, close the Services window if it is open.

Prerequisite

BAT must be installed on the server running the Publisher database for Cisco CallManager. The following steps pick up where the BAT installation left off.

Perform the following steps to complete the TAPS installation.

Step 1 At the conclusion of the BAT installation, you are prompted to install TAPS. See [Installing BAT, page 2-9](#), for instructions on installing BAT. Click **Yes** to install TAPS.

The system copies all TAPS files onto the server running the Publisher database.

Step 2 On the Cisco IP IVR/IP AA server, launch the TAPS installation file **ToolforAutoRegisteredPhonesSupport.exe**.

The installation process begins.

Step 3 Click **Next**.

- Step 4** Enter the primary Cisco CallManager server IP address.
- Step 5** Click **OK**.
- Step 6** Click **Next**.
- Step 7** Click **Finish** to complete the installation.
- Step 8** Upload TAPS to the Cisco IP IVR/IP AA server. See [Uploading TAPS to the Cisco IP IVR/IP AA Server, page 6-64](#), for instructions.
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Related Topics

- [Changing the Logon ID, page 6-66](#)
- [Securing TAPS, page 6-69](#)
- [Configuring TAPS, page 6-69](#)

Uploading TAPS to the Cisco IP IVR/IP AA Server

TAPS requires uploading a file to the Cisco IP IVR/IP AA server. Perform the following steps.

Procedure

- Step 1** On the Cisco IP IVR/IP AA server, click **Start > Programs > Cisco IP IVR > Repository Manager**.
- The Repository Manager window displays.
- Step 2** Click **Upload**.
- The Repository Manager dialog box displays.
- Step 3** Select **TAPS** and click **Open**.
- The file TAPS.aef uploads to the Cisco IP IVR/IP AA server.
- Step 4** Click **OK** on the message box that indicates the upload was successful. You must refresh the Application Engine for the change to take effect.
- Step 5** Click **Start > Programs > Cisco IP IVR > Application Administrator**.
- The Application Administration page displays.

- Step 6** Click **Engine**.
- Step 7** Click **Refresh Scripts**.
- Step 8** Click **Refresh**.
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Uninstalling TAPS

You cannot uninstall TAPS separately from BAT. Uninstalling BAT also uninstalls TAPS from the server running the Publisher database. Perform the following steps to uninstall TAPS from the Cisco IP IVR/IP AA server.

- Step 1** On the Cisco IP IVR/IP AA server, click **Start > Settings > Control Panel > Add/Remove Programs**.
- Step 2** Select **Taps** and click the **Change/Remove** button.
- TAPS is uninstalled from the IP IVR/IP AA server.
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Related Topics

- [Installing TAPS, page 6-63](#)

Using TAPS

Before you can use TAPS, you must change the logon password and login ID for the TAPS service on the server running the Publisher database and configure the application.

Related Topics

- [Changing the Logon ID, page 6-66](#)
- [Configuring the TAPS Application, page 6-66](#)
- [Starting TAPS, page 6-67](#)
- [TAPS for End Users, page 6-68](#)

Changing the Logon ID

When first installed, the TAPS service uses a local system account for logon. You must change the administrator logon and password for the server. Perform the following step to change the logon ID.

Procedure

Perform the following steps to change the logon ID.

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- Step 1** On the Cisco IP IVR/IP AA server, click **Start > Programs > Administrative Tools > Services**.

The Services window displays.

- Step 2** Right-click on TAPS and select **Properties**.

The TAPS Properties window displays.

- Step 3** Click the **Logon** tab.

- Step 4** Click **This Account** and then the **Browse** button.

The Select User dialog box displays.

- Step 5** Select **Administrator** in the list of users and click **OK**.

- Step 6** Click **OK** on the TAPS Properties window.

The logon ID changes to match the administrator logon and password for this server.

Configuring the TAPS Application

You must configure TAPS by adding a CTI route point, CTI ports, and users. Like any other application in the Cisco AVVID IP Telephony system, TAPS requires configuring. Refer to the Cisco IP IVR/IP AA Release Notes for complete information. You can review the Application Server documentation by browsing to <http://www.cisco.com> and clicking **Software Center > Voice Software > IP IVR/IP AA**. Open the documentation for instructions on how to configure an application.

You need only one CTI route point for TAPS. You will need at least one CTI port, but you can configure as many ports as you would like available to TAPS users.

In the Cisco CallManager Administration

- Create a CTI Route point and assign it a unique directory number.
- Set call forward no answer (CFNA) on the CTI Route point. If all CTI ports are in use, the system forwards incoming calls to the CFNA number.
- Create one or more CTI ports with consecutive directory numbers.

TAPS supports a maximum number of sessions equal to the number of CTI ports configured for TAPS. For example, if you have configured five CTI ports, up to five users can be dialed into TAPS at any time. The sixth caller cannot connect to TAPS.

- Create a user. The TAPS route point and ports should be in the user's control devices list.
- Create an auto-registration Partition/Calling Search Space to prevent phones that have auto-registered from dialing any directory number other than the directory number assigned to the TAPS CTI route point. Restricting access to this directory number ensures that users download the proper configuration information for their phone.
- Upload TAPS.aef using the Repository Manager on the IP IVR/IP AA server. See [Uploading TAPS to the Cisco IP IVR/IP AA Server, page 6-64](#), for instructions.

For information about how to add or assign these values, refer to the *Cisco CallManager Administration Guide*.

Starting TAPS

You must start the TAPS service manually. Perform the following steps to start TAPS.

Procedure

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- Step 1** On the primary Cisco CallManager server, click **Start > Programs > Administrative Tools > Services**.

The Services window displays.

Step 2 Double-click **TAPS**.

The TAPS service is now running. If the server should fail, you must manually restart TAPS again.

Related Topics

- [Using TAPS, page 6-65](#)
- [Stopping TAPS, page 6-70](#)

TAPS for End Users

Follow these steps to configure your new phone:

Step 1 Plug the phone into a port.

The phone automatically registers and displays a number.

Step 2 Dial the TAPS extension provided by your system administrator.

Step 3 Dial your personal extension number provided by your system administrator, followed by #.



Note You may be instructed to enter the complete telephone number (including area code).

Step 4 To confirm, enter your personal extension number again, followed by #.
A confirmation displays.

Step 5 Hang up the phone.

The phone resets and displays your extension number.

Contact your system administrator if you experience any problems.

Configuring TAPS

The application **ConfigureTAPS** allows you to use TAPS to update phones regardless of whether they were entered into the Cisco CallManager database via Cisco CallManager Administration or via BAT using a dummy MAC address. Use this feature when you need to replace one phone with a same model phone. As long as auto-registration is enabled in Cisco CallManager Administration, the user can plug in the new phone and then dial the TAPS directory number to retrieve the configuration previously used by their old phone.

You can access ConfigureTAPS from the IP IVR/IP AA server by clicking **Start > Programs > Cisco CallManager > Bulk Admin Tool > Configure TAPS**.

Related Topics

- [Using TAPS, page 6-65](#)
- [Securing TAPS, page 6-69](#)

Securing TAPS

Secure TAPS gives you the option to specify directory numbers that the TAPS feature cannot access. Use this capability when you want to protect directory numbers from being accidentally assigned.

For example, the directory number 5000 provides voice mail access. You do not want a new user to mistakenly configure 5000 on their new phone. SecureTAPS allows you to specify the directory numbers that cannot be accessed by TAPS.

From the IP IVR/IP AA server, click **Start > Programs > Cisco CallManager > Bulk Admin Tool > Secure TAPS**. Users cannot reach any directory numbers you specify here by using TAPS.

By default, TAPS allows new phones that have auto-registered to be updated with a phone that was added to Cisco CallManager using BAT.

Related Topics

- [Configuring TAPS, page 6-69](#)

Stopping TAPS

Stop the TAPS service from the Services window on the Publisher server (where BAT is installed).

Related Topics

- [Using TAPS, page 6-65](#)
- [Starting TAPS, page 6-67](#)