Cisco IP DECT 6800 Series with Cisco Unified Communications Manager

Deployment of DECT 6800 on Cisco Unified Communication Manager (CUCM)

The Cisco IP DECT 6800 Series uses Digital Enhanced Cordless Telecommunications (DECT), a wireless technology. DECT operates at or near the 1.9 GHz frequency and does not interfere with other wireless technologies such as Bluetooth (operates at 2.5 GHz or 5 GHz). The Cisco IP DECT 6800 base station converts IP to DECT. The CUCM has no knowledge of the DECT operations. From the CUCM perspective, the DECT handsets appear as VoIP endpoints.

Note You must configure DECT base station for TCP. You must not use base station MAC address when you add the DECT to the CUCM. Each Cisco IP DECT Phone 6825 is a separate Third-party SIP device (advanced) on CUCM. For example, if you have 100 6825 handsets, then you will need 100 Third-Party SIP Device (Advanced) devices in CUCM.

Currently, few basic features such as make a call, answer a call, hold, transfer a call, conference are supported.

Create a User

The Cisco IP DECT Phone 6825 handset uses DECT to communicate to a base station. The base station converts DECT to IP. The base station acts as a relay between the 6825 and Cisco Unified Communications Manager. In Cisco Unified Communications Manager, you add 6825 as a Third-Party SIP device (Advanced).You must not add the base station directly to the CUCM.

Before you begin

Log in to Cisco Unified Communications Manager Administration.

Procedure

Step 1   In Cisco Unified Communications Manager Administration, choose **User Management** > **End User**.

The **Find and List Users** window appears.

Step 2   To select an existing user, specify the appropriate filters in the **Find User Where** field, click **Find** to retrieve a list of users, and then select the user who is synchronized with LDAP from the list. You can also create a new user.

Step 3   In the **End User Configuration** window, the **User ID** fields populates the SIP digest username. The directory number configured for the user is displayed in the **Telephone Number** field.

Step 4   In the **Digest Credentials** field, you need to populate the value and the value is the SIP digest password that is set in the headset.

Step 5   Click **Save**.

Add IP DECT 6825 on CUCM

You can add an IP DECT 6825 on the CUCM and each device adds as a separate device enter. The device does not equal a base station. A device in this case is a line in conjunction with a digest user selection.

Before you begin

Log in to Cisco Unified Communications Manager Administration.

Procedure

Step 1

Step 2   In Cisco Unified Communications Manager Administration, choose **User Management** > **End User**.

The **Find and List Users** window appears.

Step 3   In the **Find and List Users** window, click **Add New**.

Step 4   In the **Add a New Phone** window, select **Phone Type** as **Third-party SIP Device (Advanced)**.

Step 5   Click **Next**.

Step 6   In the **Phone Configuration** window, add value in the **MAC Address** field.

Note   You must not enter the base station MAC address in this field. You can enter any value in this field as the profiles are not synchronized to MAC addresses. You can also enter IPEI value of the base station and add some other digits as suffix.

Step 7   Select the **Device Pool** as appropriate for the device environments. For example, you can select **Default**.

Step 8   From the **Phone Button Template** field, select **Third-party SIP Device (Advanced)**.

Step 9 In the **Owner User ID** field, add the owner that you want to register with the device.

Step 10 In the **Protocol Specific Information** section, select the value **Third-party SIP Device Advanced** from the list **Device Security Profile**.

Step 11 From the **SIP Profile** field, select **Standard SIP Profile**.

Step 12 From the **Digest User** field, select the same end user for who you want to register the device.

Step 13 Set the rerouting CSS.

Step 14 Click **Save**.

Add a Line to the Device

Before you begin

Log in to Cisco Unified Communications Manager Administration.

Procedure

Step 1 In the **Phone Configuration** window, select **Directory Number (Line 1)**.

Step 2 In the **Directory Number** field, enter the directory number of the same end user for who you want to register the device.

Step 3 Select the **Route Partition**, for example, `Everyone`.

Step 4 In the **Directory Number Settings** section, select a value from the **Calling Search Space** field.

If you set a value for the **Calling Search Space** field, you must set the value for **Rerouting Calling Search Space**.

Step 5 Click **Save**.

Associate the Device to the User

After you add the device to the CUCM, you must associate the device to the user.

Before you begin

- Log in to Cisco Unified Communications Manager Administration.

- Create a user.

- Add the device to CUCM.

- Add a directory number, partition, CSS to the device.

Procedure

Step 1	In the **End User Configuration** section, click **Device Association**.
Step 2	In the **User Device Association** section, specify the appropriate filters in the **Find User Device Association where** field, click **Find** to retrieve a list of users.
Step 3	Select the user and click **Save Selected/Changes**.

If you want to associate other devices, you can follow all the procedures but use a new directory number and new user.

Configure the Base Station

When you associate the device with the user, you need to configure the base station.

Procedure

Step 1	On the IP DECT device, press Menu button. Then type *47* on the keypad.

You will be able to fetch the IP address of the base station. The device should be kept at the proximity of the base station.

Step 2	On a Web browser, enter the IP address of the base station.

Setup a username and password when you log into the base station for the first time as a security measure. If you cannot access the base station, in the web browser, type https:// and then the IP address reported by the device.

Step 3	In the base station Administration web page, click **Servers** and then click **Add Server**.
Step 4	Set the **Server Alias** field. For example, `CUCM`.
Step 5	Set the **Registrar** field to the address given by your service provider.

This address is the actual DNS name of the Cisco Unified Communication Manager. For example, `cucm1.dcloud.cisco.com`. This the subsriber that registers to the CUCM server group.

Step 6	Set the **SIP Transport** field to **TCP**.
Step 7	Click **Save**.
Step 8	Click **Extensions** to add an extenison.
Step 9	In the **Line name** field, add the directory number of the user for who the device is associated.
Step 10	Set the **Extension** field. You can enter the same value as the value of **Line name** field.
Step 11	In the **Authentication User Name**, enter the user that is specified in the CUCM.
Step 12	Set the **Authentication Password** as the digest password.

Clear any password from the XSI Password field and set the Server same as Registrar field. For example, as

Step 13	Clear any password from the **XSI Password** field and set the **Server** same as **Registrar** field, such as `cucm1.dcloud.cisco.com`.

Step 14   Click **Save**.

For any new device, you can repeat all the steps.

Step 15   On the base station web page, navigate to **Extensions** and validate the entries appears on the page. The green circle indicates successful registration.

You can enable both single-cell and multi-cell base station on CUCM. For details, on mulit-cell base station, see *Cisco IP DECT 6800 Series Administration Guide*.