Maintenance

Reboot the Base Station from the Web Pages

When you need to reboot the base station, you have two reboot choices:

- **Reboot**—The reboot takes place when the base station has no active connections, such as active calls, directory access, or firmware update activity.

- **Forced Reboot**—The reboot takes place within 1 minute. Activity on the base station immediately stops.

Note　When the base station reboots, a new syslog starts and the previous information is lost. If you have a problem and plan to reboot, save the syslog file to your computer before you do the reboot.

Before you begin

Connect to the base station web page as described in Sign in to the administration web page

The base station needs to be connected to the network and the green LED lit.

Procedure

Step 1	Access the **Home/Status** page.
Step 2	Click **Reboot** or **Forced Reboot**.

Reboot the Base Station Remotely

You may receive the SIP Notify to reboot the base station from the call control system. The SIP Notify contains the event `Event:check-sync`. If the parameter `Sip_Check_Sync_Always_Reboot` is set to `On`, the base station initiates a reboot.

For more information about SIP Notify authentication, see Configure the SIP Notify Authentication.

You can reboot the base station remotely in this way.

Before you begin

Ensure that the base station is idle.

Procedure

Send SIP notify from the call control system.

The base station reboots automatically.

Remove the Handset from the Web Page

You may need to remove the handset, if the handset is faulty or there are problems with the handset. You can remove the handset this way from the **Extensions** web page.

Before you begin

Connect to the base station web page as described in Sign in to the administration web page.

Procedure

Step 1	Click **Extensions**.
Step 2	Click the link in the **Extension Info** column for the handset.
Step 3	Set the IPEI number to `FFFFFFFFFF`.
Step 4	Click **Save**.

Remove the Handset Remotely

You may receive the SIP Notify to reset the handset's IPEI number from the call control system. The notification contains the handset index number. For example, `Event:reset-ipei-for-handset;hs=1.`

For more information about SIP Notify authentication, see Configure the SIP Notify Authentication.

You can reset the handset's IPEI number remotely in this way.

Before you begin

Ensure that the handset and the extensions aren't used.

Procedure

Send SIP Notify from the call control system.

The handset's IPEI number is reset as `FFFFFFFFFF` and the handset isn't configured to the extension.

Reset the Base Station to Factory Defaults

The reset button is located on the bottom edge of the base station.

Before you begin

The **Factory reset from button** field in the **Management** Settings page must be enabled. For more information, see Set Up Management Settings and Management Web Page Fields.

Procedure

Press and hold the reset button for 10 seconds.

You can release the button when the LED turns red.

Reset the Handset to Factory Defaults

Occasionally, you need to reset a handset to factory defaults. The reset deletes any information you stored in the handset (for example, ringtones). Any content that is controlled by the base station (for example, system configuration) is not deleted.

Procedure

Step 1   Press **Menu** ☰.

Step 2   Select **Settings** ⚙ > **Reset settings**.

Verify the System Configuration

After you set up the system, check that you can make calls and receive calls from within the system and from external numbers. For each of the steps below, the called device rings and you are able to hear and talk from both devices.

If you have problems, the Troubleshooting chapter may help you.

Before you begin

You need these devices to be configured and active:

- One base station
- Two handsets

Procedure

Step 1   Call from one handset to the other and ensure that you have a two-way audio path.

Step 2   Call from one of the handsets to an external number (for example, a mobile phone) and ensure that you have a two-way audio path.

Step 3   Call to one of the handsets from an external number and ensure that you have a two-way audio path.

Back Up the System Configuration

You should back up your system configuration. Export the configuration as a file, and save it in a secure location. Remember that the export file may contain sensitive text.

For information on the configuration, see Configuration Web Page Fields.

Before you begin

Connect to the base station web page as described in Sign in to the administration web page.

Procedure

Step 1 Click **Configuration**.

Step 2 Click **Export**.

If your browser displays the configuration in a new browser window, you have encountered a known browser problem. Return to the administration screen, right-click on **Export** and select **Save link as**.

Step 3 Set the filename and location for the export, and click **OK**.

Related Topics

Restore the System Configuration

If your base station loses its configuration, you can load the backed-up configuration file to restore the system.

Before you begin

Connect to the base station web page as described in Sign in to the administration web page.

You need a configuration file, for example, a file created from .

Procedure

Step 1 Click **Configuration**.

Step 2 Click **Choose File**.

Step 3 Navigate to the location and exported filename, and click **OK**.

Step 4 Click **Load**.

Related Topics

System Upgrades and Downgrades

You can upgrade the Cisco IP DECT 6800 Series base stations, handsets, and repeaters with the updated software.

You can downgrade the Cisco IP DECT 6800 Series base stations, handsets, and repeaters to an earlier Firmware version. The base stations, handsets, and repeaters can't be downgraded lower than Firmware version 4.8(1) SR1. If you attempt to downgrade to a Firmware from version lower than 4.8(1) SR1, the secured data can't be decrypted and a message is saved in the system log.

For the procedure to downgrade the base station and handsets, see and .

The software is available on cisco.com at https://software.cisco.com/download/home/286323307.

Each software release has release notes available here: https://www.cisco.com/c/en/us/support/collaboration-endpoints/ip-dect-6800-series-multiplatform-firmware/products-release-notes-list.html.

The software from the release is loaded onto a TFTP, HTTP, or HTTPS server. You upgrade or downgrade the base station first, then upgrade or downgrade the handsets. After the base station upgrades or downgrades, it automatically reboots. After the handsets upgrades or downgrades, they automatically reboot.

Upgrade or Downgrade Workflow

The following workflow describes the steps you take to prepare the TFTP, HTTP, or HTTPS server and upgrade or downgrade the system. Some steps you typically only do once, during the initial setup.

Note We recommend that you upgrade or downgrade the base station first, then upgrade or downgrade the handsets after the base station upgrade completes.

Before you begin

You need to have a TFTP, HTTP, or HTTPS server available.

Procedure

	Command or Action	Purpose
Step 1	(Do this one time) Prepare TFTP, HTTP, or HTTPS Server for Upgrades or Downgrades, on page 6	Sets up the required TFTP server directory structure.
Step 2	(Do this one time) Set Up the Firmware Update Parameters, on page 7	Identifies the TFTP server and directory.
Step 3	Download and Copy the Firmware Files to the TFTP, HTTP, or HTTPS Server, on page 7	Places the firmware files in the TFTP directory structure
Step 4	Upgrade the Base Stations, on page 9 or Downgrade the Base Stations, on page 12	Instructs the base station to transfer the firmware file from the TFTP server and install the firmware in memory.
Step 5	Upgrade the Handsets, on page 10 or Downgrade the Handsets , on page 13	Instructs the handsets to transfer the firmware file from the TFTP server and install the firmware in memory.

Prepare TFTP, HTTP, or HTTPS Server for Upgrades or Downgrades

Before you download the firmware, set up the required directory structure on your TFTP, HTTP, or HTTPS server. The base station, handset, and repeater firmware must go into specific folders.

You only need to do this task once.

Before you begin

You need a TFTP, HTTP, or HTTPS server configured and active.

Configure the TFTP, HTTP, or HTTPS server timeout for at least 3 seconds.

Procedure

Step 1   Open the root folder of the TFTP, HTTP, or HTTPS server file system.

Step 2   Create a subdirectory. For example, `Cisco`.

What to do next

Set Up the Firmware Update Parameters

Typically, you only do this task once.

Before you begin

Connect to the base station web page as described in Sign in to the administration web page.

You need the IP address or fully-qualified directory name (FQDN) of the TFTP, HTTP, or HTTPS server.

Procedure

Step 1   Click **Firmware Update**.

Step 2   Enter the TFTP, HTTP, or HTTPS server IP address or FQDN into the **Firmware update server address** field.

Step 3   Enter `Cisco` into the **Firmware path** field.

Step 4   Click **Save/Start Update**.

Download and Copy the Firmware Files to the TFTP, HTTP, or HTTPS Server

You access the Cisco Software Download page to get the firmware in zip files. The zip files contain these firmware files:

- For the base station, the zip filename starts with:

    - `IPDect-DBS110` for Cisco IP DECT 110 Single-Cell Base Station

    - `IPDect-DBS210` for Cisco IP DECT 210 Multi-Cell Base Station

- From Firmware Release 5.0, the zip filename for the repeater starts with `IPDect-RPT-110` for Cisco IP DECT 110 Repeater.

For the Firmware Release earlier than 5.0, the zip filename for the repeater starts with `IPDect-RPT110` for Cisco IP DECT 110 Repeater.

- For the handsets, the zip filename starts with:
  - `IPDect-PH6823` for Cisco IP DECT Phone 6823 Handset
  - `IPDect-PH6825` for Cisco IP DECT Phone 6825 Handset
  - `IPDect-PH6825RGD` for Cisco IP DECT Phone 6825 Ruggedized Handset

Note   For Firmware Release earlier than 5.0, when the Cisco IP DECT Phone 6825 Handset and Cisco IP DECT Phone 6825 Ruggedized Handset have the same version and branch, you only need the `IPDect-PH6825` file.

Before you begin

You need the TFTP, HTTP, or HTTPS server information.

Procedure

Step 1	From your browser, go to https://software.cisco.com/download/home/286323307.
Step 2	If required, sign in with your user ID and password.
Step 3	Click **IP DECT 210 Multi-Cell Base-Station**.
Step 4	Select the release.
Step 5	Download the zip file for the required version.
Step 6	Return to https://software.cisco.com/download/home/286323307.
Step 7	(Optional) Click **IP DECT 110 Repeater with Multiplatform Firmware**.
	a) Select the release.
	b) Download the zip file for the required version.
	c) Return to https://software.cisco.com/download/home/286323307.
Step 8	(Optional) Click **IP DECT 210 Multi-Cell Base Station with Multiplatform Firmware**.
	a) Select the release.
	b) Download the zip file for the required version.
	c) Return to https://software.cisco.com/download/home/286323307.
Step 9	Click **IP DECT 6825 with Multiplatform Firmware**.
Step 10	Select the release.
Step 11	Download the zip file for the required version.
Step 12	(Optional) Click **IP DECT 6825 with Multiplatform Firmware**.
	a) Select the release.
	b) Download the zip file for the required version.
Step 13	On your PC, unzip the files.
Step 14	Access the TFTP, HTTP, or HTTPS server file system.

Step 15   If not available, create a `Cisco` directory.

Step 16   Open the `Cisco` directory.

Step 17   Copy the new base station firmware file to the `Cisco` folder.

Step 18   Copy the new repeater firmware file to the `Cisco` folder.

Step 19   Copy the new handset firmware file to the `Cisco` folder.

What to do next

Upgrade the Base Stations, on page 9 or Downgrade the Base Stations, on page 12

Upgrade the Handsets, on page 10 or Downgrade the Handsets , on page 13

Upgrade the Base Stations

The Firmware filename is available in a new format from the Firmware Release 5.0. For example, DBS-210-3PC.04-80-01-0001-02.fwu. You must enter the complete filename with the extension into the upgrade page.

The filename of the Firmware versions earlier than 5.0 contains the version (v) and branch number (b). For example, DBS-210_v0470_b0001.fwu is version 470 and branch 1. When you upgrade to Firmware versions earlier than 5.0, you can enter the firmware version and branch number without the leading zeros.

Note   You should upgrade the base station when it's inactive. All the active calls drop when the upgrade starts. During the upgrade, the base station LED flashes in the order green, red, green, and amber. Don't power off the base station while the LED flashes. The upgrade may take about 30 minutes to 1 hour to complete and reboot the base station.

Note   We recommend that you upgrade the base station first, then upgrade the handsets after the base station upgrade completes.

Before you begin

Connect to the base station web page as described in Sign in to the administration web page. If you have multiple base stations, you should sign into the primary base station.

You need to have completed Set Up the Firmware Update Parameters, on page 7 and Download and Copy the Firmware Files to the TFTP, HTTP, or HTTPS Server, on page 7.

Procedure

Step 1   Click **Firmware Update**.

Step 2   Enter the Firmware filename with the extension in the **Firmware** version field for the base station.

Step 3   Click **Save/Start Update**.

Step 4   Click **Save** in the pop-up window.

Step 5   In the warning window, click the browser **Back** arrow.

Step 6   Wait a few seconds, then click **Syslog**.

Step 7   Verify that you see the message based on the Firmware version:

- Firmware Release 5.0: Example `DBS-110-3PC 0c:75:bd:33:f8:ca -- Requesting upgrade betaware.rtx.net/MPE/test/bin/DBS-110-3PC-05-00-01-0001-12.fwu`

- Firmware Release earlier than 5.0: `Firmware update started to version vvvv branch bbbb`

    Where:

    - vvvv is the version number.

    - bbbb is the branch number.

After a few minutes, the base station will automatically reboot and you need to sign into the administration page. When the handsets register with the base station, the base station upgrade is complete.

Upgrade the Handsets

The Firmware filename is available in a new format from the Firmware release 5.0. For example, 6825-05-00-01-0002-14.fwu. You must put the complete filename with the extension into the upgrade page.

The filename of the Firmware versions earlier than 5.0 contains the version (v) and branch number (b). For example, 6825-210_v0470_b0001.fwu is version 470 and branch 1. When you upgrade to Firmware versions earlier than 5.0, you can enter the firmware version and branch number without the leading zeros.

The 6823 Handset, 6825 Handset, and the 6825 Ruggedized Handset have different firmware file from the Firmware release 5.0.

After you start the upgrade from the web page, all handsets download and load the new firmware file. The upgrade may take 20-30 minutes to download and verify, and an extra few minutes to load the new firmware file on the handset. The handset must be placed in the charger and not removed until the handset loads the firmware file and reboots. While the handset loads the new firmware, the LED flashes in the order green, red, green, and amber. The handsets automatically reboot at the end of the upgrade.

The **Extensions** page shows the upgrade progress in the **FWU Progress** column.

- During the download, the column shows the download progress as a percentage. For example, `41%`.

- After the file is downloaded, it's verified and the column shows the verification progress as a percentage. For example, `Verifying 23%`.

- If the verification is complete and the handset isn't on the charger, the column shows `Waiting for charger`.

- If the verification is complete and the handset is placed in the charger, the column shows `Waiting for charger` before it shows `Restarting`.

- When the upgrade is complete, the column shows `Complete`.

If the **FWU Progress** shows `Off`, the version and branch in the Firmware Update page are set to 0.

✎

| **Note** | We recommend that you update the base station first, then update the handsets after the base station update completes. |

Before you begin

Connect to the base station web page as described in Sign in to the administration web page.

You need to have completed Set Up the Firmware Update Parameters, on page 7 and Download and Copy the Firmware Files to the TFTP, HTTP, or HTTPS Server, on page 7.

Procedure

Step 1 Click **Firmware Update**.

Step 2 Enter the Firmware filename with the extension in the **Firmware** version field for all the handsets.

Step 3 Click **Save/Start Update**.

Step 4 Click **Save** in the pop-up window.

Step 5 In the warning window, click the browser **Back** arrow.

Step 6 Wait a few seconds, then click **Syslog**.

Step 7 Verify that you see the message based on the Firmware version: .

- Firmware Release 5.0: Example `Firmware update started to Version 05-00-01-0001-11 for Handset: 0`

- Firmware Release earlier than 5.0: `Firmware update started to version vvvv branch bbbb for handset: x`

  Where:

  - vvvv is the version number.
  - bbbb is the branch number.
  - x is the handset number.

You should see one message for each handset registered to the base station. If you don't see this message, there may be error messages.

Step 8 Click **Extensions**.

The **FWU Progress** column displays the upgrade status. Refresh your browser to monitor the progress.

Step 9 If you see the message `Waiting for charger`, put the handset in the charging cradle.

| **Caution** | Don't remove the handset from the charger until the upgrade completes. At the end of the upgrade, the handset reboots before it can be used. |

Downgrade the Base Stations

Note   You can downgrade the base stations running Firmware version 5.0(1) only to the latest branch of Firmware version 4.8(1) SR1.

The firmware filename contains the version (v) and branch number (b). For example, DBS-210_v0480_b0001.fwu is version 480 and branch 1. When you put the firmware version and branch number into the **Firmware Update** page, you don't need the leading zeros.

Note   During the downgrade, the base station LED flashes in the order green, red, green, and amber. Don't power off the base station while the LED flashes. The downgrade may take about 30 minutes to 1 hour to complete and reboot the base station.

Before you begin

Connect to the base station web page as described in Sign in to the administration web page. If you have multiple base stations, you should sign into the primary base station.

You need to have completed Set Up the Firmware Update Parameters, on page 7 and Download and Copy the Firmware Files to the TFTP, HTTP, or HTTPS Server, on page 7.

Procedure

Step 1   Click **Firmware Update**.

Step 2   Check the check box for the option **Enable legacy firmware naming**.

Step 3   Enter the new firmware version in the **Required version** field for the base station.

Step 4   Enter the branch number in the **Required branch** field for the base station.

Step 5   Click **Save/Start Update**.

Step 6   Click **Save** in the pop-up window.

Step 7   In the warning window, click the browser **Back** arrow.

Step 8   Wait a few seconds, then click **Syslog**.

Step 9   Verify that you see the message `Firmware upgrade started to version vvvv branch bbbb`.

Where:

- vvvv is the version number.

- bbbb is the branch number.

After a few minutes, the base station will automatically reboot and you need to sign into the administration page. When the handsets register with the base station, the base station downgrade is complete.

Downgrade the Handsets

> **Note** You can downgrade the base stations running Firmware version 5.0(1) only to the latest branch of Firmware version 4.8(1) SR1.

The firmware filename contains the version (v) and branch number (b). For example, 6825-210_v0480_b0001.fwu is version 480 and branch 1. When you put the firmware version and branch number into the **Firmware Update** page, you don't need the leading zeros.

The 6825 Handset, 6825 Ruggedized Handset, and 6823 Handset have their own firmware file.

After you start the downgrade from the web page, all handsets download and load the new firmware file. The downgrade may take 20-30 minutes to download and verify, and an extra few minutes to load the new firmware file on the handset. The handset must be placed in the charger and not removed until the handset loads the firmware file and reboots. While the handset loads the new firmware, the LED flashes in the order green, red, green, and amber. The handsets automatically reboot at the end of the downgrade.

The **Extensions** page shows the downgrade progress in the **FWU Progress** column.

- During the download, the column shows the download progress as a percentage. For example, `41%`.

- After the file is downloaded, it's verified and the column shows the verification progress as a percentage. For example, `Verifying 23%`.

- If the verification is complete and the handset isn't on the charger, the column shows `Waiting for charger`.

- If the verification is complete and the handset is placed in the charger, the column shows `Waiting for charger` before it shows `Restarting`.

- When the downgrade is complete, the column shows `Complete`.

If the **FWU Progress** shows `Off`, the version and branch in the Firmware Update page are set to 0.

> **Note** We recommend that you download the base station first, then download the handsets after the base station update completes.

Before you begin

Connect to the base station web page as described in Sign in to the administration web page.

You need to have completed Set Up the Firmware Update Parameters, on page 7 and Download and Copy the Firmware Files to the TFTP, HTTP, or HTTPS Server, on page 7.

Procedure

Step 1   Click **Firmware Update**.

Step 2   Enter the new firmware version in the **Required version** field for all the handsets.

Step 3   Enter the branch number in the **Required branch** field for all the handsets.

Step 4   Click **Save/Start Update**.

Step 5   Click **Save** in the pop-up window.

Step 6   In the warning window, click the browser **Back** arrow.

Step 7   Wait a few seconds, then click **Syslog**.

Step 8   Verify that you see the message `Firmware upgrade started to version vvvv branch bbbb for handset: x`.

Where:

- vvvv is the version number.

- bbbb is the branch number.

- x is the handset number.

You should see one message for each handset registered to the base station. If you don't see this message, there may be error messages.

Step 9   Click **Extensions**.

The **FWU Progress** column displays the downgrade status. Refresh your browser to monitor the progress.

Step 10   If you see the message `Waiting for charger`, put the handset in the charging cradle.

Caution	Don't remove the handset from the charger until the downgrade completes. At the end of the downgrade, the handset reboots before it can be used.

View Base Statistics

You should check the statistics stored in the base station on a regular basis. If you see problems, you can proactively identify and address any issues. The page contains statistics for:

- System

- Calls

- DECT

Before you begin

Connect to the base station web page as described in Sign in to the administration web page.

The base station needs to be connected to the network and the green LED lit.

Procedure

Step 1   Click **Statistics**.

Step 2   Click the links to view the different base station statistics, as described in Statistics Web Page Fields.

Step 3   (Optional) Click **Export** to export the data on the displayed page in comma separated value (CSV) format.

Step 4 (Optional) Click **Clear** to reset all the statistics to zero (0).

All statistics page statistics are set to 0.

Base Station States

The base station is normally in the *Locked* state. If there are problems, the base station can automatically change to *Free running* state.

Free running state is when a base station has not synchronized its data from the sync source after a period of time. When this happens, the base station will change to a new state after two minutes:

- If the base station is idle, the state changes to *Searching*.

- If the base station has an active call, the state changes to *Sync lost*. When the call completes, the status changes to *Searching*.

Reasons for the *Free running state* can include:

- There are two bases using the same DECT slots and therefore can't see each other.

- There were many simultaneous voice or data calls.

- There was a sudden change of environment (for example, a fire door closed).

- There was a distortion of DECT frequency (around 1.8MHz) either by other DECT systems or other equipment.

When the base station goes into *Free running* state, you can do one or both of these things:

- Change the DECT slot. This may enable the base station to connect to its synchronization source.

- Change the state to *Assisted lock*. This enables the base station to use information from other base stations.

If the *Assisted lock* state is stable for a long time, you can change the state back to *Locked*. The *Free running* state may also change back to *Locked*.