Cisco DECT 6800 – Manual Firmware Upgrade Procedure

Currently, as of February 2022, Cisco IP DECT 6800 series phones with firmware prior to version 5.0 does not support automated firmware upgrades. The Cisco IP DECT phones do not support the firmware comparison logic as Cisco MPP IP phones do; therefore, the only way to do a firmware upgrade is manual. Below is the recommended firmware upgrade path for DBS 110 / 210 base station.

Note: if your base station came with a higher firmware version than 4.5 then you do not need to downgrade your base station, just upgrade to the next version in the below path.

The recommended path for the **DECT DBS 110** is 4.5 ➔ 4.8SR1 ➔ 5.0(1)

The recommended path for the **DECT DBS 210** is 4.5 ➔ 4.7 ➔ 4.8SR1 ➔ 5.0(1)

Note: the upgrade procedure for the DBS-110 is the same as the DBS-210, except you do not need to upgrade to 4.7 version, you can go from 4.5 to 4.8SR1 version.
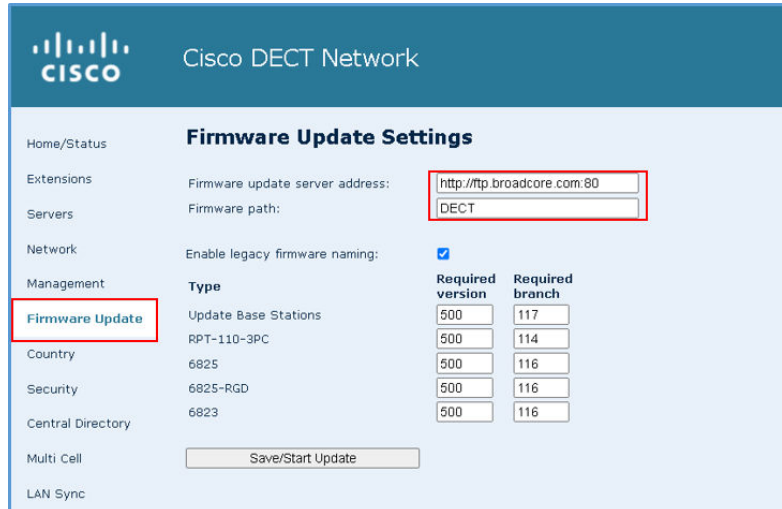
Procedure to do a manual firmware upgrade via base station web GUI on DBS 110 / 210 base stations:

Note: you cannot upgrade the firmware of the 6823 / 6825 handsets until the handset is registered with a DECT base station and the DECT base station cannot allow a handset to be registered to it without having the configuration file downloaded from the Masergy platform. Therefore, the first step is to upgrade the DECT base station to the latest firmware version mentioned above which is 5.0(1). The reason is that the DECT base station must be on the latest firmware version to be able to successfully parse and validate the configuration parameters in its configuration file downloaded from Masergy platform.

Secondly, the next step is to make sure the end-user and DECT devices are provisioned on the Masergy platform. Then the DECT base station needs to be pointed to the Masergy provisioning server by setting the DHCP option 66 to https://ftp.broadcore.com (or https://config.masergy.com) and confirm that the DECT base station downloads its configuration file successfully. Then you can proceed to register each handset with the DECT base station and perform the manual firmware upgrade of each handset.

1. Browse each base station first and then go to "Firmware Update" page by selecting this page from the left panel.

2. Set the "Firmware update server address" to http://ftp.broadcore.com:80 for US deployment and http://config.masergy.com:80 for outside of the US

3. Set the "Firmware patch" to   DECT

4. Make sure the option of "Enable legacy firmware naming" is a checkmark.

5. Set the "Update Base Stations" section for "Required version" subsection to 470 and "Required branch" subsection to 6

6. Click on the "Save/Start Update" button.

7. You will notice the 210 base station will begin downloading its firmware file and its LED will start blinking red.

8. When the firmware installation process is complete the LED will turn to green, try to browse the IP of the base station and confirm on the home page that the current firmware version is 470.

9. When the upgrade of the base station is complete, return to the firmware update settings page and set the base station to the next firmware version level per the above-recommended path.

10. Set the "Update Base Stations" section for "Required version" subsection to 480 and "Required branch" subsection to 17

11. You will notice the 210 base station will begin downloading its firmware file and its LED will start blinking red.

12. Log back to the base station and confirm the firmware version is now 480.

13. When the upgrade of all devices is complete now you can go back to the firmware update settings page and set the base station to the next firmware version level per the above recommended path.

14. Set the "Update Base Stations" section for "Required version" subsection to 500 and "Required branch" subsection to 117

15. Log back to the base station and confirm the firmware version is now 500.

16. Confirm with the Masergy Project Manager that the users and base station devices are provisioned on the Masergy platform.

17. Then browse back to the firmware page of the base station and set the "Firmware update server address" to https://ftp.broadcore.com for US deployment and https://config.masergy.com for outside of the US. Please leave the "Firmware patch" to blank. Other option is to put the base station in a voice network/subnet where the DHCP has option 66 set with the above mentioned FQDN.

    Note: there is an existing bug with LLDP-MED and CDP protocol for the DECT base station with the voice VLAN. In order to put the DECT base station into the voice VLAN, you will set the port on the switch that you would like to connect the DECT base station to be the only member of the voice VLAN untagged. In this way, the DECT base station will fall into the voice subnet.

18. At this point, the base station should be able to download its configuration file. You can confirm this by browsing to "Server" page, you should see the configuration is populated; meaning, the base station downloads it configuration file and successfully parse through it. However, if you browse to the "Extension" page you still will not see any Extension/users data because you have not registered any handset to the base station.

19. Now you can register each handset you have to the base station by entry of the Access Code for each handset that you will need to obtain from the Masergy Project Manager. You can confirm the registration of the handset by checking the Extension page where you should see each handset shows up with its IPEI Number (International Portable Equipment Identity) which is a 10 digit alphanumeric characters. You can find the IPEI on the label of the handset box or under the handset battery.

20. Now, you can go back to the base station firmware page and set each handset models firmware version info as the below steps.

    Note: the firmware upgrade process percentage will show up on the Extension page of the base station.

21. Set the "6825" handset section for "Required version" subsection to 470 and "Required branch" subsection to 3

22. Set the "6825-RGD" handset section for "Required version" subsection to 470 and "Required branch" subsection to 3

23. Set the "6823" handset section for "Required version" subsection to 480 and "Required branch" subsection to 15

24. If you have a repeater connect to the power and set the "RPT-110-3PC" (DBS 110 Repeater) section for "Required version" subsection to 480 and "Required branch" subsection to 2

25. When you have confirmed that your handset(s) is (are) upgraded, proceed to the next steps.

26. Set the "RPT-110-3PC" (DBS 110 Repeater) section for "Required version" subsection to 500 and "Required branch" subsection to 114

27. Set the "6825" handset section for "Required version" subsection to 480 and "Required branch" subsection to 16

28. Set the "6825-RGD" handset section for "Required version" subsection to 480 and "Required branch" subsection to 16

29. Set the "6823" handset section for "Required version" subsection to 500 and "Required branch" subsection to 116

30. When you have confirmed that your handset(s) is (are) upgraded proceed to the next steps.

31. Leave the "RPT-110-3PC" (DBS 110 Repeater) section as is, since this is the latest firmware version for the repeater device.

32. Set the "6825" handset section for "Required version" subsection to 500 and "Required branch" subsection to 116

33. Set the "6825-RGD" handset section for "Required version" subsection to 500 and "Required branch" subsection to 116

34. Leave the "6823" handset section as is, since this is the latest firmware version for the 6823 handsets.

Note: Please make sure the DECT 6823 / 6825 handset is fully charged before performing any firmware updates.

Cisco DECT 6800 Series Latest Firmware

Device	Firmware Version	Required Branch
DBS 210	500	117
DBS 110	500	117
Repeater 110	500	114
6825 Handset	500	116
6825 Ruggedized Handset	500	116
6823 Handset	500	116