



CDR-790 Cellular Router

Upgrade Process

Application Software Version 1.58.6

Phone Module Hardware Version K2_0_7_30A



Call Direct

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Document Description

This document is intended to be used as a step-by-step guide for upgrading the Call Direct CDR-790seu cellular router from version 1.58.1 to the following version:-

Application Software Version:	1.58.6
Phone Module Firmware Version:	K2_0_7_30A

Note that if you presently have an Application Software Version other than V1.58.1 you will need contact Call Direct to obtain an upgrade pack at either:


Phone:	+61 (02) 9011-7526
Email:	support@call-direct.com.au

You will need the following files available to complete this upgrade procedure:

Application Software:	upgrade-1.58.1-1.58.6.cramfs (1,432KB)
Boot Loader:	MC8790_DLEX_K2.0.7.28.cwe (610KB)
Phone Application:	MC8790_K2.0.7.30.cwe (15,699KB)

1.0 Upgrade Process

Upgrade the Cellular Router Application Software

1. **After upgrading the current settings on the unit will be lost**
2. Please **backup the current settings on the unit before the upgrade** to make a backup copy of the current settings go to the Application Load/Save then under the "Save a copy of current settings:" click Save, this will create a backup file of the current settings. To restore the previous settings select the "Restore saved settings:" select the backup file and click Restore.
3. Plug the network (CAT5) cable in to the Ethernet port, next plug in the power cable.
4. Log in to the web administration page by opening your web browser and typing in the URL <http://192.168.1.50/> with the following credentials:
 - a. Username: admin
 - b. Password: password
5. Verify that the present "Application Software Version" is 1.58.1 
If "Application Software Version" is NOT 1.58.1 please contact Call Direct for an alternate upgrade pack to suit your software version.

Status

LAN

IP	192.168.1.50 / 255.255.255.0
MAC Address	00:11:DC:F2:06:00

SYSTEM INFORMATION

System Up time	00:11:20
Router Version	Hardware: 1.04_e Software: 1.58.1
Phone Module	Model: Hardware: not available Firmware: not available Temp:
Serial Number	00:11:DC:F2:06:00

PPP

PPP Status	DISABLED
PPP IP Address	N/A / N/A
PPP P-t-P	N/A
IPsec	

PPPOE

PPPoE Status	DISABLED
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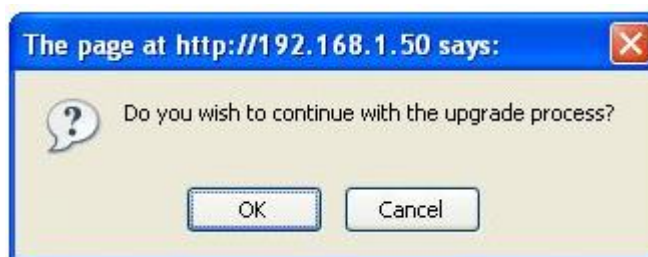
6. Click on the "Application Load/Save" link in the menu bar ② .
7. Click the "Browse" button and select the application firmware file that is to be updated, which in this case is *upgrade-1.58.1-1.58.6.cramfs* and click "Open".
8. Now click on "Upload".

UPLOAD NEW FIRMWARE:

File	d:\upgrades\upgrade-1.58.1-1.58.6.cramfs	Browse...	Upload
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Note: The whole upgrade procedure can take 2~3 mins.

9. Click OK to the below message:



10. Also click OK to the below message:



11. You will now see a progress bar as indicated in the images below, which you will have to wait to finish before you can continue:

Application Load/Save

Phase:	
Messages:	
Errors:	
Percent Complete:	54 %

Current Position:

1048 / 1432 KBytes

Elapsed time:

00:00:15

Est Time Left:

00:00:06

Est Speed:

118 KB/s.

SAVE A COPY OF CURRENT SETTINGS:

Save

RESTORE SAVED SETTINGS:

File

Browse...

Restore

UPLOAD NEW FIRMWARE:

File

S:\feed\upgrades\upgrade-1.58.1-1.58.1

Browse...

Upload

Note: The whole upgrade procedure can take 2~3 mins.

12. Once the application upload has finished, you will see the screen below with the
Phase: Finished

Application Load/Save

Phase:	
Messages:	Checking Kernel parameters ... OK MODE: cramfs Checksum OK R 1.58.1 => 1.58.6 Stopping processes Deleting symlinks Starting update MEM=7836, DISK=4480, SIZE=609 Updating kernel Checking kernel Updating file system Deleting old files Installing new files Upgrade was successful (finished=1) Cleaning up Installation has succeeded Finished. The system will shortly reboot itself. This will take about 90 seconds. Do NOT power off during this time. Reload by pressing the Status button until you see the status screen. It may be necessary to restart the Web browser after the upgrade.
Errors:	
Percent Complete:	100 %

Current Position:	1336 / 1432 KBytes
Elapsed time:	00:08:17
Est Time Left:	00:00:00
Est Speed:	6 KB/s.

13. You will need to wait approximately 1 minute for the router to restart (this is done automatically).

Do NOT power off the router.

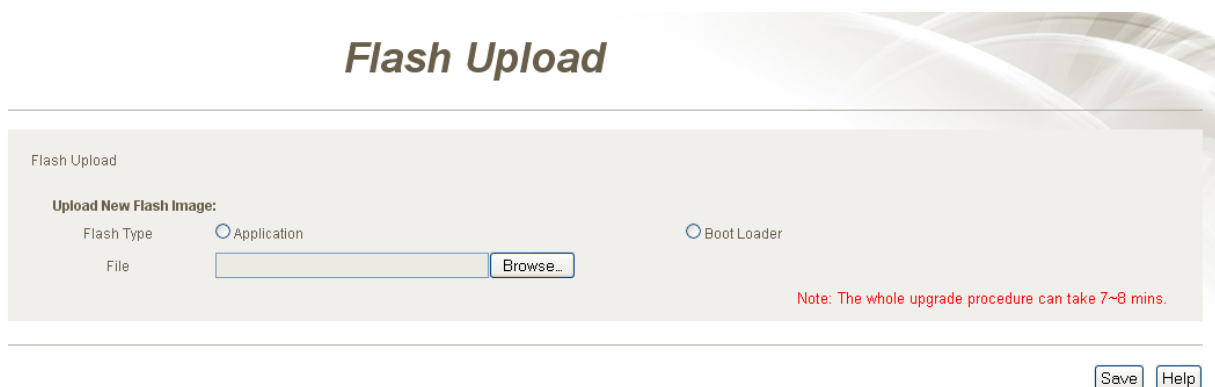
Close your web browser and log back into the web administration page by opening your web browser and typing in the URL <http://192.168.1.50/>

Router Version	Hardware: 1.04_e Software: 1.58.6
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You have now completed the cellular router software upgrade and may proceed to upgrade the phone module firmware.

Upgrade the Phone Module Bootloader

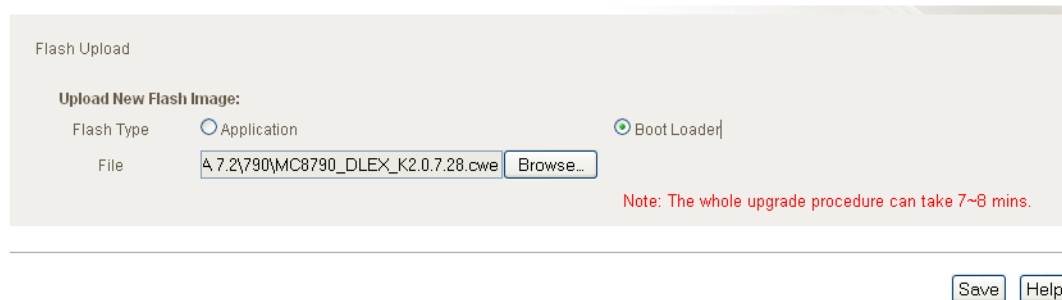
14. In your browsers URL bar, type the following address:
<http://192.168.1.50/linkFiles/FlashUpload.html> and you should see the following page load:-



The screenshot shows the 'Flash Upload' web interface. At the top, the title 'Flash Upload' is displayed in a large, bold, black font. Below the title, the page has a light gray background. On the left, there is a section titled 'Flash Upload' in a small font. Below this, the text 'Upload New Flash Image:' is followed by two radio buttons: 'Application' (which is selected) and 'Boot Loader'. To the right of these radio buttons is a text input field labeled 'File' and a 'Browse...' button. A red note at the bottom right of the form area states: 'Note: The whole upgrade procedure can take 7~8 mins.' At the bottom right of the page, there are two buttons: 'Save' and 'Help'.

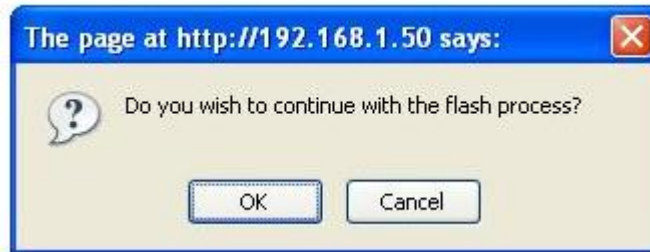
15. You must select the "Boot Loader" radio button first, then click on the "Browse" button and select the **Boot Loader** file (MC8790_DLEX_K2.0.7.28.cwe) and click "Open".

16. Now click "Save".



This screenshot shows the 'Flash Upload' page after the 'Boot Loader' radio button has been selected. The 'Application' radio button is now unselected, and the 'Boot Loader' radio button is selected. The 'File' input field now contains the text '4 7.2\790\MC8790_DLEX_K2.0.7.28.cwe'. The 'Browse...' button is still present. The red note at the bottom right remains: 'Note: The whole upgrade procedure can take 7~8 mins.' The 'Save' and 'Help' buttons are still at the bottom right.

17. Click OK to the following:



18. Also click OK to the following:



19. Once the flash upload has completed, you will see the following message:

Flash Upload

Phase:

Messages:

Bootloader - Step 1. Stopping modem emulator.
Bootloader - Step 2. Stopping daemons.
Bootloader - Step 3. module power off.
Bootloader - Step 4. Unloading USB driver.
Bootloader - Step 5. module power on.
Bootloader - Step 6. Placing module into non-MUX mode.
Bootloader - Step 7. Placing module into boot loader mode.
Bootloader - Step 8. Boot upload and save.
Bootloader successfully uploaded.
Bootloader - Step 9. Preparing modem emulator.
Your unit should now return to normal operations.

Errors:

Percent Complete: 100%

Current Position: 610 / 610 KBytes

Elapsed time: 00:01:01

Est Time Left: 00:00:04

Est Speed: 10 KB/s.

Flash Upload

Upload New Flash Image:

Flash Type

☐ Application

☒ Boot Loader

File

A 7.2\790\MC8790_DLEX_K2.0.7.28.cwe

Browse...

Note: The whole upgrade procedure can take 7~8 mins.

Save

Help

You have now completed the phone module boot loader upgrade and may proceed to upgrade the phone module firmware.

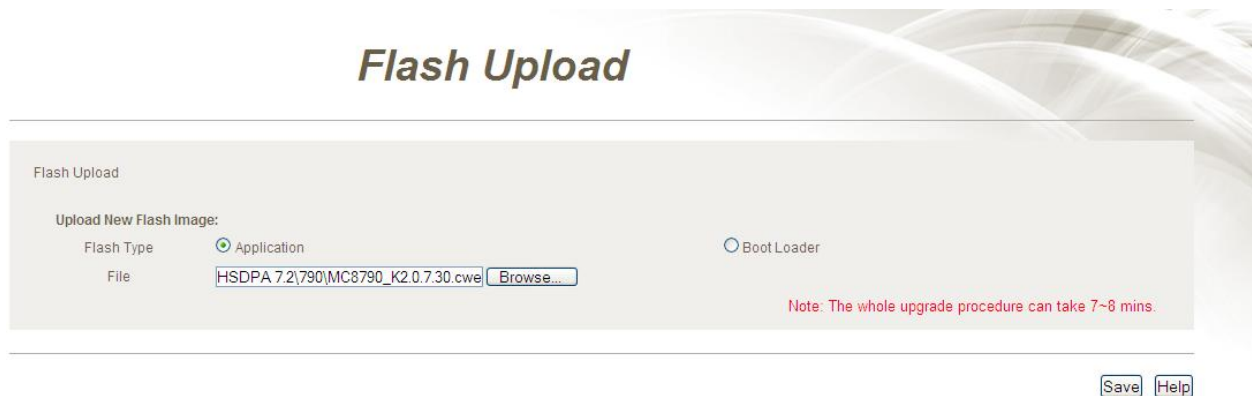
At this stage you will NOT be able to establish a cellular connection until you complete the next step.

Upgrade the Phone Module Application

20. Please power cycle the cellular router (i.e. unplug power to the router, plug it back in again and wait for the router to reboot).

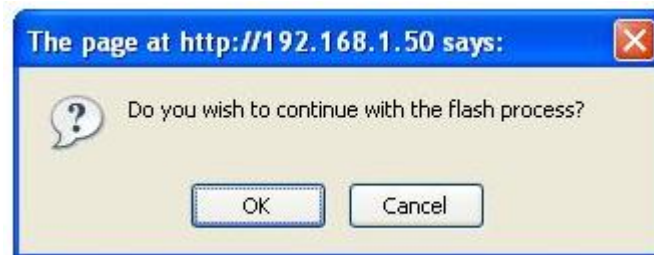
21. In your browsers URL bar, type the following address:
<http://192.168.1.50/linkFiles/FlashUpload.html> and select "Application", then "Browse" and select the Phone Application file (MC8790_K2.0.7.30.cwe) and click "Open".

22. Now click "Save".



The image shows a web browser window displaying the "Flash Upload" page. The page has a title "Flash Upload" and a subtitle "Flash Upload". Below the title, there is a section "Upload New Flash Image:". Under this section, there are two radio buttons: "Application" (which is selected) and "Boot Loader". Below the radio buttons, there is a "File" label and a text input field containing "HSDPA 7.2\790\MC8790_K2.0.7.30.cwe". To the right of the text input field is a "Browse..." button. Below the text input field, there is a red note that says "Note: The whole upgrade procedure can take 7~8 mins." At the bottom right of the page, there are two buttons: "Save" and "Help".

23. Click OK to the following:



24. Also click OK to the following:



25. This stage of the upgrade can take anywhere from 3 to 5 minutes. You will see a progress bar being displayed as the upgrade progresses. Once the phone application firmware has successfully uploaded, the following screen will appear:

Flash Upload

Phase:

Messages:

Application - Step 1. Stopping modem emulator.
Application - Step 2. Stopping daemons.
Application - Step 3. module power off.
Application - Step 4. Unloading USB driver.
Application - Step 5. module power on
Application - Step 6. Placing module into non-MUX mode.
Application - Step 7. Placing module into boot loader mode.
Application - Step 8. Boot upload and save.
Application successfully uploaded.
Application - Step 9. Preparing modem emulator.
Your unit should now return to normal operations.

Errors:

Percent Complete: 100%

Current Position: 15699 / 15699 KBytes

Elapsed time: 00:05:00

Est Time Left: 00:00:00

Est Speed: 52 KB/s.

Flash Upload

Upload New Flash Image:

Flash Type

☒ Application ☐ Boot Loader

File

Note: The whole upgrade procedure can take 7~8 mins.

26. You should now be able to type in the following URL in the address bar to check the relevant software versions. <http://192.168.1.50/>

The Application Software Version & Phone Module Firmware Version should be reflected as below:

SYSTEM INFORMATION	
System Up time	00 : 31 : 20
Router Version	Hardware: 1.04 Software: 1.58.6
Phone Module	Model: MC8790 Hardware: 1.0 Firmware: K2_0_7_30A
Temperature	31 °C
Serial Number	00:1D:85:F0:00:06

You have now completed the Phone Module upgrade process and finished upgrading the router.