Firmware Upgrade Instruction for Magnum 6K and 10K Family Switches

- 2018-02-15 - 6/10K Switches

Garrettcom has three different models in the Magnum 6K & 10K families, which runs on different firmware.

a. 6K Legacy (Models: 6K8, 6K16, 6K25, 6KQ, 6K32)
b. New 6K Switches (Models: 6KL and 6KM)
c. 10K (Models 10Kt and 10KG)

You can download the firmware from our support portal website only. There is no FTP site or other web links to download 6K and 10K series switch firmware. Web link to our support portal.

https://garrettcom-support.belden.com

If you don't have an account, please create an account. The support portal provide access to Firmware, Release Notes, User Manual, and How to Guides for implementing commonly used features.

Make sure you download the right firmware based on the switch model, otherwise you will not be able to upgrade the switch.

There is a Download section on our support portal, where we keep firmware for all Garrettcom products, with separate folders for each 6K variation under the "Firmware" folder. The products are categorized as **Magnum 6K Legacy** (firmware for 6K8, 6K16, 6K25, 6K32, and 6KQ models), and **Magnum 6KL & 6KM** (firmware for 6KL and 6KM models).

Please check your 6K switch model before downloading the firmware, and go to "Download" section of our support Portal to download the latest firmware from the appropriate switch model folder

Download -> Firmware -> Magnum 6KL & 6KM
Download -> Firmware -> Magnum 6K Legacy (Models: 6K8, 6K16, 6K25, 6K32, and 6KQ)
Download -> FIrmware -> Magnum 10K

I would highly recommend to download release notes along with the switch firmware, and read it before upgrading the switch. Release notes may have upgrade instruction, bug fixes, and new updates.

Note: If your switch is running firmware version 4.5.11 or older, you will have to do an incremental upgrade. First upgrade the switch to version 4.6.2, upgrade the bootloader. There is a fix for the CRC Vulnerability raised by ICS-CERT that has been added to Release 4.7.0. In order to upgrade to the 4.7.0, the device has to be first upgraded to 4.6.2 and then to 4.7.0. It will also be required to upgrade the BOOT Flash Code of the device whenever the message to update it appears on the CLI prompt. Reboot the switch, and then upgrade to the latest firmware. If there multiple firmware releases between 4.7.0 and 4.7.5 or the later. You can skip mid releases (4.7.0 to 4.7.4), and can upgrade directly to 4.7.5 or whichever is the latest release at that time.

Instructions to upgrade switch from serial console access and Web GUI Management

These instructions apply to Magnum 6K Legacy, 6KL/KM and 10KT/KG series switches.

Download the latest firmware from the Download section of our support portal under “Download” □ “Firmware”, select an appropriate folder based on your switch model. Click on the switch model folder, and download the latest firmware.

Procedure for firmware Upgrade on the switch
To transfer the firmware file from your PC to the switch, you will need to do so using a TFTP server software. You can download a TFTP server, a very small application from the internet for free. Here is a web link to download a free TFTP server:

http://kin.klever.net/dist/pumpkin-2.7.3.exe

You will need to provide the tftp server the path to the where the switch firmware is stored on your pc. Click on “Options” to specify the location of the image file on your pc or laptop, also make sure to check box at the lower right hand corner of the TFTP server window, to make sure TFTP server is running.

Switch Firmware Upgrade using Serial-Console Port

We have two different types of serial console ports in Garrettcom switches for Command Line Interface (CLI) access to the switch. Legacy 6K switches have DB9 serial console port. Magnum 6KL, 6KQ and 10K switches have an RJ45 serial console port for Command Line Interface (CLI) access to the switch. RJ45 console cable is the same cable used for accessing Command line in Cisco switches (blue color cable with RJ45 connector on one end, and DB9 connector on the other end).

1. Connect to your Magnum 6K or 10K switch using the appropriate serial cable (DB9 to DB9 or DB9 to RJ45). Put one end on the console port at the back of the Magnum 6K/10K switch and the other end on the COM port of your PC/Laptop. If you do not have a COM port, then follow the next step otherwise jump to step 4 2. If you do not have a COM port on your Laptop/PC, get a USB-to-Serial converter cable and plug the Serial end of the cable to the NULL modem and the USB end of the cable into the USB port of your laptop/PC. You will have to install driver for the USB-to-Serial cable.
3. After you have connected the USB-to-Serial cable as described in step 2, then right click on "My Computer" and then go to "Properties" and then go to "Hardware" and then click on "Device Manager" and then on the displayed list browse down to the COM and LPT ports menu and expand it. The USB-to-Serial com port number would be visible.
4. Open a HyperTerminal session (or other terminal emulator such as Putty or TeraTerm) and put the following port settings for the session Bits per second: 38400 Data bits: 8 Stop bits: 1 Parity: None Flow control: None
5. Login to the switch.
6. Type command: tftp get type=app ip=<ip_address_of_laptop/desktop_running_tftp_server> file=rel_v442b.bin
7. Follow the prompts and once the image gets loaded, issue the "save" command.
8. Type "Reboot" command to reboot the switch.
9. When asked to upgrade bootcode, hit the "y" key to confirm action.
10. Login and reboot the switch again.

Switch Firmware Upgrade using TELNET Application

1. Login to switch using a Telnet application.
2. Type the command below to download the firmware from the TFTP server : tftp get type=app ip=<ip_address_of_laptop/desktop_running_tftp_server> file=rel_v4.6.2.bin
3. Type "Reboot" command to reboot the switch.
4. After reboot, you will get the message to upgrade the bootloader, select yes or y option. IF you don’t get the bootloader option, follow the next step.
5. Login after the switch boots up and then give command "upgrade mode=bl" and hit enter.
6. After the boot code upgrade is done, reboot the switch.

Switch Firmware Upgrade using Web GUI Management

1. Go to Administration>File Management> TFTP
2. Enter “Server IP” <TFTP server IP is running>
3. Enter “File name” <File name of the firmware image>
4. Select “Transfer Type” as “Image download”.
5. Once firmware is uploaded to the switch, reboot the switch.
6. Login into the switch via TELNET and upgrade the bootcode by giving command "upgrade mode=bl", and then after the bootcode has been upgrade reboot the switch.

or

1. Connect to your Magnum switch using a NULL modem cable with DB9 female connector at both the ends. Put one end on the console port at the back of the Magnum 6K32 switch and the other end on the COM port of your PC/Laptop. If you do not have a COM port, then follow the next step otherwise jump to step 4
2. If you do not have a COM port on your Laptop/PC, get a USB-to-Serial converter cable and plug the Serial end of the cable to the NULL modem and the USB end of the cable into the USB port of your laptop/PC. You will have to install driver for the USB-to-Serial.
3. After you have connected the USB-to-Serial cable as described in step 2, then right click on "My Computer" and then go to "Properties" and then go to "Hardware" and then click on "Device Manager" and then on the displayed list browse down to the COM and LPT ports menu and expand it. The USB-to-Serial com port number would be visible.
4. Open a HyperTerminal session (or other terminal emulator such as Putty or TeraTerm) and put the following port settings for the session
Bits per second: 38400
Data bits: 8
Stop bits: 1
Parity: None
Flow control: None

5. Log in using the default username/password which are manager/manager.

Follow step 9 and step 10 from the Switch Firmware Upgrade using Serial-Console Port section.

To verify, Firmware Upgrade
At the switch console prompt type:
Magnum6K#show version
On the Web GUI Management, when you login after upgrading and reboot of the switch. You will see the upgraded version of the firmware on the left corner of the display screen.