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Smart ATA® Binary Upgrade Procedure

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Amendent Records

Document Rev. 01 (July, 2014)

Contents

Amendent Records **2**

Contents **3**

Contents of Figure **4**

Contents of Table **5**

1 Functionality ..... Error! Bookmark not defined.

1.1 Overview 1-1

1.2 Handling Process for Automatically Enabling VLAN ..... **Error! Bookmark not defined.**

1.2.2 Handling Procedure When the LLDP Message Carries a VLAN ID ..... **Error! Bookmark not defined.**

1.2.3 Procedure of Handling the LLDP Message with no VLAN ID ..... **Error! Bookmark not defined.**

1.3 Messages ..... **Error! Bookmark not defined.**

1.3.1 LLDP Message ..... **Error! Bookmark not defined.**

1.3.2 Sent Message with a VLAN ID ..... **Error! Bookmark not defined.**

2 GUI Configuration ..... Error! Bookmark not defined.

3 Appendix ..... Error! Bookmark not defined.

Contents of Figure

Figure 1-1 System composition ..... **Error! Bookmark not defined.**
Figure 1-2 Procedure of handling LLDP message carrying a VLAN ID ..... **Error! Bookmark not defined.**
Figure 1-3 Procedure of handling the LLDP message with no VLAN ID..... **Error! Bookmark not defined.**
Figure 1-4 LLDP message..... **Error! Bookmark not defined.**
Figure 1-5 VLAN IDAdding a VLAN ID to the message to be sent..... **Error! Bookmark not defined.**
Figure 2-1 LLDP configuration interface for HX4 ..... **Error! Bookmark not defined.**

Contents of Table

Table 2-1 LLDP configuration parameters ..... **Error! Bookmark not defined.**

1 Introduction

1.1 Overview

In most cases, upgrading a Smart ATA can be done with any of the following 2 ways:

1) Using Auto Configuration
2) Using the web GUI

However, in the situation where the kernel software of the Smart ATA has changed, and not just the firmware, a special procedure needs to be done in order to perform the upgrade.

1.2 Purpose

The purpose of this document is to describe the procedure used to upgrade the Smart ATA when a kernel update has been provided.

1.3 Determining the Firmware and Kernel Versions

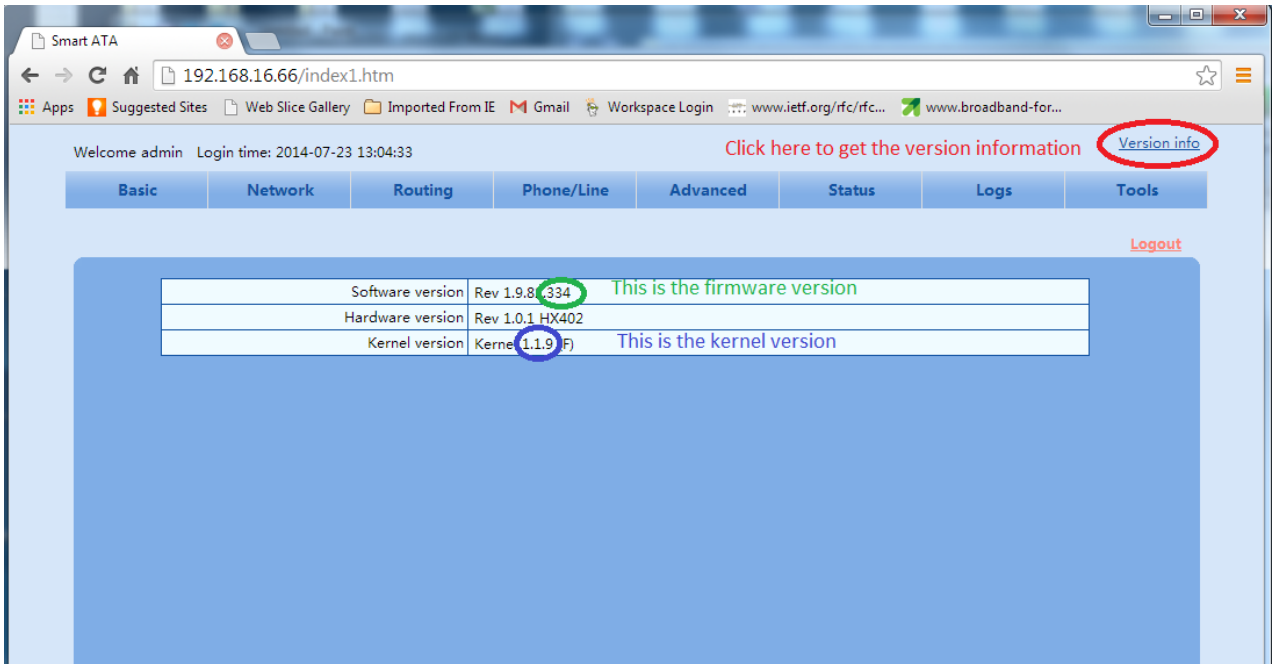
1.3.1 In the new release file provided by NetGen

The version in the new software can be determined by looking at the file name. The name of the file will be in the format NetGenJ1.<kernel_version><firmware_version><firmware_subversion>.<file_format>. An example is NetGen.J1.1.1.9.334.E0.03.bin. In this example, the kernel version is 1.1.9, the firmware version is 334 and it is a binary file. The other file format would be a standard Smart ATA upgrade file and would end in tar.gz.

1.3.2 On the Smart ATA

The version of the Smart ATA can be found by selecting Version info in the upper right hand corner of the web GUI.
Figure 1-1 shows the Version info screen for a Smart ATA. In this example the kernel version in 1.1.9 and the firmware version is 334.

Figure 1-1 Smart ATA Version info Screen



1.4 Determining Which Upgrade Procedure to Use

The binary upgrade procedure described in this document only needs to be followed if the kernel version of the new software is different than the kernel version currently installed on the Smart ATA.

2 Procedure

2.1 Pre-requisites

2.1.1 FTP Server

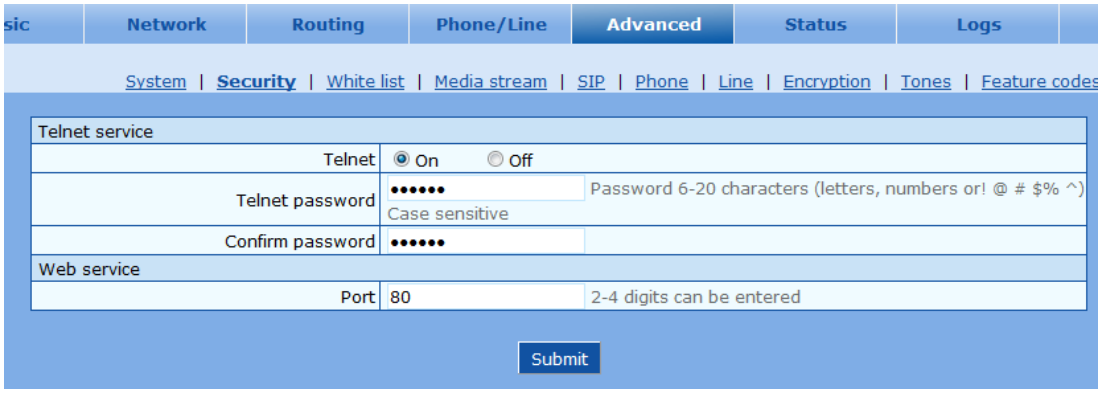
The binary upgrade process requires the use of an FTP server. In the case where an FTP server is unavailable, the necessary files can be downloaded using the NetGen FTP server.

2.1.2 IP address of the Smart ATA

If the IP address of the Smart ATA is not known, please connect a phone to one if the FXS ports of the Smart ATA. The FXS ports are the ones labeled Phone 1, Phone 2, etc. on the back of the Smart ATA.

2.1.3 Enable Telnet on the Smart ATA

Connect to the web GUI of the Smart ATA. Go to the Advanced->Security page. In the Telnet service section make sure that the radio button for the Telnet parameter is set to On. If it isn't, set it to On and set a password in the Telnet password and Confirm password fields.



Reboot the Smart ATA and telnet will be enabled.

2.1.4 Backup Configuration

It is strongly recommended that the current configuration of the Smart ATA should be saved before proceeding with the binary upgrade. This will ensure that any configuration parameters will not be lost in the case of an upgrade failure.

2.2 Procedures

If the NetGen FTP server will be used, please skip to section 2.2.2 Telnet to the Smart ATA.

2.2.1 Store files on the FTP Server

When there is a kernel change that requires a binary upgrade, a .zip file will be made available for download from the NetGen website (www.netgencommunications.com). This .zip file will contain:

1) The upgrade package (i.e. NetGen.J1.1.1.9.334.E0.03.bin).
2) The upgrade utility (i.e. kupdate.mx4.v1.13).
3) This instruction document.

It is very important that only the upgrade tool that is provided in the .zip file be used to perform the binary upgrade of the upgrade package contained in the .zip. If another version is used, there is a higher risk of the upgrade failing.

Place the upgrade package and the upgrade utility on the FTP server.

Please do not change the name of either file.

Please use binary mode when transferring the files.

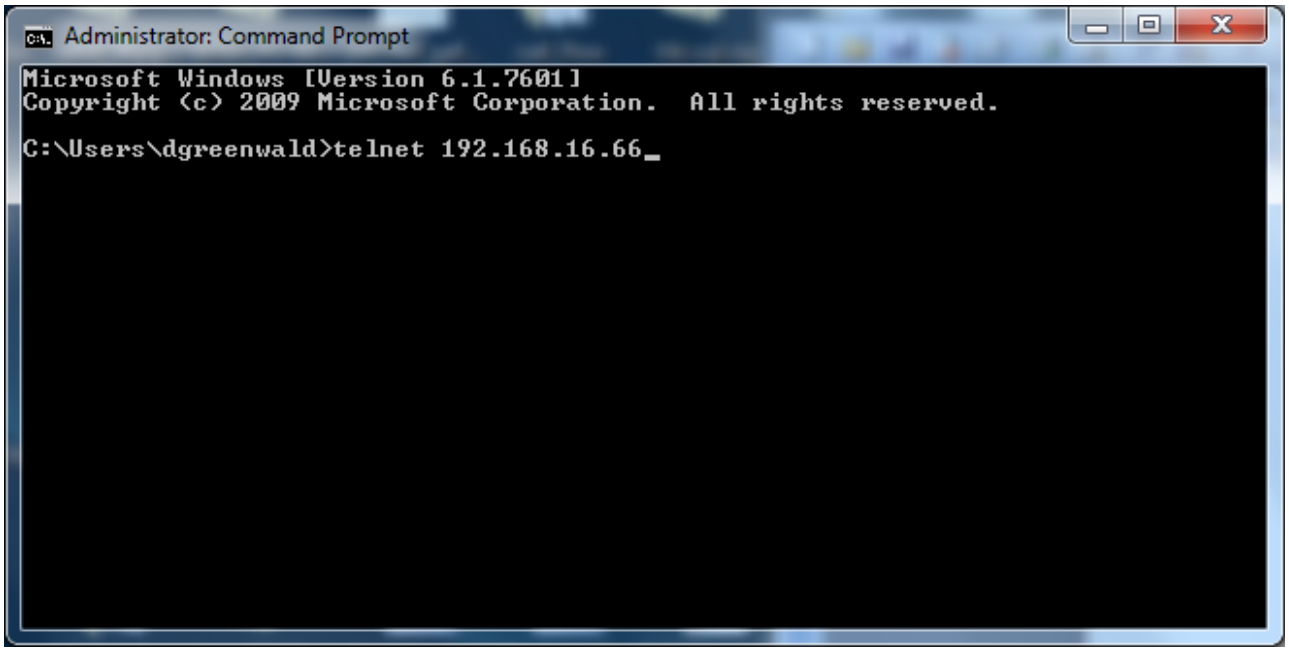
After transferring the files, please check the file sizes. The file size of NetGen.J1.1.1.9.334.E0.03.bin is 8060928 bytes and the file size of kupdate.mx4.v.1.13 is 28056.

2.2.2 Telnet to the Smart ATA

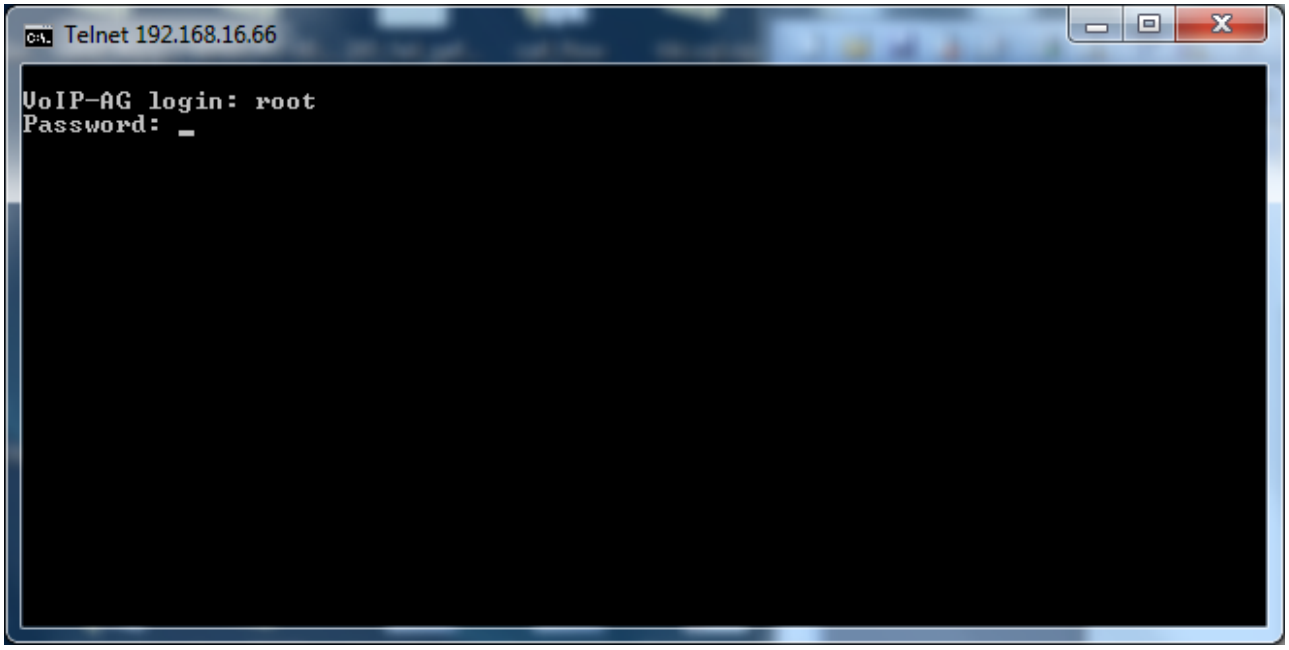
For information about telnet, including how to install it on Windows, please see the following article on the Microsoft website.

http://windows.microsoft.com/en-us/windows/telnet-faq

Telnet to the IP address of the Smart ATA. See section 2.1.2 IP address of the Smart ATA if it is unknown.

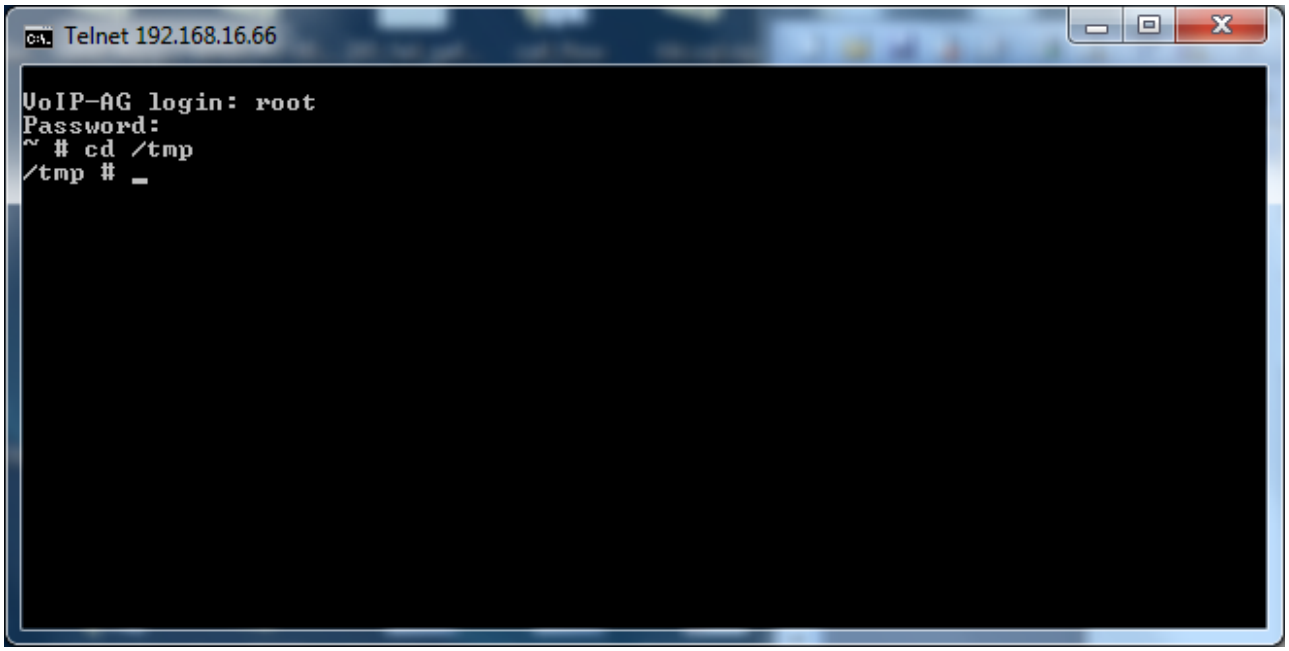


At the VoIP-AG login: prompt, enter root. At the Password: prompt, enter the telnet password for the Smart ATA that was configured according to section 2.1.3 Enable Telnet on the Smart ATA.

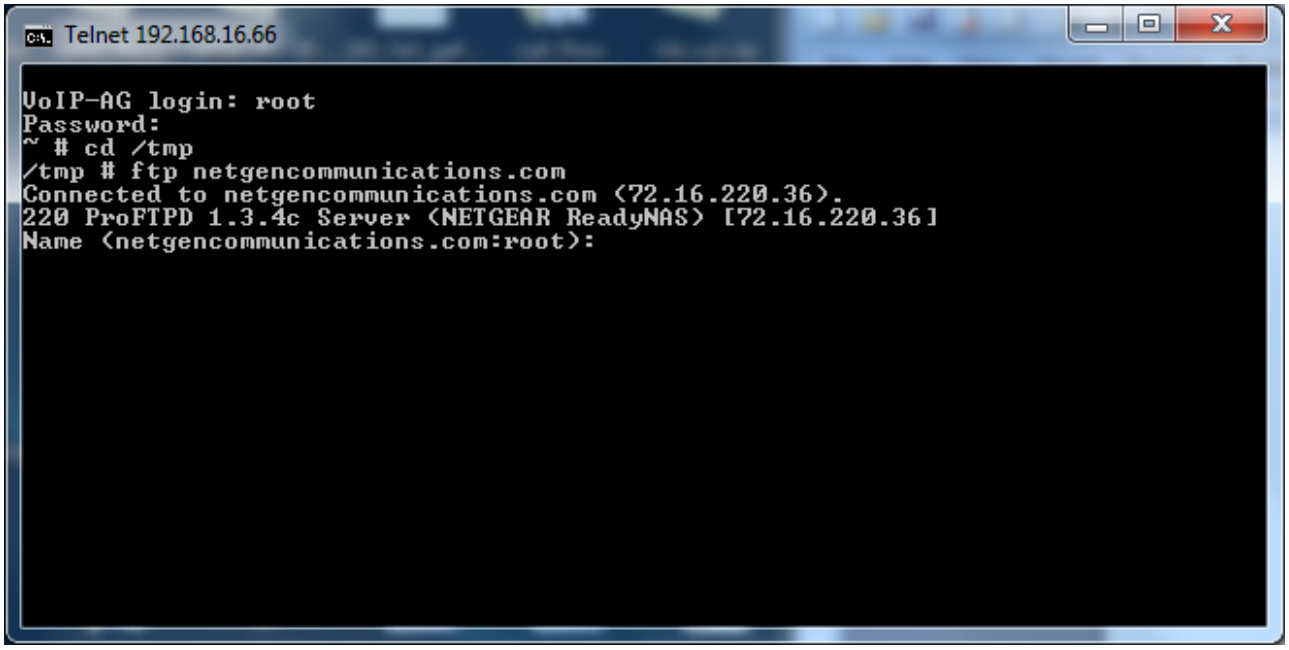


2.2.3 FTP files to the Smart ATA

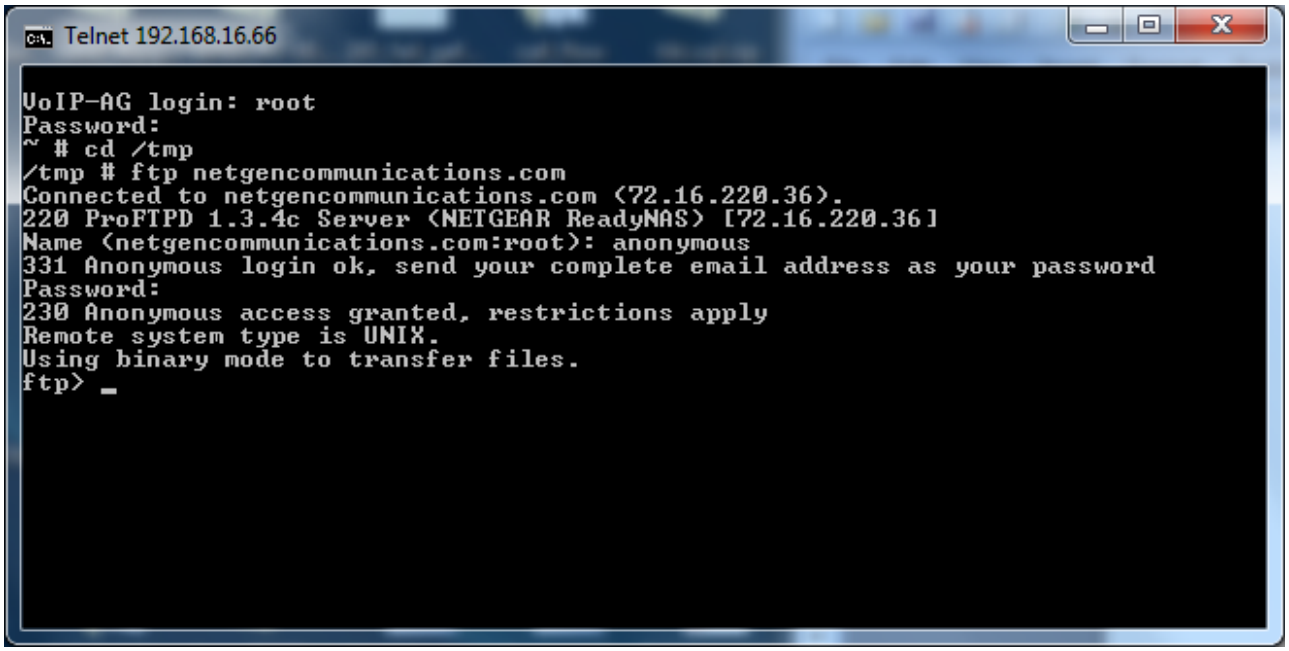
Change directories to the /tmp directory by entering cd /tmp at the ~ # prompt.



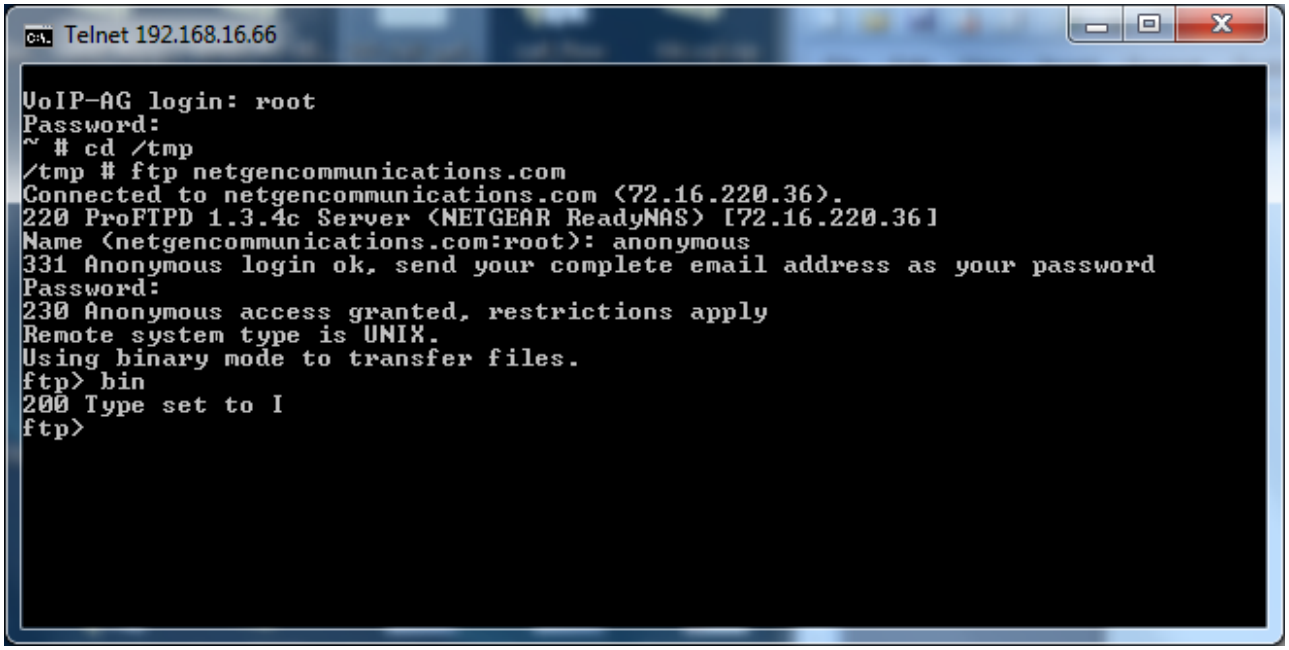
Connect to the FTP server. If the NetGen FTP server is used, connect to netgencommications.com by entering ftp netgencommunications.com (or ftp 72.16.220.36) at the /tmp # prompt.



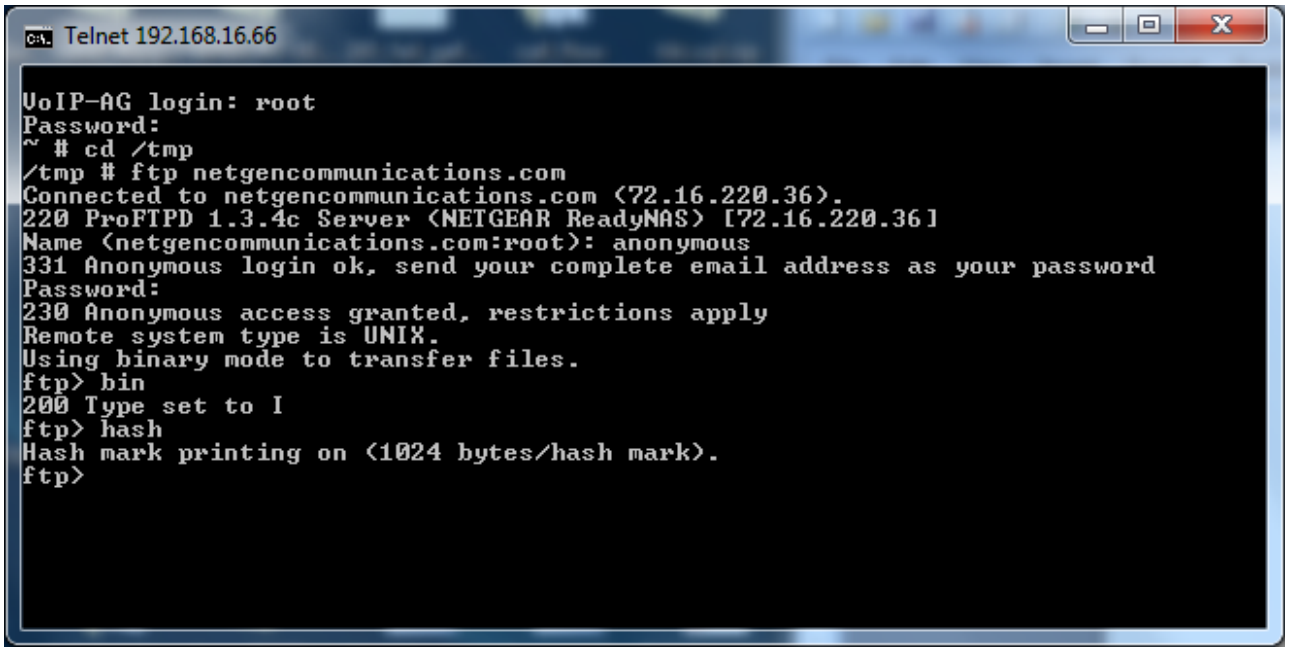
At the Name (netgencommunications.com:root): prompt, enter anonymous. At the next prompt, please enter your e-mail address.



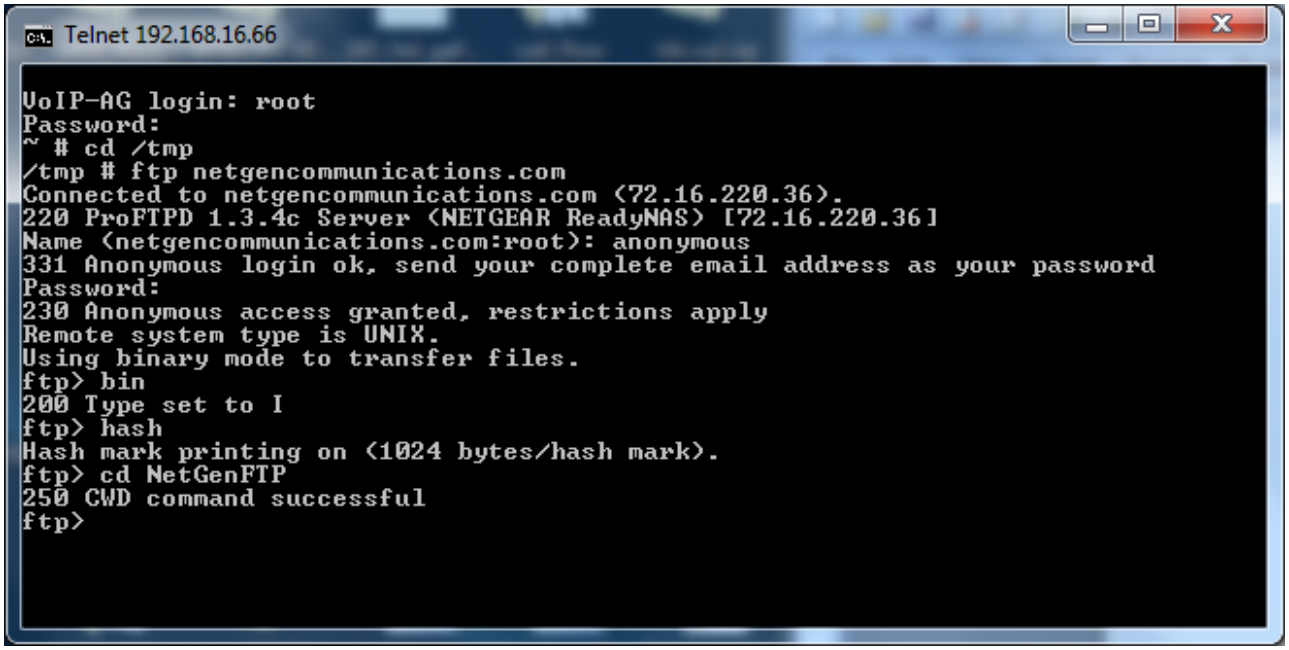
Switch to binary mode by entering bin at the ftp> prompt.



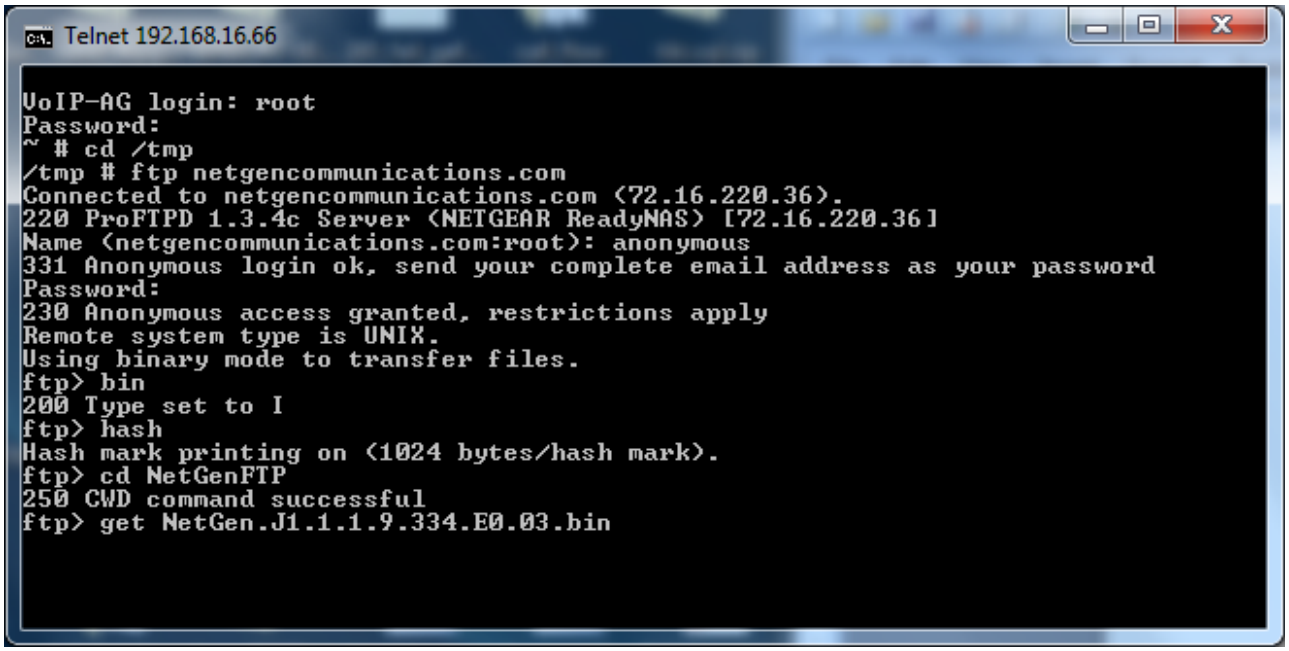
Turn on hash mode by entering hash at the ftp> prompt. This will cause a hash mark (#) to be displayed for every 1024 bytes that are transferred. This is useful to ensure that the download is still in progress.



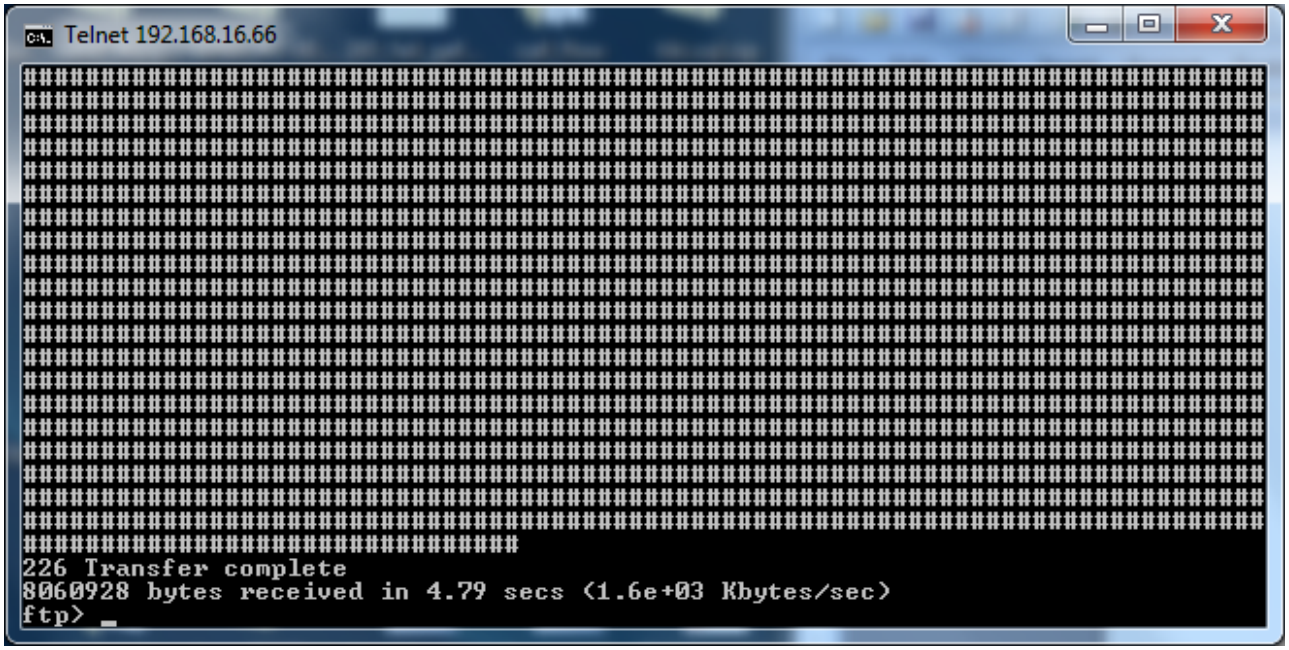
Change to the NetGenFTP directory.



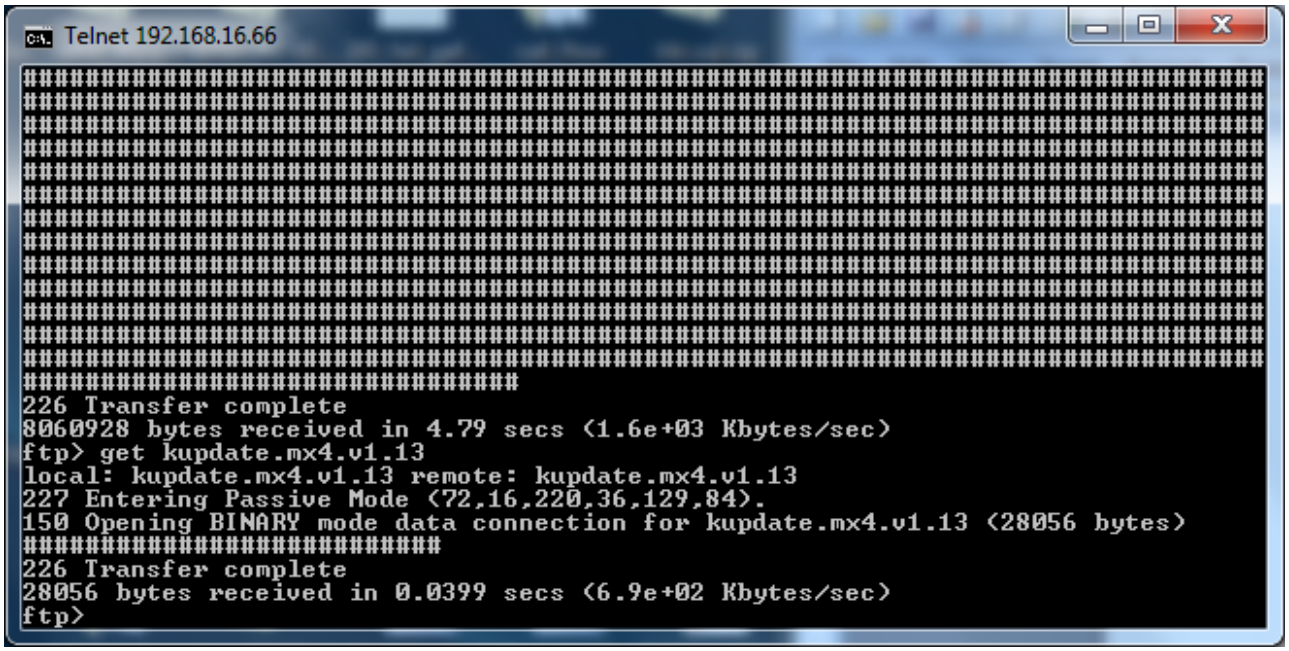
Get the upgrade package by entering get NetGen.J1.1.1.9.334.E0.03.bin.



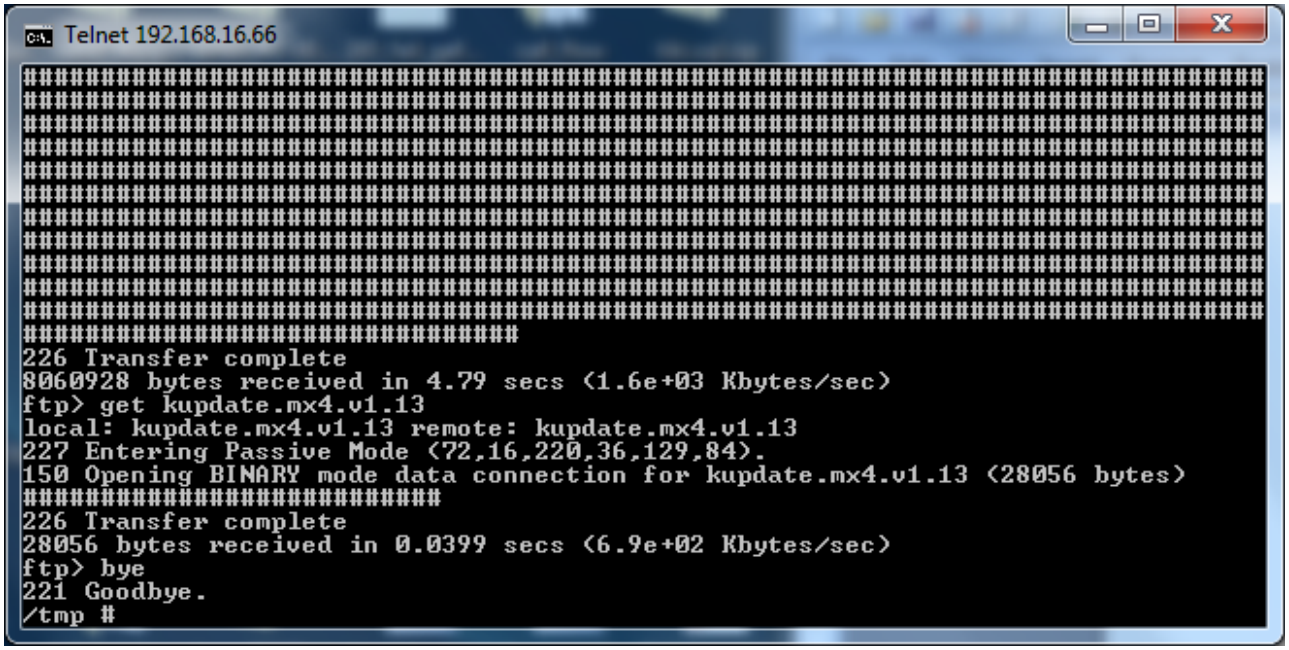
If it was successful, a message will be on the screen that says something like 226 Transfer complete.



Get the upgrade tool by entering get kupdate.mx4.v1.13. Again, make sure that the transfer was successful.



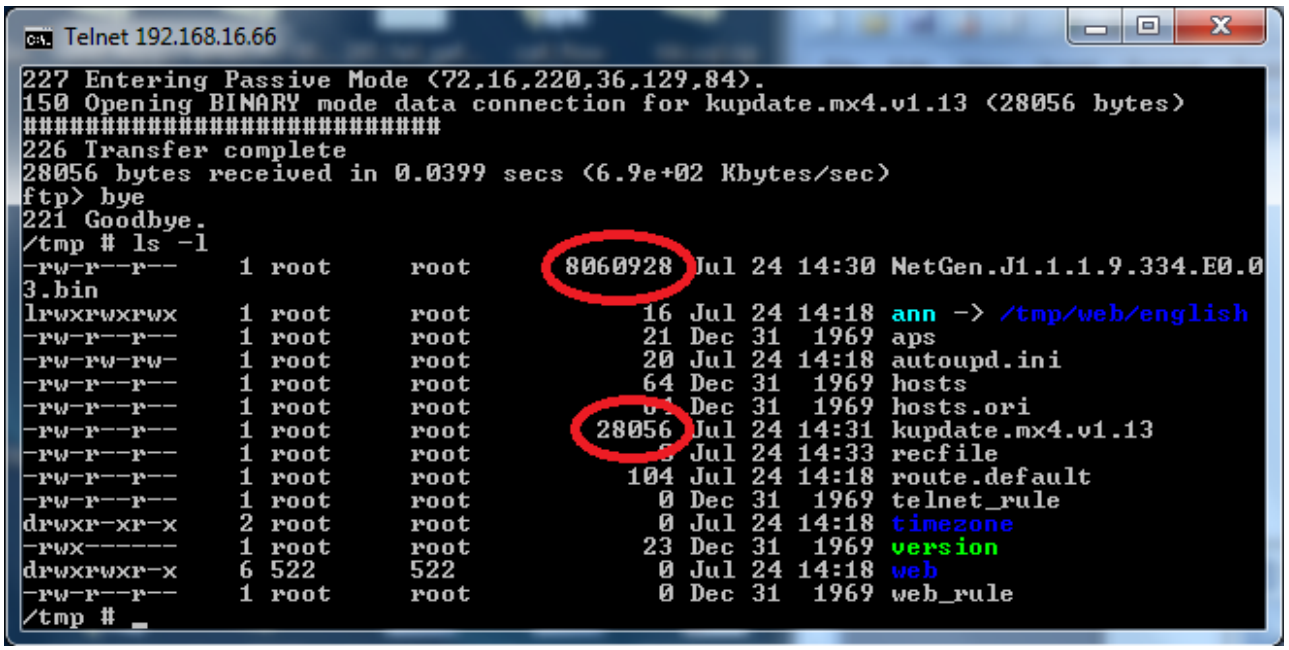
Finally, log out of the FTP server.



2.2.4 Verify the Files

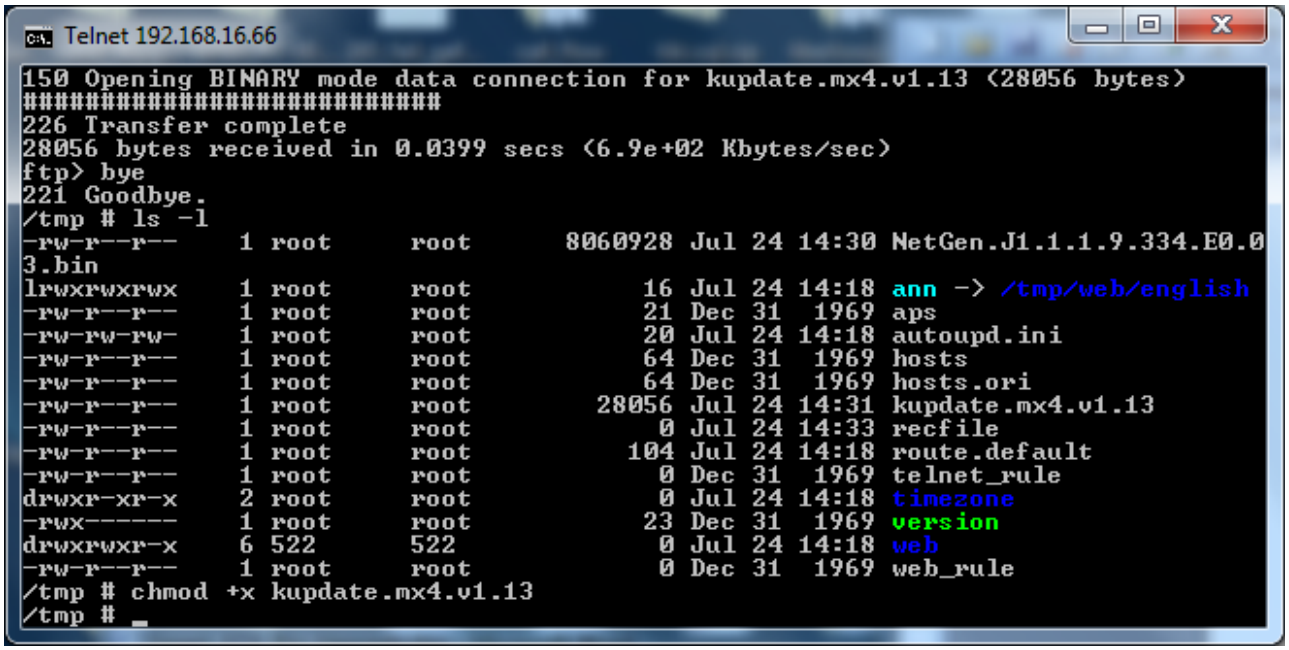
At the /tmp prompt, enter ls –l. Make sure that the file size of NetGen.J1.1.1.9.334.E0.03.bin is 8060928 and the file size of kupdate.mx4.v1.13 is 28056.

Do not continue if either file size is incorrect.

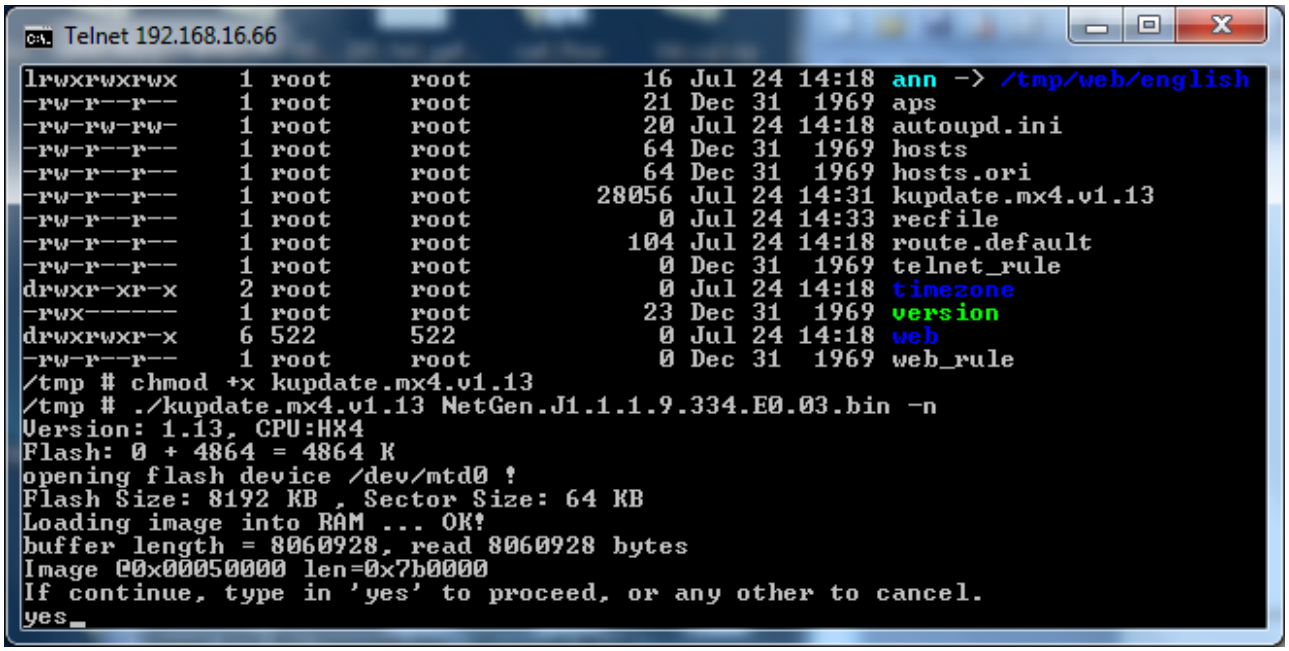


2.2.5 Run the Upgrade Tool

First, make the upgrade tool executable by entering chmod +x kupdate.mx4.v1.13.



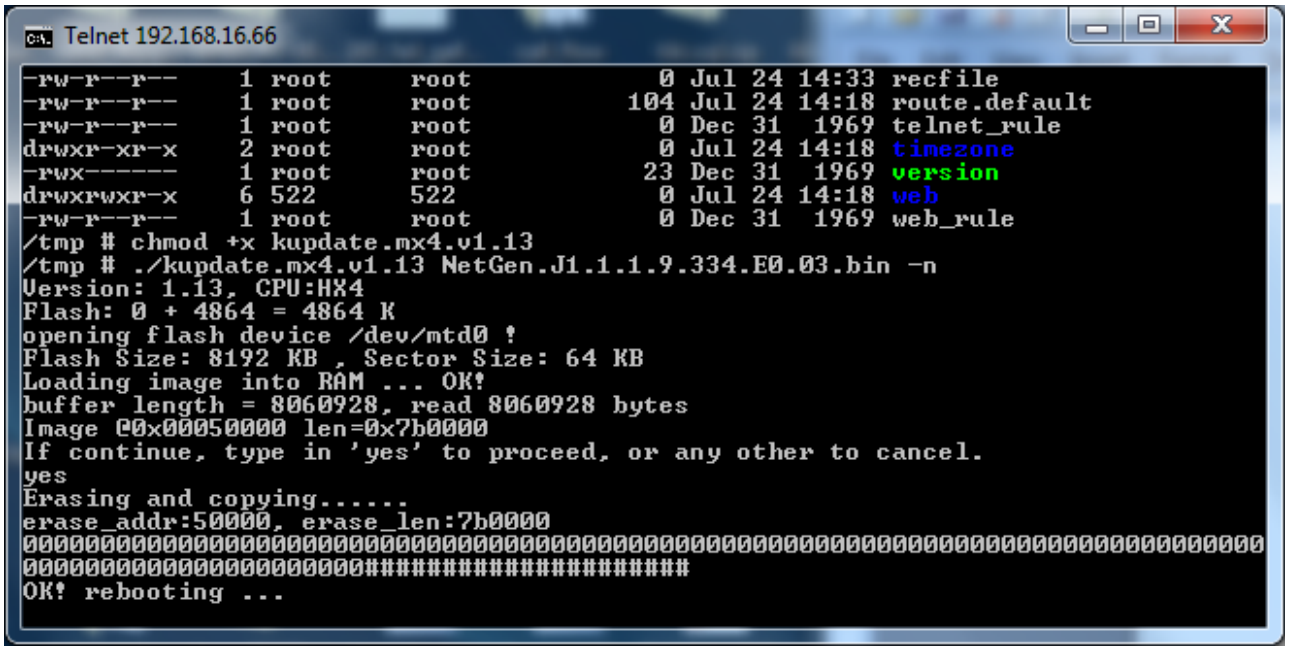
Now run the tool by entering ./kupdate.mx4.v1.13 NetGen.J1.1.1.9.334.E0.03.bin –n. When prompted, enter yes.



The upgrade should take between two and four minutes.

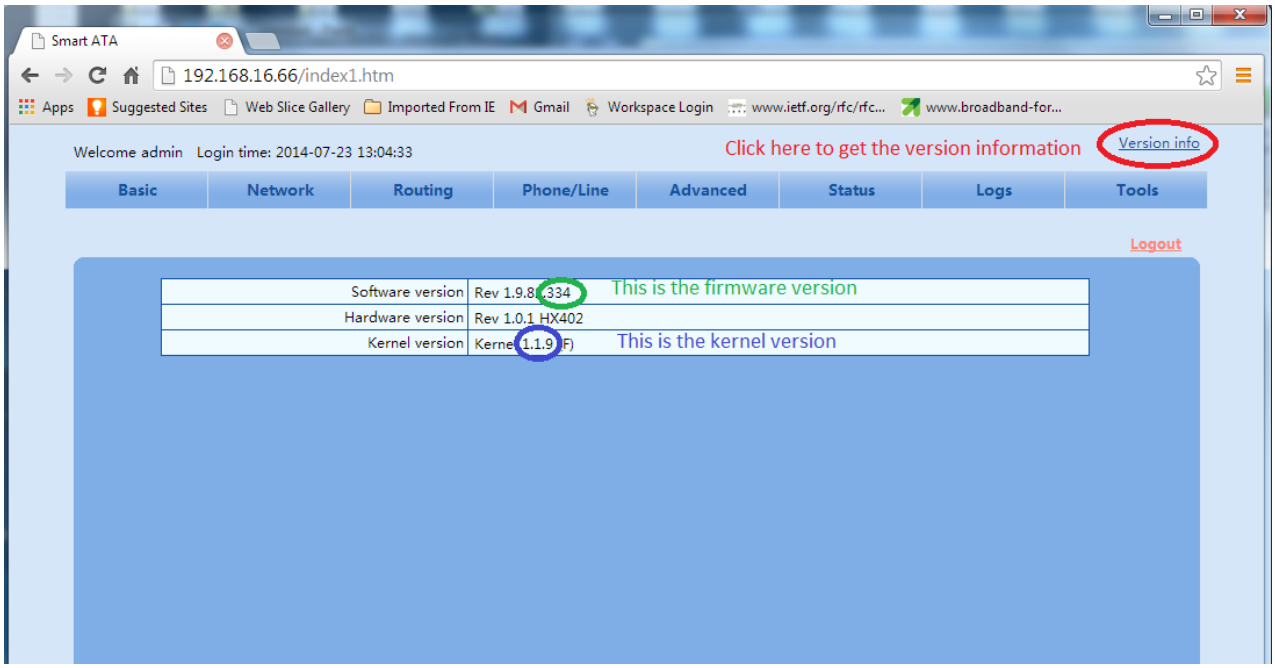
Please do not close the window or remove power until the upgrade is complete. Doing so could cause an upgrade failure that would result in the Smart ATA having to be sent back for repair.

When the message OK! Rebooting … appears on the screen, the upgrade is complete and the Smart ATA will automatically reboot.



2.2.6 Verify the Upgrade

Log back in to the web GUI and verify that the Smart ATA now has the correct kernel version and firmware version.


Smart ATA
192.168.16.66/index1.htm
Apps
Suggested Sites
Web Slice Gallery
Imported From IE
Gmail
Workspace Login
www.ietf.org/rfc/rfc...
www.broadband-for...
Welcome admin Login time: 2014-07-23 13:04:33
Click here to get the version information
Version info
Basic
Network
Routing
Phone/Line
Advanced
Status
Logs
Tools
Logout
Software version
Rev 1.9.8(334
This is the firmware version
Hardware version
Rev 1.0.1 HX402
Kernel version
Kerne 1.1.9 F)
This is the kernel version