

Answer ID  
768

## Firmware upgrade instructions for the Web/SNMP and Network Management Cards

### Question

How do I upgrade the firmware on an APC Web/SNMP Management Card or Network Management Card?

### Answer

Solution:

When upgrading the firmware on your Web SNMP/Network Management Card, you need to determine which files pertain to your application.

First, look on your card. If the part number is AP9606, then you have a Web SNMP Management Card. If the part number is AP9617/AP9618/AP9619, then you have a Network Management Card.

**\*\*If the part number is Powernet SNMP adapter, AP9605, or AP9603, there are no firmware updates available.\*\***

Second, you need to determine which device you have the Web SNMP/Network Management installed in.

For example, if you have the Network Management Card installed in a UPS, you need to determine which UPS you have. APC offers four different UPS families. These four families are as follows:

SmartUps/Matrix

Symmetra (Symmetra, Symmetra Rackmount, Symmetra LX)

Symmetra 3 phase (Symmetra PX)

Silcon

Select the correct UPS type. Next, go to the Network Management Card section on the software downloads page. A link to the software downloads page is below:

<http://www.apcc.com/tools/download/>

If you have a Smart Ups 700, then you will choose:

Network Management Card x.x.x firmware executable for Smart Ups and Matrix w/AP9617/8/9 installed

Click on the **Free Download** link on the left hand side of the page. Proceed through the menus and download the firmware executable.

Once you have the firmware downloaded, then you can proceed with the upgrade.

There are a couple of different ways that you can upload the firmware.

- Firmware executable
- Xmodem
- Manual (FTP prompt)

### **Firmware executable**

If you have a Windows NT/2000 computer, you can use the executable to upgrade the firmware.

If you have any other type of computer, then you will need to manually upload each firmware file to the Web SNMP/Network Management Card. Go to the Xmodem or Manual section for firmware upgrades.

Click on the firmware executable once the download is complete. The executable will proceed to unzip firmware files. You can specify the location where you want the firmware to download to.

Once the firmware has been saved, the executable will prompt you for the IP address of the Web SNMP/Network Management Card that you want to upgrade.

Once you enter the IP address, click enter.

You will be prompted for a username and password. Use the username/password that you normally use to log into the card. By default, the username and password is `apc`. Press enter.

You will then be prompted to either 1) Continue with upgrade 2) Re-enter Parameters 3) Quit. Choose option 1 then enter.

The firmware executable will then begin the upgrade process. This process may take as long as 5-7 minutes to finish. Once finished, close the executable.

Verify that the firmware upgrade was successful. Log into the card and go to Help, then About System. The updated firmware should be listed on this page.

### **Xmodem**

\*\*\*For AP9617/18/19 cards that have AOS 1.2.0 firmware and below, you will need to first upgrade to AOS 2.0.2 before upgrading to the latest firmware. AOS 2.0.2 should be included as part of the firmware executable located on the firmware download page.\*\*\*

1. Connect the Management Card to an available serial port on the host

computer with the supplied cable (part number 940-0024C).

2. If PowerChute is running then stop that service.

3. Open a terminal session. Configure the terminal session to 2400bps, no

parity, 8 data bits, 1 stop bit, and no flow control. If you are using

HyperTerminal select Call->Disconnect and then Call->Connect to apply the changes to the serial port.

4. Press the <Enter> key several times. You should see a User Name prompt. If you do not see the prompt, make sure that you have the proper cable and that the communication settings are correct.

5. Log into the Management Card.

6. Enter the Administrator User Name and Password. The default for both is "apc". If you have changed the Administrator User Name and Password, use the new settings to log in. The main Control Console menu will appear.

7. Start an XMODEM transfer.

8. Select option 3 - System.

9. Select option 4 - File Transfer.

10. Select option 2 - XMODEM.

11. Enter "YES" at the prompt to continue with the transfer.

12. Select the appropriate baud rate. The higher the baud rate, the faster the firmware upgrade.

13. Change the terminal program's baud rate to match the one you selected in step 4. If you are using HyperTerminal select Call->Disconnect and then Call->Connect to apply changes made to the serial port. Press <ENTER> to continue.

14. From the terminal program's menu, select the binary platform file (the file with the plat prefix) to transfer via XMODEM-CRC.

15. After the XMODEM transfer is complete set the baud rate back to 2400. The

Management Card will automatically reboot itself .  
(Please note that a reboot of the control unit does not reboot outlets)

### **Manual (via FTP)**

\*\*\*For AP9617/18/19 cards that have AOS 1.2.0 firmware and below, you will need to first upgrade to AOS 2.0.2 before upgrading to the latest firmware. AOS 2.0.2 should be included as part of the firmware executable located on the firmware download page.\*\*\*

1. To perform an upgrade with this method the Management Card must have been previously configured with a System IP, Subnet Mask, and Default Gateway and attached to the network. In addition, FTP Server must be enabled.

2. Open an MS-DOS command prompt window on a PC which is connected to the network. Change to the directory which contains the firmware upgrade files. The commands which need to be entered are shown in **bold**.

```
C:\>cd\apc
```

```
C:\apc>
```

3. Open an FTP client session.

```
C:\apc> ftp 150.250.6.21 (150.250.6.21 being the IP address of the  
web card)
```

4. Log in using the Administrator User Name and Password. Your passwords may be different than the defaults, "apc" and "apc". Typically, the password will appear on the screen as

```
***
```

```
Connected to 150.250.6.21
```

220- APC FTP server ready.

220

User (150.250.6.10:(none)):apc

331 User name okay, need password.

Password:apc

230 User logged in, proceed.

ftp>

5. Upgrade the aos first. The aos module is the file with the aos prefix.

ftp> bin

200 Command okay.

ftp>

ftp> put aosXXX.bin (XXX being the version number downloaded)

200 Command okay.

150 Opening data connection for aos301.bin

250 Requested file action okay, completed. Management Card

Rebooting....

327680 bytes sent in 5.99 seconds (54.70 Kbytes/sec)

ftp>

6. Close the FTP client session.

ftp>bye

C:\apc>

7. Wait about 20 - 30 seconds.

8. Repeat Steps 3 - 8 again for the application module (sumx for Smart Ups/Matrix, sy for Symmetra, etc). In Step 6, substitute the

sumx module file name, in place of the aos module file name. Or the sy prefix  
for the Symmetra

**Note : Never remove the Management Card before it completes the reboot  
cycle. Doing so will damage the Management Card. The reboot cycle is complete when the  
status LED turns off and after 20 seconds turns solid green or slowly flashing  
red.**