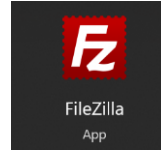
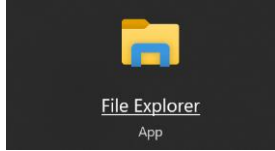




GAM FW Upgrade Procedure

October 20, 2023

1. Use windows File Explorer app or a FTP client like Filezilla to open connection with Positron FTP Server with link shown below.



<ftp://ftp.positronaccess.com/GAM/>

Note: Do not use any Web Browsers due they block ftp downloads.

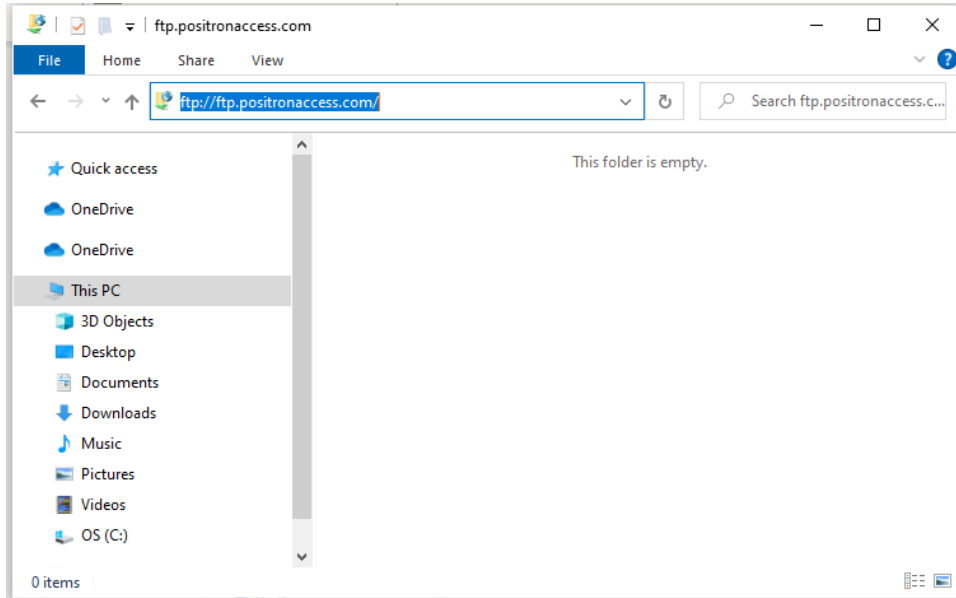


Figure 1 Connecting with Positron FTP Server using File Explorer

2. Once the Log On window be prompted, use the following credentials:

Username: positron

Password: positron

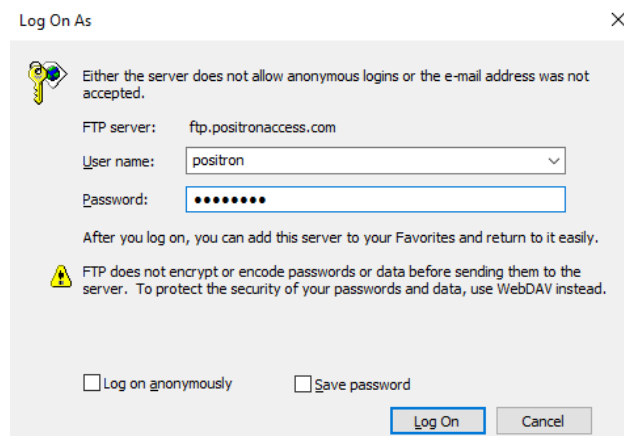


Figure 2 FTP Log On window

3. Select **GAM** folder and open it by double clicking on it.

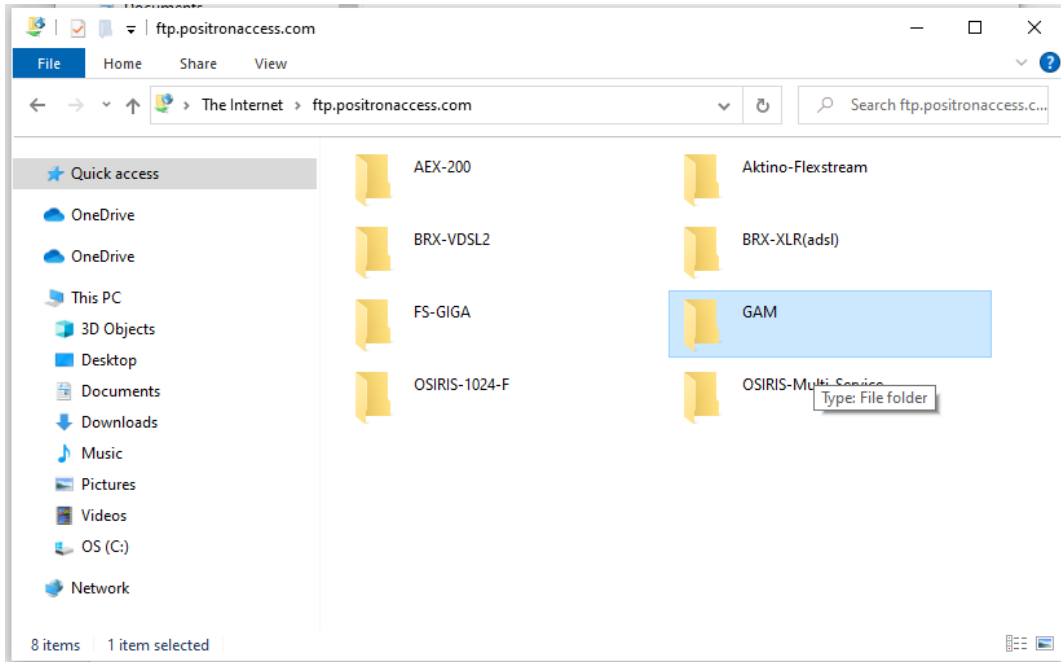


Figure 3 GAM folder in Positron FTP Server

4. For GAM working with G1000 Endpoint series only go to folder **2-GA-LATEST-v1.4**. before going to higher versions (see **Figure 4**). Read **IMPORTANT NOTES A AND B ON PAGES 5 AND 7**

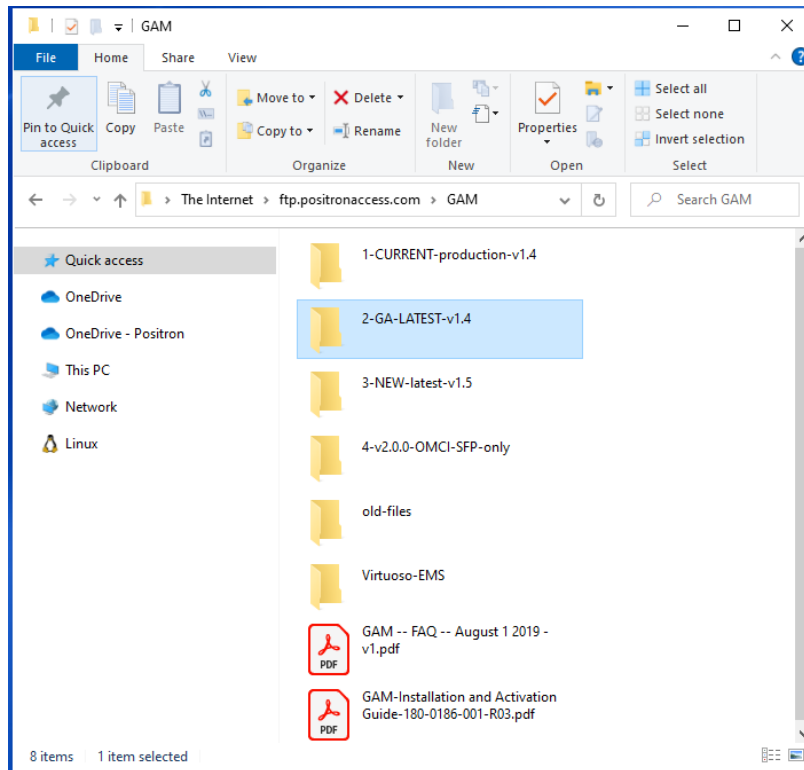


Figure 4 Folder with FW for GAM working with G1000

- For GAM working with G1001 and G1002 Endpoint series go to folder **3-NEW-latest-v1.5** (see **Figure 5**)

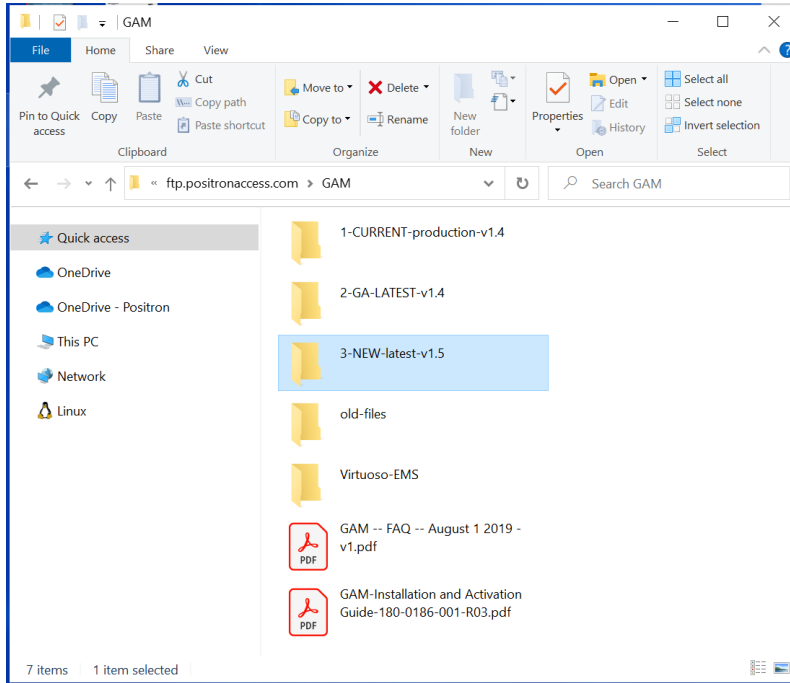


Figure 5 Folder with FW for GAM working with G1001/G1002

- Each GAM type, indoor/outdoor/MIMO/Coax has a different folder. (see **Figure 6**),

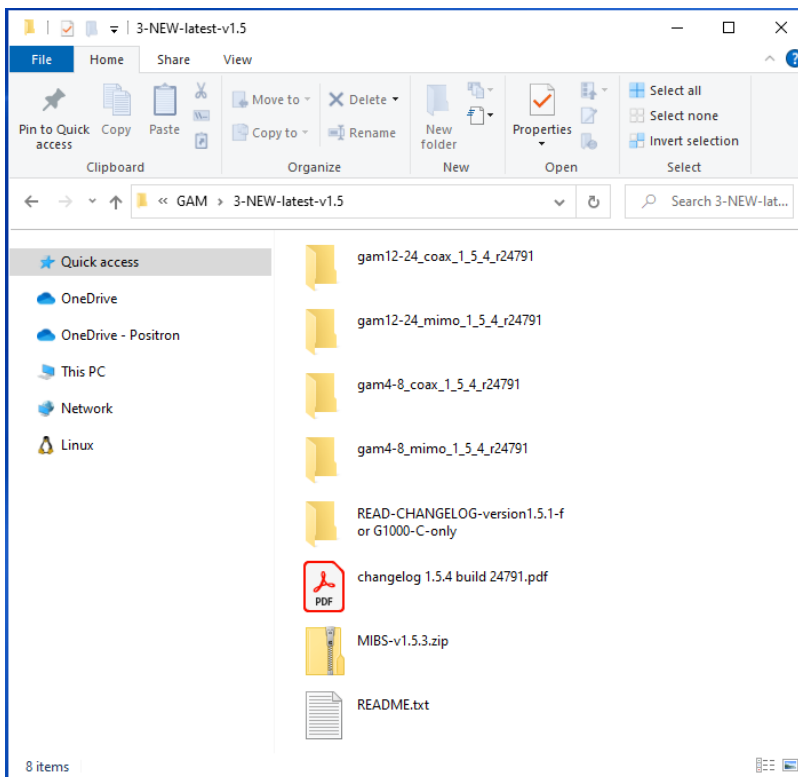


Figure 6 Folders with FW for different models of GAM

- a. gam12-24_coax_1_X_X_r2XXXX is for Indoor **GAM-12-C** or **GAM-24-C**
 - b. gam12-24_mimo_1_X_X_r2XXXX is for Indoor **GAM-12-M** or **GAM-24-M**
 - c. gam4-8_coax_1_X_X_r2XXXX is for Outdoor **GAM-4-CX** or **GAM-4-CRX**
 - d. gam4-8_mimo_1_X_X_r2XXXX is for Outdoor **GAM-4-MX** , **GAM-8-MX**, **GAM-4-MRX** or **GAM-8-MRX**
7. Once you locate the right folder, open it and proceed to download the file with “.mfip” extension into your PC, see **Figure 7**. For Example: for a GAM12/24-M the file will be ftp://ftp.positronaccess.com/GAM/3-NEW-latest-v1.5/gam12-24_mimo_1_5_4_r24791/

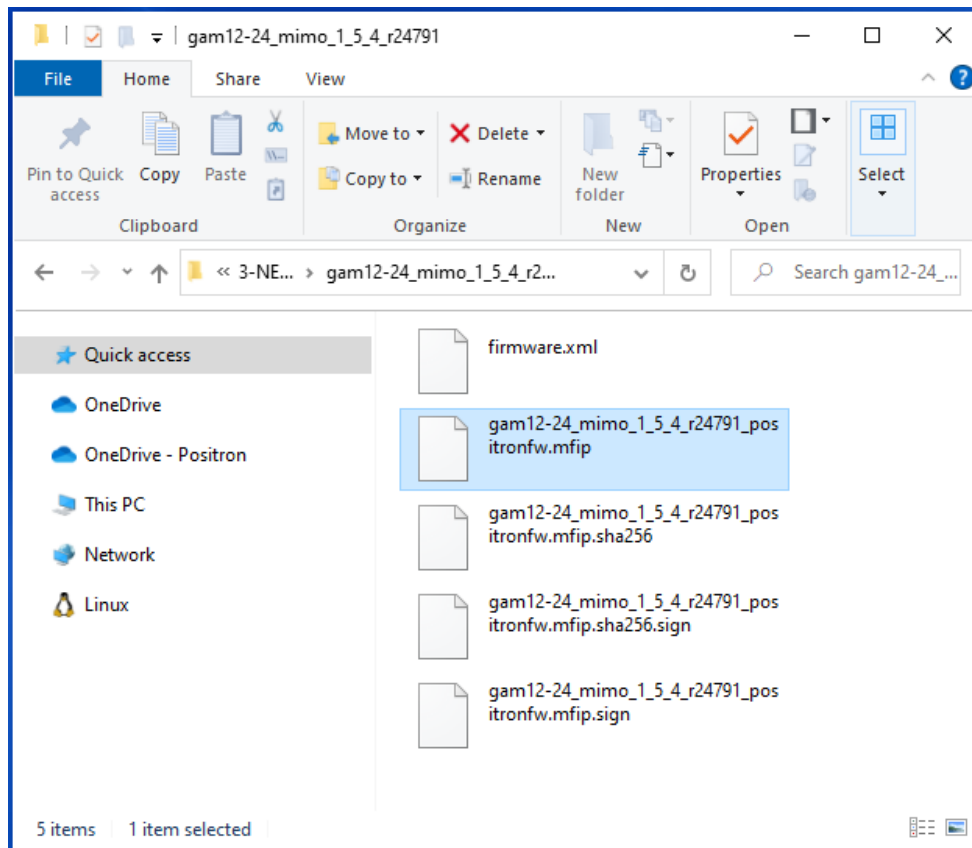


Figure 7 Firmware load for GAM 12/24-M working with G1001/G1002 series

The GAM doesn't validate if you are using the proper file for the GAM model, validation was implemented from V 1.5.0.r22842, it is important to upload the good file if you are running an older version.

IMPORTANT NOTES:

- A. IF YOU ARE RUNNING A VERSION PRIOR OF 1.5.1 AND HAVE LEGACY G1000-C (COAX ONLY) IN YOUR NETWORK, YOU MUST UPGRADE TO V1.5.1 PRIOR TO UPGRADE TO 1.5.4, IF NOT, YOU WILL BE STUCK WITH ENDPOINTS THAT WILL NEVER UPGRADE. VERSION 1.5.1 IS LOCATED IN <ftp://ftp.positronaccess.com/GAM/3-NEW-latest-v1.5/> AS SHOWN IN **Figure 8** and **Figure 9****

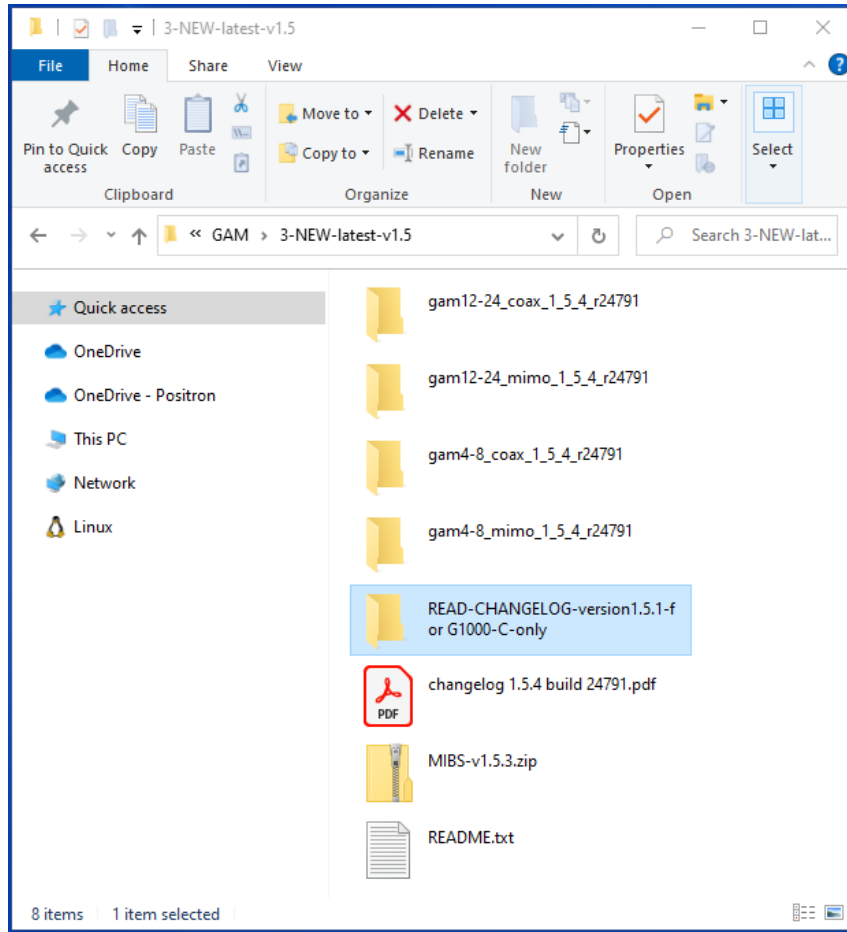


Figure 8 Folder with GAM FW V 1.5.1

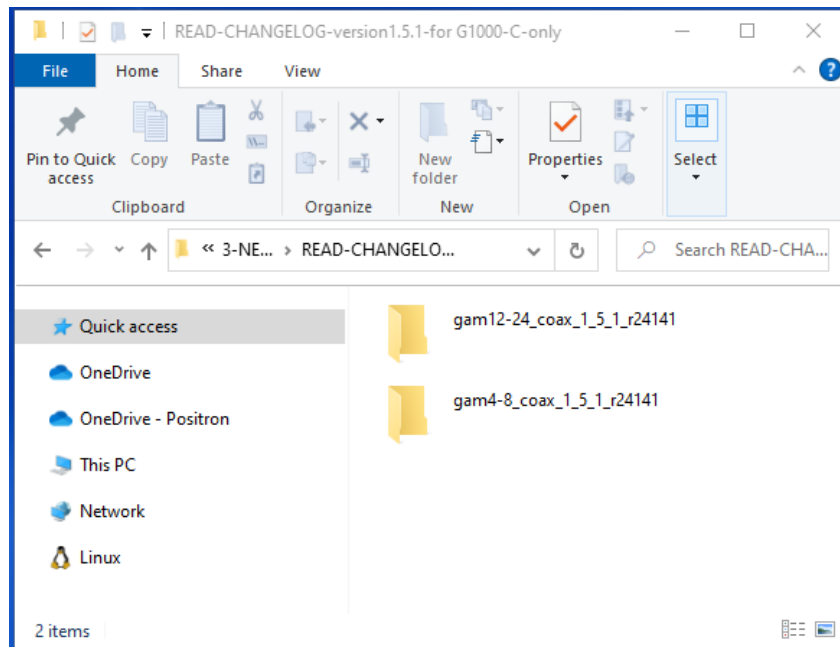


Figure 9 Folders with FW V 1.5.1 for Coax GAM

B. IF THE GAM IS RUNNING A VERSION OLDER THAN 1.2.0(BUILD r21298), THERE IS A RARE CASE OF FLASH CORUPTION THAT CAN OCCUR DURING THE UPGRADE. CHECK WITH SALES ENGINEERING TEAM FIRST.

8. Download the **.mfip** file to your PC.
9. Open GAM Web GUI on your PC.
10. Copy running-config to startup-config of the GAM by doing click on disk symbol located in top right corner of Web GUI as shown in **Figure 10** or from menu **Maintenance**→**Configuration**→**Save startup-config**



Figure 10 Copy running-config to startup-config button

11. Under **Maintenance**→**Software** select **Update From File** See **Figure 11**.
12. Click on **Choose File** button to locate the **.mfip** file downloaded previously in your PC then press **Open** button to confirm, see **Figure 12**.
13. Click on **Upload** button to start the update process, see **Figure 13**.

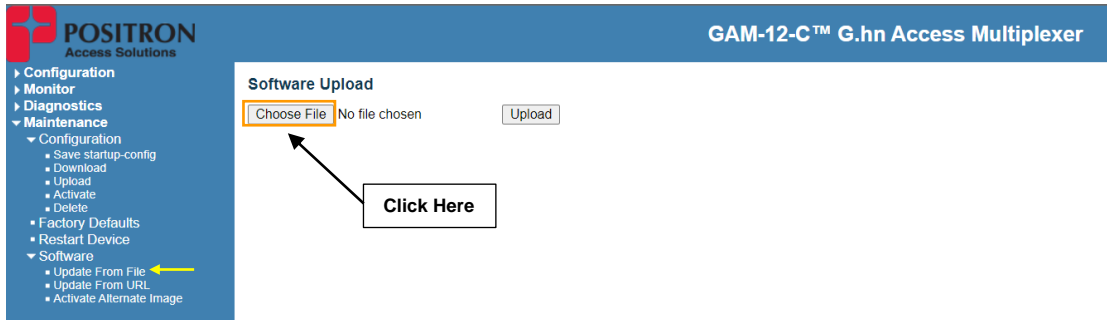


Figure 11 Update From File menu

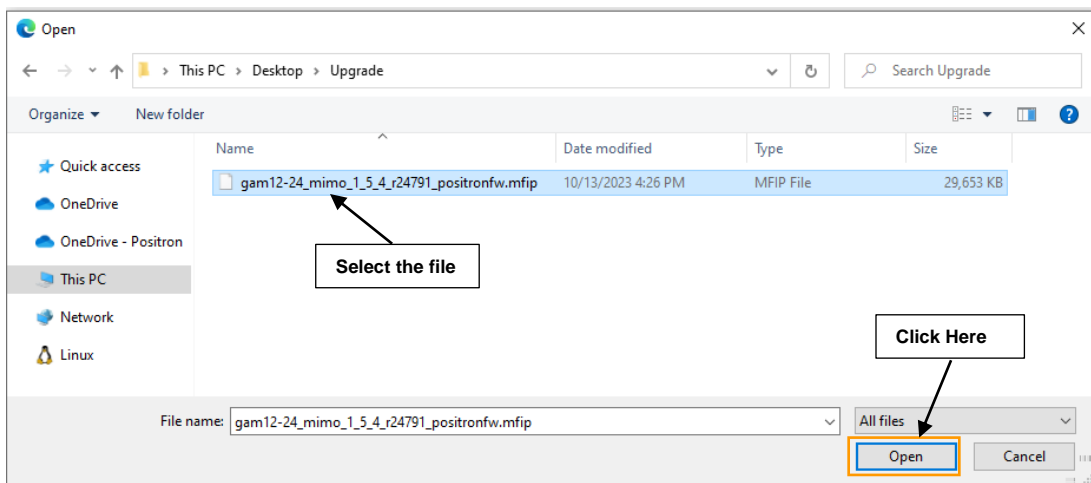


Figure 12 Selecting new GAM Firmware

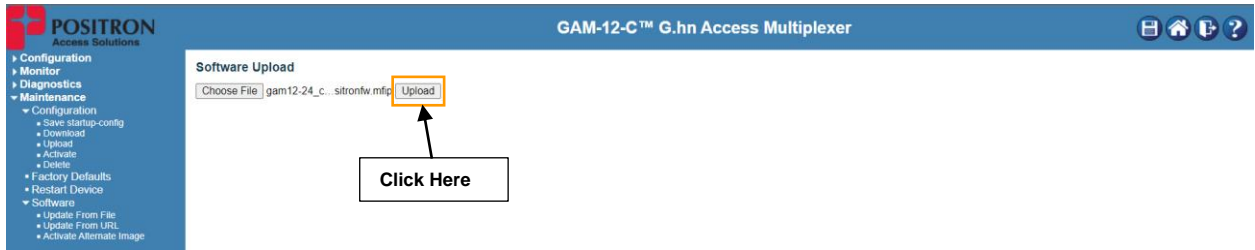


Figure 13 Starting Update Process

14. It will take a few minutes and the system will reboot the GAM automatically once the firmware load is copied into the flash. (Upgrade takes around 5-10 mins)
15. After the GAM upgrade is completed, a message will appear in Web GUI confirming it.
16. Go to **Monitor**→**System**→**Information** to confirm that the GAM is working with new firmware version and release, see **Figure 14**.

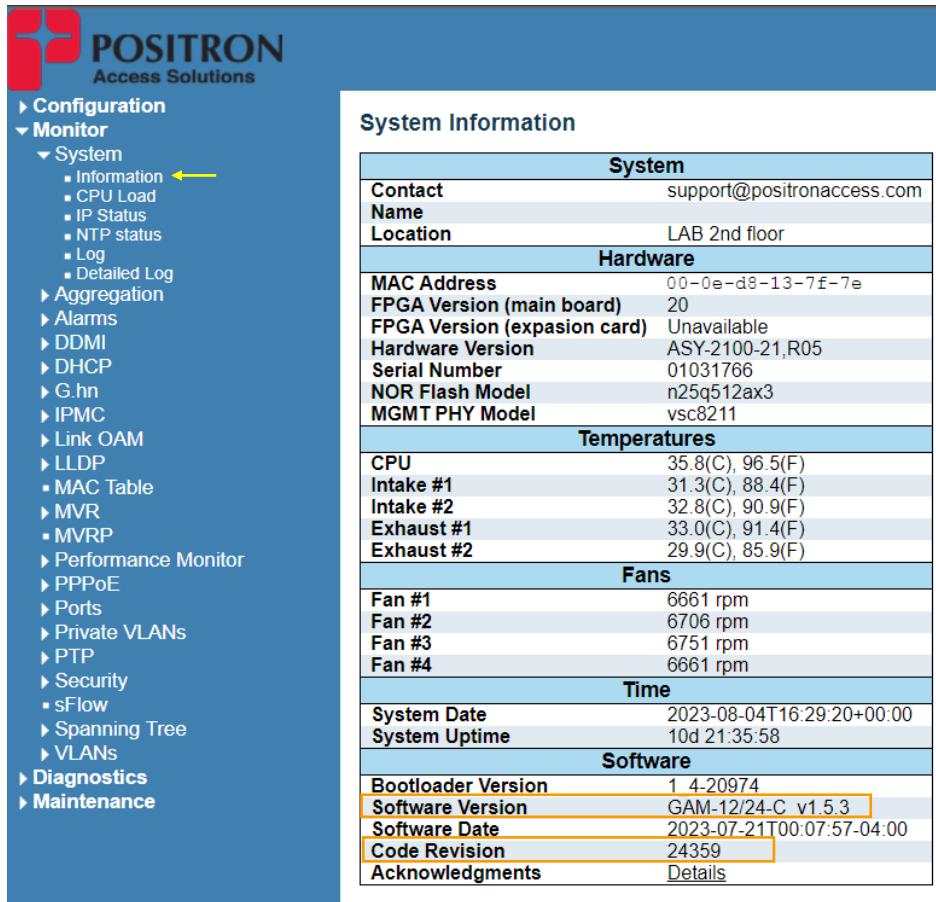


Figure 14 Checking new gam FW version

17. At this point the endpoints could be showing a software mismatch issue with a warning symbol in **Monitor**→**G.Hn**→**Overview**.

18. Upgrade of endpoints firmware can be done manually one by one by clicking on the MAC address of endpoint while in **Monitor→G.Hn→Overview**, a button “**upgrade endpoint**” should be available to proceed (~1min to upgrade each). There is an option to perform automatic firmware upgrade of the endpoint as shown in **Figure 15**.

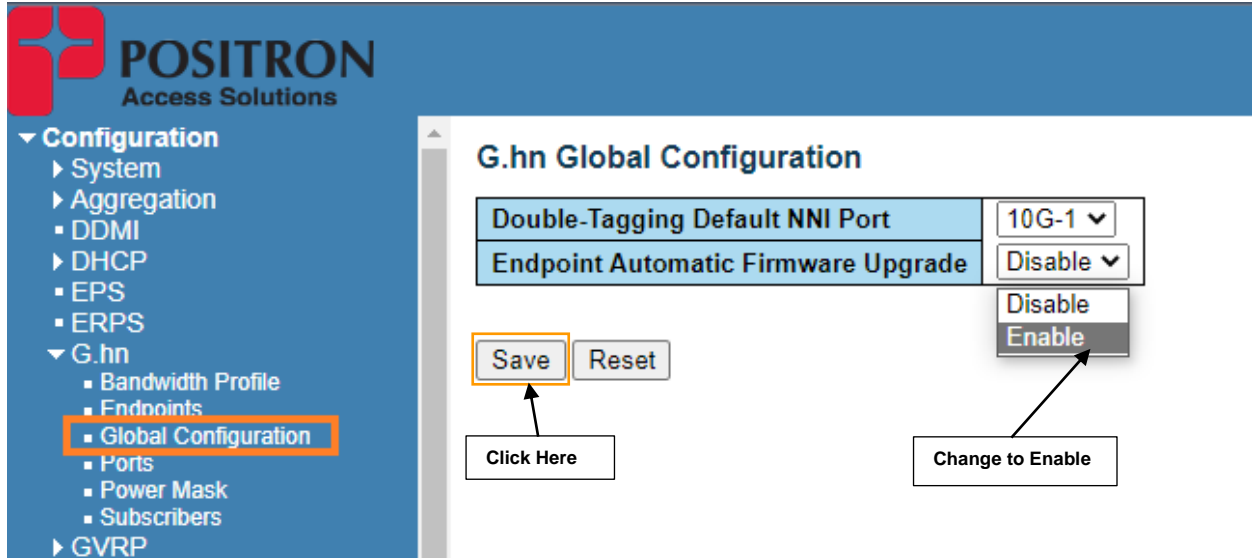


Figure 15 Enabling Endpoint Automatic Firmware Upgrade

19. Sometimes the endpoint doesn't seem to upgrade properly or the g.hn link goes up and down, in that case we recommend to power cycle the endpoint to fix it. If the issue persists, press and hold the reset button on the endpoint for 15 seconds, it will factory default the endpoint and firmware upgrade should be done again (manually or automatically).
20. In case Web GUI of GAM does not display **Monitor→G.hn→overview** information properly after firmware upgrade it is necessary to **clear cache** of your browser or open a new page in private/incognito mode.