How to upgrade HP 5130 switch Comware firmware via FTP

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Disclaimer

The author of this document shall not carry responsibility for any damage to the network, switch(s), computer(s), software or hardware either direct or indirect as a result of following the instructions herein.

Introduction

This document covers upgrading the firmware on **HP 5130-24G-PoE+-4SFP+ (370W) EI JG936A** switches via **FTP** using a console cable.

This document is intended for I.T. and/or network professionals. However, other users with basic network understanding may find this document useful and straight forward to follow.

Note:

- The commands used herein may also work on different switch make and models, please refer to the reference manual of your switch to compare commands syntax first
- For simplicity this document uses username "**admin**" and password "**passw0rd**". As a general rule, a strong password and a more complex username must be used on production devices
- This document uses **PuTTy** as the tool to communicate with the switch
- Latest HP firmware images can be obtained from HP website. You may narrow down your search list by typing the product series which can be found printed at the front of the switch or using the command **display version**, for example **JG936A**. The following is a direct download link, unless changed by HP at a later time:
- https://h10145.www1.hpe.com/downloads/SoftwareReleases.aspx?ProductNumber=JG936A&lang=en&cc=uk&prodSeriesId=8737396
- Firmware used in this document is **5130EI-CMW710-R3109P07.ipe**
- If you are still experiencing, you may not save the changes, simply reboot without saving or just unplug the power cord from the switch. However the firmware will be overwritten regardless

Requirements

- HP 5130-24G-PoE+-4SFP+ (370W) EI JG936A switch
- An Ethernet cord
- A PC capable of hosting a 9 Pin serial cable (*this will be the console cable provided as part of the switch package contents*)
- **PuTTy** or similar tool to establish connection to the switch (***ensure safe download links***)
- The latest firmware (*this document uses **5130EI-CMW710-R3109P07.ipe** release*)

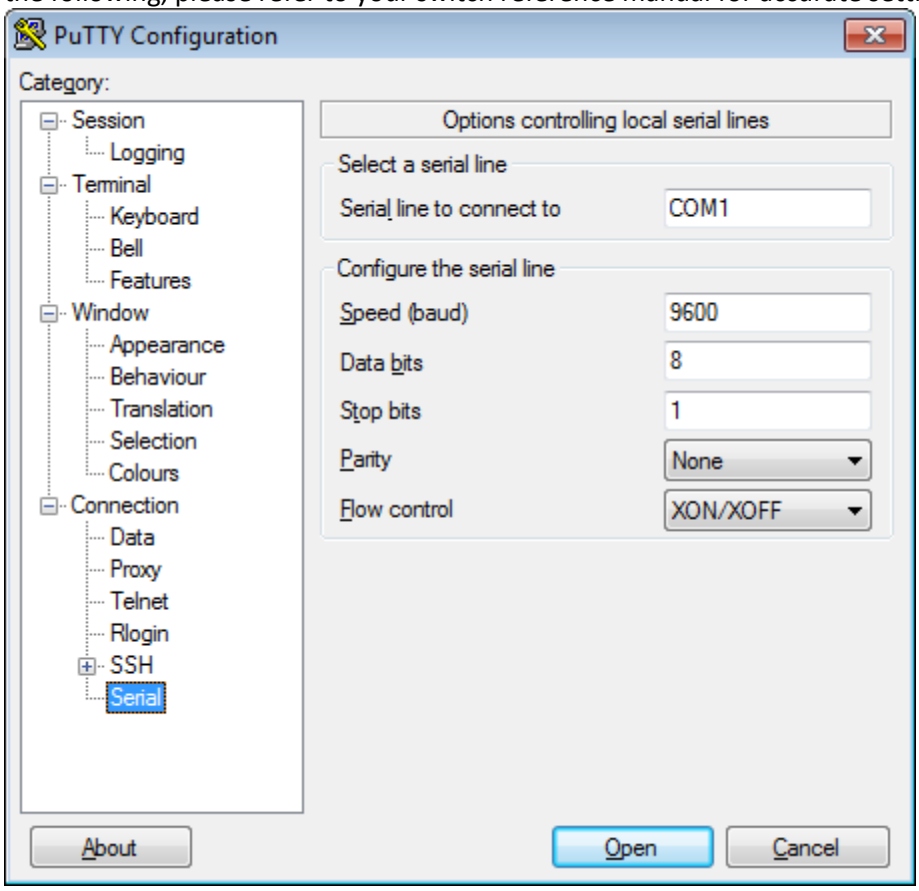
Brief

- Download and extract the switch latest firmware
- Download **PuTTy** or a similar tool to establish connection to the switch (***ensure safe download links***)
- Establish a connection to switch using the console cable (*part of the switch package contents*)
- Setup FTP server service
- Upload and apply the new firmware to the switch
- Save and reboot the switch

Procedure

1. Power ON the switch and connect the console cable between the PC and the console port of the switch

2. Use **PuTTy** or similar tool to establish a serial connection to the switch. Typical **COM** port configuration may look like the following, please refer to your switch reference manual for accurate settings:



3. Out of box when switch boot for the first time, it will try to load automatic configuration. After switch boots you may see repeated messages as illustrated in the snapshot below, you may then press **CTRL_D** to break:

```
System is starting...

Startup configuration file does not exist.
Started automatic configuration, press CTRL_D to break.

Automatic configuration attempt: 1.
Not ready for automatic configuration: no interface available.
Waiting for the next...

Automatic configuration attempt: 2.
Not ready for automatic configuration: no interface available.
Waiting for the next...

Automatic configuration attempt: 3.
Not ready for automatic configuration: no interface available.
Waiting for the next...
```

4. After pressing **CTRL_D** you may receive prompts as illustrated in the snapshot below, meaning you are ready to communicate with the switch:

```
Automatic configuration is aborted.
Line aux0 is available.

Press ENTER to get started.
```

5. Press **Enter** then either type the following commands one at a time or simply copy all and paste as script to apply on the switch to enable FTP server service and setup a communication interface:

```
system-view
ftp server enable
local-user admin class manage
password simple passw0rd
authorization-attribute user-role network-admin
service-type ftp
quit
interface vlan 1
description workVLAN1
ip address 192.168.1.1 24
```

The snapshot below illustrates an example of the switch interface using the above commands:

```
<HP>system-view
System View: return to User View with Ctrl+Z.
[HP]ftp server enable
[HP]local-user admin class manage
[HP-luser-manage-admin]password simple passw0rd
[HP-luser-manage-admin]authorization-attribute user-role network-admin
[HP-luser-manage-admin]service-type ftp
[HP-luser-manage-admin]quit
[HP]interface vlan 1
[HP-Vlan-interface1]description workVLAN1
[HP-Vlan-interface1]ip address 192.168.1.1 24
```

You may use the command **display this** at any time to confirm your changes as illustrated in the snapshot below (*note that the **quit** command used twice to return the root level*):

```
[HP-Vlan-interface1]display this
#
interface Vlan-interface1
 description workVLAN1
 ip address 192.168.1.1 255.255.255.0
#
return
[HP-Vlan-interface1]quit
[HP]quit
<HP>
```

Now the switch is ready to receive the new firmware file.

6. Use an Ethernet cable to connect the PC to any of the switch LAN ports.

7. In the Local Area Connection use the following static configuration (*remember to switch back to your original settings when finish*):

IP address: **192.168.1.10**
Subnet Mask: **255.255.255.0**

8. Run the **Command Prompt** in elevated mode and type the following command line followed by entering the username and password created earlier (***admin, passw0rd***):

```
ftp 192.168.1.1
```

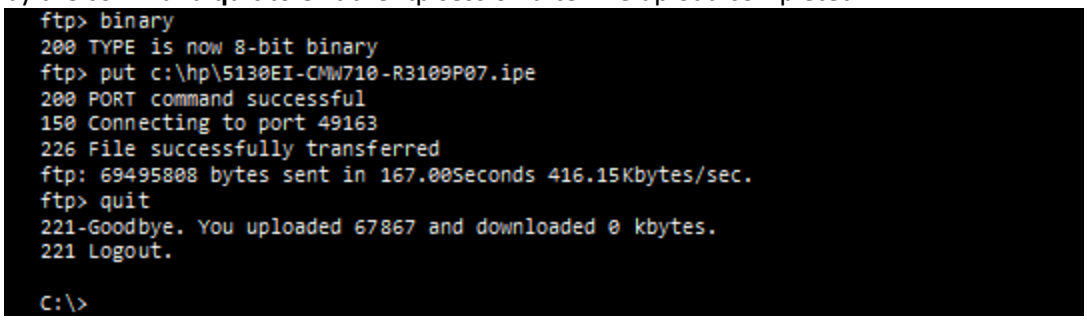
The snapshot below illustrates an example of the **Command Prompt** interface using the above command:

```
C:\ftp 192.168.1.1
Connected to 192.168.1.1.
220 FTP service ready.
User (192.168.1.1:(none)): admin
331 Password required for admin.
Password:
230 User Logged in.
<ftp>
```

9. Continue by typing the commands below followed by pressing the enter key (*presuming that latest firmware is extracted on **C:\HP** path*):

```
binary
put c:\hp\5130EI-CMW710-R3109P07.ipe
```

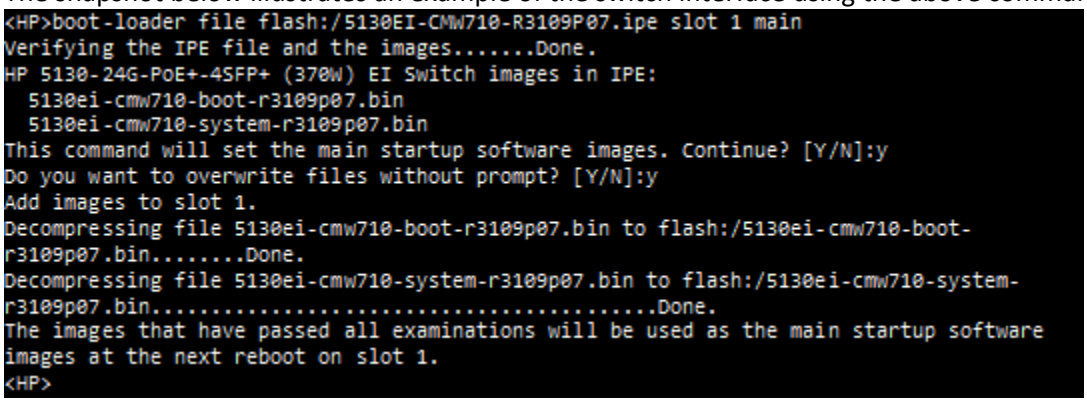
The snapshot below illustrates an example of the **Command Prompt** interface using the above commands followed by the command **quit** to exit the ftp session after file upload completed:



10. Back to the **PuTTy** console session, continue with the command line below to upgrade the firmware:

```
boot-loader file flash:/5130EI-CMW710-R3109P07.ipe slot 1 main
```

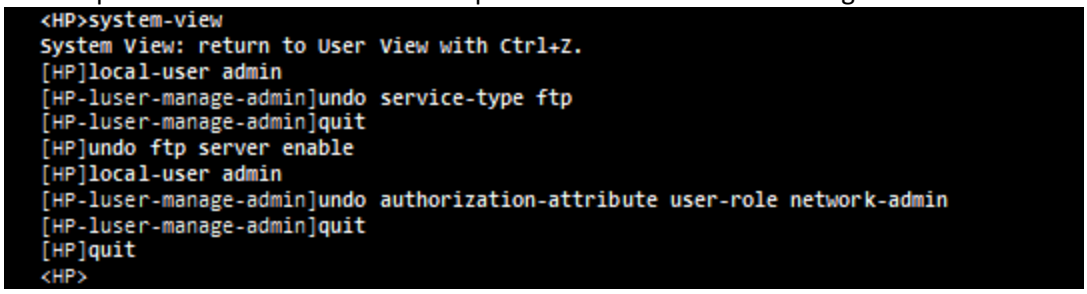
The snapshot below illustrates an example of the switch interface using the above command and prompt answers:



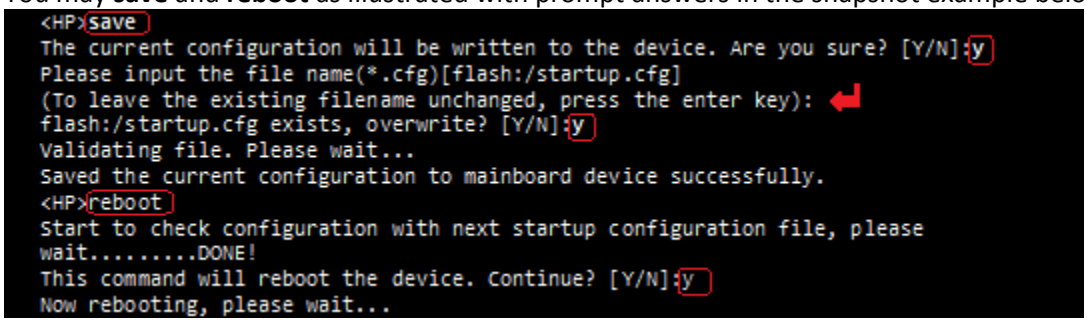
11. The following script are optional to undo the FTP service enabled earlier:

```
system-view
local-user admin
undo service-type ftp
quit
undo ftp server enable
local-user admin
undo authorization-attribute user-role network-admin
quit
quit
```

The snapshot below illustrates an example of the switch interface using the above commands:



12. You may **save** and **reboot** as illustrated with prompt answers in the snapshot example below:



Additional Comments

To delete the old images due to limited space use the **delete /unreserved flash:/** command from the "<HP>" prompt. The two command lines below illustrate an example of deleting the old images **5130ei-cmw710-boot-r3106.bin** and **5130ei-cmw710-system-r3106.bin**:

```
delete /unreserved flash:/5130ei-cmw710-boot-r3106.bin
y
delete /unreserved flash:/5130ei-cmw710-system-r3106.bin
y
```

End of document.