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 enabling SSH on **HP 5130-24G-PoE+-4SFP+ (370W) EI JG936A** switches.

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.

<u>Note:</u>
- 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
- If you are still experiencing, you may not save the configuration, simply reboot without saving or just unplug the power cord from the switch

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***)

Brief

- 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*)
- Enable **SSH**
- Create communication interface (*192.168.1.1 as an example, change to reflect your network address scheme*)
- Test communicating with the switch via **SSH**
- 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:
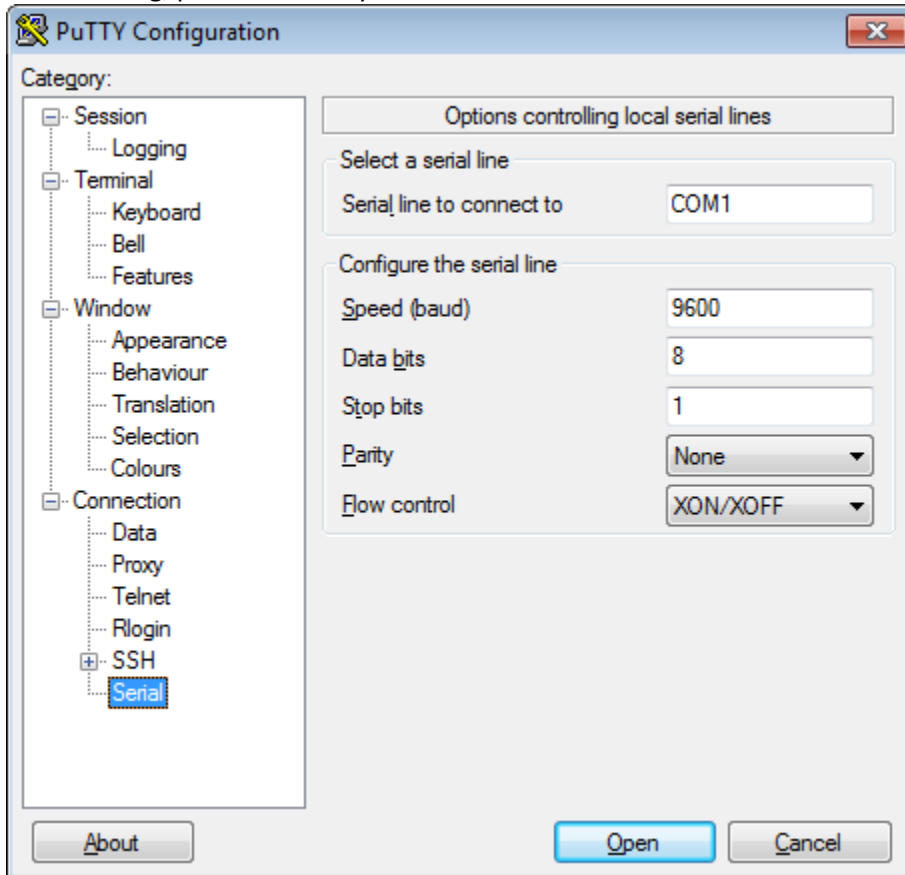
3. Out of box when switch boot for the first time, it will try to load automatic configuration. After switch boots you may see repeated messages as illustrated in the snapshot below, you may then press **CTRL_D** to break:

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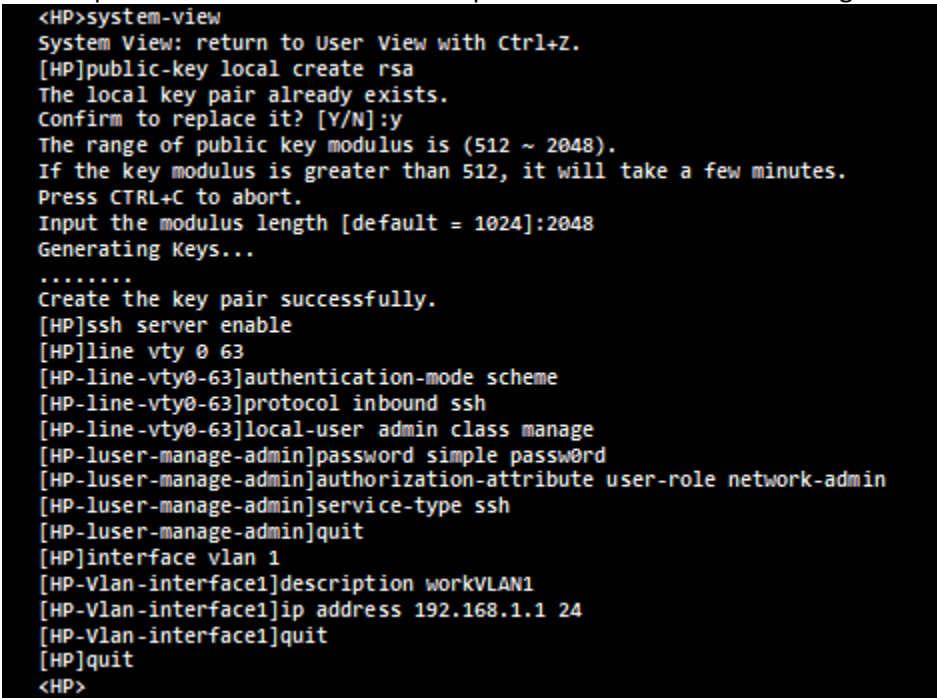
```
Automatic configuration is aborted.
Line aux0 is available.

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 SSH service and setup a communication interface:

```
system-view
public-key local create rsa
y
2048
ssh server enable
line vty 0 63
authentication-mode scheme
protocol inbound ssh
local-user admin class manage
password simple passw0rd
authorization-attribute user-role network-admin
service-type ssh
quit
interface vlan 1
description workVLAN1
ip address 192.168.1.1 24
quit
quit
```

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]public-key local create rsa
The local key pair already exists.
Confirm to replace it? [Y/N]:y
The range of public key modulus is (512 ~ 2048).
If the key modulus is greater than 512, it will take a few minutes.
Press CTRL+C to abort.
Input the modulus length [default = 1024]:2048
Generating Keys...

........
Create the key pair successfully.
[HP]ssh server enable
[HP]line vty 0 63
[HP-line-vty0-63]authentication-mode scheme
[HP-line-vty0-63]protocol inbound ssh
[HP-line-vty0-63]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 ssh
[HP-luser-manage-admin]quit
[HP]interface vlan 1
[HP-Vlan-interface1]description workVLAN1
[HP-Vlan-interface1]ip address 192.168.1.1 24
[HP-Vlan-interface1]quit
[HP]quit
<HP>
```

Now the switch can be accessed via **SSH**.

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 PuTTy or a similar tool to establish SSH connection using interface address **192.168.1.1**, then clock **Open**
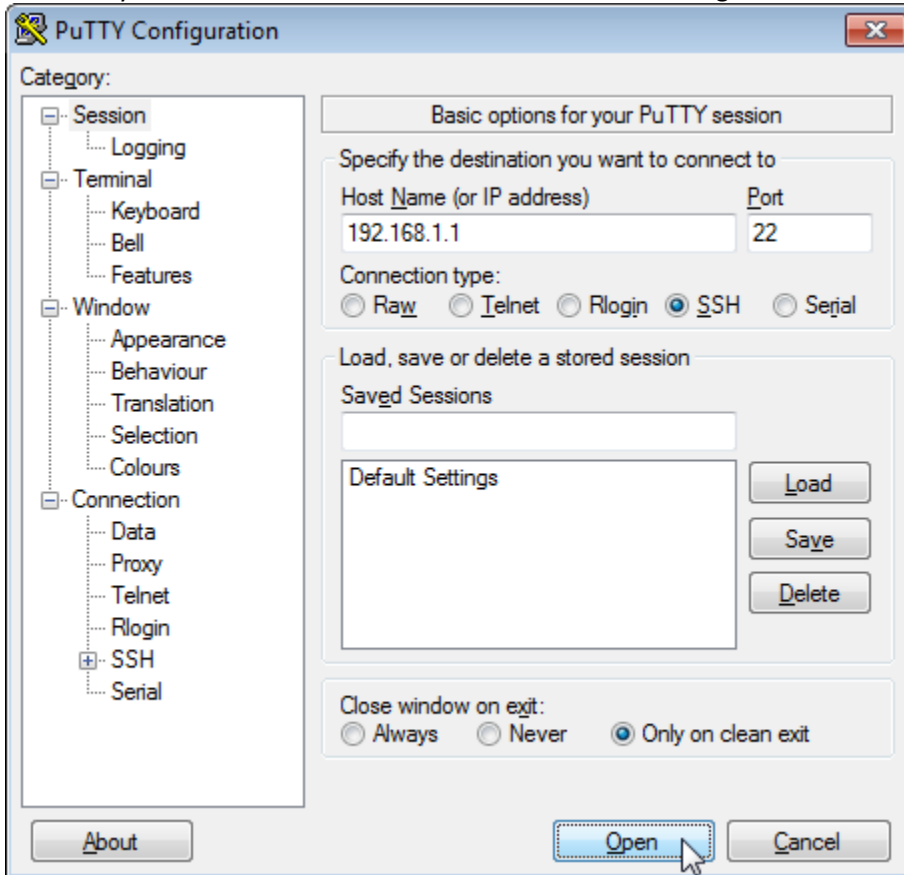
If prompted you may click **Yes**
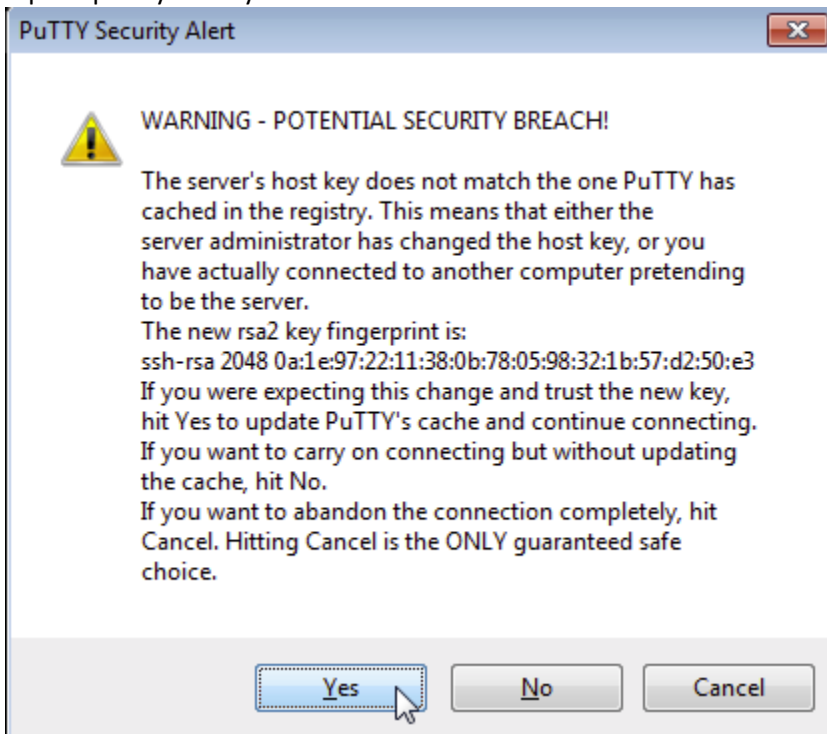
9. The switch login screen will appear, enter the username and password created earlier (***admin, passw0rd***). Now you can manage the switch via **SSH**.

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

```
<HP>save
The current configuration will be written to the device. Are you sure? [Y/N]:y
Please input the file name(*.cfg)[flash:/startup.cfg]
(To leave the existing filename unchanged, press the enter key): ⏎
flash:/startup.cfg exists, overwrite? [Y/N]:y
Validating file. Please wait...
Saved the current configuration to mainboard device successfully.
<HP>reboot
Start to check configuration with next startup configuration file, please
wait.........DONE!
This command will reboot the device. Continue? [Y/N]:y
Now rebooting, please wait...
```

Reference:
HP 5130 EI Switch Series Fundamentals Configuration Guide

Credits:
Vladimir Kupchinsky and Vivin Thomas; Enterprise Infrastructure Solutions

End of document.