How to change time zone and set NTP service on HP 5130 switches

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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 changing time zone and configuring **NTP** 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.

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
- 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
- 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)***

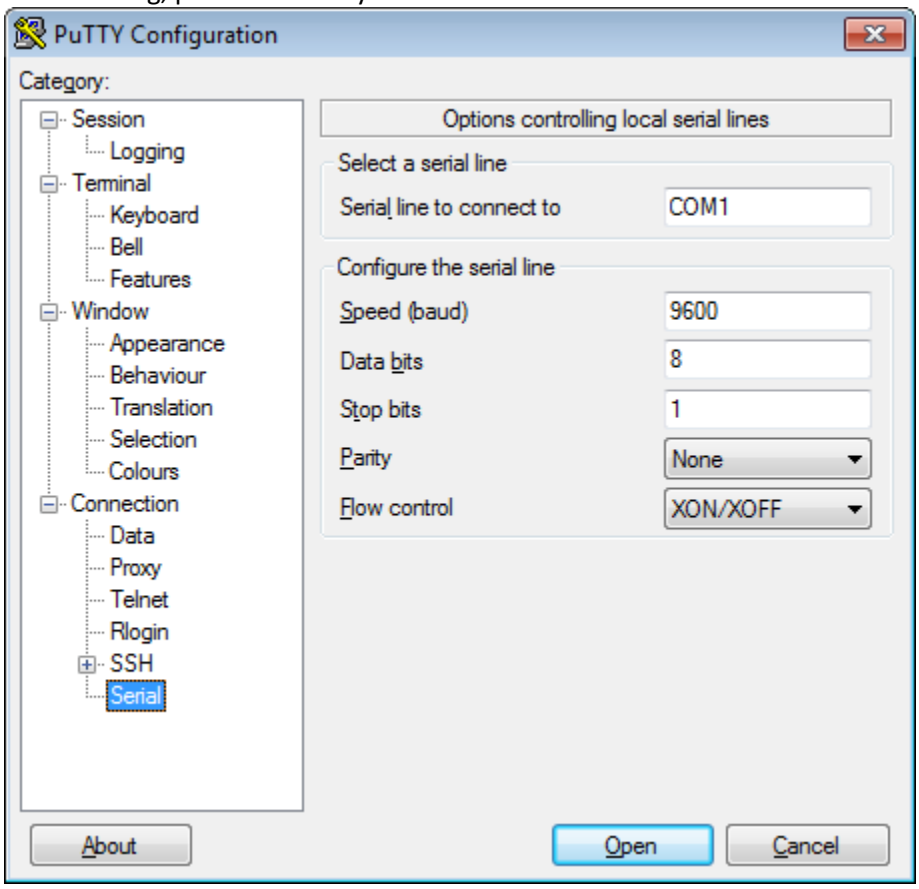
Brief

- 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)*
- Assign an IP address to a VLAN to use from within your subnet pool *(example: 192.168.1.10)*
- Change time zone and setup **NTP** *(EST, 128.100.100.128 and 128.700.72.168 used as an example)*
- IP route-static to your existing gateway address *(example: 192.168.1.1)* so that your switch is able to reach the **NTP** server(s) to sync time from
- 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 follow the command lines example below using your correct values to apply on the switch:

```
system-view
interface vlan 1
description workVLAN1
ip address 192.168.1.10 24
quit
clock timezone UTC-5 minus 05:00:00
clock summer-time UTC-5 02:00:00 March second Sunday 02:00:00 November first Sunday 01:00:00
clock protocol ntp
ntp-service enable
ntp-service unicast-server 128.100.100.128
ntp-service unicast-server 128.100.72.168
ip route-static 0.0.0.0 0.0.0.0 192.168.1.1
```

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]interface vlan 1
[HP-Vlan-interface1]description workVLAN1
[HP-Vlan-interface1]ip address 192.168.1.10 24
[HP-Vlan-interface1]quit
[HP]clock timezone UTC-5 minus 05:00:00
[HP]clock summer-time UTC-5 02:00:00 March second Sunday 02:00:00 November first
 Sunday 01:00:00
[HP]clock protocol ntp
[HP]ntp-service enable
[HP]ntp-service unicast-server 128.100.100.128
[HP]ntp-service unicast-server 128.100.72.168
[HP]ip route-static 0.0.0.0 0.0.0.0 192.168.1.1
[HP]
```

You may use the command **display this** at any time to confirm your changes as illustrated in the snapshot below:

```
[HP]display this
#
 sysname HP
#
 clock timezone UTC-5 minus 05:00:00
 clock summer-time UTC-5 02:00:00 March second Sunday 02:00:00 November first Sunday
01:00:00
 clock protocol ntp
#
 irf mac-address persistent timer
 irf auto-update enable
 undo irf link-delay
 irf member 1 priority 1
#
 lldp global enable
#
 password-recovery enable
#
 stp global enable
#
 scheduler logfile size 16
#
 ip route-static 0.0.0.0 0 192.168.1.1
#
 ntp-service enable
 ntp-service unicast-server 128.100.100.128
 ntp-service unicast-server 128.100.72.168
#
 domain default enable system
#
return
[HP]
```

Now your switch is configured to sync its time from the NTP source specified above. You may check to ping these NTP IP addresses to ensure they are reachable as illustrated in the figure below:

```
[HP]ping 128.100.100.128
Ping 128.100.100.128 (128.100.100.128): 56 data bytes, press CTRL_C to break
56 bytes from 128.100.100.128: icmp_seq=0 ttl=59 time=2.097 ms
56 bytes from 128.100.100.128: icmp_seq=1 ttl=59 time=1.958 ms
56 bytes from 128.100.100.128: icmp_seq=2 ttl=59 time=1.868 ms
56 bytes from 128.100.100.128: icmp_seq=3 ttl=59 time=1.889 ms
56 bytes from 128.100.100.128: icmp_seq=4 ttl=59 time=1.804 ms

--- Ping statistics for 128.100.100.128 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 1.804/1.923/2.097/0.100 ms
[HP]%Dec 31 19:10:20:141 2012 HP PING/6/PING_STATIS_INFO: Ping statistics for
128.100.100.128: 5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss,
round-trip min/avg/max/std-dev = 1.804/1.923/2.097/0.100 ms.

[HP]ping 128.100.72.168
Ping 128.100.72.168 (128.100.72.168): 56 data bytes, press CTRL_C to break
56 bytes from 128.100.72.168: icmp_seq=0 ttl=61 time=2.772 ms
56 bytes from 128.100.72.168: icmp_seq=1 ttl=61 time=2.052 ms
56 bytes from 128.100.72.168: icmp_seq=2 ttl=61 time=5.057 ms
56 bytes from 128.100.72.168: icmp_seq=3 ttl=61 time=2.094 ms
56 bytes from 128.100.72.168: icmp_seq=4 ttl=61 time=3.873 ms

--- Ping statistics for 128.100.72.168 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 2.052/3.170/5.057/1.151 ms
[HP]%Dec 31 19:10:35:214 2012 HP PING/6/PING_STATIS_INFO: Ping statistics for
128.100.72.168: 5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss,
round-trip min/avg/max/std-dev = 2.052/3.170/5.057/1.151 ms.

[HP]
```

6. 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...
```

Credits:

Vladimir Kupchinsky and Vivin Thomas; Enterprise Infrastructure Solutions

End of document.