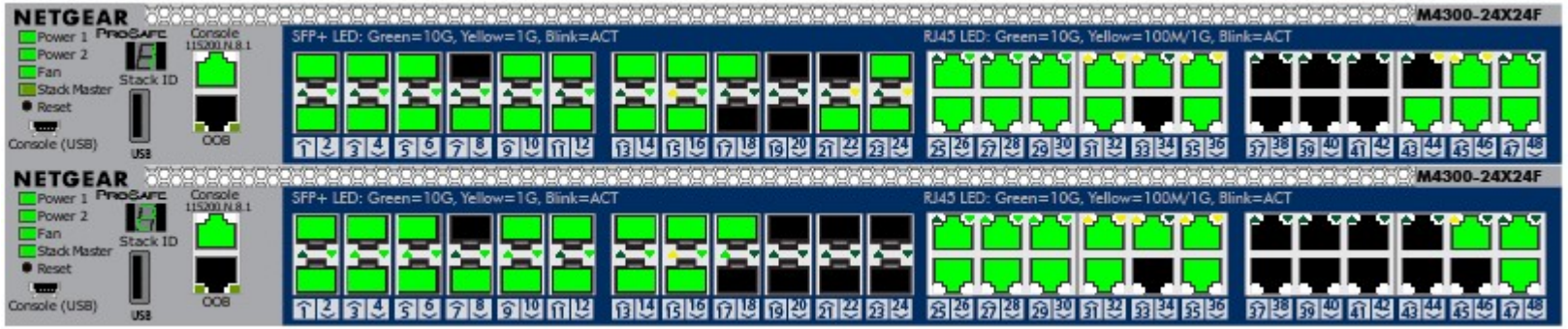
This email served to document the necessary process on upgrading the firmware on the Netgear switching stack to avoid simultaneous outages on the stack members. Stacked switches need to operate on the same firmware levels, so it's not possible to selectively restart members as they wouldn't be able to join the remaining stack and more importantly wouldn't forward traffic.

Herewith a view of the switches, for your reference:



The process essentially involves purposefully split braining the switching stack in the following order:

- Set both switches to load new firmware, at next boot
- Disconnect unit 2's LACP uplinks (2:14, 2:17, 2:35 & 2:45)
- Disconnect switch stack uplinks (2:47 & 2:48)
- Restart unit 2 and wait approximately 5 minutes for the device to boot and elect itself as stack master (split brain)
- Once connectivity via unit 2 has been confirmed, disconnect unit 1's LACP uplinks (1:14, 1:17, 1:35 & 1:45) and reconnect unit 2's LACP uplink (2:14, 2:17, 2:35 & 2:45)
- Restart unit 1 and wait approximately 5 minutes for the device to boot and elect itself as stack master (split brain)
- Once connectivity via unit 1 has been confirmed, reconnect the stack uplinks (2:47 & 2:48)
- The stack members will go through a master election cycle and unit 2 should restart
- Reconnect unit 1's LACP uplink (1:14, 1:17, 1:35 & 1:45) when unit 2 initiates it's restart

Summarised on premise actions:

- Disconnect 2:14, 2:17, 2:35, 2:45, 2:47 & 2:48
- Restart switch 2
- Disconnect 1:14, 1:17, 1:35 & 1:45 and reconnect 2:14, 2:17, 2:35 & 2:45 (never have 1:x and 2:x connected at the same time)
- Restart switch 1

- Reconnect 2:47 & 2:48
- Reconnect 1:14, 1:17, 1:35 & 1:45 when switch 2 initiates restart

Pre-requisites:

- Windows laptop with PuTTY, Netgear USB management cable and associated drivers preloaded (*)
- Start PuTTY with emulated COM port and 115200 bps baud rate with no flow control
- Ensure local admin credentials work and can be used by copy & pasting them
- Set switches to boot new firmware at next boot cycle

*: The Netgear USB cable itself doesn't load drivers, it needs to be connected to the switch. The drivers may need to be force installed:

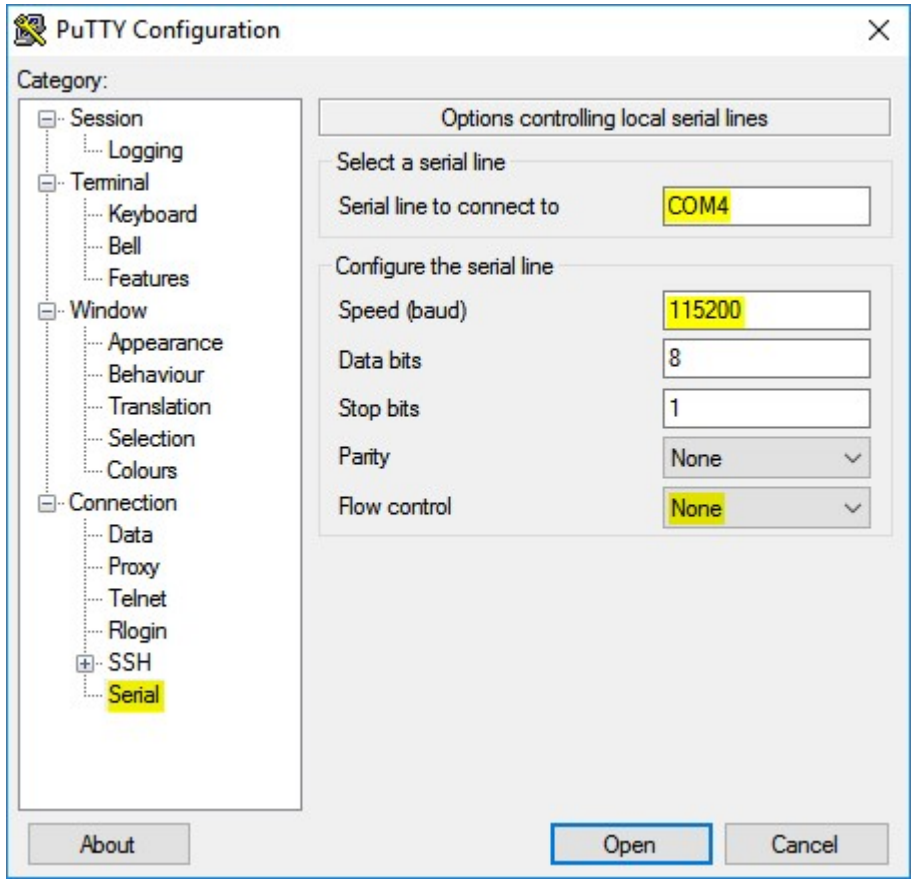
`W:\incoming\drivers\Networking\Netgear\M4300-24X24F\USB interface driver\CP210x_Windows_Drivers v6.7.4.261`

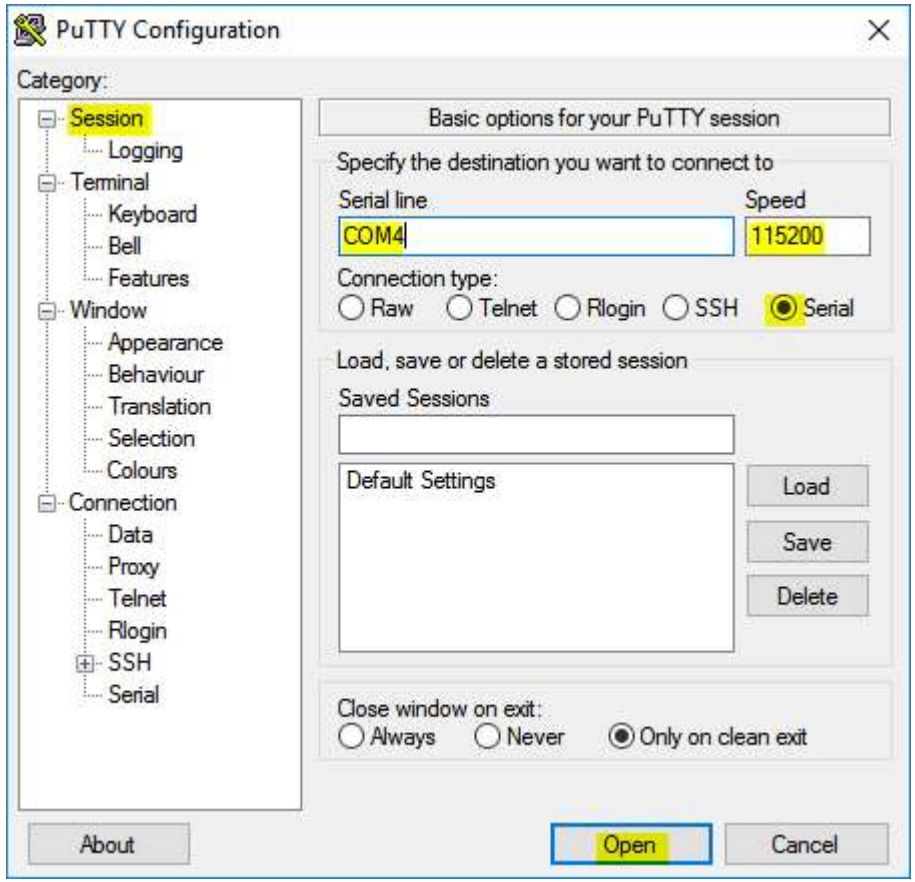
Force install:

- Update driver
- Browse my computer
- Let me pick from a list of device drivers on my computer
- Ports (COM & LPT)
- Have Disk
- Enter path
- Select 'Silicon Labs CP210x USB to UART Bridge'
- Record the 'COMx' port name that appears next to the drive once it's installed and active

Running PuTTY in serial mode:

- <win>-R
- putty


PuTTY Configuration
Category:
Session
Logging
Terminal
Keyboard
Bell
Features
Window
Appearance
Behaviour
Translation
Selection
Colours
Connection
Data
Proxy
Telnet
Rlogin
SSH
Serial
Options controlling local serial lines
Select a serial line
Serial line to connect to
COM4
Configure the serial line
Speed (baud)
115200
Data bits
8
Stop bits
1
Parity
None
Flow control
None
About
Open
Cancel



NB: Please prepare the laptop by connecting it to the Netgear switches in my office whilst they are here!