



# Upgrading MDF / IDF Switches

Advanced Dre Training

# Course Objectives



After this course you will know how to log into and upload updated firmware and software to the managed DRE's MDF and IDF switches.



You will be able to view a snapshot of the current configuration to see the function of each port



You will understand the steps that need to be taken to make sure that the new settings are saved into the switch and are not lost on a power cycle.

# What you need

In order to connect to the MDF / IDF switches you will need a few different things.

- The first thing you will need is 2 Ethernet cables.
- An Ethernet to Serial adapter.
- A Serial to USB adapter





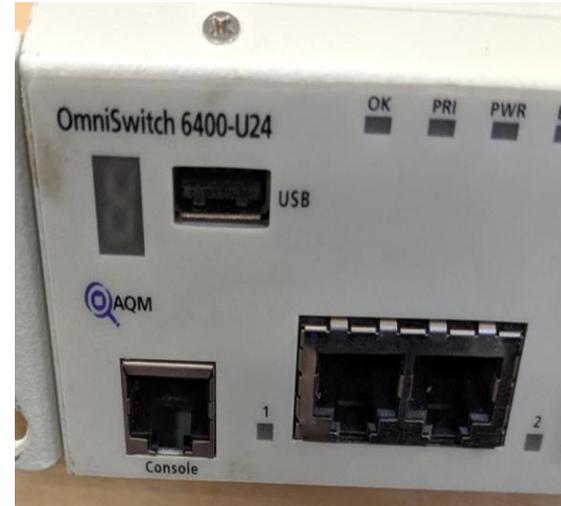
## What you need cont.

---

- You also need a USB cable
- Once you have these items you will be able to connect them to form the cable you will be using to connect to the console port on the MDF or IDF switch.

# Connecting to the switch

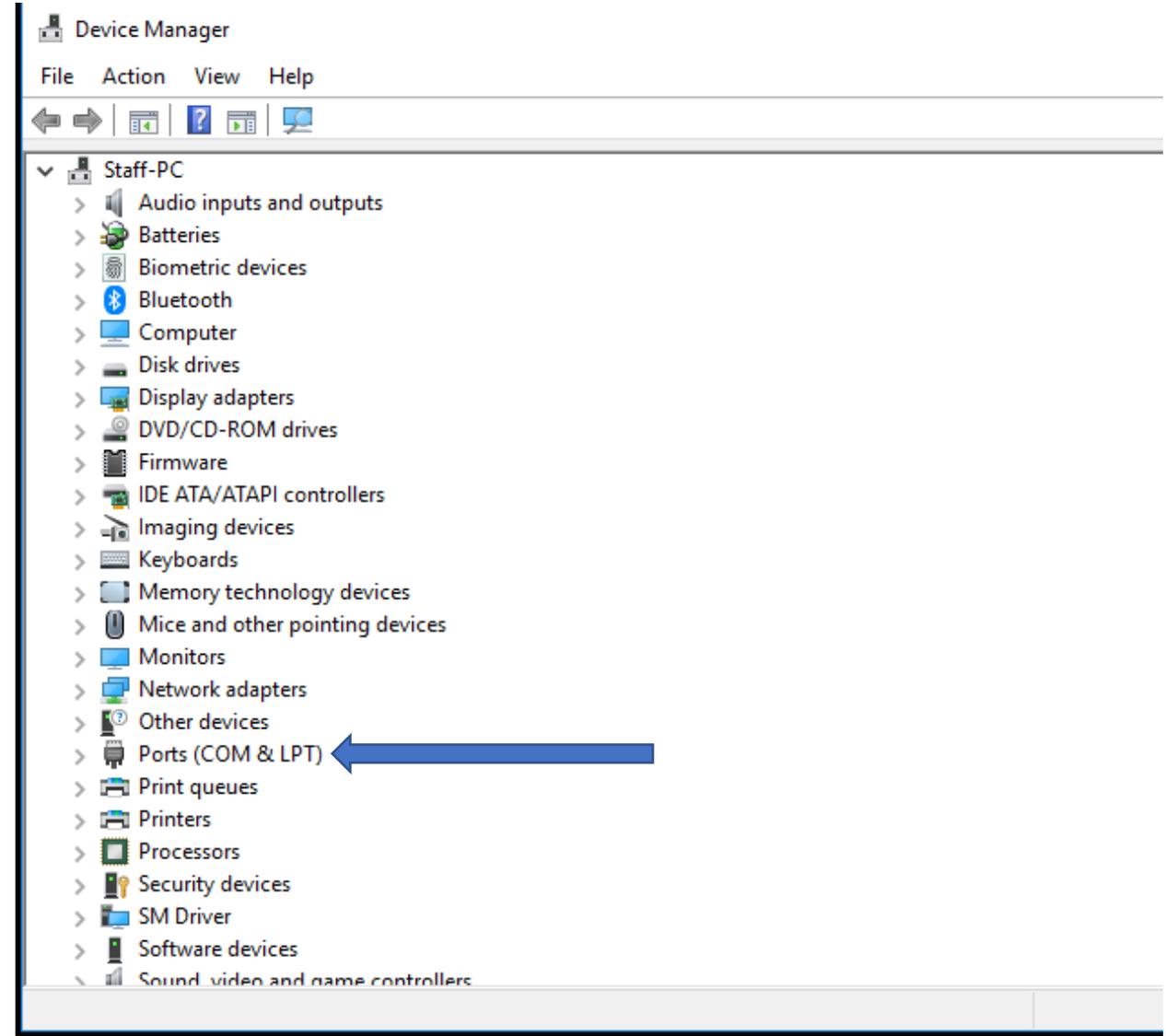
- After you have the parts that you need you will can now connect to the Console port on the switch you are working on.
- You will connect the Ethernet side to the Console port on the switch and the USB side to your laptop.



# Identify the COM port

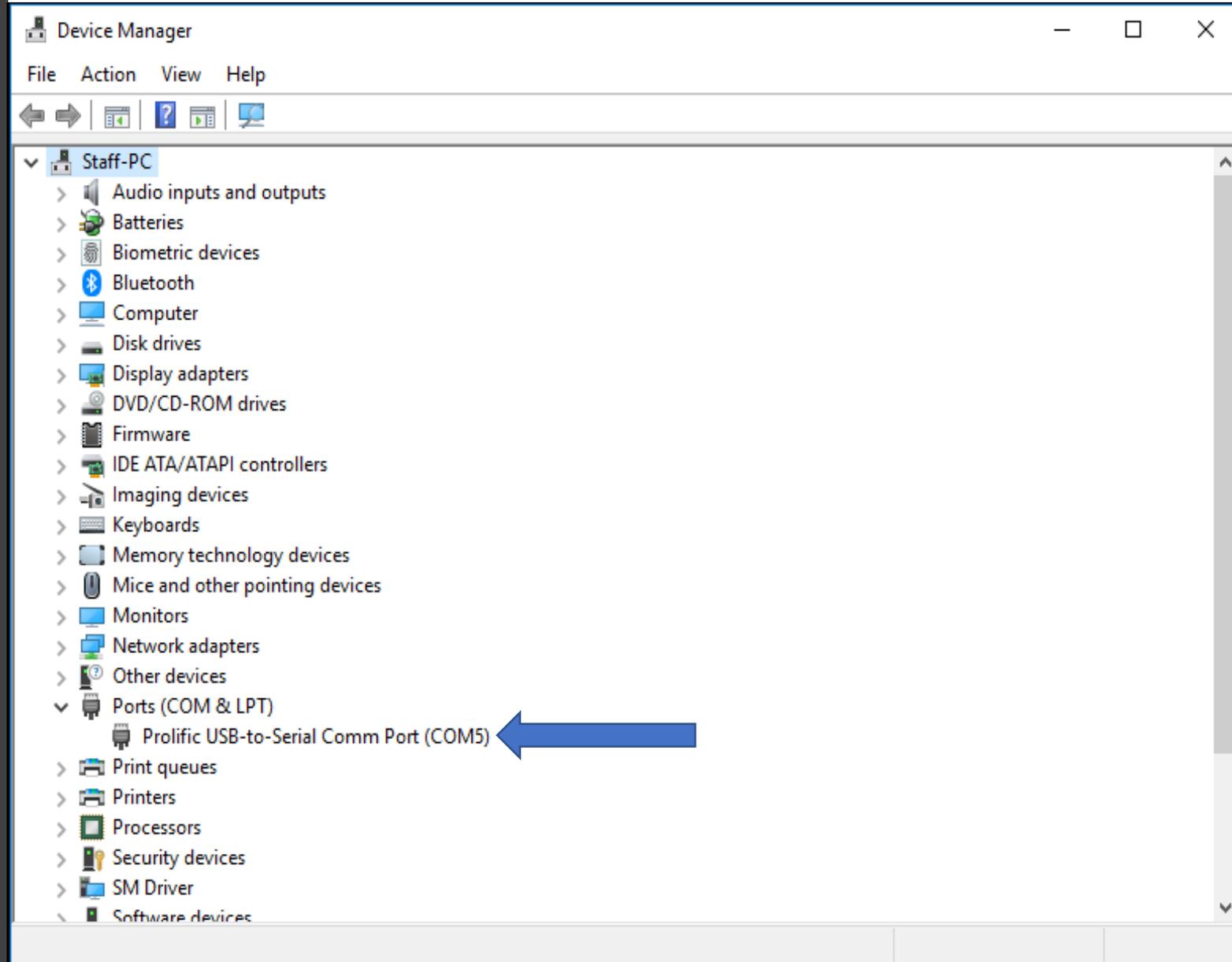
Once you are connected to the switch you will need to identify which com port your computer has assigned the cable.

- You can do this by using the search bar to locate your device manager and opening your device manager.
- Once the device manager is open you should see something like this. More importantly you should have a line titled “Ports (COM & LPT)”



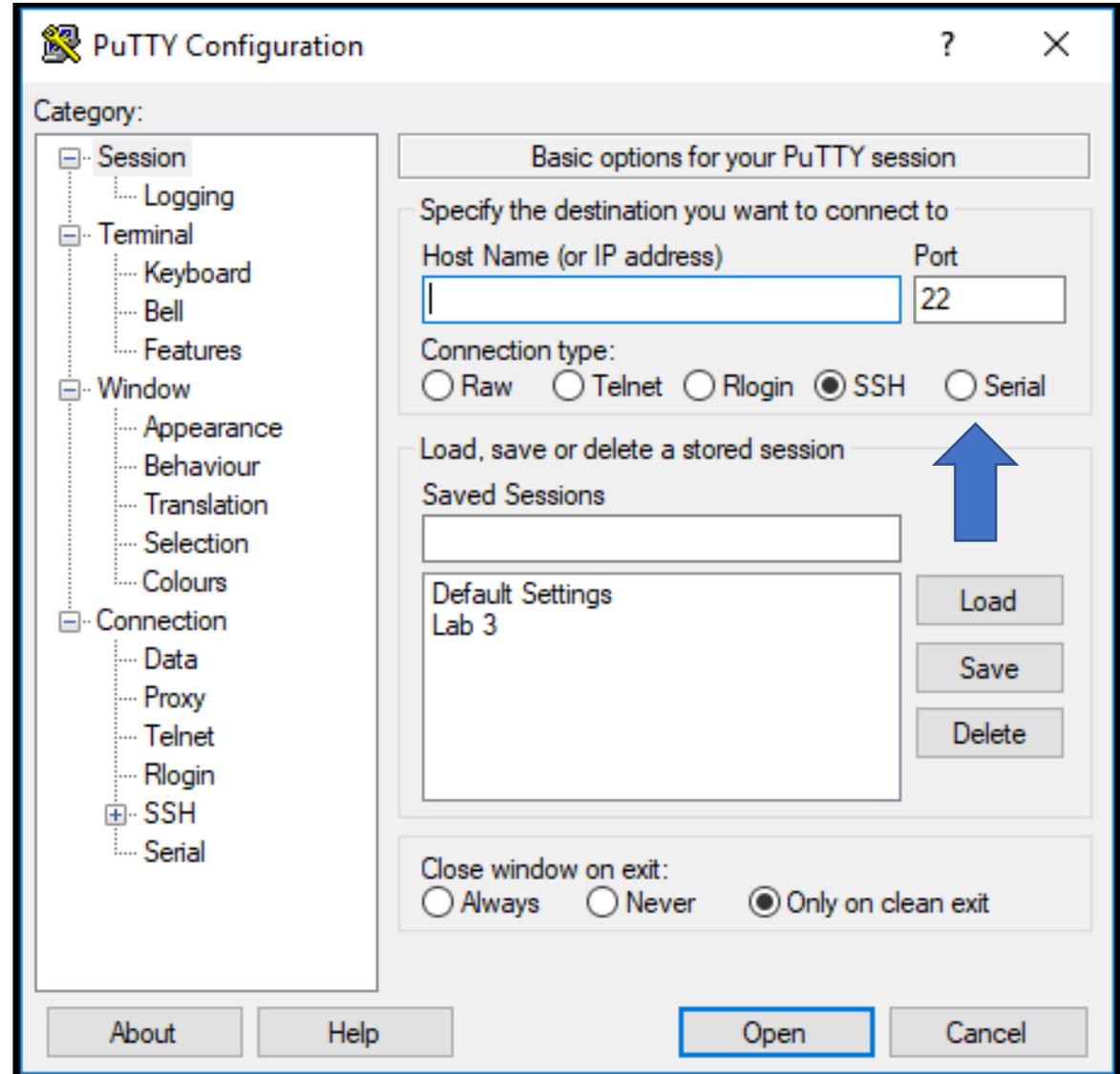
## Identify the COM port cont.

- Once you have located the “Ports” Field click on it and it should expand and show you the COM number that your connection has been assigned.
- In my case the COM port that has been assigned is COM5



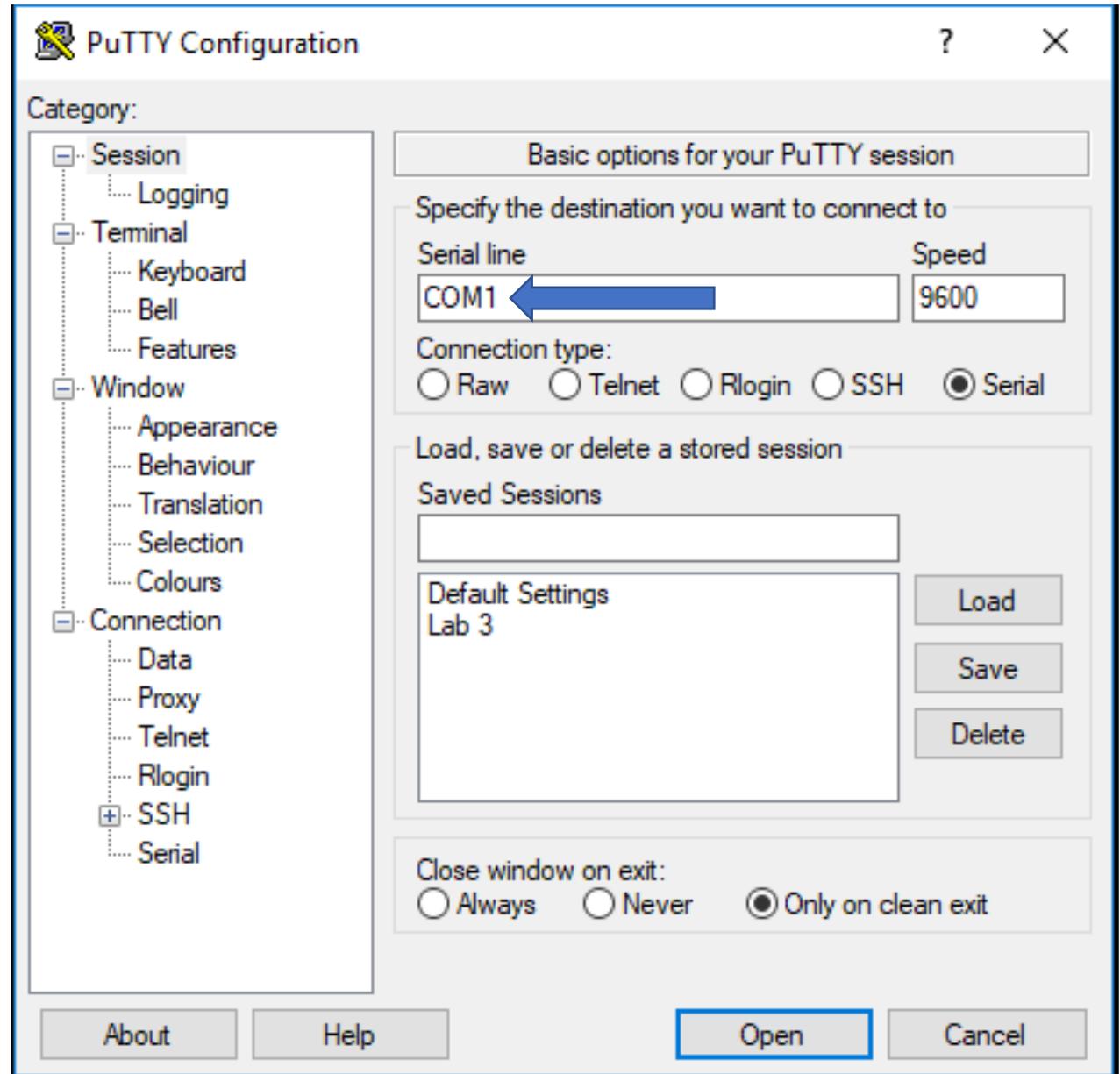
# Putty

- Once you know which Com port your connection in on you can open Putty.
- Once Putty has launched you will need to select the Serial bubble.



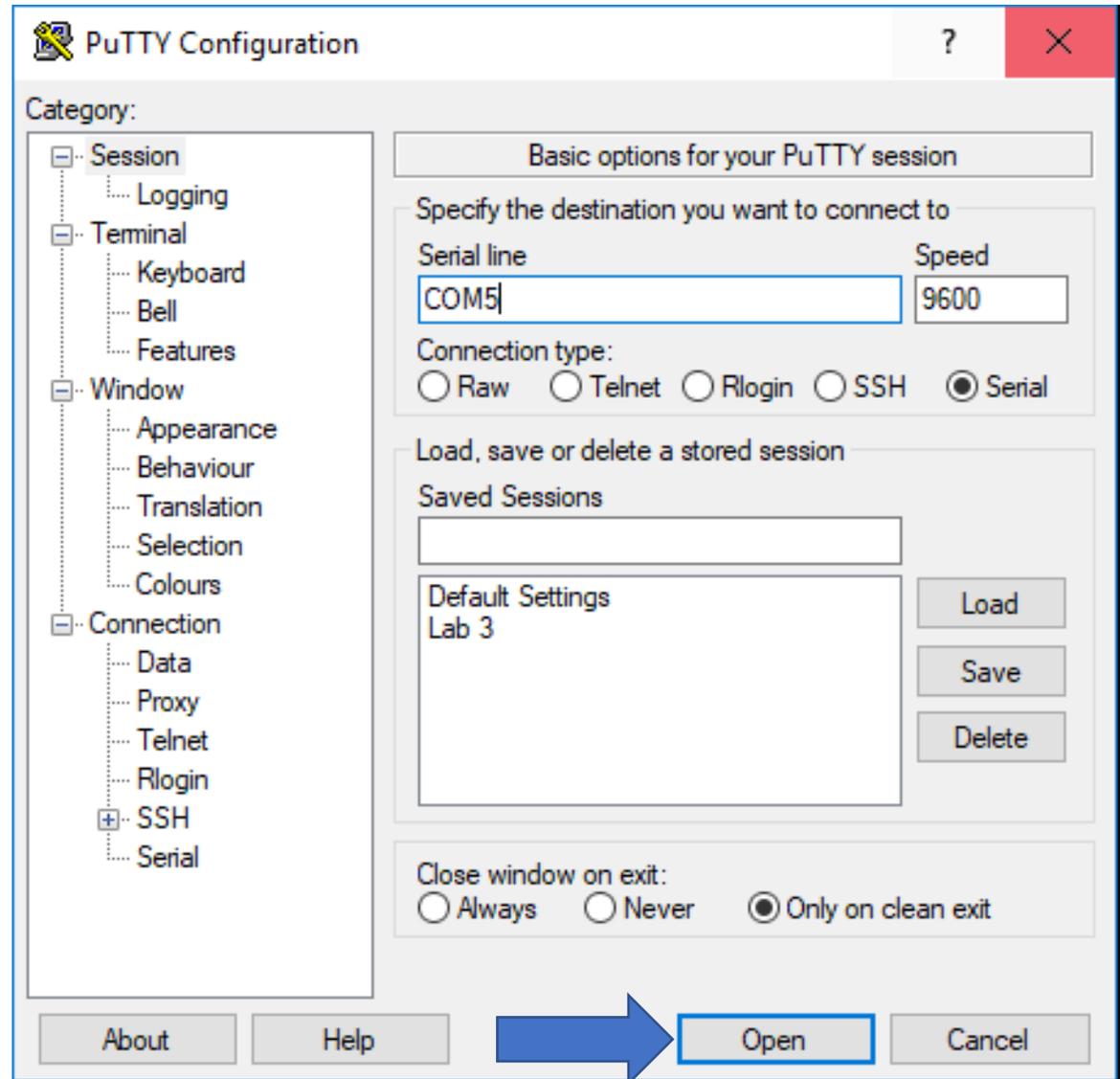
# Putty cont.

Once you have selected the “Serial” bubble you will need to change the serial line to reflect the COM port that the cable has been assigned



## Putty cont.

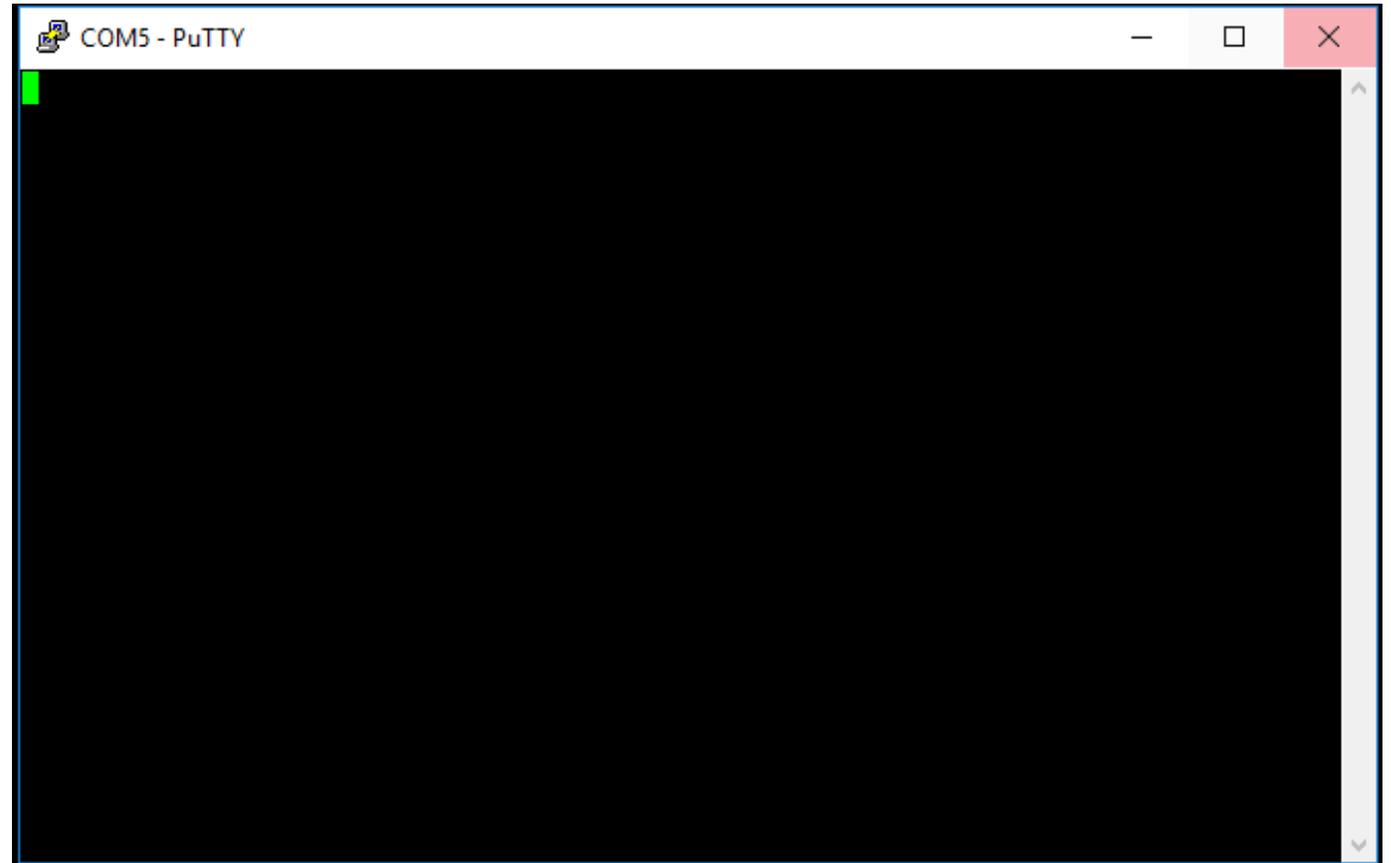
- Once you have changed the serial line to the correct Com port you will click open to open a terminal that will be monitoring the chosen port.



# Putty cont.

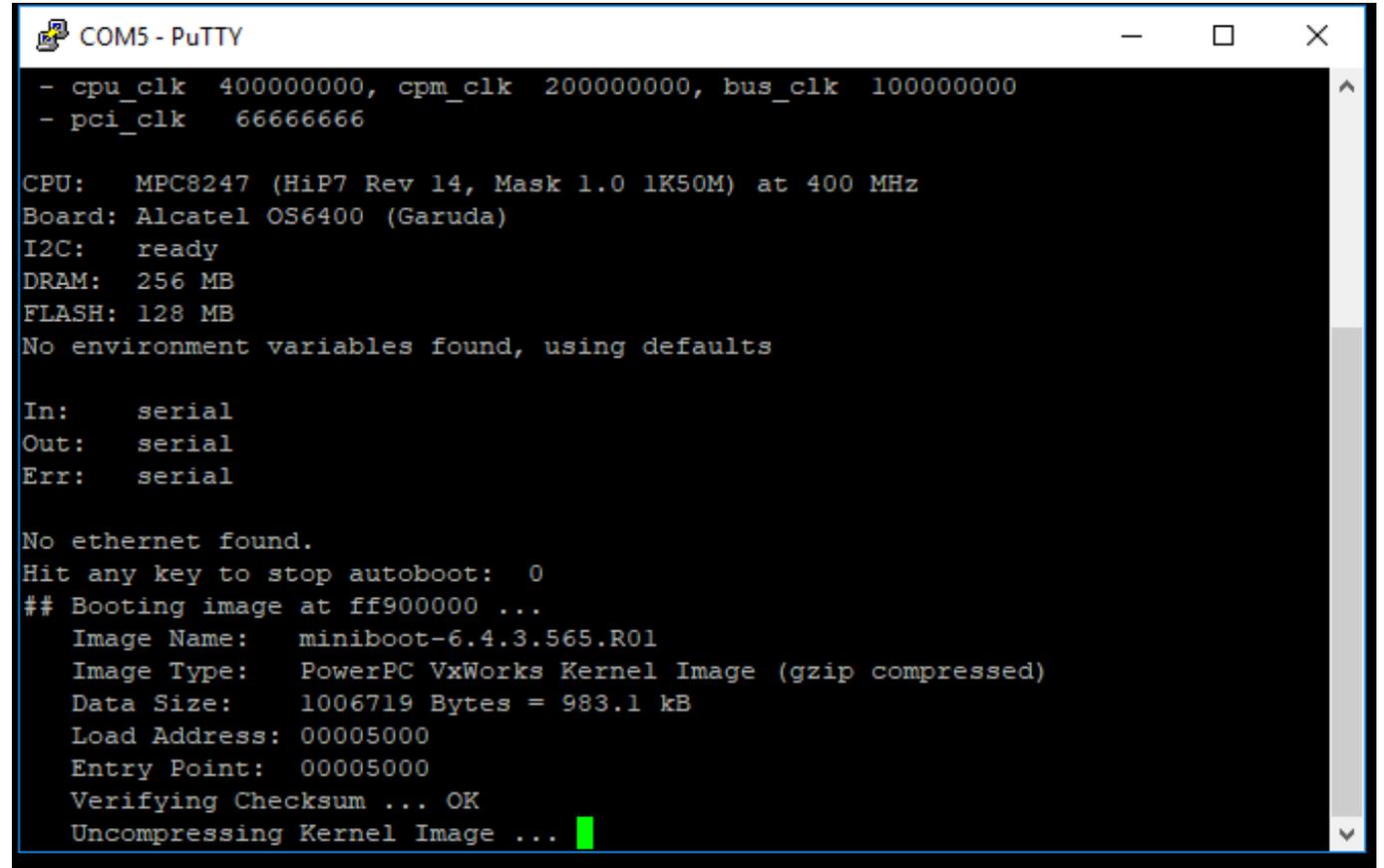
---

Once you click open a blank terminal should open. You are now ready to power on the switch.



# Powering on

- Once you have powered on your switch you should begin to see lines of text appear in your Putty terminal showing the boot sequence of the switch you are working on.



```
COM5 - PuTTY
- cpu_clk 400000000, cpm_clk 200000000, bus_clk 100000000
- pci_clk 66666666

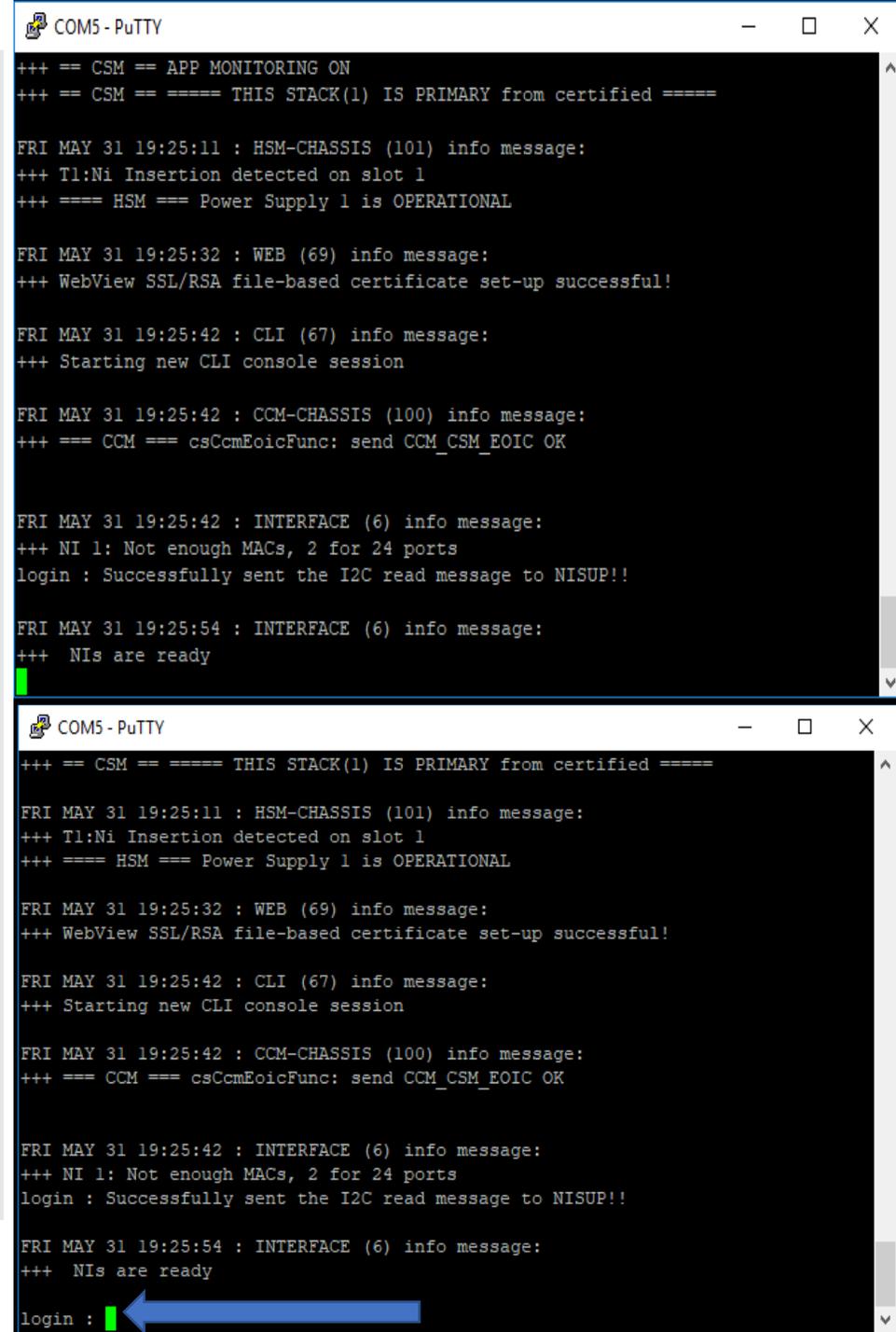
CPU: MPC8247 (HiP7 Rev 14, Mask 1.0 1K50M) at 400 MHz
Board: Alcatel OS6400 (Garuda)
I2C: ready
DRAM: 256 MB
FLASH: 128 MB
No environment variables found, using defaults

In: serial
Out: serial
Err: serial

No ethernet found.
Hit any key to stop autoboot: 0
## Booting image at ff900000 ...
Image Name:   miniboot-6.4.3.565.R01
Image Type:   PowerPC VxWorks Kernel Image (gzip compressed)
Data Size:    1006719 Bytes = 983.1 kB
Load Address: 00005000
Entry Point:  00005000
Verifying Checksum ... OK
Uncompressing Kernel Image ... █
```

# Finished Boot

- Once the switch has finished booting you should have a screen similar to this.
- Press enter and you should be prompted with login line.



```
COM5 - PuTTY
+++ == CSM == APP MONITORING ON
+++ == CSM == ===== THIS STACK(1) IS PRIMARY from certified =====

FRI MAY 31 19:25:11 : HSM-CHASSIS (101) info message:
+++ Tl:Ni Insertion detected on slot 1
+++ ===== HSM === Power Supply 1 is OPERATIONAL

FRI MAY 31 19:25:32 : WEB (69) info message:
+++ WebView SSL/RSA file-based certificate set-up successful!

FRI MAY 31 19:25:42 : CLI (67) info message:
+++ Starting new CLI console session

FRI MAY 31 19:25:42 : CCM-CHASSIS (100) info message:
+++ === CCM === csCcmEoicFunc: send CCM_CSM_EOIC OK

FRI MAY 31 19:25:42 : INTERFACE (6) info message:
+++ NI 1: Not enough MACs, 2 for 24 ports
login : Successfully sent the I2C read message to NISUP!!

FRI MAY 31 19:25:54 : INTERFACE (6) info message:
+++ NIs are ready

COM5 - PuTTY
+++ == CSM == ===== THIS STACK(1) IS PRIMARY from certified =====

FRI MAY 31 19:25:11 : HSM-CHASSIS (101) info message:
+++ Tl:Ni Insertion detected on slot 1
+++ ===== HSM === Power Supply 1 is OPERATIONAL

FRI MAY 31 19:25:32 : WEB (69) info message:
+++ WebView SSL/RSA file-based certificate set-up successful!

FRI MAY 31 19:25:42 : CLI (67) info message:
+++ Starting new CLI console session

FRI MAY 31 19:25:42 : CCM-CHASSIS (100) info message:
+++ === CCM === csCcmEoicFunc: send CCM_CSM_EOIC OK

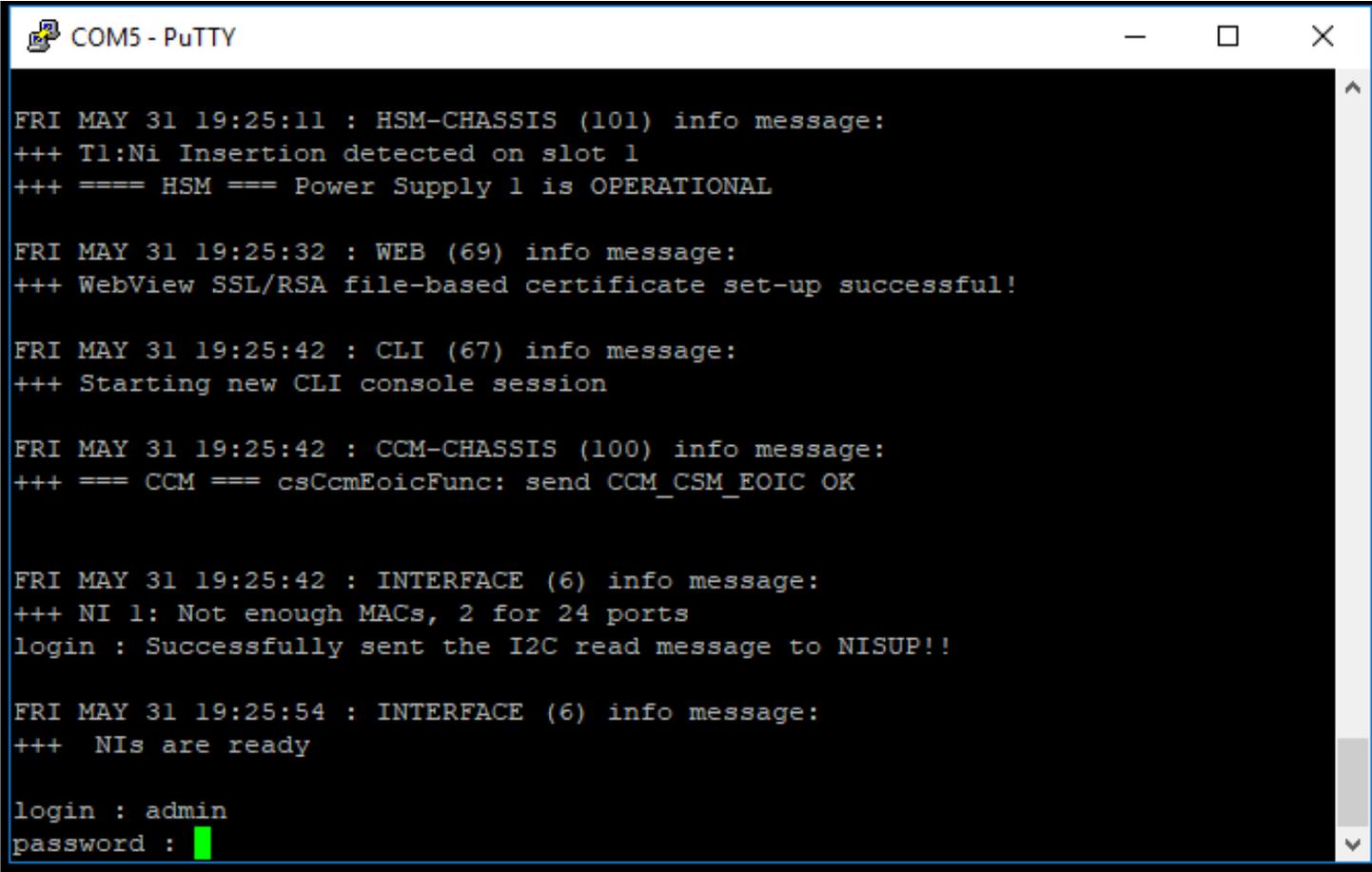
FRI MAY 31 19:25:42 : INTERFACE (6) info message:
+++ NI 1: Not enough MACs, 2 for 24 ports
login : Successfully sent the I2C read message to NISUP!!

FRI MAY 31 19:25:54 : INTERFACE (6) info message:
+++ NIs are ready

login : 
```

# Switch Login

- Once you have the Login line enter the user name “admin” and press enter.
- You will now be asked for a password. The password is “switch” and will not appear as you type it.



```
COM5 - PuTTY
FRI MAY 31 19:25:11 : HSM-CHASSIS (101) info message:
+++ Tl:Ni Insertion detected on slot 1
+++ ==== HSM ==== Power Supply 1 is OPERATIONAL

FRI MAY 31 19:25:32 : WEB (69) info message:
+++ WebView SSL/RSA file-based certificate set-up successful!

FRI MAY 31 19:25:42 : CLI (67) info message:
+++ Starting new CLI console session

FRI MAY 31 19:25:42 : CCM-CHASSIS (100) info message:
+++ === CCM === csCcmEoicFunc: send CCM_CSM_EOIC OK

FRI MAY 31 19:25:42 : INTERFACE (6) info message:
+++ NI 1: Not enough MACs, 2 for 24 ports
login : Successfully sent the I2C read message to NISUP!!

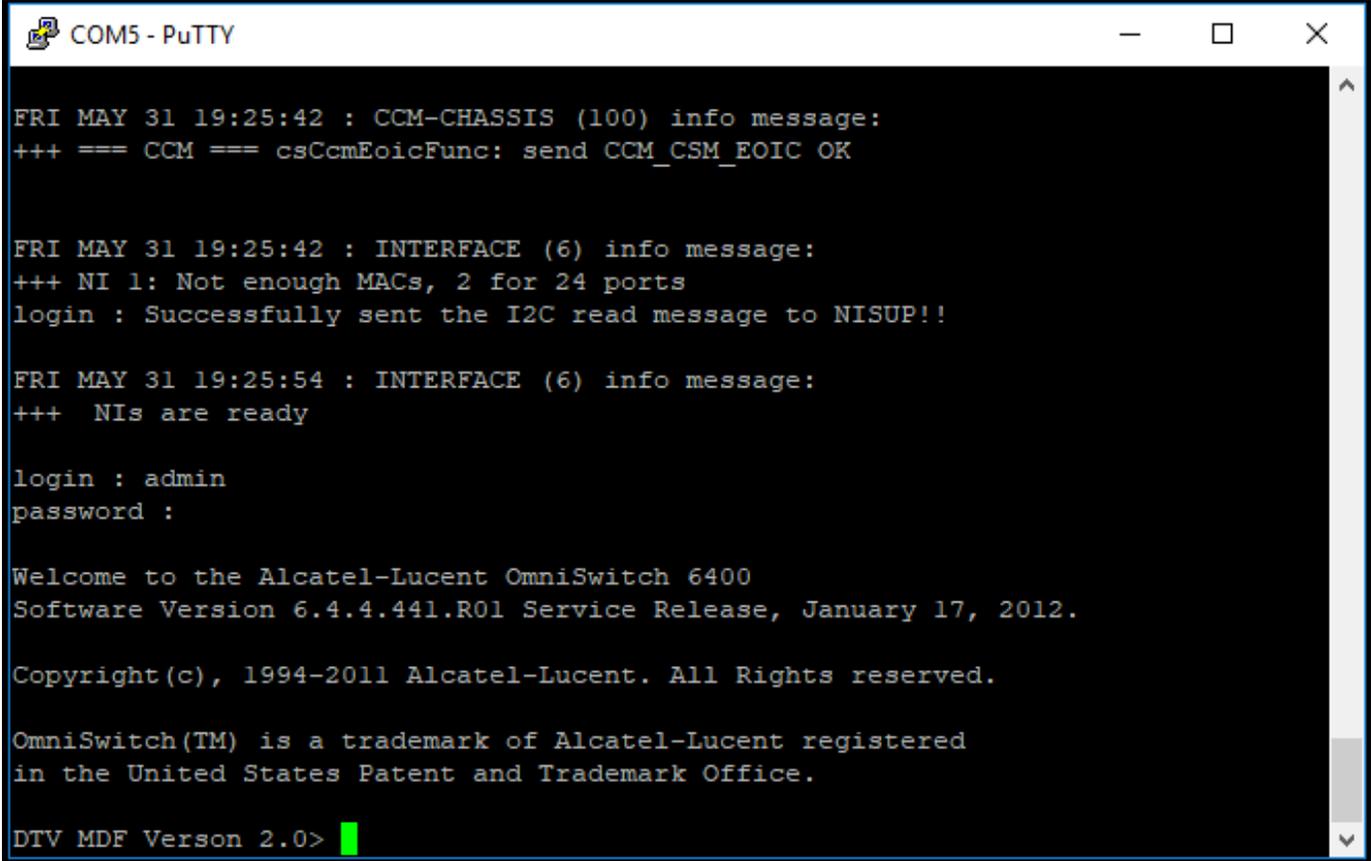
FRI MAY 31 19:25:54 : INTERFACE (6) info message:
+++ NIs are ready

login : admin
password : █
```

# Logged in

---

Once you have typed the password press enter you should get something like this



```
COM5 - PuTTY
FRI MAY 31 19:25:42 : CCM-CHASSIS (100) info message:
+++ === CCM === csCcmEoicFunc: send CCM_CSM_EOIC OK

FRI MAY 31 19:25:42 : INTERFACE (6) info message:
+++ NI 1: Not enough MACs, 2 for 24 ports
login : Successfully sent the I2C read message to NISUP!!

FRI MAY 31 19:25:54 : INTERFACE (6) info message:
+++ NIs are ready

login : admin
password :

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.4.441.R01 Service Release, January 17, 2012.

Copyright(c), 1994-2011 Alcatel-Lucent. All Rights reserved.

OmniSwitch(TM) is a trademark of Alcatel-Lucent registered
in the United States Patent and Trademark Office.

DTV MDF Verson 2.0> █
```

Once you have logged in you can check the current version of the switch here.

As you can see this switch is currently on 2.0

## Checking the software version

```
COM5 - PuTTY
FRI MAY 31 19:25:42 : CCM-CHASSIS (100) info message:
+++ === CCM === csCcmEoicFunc: send CCM_CSM_EOIC OK

FRI MAY 31 19:25:42 : INTERFACE (6) info message:
+++ NI 1: Not enough MACs, 2 for 24 ports
login : Successfully sent the I2C read message to NISUP!!

FRI MAY 31 19:25:54 : INTERFACE (6) info message:
+++ NIs are ready

login : admin
password :

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.4.441.R01 Service Release, January 17, 2012.

Copyright (c), 1994-2011 Alcatel-Lucent. All Rights reserved.

OmniSwitch(TM) is a trademark of Alcatel-Lucent registered
in the United States Patent and Trademark Office.

DTV MDF Verson 2.0>
```

```
COM5 - PuTTY
TUE JUN 11 13:29:40 : INTERFACE (6) info message:
+++ NI 1: Not enough MACs, 2 for 24 ports
login : admin
password :

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.4.441.R01 Service Release, January 17, 2012.

Copyright(c), 1994-2011 Alcatel-Lucent. All Rights reserved.

OmniSwitch(TM) is a trademark of Alcatel-Lucent registered
in the United States Patent and Trademark Office.

DTV MDF Verson 2.0> Successfully sent the I2C read message to NISUP!!

TUE JUN 11 13:29:52 : INTERFACE (6) info message:
+++ NIs are ready

DTV MDF Verson 2.0> pwd
/flash
```

- After you are logged in you will need to check the Present Working Directory. You can do this by typing in the command “pwd” and pressing enter.
- Here we can see that we are currently in the /flash directory. We need to navigate to the /flash/working directory

Check the Present Working Directory

```
COM5 - PuTTY
login : admin
password :

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.4.441.R01 Service Release, January 17, 2012.

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DTV MDF Verson 2.0> Successfully sent the I2C read message to NISUP!!

TUE JUN 11 13:29:52 : INTERFACE (6) info message:
+++ NIs are ready

DTV MDF Verson 2.0> pwd
/flash

DTV MDF Verson 2.0> cd /flash/working
DTV MDF Verson 2.0> pwd
/flash/working
```

- In order to get from the /flash directory to the /flash/working directory we will need to enter the command “cd /flash/working” and press enter.
- After you do this you will just get a fresh command line. So once again enter the command “pwd” and verify that you are now in the /flash/working directory.

## Changing Directories

```
COM5 - PuTTY
Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.4.441.R01 Service Release, January 17, 2012.

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DTV MDF Verson 2.0> Successfully sent the I2C read message to NISUP!!

TUE JUN 11 13:29:52 : INTERFACE (6) info message:
+++ NIs are ready

DTV MDF Verson 2.0> pwd
/flash

DTV MDF Verson 2.0> cd /flash/working
DTV MDF Verson 2.0> pwd
/flash/working

DTV MDF Verson 2.0> Vlan 1001 no 802.1q 1/1
DTV MDF Verson 2.0> vlan 2000 no 802.1q 1/1
DTV MDF Verson 2.0> █
```

# Remove Vlan Tagging

- We will now need to remove vlan tagging from port 1 of the switch in order to be able to connect via an ethernet cable. To do this you will need to enter the command “vlan 1001 no 802.1q 1/1” and press enter.
- Now you will need to enter the command “vlan 2000 no 802.1q 1/1” and press enter.

You can get an IP address assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address:

10 . 129 . 8 . 25

Subnet mask:

255 . 255 . 0 . 0

Default gateway:

. . .

Obtain DNS server address automatically

Use the following DNS server addresses:

## Setting your IPv4 settings

- You will now need to connect your laptops ethernet port to port 1 on the switch. After you have connected you will need to navigate to your IPv4 settings and set the following values.
- IP Address: 10.129.8.25
- Subnet mask: 255.255.0.0

```
COM5 - PuTTY
Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.4.441.R01 Service Release, January 17, 2012.

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in the United States Patent and Trademark Office.

DTV MDF Verson 2.0> Successfully sent the I2C read message to NISUP!!

TUE JUN 11 13:29:52 : INTERFACE (6) info message:
+++ NIs are ready

DTV MDF Verson 2.0> pwd
/flash

DTV MDF Verson 2.0> cd /flash/working
DTV MDF Verson 2.0> pwd
/flash/working

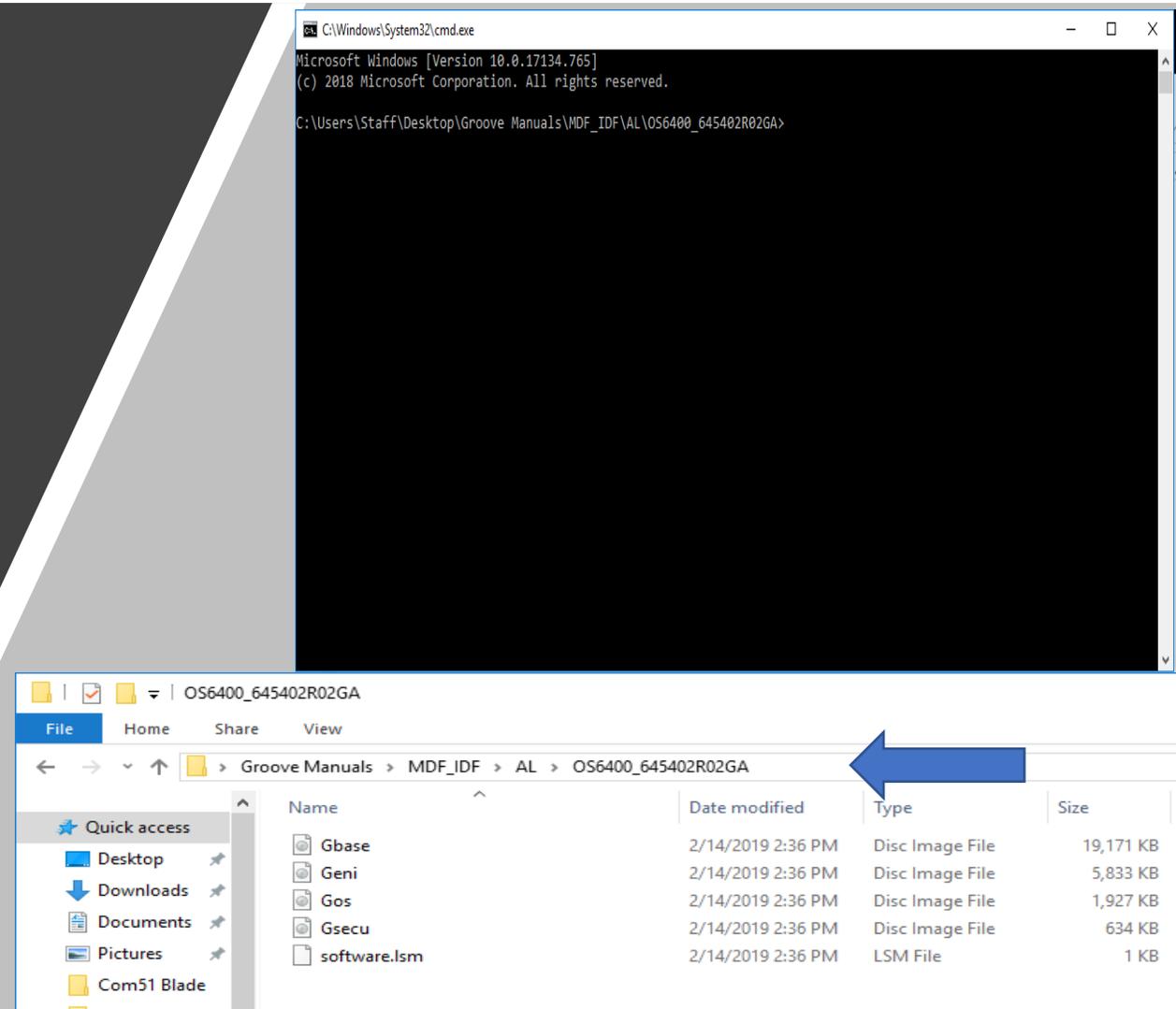
DTV MDF Verson 2.0> Vlan 1001 no 802.1q 1/1
DTV MDF Verson 2.0> vlan 2000 no 802.1q 1/1
DTV MDF Verson 2.0> vlan 1001 port default 1/1
DTV MDF Verson 2.0> █
```

- Now we need to allow your laptop to FTP to the switch in order to send the updated files. To do this you will need to type in the following command. “vlan 1001 port default 1/1” and press enter.

Allowing FTP from your laptop

# Navigate to the update file

- On your laptop navigate to the folder that contains the update files for the switch.
- Once there you will need to enter “cmd” in the directory bar and press enter to open a command prompt that starts in the current directory.



```
C:\Windows\System32\cmd.exe - ftp 10.129.8.1
Microsoft Windows [Version 10.0.17134.765]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Staff\Desktop\Groove Manuals\MDF_IDF\AL\OS6400_645402R02GA>ftp 10.129.8.1
Connected to 10.129.8.1.
220 FTP server ready
530 USER and PASS required
User (10.129.8.1:(none)):
```



## Create an FTP session

- Use the command “ftp 10.129.8.1” to create an FTP connection to the MDF switch. If you are connecting to a different device, you would use the IP address of the given device.

## Login with the FTP connection

- After you have created the FTP connection you will need to login using the same username and password used before. The username is “admin” and the password is “switch”
- Like before when you enter the password nothing will show on the line.
- Once you are logged in you will have a ftp command line show at the bottom.

C:\Windows\System32\cmd.exe - ftp 10.129.8.1

```
Microsoft Windows [Version 10.0.17134.765]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Staff\Desktop\Groove Manuals\MDF_IDF\AL\OS6400_645402R02GA>ftp 10.129.8.1
Connected to 10.129.8.1.
220 FTP server ready
530 USER and PASS required
User (10.129.8.1:(none)): admin
331 Password required
Password:
230-

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.4.441.R01 Service Release, January 17, 2012.

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230
ftp>
```

```
C:\Windows\System32\cmd.exe - ftp 10.129.8.1
Microsoft Windows [Version 10.0.17134.765]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Staff\Desktop\Groove Manuals\MDF_IDF\AL\OS6400_645402R02GA>ftp 10.129.8.1
Connected to 10.129.8.1.
220 FTP server ready
530 USER and PASS required
User (10.129.8.1:(none)): admin
331 Password required
Password:
230-

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.4.441.R01 Service Release, January 17, 2012.

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230
ftp> pwd
257 Current directory is "/flash/working"
ftp>
```



# Check the PWD

- Once again you will need to use the command “pwd” to check the present working directory if the PWD is /flash/working then no further action is needed. If however your PWD is /flash then you will need to enter the command “cd /flash/working” and press enter.

# Set your FTP to Binary

- Once you have verified that you are in the correct PWD you will need to change the FTP into binary mode. To do this simply enter the command "bin" and press enter. You should get a confirmation that you have changed to binary mode.

```
C:\Windows\System32\cmd.exe - ftp 10.129.8.1
Microsoft Windows [Version 10.0.17134.765]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Staff\Desktop\Groove Manuals\MDF_IDF\AL\OS6400_645402R02GA>ftp 10.129.8.1
Connected to 10.129.8.1.
220 FTP server ready
530 USER and PASS required
User (10.129.8.1:(none)): admin
331 Password required
Password:
230-

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.4.441.R01 Service Release, January 17, 2012.

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230
ftp> pwd
257 Current directory is "/flash/working"
ftp> bin
200 Type set to I, binary mode ←
ftp>
```

## Transfer the updates

```
C:\Windows\System32\cmd.exe - ftp 10.129.8.1

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230
ftp> pwd
257 Current directory is "/flash/working"
ftp> bin
200 Type set to I, binary mode
ftp> put Gbase.img
200 Port set okay
150 Opening BINARY mode data connection
226 Transfer complete
ftp: 19630840 bytes sent in 160.79Seconds 122.09Kbytes/sec.
ftp>
```

- Now you will need to transfer the updated file to the switch. You will do this by entering the command “put (file name)” in the example of this MDF switch we would use the command “put Gbase.img” and press enter.
- It is important to note that once you have begun the transfer do not interrupt it until it has completed. Once completed you will get a transfer size and transfer time line.
- After you receive the transfer size and time you can transfer the next file.

# Finish transferring all updates

- Once you have finished transferring all updates you are ready to end the FTP session.

```
C:\Windows\System32\cmd.exe - ftp 10.129.8.1
OmniSwitch(TM) is a trademark of Alcatel-Lucent registered
in the United States Patent and Trademark Office.

230
ftp> pwd
257 Current directory is "/flash/working"
ftp> bin
200 Type set to I, binary mode
ftp> put Gbase.img
200 Port set okay
150 Opening BINARY mode data connection
226 Transfer complete
ftp: 19630840 bytes sent in 160.79Seconds 122.09Kbytes/sec.
ftp> put Geni.img
200 Port set okay
150 Opening BINARY mode data connection
226 Transfer complete
ftp: 5972647 bytes sent in 48.50Seconds 123.15Kbytes/sec.
ftp> put Gos.img
200 Port set okay
150 Opening BINARY mode data connection
226 Transfer complete
ftp: 1973103 bytes sent in 15.87Seconds 124.35Kbytes/sec.
ftp> put Gsecu.img
200 Port set okay
150 Opening BINARY mode data connection
226 Transfer complete
ftp: 649038 bytes sent in 5.86Seconds 110.68Kbytes/sec.
ftp>
```

C:\Windows\System32\cmd.exe

```
230
ftp> pwd
257 Current directory is "/flash/working"
ftp> bin
200 Type set to I, binary mode
ftp> put Gbase.img
200 Port set okay
150 Opening BINARY mode data connection
226 Transfer complete
ftp: 19630840 bytes sent in 160.79Seconds 122.09Kbytes/sec.
ftp> put Geni.img
200 Port set okay
150 Opening BINARY mode data connection
226 Transfer complete
ftp: 5972647 bytes sent in 48.50Seconds 123.15Kbytes/sec.
ftp> put Gos.img
200 Port set okay
150 Opening BINARY mode data connection
226 Transfer complete
ftp: 1973103 bytes sent in 15.87Seconds 124.35Kbytes/sec.
ftp> put Gsecu.img
200 Port set okay
150 Opening BINARY mode data connection
226 Transfer complete
ftp: 649038 bytes sent in 5.86Seconds 110.68Kbytes/sec.
ftp> bye
221 Bye...see you later ←
```

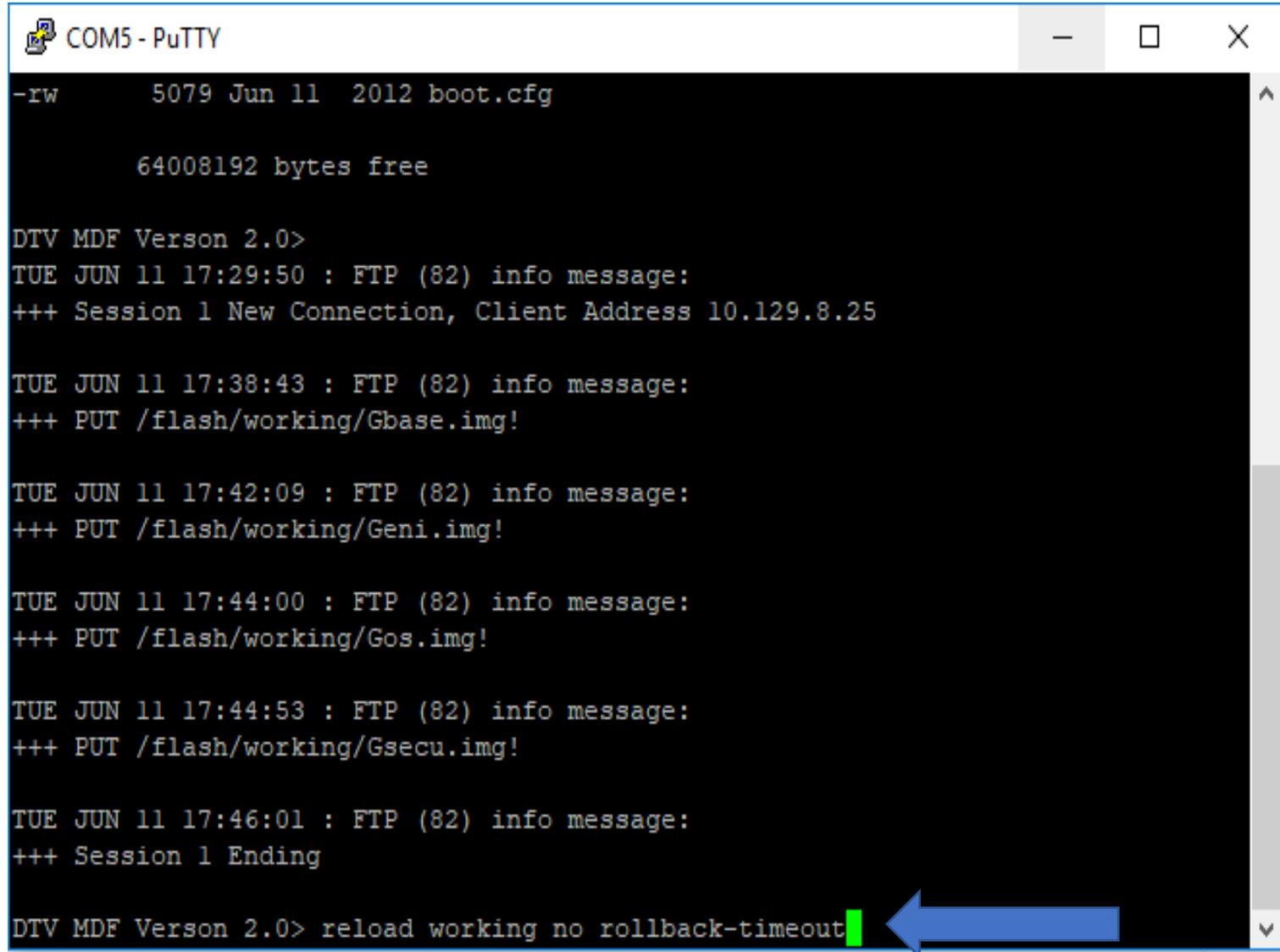
C:\Users\Staff\Desktop\Groove Manuals\MDF\_IDF\AL\OS6400\_645402R02GA>

- Once all files have been transferred you can end the FTP session by simply typing the command “bye” and pressing enter.

# Ending the FTP session

## Restarting the switch

- After you have closed the FTP session you will need to go back to the Putty console connection.
- Enter the command “reload working no rollback-timeout” and press enter. The switch will now restart.



```
COM5 - PuTTY
-rw      5079 Jun 11  2012 boot.cfg

      64008192 bytes free

DTV MDF Verson 2.0>
TUE JUN 11 17:29:50 : FTP (82) info message:
+++ Session 1 New Connection, Client Address 10.129.8.25

TUE JUN 11 17:38:43 : FTP (82) info message:
+++ PUT /flash/working/Gbase.img!

TUE JUN 11 17:42:09 : FTP (82) info message:
+++ PUT /flash/working/Geni.img!

TUE JUN 11 17:44:00 : FTP (82) info message:
+++ PUT /flash/working/Gos.img!

TUE JUN 11 17:44:53 : FTP (82) info message:
+++ PUT /flash/working/Gsecu.img!

TUE JUN 11 17:46:01 : FTP (82) info message:
+++ Session 1 Ending

DTV MDF Verson 2.0> reload working no rollback-timeout
```

```
Successfully sent the I2C read message to NISUP!!

TUE JUN 11 17:50:39 : INTERFACE (6) info message:
+++ NIs are ready

login : admin
password :

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.5.402.R02 GA, December 24, 2012.

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OmniSwitch(TM) is a trademark of Alcatel-Lucent registered
in the United States Patent and Trademark Office.

DTV MDF Verson 2.0> copy working certified ←
TUE JUN 11 17:52:02 : CSM-CHASSIS (103) info message:
+++ == CSM == CERTIFYing software process started
+++ == CSM == Setting CERTIFY Timeout for 800 seconds

from /flash/working to /flash/certified
Copying Gbase.img
```

# Copy working certified

- After the switch has finished restarting you will need to log back in using the username “admin” and the password “switch”
- Once logged in type the command “copy working certified” the switch will no write the updated files to the /flash/working directory.
- Once this has completed you are finished updating the switch firmware.

```
COM5 - PuTTY
-rw  5972647 Jun 11 17:42 Geni.img
-rw  1973103 Jun 11 17:44 Gos.img
-rw   649038 Jun 11 17:45 Gsecu.img
-rw    5079 Jun 11 2012 boot.cfg
59469824 bytes free

DTV MDF Verson 2.0> rm boot.cfg
DTV MDF Verson 2.0> ls

Listing Directory /flash/working:

drw   4096 Jun 11 17:52 ./
drw   4096 Jun 11 17:54 ../
-rw   618 Apr 18 2011 SOFTWARE.LSM
-rw 19630840 Jun 11 17:41 Gbase.img
-rw 1826436 Apr 18 2011 Gdiag.img
-rw 5972647 Jun 11 17:42 Geni.img
-rw 1973103 Jun 11 17:44 Gos.img
-rw 649038 Jun 11 17:45 Gsecu.img
59478016 bytes free

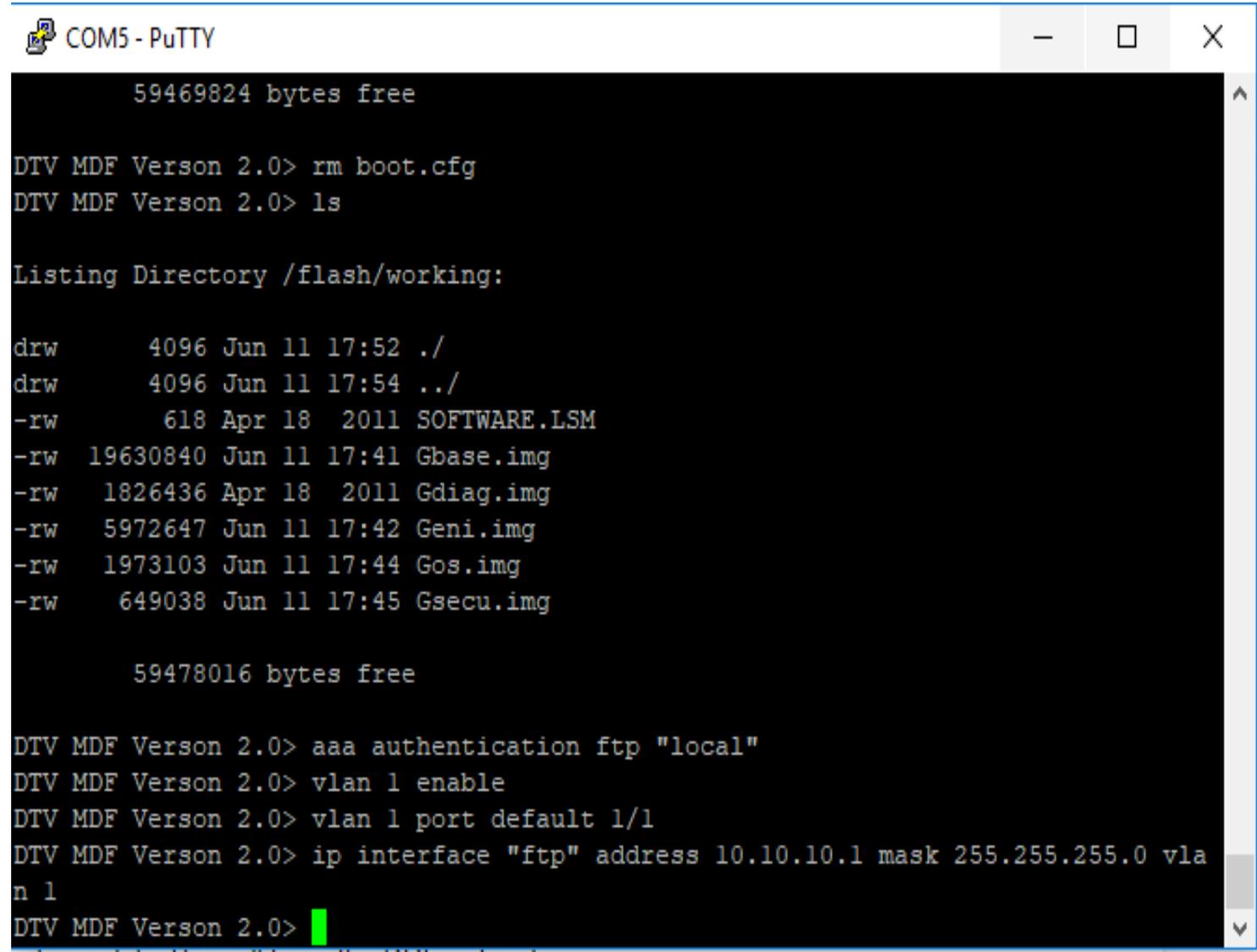
DTV MDF Verson 2.0>
```

- Now that the firmware has been updated, we need to update the switches software. To do this we will keep our current connection but use a few different commands. So on your Putty connection make sure you are in the /flash/working directory. If you are not use the command “cd /flash/working” to change directories.
- Now us the command “ls” this will show you the files present in the current directory. If a boot.cfg file is present enter the command “rm boot.cfg” to delete the file.

## Updating the switch software

## Prepping for transfer

- Now that the boot.cfg file is gone we need to prepare to transfer the new software to the switch. To do this enter the following command one after the other.
  - “aaa authentication ftp “local””  
press enter
  - “vlan 1 enable”
  - “vlan 1 port default 1/1”
  - “ip interface “ftp” address 10.10.10.1 mask 255.255.255.0  
vlan 1”



```
COM5 - PuTTY
59469824 bytes free
DTV MDF Verson 2.0> rm boot.cfg
DTV MDF Verson 2.0> ls

Listing Directory /flash/working:

drw      4096 Jun 11 17:52 ./
drw      4096 Jun 11 17:54 ../
-rw       618 Apr 18  2011 SOFTWARE.LSM
-rw  19630840 Jun 11 17:41 Gbase.img
-rw  1826436 Apr 18  2011 Gdiag.img
-rw  5972647 Jun 11 17:42 Geni.img
-rw  1973103 Jun 11 17:44 Gos.img
-rw   649038 Jun 11 17:45 Gsecu.img

59478016 bytes free
DTV MDF Verson 2.0> aaa authentication ftp "local"
DTV MDF Verson 2.0> vlan 1 enable
DTV MDF Verson 2.0> vlan 1 port default 1/1
DTV MDF Verson 2.0> ip interface "ftp" address 10.10.10.1 mask 255.255.255.0 vla
n 1
DTV MDF Verson 2.0>
```

# Change your IPv4 Settings

- Now you will need to change your IPv4 setting on your laptop once again.
- Set your IP address to 10.10.10.2
- And the Subnet Mask to 255.255.255.0

Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address: 10 . 10 . 10 . 2

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server: . . .

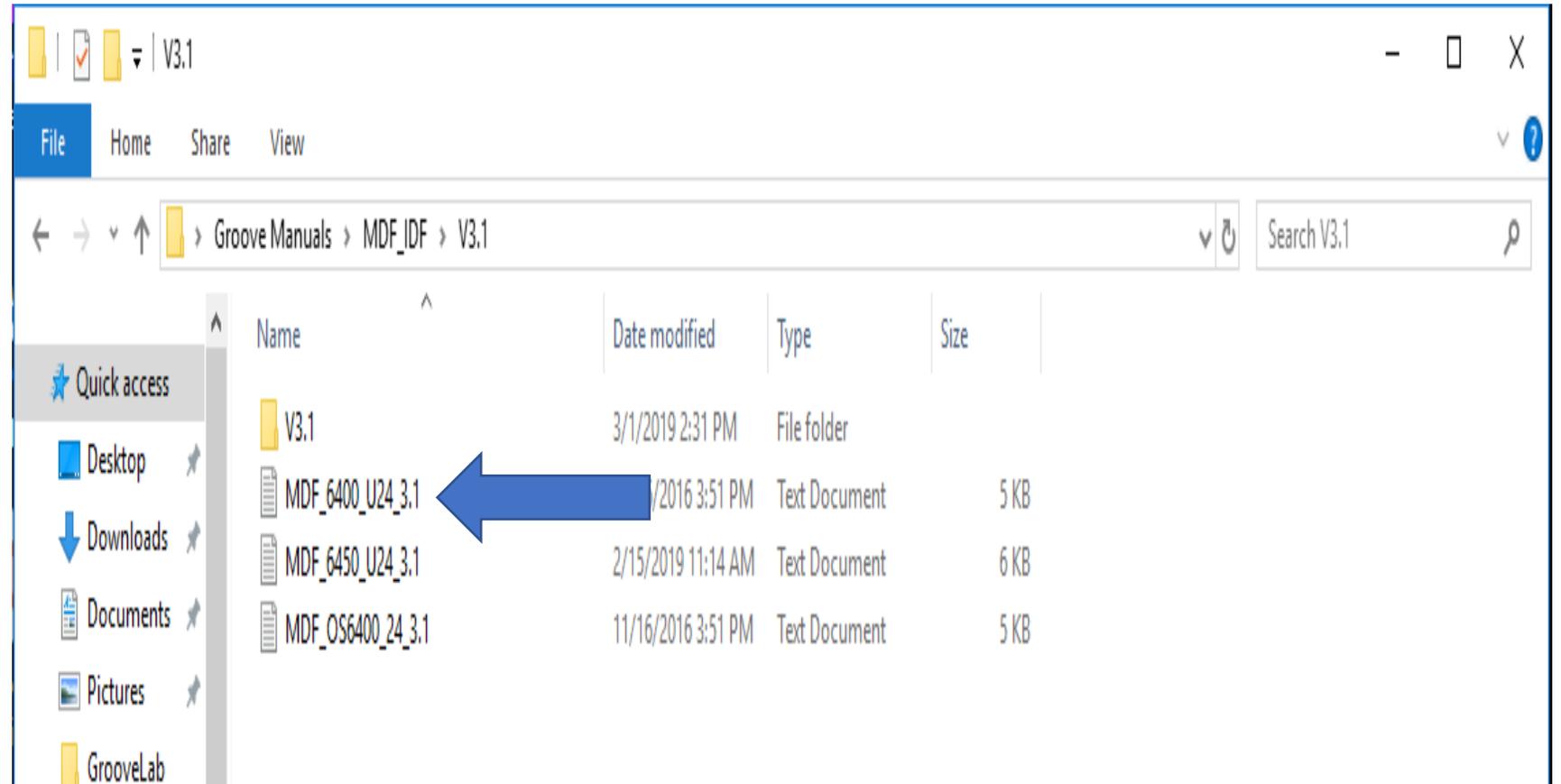
Alternate DNS server: . . .

Validate settings upon exit

Advanced...

OK Cancel

Open  
command  
prompt at  
the update



- Now we need to navigate to the software update for the switch we are working on and using the address bar in the folder open a command prompt at the directory.
- In this example we are working on a 6400-U24 switch so we will use the corresponding txt file to update the software.

## Creating the FTP session

- Once the command prompt is open, we need to create an FTP connection to the switch. In the command prompt enter “ftp 10.10.10.1” and press enter.
- Use the user name “admin” and the password “switch” to log into the switch.

```
C:\Windows\System32\cmd.exe - ftp 10.129.8.1
Microsoft Windows [Version 10.0.17134.765]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Staff\Desktop\Groove Manuals\MDF_IDF\AL\OS6400_645402R02GA>ftp 10.129.8.1
Connected to 10.129.8.1.
220 FTP server ready
530 USER and PASS required
User (10.129.8.1:(none)): admin
331 Password required
Password:
230-

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.4.441.R01 Service Release, January 17, 2012.

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230
ftp>
```

```
C:\Windows\System32\cmd.exe - ftp 10.10.10.1
Microsoft Windows [Version 10.0.17134.765]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Staff\Desktop\Groove Manuals\MDF_IDF\V3.1>ftp 10.10.10.1
Connected to 10.10.10.1.
220 FTP server ready
530 USER and PASS required
User (10.10.10.1:(none)): admin
331 Password required
Password:
230-

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.5.402.R02 GA, December 24, 2012.

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230
ftp> pwd
257 Current directory is "/flash/working"
ftp> bin
200 Type set to I, binary mode
ftp>
```

- Once logged in use the command “pwd” to check your current directory. If you are not in the /flash/working directory then use the command “cd /flash/working” to change directories.
- Once you are in the correct directory enter the command “bin” to change into binary mode.

Check the directory

## Transfer the software

- Now that everything is ready use the command “put (filename.txt) boot.cfg” to transfer the desired software to the switch in this example we will be using the command “put MDF\_6400\_U24\_3.1.txt boot.cfg”
- Wait for the confirmation that the transfer is complete then enter the command “bye”

```
C:\Windows\System32\cmd.exe - ftp 10.10.10.1
Connected to 10.10.10.1.
220 FTP server ready
530 USER and PASS required
User (10.10.10.1:(none)): admin
331 Password required
Password:
230-

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.5.402.R02 GA, December 24, 2012.

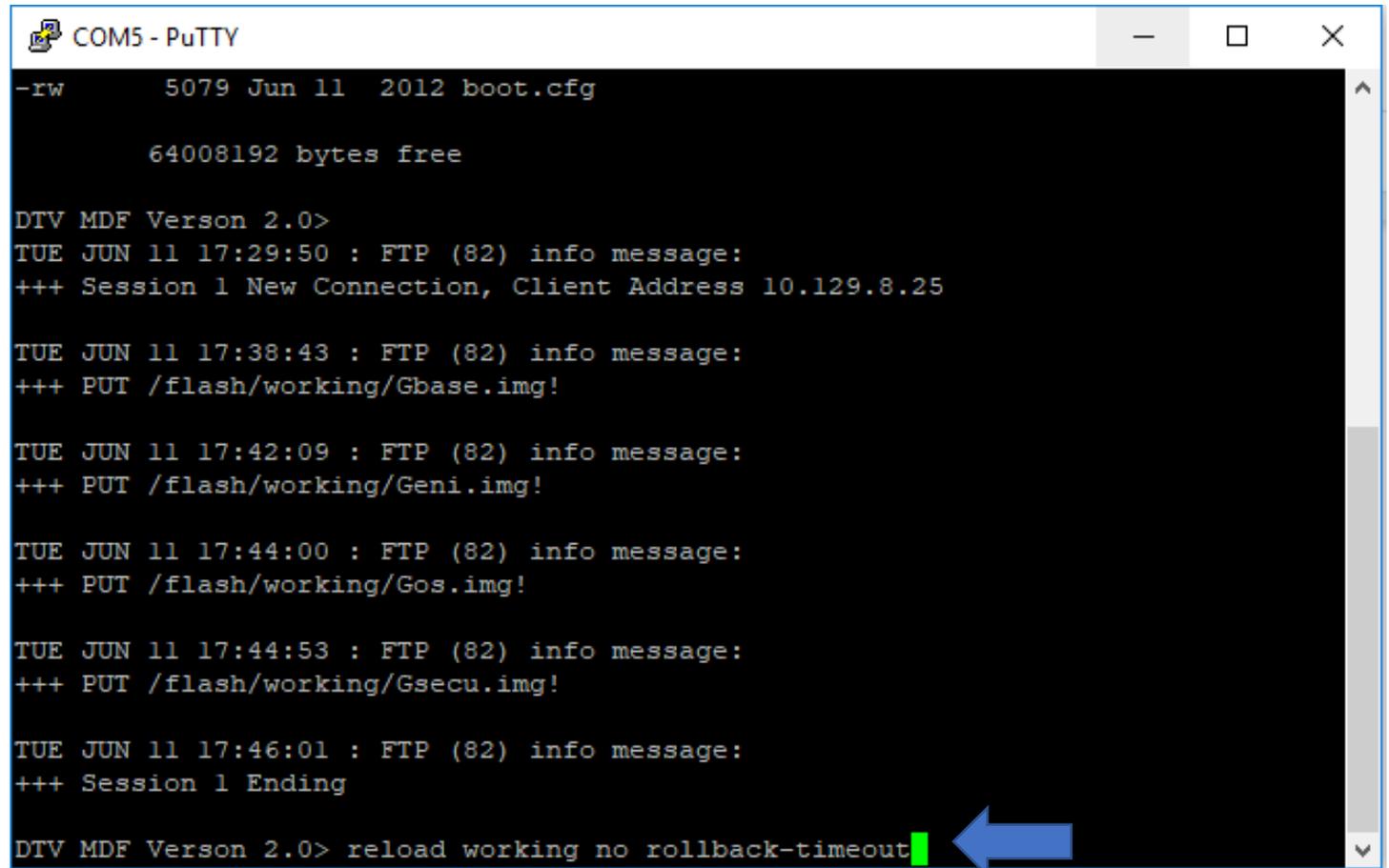
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in the United States Patent and Trademark Office.

230
ftp> pwd
257 Current directory is "/flash/working"
ftp> bin
200 Type set to I, binary mode
ftp> put MDF_6400_U24_3.1 boot.cfg
MDF_6400_U24_3.1: File not found
ftp> put MDF_6400_U24_3.1.txt boot.cfg
200 Port set okay
150 Opening BINARY mode data connection
226 Transfer complete
ftp: 4770 bytes sent in 0.03Seconds 149.06Kbytes/sec.
ftp>
```

## Back to Putty

- After closing your command prompt window go back to the Putty session and enter the command “reload working no rollback\_timeout” and press enter when prompted enter ‘Y’ for yes and the switch will restart.



```
COM5 - PuTTY
-rw      5079 Jun 11  2012 boot.cfg

      64008192 bytes free

DTV MDF Verson 2.0>
TUE JUN 11 17:29:50 : FTP (82) info message:
+++ Session 1 New Connection, Client Address 10.129.8.25

TUE JUN 11 17:38:43 : FTP (82) info message:
+++ PUT /flash/working/Gbase.img!

TUE JUN 11 17:42:09 : FTP (82) info message:
+++ PUT /flash/working/Geni.img!

TUE JUN 11 17:44:00 : FTP (82) info message:
+++ PUT /flash/working/Gos.img!

TUE JUN 11 17:44:53 : FTP (82) info message:
+++ PUT /flash/working/Gsecu.img!

TUE JUN 11 17:46:01 : FTP (82) info message:
+++ Session 1 Ending

DTV MDF Verson 2.0> reload working no rollback-timeout
```

A blue arrow points to the end of the command line.

```
COM5 - PuTTY
+++ == CSM == = SW Activation In Progress, CERTIFY & FLASH SYNCHRO may be needed
=
+++ [Count.]
+++ == CSM == -----
-
+++ [Count.]
Successfully sent the I2C read message to NISUP!!

TUE JUN 11 21:35:20 : INTERFACE (6) info message:
+++ NIs are ready

login : admin
password :

Welcome to the Alcatel-Lucent OmniSwitch 6400
Software Version 6.4.5.402.R02 GA, December 24, 2012.

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DTV MDF Verson 3.1> write memory
```

- After the switch has restarted you will need to log back in.
- Once back into the switch use the following command to save the changes made.
  - “write memory” press enter
  - “copy working certified” press enter
  - “show configuration snapshot” press enter. This should show you the current configuration of the switch and should match the txt file you uploaded to it.
- Your version number should now reflect 3.1 indicating that your update has been successful.

After restart