

How to change VLANs, Authentication

=> First check switch and port.

Check the port tag on the faceplate, It would tell you about the switch name and port number.



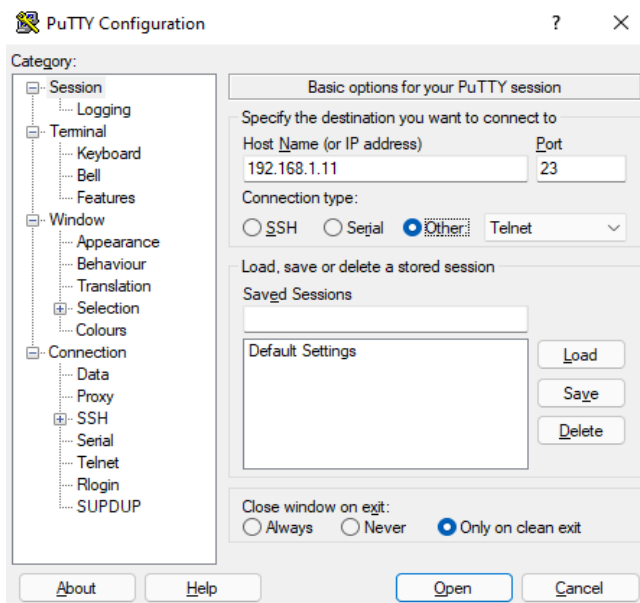
Example: As you can see from the tag, its D-19 'D' represent switch name and '19 represent port #'. The floor number represents the switch number. If it is on the fourth floor, then the complete address will be

Switch name: 4D

Port # : 19

Once you confirm the switch and port number, It's time to use putty.

Telnet the switch using putty,



Hostname: (IP address of SW)

Port: 23

Connection type: Other

Click on Open.

➔ Now to log in enter your password,



➔ type the command “**show running-config**” to check the configurations on the switch.

```
SW-4A#sho
SW-4A#show run
SW-4A#show running-config
```

This will show all the configurations done on SW.

```
service password-encryption
!
hostname SW-4A
!
boot-start-marker
boot-end-marker
!
enable secret 5 $1$IV.x$7imJT5L78moSRgVvzMhBr0
!
!
!
aaa new-model
!
!
aaa group server radius RAD_SERVERS
 server-private 192.168.99.11 auth-port 1812 acct-port 1813 key 7 0227005602085E
 731F
!
aaa authentication login SYSADMINs line
aaa authentication dot1x default group RAD_SERVERS
aaa authorization network default group RAD_SERVERS
!
!
!
aaa session-id common
system mtu routing 1500
!
!
!
crypto pki trustpoint TP-self-signed-796712320
 enrollment selfsigned
 subject-name cn=IOS-Self-Signed-Certificate-796712320
 revocation-check none
 rsa-keypair TP-self-signed-796712320
!
!
crypto pki certificate chain TP-self-signed-796712320
 certificate self-signed 01
 3082023C 308201A5 A0030201 02020101 300D0609 2A864886 F70D0101 04050030
 30312E30 2C060035 04031325 494F532D 53656C66 2D536987 6E65642D 43657274
 69666963 6174652D 37393637 31323332 30301E17 0D393330 33303130 30303133
 315A170D 32303031 30313030 30303030 5A303031 2E302C06 03550403 1325494F
 532D5365 6C662D53 69676E65 642D4365 72746966 69636174 652D3739 36373132
 33323030 819F300D 06092A86 4886F70D 01010105 0003818D 00308189 02818100
 9730F0FC E80E69FE A4F089ED 8D6E5B4C 2FE05E80 B8242C5A 5ABD7035 2A442E7D
 5E9C3F69 CD77045A EBA0D727 0AE64EA5 036CF386 8FBA51B8 09D9D14A 0A28AC31
 A9991C1E A09D82B8 99201189 D02952AE 42C8A77E 53FF586C 9288A4C8 A2B780BD
 940797E0 CB1F8B75 D85F7753 7F00FEEA BEF74995 1F3B4869 AC99AD96 0C78CEDD
 02030100 01A36630 64300F06 03551D13 0101FF04 05300301 01FF3011 0603551D
 11040A30 08820653 572D3441 2E301F06 03551D23 04183016 8014EE55 2B1CB375
 633262D2 F06A9DBA 102F6504 8B72301D 0603551D 0E041684 14EE552B 1CB37563
 3262D2F0 0A998A10 2F650488 72300D06 092A8648 86F70D01 01040500 03B18100
 815708B7 9D560C0D 691B2D28 926C22AD D3A7A24A 09D374E3 F7327722 02625E66
 DEBE7EDA F8F83F1F 1653A3B1 3FA92CFA 7730237F 0BD5891C EE3DCAD0 7F208B69
 387A140F BD329A2B ED8B24CE 7A2E2D67 3392A822 B6354F2E C3EC3E5F A9152F1F
 91181852 E3905C23 9D17F279 3283BA95 C8995A44 25F17A32 B281485D 3390090E
 quit
dot1x system-auth-control
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
vlan internal allocation policy ascending
```

Suppose we need to change the VLAN on port 19.

```
interface GigabitEthernet0/17
 switchport access vlan 3
 switchport mode access
 authentication host-mode multi-auth
 authentication port-control auto
 dot1x pae authenticator
 spanning-tree portfast
!
interface GigabitEthernet0/18
 switchport access vlan 3
 switchport mode access
 authentication host-mode multi-auth
 authentication port-control auto
 dot1x pae authenticator
 spanning-tree portfast
!
interface GigabitEthernet0/19
 switchport access vlan 3
 switchport mode access
 authentication host-mode multi-auth
 authentication port-control auto
 dot1x pae authenticator
 spanning-tree portfast
!
interface GigabitEthernet0/20
 switchport access vlan 3
 switchport mode access
 authentication host-mode multi-auth
 authentication port-control auto
 dot1x pae authenticator
 spanning-tree portfast
!
```



This is current configuration on port 19. as we can see this from Show Running-config output.

The authentication on this port is on and for now, it is a member of VLAN 3.

Example: We need to change the VLAN from 3 to 6

Steps:

First, we go into configuration mode from enable mode.

→Type “**config terminal**”

Now type

→ “ **interface GigabitEthernet0/19** ”

Now you are in interface 0/19

→Type “**no switchport access vlan 3**”

To remove old VLAN from the port.

→Type “**switchport access vlan 6**”

Now VLAN 6 is config port 19.

We need to change the Port from Authentication to Non-Authentication



As you can see in Fig. authentication is applied on this port.

Now we remove authentication.

Steps:

First, we go into configuration mode from enable mode.

→ Type “**config terminal**”

Now type

→ “ **interface GigabitEthernet0/13** ”

Now you are in interface 0/13

To remove the port from authentication.

→ Type “**No authentication host-mode multi-auth**”

→ Type “**No authentication port-control auto**”

→ Type “**no dot1x pae authenticator**”

Now port 13 is removed from authentication.

If you want to apply authentication on any port

Steps:

First, we go into configuration mode from enable mode.

→ Type “**config terminal**”

Now type

→ “ **interface GigabitEthernet0/13** ”

Now you are in interface 0/13

To remove the port from authentication.

→Type **“authentication host-mode multi-auth”**

→Type **“authentication port-control auto”**

→Type **“dot1x pae authenticator”**

Now authentication is applied to the port.

