

Basic Switch configuration commands

Command	Action
<pre>switch(config)#interface FastEthernet 0/14 switch(config)#interface GigabitEthernet 0/1</pre>	Moves to interface configuration mode
<pre>switch(config)#interface range fastethernet 0/14 - 24 switch(config)#interface range gigabitethernet 0/1 - 4 switch(config)#interface range fa 0/1 - 4 , 7 - 10 switch(config)#interface range fa 0/8 - 9 , gi 0/1 - 2</pre>	Moves to configuration mode for a range of interfaces
<pre>switch(config-if)#speed 10 switch(config-if)#speed 100 switch(config-if)#speed 1000 switch(config-if)#speed auto</pre>	Sets the port speed on the interface
<pre>switch(config-if)#duplex half switch(config-if)#duplex full switch(config-if)#duplex auto</pre>	Sets the duplex mode on the interface
<pre>switch(config-if)#no shutdown switch(config-if)#shutdown</pre>	Enables or disable the interface
<pre>switch#show interface status</pre>	Shows interface status of all ports
<pre>switch#show ip interface brief</pre>	Shows line and protocol status of all ports

Be aware of the following switch configuration details:

- All switch ports are enabled (no shutdown) by default.
- Port numbering on some switches begins at 1, not 0. For example, **FastEthernet 0/1** is the first FastEthernet port on a switch.
- Through autonegotiation, the 10/100/1000 ports configure themselves to operate at the speed of attached devices. If the attached ports do not support autonegotiation, you can explicitly set the speed and duplex parameters.

VLAN configuration commands:

Command	Action
<pre>switch(config)#vlan [1-1005] switch(config-vlan)#name [unique_name]</pre>	<p>Defines a VLAN Gives the VLAN a name Naming the VLAN is optional. VLAN names must be unique.</p>
<pre>switch(config)#no vlan [1-1005]</pre>	<p>Deletes a VLAN When you delete a VLAN, all ports assigned to the VLAN remain associated with the deleted VLAN and are therefore inactive. After a VLAN is deleted, you must reassign the ports to an appropriate VLAN.</p>
<pre>switch(config-if)#switchport access vlan [1-1005]</pre>	<p>Assigns ports to the VLAN If you assign a port to a VLAN that does not exist, the VLAN will be created automatically.</p>
<pre>switch#show vlan switch#show vlan brief</pre>	<p>Shows a list of VLANs on the system</p>
<pre>switch#show vlan id [1-1005]</pre>	<p>Shows information for a specific VLAN</p>

The following commands create VLAN 12 named IS_VLAN, identifies port 0/12 as having only workstations attached to it, and assigns the port to VLAN 12.

```
switch#config t
switch(config)#vlan 12
switch(config-vlan)#name IS_VLAN
switch(config-vlan)#interface fast 0/12
switch(config-if)#switchport access vlan 12
```

VLAN Configuration

Short Command	Full Command
sw m t	switchport mode trunking
sw t n v 99	switchport trunking native vlan 99
sw t a v 2,10,99	switchport trunking access vlan 2,10,99
sw non	switchport nonegotiate
sw a v 10	switchport access vlan 10