VLAN Quick Guide

Access Port Configuration – Sales configuration:

SW1# vlan 10

SW1# name Sales

SW1#interface Fastethernet 0/1

SW1#switchport mode access

SW1#swiitchport access vlan 10

SW1#interface range FastEthernet 0/3 – 5

SW1#switchport mode access

SW1#switchport access vlan 10

Access Port Configuration – Engineers configuration:

SW1# vlan 20

SW1# name Eng

SW1# interface Fastethernet 0/2

SW1# switchport mode access

SW1# switchport access vlan 20

SW1# interface range FastEthernet 0/6 – 7

SW1# switchport mode access

SW1# switchport access vlan 20

Trunk Port Configuration:

SW1# interface fastethernet 0/24

SW1# description Trunk to SW2

SW1# switchport trunk encapsulation dot1q

SW1# switchport mode trunk

SW1# switch trunk encapsulation dot1q

Native VLAN Configuration:

SW1# vlan 199

SW1# name Native

SW1# interface gigabitethernet 0/1

SW1# description Trunk to SW2

SW1# switchport mode trunk

SW1# switchport trunk encapsulation dot1q

SW1# switchport trunk native vlan 199

Switchport Manual Configuration

SW1# switchport mode access

SW1# switchport mode trunk

DTP Configuration:

SW1# Switchport mode dynamic auto – forms a trunk if the neighbor switch port is set to trunk desirable.

Or…

SW1# Switchport mode dynamic desirable – forms a trunk if the neighbor switch port is set to trunk, desirable or auto.

Or…

SW1# Switchport nonegotiate – disables DTP.

VTP Configuration:

SW1# vtp domain example

SW1# vtp mode server

Or…

SW1# vtp mode client

Or…

SW1# vtp mode transparent

SW1# vlan 20

SW1#name sales (cannot add VLAN if VTP client)

Full Example Configuration:

R1#interface FastEthernet 0/1

R1#ip address 10.10.10.1 255.255.255.0

R1#interface fastether 0/2

R1#ip address 10.10.20.1 255.255.255.0

R1#ip route 0.0.0.0 0.0.0.0 203.0.113.2

SW1#interface fastethernet 0/1

SW1#switchport mode access

SW1#switchport access vlan 10

SW1#interface fastethernet 0/2

SW1#switchport mode access

SW1#switchport access vlan 20

Router on a Stick Configuration

R1#interface fastethethernet 0/1

R1#no ip address

R1#no shutdown

R1#interface fastethernet 0/1.10

R1#encapsulation dot1q 10

R1#ip address 10.10.10.1 255.255.255.0

R1#interface fastethernet 0/1.20

R1#encapsulation dot1q 20

R1#ip address 10.10.20.1 255.255.255.0

R1#ip route 0.0.0.0 0.0.0.0 203.0.113.2

SW1#interface fastethernet 0/1

SW1#switchport mode trunk

Inter-VLAN Routing Configuration:

SW1#ip router

SW1#interface vlan 10

SW1#ip address 10.10.10.1 255.255.255.0

SW1#interface vlan 20

SW1#ip address 10.10.20.1 255.255.255.0

STP commands

Command	Description	Example
Show spanning-tree vlan 1		Show spanning-tree vlan 1

General Switch commands

Command	Description	Example
		Show mac address-table
		Show interface g0/1

VLAN Commands Cheat sheet

Command	Description	Example
Show vlan brief	Displays vlan brief	show vlan brief
show interface switchport	Displays switchport information	show int g0/2 switchport
Show vtp status	Displays the VTP status	show vtp status