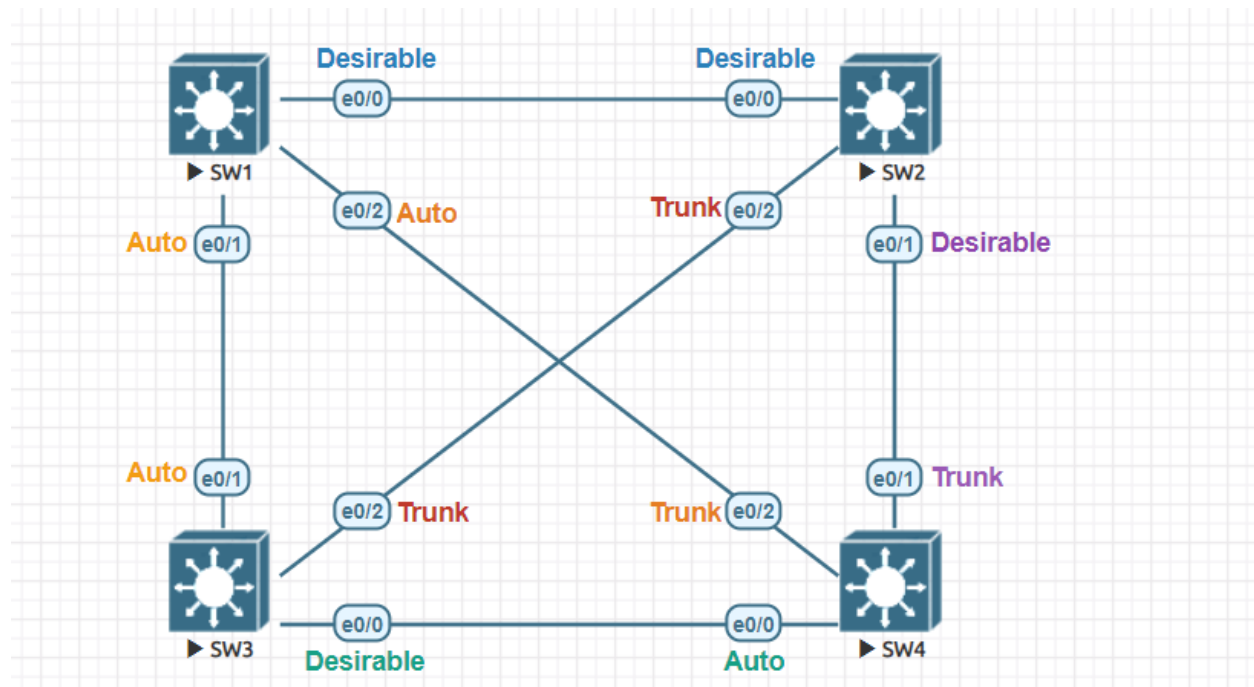


DTP Lab:



Switch Images	I86bi_linux_I2-ipbasek9-ms.high_iron_aug9_2017b.bin
SW1 Ethernet 0/0 DTP Mode	Desirable
SW1 Ethernet 0/1 DTP Mode	Auto
SW1 Ethernet 0/2 DTP Mode	Auto
SW2 Ethernet 0/0 DTP Mode	Desirable
SW2 Ethernet 0/1 DTP Mode	Desirable
SW2 Ethernet 0/2 DTP Mode	Trunk
SW3 Ethernet 0/0 DTP Mode	Desirable
SW3 Ethernet 0/1 DTP Mode	Auto
SW3 Ethernet 0/2 DTP Mode	Trunk
SW4 Ethernet 0/0 DTP Mode	Auto
SW4 Ethernet 0/1 DTP Mode	Trunk
SW4 Ethernet 0/2 DTP Mode	Trunk

SW1	Trunk	SW2
Desirable	Established	Desirable
Desirable	Established	Auto
Trunk	Established	Desirable
Auto	Established	Trunk
Auto	Not Established	Auto

SW1 Configuration

```
Switch(config)#hostname SW1
SW1(config)#line con 0
SW1(config-line)#exec-timeout 0 0
SW1(config-line)#logging synchronous
SW1(config-line)#exit
SW1(config)#interface e0/0
SW1(config-if)#switchport mode dynamic desirable
SW1(config-if)#exit
SW1(config)#interface ethernet 0/1
SW1(config-if)#switchport mode dynamic auto
SW1(config-if)#exit
SW1(config)#interface ethernet 0/2
SW1(config-if)#switchport mode dynamic auto
SW1(config-if)#exit
```

SW2 Configuration

```
Switch(config)#hostname SW2
SW2(config)#line con 0
SW2(config-line)#exec-timeout 0 0
SW2(config-line)#logging synchronous
SW2(config-line)#exit
SW2(config)#interface ethernet 0/0
SW2(config-if)#switchport mode dynamic desirable
SW2(config-if)#exit
SW2(config)#interface ethernet 0/1
SW2(config-if)#switchport mode dynamic desirable
SW2(config-if)#exit
SW2(config)#interface ethernet 0/2
SW2(config-if)#switchport trunk encapsulation dot1q
SW2(config-if)#switchport mode trunk
SW2(config-if)#exit
```

SW3 Configuration

```
Switch(config)#hostname SW3
SW3(config)#line con 0
SW3(config-line)#exec-timeout 0 0
SW3(config-line)#logging synchronous
SW3(config-line)#exit
SW3(config)#interface ethernet 0/1
SW3(config-if)#switchport mode dynamic auto
SW3(config-if)#exit
SW3(config)#interface ethernet 0/0
SW3(config-if)#switchport mode dynamic desirable
SW3(config-if)#exit
SW3(config)#interface ethernet 0/2
SW3(config-if)#switchport trunk encapsulation dot1q
SW3(config-if)#switchport mode trunk
```

SW4 Configuration

```
Switch(config)#hostname SW4
SW4(config)#line con 0
SW4(config-line)#exec-timeout 0 0
SW4(config-line)#logging synchronous
SW4(config-line)#exit
SW4(config)#interface ethernet 0/0
SW4(config-if)#switchport mode dynamic auto
SW4(config-if)#exit
SW4(config)#interface ethernet 0/1
SW4(config-if)#switchport trunk encapsulation dot1q
SW4(config-if)#switchport mode trunk
SW4(config-if)#exit
SW4(config)#interface ethernet 0/2
SW4(config-if)#switchport trunk encapsulation dot1q
SW4(config-if)#switchport mode trunk
```

SW1#show interfaces trunk

Port	Mode	Encapsulation	Status	Native vlan
Et0/0	desirable	n-isl	trunking	1
Et0/2	auto	n-802.1q	trunking	1

Port	Vlans allowed on trunk
Et0/0	1-4094
Et0/2	1-4094

Port	Vlans allowed and active in management domain
Et0/0	1
Et0/2	1

Port	Vlans in spanning tree forwarding state and not pruned
Et0/0	1
Et0/2	1

SW2#show interfaces trunk

Port	Mode	Encapsulation	Status	Native vlan
Et0/0	desirable	n-isl	trunking	1
Et0/1	desirable	n-802.1q	trunking	1
Et0/2	on	802.1q	trunking	1

Port	Vlans allowed on trunk
Et0/0	1-4094
Et0/1	1-4094
Et0/2	1-4094

Port	Vlans allowed and active in management domain
Et0/0	1
Et0/1	1
Et0/2	1

Port	Vlans in spanning tree forwarding state and not pruned
Et0/0	1
Et0/1	1
Et0/2	1

SW3#show interfaces trunk

Port	Mode	Encapsulation	Status	Native vlan
Et0/0	desirable	n-isl	trunking	1
Et0/2	on	802.1q	trunking	1

Port	Vlans allowed on trunk
Et0/0	1-4094
Et0/2	1-4094

Port	Vlans allowed and active in management domain
Et0/0	1
Et0/2	1

Port	Vlans in spanning tree forwarding state and not pruned
Et0/0	1
Et0/2	none

```
SW4#show interfaces trunk
```

Port	Mode	Encapsulation	Status	Native vlan
Et0/0	auto	n-isl	trunking	1
Et0/1	on	802.1q	trunking	1
Et0/2	on	802.1q	trunking	1

```
Port          Vlans allowed on trunk
Et0/0         1-4094
Et0/1         1-4094
Et0/2         1-4094
```

```
Port          Vlans allowed and active in management domain
Et0/0         1
Et0/1         1
Et0/2         1
```

```
Port          Vlans in spanning tree forwarding state and not pruned
Et0/0         none
Et0/1         none
Et0/2         1
```

Turn Off DTP

```
SW1(config)#interface range ethernet 0/0-3, ethernet 1/0-3
SW1(config-if-range)#switchport mode access
SW1(config-if-range)#switchport nonegotiate
SW1#show interfaces ethernet 0/0 switchport
SW1#show interfaces ethernet 1/3 switchport
```

```
SW1#show interfaces ethernet 0/0 switchport
```

```
Name: Et0/0
Switchport: Enabled
Administrative Mode: static access
Operational Mode: static access
Administrative Trunking Encapsulation: negotiate
Operational Trunking Encapsulation: native
Negotiation of Trunking: Off ←
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Administrative Native VLAN tagging: enabled
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk Native VLAN tagging: enabled
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk associations: none
Administrative private-vlan trunk mappings: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
```