

enable

configure terminal

#

Layer 3 Switch Configuration

#

hostname L3-SW

#

Enable Layer 3 Routing

#

ip routing

#

Create VLANs

#

vlan 10

name VLAN10

exit

vlan 20

name VLAN20

exit

#

Configure VLAN 10 SVI Gateway

#

interface vlan 10

ip address 172.16.10.1 255.255.255.0

no shutdown

exit

#

Configure VLAN 20 SVI Gateway

#

interface vlan 20

ip address 172.16.20.1 255.255.255.0

no shutdown

exit

#

Configure Trunk Port to Access Switch

#

interface gigabitEthernet1/0/1

switchport mode trunk

switchport trunk allowed vlan 10,20

```
no shutdown
```

```
exit
```

```
#
```

```
# Configure Second Trunk Port (if needed)
```

```
#
```

```
interface gigabitEthernet1/0/2
```

```
switchport mode trunk
```

```
switchport trunk allowed vlan 10,20
```

```
no shutdown
```

```
exit
```

```
#
```

```
# Configure Access Port VLAN 10
```

```
#
```

```
interface fastEthernet0/2
```

```
switchport mode access
```

```
switchport access vlan 10
```

```
spanning-tree portfast
```

```
no shutdown
```

```
exit
```

```
#
```

```
# Configure Access Port VLAN 20
```

#

interface fastEthernet0/3

switchport mode access

switchport access vlan 20

spanning-tree portfast

no shutdown

exit

#

Save Configuration

#

end

copy running-config startup-config

#

Access Switch Configuration

#

enable

configure terminal

hostname ACCESS-SW

#

Create VLANs

#

vlan 10

name VLAN10

exit

vlan 20

name VLAN20

exit

#

Configure Trunk to Layer 3 Switch

#

interface fastEthernet0/1

switchport mode trunk

switchport trunk allowed vlan 10,20

no shutdown

exit

#

Configure PC Port VLAN 10

#

```
interface fastEthernet0/2
  switchport mode access
  switchport access vlan 10
  spanning-tree portfast
  no shutdown
exit
```

```
#
# Configure PC Port VLAN 20 (if PC2 on same switch)
#
```

```
interface fastEthernet0/3
  switchport mode access
  switchport access vlan 20
  spanning-tree portfast
  no shutdown
exit
```

```
#
# Save Configuration
#
```

```
end
copy running-config startup-config
```