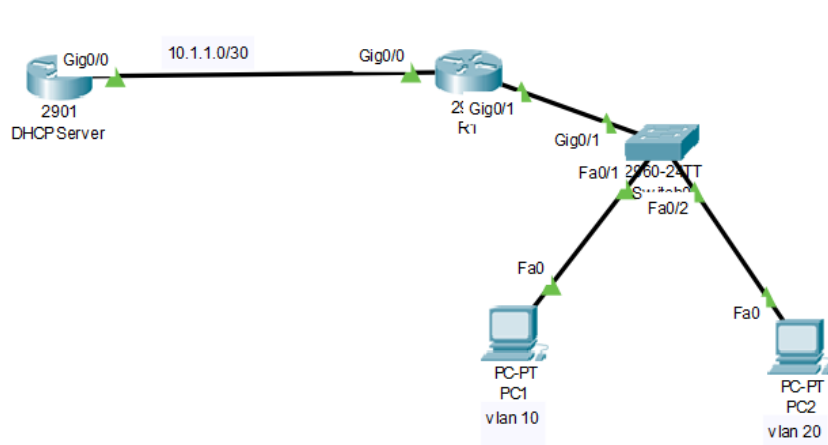


## DHCP Configuration



- 1) Exclude first 10 IP addresses in each subnet from pool
- Pool names = vlan10 and vlan20
- 2) Networks = 10.1.10.0/24 (VLAN 10) and 10.1.20.0/24 (VLAN 20)
- 3) default-router 10.1.10.1  
10.1.20.1
- 4) dns: 8.8.8.8

R1	DHCP Server	Switch
<pre> Router&gt;en Router#configure terminal Router(config)#hostname R1 R1(config)#interface gigabitethernet 0/0 R1(config-if)#no shutdown R1(config-if)#ip address 10.1.1.1 255.255.255.252 R1(config)#interface gigabitethernet 0/1.10 R1(config-subif)#encapsulation dot1Q 10 R1(config-subif)#ip address 10.1.10.1 255.255.255.0  R1(config-subif)#ip helper- address 10.1.1.2 R1(config-subif)#exit R1(config)#int gig0/1.20 R1(config-subif)#encapsulation dot1Q 20 R1(config-subif)#ip address 10.1.20.1 255.255.255.0 R1(config-subif)#ip helper- address 10.1.1.2 R1(config-subif)#exit </pre>	<pre> Router&gt;en Router#config t Router(config)#hostname DHCP_server DHCP_server(config)#int gig0/0 DHCP_server(config-if)#no shutdown DHCP_server(config-if)#ip address 10.1.1.2 255.255.255.252 R1(config-if)#ex DHCP_server(config)#ip dhcp excluded-address 10.1.10.1 10.1.10.10 DHCP_server(config)#ip dhcp excluded-address 10.1.20.1 10.1.20.10 DHCP_server(config)#ip dhcp pool vlan10 DHCP_server(dhcp- config)#network 10.1.10.0 255.255.255.0 DHCP_server(dhcp- config)#default-router 10.1.10.1 DHCP_server(dhcp- config)#dns-server 8.8.8.8 </pre>	<pre> Switch&gt;en Switch#configure terminal Switch(config-if)#exit Switch(config)#vlan 10 Switch(config-vlan)#name cse Switch(config-vlan)#vlan 20 Switch(config-vlan)#name eee Switch(config-vlan)#vlan 30 Switch(config-vlan)#name native Switch(config-vlan)#int gig0/1 Switch(config-if)#switchport mode trunk Switch(config-if)#switchport trunk native vlan 30 Switch(config-if)#switchport trunk allowed vlan 10, 20 Switch(config-if)#switchport trunk allowed vlan 10,20 Switch#show interfaces trunk Switch(config)#int fa0/1 Switch(config-if)#switchport mode acc Switch(config-if)#switchport access vlan10 </pre>

	DHCP_server(dhcp-config)#exit DHCP_server(config)#ip dhcp pool vlan20 DHCP_server(dhcp-config)#network 10.1.20.0 255.255.255.0 DHCP_server(dhcp-config)#dns-server 8.8.8.8 DHCP_server(dhcp-config)#default-router 10.1.20.1 DHCP_server(dhcp-config)#exit DHCP_server(config)#ip route 10.1.10.0 255.255.255.0 10.1.1.1 DHCP_server(config)#ip route 10.1.20.0 255.255.255.0 10.1.1.1 DHCP_server#show ip dhcp binding	Switch(config-if)#switchport access vlan 10 Switch(config-if)#int fa0/2 Switch(config-if)#switchport mode acc Switch(config-if)#switchport access vlan 20
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**#show ip dhcp binding**

**#show ip dhcp pool [pool name]**

**#show ip dhcp server statistics**

**#show ip dhcp conflict**