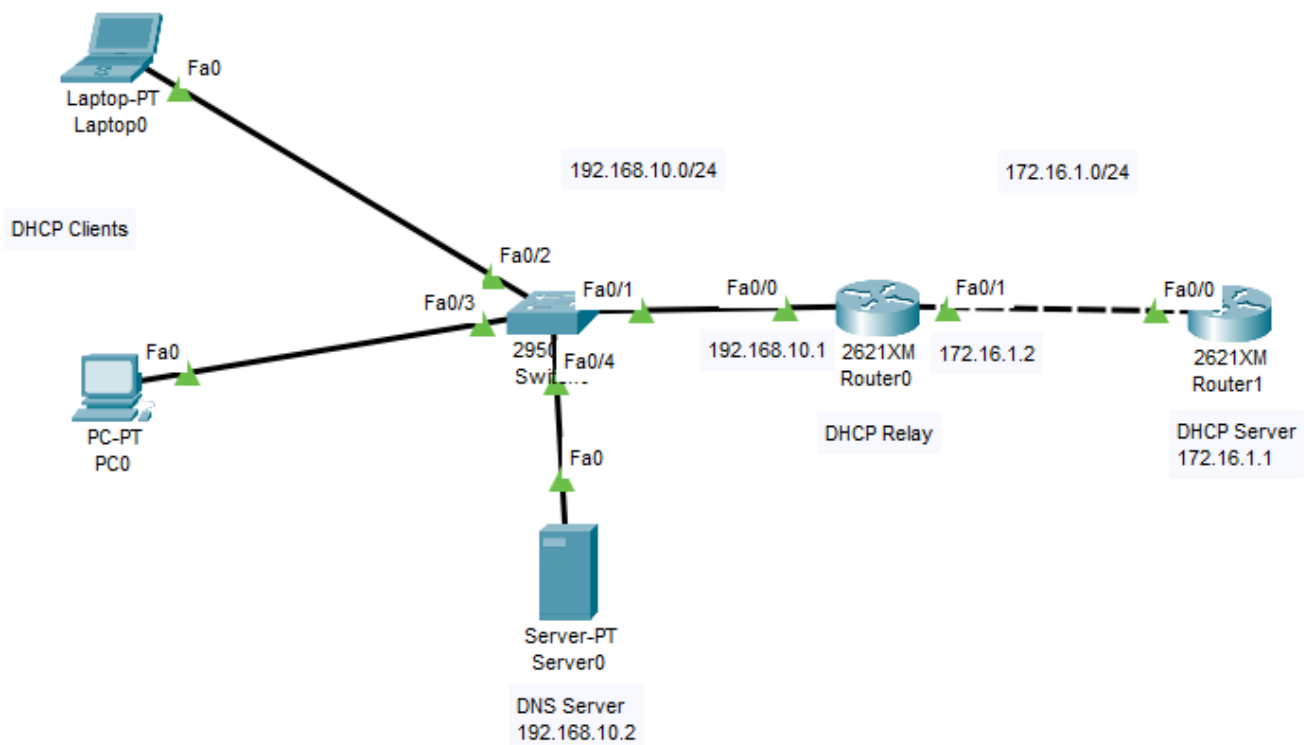


Cisco IOS Configure DHCP Relay with IP Helper Address

Network Topology



Router1 Configuration Commands

```
Router1>enable
Router1#configure terminal
Router1(config)# interface fastEthernet 0/0
Router1(config-if)# ip address 172.16.1.1 255.255.255.0
Router1(config-if)# no shutdown
Router1(config-if)# exit
Router1(config)# service dhcp
Router1(config)# ip dhcp pool MAIN-POOL
Router1(dhcp-config)# network 192.168.10.0 255.255.255.0
Router1(dhcp-config)# default-router 192.168.10.1
```

```
Router1(dhcp-config)#dns-server 192.168.10.2
Router1(dhcp-config)#exit
Router1(config)#ip dhcp excluded-address 192.168.10.1 192.168.10.10
Router1(config)#ip route 192.168.10.0 255.255.255.0 172.16.1.2
```

Router0 Configuration Commands

```
Router0>enable
Router0#configure terminal
Router0(config)# interface fastEthernet 0/1
Router0(config-if)#ip address 172.16.1.2 255.255.255.0
Router0(config-if)#no shutdown
Router0(config)# interface fastEthernet 0/0
Router0(config-if)#ip address 192.168.10.1 255.255.255.0
Router0(config-if)#ip helper-address 172.16.1.1
Router0(config-if)#no shutdown
```

Router1 DHCP Commands

```
Router1>enable
Router1#show ip dhcp pool MAIN-POOL
```

```
Pool MAIN-POOL :
  Utilization mark (high/low)      : 100 / 0
  Subnet size (first/next)         : 0 / 0
  Total addresses                   : 254
  Leased addresses                  : 2
  Excluded addresses                : 1
  Pending event                     : none

  1 subnet is currently in the pool
  Current index      IP address range      Leased/Excluded/Total
  192.168.10.1      192.168.10.1 - 192.168.10.254  2 / 1 / 254
```

```
Router1#show ip dhcp binding
```

IP address	Client-ID/ Hardware address	Lease expiration	Type
192.168.10.11	0060.2F4A.621C	--	Automatic
192.168.10.12	0090.2139.9C61	--	Automatic

Cisco Packet Tracer File

[net4 dhcp relay.pkt](#)

Revision #3

Created 8 December 2022 22:06:44 by Glen Taylor

Updated 24 January 2023 22:45:52 by Glen Taylor