Cisco Router DHCP Configuration Guide

For Router1 (192.168.1.0/24 Network):

1. Enter Configuration Mode:

Router1# configure terminal

2. Set Hostname:

Router1(config)# hostname Router1

3. Enable DNS Server on Router1:

Router1(config)# ip dns server

4. Set Domain Name:

Router1(config)# ip domain-name local.net

5. Exclude Static IP Addresses:

Router1(config)# ip dhcp excluded-address 192.168.1.1 192.168.1.10

6. Create the DHCP Pool:

Router1(config)# ip dhcp pool NET1

Router1(dhcp-config)# network 192.168.1.0 255.255.255.0

Router1(dhcp-config)# default-router 192.168.1.1

Router1(dhcp-config)# dns-server 192.168.1.1

Router1(dhcp-config)# domain-name local.net

Router1(dhcp-config)# lease 7

Router1(dhcp-config)# exit

7. Exit Configuration Mode:

Router1(config)# exit

For Router2 (192.168.2.0/24 Network):

1. Enter Configuration Mode:

Router2# configure terminal

2. Set Hostname:

Router2(config)# hostname Router2

3. Enable DNS Server on Router2:

Router2(config)# ip dns server

4. Set Domain Name:

Router2(config)# ip domain-name local.net

5. Exclude Static IP Addresses:

Router2(config)# ip dhcp excluded-address 192.168.2.1 192.168.2.10

6. Create the DHCP Pool:

```
Router2(config)# ip dhcp pool NET2
Router2(dhcp-config)# network 192.168.2.0 255.255.255.0
Router2(dhcp-config)# default-router 192.168.2.1
Router2(dhcp-config)# dns-server 192.168.1.1
Router2(dhcp-config)# domain-name local.net
Router2(dhcp-config)# lease 7
Router2(dhcp-config)# exit
```

7. Exit Configuration Mode:

```
Router2(config)# exit
```

Verifying the Configuration on Both Routers:

1. Check DHCP Bindings:

```
Router# show ip dhcp binding
```

2. Check DHCP Pool Information:

```
Router# show ip dhcp pool
```

3. Check DHCP Server Statistics:

```
Router# show ip dhcp server statistics
```

On the PCs:

1. Change the IP Configuration to DHCP:

On each PC, change the network settings to use DHCP to automatically receive an IP address.

2. Renew IP Address:

In the Command Prompt (Windows), use the ipconfig /renew command to request a new IP address from the DHCP server:

ipconfig /renew