







Lab 8.1.4.4 - Troubleshooting DHCPv4

Part 1: Build the Network and Configure Basic Device Settings

Step 4: Verify network connectivity between the routers

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	R1	R2	IC...		0.000	N	0	(e...	(delete)
	Successful	R1	ISP	IC...		0.000	N	1	(e...	(delete)
	Successful	R2	ISP	IC...		0.000	N	2	(e...	(delete)

Part 2: Troubleshoot DHCPv4 Issues

Step 2: Troubleshoot DHCP issues on routers R1, R2, and R3.

- R2 - Badly configured excluded address 192.168.11.1 192.168.11.9, should be 192.168.1.1 192.168.1.9
- R2 - Badly configured default-router 192.168.11.1, should be 192.168.0.1
- R1 - Badly configured helper-address 192.168.0.253, should be 192.168.0.254 to be R2 interface
- R1 - Missing helper address on interface g0/0

PC-A

Physical Config Desktop Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IPv4 Address 192.168.1.10

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::260:47FF:FE52:8

Default Gateway

DNS Server

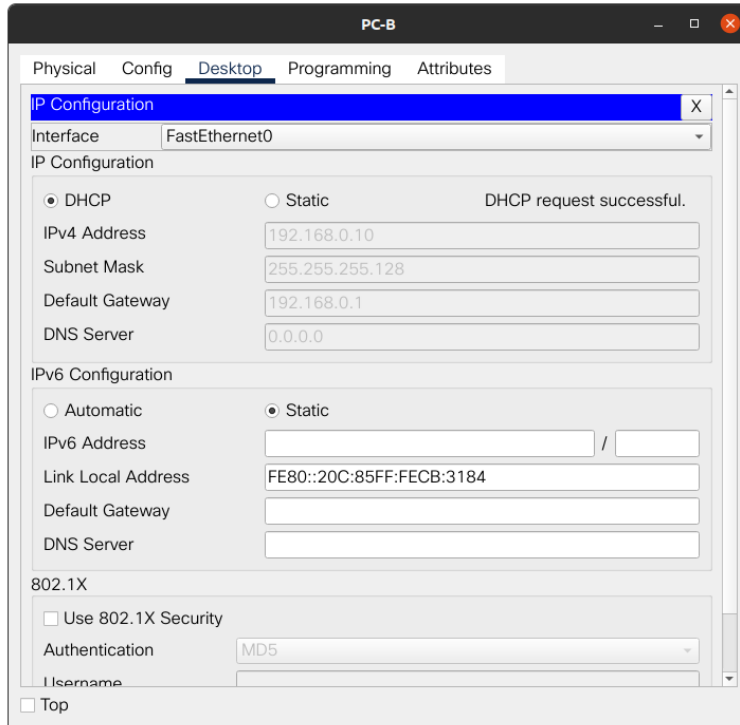
802.1X

☐ Use 802.1X Security

Authentication MD5

Username

☐ Top



PC-B

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IPv4 Address 192.168.0.10

Subnet Mask 255.255.255.128

Default Gateway 192.168.0.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::20C:85FF:FECB:3184

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

☐ Top

Reflection

What are the benefits of using DHCP?

Every device on a TCP/IP-based network must have a unique unicast IP address to access the network and its resources. With DHCP, assigning ip for new hosts is easy, is automated and managed centrally.