

Hands-on Activity 4.1 | Packet Tracer - Connect a Wired and Wireless LAN

Name: Belocora, John Rome A.

Section: CPE22S3

Part 1: Connect to the Cloud

Step 1:

Cisco Packet Tracer - C:\Users\jom\Downloads\4.6.5 Packet Tracer - Connect a Wired and Wireless LAN.pka - John Rome A. Belocora - 2024-03-11 21:21:33

File Edit Options View Tools Extensions Window Help

Logical Physical x 888 y 470

Part 4: Verify Connections
Part 5: Examine the Physical Topology

Background

When working in Packet Tracer (a lab environment or a corporate setting), you should know how to select the appropriate cable and how to properly connect devices. This activity will examine device configurations in Packet Tracer, selecting the proper cable based on the configuration, and connecting the devices. This activity will also explore the physical view of the network in Packet Tracer.

Instructions

Part 1: Connect to the Cloud

Step 1: Connect the cloud to Router0.

- At the bottom left, click the orange lightning icon to open the available Connections.
- Choose the correct cable to connect Router0 F0/0 to Cloud Eth6. Cloud is a type of switch, so use a Copper Straight-Through connection. If you attached the correct cable, the link lights on the cable turn green.

Step 2: Connect the cloud to Cable Modem.

Choose the correct cable to connect Cloud Coax7 to Modem Port0.
If you attached the correct cable, the link lights on the cable turn green.

Part 2: Connect Router0

Step 1: Connect Router0 to Router1.

Choose the correct cable to connect Router0 Ser0/0/0 to Router1 Ser0/0. Use one of the available Serial cables.
If you attached the correct cable, the link lights on the cable turn green.

Step 2: Connect Router0 to netacad.pka.

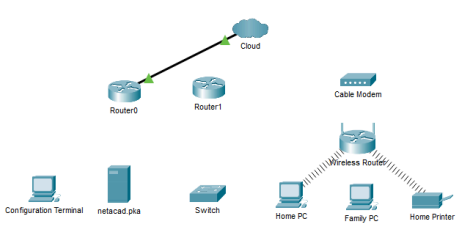
Choose the correct cable to connect Router0 F0/1 to netacad.pka F0. Routers and computers traditionally use the same wires to transmit (1 and 2) and receive (3 and 6). The correct cable to choose consists of these crossed wires. Although many NICs can now autosense which pair is used to transmit and receive, Router0 and netacad.pka do not have autosensing NICs.
If you attached the correct cable, the link lights on the cable turn green.

Time Elapsed: 00:05:14 Completion: 12%

Back 1/1 Next

Time: 00:05:06

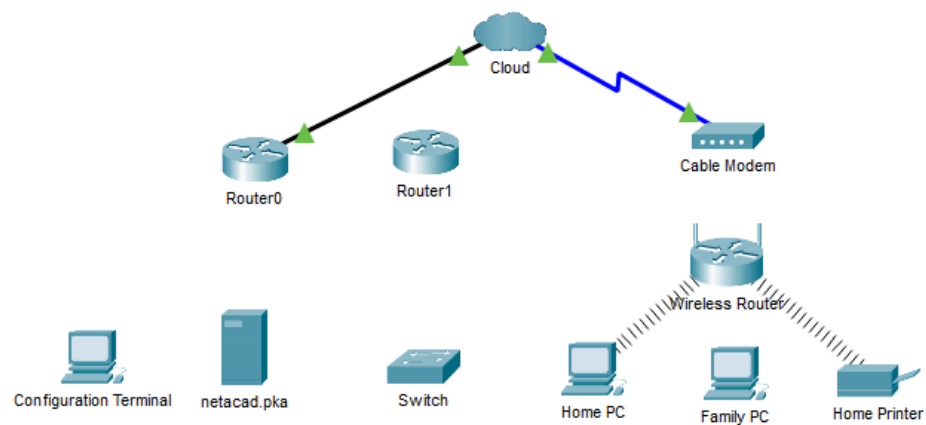
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete



Step 2:

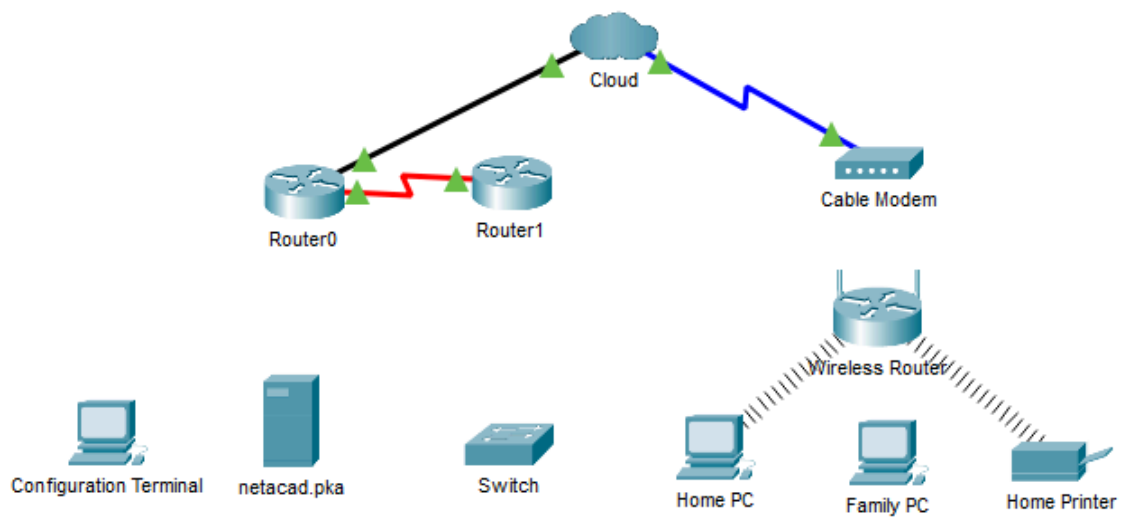
ow how to
ne device
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packet

switch, so
nk lights

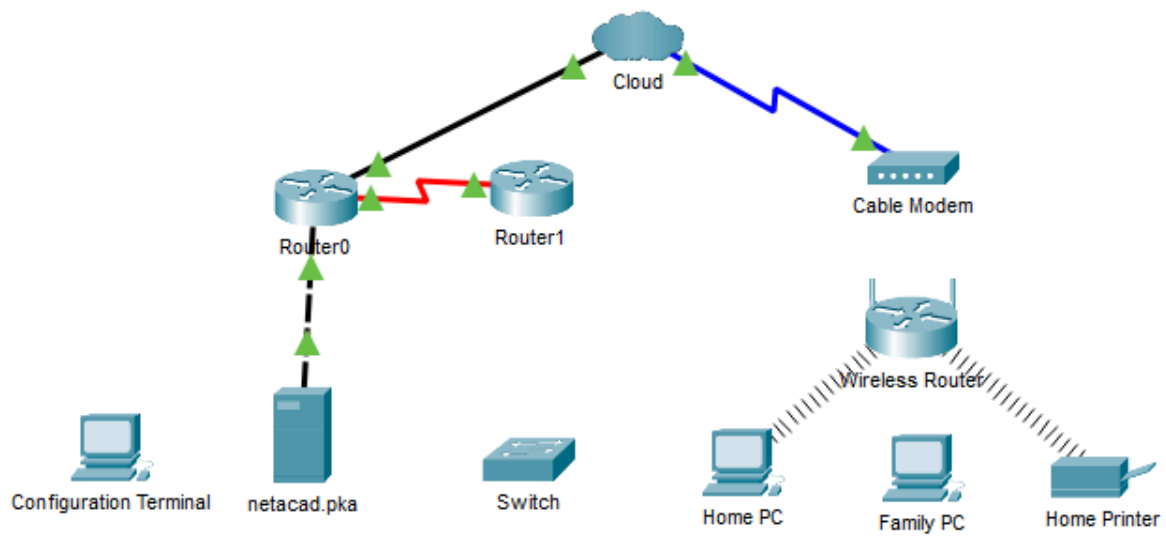


Part 2: Connect Router 0

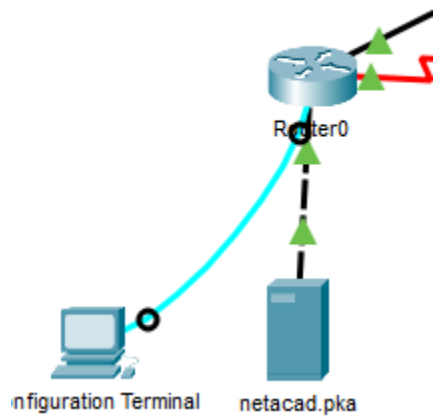
Step 1:



Step 2:

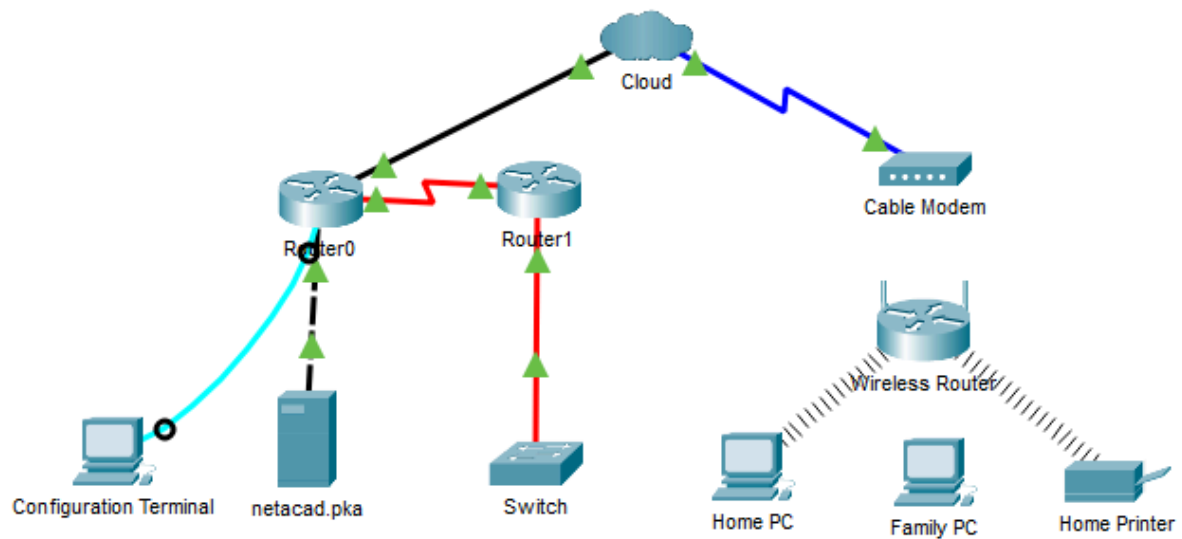


Step 3:

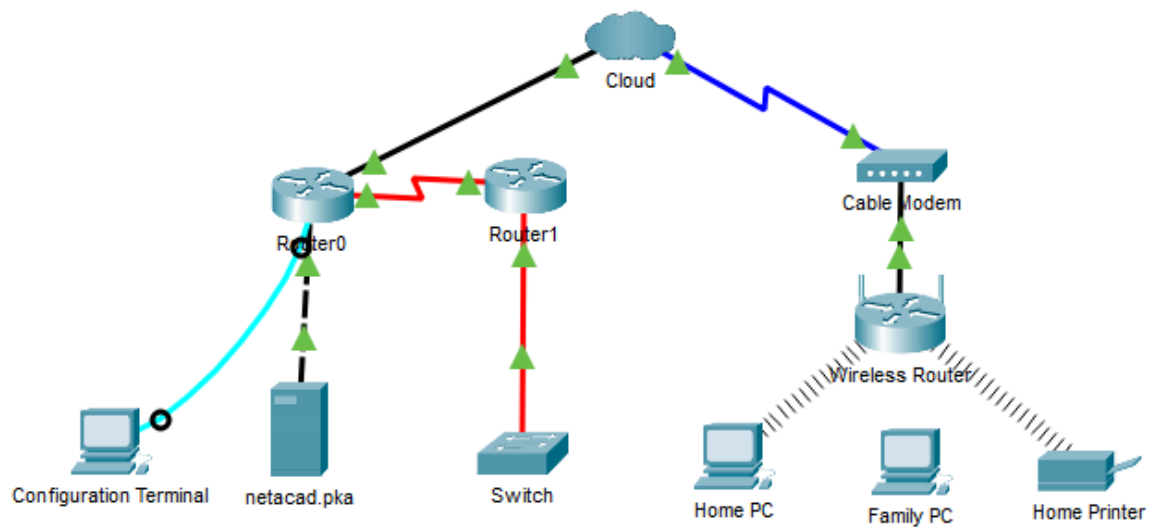


Part 3: Connect Remaining Devices

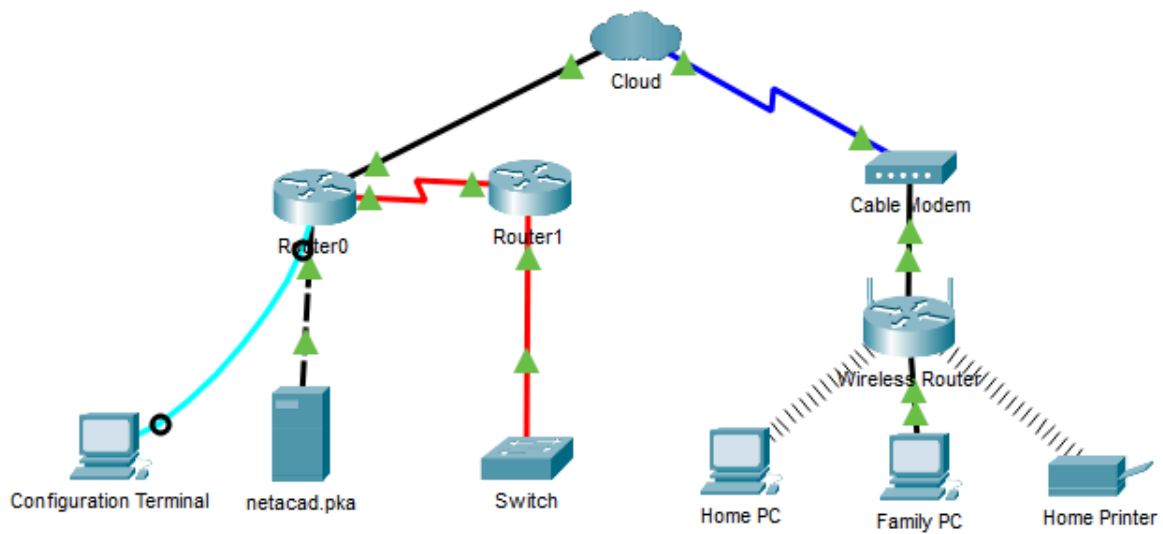
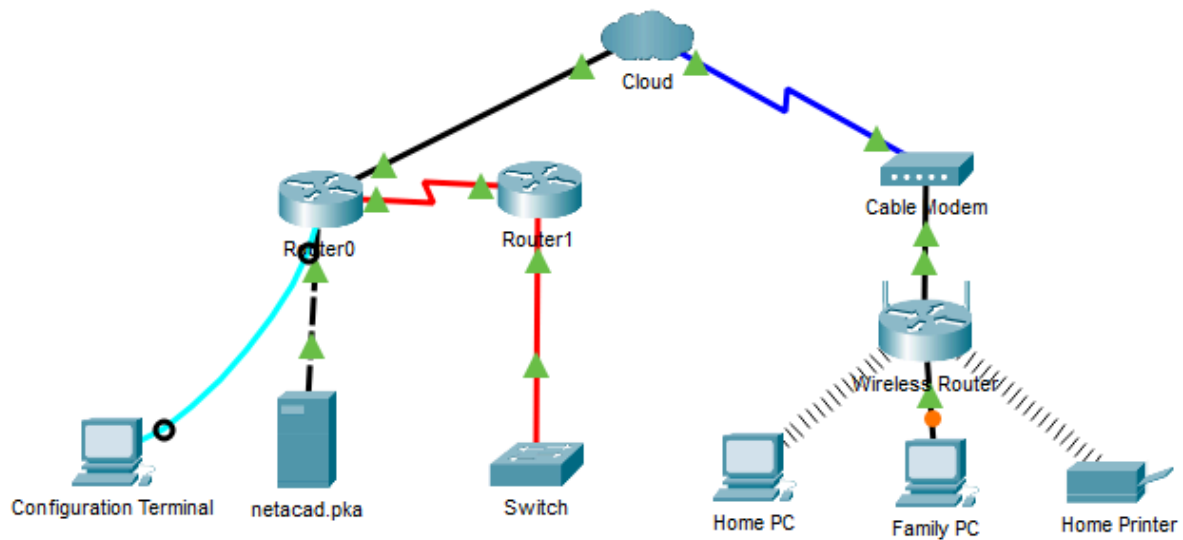
Step 1:



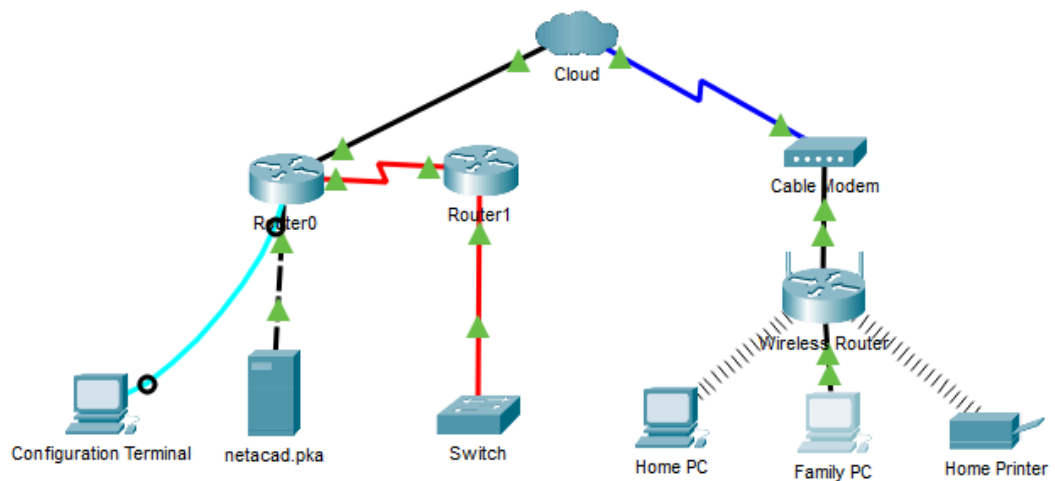
Step 2:



Step 3:



Part 4: Verify Connections
Step 1:



Family PC

Physical Config Desktop Programming Attributes

Command Prompt

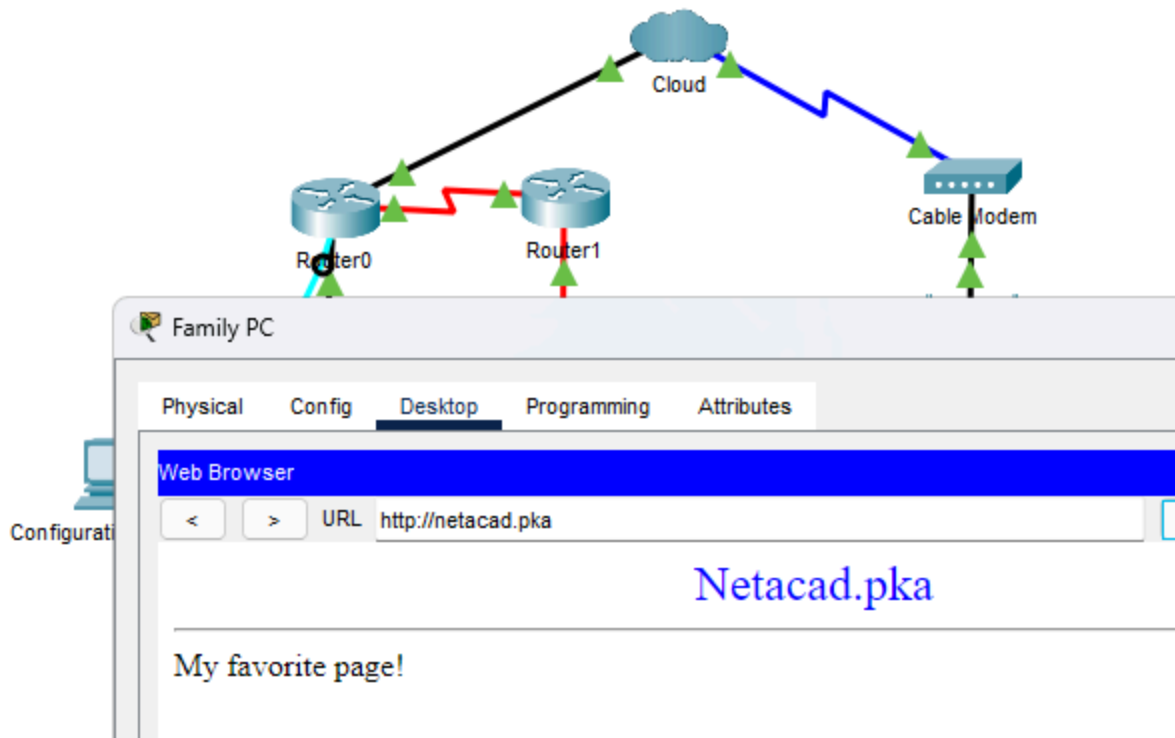
```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping netacad.pka

Pinging 10.0.0.254 with 32 bytes of data:

Reply from 10.0.0.254: bytes=32 time=2ms TTL=126
Reply from 10.0.0.254: bytes=32 time=10ms TTL=126
Reply from 10.0.0.254: bytes=32 time=2ms TTL=126
Reply from 10.0.0.254: bytes=32 time=25ms TTL=126

Ping statistics for 10.0.0.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 25ms, Average = 9ms

C:\>
```



Step 2:

to Wireless Router Internet port.
a will turn green.

ernet 1 to Family PC.
a turn green.

d.pka.
ad.pka.
stacad.pka.

1 IP address of to verify the connection.

cept the default settings.

s.

```

Cisco Packet Tracer PC Command Line 1.0
C:\>ping Switch
Ping request could not find host switch. Please check the name and try again.
C:\>ping Switch IP address
Invalid Command.

C:\>ping 172.16.0.2

Pinging 172.16.0.2 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 172.16.0.2: bytes=32 time=65ms TTL=252
Reply from 172.16.0.2: bytes=32 time=84ms TTL=252

Ping statistics for 172.16.0.2:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 65ms, Maximum = 84ms, Average = 74ms

C:\>

```

Step 3:

green.

1 to Wireless Router.
 nnect Cable Modem Port1 to Wireless Router Internet port.
 e, the link lights on the cable will turn green.

ter to Family PC.
 nnect Wireless Router Ethernet 1 to Family PC.
 e, the link lights on the cable turn green.

om Family PC to netacad.pka.
 and prompt and ping netacad.pka.
 id the web address <http://netacad.pka>.

home PC.
 prompt and ping the Switch IP address of to verify the connection.

onfiguration Terminal.
 figuration Terminal and accept the default settings.
 uter0 command prompt.
 ief to view interface statuses.

al Topology

ace tab or press **Shift+P** and **Shift+L** to toggle between the logical

ected to the switch in the blue rack?
 ne City.

Completion: 100%

Back 1/1 Next

Configuration Terminal

Physical Config **Desktop** Programming Attributes

Terminal X

```
Compiled Mon 15-May-06 14:54 by pt_team
Image text-base: 0x6007D180, data-base: 0x61400000

Port Statistics for unclassified packets is not turned on.
Cisco 1841 (revision 5.0) with 114688K/16384K bytes of memory.
Processor board ID FTX0947218E
M860 processor: part number 0, mask 49
2 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
151K bytes of NVRAM.
32768K bytes of ATA CompactFlash (Read/Write)
Cisco IOS Software, 1841 Software (C1841-IPBASE-M), Version 12.3(14)T7, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2006 by Cisco Systems, Inc.
Compiled Mon 15-May-06 14:54 by pt_team

Press RETURN to get started!
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
%DUAL-5-NBRCHANGE: IP-EIGRP 1: Neighbor 172.31.0.2 (Serial0/0/0) is up: new adjacency
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
```

```
Router0>show ip interface brief
Interface      IP-Address      OK? Method Status      Protocol
FastEthernet0/0 192.168.2.1     YES manual up          up
FastEthernet0/1 10.0.0.1        YES manual up          up
Serial0/0/0     172.31.0.1      YES manual up          up
Serial0/0/1     unassigned      YES unset  administratively down down
Vlan1          unassigned      YES unset  administratively down down
Router0>
```

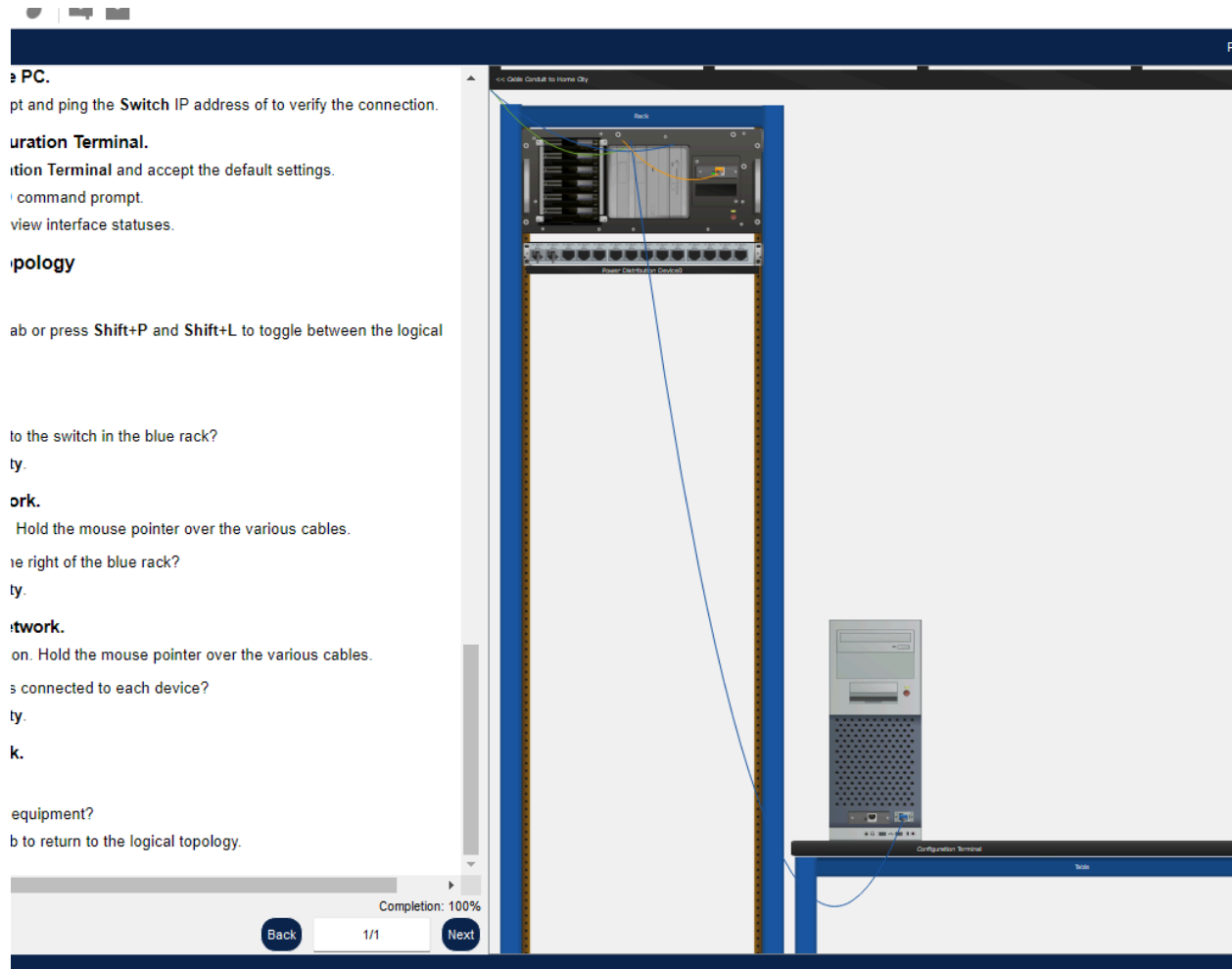
☐ Top

Part 5: Examine the physical topology

Step 1:

How many wires are connected to the switch on the blue rack?

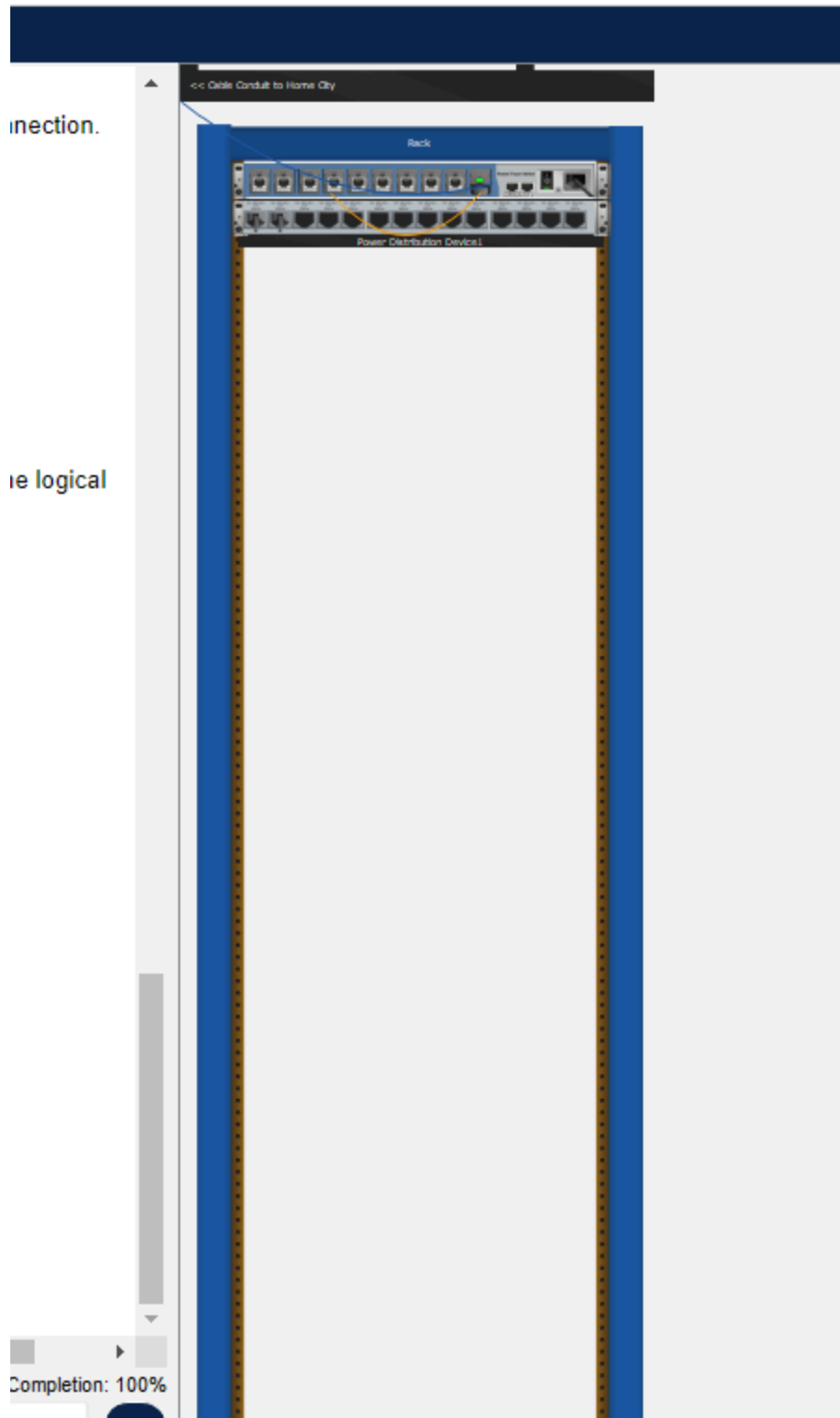
- 2



What is located on the table to the right of the blue rack?

- A pc or a computer.

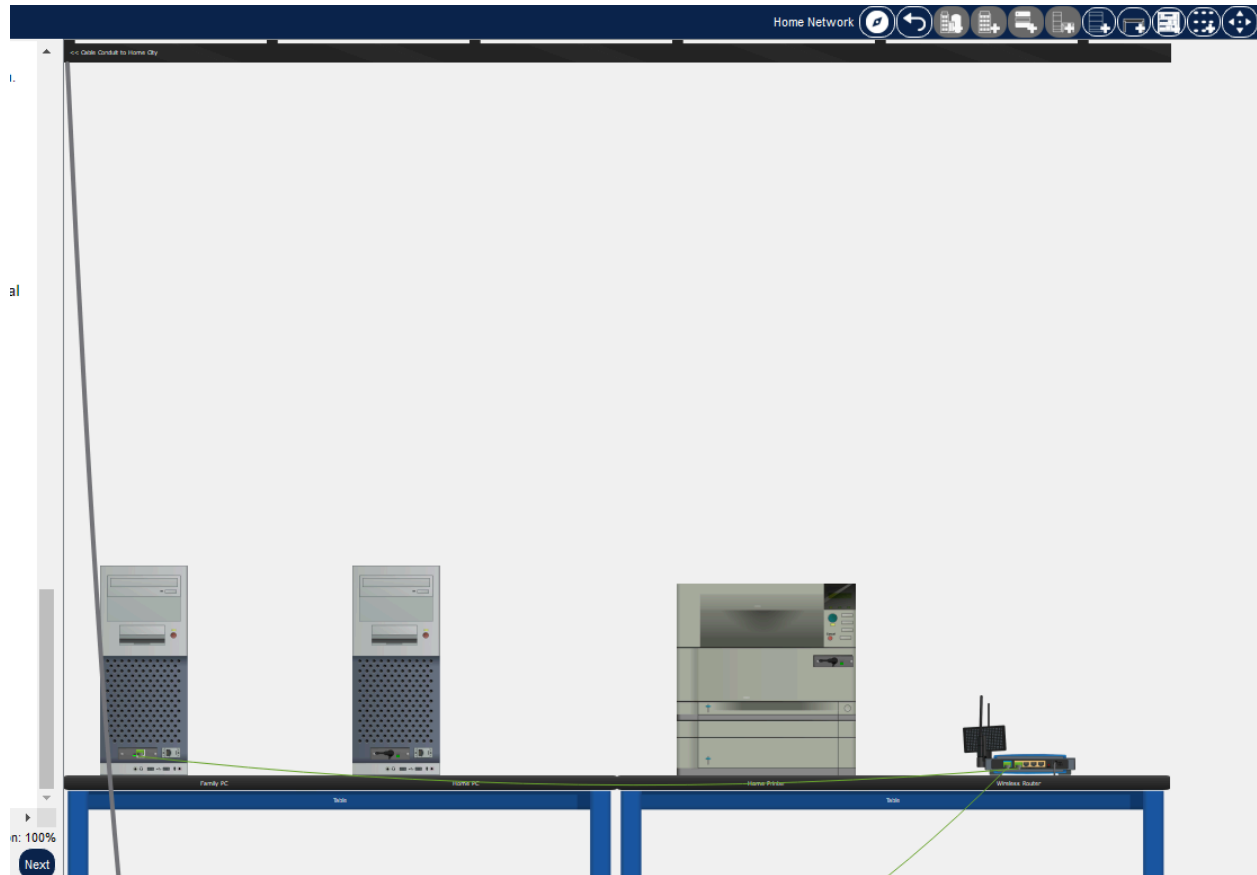
Step 3:



Why are there two orange cables connected to each device?

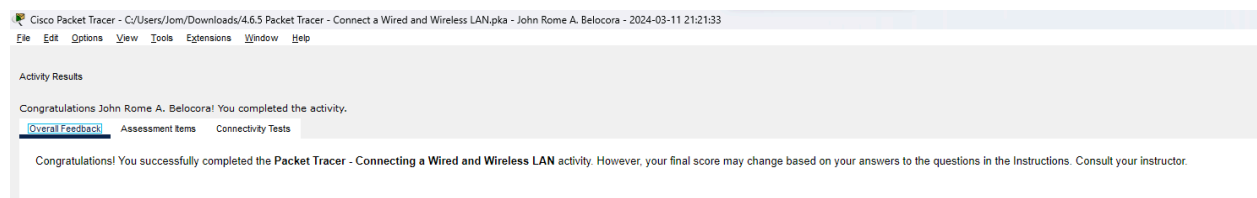
- For the connection of the source and the destination.

Step 4:



Why is there no rack to hold the equipment?

- Because usually houses do not have rack equipment for the router.



Assessment Items:

Cisco Packet Tracer - C:\Users\joni\Downloads\4.6.5 Packet Tracer - Connect a Wired and Wireless LAN.pka - John Rome A. Belocora - 2024-03-11 21:22:33

FileEditOptionsViewToolsExtensionsWindowHelp

Activity Results

Time Elapsed: 00:35:34

Congratulations John Rome A. Belocora! You completed the activity.

Overall FeedbackAssessment ItemsConnectivity Tests

Expand/Collapse AllShow Incorrect Items

Assessment Items	Status	Points	Component(s)	Feedback
Network				
Cable Modem				
Ports				
Port 0		0	Other	
Link to Cloud		0	Other	
Connects to Coaxial?	Correct	5	Device Connection	
Port 1		0	Other	
Link to Wireless Router		0	Other	
Connects to Internet	Correct	5	Device Connection	
Cloud				
Ports				
Coaxial?		0	Other	
Link to Cable Modem		0	Other	
Connects to Port 0	Correct	5	Device Connection	
Ethernet8		0	Other	
Link to Router0		0	Other	
Connects to FastEthernet0/0	Correct	5	Device Connection	
Configuration Terminal		0	Other	
RS 232		0	Other	
Link to Router0		0	Other	
Connects to Console	Correct	5	Device Connection	
Family PC		0	Other	
Ports				
FastEthernet0		0	Other	
Link to Wireless Router		0	Other	
Connects to Ethernet 1	Correct	5	Device Connection	
intacadm.pka		0	Other	
Ports				
FastEthernet0		0	Other	
Link to Router0		0	Other	
Connects to FastEthernet0/1	Correct	5	Device Connection	
Router0				
Console		0	Other	
Link to Configuration Terminal		0	Other	
Connects to RS 232	Correct	5	Device Connection	
Ports				
FastEthernet0/0		0	Other	
Link to Cloud		0	Other	
Connects to Ethernet8	Correct	5	Device Connection	
FastEthernet0/1		0	Other	
Link to intacadm.pka		0	Other	
Connects to FastEthernet0	Correct	5	Device Connection	
Serial0/0		0	Other	
Link to Router1		0	Other	
Connects to Serial0/0	Correct	5	Device Connection	
Router1				
Ports				
FastEthernet1/0		0	Other	
Link to Switch		0	Other	
Connects to FastEthernet0/1	Correct	5	Device Connection	
Serial0/0		0	Other	
Link to Router0		0	Other	
Connects to Serial0/0	Correct	5	Device Connection	

Score: 80/80

Item Count: 16/16

Component	Items/Total	Score
Device Connection	16/16	80/80

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FileEditOptionsViewToolsExtensionsWindowHelp

Activity Results

Time Elapsed: 00:35:45

Congratulations John Rome A. Belocora! You completed the activity.

Overall FeedbackAssessment ItemsConnectivity Tests

Expand/Collapse AllShow Incorrect Items

Assessment Items	Status	Points	Component(s)	Feedback
Ethernet8		0	Other	
Link to Router0		0	Other	
Connects to FastEthernet0/0	Correct	5	Device Connection	
Configuration Terminal		0	Other	
RS 232		0	Other	
Link to Router0		0	Other	
Connects to Console	Correct	5	Device Connection	
Family PC		0	Other	
Ports				
FastEthernet0		0	Other	
Link to Wireless Router		0	Other	
Connects to Ethernet 1	Correct	5	Device Connection	
intacadm.pka		0	Other	
Ports				
FastEthernet0		0	Other	
Link to Router0		0	Other	
Connects to FastEthernet0/1	Correct	5	Device Connection	
Router0				
Console		0	Other	
Link to Configuration Terminal		0	Other	
Connects to RS 232	Correct	5	Device Connection	
Ports				
FastEthernet0/0		0	Other	
Link to Cloud		0	Other	
Connects to Ethernet8	Correct	5	Device Connection	
FastEthernet0/1		0	Other	
Link to intacadm.pka		0	Other	
Connects to FastEthernet0	Correct	5	Device Connection	
Serial0/0		0	Other	
Link to Router1		0	Other	
Connects to Serial0/0	Correct	5	Device Connection	
Router1				
Ports				
FastEthernet1/0		0	Other	
Link to Switch		0	Other	
Connects to FastEthernet0/1	Correct	5	Device Connection	
Serial0/0		0	Other	
Link to Router0		0	Other	
Connects to Serial0/0	Correct	5	Device Connection	
Switch				
Ports				
FastEthernet0/1		0	Other	
Link to Router1		0	Other	
Connects to FastEthernet1/0	Correct	5	Device Connection	
Wireless Router				
Ports				
Ethernet 1		0	Other	
Link to Family PC		0	Other	
Connects to FastEthernet0	Correct	5	Device Connection	
Internet		0	Other	
Link to Cable Modem		0	Other	
Connects to Port 1	Correct	5	Device Connection	

Score: 80/80

Item Count: 16/16

Component	Items/Total	Score
Device Connection	16/16	80/80

Close