

family pc

Lab8

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Family PC
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.0.0.254

Pinging 10.0.0.254 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 10.0.0.254: bytes=32 time=1ms TTL=126
Reply from 10.0.0.254: bytes=32 time=1ms TTL=126

Ping statistics for 10.0.0.254:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms

C:\>ping 10.0.0.254

Pinging 10.0.0.254 with 32 bytes of data:

Reply from 10.0.0.254: bytes=32 time=11ms TTL=126
Reply from 10.0.0.254: bytes=32 time=2ms TTL=126
Reply from 10.0.0.254: bytes=32 time=1ms TTL=126
Reply from 10.0.0.254: bytes=32 time=1ms 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 = 1ms, Maximum = 11ms, Average = 3ms

C:\>
```

ping Home pc

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Home PC
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
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=13ms TTL=252
Reply from 172.16.0.2: bytes=32 time=9ms 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 = 9ms, Maximum = 13ms, Average = 11ms

C:\>ping 172.16.0.2

Pinging 172.16.0.2 with 32 bytes of data:

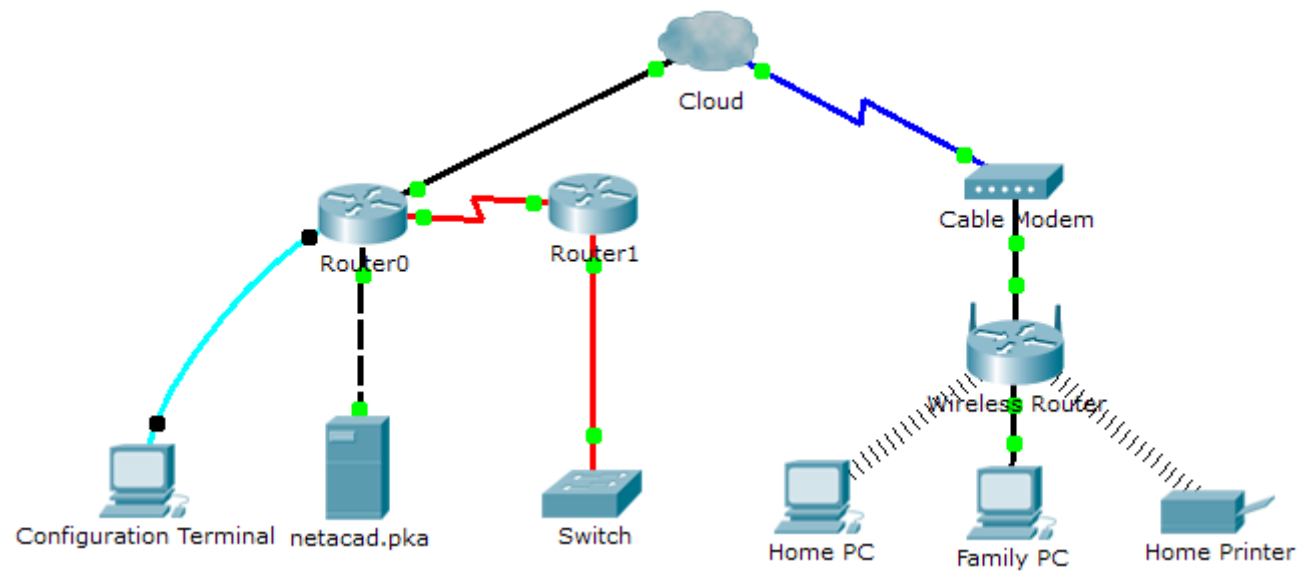
Reply from 172.16.0.2: bytes=32 time=12ms TTL=252
Reply from 172.16.0.2: bytes=32 time=16ms TTL=252
Reply from 172.16.0.2: bytes=32 time=13ms TTL=252
Reply from 172.16.0.2: bytes=32 time=13ms TTL=252

Ping statistics for 172.16.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 12ms, Maximum = 16ms, Average = 13ms

C:\>
```

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Lab. 8: Connecting a Wired and Wireless LAN Topology



Addressing Table

Part 1: Device	Part 2: Interface	Part 3: IP Address	Part 4: Connects To
Part 5: Cloud	Part 6: th6	Part 7: N/A	Part 8: Fa 0/0
	Part 9: oax7	Part 10: N/A	Part 11: Port0
Part 12: Cable Modem	Part 13: ort0	Part 14: N/A	Part 15: Co ax7
	Part 16: ort1	Part 17: N/A	Part 18: Internet
Part 19: Router0	Part 20: onsole	Part 21: N/A	Part 22: RS 232
	Part 23: a0/0	Part 24: 192.168.2.1/24	Part 25: Eth 6
	Part 26: a0/1	Part 27: 10.0.0.1/24	Part 28: Fa 0
	Part 29: er0/0/0	Part 30: 172.31.0.1/24	Part 31: Ser0/0
Part 32: Router1	Part 33: er0/0	Part 34: 172.31.0.2/24	Part 35: Ser0/0/0
	Part 36: a1/0	Part 37: 172.16.0.1/24	Part 38: Fa 0/1
Part 39: WirelessRouter	Part 40: nternet	Part 41: 192.168.2.2/24	Part 42: Port 1
	Part 43: th1	Part 44: 192.168.1.1	Part 45: Fa 0
Part 46: Family PC	Part 47: a0	Part 48: 192.168.1.102	Part 49: Eth 1
Part 50: Switch	Part 51: a0/1	Part 52: 172.16.0.2	Part 53: Fa 1/0
Part 54: Netacad.pka	Part 55: a0	Part 56: 10.0.0.254	Part 57: Fa 0/1
Part 58: Configuration Terminal	Part 59: S232	Part 60: N/A	Part 61: Console

Objectives

Part 1: Connect to the Cloud

Part 2: Connect Router0

Part 3: Connect Remaining Devices

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.

Part 62: Connect to the Cloud

Connect the cloud to Router0.

- a. At the bottom left, click the orange lightning icon to open the available **Connections**.
- b. Choose the correct cable to connect **Router0 Fa0/0** 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.

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 63: Connect Router0

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.

Connect Router0 to netacad.pka.

Choose the correct cable to connect **Router0 Fa0/1** to **netacad.pka Fa0**. 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.

Connect Router0 to the Configuration Terminal.

Choose the correct cable to connect **Router0 Console** to **Configuration Terminal RS232**. This cable does not provide network access to **Configuration Terminal**, but allows you to configure **Router0** through its terminal.

If you attached the correct cable, the link lights on the cable turn black.

Part 64: Connect Remaining Devices

Connect Router1 to Switch.

Choose the correct cable to connect **Router1 Fa1/0** to **Switch Fa0/1**.

If you attached the correct cable, the link lights on the cable turn green. Allow a few seconds for the light to transition from amber to green.

Connect Cable Modem to Wireless Router.

Choose the correct cable to connect **Modem Port1** to **Wireless Router Internet** port.

If you attached the correct cable, the link lights on the cable will turn green.

Connect Wireless Router to Family PC.

Choose the correct cable to connect **Wireless Router Ethernet 1** to **Family PC**.

If you attached the correct cable, the link lights on the cable turn green.

Part 65: Verify Connections

Test the connection from Family PC to netacad.pka.

- Open the **Family PC** command prompt and ping **netacad.pka**.
- Open the **Web Browser** and the web address **http://netacad.pka**.

Ping the Switch from Home PC.

Open the **Home PC** command prompt and ping the **Switch** IP address of to verify the connection.

Open Router0 from Configuration Terminal.

- Open the **Terminal** of **Configuration Terminal** and accept the default settings.
- Press **Enter** to view the **Router0** command prompt.
- Type **show ip interface brief** to view interface statuses.

Part 66: Examine the Physical Topology

Examine the Cloud.

- Click the **Physical Workspace** tab or press **Shift+P** and **Shift+L** to toggle between the logical and physical workspaces.
- Click the **Home City** icon.
- Click the **Cloud** icon. How many wires are connected to the switch in the blue rack?

2 , one for router0 the other for router1

- Click **Back** to return to **Home City**.

Examine the Primary Network.

- Click the **Primary Network** icon. Hold the mouse pointer over the various cables. What is located on the table to the right of the blue rack?

Configuration Terminal

- Click **Back** to return to **Home City**.

Examine the Secondary Network.

- Click the **Secondary Network** icon. Hold the mouse pointer over the various cables. Why are there two orange cables connected to each device?

one for transmit, the other for receive

تأتي كابلات فايبر في أزواج ، واحدة للإرسال ، والأخرى للاستقبال

- Click **Back** to return to **Home City**.

Examine the Home Network.

- i. Why is there an oval mesh covering the home network?

range of the wireless network

يمثل نطاق الشبكة اللاسلكية

- j. Click the **Home Network** icon. Why is there no rack to hold the equipment?

Home networks typically do not have racks

الشبكات المنزلية عادة لا تحتوي على رفوف لأنها لا تحتاج ذلك

Click the **Logical Workspace** tab to return to the logical topology.

