

#### Good job!

You have successfully identified the correct answers.

You answered 12 out of 12 questions correctly.

Summary

Show Menu 2 Online Connections Unline Connections 2.4 Summary What Did I Learn in this Module? 2.4.1 Module 2 - Online Connections 2.4.2 Ouiz **Explore Networks with** 3 Packet Tracer 3.0 Introduction Packet Tracer Network 3.1 Simulator 3.2 Packet Tracer Installation The Packet Tracer User 3.3 Interface

**Packet Tracer Network** 

**Explore Networks with** 

**Packet Tracer Summary** 

Build a Simple Network

**Network Media Types** 

Coaxial and Fiber-Optic

Twisted-Pair Operation

**Ethernet Cabling** 

Configuration

Introduction

3.4

3.5

4

4.0

4.1

4.2

4.3

4.4

# Online Connections Summary

2.4.1

### What Did I Learn in this Module?



#### Wireless Networks

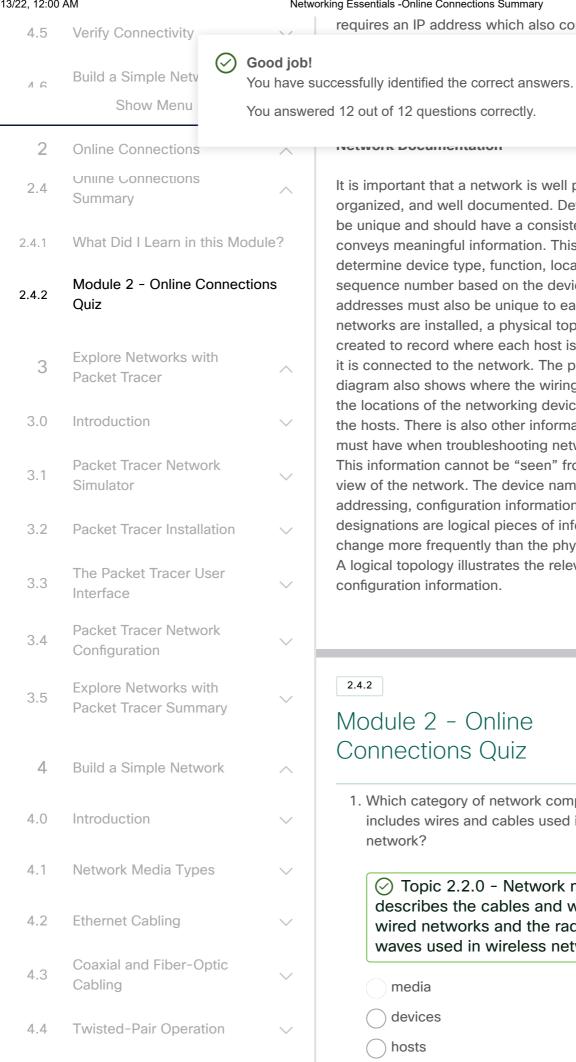
Mobile phones use radio waves to transmit voice signals to antennas. These antennas are mounted on towers located in specific geographic areas. The most common type of cellular telephone network is a GSM network. Most mobile phones and smart phones have an indicator that shows when a 4G or 5G signal is available. In addition to the GSM and 3G/4G transmitters and receivers, smart phones make connections to different types of networks, including: GPS, Wi-Fi, Bluetooth, and NFC.

#### **Local Network Connections**

You can group network components into four categories: hosts, peripherals, network devices, and network media. Hosts are any devices that send and receive messages directly across the network. Shared peripherals are not directly connected to the network, but instead are connected to hosts. Networking devices are sometimes referred to as "intermediary devices" because they are usually located in the path that messages take between a source host and a destination host. Network media refers to the cables and wires used in wired networks, along with radio frequency waves used in wireless networks.

To physically connect to a network, a host must have a network interface card (NIC). The NIC is a piece of hardware that enables the device to connect to the network media, either wired or wirelessly. A host

Cabling



It is important that a network is well planned, logically organized, and well documented. Device names must be unique and should have a consistent format that conveys meaningful information. This can help to determine device type, function, location, and sequence number based on the device name. IP addresses must also be unique to each device. When networks are installed, a physical topology diagram is created to record where each host is located and how it is connected to the network. The physical topology diagram also shows where the wiring is installed and the locations of the networking devices that connect the hosts. There is also other information that you must have when troubleshooting network problems. This information cannot be "seen" from the physical view of the network. The device names. IP addressing, configuration information, and network designations are logical pieces of information that may change more frequently than the physical connectivity. A logical topology illustrates the relevant network configuration information.

requires an IP address which also contains a subnet

to the other

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n be

2.4.2

## Module 2 - Online Connections Quiz



1. Which category of network components includes wires and cables used in a wired network?

✓ Topic 2.2.0 - Network media describes the cables and wires used in wired networks and the radio frequency waves used in wireless networks.

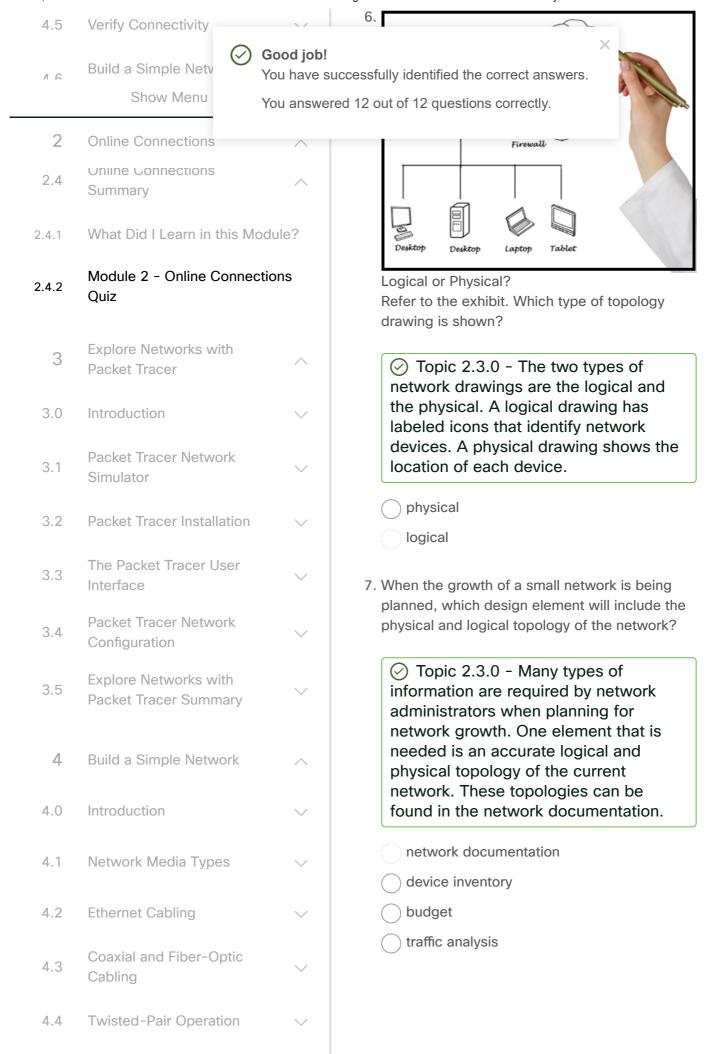
media

devices

hosts

4.5	Verify Connectivity		peripherals		
16	Build a Simple Netv  Show Menu		ical cessfully identified the correct answers. d 12 out of 12 questions correctly.		
2 2.4	Online Connections Online Connections	^	defines the way in which computers and other network devices are		
2.4.1	Summary  What Did I Learn in this M	odule?	It describes whether the LAN is a broadcast or token-passing network.		
2.4.2	Module 2 - Online Conne Quiz	ctions	It shows the order in which hosts access the network.		
3	Explore Networks with Packet Tracer	^	It defines how hosts and network devices connect to the LAN.  It depicts the addressing scheme that is employed in the LAN.  3. Which wireless technology is used on smart phones to transmit data to another device within very close proximity?		
3.0	Introduction	~			
3.1	Packet Tracer Network Simulator	~			
3.2	Packet Tracer Installation	~	⊘ Topic 2.1.0 - Near Field		
3.3	The Packet Tracer User Interface	~	Communications (NFC) is a wireless technology that enables data to be exchanged by devices that are in very		
3.4	Packet Tracer Network Configuration	~	close proximity to each other.  NFC		
3.5	Explore Networks with Packet Tracer Summary	~	○ Bluetooth ○ Wi-Fi		
4	Build a Simple Network	^	○ 3G/4G		
4.0	Introduction	~			
4.1	Network Media Types	~			
4.2	Ethernet Cabling	~			
4.3	Coaxial and Fiber-Optic Cabling	~			
4.4	Twisted-Pair Operation				

4.5	Verify Connectivity		4. Which IP configuration parameter provides the		
4.5	$\bigcirc$	Good job!			
16	Build a Simple Netv	You have successfully identified the correct answers.			
	Show Menu	You answe	red 12 out of 12 questions correctly.  P include		
2	Online Connections	^	these:		
2.4	Online Connections Summary	^	<ul> <li>IP address - identifies the host on the network.</li> <li>Subnet mask - identifies the network</li> </ul>		
2.4.1	What Did I Learn in this N	on which the host is connected.  o Default gateway - identifies the			
2.4.2	Module 2 - Online Connections Quiz		networking device that the host uses to access the Internet or another remote network.  • DNS server - identifies the server		
3	Explore Networks with Packet Tracer	^	that is used to translate a domain name into an IP address.		
3.0	Introduction	~	default gateway subnet mask		
3.1	Packet Tracer Network Simulator	~	O DNS server		
3.2	Packet Tracer Installation	~	host IP address		
3.3	The Packet Tracer User Interface	~	5. A traveling sales representative uses a cell phone to interact with the home office and customers, track samples, make sales calls, log mileage, and upload/download data while at a		
3.4	Packet Tracer Network Configuration	~	hotel. Which internet connectivity method would be a preferred method to use on the mobile device due to the low cost?		
3.5	Explore Networks with Packet Tracer Summary	~			
4	Build a Simple Network	^	cellular network or a Wi-Fi network to connect to the internet. The Wi-Fi connection is preferred because it uses		
4.0	Introduction	~	less battery power and is free in many places.		
4.1	Network Media Types	~	cellular		
4.2	Ethernet Cabling	~	Wi-Fi  cable		
4.3	Coaxial and Fiber-Optic	~	ODSL		



4.5	Verify Connectivity		8. What are two recommendations for an
11.0			× twork
	Build a Simple Netv	Good job!	:wo.) ccessfully identified the correct answers.
16	Show Menu		
	SHOW Menu	You answere	d 12 out of 12 questions correctly.
2	Online Connections	^	should include a standard and
_			consistent format that conveys
2.4	Online Connections	^	meaningful information that is useful
	Summary		when locating devices on a network.
2.4.1	What Did I Learn in this M	odulo2	Because of the fact that the IP address
2.4.1	vviiat bid i Leain in tilis iv	oddie:	may change, an IP address on a PC is
	Module 2 - Online Connections		not commonly part of the name. The
2.4.2 Quiz			length of the name varies. The format of the device name is company-
			dependent.
	Explore Networks with		dopondona
3	Packet Tracer	^	A device name should be more than 8
	1 00100 110001		characters.
3.0	Introduction		Each device name should include
			upper/lower case letters, numbers, and
0.4	Packet Tracer Network		symbols.
3.1	Simulator	<u> </u>	A device name, especially for PCs, should
			include an IP address.
3.2	Packet Tracer Installation	~	Device names should be in a consistent
			format.
3.3	The Packet Tracer User		_
	Interface		Each device should have a unique, meaningful name.
	Packet Tracer Network		meaningful flame.
3.4	Configuration	V	9. Which type of technology is used to provide
			digital data transmissions over cell phone
3.5	Explore Networks with	V	networks?
	Packet Tracer Summary		
4	Build a Simple Network	^	are technologies that are used to
			provide enhanced cell phone networks
4.0	Introduction		that are capable of fast data
		·	transmission.
4.1	Network Media Types		Bluetooth
4.1	Network Media Types		
	F.1		◯ Wi-Fi
4.2	Ethernet Cabling	~	4G
	Coord on d Fiber Ond		○ NFC
4.3	Coaxial and Fiber-Optic Cabling	~	
	Cability		
4.4	Twisted-Pair Operation		
7.7	. Wiotod i ali Operation	~	

4.5	Verify Connectivity		10. Which wireless technology can be		
	Build a Simple Netv	Good job!	>	omputer?	
16	·	You have suc	ccessfully identified the correct answers.	low-	
	Show Menu	You answere	d 12 out of 12 questions correctly.	chnology	
2	Online Connections	^	accessories such as speaker headphones, and microphone	· 1	
2.4	Online Connections Summary	^		<b>c</b> 5.	
2.4.1	What Did I Learn in this Module?		NFC Bluetooth		
			○ Wi-Fi		
2.4.2	Module 2 - Online Connec Quiz	ctions	○ 4G-LTE		
3	Explore Networks with Packet Tracer	^	A teenager has asked the grandparents for a specific type of mobile technology. The grandparents do not remember the specific		
3.0	Introduction	~	name of the device, but remember teenager wants to receive a cell pl	none call on	
3.1	Packet Tracer Network Simulator	~	it. Which technology is likely to be teenager wants?	the one the	
3.2	Packet Tracer Installation	~			
3.3	The Packet Tracer User Interface	~	receiving/placing calls, playing online games, and using applications such as		
3.4	Packet Tracer Network Configuration	~	a calculator or geolocator.  GPS		
3.5	Explore Networks with Packet Tracer Summary	~	VR headset		
	,		smart watch		
4	Build a Simple Network	^	e-reader		
4.0	Introduction	~	12. What is a technology used in a cel telephone network?	lular	
4.1	Network Media Types	~	⊘ Topic 2.1.0 - The most continue of cellular telephone net     value of the continue	twork is	
4.2	Ethernet Cabling	~	called Global System for Mobile Communications or GSM network and it relays a voice signal from one tower to another tower, until it is delivered to a destination.		
4.3	Coaxial and Fiber-Optic Cabling	V			
4.4	Twisted-Pair Operation	~	fiber-optic Bluetooth		

4.4

Twisted-Pair Operation