• Server

A server in Cisco Packet Tracer is a simulated device that mimics the behaviour of a real-world network server. It is used to provide services to other devices (clients) within a network. The server acts as a centralized point for the following:

• DHCP Service: Automatically assigns IP addresses to devices within a network.

• DNS Service: Resolves domain names to IP addresses.

• Web Hosting: Hosts websites accessible through the network.

• FTP and TFTP Services: For transferring files across the network.

 Modules

A. WMP300N

Description:

The WMP300N Module in Cisco Packet Tracer is a virtual wireless network interface card (NIC) that adds Wi-Fi capabilities to devices like computers or servers. It supports Wi-Fi standards (802.11b/g/n), enabling wireless communication between devices and access points or routers in a network simulation.

Usage:

1. Adding Wireless Connectivity: The module allows devices to connect to wireless networks, simulating Wi-Fi functionality in a network design.

2. WLAN Simulation: Enables the creation of wireless networks, connecting devices to wireless access points or routers.

3. Configuration: Users can set SSID, security protocols (WPA, WPA2), and IP addressing to customize the wireless connection.

4. Testing Connectivity: Verify the wireless connection using tools like ping to ensure proper network communication.

5. Educational and Troubleshooting Tool: Ideal for learning wireless networking concepts, testing configurations, and simulating real-world wireless network scenarios.

B. PT-HOST-NM-1CE

Description:

The PT-HOST-NM-1CE is a host module in Cisco Packet Tracer used to simulate a computer or workstation with a single Ethernet connection. It represents end-user devices like desktops or laptops, and it supports common network configurations such as IP addressing, DNS, and DHCP.

Usage:

1. Simulates End Devices like computers or workstations in a network.

2. Configures IP and Network Settings (DHCP, static IP, DNS).

3. Tests Network Connectivity using tools like ping.

4. Designs Basic Networks by representing user devices in a network topology.

C. PT-HOST-NM-1CFE

Description:

The PT-HOST-NM-1CFE is a host module in Cisco Packet Tracer used to simulate a computer or workstation with a single Ethernet port. The "CFE" part of the name stands for "Compact Form Factor Ethernet", indicating that it is designed for more compact devices that use Ethernet connections. This module allows users to create and configure simple end-devices (like computers or servers) for network simulations, supporting basic network functionalities such as IP addressing, DNS, and DHCP.

Usage:

1. Simulates End Devices: Used to represent computers, workstations, or servers in network simulations.

2. Configures Network Settings: Allows configuration of IP addresses, DNS, and DHCP for network communication.

3. Connectivity Testing: Helps test network connectivity using ping or other tools.

4. Network Design: Used in simple network designs to represent user devices that interact with routers, switches, and other network elements.

D. PT-HOST-NM-1CGE

Description:

The PT-HOST-NM-1CGE is a host module in Cisco Packet Tracer designed to simulate a computer or workstation with a single Gigabit Ethernet (GE) port. It represents an end-user device with a high-speed network interface for communication in a simulated network.

Usage:

1. Simulates End Devices: Represents computers, servers, or workstations in a network.

2. Configures Network Settings: Supports IP, DNS, and DHCP configurations.

3. Tests Network Connectivity: Used to test connections and troubleshoot using tools like ping.

4. Network Design: Ideal for designing network topologies with Gigabit Ethernet devices.

E. PT-HOST-NM-1FFE

Description:

The PT-HOST-NM-1FFE is a host module in Cisco Packet Tracer used to simulate a computer or workstation with a single Fast Ethernet (FE) port. This module represents end-user devices that use Fast Ethernet for network connectivity, which typically supports speeds up to 100 Mbps. It is used in network simulations to create simple devices like PCs or servers that interact with other network components.

Usage:

1. Simulates End Devices: Used to represent computers, workstations, or servers in a network.

2. Configures Network Settings: Supports configuration of IP addresses, DNS, and DHCP.

3. Tests Connectivity: Can be used to test network connectivity with tools like ping.

4. Network Design: Ideal for designing and simulating basic network topologies with Fast Ethernet devices.

F. PT-HOST-NM-1FGE

Description:

A 1-Port Fiber Gigabit Ethernet (FGE) network module for host devices in Packet Tracer. It enables high-speed Fiber connectivity for simulated devices like PCs, servers, or routers.

Usage:

1. Adds Fiber Gigabit Ethernet capability to compatible devices.

2. Used in simulations involving high-speed Fiber links.

3. Helps in learning and testing Fiber-based network setups.

4. Installed via the Modules tab in device settings.

G. PT-HOST-NM-1W

Description:

A 1-Port Wireless Network Module used in host devices within Cisco Packet Tracer. It provides basic wireless connectivity for devices like servers or PCs.

Usage:

1. Adds wireless communication capabilities to a host device.

2. Enables simulation of simple Wi-Fi networks.

H. PT-HOST-NM-1W-A

Description:

An Advanced 1-Port Wireless Network Module with enhanced range and performance.

Usage:

1. Simulates improved Wi-Fi connectivity in scenarios requiring advanced wireless capabilities.

2. Supports configurations involving higher bandwidth or extended coverage.

I. PT-HOST-NM-1W-AC

Description:

A 1-Port Wireless Network Module with AC Standard that supports the 802.11ac wireless protocol for high-speed connectivity.

Usage:

1. Used to simulate Wi-Fi setups with faster data transfer rates and better performance.

2. Ideal for advanced wireless network simulations involving modern Wi-Fi standards.

J. PT-HOST-NM-3G/4G

Description:

A 3G/4G Cellular Network Module for host devices, enabling mobile network connectivity simulation.

Usage:

1. Simulates cellular communication in network designs.

2. Used for creating scenarios involving mobile network connectivity or failover systems.

K. PT-HOST-NM-COVER

Description:

A Module Cover used to block empty module slots in host devices.

Usage:

1. Ensures unused slots are covered in the simulation.

2. Provides a realistic representation of network hardware in Packet Tracer.