

Introduction to CISCO Packet Tracer:

Packet Tracer is a medium fidelity, network-capable, simulation-based learning environment for networking novices to design, configure, and troubleshoot computer networks. Helps in visualizations, simulations and animations of networking phenomena.

- * We can toggle between logical & physical workspaces. And workspace is where the network will be created, watch simulations, view many kinds of info.
- * We can also toggle between Realtime and Simulation Mode.
- * Various devices and connections can be chosen from device-type selection box and Device-specific selection box contains specific devices which you want to put in the network.

Creating First Network:Demonstration:

- 1) Pick 2 end devices from device-type selection box
- 2) Connect these two devices (Automatically choose conn. type).
- 3) Config device 1 and modify the IP address to 10.0.0.1 and in the FastEthernet0.
- 4) For device 2 set the IP address to 10.0.0.2.
- 5) Add Simple PDU to the device.
- 6) Switch to the Simulation tab and click on Auto capture/play, to view the simulation.

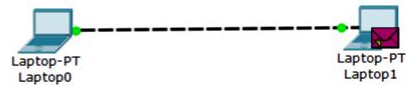
* Using command prompt:

Use:

➡➡ ping IP-address
to send message to a particular device

Difference between

<u>Hub</u>	<u>Switch</u>	<u>Router</u>
Hub is a physical layer device i.e. layer 1	Switch is a data link layer device i.e. layer 2	Router is a network layer device i.e. layer 3
Hub works on the basis of broadcasting.	Switch works on the basis of MAC address	A router works on the basis of IP address
A Hub is a multi-port repeater in which a signal introduced at the input of any port appears at the output of all available ports	A Switch is a telecommunication device which receives a message from any device connected to it and then transmits the message only to the device for which the message is intended.	A router reads the header of incoming packet and forward it to the port for which it is intended there by determines the route.
At least single network is required to connect	At least single network is required to connect.	Router needs at least two networks to connect
Cheaper compared to switch and router	Switch is an expensive device than hub.	Router is relatively much more expensive device than hub & switch.



Simulation Panel

Event List

Vis.	Time(sec)	Last Devi	At Devi	Type	Info
	0.000	--	Laptop1	ICMP	
	0.001	Laptop1	Laptop0	ICMP	
	0.002	Laptop0	Laptop1	ICMP	

Reset Simulation
☒ Constant Delay
Captured to: * 143.845 s

Play Controls

Back
Auto Capture / Play
Capture / Forward

Event List Filters - Visible Events

ACL Filter, ARP, BGP, CDP, DHCP, DHCPv6, DNS, DTP, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, LACP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, RADIUS, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, VTP

Edit Filters
Show All/None

