

EXPERIMENT-14

Design the Functionalities and Exploration of UDP using Packet Tracer.

Aim: To implement Data Link Layer Traffic Simulation using Packet Tracer Analysis of CSMA/CD & CSMA/CA.

Software / Apparatus required: Packet Tracer / End devices, Switches, connectors.

Requirements:

1. End device - They are the devices through which we can pass message from one device to another and they are interconnected.
2. Switch/Hub - Interface Between two devices.
3. Cable - Used to connect two devices

Procedure:

STEP 1: Click on end devices, select generic Pc's drag and drop it on the window. Click on SWITCH drag and drop it on the window.

STEP 2: Select the straight through cable and connect all end device to switch. Assign the IP

address for all end devices. (Double click the end device Select → desktop → IP configuration static)

STEP 3: Now set the IP address to Host A (192.168.1.1) in static mode. Similarly set IP address

for Host B (192.168.1.2) and Host C (192.168.1.3)

STEP 4: To view the IP address, give ip config command in command prompt. Using ping

command, we can establish communication between two host devices.

STEP 5: Now display the packet transmission in simulation mode.

Cisco Packet Tracer
 File Edit Options View Tools Extensions Window Help

Logical Physical 1523 v 615

Router1
 2901 Switch5
 Server-PT Server1 192.168.0.2
 PC-PT PCS 192.168.0.1

Simulation Panel

Event List

| Vis. | Time(sec) | Last Device |
|---------------|-----------|-------------|
| 0.000 | - | - |
| 0.001 | PCS | PCS |
| 0.001 | - | - |
| 0.002 | PCS | PCS |
| 0.002 | Switch5 | Switch5 |
| 0.003 | Switch5 | Switch5 |
| 0.003 | Server1 | Server1 |
| Visible 0.004 | Server1 | Server1 |
| Visible 0.004 | Switch5 | Switch5 |

Reset Simulation Constant Delay Captured to: 0.004 s

Play Controls

Event List Filters - Visible Events
 ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IUT, IUT TOP, LACP, LLDP, Mcast, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RFP, RFPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Event List Realtime Simulation

Time: 00:25:58.552 PLAY CONTROLS

Scenario 0

New Delete

Toggle PDU List Window

Copper Straight-Through

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
 Successful PCS Server1 ICMP 0.000 N 0 (edit) (delete)