



DEPARTMENT OF

COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

WORKSHEET – 2.4

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Branch: CSE

Section/Group: 606 “A”

Semester: 4th

Date of Performance: 10-04-2023

Subject Name: Computer Networks

Subject Code: 21CSH-256

Aim:

Configure a network using Link State Routing Protocol using Packet Tracer or NS2.

Objective: Understand Routing Mechanism

S/W Requirement: Packet Tracer

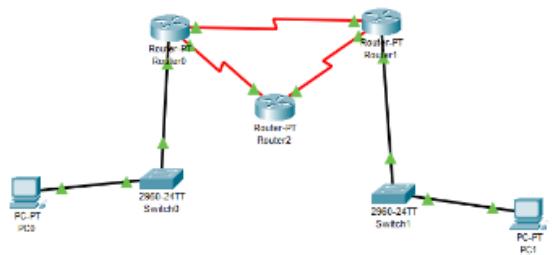
H/W Requirement:

- Processor – Any suitable Processor e.g. Celeron
- Main Memory - 128 MB RAM
- Hard Disk – minimum 20 GB IDE Hard Disk
- Removable Drives–1.44 MB Floppy Disk Drive –52X IDE CD-ROM Drive
- PS/2 HCL Keyboard and Mouse

Method:

- Create simulator objects such as end devices, Routers and Switches.
- Using switch connect all nodes to the router
- For every node assign unique IP address
- Provide same Gateway IP.
- Configure router as Network address
- Configure OSPF Protocol

Result: Simulated Link State Routing Protocol.



re	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit
●	Successful	PC0	PC1	ICMP	█	0.000	N	0	(edit)
●	Successful	PC1	PC0	ICMP	█	0.000	N	1	(edit)

Router0

Physical Config **CLI** Attributes

IOS Command Line Interface

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Cisco Internetwork Operating System Software
IOS (tm) PT1000 Software (PT1000-I-M), Version 12.2(28), RELEASE SOFTWARE (fc5)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2005 by cisco Systems, Inc.
Compiled Wed 27-Apr-04 19:01 by miwang

PT 1001 (PTSC2005) processor (revision 0x200) with 60416K/5120K bytes of memory
.
Processor board ID PT0123 (0123)
PT2005 processor: part number 0, mask 01
Bridging software.
X.25 software, Version 3.0.0.
4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up
00:00:10: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.4.1 on Serial2/0 from LOADING to FULL,
Loading Done
00:00:10: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.5.1 on Serial3/0 from LOADING to FULL,
Loading Done

```

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