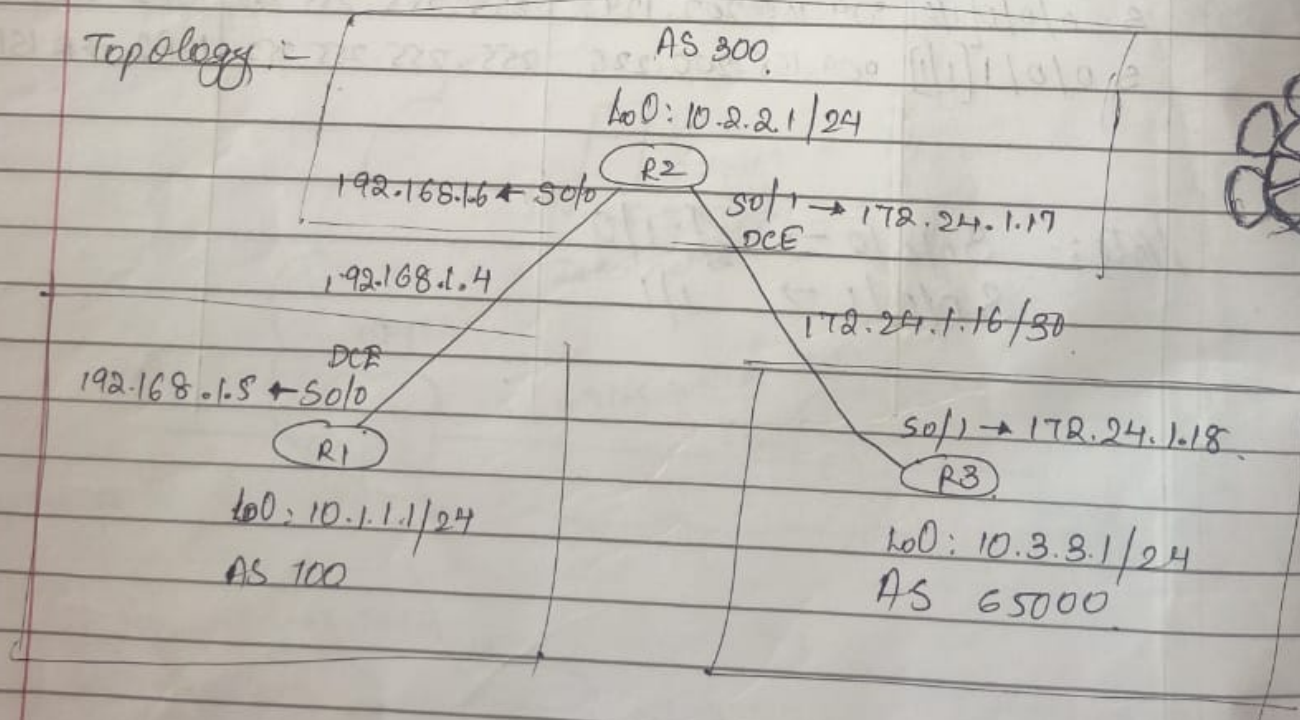


Prac-2 - Using the AS-PATH Attribute Addressing Table

Devices	Interface	IP Address	Subnetmask	Description
R1	loopback 0	10.1.1.1	255.255.255.0	
(San Jose)	S 0/0	192.168.1.5	255.255.255.252	
R2	loopback 0	10.2.2.1	255.255.255.0	
(ISP)	S 0/0	192.168.1.6	255.255.255.252	
	S 0/1	172.24.1.17	255.255.255.252	
R3	loopback 0	10.3.3.1	255.255.255.0	
(Mumbai)	S 0/1	172.24.1.18	255.255.255.252	

Topology :-

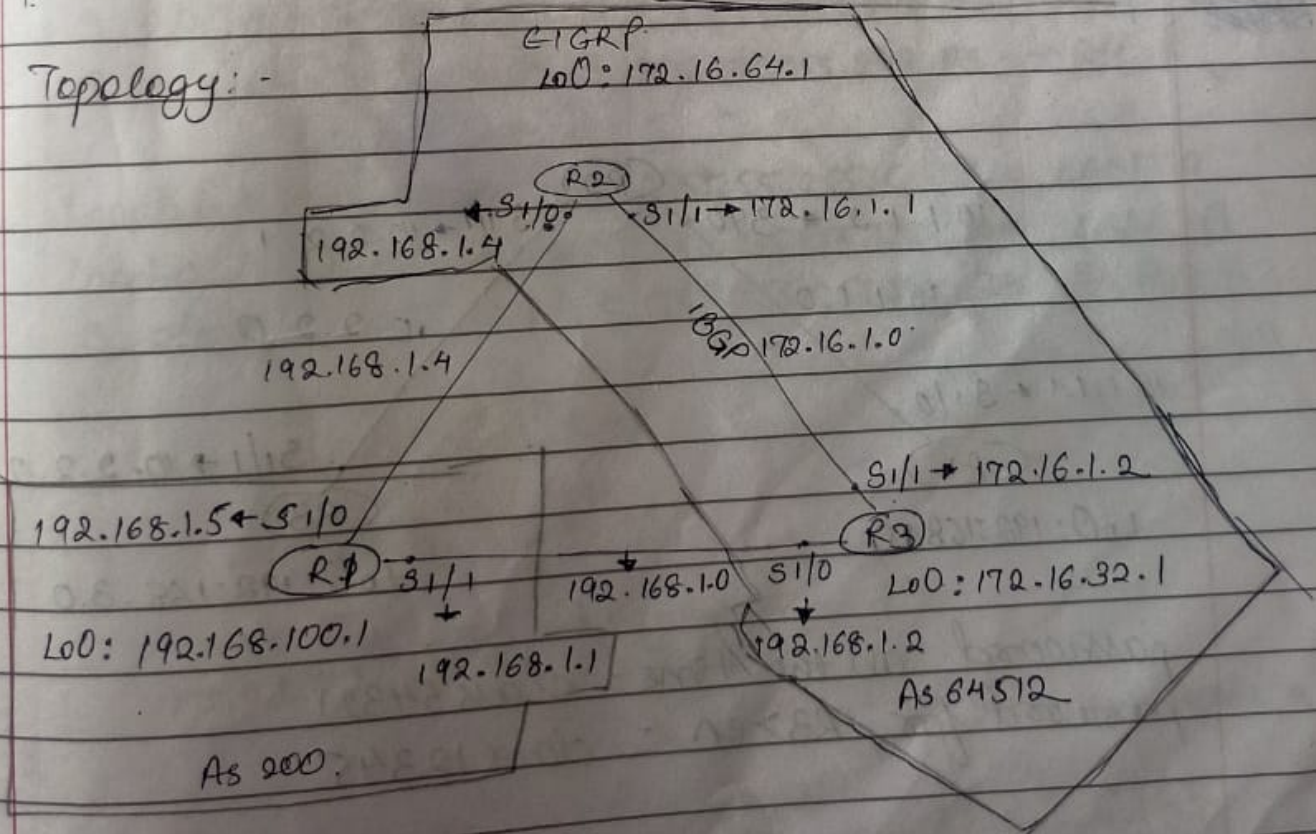


C7200

Prac-3 - Configuring IBGP and EBGP sessions, Part 1-3: Local Preference and MED Addressing Table

Devices	Interface	IP Address	Subnet mask	Description
R1 (ISP)	Loopback 0	192.168.100.1	255.255.255.0	
	S1/0	192.168.1.5	255.255.255.252	
	S1/1	192.168.1.1	255.255.255.252	
R2 (Sanjose 1)	Loopback 0	172.16.64.1	255.255.255.0	
	S1/0	192.168.1.6	255.255.255.252	
	S1/1	172.16.1.1	255.255.255.252	
R3 (Sanjose 2)	Loopback 0	172.16.32.1	255.255.255.0	
	S1/0	192.168.1.2	255.255.255.252	
	S1/1	172.16.1.2	255.255.255.0	

Topology: -

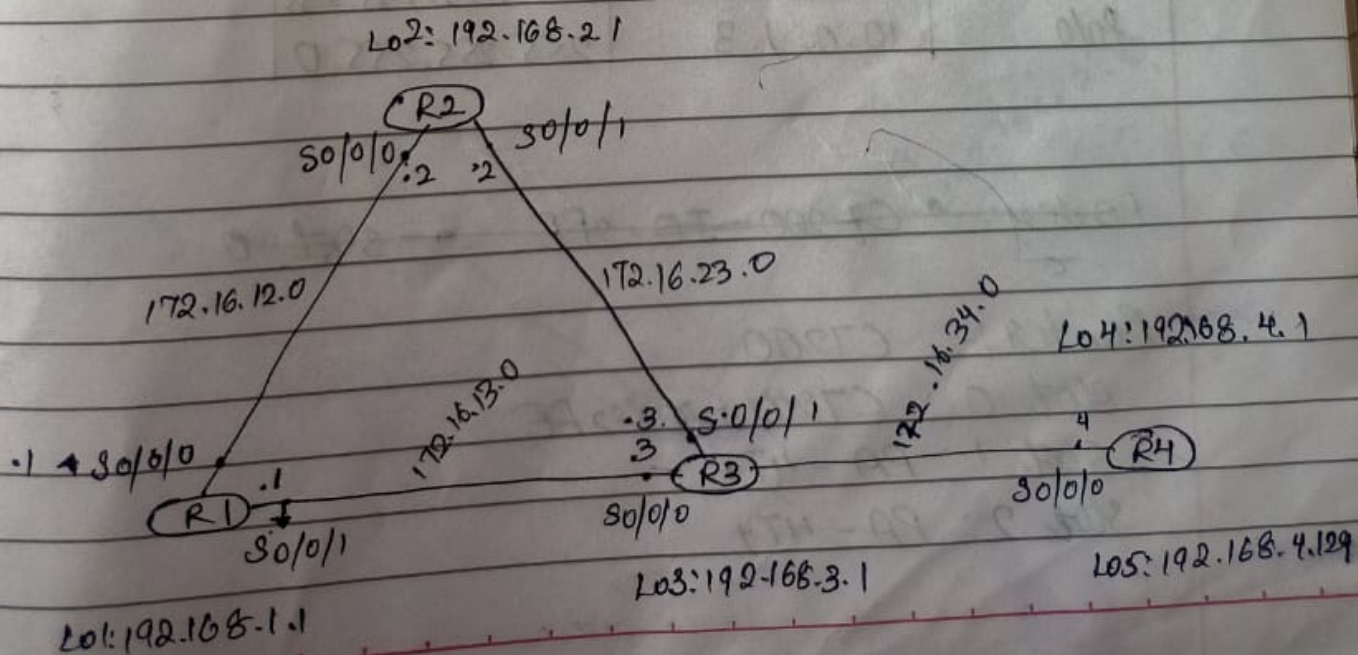


Eastest.

★ S 0/0/0 → S 1/0
 • S 0/0/1 → S 1/1
 • S 0/1/0 → S 1/2

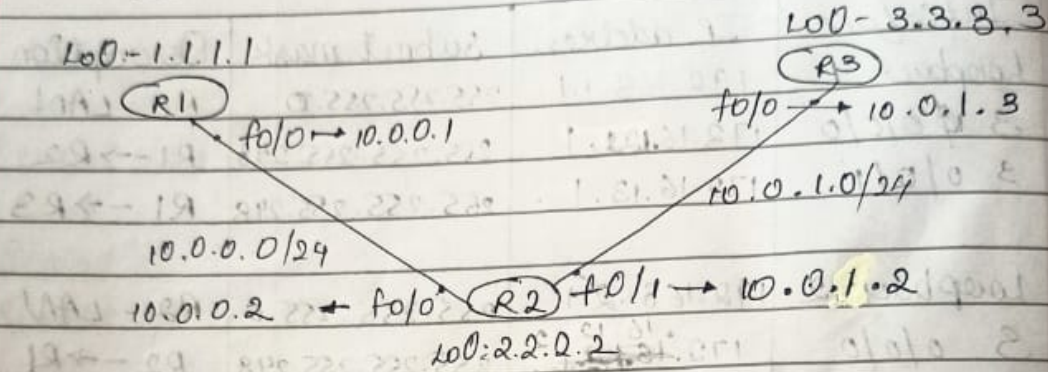
Prac-5. Configure and verify path control using PBR's Addressing Table.

Devices	Interface	IP address	Subnet mask	Description
R1	Loopback 1	192.168.1.1	255.255.255.0	R1 LAN
	S 0/0/0	172.16.12.1	255.255.255.248	R1 → R2
	S 0/0/1	172.16.13.1	255.255.255.248	R1 → R3
R2	Loopback 2	192.168.2.1	255.255.255.0	R2 LAN
	S 0/0/0	172.16.12.2	255.255.255.248	R2 → R1
	S 0/0/1	172.16.23.2	255.255.255.248	R2 → R3
R3	Loopback 3	192.168.3.1	255.255.255.0	R3 LAN
	S 0/0/0	172.16.13.3	255.255.255.248	R3 → R1
	S 0/0/1	172.16.23.3	255.255.255.248	R3 → R2
	S 0/1/0	172.16.34.3	255.255.255.248	R3 → R4
R4	Loopback 4	192.168.4.1	255.255.255.0	R4 LAN A
	Loopback 5	192.168.4.129	255.255.255.128	R4 LAN B
	S 0/0/0	172.16.34.4	255.255.255.248	R4 → R3



Prac-6 Simulating MPLS environment

Topology:-



Addressing Table

Devices	Interfaces	IP address	Subnet mask	Description
R1	Lo0	1.1.1.1	255.255.255.255	ip aspt 1 area 0
	fo/0	10.0.0.1	255.255.255.0	
R2	Lo0	2.2.2.2	255.255.255.255	
	fo/0	10.0.0.2	255.255.255.0	
	fo/1	10.0.1.2	255.255.255.0	
R3	Lo0	3.3.3.3	255.255.255.255	
	fo/0	10.0.1.3	255.255.255.0	

Router:- C7200-10-2FE slot 0

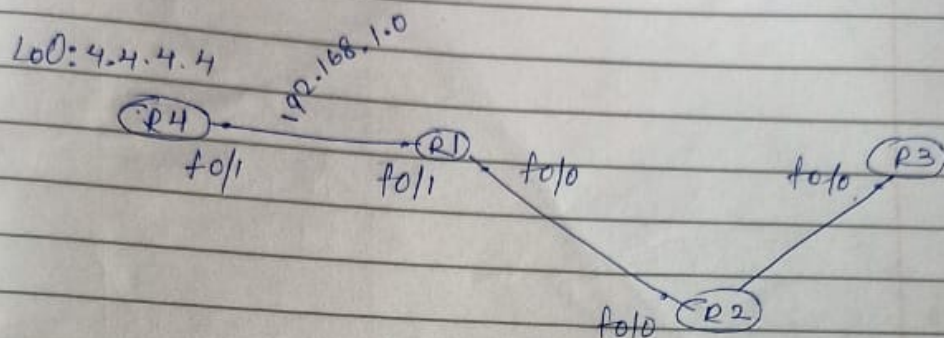
Router:- C7200

slot 0: C7200-10-2FE

slot 1: PA-4T+

slot 2: PA-4T+

Now, after some steps, we have to add router 4 in the topology.



Then go to console and configure

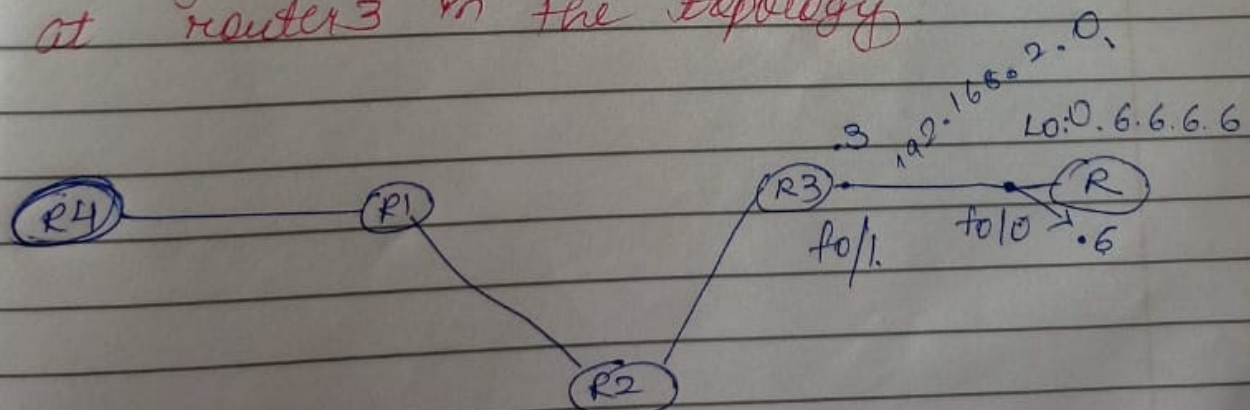
Addressing Table for router 4

Device	Interface	IP address	Subnet mask
R4	Lo0	4.4.4.4	255.255.255.255
	f0/0	192.168.1.4	255.255.255.0
	f0/1	192.168.1.1	255.255.255.0

Descript^r.

:- ip ospf 2 area 2

★ Now, again we have to add another router 6 at router 3 in the topology.



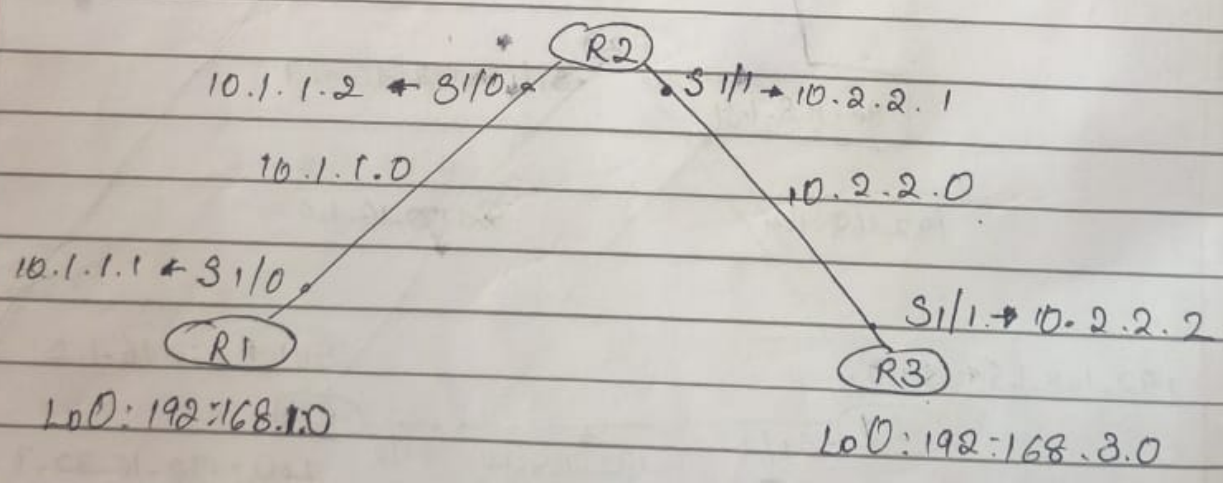
Did it

Prac-4 Secure the Management Plane

Addressing Table

Devices	Interface	IP address	subnet mask	Description
R1	Loopback 0	192.168.1.1	255.255.255.0	R1 LAN
	Serial 1/0	10.1.1.1	255.255.255.252	R1 --> R2
R2	Serial 1/0	10.1.1.2	255.255.255.252	R2 --> R1
	Serial 1/1	10.2.2.1	255.255.255.252	R2 --> R3
R3	Loopback 0	192.168.3.1	255.255.255.0	R3 LAN
	Serial 1/1	10.2.2.2	255.255.255.252	

Sketch



password - all the time - class 54321
 password for R3 > en - class 12345

Practical 1 - Configure IP SLA Tracking & Path Control

Addressing Table

Devices	Interface	IP Address	Subnet mask	Description
R1	loopback 0	192.168.1.1	255.255.255.0	R1 LAN
	S 0/0/0[1/0]	209.165.201.2	255.255.255.252	R1 → ISP1
	S 0/0/1[1/1]	209.165.202.130	255.255.255.252	R1 → ISP2
R2 (ISP1)	loopback 0	209.165.200.254	255.255.255.255	Simulated Internet web server
	loopback 1	209.165.201.30	255.255.255.255	ISP1 DNS Server
	S 0/0/0[1/0]	209.165.201.1	255.255.255.252	ISP1 → R1
	S 0/0/1[1/1]	209.165.200.225	255.255.255.252	ISP1 → ISP2
R3 (ISP2)	loopback 0	209.165.200.254	255.255.255.255	Simulated Internet web server
	loopback 1	209.165.202.158	255.255.255.255	ISP2 DNS Server
	S 0/0/0[1/0]	209.165.202.129	255.255.255.252	ISP2 → R1
	S 0/0/1[1/1]	209.165.200.226	255.255.255.252	ISP2 → R1 ISP1

Note:- S0/0/0 → 1/0
S0/0/1 → 1/1