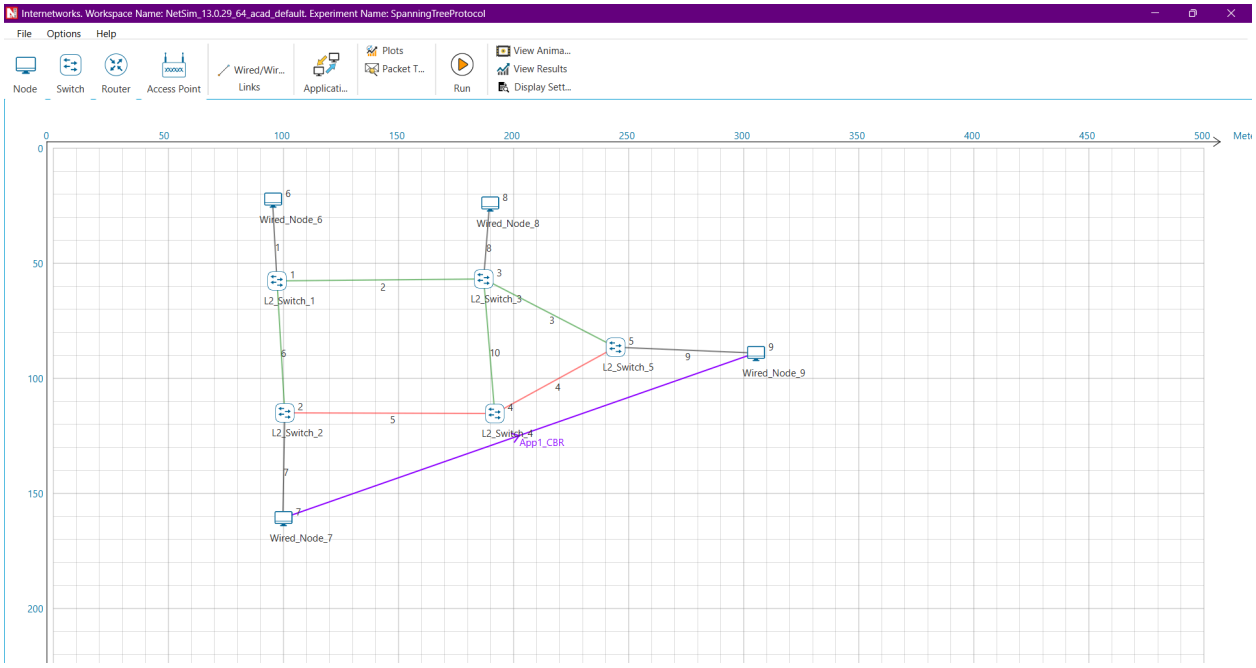
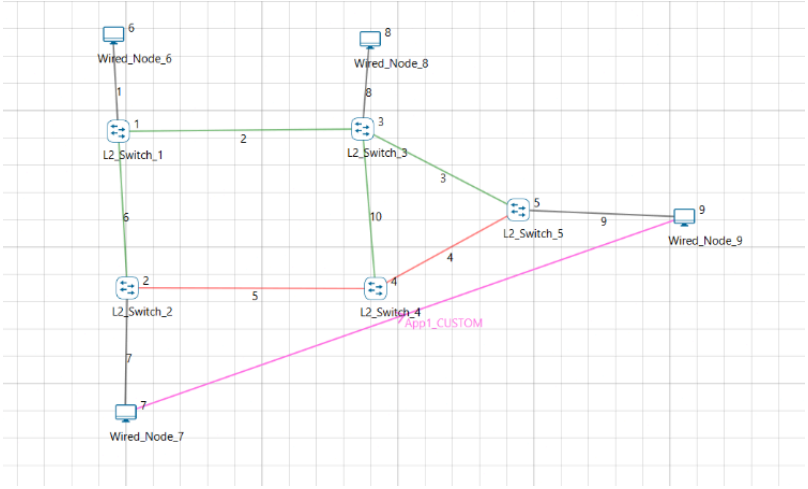
Experiment 1

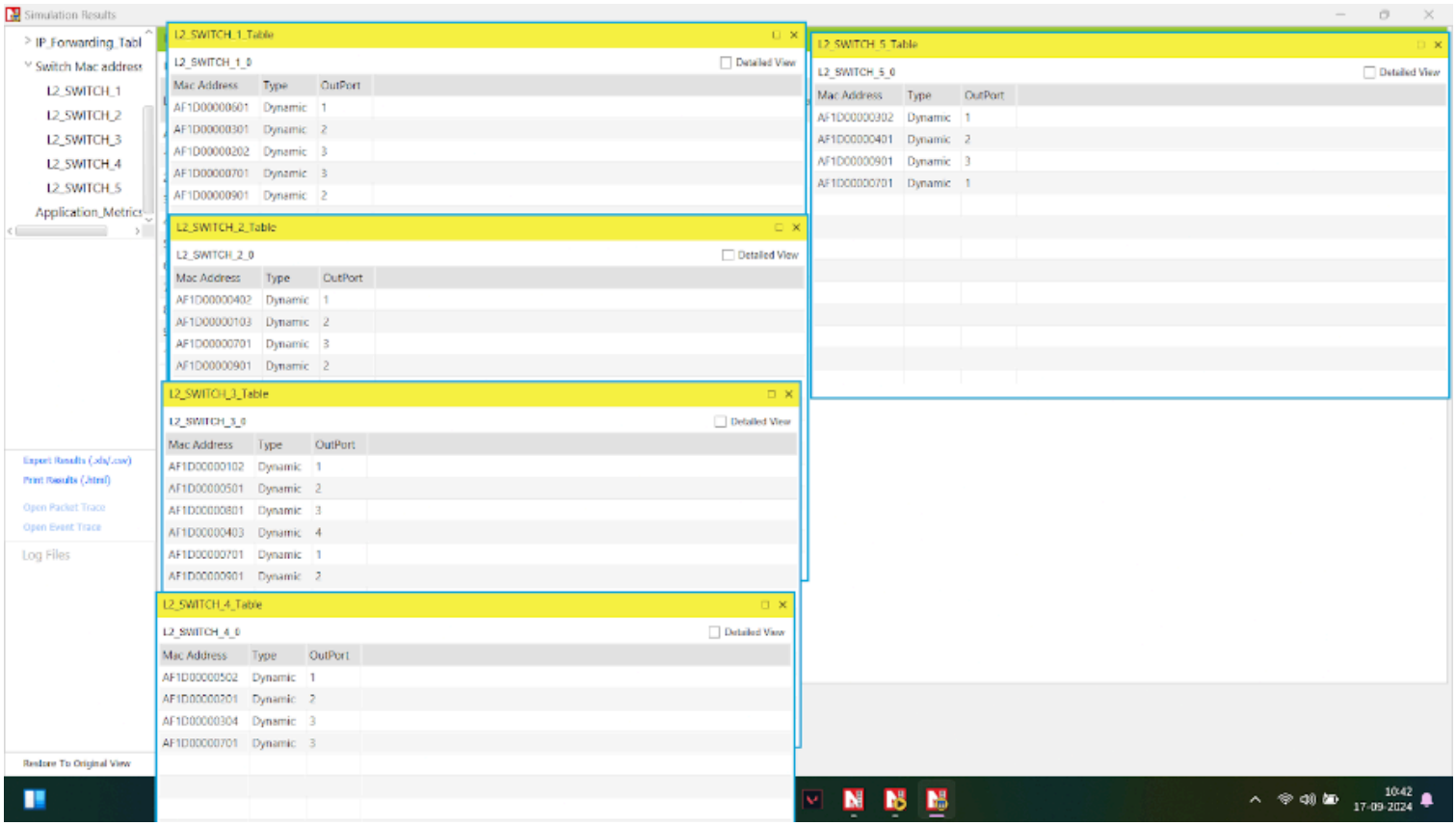


Que1	**Switch**	**BLOCKED PORTS**	
	Switch 2	Outport 1 - Switch 4	
	Switch 4	Outport 2 - Switch 2	
		Outport 1 - Switch 5	
	Switch 5	Outport 2- Switch 4	

Que2

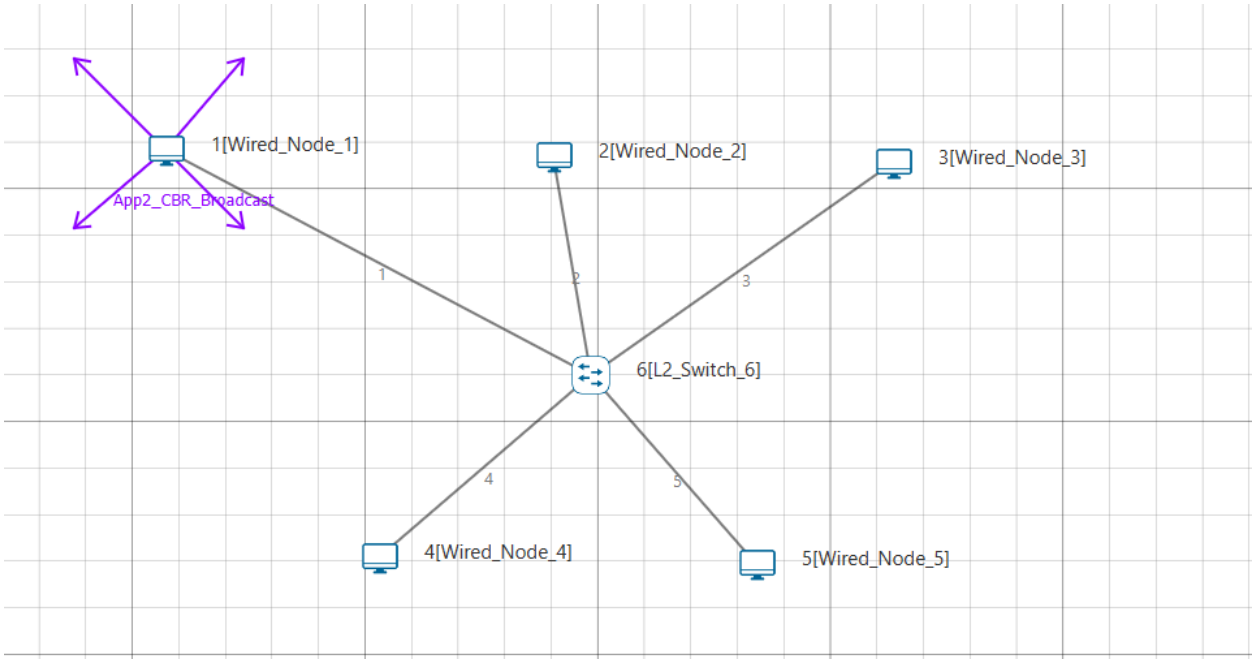


Que3



Experiment 2

a)



Application_Metrics_Table

Application_Metrics

Detailed View

Application Id	Application Name	Source Id	Destination Id	Packet generated	Packet received	Payload generated (bytes)	Payload received (bytes)	Throughput (Mbps)	Delay(microsec)	Jitter(microsec)
2 (Aggregated)	App2_CBR	1	0	1000	1992	1460000	2908320	1.163328	252.240964	0.000000
2	App2_CBR	1	2	1000	996	1460000	1454160	0.581664	252.240964	0.000965
2	App2_CBR	1	3	1000	996	1460000	1454160	0.581664	252.240964	0.000965

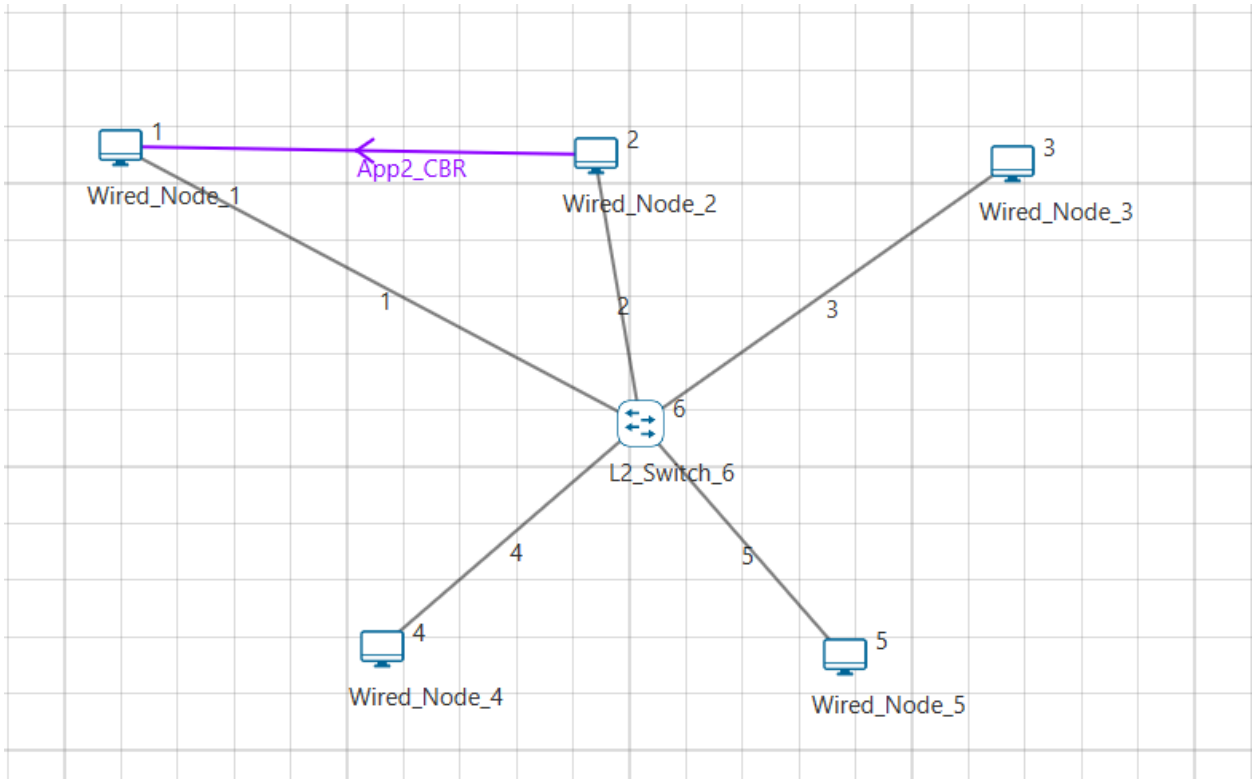
Link_Metrics_Table

Link_Metrics

Detailed View

Link_id	Link_throughput_plot	Packet_transmi...		Packet_errored		Packet_collided		Bytes_transmitted(bytes)	Payload_transmitted(bytes)	Overhead_transmitted(bytes)
		Data	Control	Data	Control	Data	Control			
All	NA	2996	0	6	0	0	0	4535944	4365400	170544
1	NA	1000	0	2	0	0	0	1514000	1457080	56920
2	NA	998	0	2	0	0	0	1510972	1454160	56812
3	NA	998	0	2	0	0	0	1510972	1454160	56812
4	NA	0	0	0	0	0	0	0	0	0
5	NA	0	0	0	0	0	0	0	0	0

b)



Application_Metrics_Table

Application_Metrics

Detailed View

Application Id	Application Name	Source Id	Destination Id	Packet generated	Packet received	Payload generated (bytes)	Payload received (bytes)	Throughput (Mbps)	Delay(microsec)	Jitter(microsec)
2	App2_CBR	2	1	1000	1000	1460000	1460000	0.584000	19412.638013	2965.517512

Link_Metrics_Table

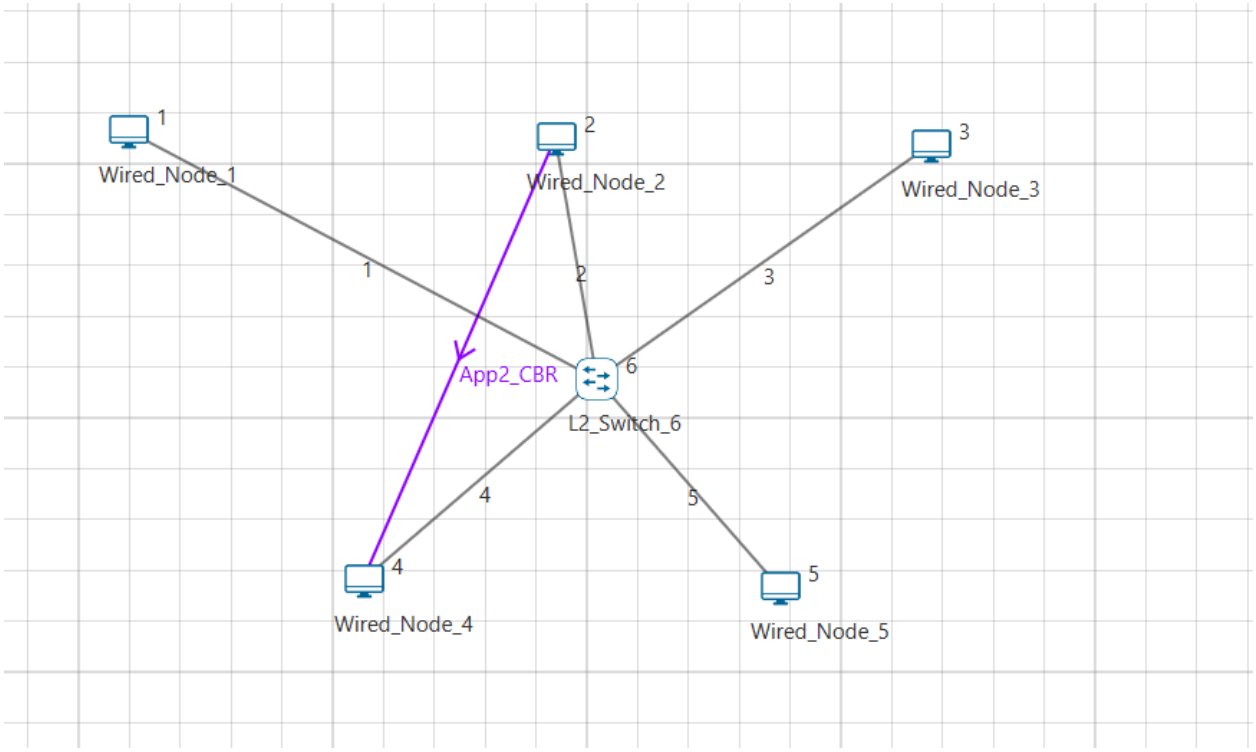
Link_Metrics

Detailed View

Link_id	Link_throughput_plot	Packet_transmi...		Packet_errored		Packet_collided		Bytes_transmitted(bytes)	Payload_transmitted(bytes)	Overhead_transmitted(bytes)
		Data	Control	Data	Control	Data	Control			
All	NA	2005	2008	2	1	0	0	3192174	2924380	267794
1	NA	1002	1004	1	0	0	0	1595324	1461460	133864
2	NA	1003	1004	1	1	0	0	1596850	1462920	133930
3	NA	0	0	0	0	0	0	0	0	0
4	NA	0	0	0	0	0	0	0	0	0
5	NA	0	0	0	0	0	0	0	0	0

Throughput = 0.5840
Packet Errored = 2

c)



Application_Metrics_Table

Application_Metrics — Detailed View

Application Id	Application Name	Source Id	Destination Id	Packet generated	Packet received	Payload generated (bytes)	Payload received (bytes)	Throughput (Mbps)	Delay(microsec)	Jitter(microsec)
2	App2_CBR	2	4	1000	0	1460000	0	0.000000	0.000000	0.000000

Link_Metrics_Table

Link_Metrics — Detailed View

Link_id	Link_throughput_plot	Packet_transmi...		Packet_errored		Packet_collided		Bytes_transmitted(bytes)	Payload_transmitted(bytes)	Overhead_transmitted(bytes)
		Data	Control	Data	Control	Data	Control			
All	NA	0	15	0	0	0	0	1050	0	1050
1	NA	0	5	0	0	0	0	350	0	350
2	NA	0	5	0	0	0	0	350	0	350
3	NA	0	5	0	0	0	0	350	0	350
4	NA	0	0	0	0	0	0	0	0	0
5	NA	0	0	0	0	0	0	0	0	0

Throughput = 0

Observation : VLANs divide a larger network into smaller, logical networks

Devices within the same VLAN can communicate directly with each other, but communication between VLANs requires a router or Layer 3 switch. So node 2 cannot transfer to node 4 here.