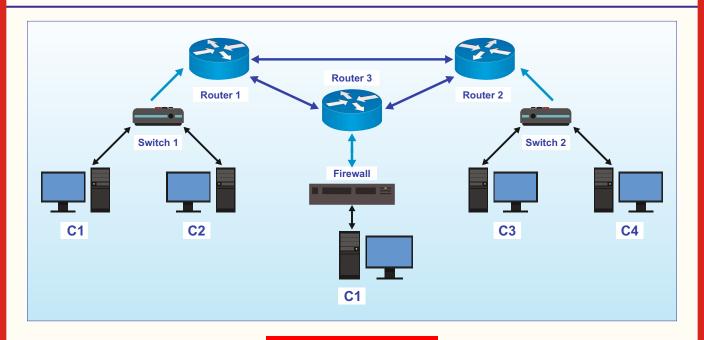


This trainer has been designed with a view to provide practical and experimental knowledge of different types of Routing technologies and experiments.



#### SPECIFICATIONS

### 1. Hardware

Sigma Trainers and Kits E-113, Jai Ambe Nagar, Near Udgam School, Thaltej, AHMEDABAD - 380054. INDIA.		Phone(F): +9 Fax : +9 Mobile : +9 Email : sa : si	91-79-26852427/ 26850829 91-79-26767512/ 26767648 91-79-26840290/ 26840290 91-9824001168 ales@sigmatrainers.com gmatrainers@sify.com ww.sigmatrainers.com	Dealer:-
			5. Mp4 Video Class - 40 Nos	
			4. E-Books for Routers - 20 N	
			3. Drivers and Operating Syst	tems
10.	Standard Accessories	:	1. Trainer. 2. Practical Manual	
9.				
8.	Rj45 Straight Cables	:	20 Nos.	
7.	RJ 45 Cross cables	:	10 Nos.	
6.	Wifi USB Cards	:	2 Nos	
5.	Wifi Router	:	1 No. D-link or equivalent	
4.	Desktop Computers	:	Standard Sysyetm - 4 Nos wi	th OS
3.	Firewall	:	Cisco - ASA5505 - 1 Nos	
2.	Switches	:	Cisco - 2950 - 2 Nos	
1.	Routers	:	Cisco 1841 - 3 Nos.	

#### **EXPERIMENTS**

## **1. ROUTING EXPERIMENTS**

- 1. Aim to Understand the basic working of Router on internet and Ip address.
- 2. Aim to Configure the Router interfaces with Ip addresses.
- 3. Aim to Understand the ICMP and perform PING between two Routers.
- 4. Aim to Configure the Static Routing between two Routers and understand the Routing table.
- 5. Aim to Configure the Default Routing between two Routers and understand the Route table.
- 6. Aim to Configure the RIP Routing between Routers and understand the Routing table.
- 7. Aim to Configure the EIGRP Routing between Routers and understand the topology.
- 8. Aim to Configure the OSPF Routing between Routers and understand the Routing table.
- 9. Aim to Configure the BGP Routing in topology to understand the working of protocol.
- 10. Aim to Configure the MPLS Routing between Routers to understand the multiprotocol Routing.

# **2. ROUTING SECURITY EXPERIMENTS**

- 1. Aim to Configure the username and password on Router.
- 2. Aim to Understand and Configure the telnet access on Router.
- 3. Aim to Understand and perform the ssh access on Router.
- 4. Aim to Understand and perform the Standard access-list on Router.
- 5. Aim to Understand and perform the Extended access-list on Router.
- 6. Aim to Understand and Configure the HTTP server for Network.
- 7. Aim to Understand and Configure the FTP server for Network.
- 8. Aim to Understand and Configure the access-list to filter http traffic for IP's.
- 9. Aim to Understand and Configure the access-list to filter ICMP traffic for IP's.
- 10. Aim to Understand and Configure the tftp server for Emergency backup.
- 11. Aim to Understand and Configure the NAT on Network Topology.
- 12. Aim to Configure the DHCP Service .
- 13. Aim to Understand and Configure the DHCP Snooping.
- 14. Aim to Understand and Configure the MD5 password Authentication on Routers.
- 15. Aim to Configure ARP inspection.