

**INTERNSHIP ON CCNA ROUTING AND SWITCHING**

**BY**

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This Report Presented in Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Science in Computer Science and Engineering

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## APPROVAL

This Project/internship titled “**Internship on CCNA ROUTING AND SWITCHING**”, submitted by Md Estahad Ali Sifat, ID No: 191-15-12229 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfilment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 02/02/2023.

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We hereby declare that, this project has been done by us under the supervision of **Shah Md. Tanvir Siddiquee, Assistant Professor, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

## **ABSTRACT**

A range of computer networking subjects are covered in the "CISCO CERTIFIED NETWORK ASSOCIATE-CCNA (Routing & Switching)" internship. When two or more PCs are connected and ready to share and exchange information, we speak of a networking. We desire a variety of networked PCs. We at Gift and Destiny can no longer function without the internet. As a result, we must carefully evaluate and obtain it for our future selves. For my Computer Networking "Internship on CCNA Routing and Switching" record, I choose to take on this activity for that reason. The record included information about the functions of routing, switching, addressing, RIP, EIGRP, OSPF, and VLAN. The context includes setting up point-to-point internet connections, extending switched networks with VLANs, choosing IP routes, controlling IP traffic with get-access lists, and enforcing community security, community types, community media, routing and switching fundamentals, the TCP/IP and OSI models, IP addressing, and WAN technologies. and configures all networking and communication equipment.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

Right now, we're living in the Information Age. Networking is the basis for everything. We can't make future plans if we don't have internet connection. CCNA is the world's most well-known and secure networking system. Nothing can be done. Without internet access, almost every business, bank, and industry today is heavily reliant on technology. networking and dialogue The CCNA routing and switching certification is crucial for an IT professional. The internet is maintained by a business, each Internet service provider, and a functioning station. the two futures: the present. Without the internet, we won't be able to think in the future. This forces us to ignore it and conduct research in order to protect the next generation. I've considered a variety of factors in my research, including the need for communication. "CCNA routing and switching" is a well-known and widely used term in the information technology and communication areas.

### 1.2 Motivation

I'm currently pursuing a Bachelor of Science in CSE at DIU. Here is a huge event space in Bangladesh for information technology. I have the chance to get real knowledge, which will help me develop my IT skills and increase my chances of landing a job. CCNA is a system that fortifies my ties so that I can accomplish my objectives. Based on my CCNA qualification, I made the decision to accept a temporary position in the field of networking as a network administrator. suitable for comprehension, interpersonal communication, and problem-solving. Their expectations, expertise in sustaining the issue, and provision of top-notch management.

### 1.3 Internship Objectives

Internships are essential to the success of both our future employment and personal life. I successfully completed my Functional Analysis on CCNA training course. The main goal of this training program is to provide me with a defined work and practice in order to get

me ready for an IT corporate career. It, therefore, presents a great opportunity for experience growth. My internship taught me a lot of new things that will be very useful to me in my prospective corporate job. In order to integrate professional development with academic study, this traineeship program is designed to give understudies practical work experience while they are still enrolled in educational institutions.

#### **1.4 Introduction to the Company**

Safara Infotech Bangladesh has finished the entire academic curriculum. Routing and Switching is a technical knowledge and communication improvement course that The Networking Academy delivers to people and educational institutions worldwide. A technical team comprised of competent and skilled professionals works for this firm Safara Infotech Bangladesh upholds a high degree of customer and service quality management. More capable than you could possibly dream, our technical crew. They have demonstrated their worth in the disciplines of design, information technology, business, software development, and other pertinent abilities in the past. To keep internal students informed of changes, Safara Infotech Bangladesh offers the most recent networking courses.

## **CHAPTER 2**

### **ORGANIZATION**

#### **2.1 Introduction**

One of Bangladesh's top organizations for learning administrations and providers of services for professional development is Safara Infotech Bangladesh. It was developed to facilitate the flexible development of the essential learning arrangements to support proficient knowledge and abilities in a particular field of employment. whether intentionally or not, their educational programs Help organizations by filling skill gaps as a generalist or a freelance expert, and foster a domain of steady skill development with so many people. The IT center provides classes for everything from fundamental instruction to specialized accreditation. The focus of the planning is on cutting-edge partners like Red Hat, Cisco, VMware, Microsoft, and Amazon Web Services.

#### **2.2 Product and Market Situation**

##### **Professional Training Services:**

- Engineering Red Hat Certified (RHCE).
- Associate in Cisco Certified Networks (CCNA).
- programming in Java.
- Net and C#.
- Programming in Python.
- C/C++ programming for high school students.
- MySQL and PHP.
- a beginner's introduction to networking
- design and development of websites.
- VMware.

### **2.3 SWOT Analysis**

- Excellent communication abilities are a strength.
- A positive reputation in the industry superior coach.
- Insufficient experience is a weakness.
- Insufficient resources.
- Inadequate marketing.
- Opportunities:
  - Train a diverse group of individuals.
  - Work as a teacher.
- Threats: Financial limitations prevent them from growing their training facility and institute.

## **CHAPTER 3**

### **TASKS, EVENTS AND ACTIVITIES**

#### **3.1 Daily Activities and Tasks**

Month 1:

I gained a lot of knowledge during my first month of work as an intern at Safara Infotech Bangladesh.

Practice the following lessons as directed:

- IT communication.
- The OSI Model and TCP/IP.
- Subnetting and addressing for IPv4.
- Details on the routing protocol.

Month 2:

In my second month as an intern at my internship company, I developed and applied the following skills:

- An Overview of Switching.
- Wireless communication
- VLAN
- VTP
- STP

Month 3:

The following topics were covered during my third month of practice at Safara Infotech Bangladesh:

- Routing by default and static.
- OSPF.
- EIGRP.
- RIP.

## **CHAPTER 4**

### **BACKGROUND KNOWLEDGE**

CCNA, or Cisco Certified Network Associate, is a certification from Cisco. The beginning level of an IT professional is this. The Cisco Certified Network Associate is a career credential (CCNA). It certifies the proficiency in setting up, growing, managing, and troubleshooting medium-sized switched and routed networks, as well as in setting up and confirming WAN connections to distant locations. The 200-120 CCNA composite test must be passed in order to earn the Cisco Certified Network Associate certification. The ability to setup, run, and troubleshoot a small- to medium-sized corporate branch network is assessed by this test. WAN technologies, implementing network security, network kinds, network media, the TCP/IP and OSI models, IP addressing, running and configuring IOS devices, expanding switched networks using VLANs, recognizing IP routes, routing and switching fundamentals, The construction of point-to-point connections, access list-based IP traffic control, and frame relay connections are all topics covered in this course. The examinations itself involve a wide variety of questions. The most typical types of tests include drag-and-drop, simulations, and multiple-choice.

#### **4.1 Router Cisco**

Routers employ two or more packet-switch networks or subnetworks. The router also controls the interaction between data packets and IP addresses. Thanks to routers, numerous devices can share a single internet connection.



Figure 4.1.1: Router Cisco

## 4.2 Switch Cisco

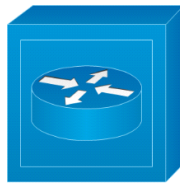
A variety of switches designed specifically for different functions are offered by Cisco. Campus networks now employ Catalyst switches, while data centers use Nexus switches, according to Cisco. A switch in networking connects a router and data packets to their destination on a local area network at a fast speed (LAN).



Figure 4.2.1: Switch Cisco

### 4.3 Cisco Hub

An Ethernet-based hub is a node that broadcasts data to all associated computers and devices. A hub is a LAN device that provides a centralized connecting point to create a logical bus.



Cisco hub  
Figure 4.3.1: Cisco Hub

### 4.4 Optical Fiber Cable

Data is sent by light pulses over optical fibers, which are typically made of glass or plastic. In a variety of network configurations, optical fiber cables are used to connect servers and users and to enhance the accuracy and speed of data transport.

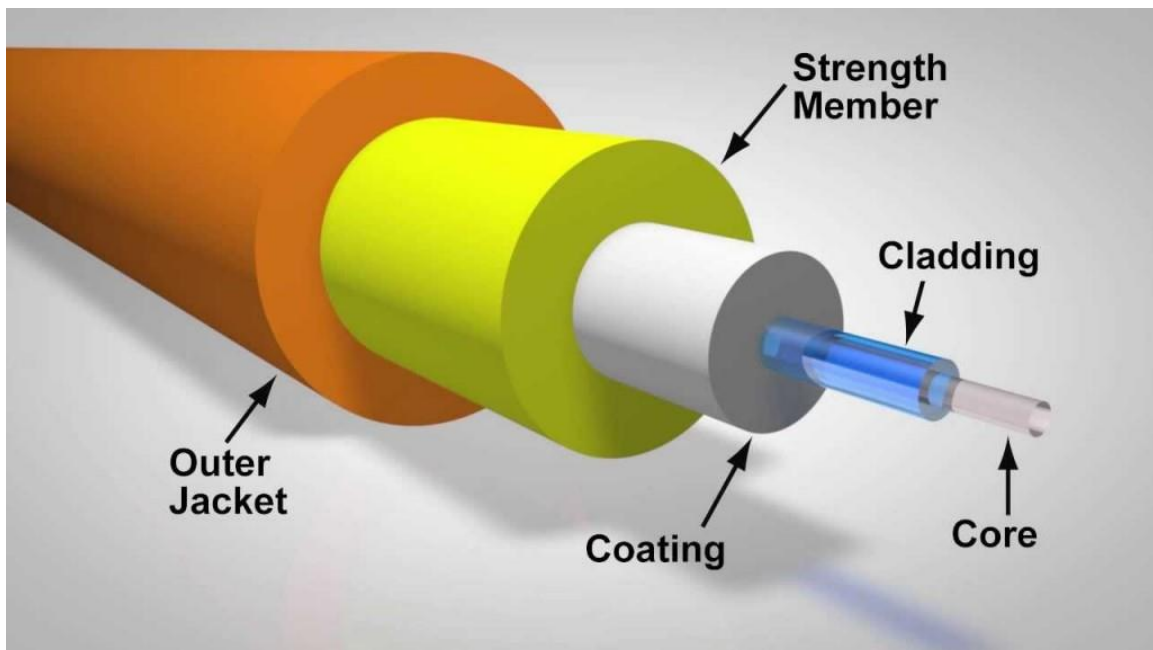
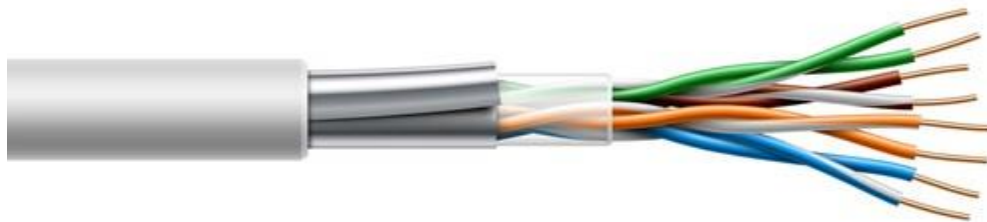


Figure 4.4.1: Optical Fiber Cable



## 4.5 Twisted Pair Cable

Most information and voice data applications employ twisted pair cable. Shielded Twisted Pair (STP) and Unshielded Twisted Pair are the two varieties of twisted pair cable (UTP). This twisted pair shields users from adjacent pair noise, signal interference, and crosstalk.



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Figure 4.5.1: Twisted pair Cable

## 4.6 The Definition of a Network

An IT transfer station is any collection of independent devices that communicate with one another via linked data. A computer network is a collection of two or more connected computers. When these computers are linked together in a network, everyone may interchange files and peripherals like modems, printers, tape backup drives, and CD-ROM drives. Everyone has access to the global Internet and can transfer data and share connected devices, and many networks are connected via phone company services.

Every network has the following components:

- Two client or server workstation PCs, at least.
- Network adapter cards (NIC).
- A communication channel, often wired but occasionally wireless Networked devices like computers and peripherals can talk to one another.

## **4.7 Network Categories**

The following types of networks are fairly prevalent:

- Local Area Network, or LAN.
- Wide Area Network, or WAN.
- Metropolitan Areas Network (MAN).
- Personal Area Network, or PAN.

### **1. Local Area Network, or LAN**

Lan, or local area network. In a LAN, there are two different kinds of computers: working station connect computers and server connect computers. They both have a connection to a particular space, such a lab, a tiny office, or a workstation. Popular usable networks like LAN offer quick data connectivity for networks.

### **2. Wide Area Network, or WAN**

Wide-area networks are data networks that link smaller networks. This has no fixed location of origin. It allows small networks to connect over great distances. Additionally, WAN enables global device communication and data sharing.

### **3. Metropolitan Areas Network (MAN)**

A data transport system known as MAN connects several IT devices that are physically separated but share a metropole. Regional municipal corporations, whose names we are forbidden to provide, define the limits of metropolitan cities. As a result, the MAN grows in proportion to the size of the Metropolitan whereas the proportionally shrinks. A MAN is defined as follows by the IEEE 802-2002 standard.

### **4. Personal Area Network, or PAN**

It enables wireless devices, including computers and cellphones, to connect with one another. You can communicate with other mobile devices or connect to the Internet

station. It makes the most of wireless connections possible. PAN may on occasion be used by the armed forces or academic institutions of any nation.

### **A topology is defined?**

How computers, cables, and other network devices are connected is determined by a network's topology. This topology is used to describe the process of transmitting data across workstations. In the network rules, it is addressed.

### **The Most Popular Physical Topologies**

- The linear bus topology.
- The star topology.
- The ring topology.
- Mesh topologies.
- Expansion of the star tree topology.
- Hybrid Topology.

### **The linear bus topology**

This bus design has a principal cable run and connector at either end. A linear link data center connects one node to the other.

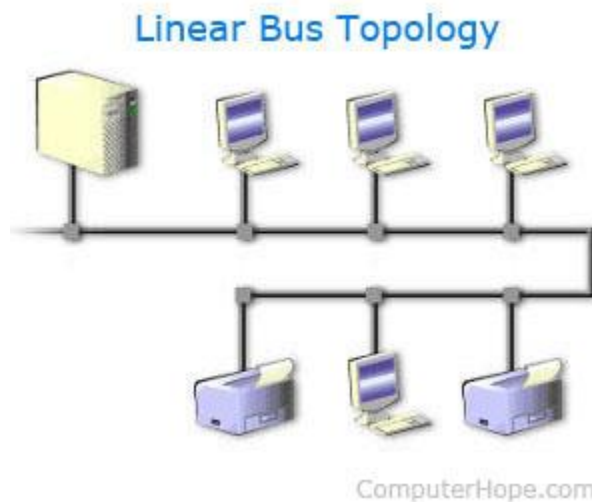


Figure 4.7.1: Linear Bus Topology

## Linear Bus Topology Benefits:

- Connecting a computer or device to a linear bus is simple.
- In comparison to a star topology, little wire is needed.

## A Drawback of the Linier Bus Topology

- The entire configuration is destroyed if the font line wire fails.
- The primary cable at the finishing point must have a connection.
- If the entire network goes down, it can be difficult to pinpoint the source of the problem.
- For a huge construction, this is not the only option.

## Topology of rings

Before the gifts reach their designated recipient, they are passed around the ring. This network is known as the Ring network. It connects network devices in the form of a ball. The is no longer often connected. A graphic representation of the fundamental network configuration for this architecture may be found at the bottom.

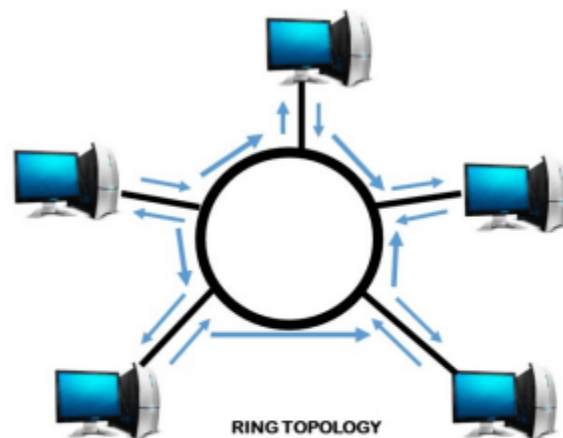


Figure 4.7.2: Ring Topology

## **Ring topology's benefits**

Rings have a highly structured topology. A node is given the chance to provide data when it gets a blank signal. As a result, there are fewer chances of a collision. All traffic moves along a single lane at a high demand velocity in a ring topology. Even under increased demand, the network performs better than the Bus topology.

- To manage workstation connectivity, a network server is not necessary.
- The performance of extra components has no impact on the network.
- The source is distributed equally among all machines.

## **Drawbacks of Ring Topology**

This topology works from the first step to the last. Each data or packet must pass via every device. Compared to this structure, this causes the situation to lag.

- If one workstation or port fails, the entire network suffers.
- The wire connecting the various components is essential to the network.
- •Compared to Ethernet cards and hubs, MAUs and network cards are more expensive.

## **Star Topology**

Everything is connected to the primary IT station, devices, and data storage through a top data hub, switch, or concentrator in this topology. Internet travels through to the network device concentrator before reaching its own path. those units are charge of controlling and supervising all network devices. This serves as a connector for the transmission of data as well. Although star topology is a common cable design, it can also be used with coaxial or fiber optic cable.

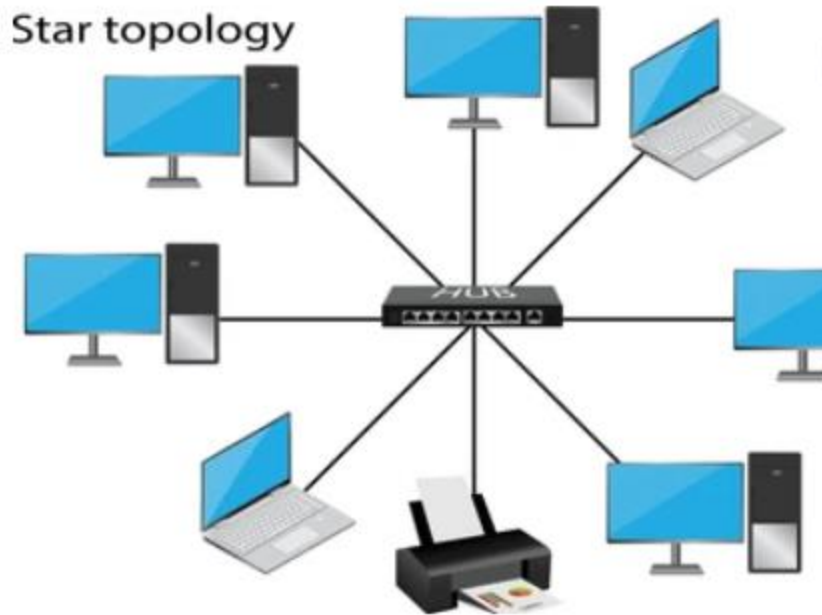


Figure 4.7.3: Start Topology

### **The Advantages of Star Topography**

There are no network outages when adding or replacing peripherals, and problems are quickly identified and fixed. It supports the data flow system and connects to the network with ease.

### **Star topology's drawbacks**

This topology requires a longer wire length than a linear topology. A node linked to a hub, switch, or concentrator gets deactivated if one of those fails. It is more expensive than conventional bus systems since hubs and other components are more expensive.

### **Mesh Topology**

Most communications can still be distributed even if a connection fails in a network arrangement where each computer and network peripheral is connected to the others. Since it is difficult and expensive to build up redundant connections to each unit, most computer networks do not use this design. Wireless networks, on the other hand, frequently use this design. A simple PC setup on a mesh network can be seen in the figure below.

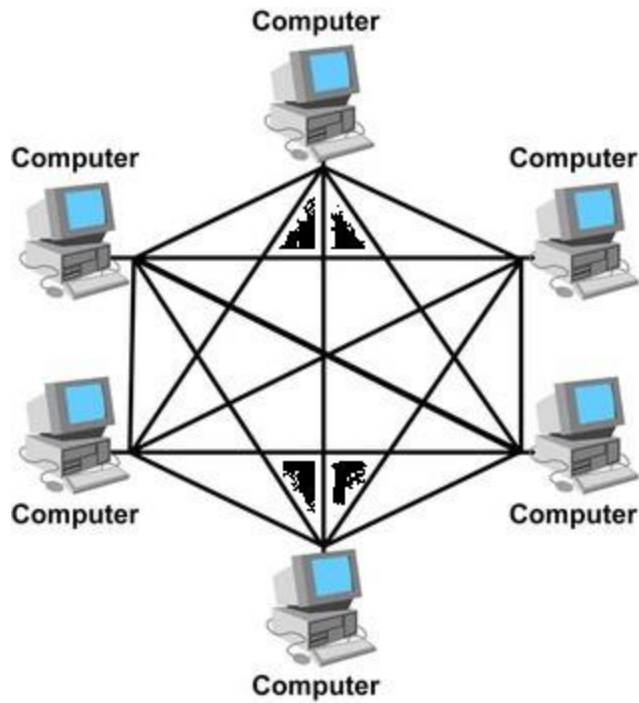


Figure 4.7.4: Mesh Topology

### **Mesh topology benefits**

- Multiple devices may send data at the same time. A lot of traffic can be maintained with this topology.
- A backup is always available, even if one of the components fails. Data transfer is therefore unaffected.
- It is possible to expand and modify the topology without affecting other nodes.

### **Mesh topology's Drawbacks**

- The division of several network connections is high..
- This network's overall upkeep is more expensive when compared to other network designs.
- Mesh topology is exceedingly difficult to control. Even managing data is challenging.

## Expanded star or tree

The benefits of star and linear bus topologies are combined in a tree topology. It is building linear bus main cable-connected data center clusters. With the help of this topology, a network can be upgraded and tailored to the requirements of certain schools.

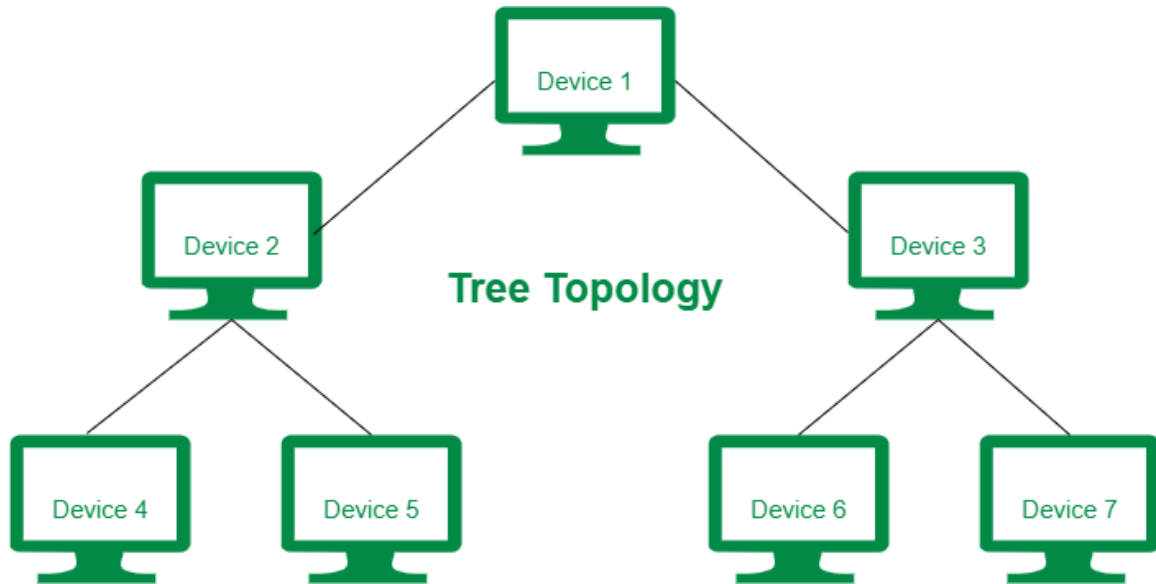


Figure 4.7.5: Tree Topology

## Tree topology's benefits

- Point-to-point wiring is provided by several hardware and software providers, and various hardware and software holders have backed it up.

## Disadvantage of Tree Topology

- The type of cabling utilized determines the maximum total length of each segment; if the backbone line fails, the segment will collapse as a whole.
- More challenging to wire and configure than other topologies.



## Hybrid Topology?

In this topology, we combine a number of topologies to create a solid topology that keeps the best features of each of the original constituent topologies while being less complex than just one. A standard to perform in accordance with the organization's requirements is upheld by this topology. If two corporate sections with ring and bus topologies are connected, for example, one of the sections cannot explain the connection of two similar topologies. These networks most frequently take the form of star-bus and star-ring networks. Now consider the unique features of this networking design.

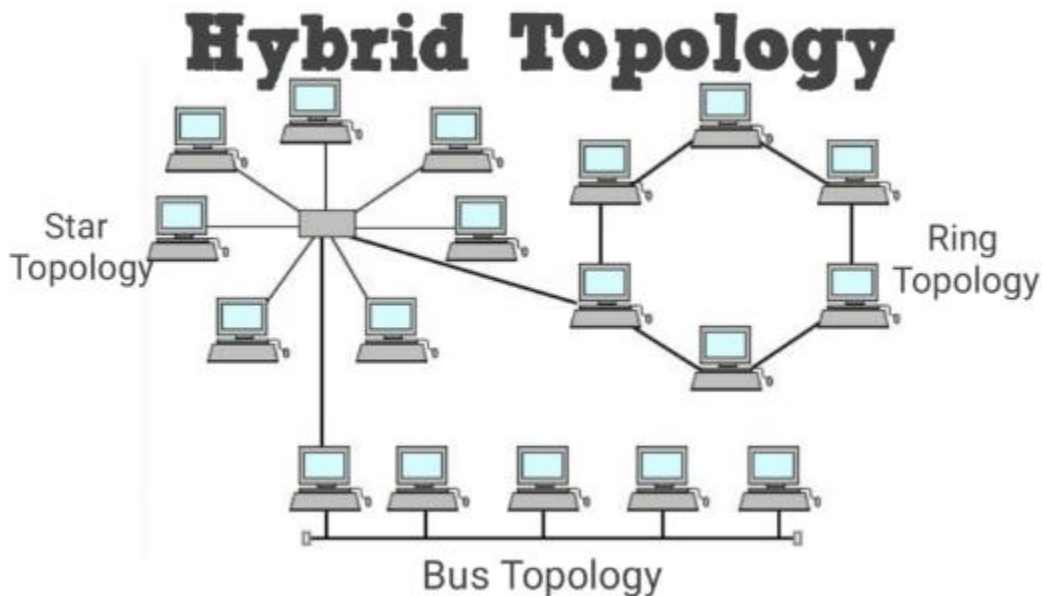


Figure 4.7.6: Hybrid Topology

## Hybrid Topology's advantages

Reliable: Failure detection and troubleshooting are made simple by the structure, which differs from conventional data communication. The data center can pinpoint the particular area of the network where the issue is, making it possible to take the required corrective action without endangering the network's functionality. It is simple to expand the network without changing the way it is already constructed.

Flexible: These networks could be created to meet the demands of the association while also maximizing the information that is already accessible. Nodes that are very susceptible to failure and experience heavy traffic may get special attention.

### **Hybrid Topology's drawbacks**

The primary issue with a layer is its shape and design. Building inventories are challenging to construct, and creators face challenging tasks. The setup and setting up processes must be expensive and standardized. Hubs that join two distinct networks are very expensive. Since they must be able to handle a variety of topologies and continue to operate even if a portion of the network is slow, this differs from normal hubs.

## **CHAPTER 5**

### **ROUTING**

#### **5.1 The OSI Model**

##### **Application Layer**

Application layer is typically the only layer that connects a product directly to user data. The application program is the primary means of communication for application software, including the application program. Application layer: The job of the application layer is to handle data manipulation and protocol.

##### **Presentation Layer**

In order for the information to be utilised, the presentation layer collaborates with the top layer. The dynamic, transmission, and comparing functions are handled by the display layer. The other levels' PCs and apps' linkages are created and maintained by that layer. This layer supports top-to-bottom transmission as well as simplex, half-duplex, and full-duplex transmission modes.

##### **Transport Layer**

The main and final component can readily exchange information thanks to the Transport Layer. This layer is in charge of controlling data flow and recovering from errors from beginning to end. If necessary, all data across this layer is divided into smaller bits before being sent to the network layer. checks to see if each segment has arrived. Information is transferred from one place to another through the transport layer. As it links the source and destination, this layer can be regarded as an end-to-end layer.

## Network Layer

With these two parts, this layer functions. One approach is to divide segments into network packets, which may then be reassembled at the other end. Data is divided by the network layer so that it can flow smoothly and at a high rate. The OSI Model's most crucial layer is this one. the bulk of this layer's work. Data transfer within the network is monitored by the network layer.

## Data Link Layer

This layer is defined as a connection between two network nodes. Before delivering data, it creates a frame and a packet, which it then transmits to the network after establishing permissions to ensure that the data link layer only packages the data for transmission. It sends LLC data and makes use of MAC addresses.

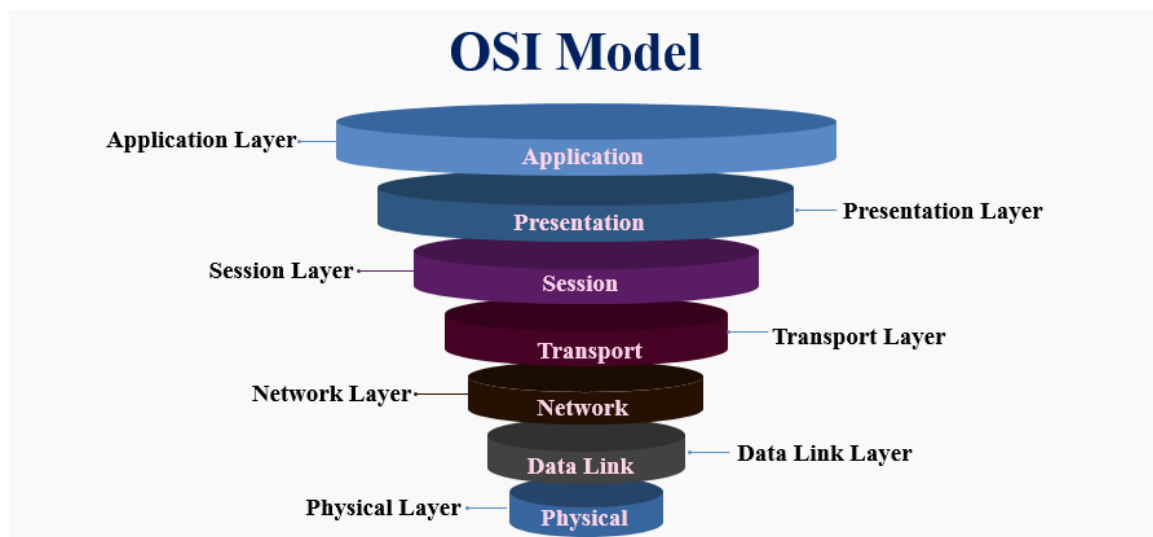


Figure5.1.1: OSI Model

## Physical Layer

The wired or wireless connections that physically connect network nodes are under the control of the physical layer. It discusses how the connector and wire work together. It produces unprocessed data and acts as a source for the 0s and 1s series.

## 5.2 IP Addressing

It is a route that specifies how to get to a particular host, ideally outside the LAN. This address is 32 bits long and has a 2<sup>32</sup>-bit address space. Hexadecimal notation or dotted decimal notation are frequently used to write IP addresses.

Two categories of IP addresses are distinguished:

- Version 4 of IP (IPv4).
- The IPv6 protocol (IPv6).

The 32-bit address bit used by IPv4-currently the most popular-is used. On the other hand, IPv6 also uses an IP address that is 128 bits long.

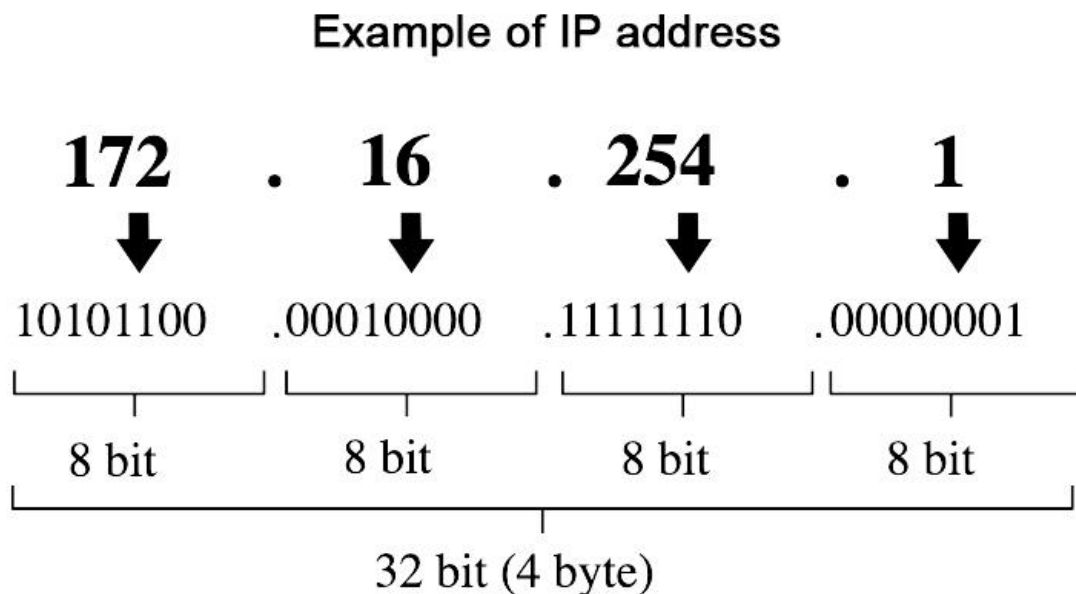


Figure 5.2.1: IP Addressing

### A notation in hexadecimal:

There are a few things to keep in mind while using the decimal describe notation: 1. A segment's (byte's) value falls between 0 and 255. (Approximately two) 2. There are no zeros processing the sum in any part (054 is false 54 is true).

## Hexadecimal Numbers

- Radix of 16.
- Sixteen symbols:  
0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F.
- Positional weights :  
... ,  $16^3$ ,  $16^2$ ,  $16^1$ ,  $16^0$

Figure 5.2.2: Hexadecimal Notation

Class Address:

The five subclasses of 32-bit IP addresses are as follows.

They are:

- Class A
- Class B,
- Class C,
- Class D, and Class E.

Each of these categories has a permitted IP address range. Classes D and E are set aside for multicast and experimental usage, respectively. The number of bits in the starting point defines the different kinds of IP addresses.

The IPv4 address is divided into two parts:

The Network ID.

Hosting ID The total number of networks and hosts that can be assigned to a class as well as the bits utilized for network ID and host ID are determined by the IP address class. Each device connected to a network receives an IP address from the ISP or network administrator.

Class	Private IP address range	Subnet mask
A	10.0.0.0 – 10.255.255.255	255.0.0.0
B	172.16.0.0 – 172.16.31.255	255.255.0.0
C	192.168.0.0 – 192.168.255.255	255.255.255.0

Figure 5.2.3: Class Address

### 5.3 Subnet

A network that is enclosed within another network is referred to as a subnetwork, sometimes known as a network within a network. Subnets improve network efficiency. Thanks to subnetting, network data can now travel a shorter distance without going through additional routers.

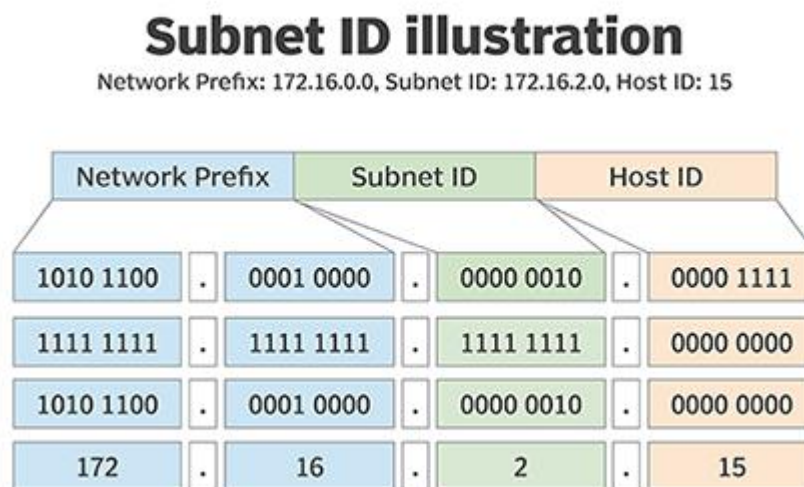


Figure 5.3.1: Subnet

### Table of Subnet Mask References

Subnetting is the process of breaking up a large network into smaller ones. Smaller networks are referred to as subnetworks (or subnets) collectively, whereas a subnetwork is a single subdivision (more commonly referred to as a subnet). Every machine connecting to a subnet has the same IP address component.

You might be able to understand how a network is divided into subnets with the aid of this IPv4 Subnet Diagram.

Address ranges for classes:

- to 126.0.0.0 (Class A).
- 128.0.0.0 to 191.255.0.0 (Class B) (Class B).
- 192.0.1.0 to 223.255.255.0 (Class C) (Class C).

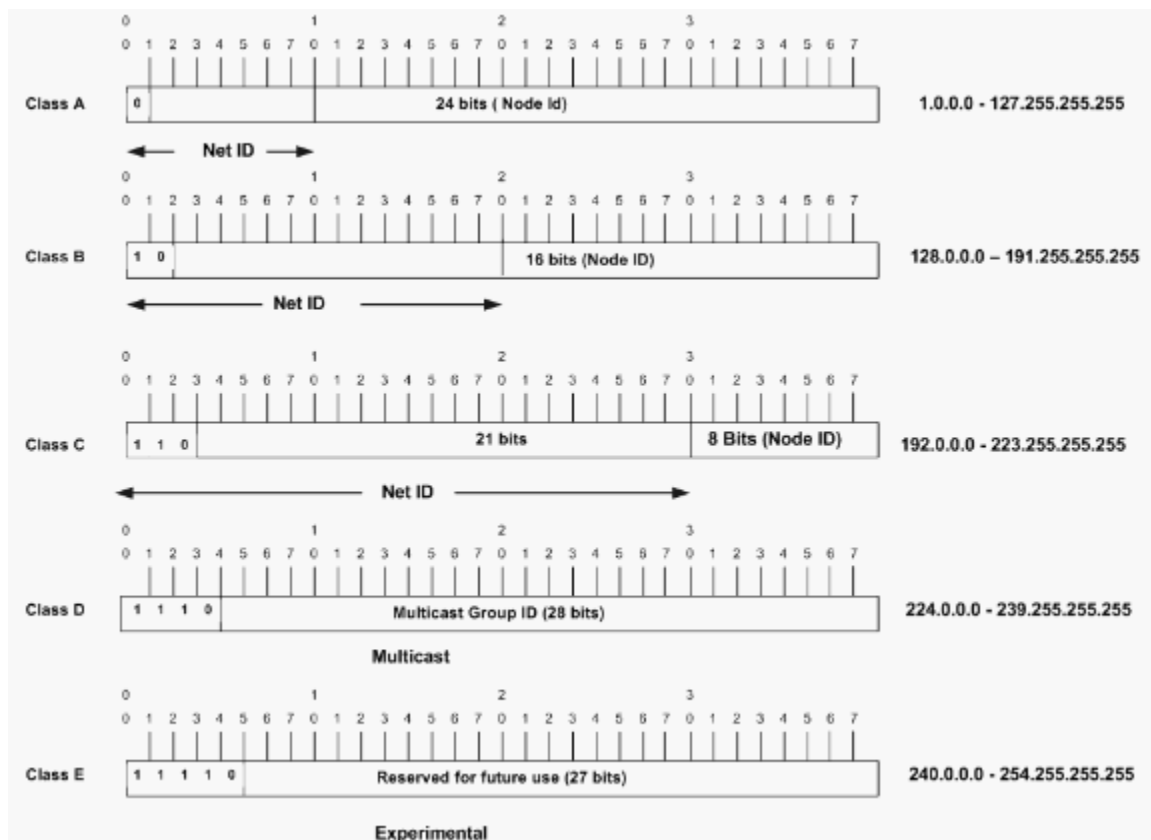


Figure 5.3.2: Reference Table for Subnet Masks

## 5.4 VLSM

Subnet Mask with Variable Length (VLSM) A VLSM can be either a numerical masking sequence or an IP address subset, depending on the requirements of the entire network. The use of a VLSM allows network administrators to create lengthy masks for small networks and short masks for large networks. 10.1.1.0/24, s10.1.2.0/25\, s10.1.2.128/.



## 5.5 Route Types, Section

There are three different types for routing:

Static, dynamic, and default routing are all available.

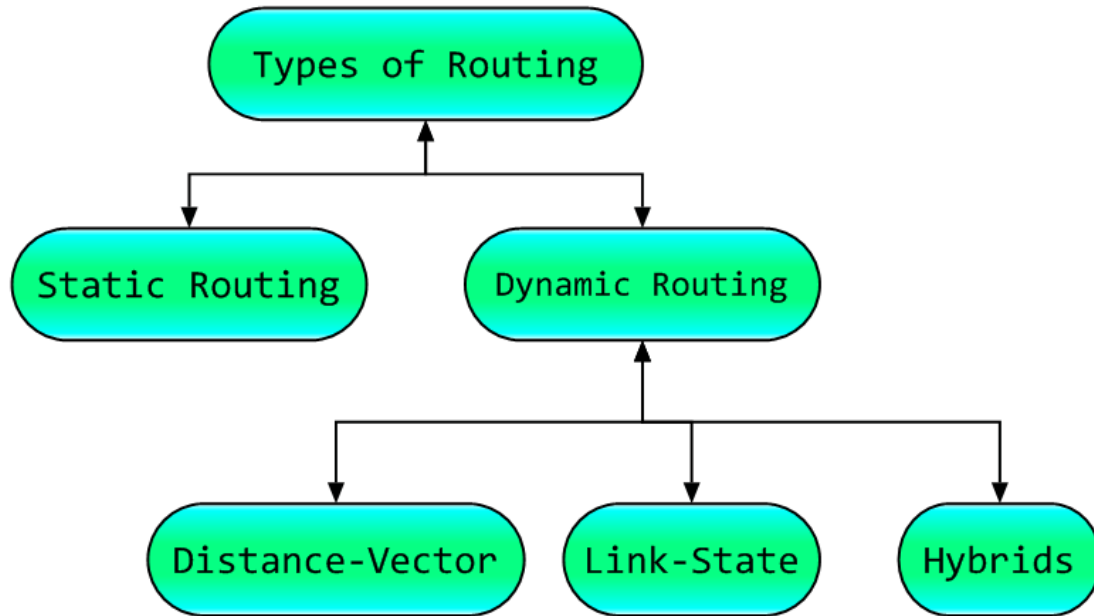


Figure 5.5.1: Types of Routing

## 5.6 Routing that is static

One way to communicate with distant networks is through static routes. In production networks, static routes are mostly used for network-to-network routing. One way to communicate with distant networks is through static routes. In production networks, static routes are mostly used for network-to-network routing.

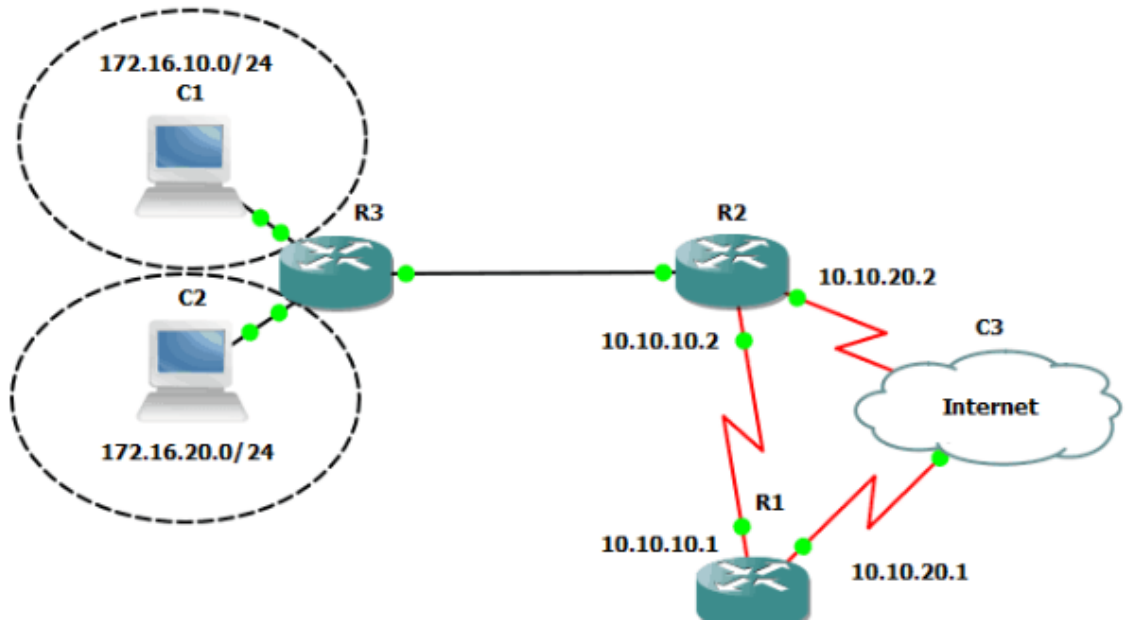


Figure 5.6.1: Routing that is static

One method for connecting to remote networks is through static routes. Production networks usually use static routes when routing between networks. The network administrator also set up the serial ports on R1 and R3 as the DCE, and all other configurations are correct. In this instance, R1 can ping HOST A and R2's s0/0/0 interface but not s0/0/1. R3 cannot ping HOST B; only R2's s0/0/1 interface can. As seen in the example below, communication between HOST A and HOST B is impossible.

Figure 5.6.2: Routing in static communication.

<pre> HOST B&gt;ping 192.168.4.2  Pinging 192.168.4.2 with 32 bytes of data:  Reply from 192.168.1.1: Destination host unreachable. Reply from 192.168.1.1: Destination host unreachable. Reply from 192.168.1.1: Destination host unreachable. Reply from 192.168.1.1: Destination host unreachable.  Ping statistics for 192.168.4.2:     Packets: Sent = 4, Received = 0, Lost = 4 (100% loss), </pre>	<pre> HOST A &gt;ping 192.168.1.2  Pinging 192.168.4.2 with 32 bytes of data:  Reply from 192.168.4.1: Destination host unreachable. Reply from 192.168.4.1: Destination host unreachable. Reply from 192.168.4.1: Destination host unreachable. Reply from 192.168.4.1: Destination host unreachable.  Ping statistics for 192.168.4.2:     Packets: Sent = 4, Received = 0, Lost = 4 (100% loss), </pre>
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## 5.7 Dynamism in routing

In reaction to changes in the topology, dynamic routing, sometimes referred to as adaptive routing, modifies the routing table. Although it uses sophisticated routing algorithms, dynamic routing does not offer the same level of security as static routing. A message is delivered to the router whenever the topology of a network changes to make sure that the routes are updated and fresh routing data is provided.

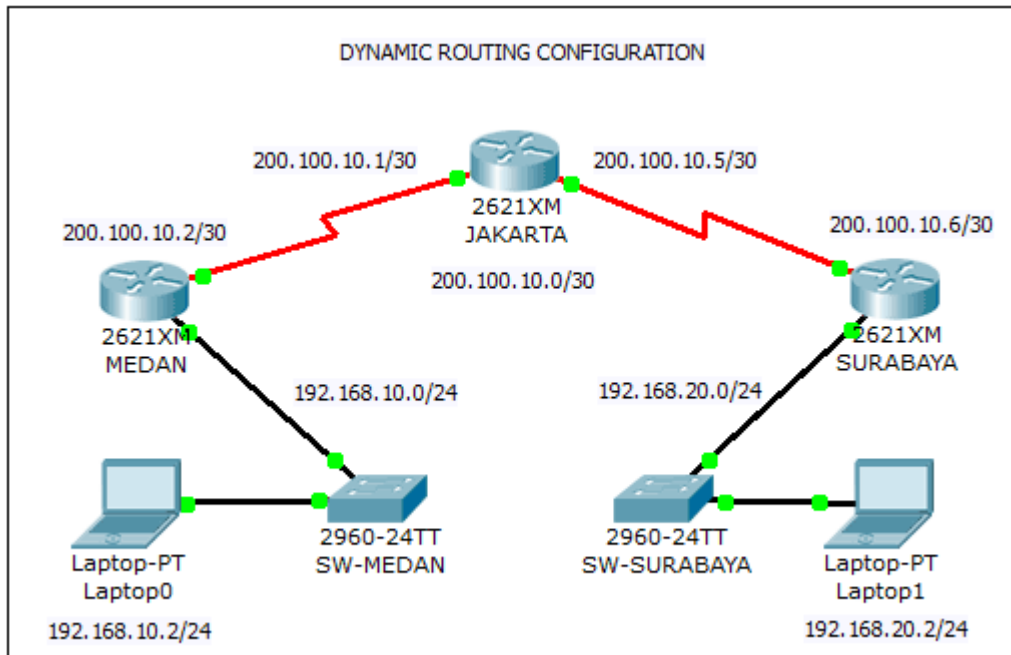


Figure 5.7.1: Dynamic Routing Configuration

## **CHAPTER 6**

### **COMPETENCIES AND SMART PALN**

#### **6.1 Competencies Earned**

Every area or job market right now is bursting at the seams with skills. We must therefore ensure our practical aptitude. Skills A statement of what a student is supposed to know, understand, or be able to do as a result of a learning process is known as an earned or learning outcome. Computer networking will be a part of my future job. Both system and server equipment are installed and removed from service in two datacenters. Role as the router's configuration leader. I performed more than just problem-solving tasks during my internship, which will help me maintain my composure in the future when tackling significant issues. In addition to teaching me how to install and configure switches and routers, this internship also taught me how to set up VLANs, OSPF, EIGRP, and RIP. The Internship on Site Supervisor will also introduce authoritative strategies and technical proficiency in line with the learning objectives from this.

#### **6.2 Smart Plan**

In order to acquire more and higher achievement gains, an organization sets its top label management to create their strategy unique, efficient, and innovative than the other Organization. to live a happy life and have a successful job. This internship is really helpful for thoughtful planning.

#### **6.3 Observations**

Customers are given excellent service from Safara Infotech Bangladesh. Since their inception, they have given careful consideration to the delivery of their service. Additionally, they go to tremendous lengths to retain clients and keep them coming back for more. They are corporate network solution and communications companies that provide a highly and most effective network to the technical group.

## **6.4 Challenges**

Every workplace has its share of difficulties. The phrase "easy job" is a myth. We must therefore handle our work with respect and take it seriously. Internships are a fantastic method to gain experience, meet people, and discover our talents and weaknesses. It's time for practice. Many people struggle with picking up and comprehending unfamiliar things. More problems need to be resolved in order to solve the solutions. My training sessions at the company had too few problems to be solved. I work independently on some projects and email them to the boss of my business. I handle a portion of the work, my managers handle a portion, and laborers handle a portion. as a result, labor I finished a few tasks during my training.

## **CHAPTER 7**

### **CONCLUSION AND FUTURE CAREER**

#### **7.1 Conclusion and Discussion**

I successfully finished my internship. To get real-world experience, you must complete this internship. I learned how to endure for eight to nine hours in a cramped office throughout this internship. In addition to the drive to overcome obstacles and finish tasks successfully. This internship has ingrained this habit in me because it requires me to work hard for 8–9 hours every day, five or six days a week. In this training session, time sense is maintained, which is fairly common and essential in corporate and business life.

#### **7.2 Career Opportunities**

Computer networking is a career field that is in high demand right now. There are various categories that the IT sector falls under. IT offers a wide range of career options, including CCNA Routing and Switching, Linux, and more. Examples of networking include wireless networking, router and switching, computer to computer networking, and network system admin or engineer.

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## **APPENDIX**

### **Appendix A: Reflections on the Internship:**

The internship is without a doubt important for our company's level of knowledge acquisition. As a result, the internship experience is quite helpful for the development of our practical skills. When I was in business school, I treated every move with the utmost seriousness. My internship helped me develop my client-keeping, project-management, and problem-solving skills. I work and collaborate with another skilled professional who carefully trains me during my internship. My entire life has been affected by the internship reflection, which taught me how to reconcile my personal life with my career and how to remain composed under pressure. It also helps us better understand our current situations and how to handle them for the sake of the future. A fantastic approach to interact professionally with professionals is through internships. It is necessary to comprehend how they complete a variety of important responsibilities.



## Md Estahad Ali Sifat final report

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