

**INTERNSHIP ON CORPORATE NETWORK  
ADMINISTRATION & MAINTENANCE**

**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.

Supervised By

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**DAFFODIL INTERNATIONAL UNIVERSITY  
DHAKA, BANGLADESH  
SEPTEMBER 2019**

## APPROVAL

This internship titled “Corporate Network Administration & Maintenance”, submitted by Abul Farah Ananda , ID No: 162-15-8064 to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment 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 Sept 12,2019.

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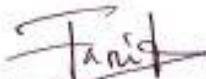
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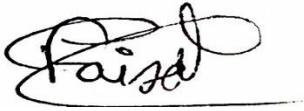
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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Fahad Faisal, 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.

**Supervised by:**



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**Fahad Faisal**  
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**Submitted by:**



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First I express our heartiest thanks and gratefulness to almighty Allah for His divine blessing makes us possible to complete this project successfully.

I am really grateful to and wish my profound my indebtedness to **Fahad Faisal, Assistant Professor**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of my supervisor in the field of “Computer Networking” influenced me to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

I would like to express our heartiest gratitude to **Dr. Syed Akhter Hossain, Professor and Head**, Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

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

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

## **ABSTRACT**

This project is on Computer Networking .Computer Network have become an essential tool in many aspects: human communication, gathering, exchange and sharing of information, distributed work environments, access to remote resources (data and computing power) and many more. Starting from an historical overview, this paper will give an introduction to the underlying ideas and technologies. The second half will concentrate on the most commonly used network technology today (Ethernet and TCP/IP) and give an introduction to the communication mechanisms used. Computer networks are a system of interconnected computers for the purpose of sharing digital information. The concept of a network began in 1962 when a server in Santa Monica, California. Since that time the proliferation of computers and computer networks has increased significantly. One of the most significant challenges to networks is attacks on their resources caused by inadequate network security. The purpose of this research project was to evaluate open source, free, intrusion detection systems and how easily they can integrate into an existing network. Research was conducted for this study through a review of existing literature pertaining to intrusion detection systems and how they function.

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# CHAPTER 1

## Introduction

### 1.1 Introduction

Internship Program of daffodil international university is an under-Graduation requirement for the CSE students. This examination is a fractional necessity to the entry level position program of CSE educational plan at the daffodil global college. The primary reason for temporary job is to get the understudy presented to the activity world. Being an understudy, the principle challenge was to make an interpretation of the hypothetical ideas into genuine experience.

The entry level position program and the investigation have following purpose:

- To get and sort out details information hands on obligations.
- To experience the genuine business world.
- To compare the real scenario with the lessons learned in Daffodil International University.
- To satisfy the necessity of CSE program.

### 1.2 Motivation

In the study period, mainly student gain theoretical knowledge but now a day, in the job market is no substitute for principle work experience. Therefore, before getting into job, student should have some real-world work experience in the major field of study on the career choice that interests him/her. The academic world and the working world are two completely different setting. The knowledge and experience are gain from working at a company helps anyone when it comes time to attain a full-time worker. The major targets to offer Internship at DIU are as following, Students break free from the theoretical world of textbooks and class courses and lead into the real world of applications of knowledge. The student's competency and efficiency in the working environment can be accessed from this course. Helping students to express dependability, initiative, resourcefulness

and professionalism in the tasks they are assigned. Enabling the students to effectively interact in a work environment within a hierarchy of employees. The efficiency in working in groups and under higher authorities is tested during this course.

### **1.3 Internship Objectives**

Temporary job is a program that upgrades the ability of the alumni and a degree to do down to earth works in an association identified with the understudy's major to pick up the work understanding. Daffodil International University offers a 06-acknowledge course as Internship for the graduating understudies in its course educational plan with the goal of empowering understudies to come into contact with genuine applications in regards to the information and abilities picked up in both hypothetical and useful courses of the college. The temporary position time frame is for in any event three months. Assistant understudies are regulated under a specific employee all through their temporary position period. What's more, the undertaking gets headway by adhering to the Supervisor's guidance We may discover appreciate us the calling and need to seek after an alternate profession. Settling on a conclusive and instructed decision about our vocation way ought to be an objective of entry level position understanding.

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

Not long after autonomy of the nation Sonali Bank developed as the biggest and driving Nationalized Commercial bank by decree of the Bank' Nationalization Order 1972 (Presidential Order-26) selling the them National Bank of Pakistan, Premier Bank and Bank of Bahawalpur. As a completely state claimed foundation, The bank has been changed over to a public Limited Company with 100% responsibility for government and began working as Sonali Bank Limited from November 15,2007 assuming control over all advantages, liabilities and business of Sonali Bank. The Bank is going by the Chief Executive Officer and Managing Director, who is a notable Banker and a rumored proficient. The corporate head quarter of the bank is situated at Motijheel, Dhaka, Bangladesh, the principle business focal point of the capital.

## **1.5 Report Layout**

The Internship of my report is varying by 5 parts. Section 1: Discussion about Introduction, Motivation, Internship Objectives, Introduction to the Company and Report Layout Section 2: About Introduction to Sonali Bank Limited, Product and Market Situation, Target Group, SWOT Analysis and Organizational Structure. Part 3: Daily Task and Activities, Events and Activities, Project Task and Activities and Challenges. Section 4: Competencies Earned, Smart Plan and Reflection. 5: Discussion and Conclusion and Scope for the Future Career.

## **CHAPTER 2**

### **Organization**

#### **2.1 Introduction to Sonali Bank Limited**

National Bank of Pakistan was the largest commercial bank in the then East Pakistan. After liberation of Bangladesh in 1971, this bank along two smaller bank, premier bank and Bank of Bahawalpur were merged into Sonali Bank. The bank was nationalized under Government order P.O.26, 1972.

This bank was transformed into a Public Limited Company under 100% ownership of Government and started functioning as Sonali Bank Limited on 15 November, 2007.

Sonali has an authorized capital of BDT 10 billion and has BDT 9 billion of paid up capital. With 1215 branches including two overseas branches, 3 subsidiaries and 3 representative offices, Sonali is by far the largest commercial bank of the country.

Since its emerge as a nationalized bank in 1972, it is discharging its duties in building the economy of the nation and till now it's carry out the social commitment for which it was entrusted.

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

##### **Products:**

Sonali Bank offering different type of product

- 1) Retail Banking
- 2) Consumer Banking
- 3) Corporate Banking
- 4) Investment Banking
- 5) Foreign Exchange
- 6) Treasury Banking

**Market situation:**

Sonali Bank has an aggregate of 1215 branches. Out of them, 467 are situated in urban territories. 746 in rural territories, and 2 are found overseas(India).

It likewise works the Sonali Bank Trade Company inc.

In USA and Sonali Bank (UK) Ltd, United Kingdom, to encourage outside trade settlements.

Sonali Bank UK transmits up to 14 goals crosswise over

Bangladesh straightforwardly, these incorporate Dhaka, Chittagong, Moulvibazar, Beanibazar, Balaganj, Biswanath, Jagannathpur, Sunamganj, Gopalganj, Nabiganj, Hobiganj, KulaoraorTajpur.

### 2.3 Target of Sonali Bank Limited

#### Corporate Profile of Sonali Bank

Name of the Company	Sonali Bank Limited
Chairman	Mr. Md. AshrafulMoqbul
CEO & Managing Director	Mr. Md. ObayedUllah Al Masud
Company Secretary	Mr. Md. HasanulBanna
Legal Status	Public Limited Company
Genesis	Emerged as Nationalized Commercial Bank in 1972, following the Bangladesh Bank (Nationalization) Order No. 1972(PO No.26of 1972)
Date of Incorporation	03 June, 2007
Date of Vendor's Agreement	15 November, 2007
Registered Office	35-42, 44 Motijheel commercial Area, Dhaka, Bangladesh
Authorized Capital	Taka 6000.00 core
Paid-up Capital	Taka 4130.00 core
Number of Employee	18,167
Number of Branches	1215
Phone-PABX	9550426-31, 33, 34, 9552924
FAX	88-02-9561410, 9552007
SWIFT	BSONBDDH
Website	www.sonalibank.com.bd
E-mail	itd@sonalibank.com.bd

Table 2.3: Corporate Profile of Sonali Bank

**Target of the Bank:**

## Features of the Bank

<b>Capital Structure</b>	
Authorized Capital	Tk. 2000.00 core
Paid-up Capital	Tk. 1125.00 core
<b>Branches &amp; Subsidiaries</b>	
1. Total No of Branches	1214 (As on 28/08/2019)
a. No of Foreign Branches	2
b. No of Local Branches	1212
I. No of Rural Branches	867
II. No of Urban Branches	345
2. No of Regional Offices	19
3. No of Principal Offices	42
4. no of G.M. Offices	12
Subsidiaries	3 1. Sonali Bank (UK) Limited having 6 (six)

Table 2.3: Features of the Bank



## 2.4 Organizational Structure

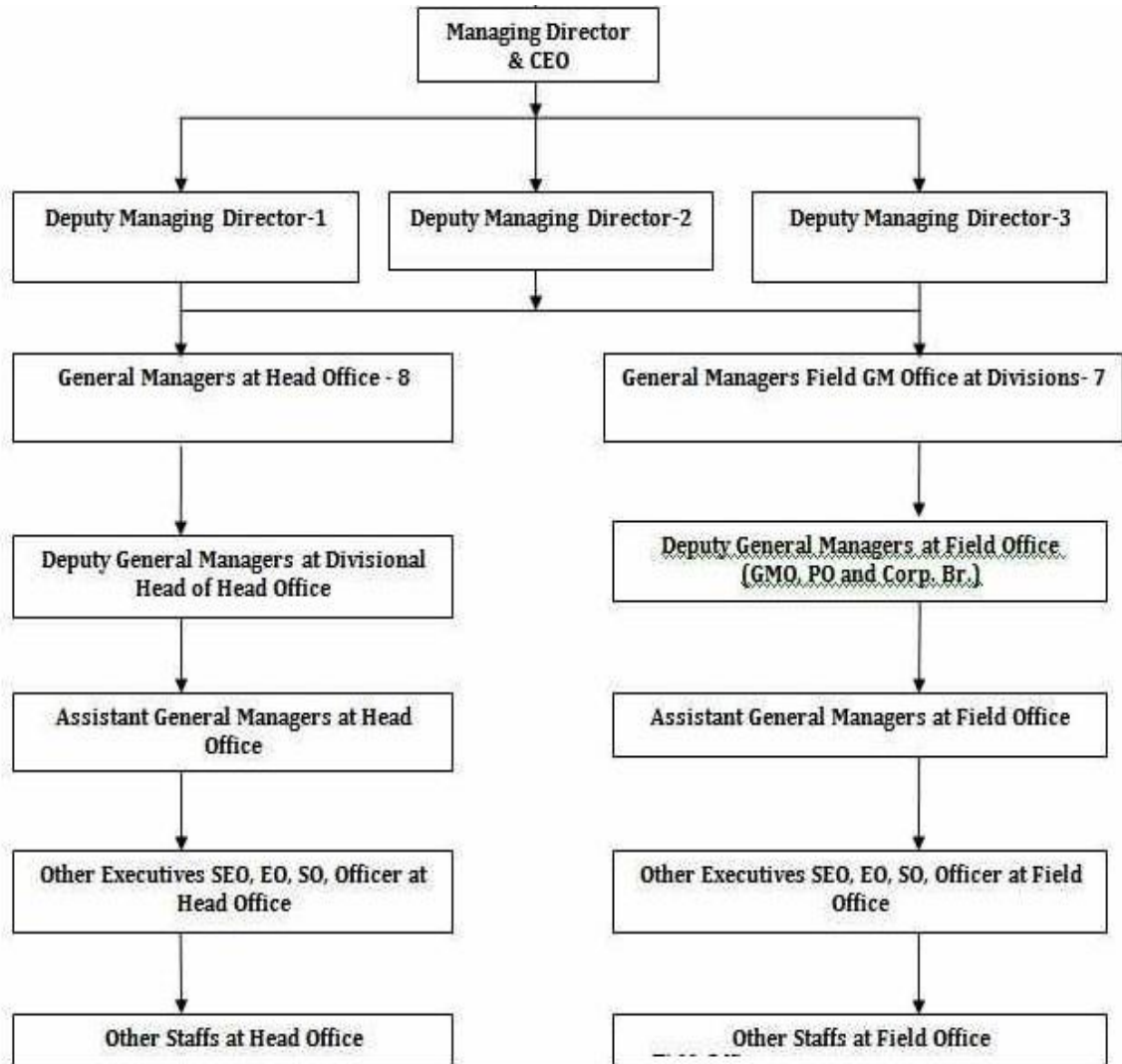


Figure 2.4 shows organizational structure of Sonali Bank Limited

The organization structure of Sonali Bank Limited is tall and it starts from the top that is from board. It has seven levels which are board, Head Office, GM Office, Regional Office, Branch and Booth. Till now it has 6(six) GM office, 41 Principal Office, 21 Regional Office, 1215 Branches, and 36 Booths.

**Organizational Structure by Office:**

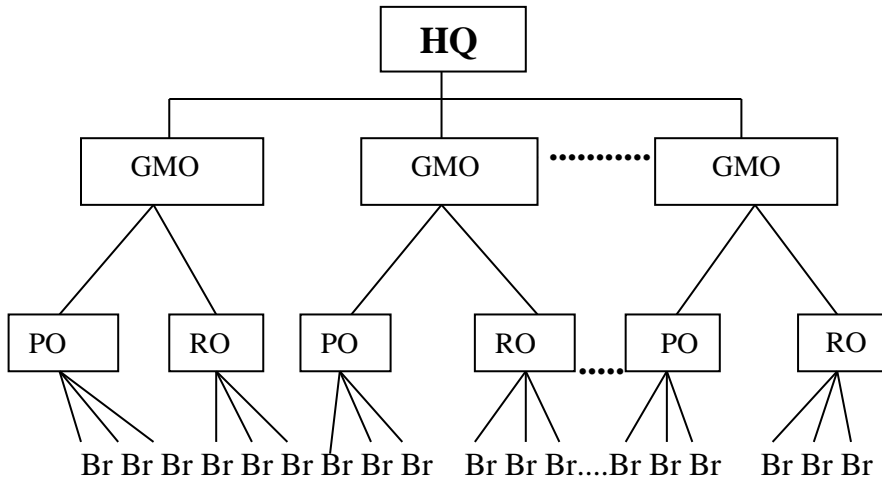


Figure 2.4 Organizational structure by office

**Network Structure (Logical):**

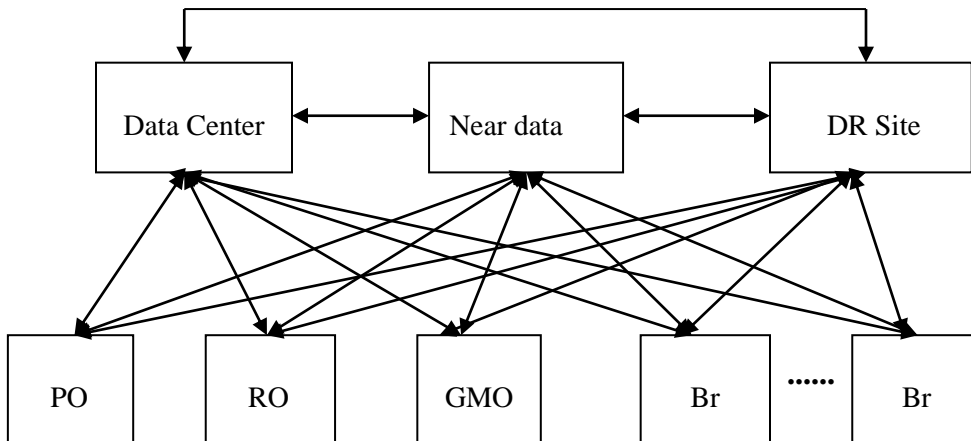


Figure 2.4 Network Structure (Logical)

### Network Structure (Physical):

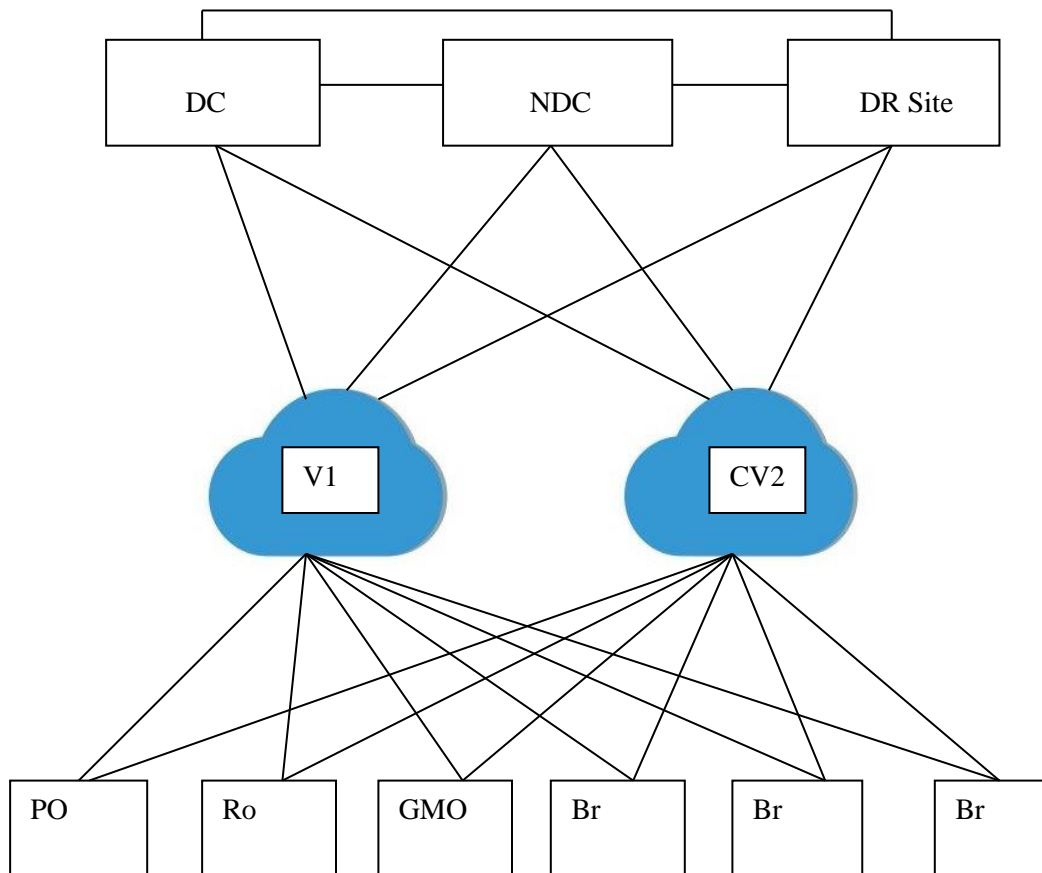


Figure 2.4 Network Structure (Physical)

### Network Equipments used by SBL

01. Firewall
02. IPS/IDS Appliance
03. Router
04. Switch
05. SIEM
06. ADC Appliance
07. WAF Appliance
08. Web Gateway/proxy
09. DDoS Appliance
10. Network Access Control (NAC)

## CHAPTER 3

### Tasks, Projects and Activities

#### 3.1 Daily Task and Activities

I am completing my intern from **Sonali Bank Limited (SBL)** in **Network operation Center (NOC)** under their **IT Division** ( Infrastructure IT ). They treated me as like their employee. IT Department maintain their works and activities with 5 days in a week from Sunday to Thursday. Working time is IT Division is 10:00 AM- 6:00 PM. Basically, my intern time was same 10:00 AM- 6:00 PM from Sunday to Thursday. I have started my internship from 16 April 2019 and Ending 18 July 2019.

01. Information Security and Service Management(ISSM)
02. Infrastructure
03. Network Management System(NMS)
04. Data Center(DC)

Every Day needs to send a fault report when they started duty and Every Evening shift also provide a fault report before ending their duty. Fault report contains all sites down list of whole country under SBL. A database that named NOC Database is use for sites details.

In internship period I had to do this type of works which assigned by the authority.

- Creating and sending Fault Report.
- Monitoring sites (for assign terminals)
- Mail Sending (for fault sites to Vendor/Third parties),and
- Support phone call for help maintenance work

### 3.2 Events and Activities

By all of this easily, I may complete my internship works. It is an evaluation of the monitoring and logically maintenance work to maintain Computer Network system.

1. All types of networking are connected with twisted pair cable. Two types of cable:-

1. Fiber optic
2. Twisted pair

Twisted pair cable are two types

1. Unshielded Twisted Pair
2. Shielded Twisted Pair

Pair Color- 1. Orange

2. Green

3. Blue

4. Brown

2. There are seven types of category : Each category is divided by speed.

Category 4 → Ethernet Cable → 10Mbps

Category 5 → Fast Ethernet Cable → 100Mbps

Category 6 → GBPS Cable → 1 to 10Gb

Category 7 → Up to 150Gb

- RJ-45 → Register jack 45 standard connector.
- Crimping Tools → The crimping tools used to cut it.
- The RJ eleven that r used on the telephone

STP and UTP are used in each category-

1. Orange white
2. Orange
3. White Green
4. Blue
5. White Blue
6. Green
7. White Brown
8. Brown

1, 2, 3 and 6 are used for Bit transfer. The pin 1(One) and 2(Two) work for the transmission, and the pin 3(Three) and 6(Six) work for the receiver.

**3.POE (Power Over Ethernet cable)** - With this cable we can carry and transfer power. We can get current or power through blue and white blue. Brown pair is used for Security purpose or Extra bit.

**4.**There are three types of cable-

- Straight Through Cable
- Crossover Cable
- Rolled Cable/ Console Cable

Router and pc same standard device. Straight through cable is used here for this.

**A. Straight through cable:-** If both sides of the cable are the same or if the two ends are the same, then it is called a Straight through cable. We use it for differential standard device connectivity.

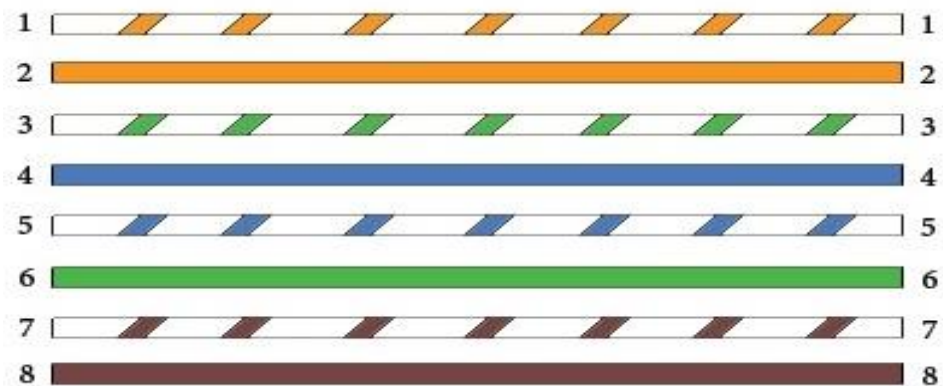


Figure 3.2 Straight Through Cable

**B. Crossover Cable:-** This type of connection is used for same standard device.

- Orange white → White Green
- Orange → Green
- White Green → Orange White
- Blue → White Brown
- White Blue → Brown
- Green → Orange
- White Brown → Blue
- Brown → White Blue

All kinds of work can be done if 1, 2, 3 and 6 are ok.

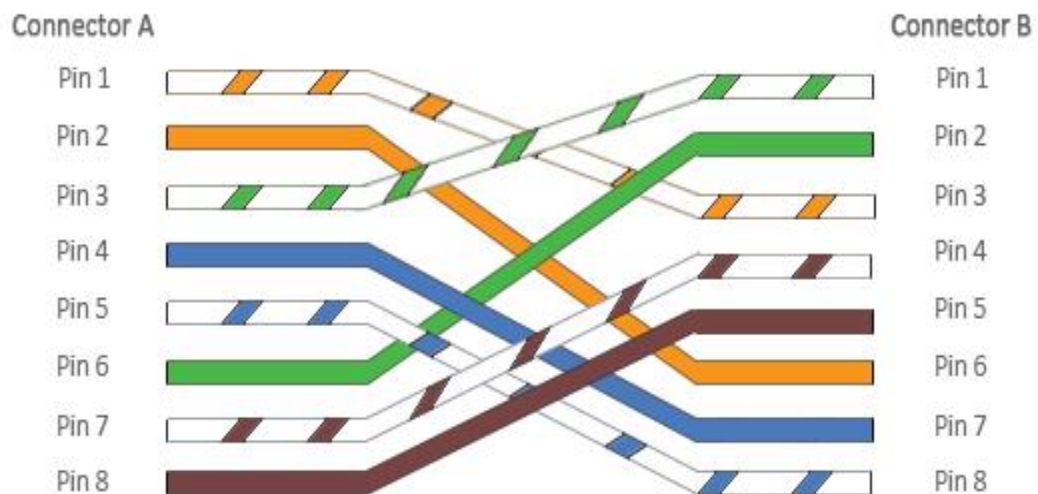


Figure 3.2 Crossover Cable

**C. Rolled Cable/ Console Cable:-** This type of connection is used to configure the device.

- Orange white → Brown
- Orange → White Brown
- White Green → Green
- Blue → White Blue
- White Blue → Blue
- Green → White Green
- White Brown → Orange
- Brown → Orange white

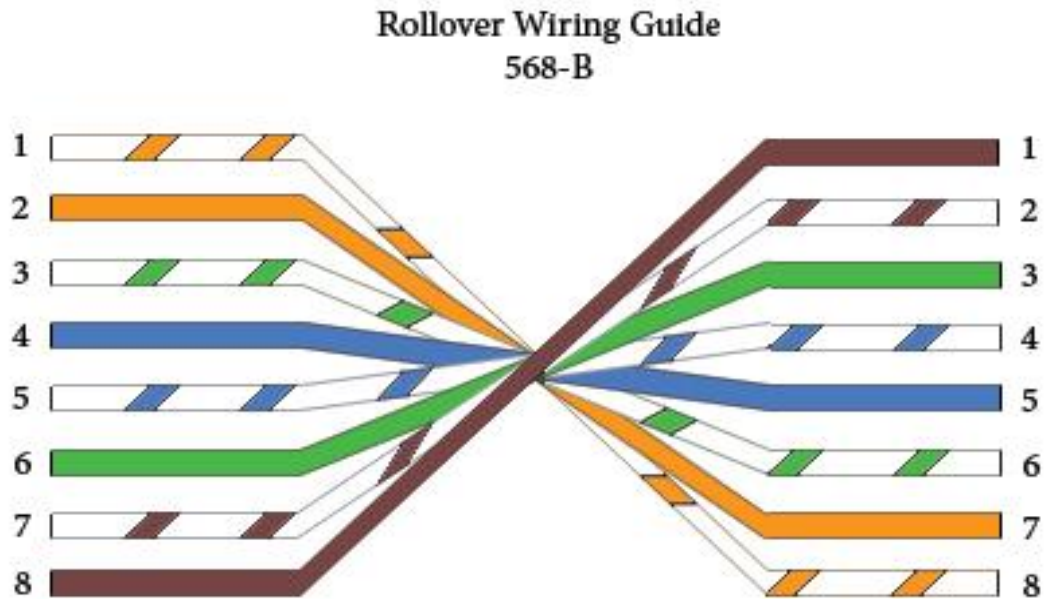
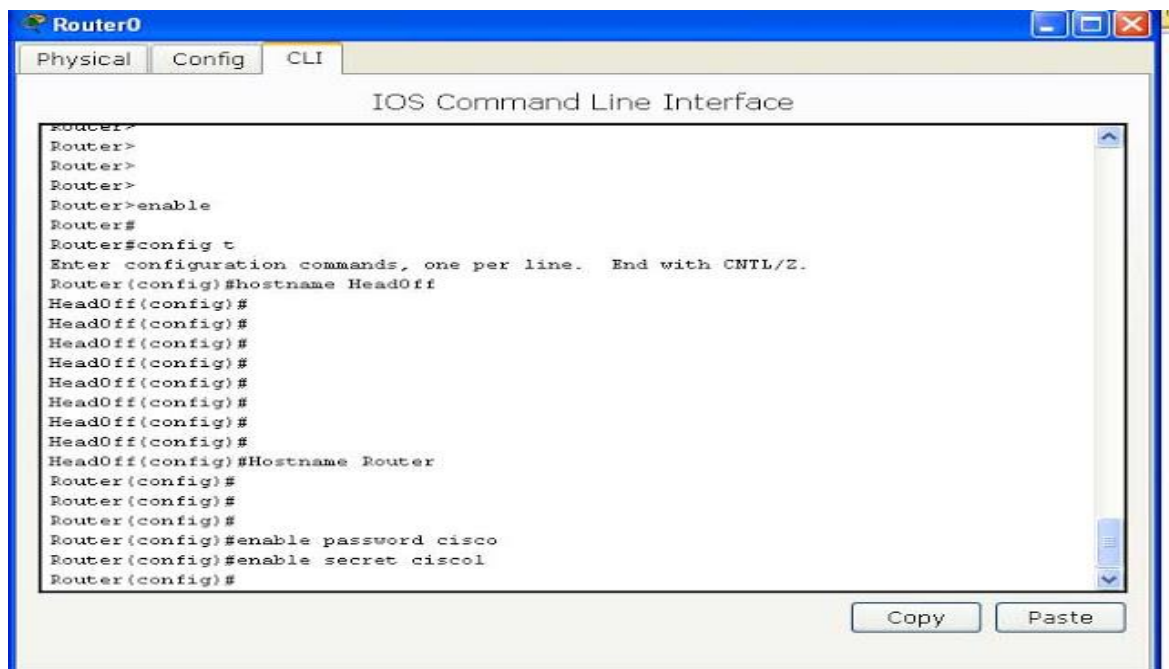


Figure 3.2 Rolled/Console Cable



## 3.2. Basic Router Configuration

### 3.2: Host Name Change-



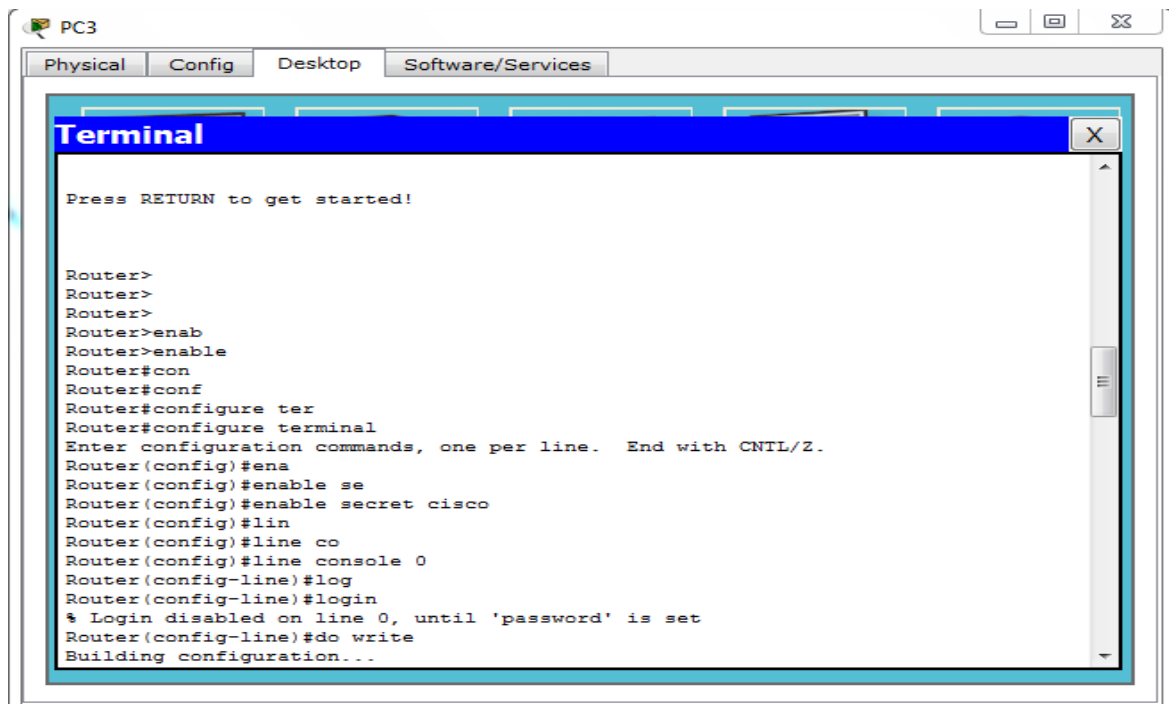
The screenshot shows the 'Router0' window with the 'CLI' tab selected. The title bar indicates 'IOS Command Line Interface'. The terminal window displays the following commands and prompts:

```
Router>
Router>
Router>
Router>enable
Router#
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname HeadOff
HeadOff(config)#
HeadOff(config)#
HeadOff(config)#
HeadOff(config)#
HeadOff(config)#
HeadOff(config)#
HeadOff(config)#
HeadOff(config)#
HeadOff(config)#
HeadOff(config)#
Router(config)#
Router(config)#
Router(config)#
Router(config)#enable password cisco
Router(config)#enable secret cisco
Router(config)#
```

Buttons for 'Copy' and 'Paste' are visible at the bottom right of the terminal window.

Figure 3.2: Host Name Change for Router

### 3.2: Console Port Password Change:



The screenshot shows the 'PC3' window with the 'Software/Services' tab selected. A 'Terminal' window is open, displaying the following commands and prompts:

```
Press RETURN to get started!

Router>
Router>
Router>
Router>enab
Router>enable
Router#con
Router#conf
Router#configure ter
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ena
Router(config)#enable se
Router(config)#enable secret cisco
Router(config)#lin
Router(config)#line co
Router(config)#line console 0
Router(config-line)#log
Router(config-line)#login
% Login disabled on line 0, until 'password' is set
Router(config-line)#do write
Building configuration...
```

Figure 3.2: Console Port Password Change for Router

### 3.2: Auxiliary Port Password:

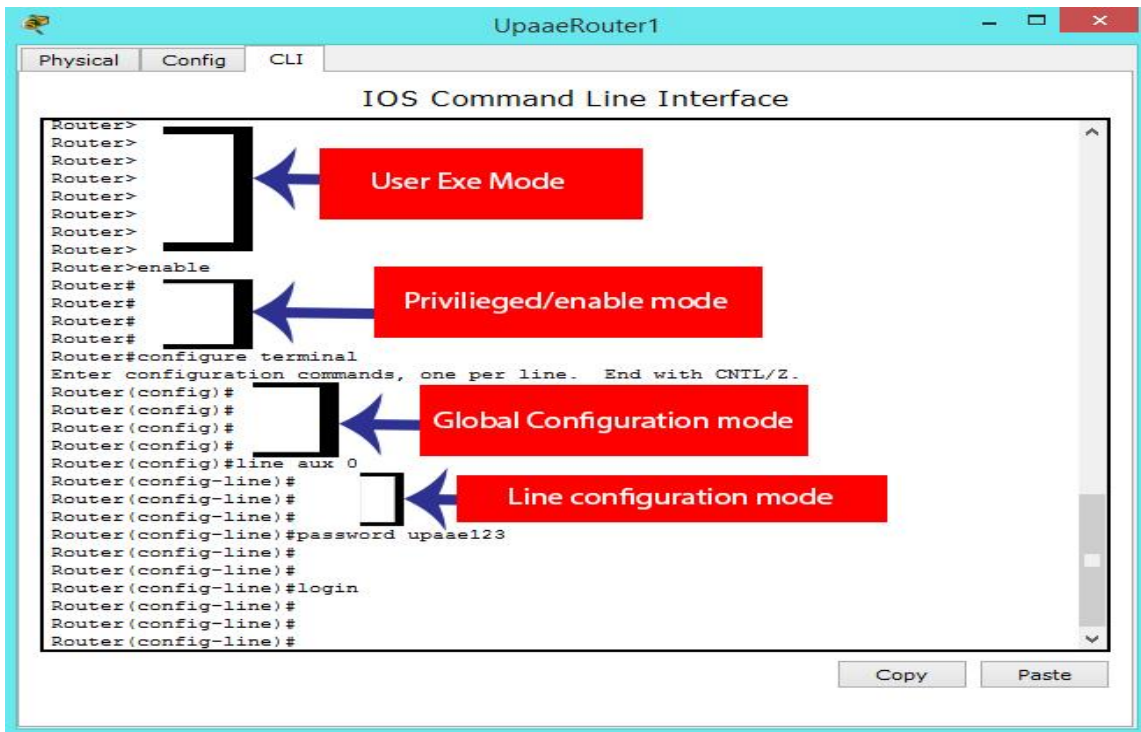


Figure 3.2: Auxiliary Port Password Create for Router

### 3.2: VTY Port Password:

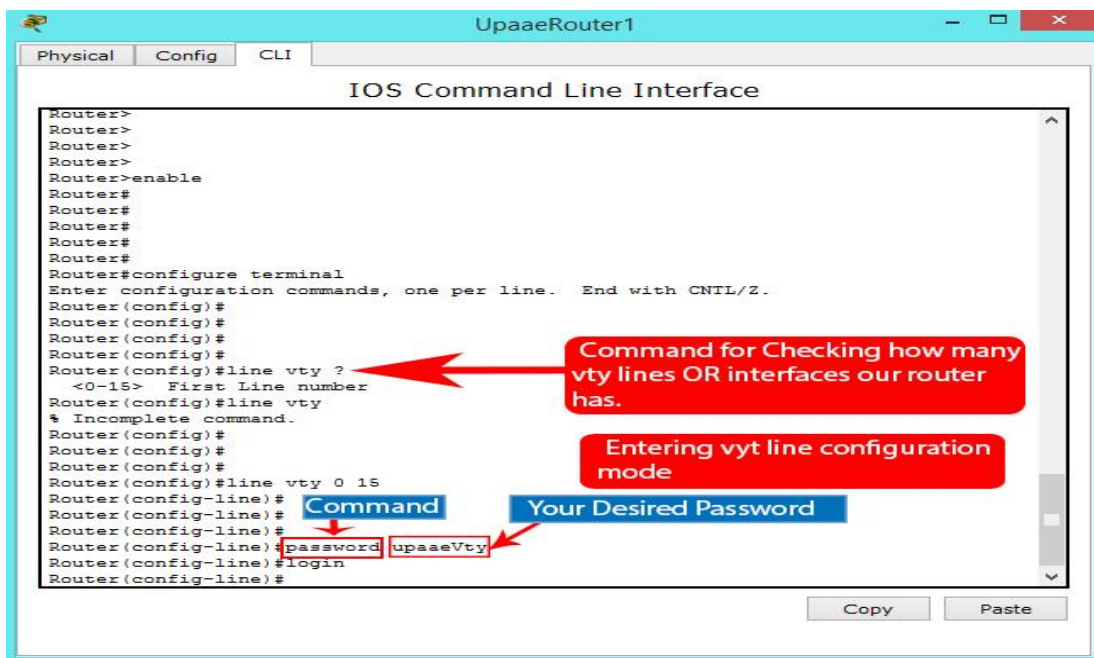


Figure 3.2: VTY Port Password Create for Router

### 3.2 Weekly Working Details

Information Technology Division (Infrastructure IT)

Table Name: Everyday Working Details

Department (Area of Operation 2016 Based)		Processes	Progress (30.05.2019)
<p>Network Communication Management Department</p> <p>Incharge: Md. Faruk Hasan Senior Principal Officer</p>	<p>HO &amp; LO LAN</p>	01. 4th Floor LAN connection was down due to looping problem.	01. LAN connection of 4th Floor made up.
		02. Two new LAN connection and IP required for TMD.	02. Two new LAN connection and IP provided for TMD.
		03. LAN connection of ITFD Division were down due to network switch problem.	03. LAN connection of ITFD Division were made up after new switch installed.
		04. LAN connections were not working in DMD-2 Chamber due to looping problem.	04. LAN connections now working in DMD-2 Chamber after reestablished the connections.
		05. LAN connection problem in Old conference room.	05. LAN connection repaired in Old conference room.
		06. A new IP required in CARD Division.	06. A new IP provided in CARD Division.

Information Technology Division (Infrastructure IT)

Table Name: Everyday Working Details

		Processes	Progress (30.05.2019)
		07. A new IP required in TMD.	07. A new IP provided in TMD.
		08. LAN connectivity problem in CSD.	08. LAN connectivity repaired in CSD.
		09.Required cable for LAN connections ( Shifting and new connection) from different divisions of HO.	09.Supplied cable for LAN connections ( Shifting and new connection) from different divisions of HO.
		10. Executive chambers of Head Office. Different divisions of HO and LO need regular telephonic and physical support as well as maintenance.	10. Provide regular telephonic and physical support as well as maintenance in Executive chambers of Head Office Different division of HO and LO.
		11.Human Resources Division IP required.	11. Human Resources Division IP provided.

Information Technology Division (Infrastructure IT)

Table Name: Everyday Working Details

Department (Area of Operation 2016 Based)	Processes	Progress (13.06.2019)	
<p>Network Communication Management Department</p> <p>Incharge: Md. Faruk Hasan Senior Principal Officer</p>	<p>HO &amp; LO LAN</p>	<p>01. Request for shifting of Existing Switch with 23 LAN connection of PMD-1 from one side to another side within their division.</p>	<p>01. Existing Switch with 23 LAN connection of PMD-1 have been shifted from one side to another side within their division.</p>
		<p>02. Request of LAN connections for new sitting arrangement of Infrastructure IT &amp; information Security, IT risk management ford control division.</p>	<p>02. Ten new LAN connections have been established for newly sitting arrangement of Infrastructure IT &amp; information Security, IT risk management ford control division.</p>
		<p>03. Visit &amp; Inspection CMD, Audit-1, LMD of SUNMOON tower for establishing LAN Connectivity.</p>	<p>03. Preparing cable for establishing LAN Connectivity.</p>
		<p>04. 15 LAN connections (shifting and new connection) have been requested for different divisions of HO &amp; LO. Out of them, 11 connections (shifting and new connection) have been successfully done. Rest of the connections (4) will be established shortly.</p>	<p>04. 11 connections (shifting and new connection) have been successfully done.</p>
		<p>05. Providing regular telephonic and physical support as well as maintenance in HO and LO.</p>	<p>05. Providing regular telephonic and physical support as well as maintenance in HO and LO.</p>

Information Technology Division (Infrastructure IT)

Table Name: Everyday Working Details

		Processes	Progress (13.06.2019)
		06. Solve some critical problem related with H.O LAN in PMD 1 & PMD 6.	06. LAN connection of PMD 1 & PMD 6 is running smoothly.
		07. Inspection CMD, Audit-1, LMD of SUNMOON tower for establishing LAN Connectivity.	07. Preparing cable for establishing LAN Connectivity.
		08. Required one new LAN connection in Human Resources (HR) Division.	08. Provided one new LAN connection in Human Resources (HR) Division.
		09. Required one new IP in Management Information System (MIS) Division.	09. Provided one new IP in Management Information System (MIS) Division.
		10. Required one new IP in Loon and Recovery Division (LRD) from DGM.	10. Provided one new IP in Loon and Recovery Division (LRD) from DGM.
		11. Required Five-5 new computer LAN connection and IP in Government Accounts Services Division (GASD).	11. Supplied cable for Five-5 new computer LAN connection and IP Provided in Government Accounts Services Division (GASD).

Information Technology Division (Infrastructure IT)

Table Name: Everyday Working Details

Department (Area of Operation 2016 Based)	Processes	Progress (20.06.2019)	
<p>Network Communication Management Department</p> <p>Incharge: Md. Faruk Hasan</p> <p>Senior Principal Officer</p>	<p>HO &amp; LO LAN</p>	<p>01. 12 LAN connections (shifting and new connection) have been requested for different divisions of HO &amp; LO. Out of them, 10 connections (shifting and new connection) have been successfully done. Rest of the connections (2) will be established shortly.</p>	<p>01. 10 connections (shifting and new connection) have been successfully done.</p>
		<p>02. Providing regular telephonic and physical support as well as maintenance in HO and LO.</p>	<p>2. Providing regular telephonic and physical support as well as maintenance in HO and LO.</p>
		<p>03. Required new LAN and IP in Low Consultant Division.</p>	<p>03. Provided a new LAN and IP in Low Consultant Division.</p>
		<p>04. Required one IP in Small and Medium Enterprise (SME) Division.</p>	<p>04. Supplied to the IP in Small and Medium Enterprise (SME) Division.</p>
		<p>05. Required three Annexure from in BDD.</p>	<p>05. Provided three Annexure from in BDD.</p>
		<p>06. Required one new LAN connection in ITFD.</p>	<p>06. Provided one new LAN connection in ITFD.</p>

Information Technology Division (Infrastructure IT)

Table Name: Everyday Working Details

Department (Area of Operation 2016 Based)	Processes	Progress (20.06.2019)	
<p>Network Communication Management Department</p> <p>Incharge: Md. Faruk Hasan Senior Principal Officer</p>	<p>HO &amp; LO LAN</p>	<p>07.RMS Division LAN connection was down due to looping problem.</p>	<p>07. LAN connection of RMS Division in made up.</p>
		<p>08. Required LAN connection problem in two Computer in Transport Division.</p>	<p>08. We are check the physical connection and IP. The LAN connection and IP address is ok. then check the Hub and problem the Cisco Switch to Hub.</p>
		<p>09. LAN connectivity problem in CAD (Operation).</p>	<p>09. LAN connectivity repaired in CAD (operation).</p>
		<p>10. IP problem in Human Resource Division. Anybody change this computer IP.</p>	<p>10. Provided to the IP in the computer in Human Resource Division.</p>
		<p>11. Structural Diagram &amp; Mapping of existing LAN connection are being prepared for HO.</p>	<p>11.Structural Diagram &amp; Mapping of existing LAN connection has been fruitfully completed.</p>
		<p>12. Discipline and Apple Division LAN connection were not working due to looping problem.</p>	<p>12. Discipline and Apple Division LAN connection now working after reestablished the connections.</p>



Information Technology Division (Infrastructure IT)

Table Name: Everyday Working Details

Department (Area of Operation 2016 Based)	Processes	Progress (27.06.2019)	
<p>Network Communication Management Department</p> <p>Incharge: Md. Faruk Hasan Senior Principal Officer</p>	<p>HO &amp; LO LAN</p>	<p>01. Common Service Division LAN connection was down due to looping problem.</p>	<p>01. LAN connection of Common Service Division made up</p>
		<p>02. Two new LAN connection and IP required for CAD.</p>	<p>02. Two new LAN connection and IP Provided for CAD.</p>
		<p>03. LAN connection of MIS division were down due to network switch problem.</p>	<p>03. LAN connection of MIS division were made up after new switch installed.</p>
		<p>04. LAN connection were not working in GM ( Saidur Rahman sir) Chamber due to looping problem.</p>	<p>04.LAN connection now working in GM ( Saidur Rahman sir) Chamber after reestablished the connection.</p>
		<p>05.LAN connection Problem in SME Division.</p>	<p>05.LAN connection repaired in SME Division.</p>
		<p>06. A new IP required in BDD Division.</p>	<p>06. A new IP provided in BDD Division.</p>

Information Technology Division (Infrastructure IT)

Table Name: Everyday Working Details

Department (Area of Operation 2016 Based)	Processes	Progress (27.06.2019)	
<p>Network Communication Management Department</p> <p>Incharge: Md. Faruk Hasan Senior Principal Officer</p>	<p>HO &amp; LO LAN</p>	<p>07. LAN connectivity problem in EAC Division.</p>	<p>07. LAN connectivity repaired in EAC Division.</p>
		<p>08. Required cable for LAN connections (shifting and new connection) from different divisions of RMS.</p>	<p>08. Supplied cable for LAN connections (shifting and new connection) for different divisions of RMS.</p>
		<p>09. Providing regular telephonic and physical support as well as maintenance in HO and LO.</p>	<p>09. Providing regular telephonic and physical support as well as maintenance in HO and LO.</p>
		<p>10. Required one new IP in Business Development Division (BDD).</p>	<p>10. Provided one new IP in Business Development Division (BDD).</p>
		<p>11.</p>	<p>11.</p>
		<p>12.</p>	<p>12.</p>

### 3.2 Simple HQ LAN Network Diagram of Sonali Bank Limited

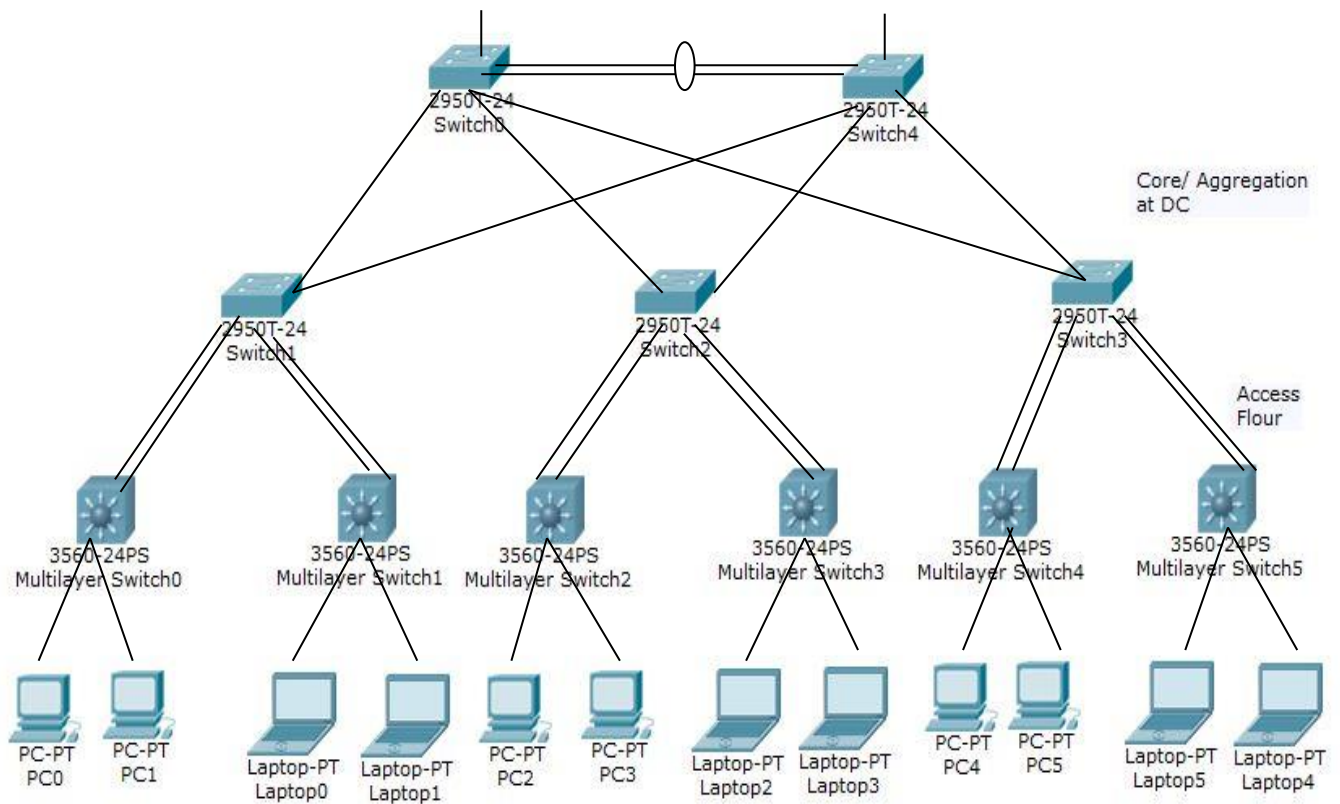


Figure 3.2 Network Diagram of Sonali Bank Limited

## Work Flow for HQ LAN Department:

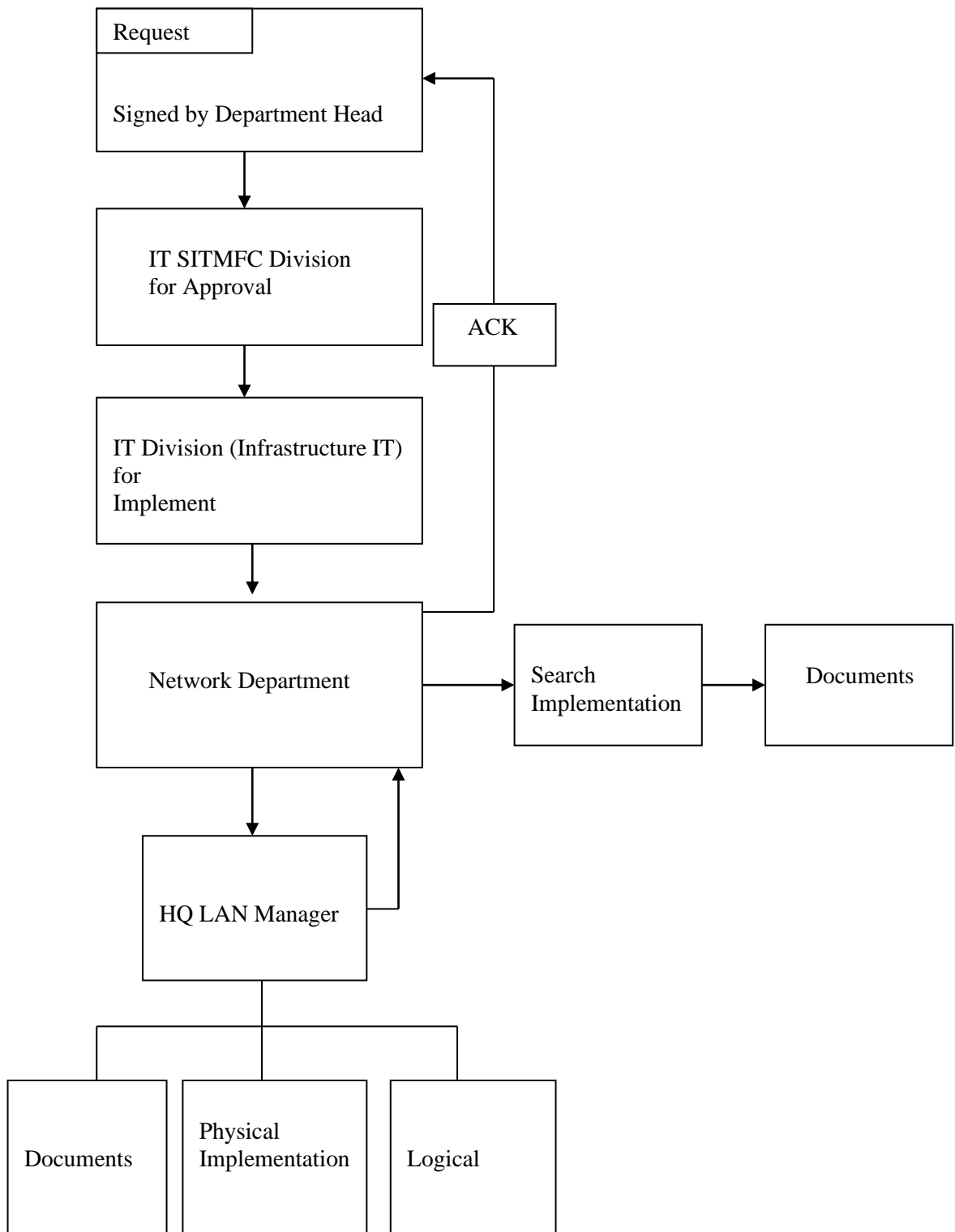


Figure: HQ LAN for Working Flow

### **3.3 Project Task and Activities**

I have many achievements from Sonali Bank Limited. I have had the opportunity to work with a network team. They have taken on a new job and have been working with them and I have learned a lot and helped them.

- Update Network IP.
- Create group on Internet Services.
- Design Handover sheet.
- Create Summary sheet.
- Network team to help.

### **3.4 Challenges**

Computer networking and monitoring is not to easy task. To find the problem that an employee has to face different problems in different tasks, and to solve this problem. The result is that there are many problems with the network but the most common problems are network down, CBS etc. Only disconnected IP change, server down etc. The engineer was informed by Sonali Bank Limited to resolve these problems and the engineer fixes it when the network is down and monitors the MD, GM, DGM and AGM checks if its working properly.

The network team must be able to check all problems and know how to solve all problems and accept challenges. I know the officers have helped me a lot despite being so busy. During the internship I took a lot of data or information secretly. I put a lot of time and effort into learning this task. I have had the opportunity to work in new place with new people and have done so. The sector working on computer networks is very sensitive.

## CHAPTER 4

### COMPETENCIES AND SMART PLAN

#### 4.1 Competencies Earned

Networking Technology is best seen as a complement to, not a substitute for, direct contact. Social networking software certainly can make individual employee expertise more visible and accessible. But ideally, more should be done with it. The social networking system could include imbedded "just-in-time" face-to-face skill-building tips. For example, a new hire creating his profile could be asked, "Want tips on teaching your name?" One click would take him to a short tutorial on that topic. Or an employee accessing an expense report from before going to a conference or meeting could be offered an article on how to network to make valuable contacts and bring back business intelligence, ensuring that her attendance is worth the organization's time and money.

#### 4.2 Smart Plan

- Most prominently about NOC Monitoring system.
- It is critical to monitoring all the terminals if you want to performance better.
- Carefully learn about MD, GM, DGM, AGM, SPO and PO subscriber management system.
- Check out many devices and smart technology for unique screen resolutions and ideas.
- Release/gain idea in a unique way.

### **4.3 Reflections**

SBL NOC is in very secure place where unauthorized people cannot be permitted. NOC team members are monitoring whole network system of Sonali Bank Limited. I get the opportunity for internship here and working with them to support technical side like network Monitoring, Troubleshooting, Management, Documentation etc. which make the reflection of my future journey.

From completing this report I learned that networking is not as daunting as it originally seemed. Making connections can be easy and might happen at any time. In order to build a solid enterprise network it is important to develop strong social skills, communication skill, technical network skill and to be confident speaking with important people. Saying the right thing and asking the right questions can be challenging. Anybody who is master of communication skills he can gain valuable knowledge from the experience and expertise from others. Enterprise networking is so secure robust & smooth, I plan to become a network professional which will benefit for my future journey.

## **CHAPTER 5**

### **CONCLUSION AND FUTURE CAREER**

#### **5.1 Discussion and Conclusion**

From that entry level position, I will pick up a great deal of experience that will be extremely useful in my future works. I will ready to make a ton of venture regarding a matter of system observing and further more support to create it in a fruitful way. In general, I need to state that this entry level position is extremely useful for my observing and system the executives bearer that make me effective in wherever in system segment. I have taken in the part of valuable and potential execute that again help me to do work in a system base organization. Each experience I gather structure the temporary position will doubtlessly be profited me in my not so distant future.

#### **5.2 Scope for Further Career**

Internship goals provide a very good clear concept about practical and semantic about network base system. My internship implemented a proof of concept for a decision making system using imitated knowledge. If I have no experience then finding a good job is very difficult. But this internship will help me a lot in building a good career in my life. So this internship will do a great job to learn and applicable for my future career.

- To be work network company.
- Data and information Security.
- Telecommunication sector.
- Ability to teamwork.
- Work as a network monitoring concern.
- Self network professional.
- Self Entrepreneurship in Networking field.



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