

**Internship on Microtik certified Network Associate (MTCNA)  
BY**

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**ID: 151-15-5169**

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 JANUARY-2022**

## APPROVAL

This Internship titled “Microtik certified Network Associate (MTCNA)” submitted by Md. Omar Faruq Patwary, ID: 151-15-5169 International University, has been accepted as satisfactory for the partial complete 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 06-Jan 2022.

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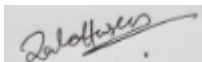


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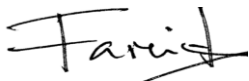


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## DECLARATION

I prepared the internship report, Md. Omar Faruq Patwary, ID: 151-15-5169 Daffodil International University's Department of Computer Science and Engineering, under the leadership of **MS.**

**Subhenur Latif, Department of CSE** and Daffodil International University.

I am declaring that, I gather data for Daffodil Online Limited (DOL), a Data Center and Internet Service Provider (ISP) based company, as well as for books and the internet.

**Supervised by:**



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## **ACKNOWLEDGEMENT**

I thanks to Allah who give me the opportunity to complete my internship and give me chance to prepare my internship report

Mr. SabbirAhamed, General Manager of Daffodil Online Limited, deserves my gratitude. I am also grateful to Mr. Mohammad Abul Basher, Daffodil Online Limited's System Admin (Network& Training). I won't be able to continue my internship at the company unless they continue to help me. Other personnel of the company were quite helpful in completing my internship.

Ms. Subhenur Latif, Daffodil International University, Department of Computer Science and Engineering, Dhaka, is my course teacher, and I am quite pleased of her. My supervisor's extensive knowledge and deep interest in the topic of "Microtik certified Network Associate (MTCNA)" enabled me to finish this internship

Professor Dr. Touhid Bhuiyan, Professor and Head, Department of CSE, deserves my heartfelt gratitude, as well as the CSE department's other academics and employees at Daffodil International University, for their assistance in completing my internship. I'd want to express my gratitude to everyone in our Daffodil International University course who contributed to the completion of the course work. I also want to express my gratitude to a classmate who assisted me in preparing the report and working.

Finally, I must respect my honour and respect for my parents to giving the opportunity, and support to me to come this places.

## **ABSTRACT**

"Microtik certified Network Associate (MTCNA)" is the title of my internship. I use a MikroTik Router, a Switch, and Linux. The Internet is essential for communicating with one another. As a result, I see a lot of opportunities to improve my networking skills in the future. I believe that once upon a time, many companies entered the market to assist and secure our data. As a result, we require a large number of network engineers. As a result, the market provides numerous opportunities to begin a career. That is why I chose "Microtik certified Network Associate (MTCNA)" as my internship topic.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

This is the age of information technology. Servers are being used by a large number of individuals all over the world, and they are a component of Internet technology. Linux is widely regarded as the most significant free software success since, if not more recently, the original Space War. We can't do anything involving Internet communication until we have a server. As a result, DNS servers are critical for Internet technology. The internship approach is an old practice that helps students comprehend the real world of work, the surroundings, and the obstacles that come with it. Internships are important in all areas of study, but they are especially important before receiving a degree.

Every business, corporation, and job education is now heavily reliant on software-based communication and Internet technologies. We like to use more E-services, often known as E-Commerce. E-government, Internet Banking, SMS Alert Banking, Mobile Banking, EFT (Electronic Fund Transfer), and other services are not possible without a server. DNS (domain name system) is yet another extremely useful server that we may use to run numerous services such as Internet technology, e-mail, e-business, telecommunications, and mobile technology.

These functions are not possible in the absence of a server and DNS. I'm sure it's one of them. Today's banking industry, transportation, and other corporate organizations rely fully on various forms of software and Online technology, and the server is vital.

Banking Software, ATM Technology (Switching Software), Debit Card, Credit Card, Online Transactions, and so on are all heavily reliant on software and various types of servers, one of which being Linux. It has evolved into a commercial, education, and personal productivity operating system.

### 1.2 Motivation

At Daffodil International University, I am now studying a Bachelor of Science in Engineering in Computer Science. I recognize the value of hands - on experience, which is rich in textbook understanding and real-world problem solving.

My dream is to establish me as a network security expert. And I enjoyed that networking job very much. During my internship, I discovered that the intricacies of Linux network and server management, as well as MikroTik details, are inefficient.

As an Internet service provider, I've made it a point to engage with individuals in order to better comprehend their requirements and give them with superior services. My abilities remain in my capacity to read and understand the issue, as well as to work fast and beautifully. I also witnessed the server's work and responsibility. I believe that my work will help me to be more successful in life.

### **1.3 Object of Internship**

The ultimate purpose of my internship program is to prepare me to compete in a competitive employment market. As a result, this skill development strategy is incredibly effective. I'd like to collect some remarkable qualities in order to provide myself as a skilled one and make my dream come true.

The computer science internship is designed to provide work experience while students are still in high school or college, to coordinate job experience with academic training, and to assist students who are self-motivated, self-directed, and eager to work in making the transition from classroom to job.

### **1.4 An Overview of the Company**

Daffodil Online Limited. takes pleasure in being one of Bangladesh's premier countrywide Internet Service Providers (ISPs). They are the most experienced and oldest firm in the field of information technology, and their basic business ethics include long-term customer connections. When we look back over the decade since our inception, they are extremely proud of what they have accomplished and even more excited about the future potential. It may be of interest to you to know that they began operations in 2002. Based on client recommendations and time restrictions, they have increased their operating and service portfolio over the years. They built their reputation by working on numerous national initiatives and with international organizations. They are utilizing cutting-edge technology and improving services as needed. With a highly efficient technical knowledge group, their Corporate Network Solution department is capable of providing cutting- edge network and telecommunication solutions.

## **1.5 Layout of the report**

I described the internship's goal, motivation, and introduction to the firm in Chapter 1.

I detailed the process of my internship in Chapter 2. And this chapter tells you where you can get an internship to help you with this program. Also included are details about how the internship was carried out, about the organization, what IT services are provided by DOL, and what roles exist in the Linux employment market.

I explored daily duties and activities, Events and Activities, and Challenges in Chapter 3.

Chapter 4 discusses Earned Competencies, Smart Planning, and Reflections.

Conclusion and Future Scope are discussed in Chapter 5. I offer a conclusion after discussing the Linux's Future Scopes

## **CHAPTER 2**

### **ORGANIZATION OF INTERNSHIP**

#### **2.1 Introduction**

Daffodil Online Ltd. (DOL) is proud to be one of Bangladesh's first and longest-running ISP/ ASPs, offering one-stop integrated ICT services and solutions since July 2002. It makes corporate, small and medium-sized businesses, and individuals service its own fiber optic and radio connection in a hazy infrastructure.

The Institute is involved in a number of national programs, many of which are associated with highly regarded international organizations.

It makes use of cutting-edge technology and services whenever an upgrade is required. With a team of highly skilled technical professionals in the Corporate Network Solutions division, The Center can offer cutting-edge network and telecommunications solutions. DOL has a very strong professional engineering and management team that is certified by Sun, Cisco, Microsoft, Linux, and Oracle, and is actively involved with the world's best computing associations like as IEEE-ACM, ACS, BCS, and PMI.

Its Corporate Social Responsibility program fosters a sense of responsibility in the community, workplace, location, and market environment. DOL emphasizes three core platforms through its activities and services as a Group concern: education, nation-building, and the environment[1].

## **2.2 Situation of the Product and Market**

Daffodil Online Limited is the major national Internet Service Provider (ISP) and is proud to be one of Bangladesh's leading ISPs. They are the most experienced and oldest organizations in the ICT area, where they are the major business policies, and where they have long-term ties. They foresee growth in a decade from our foundation, are quite proud of what we have accomplished, and are much more excited about our possibilities for an equally bright future. Daffodil Online Limited offers a wide range of IT services as well as professional training. This is shown below.

### **IT Services**

- Solution for Corporate Internet
- Security solution.
- Registration of domain names and web hosting.
- Website creation.
- A solution based on open source software
- Provider of Internet Access
- High-speed Wi-Fi Zone
- Data Connectivity, Data Centers, and Co-Location  
are all terms used to describe data connectivity,  
data centers, and co-location.

## **Services for Professional Training**

- Setup and administration of a Linux-based ISP.
- Course in Certified Ethical Hacking (CEH).
- MikroTik ISP Setup and Administration
- Joomla website development.
- For website development, PHP and MYSQL are employed.
- Certified Engineer by Red Hat (RHCE).

## **2.3 SWOT Analysis**

SWOT reanalysis is a great tool for identifying our strengths and weaknesses in relation to both the changes we encounter and the threats we face.

### **Strengths**

- Connecting persons who are separated by distance.
- Working from home is simple.
- Starting an Online business.
- Obtaining details.

### **Weaknesses**

- New entrants undervalue the level of expertise required to succeed in the market.
  - Large amounts of money are necessary to start a firm.
  - Small resellers struggle to compete.
  - A wide range of pricing and service possibilities.

### **Opportunities**

- The aging population is shifting.
- The number of households in Bangladesh is developing.
- Imposition of lower taxes.
- Improvements to the regulatory framework.

## **Threats**

- The Financial Crisis - Homeowners are less willing to raise their mortgages. Broadband subscriptions reflect the stock market's lack of confidence in the digital-communications industry.
- It will be interesting to watch how far customers can be convinced to adopt Internet access.

## **2.4 Target Group**

All individuals and small to medium-sized enterprises are among the company's customers. The company intends to concentrate on SOHO clients because they are the best growth choice for our new high-resolution proposal and have the most potential for the company's growth. If the organization takes the appropriate steps and focuses on customer service, it will continue to grow. Web Solutions feels that this market sector has unique pricing and service requirements, as well as more decision-making, dependable clients. As a result, it is critical for each.

## **2.5 Organizational Structure**

The organizational structure of Daffodil Online Ltd is depicted in Figure 2.1.



Figure 2.1 Daffodil Online Limited's Organization

## CHAPTER 3

### DAILY TASK AND ACTIVITIES

#### 3.1 Daily Task and Activities

**Month - 1:** I learned and executed the following duties during my first month of internship at Daffodil Online Limited:

- Gaining knowledge and comprehension of network components.
- understanding & Learning the fundamentals of MikroTik
- MikroTik HDD Partitions: What You Need to Know
- Understanding and learning the fundamentals of MikroTik
- Learning and comprehending the MikroTik Level.
- Installing VMware Workstation



**Month - 2:** : I learned and executed the following things through my second month of internship at Daffodil Online Limited:

- Centos Commands for Novice
- Management of MikroTik users and passwords.
- In a MikroTik, set the IP address
- Set the ip subnet mask ‘
- Copying and relocating files and directories.
- File and Directory compression and Decompression.

**Month – 3:** I learned and completed the following duties during my third month as an intern at Daffodil Online Limited:

- Learning and comprehending the fundamental of Linux.
- Basic command of Linux
- Configuration of Centos IP Addresses

**Month – 4:** I learn and completed the following tasks throughout my third month of training at Daffodil Online Limited:

- Network cabling systems
- Routing protocols

### **3.2 MikroTik Router**

Since 1996, MikroTik, a Latvian company, has been creating routers and wireless ISP systems. In most nations throughout the world, MikroTik currently produces hardware and software for Internet connectivity. The company's products are well-known for being low-cost substitutes for high-cost routers and Ethernet radio relay lines. As of 2016, the company employed more than 100 individuals. [5].

### **3.3 RouterOS & Release History**

MikroTik RouterOS is a standalone operating system based on Linux. The MikroTik RouterOS, an operating system based on the Linux kernel, is the company's flagship product. When deployed on the company's own hardware (Router board series) or on standard x86-based PCs,

It turns a PC into a network router and adds capabilities like firewalls, VPN server and client, bandwidth shaper and quality of service, wireless access point operations, and other features that are often used when joining networks. The system has the capability of acting as a captive-portal hotspot. [6].

### **Release history**

MikroTik has published many versions of RouterOS at various times. Some examples are presented below [7].

- RouterOS version **3**, Jan-2008
- RouterOS version **4**, Oct-2009
- RouterOS version **5**, Mar-2010
- RouterOS version **6**, May 2013

### **3.4 Features**

RouterOS is MikroTik's stand-alone operating system based on Linux kernel. The following list shows features found in the latest RouterOS. It supports a wide range of applications used by Internet service providers. It can function as a router.

a subset of hardware availability (user maintained)

- Support for switch chip setup
- MAC based access for initial configuration
- Android based configuration tool.

Protocols such as OSPF, BGP, Multi-protocol Label Switching (VPLS/MPLS), Open Flow, and others are supported.

### 3.5 Useable routers

In the network world, there are numerous routers, switches, and routing protocols. Different routers and routing protocols are used by different companies and ISPs. That is their favored method. The Mikrotik Router Rb2011UI, Mikrotik Router RB450, CRC1016 and simple switches are Cisco switches, such as the Cisco 2800 series, are used by Daffodil Online. Use Juniper EX-Series in server stations. And for the Wi-Fi networks, Cambium was primarily used, as seen in Figure 3.1.



Figure 3.1: Screen Printto Mikrotik Rouret

### Mikrotik Router Rb2011UiAS

The most popular and easiest of all our Wireless Routers is the Mikrotik Router Rb2011UiAS, which boasts a 600MHz 70K MIPS network CPU. SFP cage, 128 MB RAM, 5GB LAN ports, and Ethernet connections It features a robust dual-chain 2.4GHz 802.11 bgn wireless connection, as well as an RJ45 serial interface and a micro USB port. It also has a touchscreen LCD display, two indoor antennae for wireless power, and a desktop enclosure.

In the Daffodil Online network diagram, a main router is used to take bandwidth and another router is given to it. They connect to a distribution switch, which converts the connection to a different trade, then each determent has LAN and Wi-Fi for the user.

## Cloud Core Router

CCR1016 Cloud Core Router is a good router with a cutting-edge 16 core CPU. If you need to send millions of files every second, this is the perfect router for you. It comes in a 1U rack mount container with twelve Gigabit Ethernet connections, a serial console cable, and a USB port. The CCR1016-12G has two SODIMM slots and comes with 2GB of RAM by default, however RouterOS 06 has no memory restriction (will accept and utilize 16GB or more). It includes a power supply as well as a 1U rack mount case. This device is aimed at medium-sized network providers and attempts to be a cost-effective alternative to other more well-known brands, as seen in Figure 3.2, a cloud core router. CCR1016 [9].



Figure 3.2: Screen Print to Cloud Core Router CCR1016

## Cisco 2800 series

The Cisco 2800 series of smart, fixed-configuration Gigabit switches offer reliable switching capabilities to expanding mid-size businesses that require a cost-effective dynamic routing and Layer 3 switching solution that is built for scalability which is shown in figure 3.3.



Figure 3.3: Screen Print to Cisco2800 series

## MikroTik OS Step in Linux

MikroTikRouterOS is a router and thin router operating system based on Linux. It does not necessitate any additional resources. The basic steps for installing and configuring a running MikroTikrouterOS are described here.

Step1: Open a new computer in virtual box and move to the next to check custom button. Then pick the option to the disk, enter the machine's name, and select next, as shown in figure 3.4.

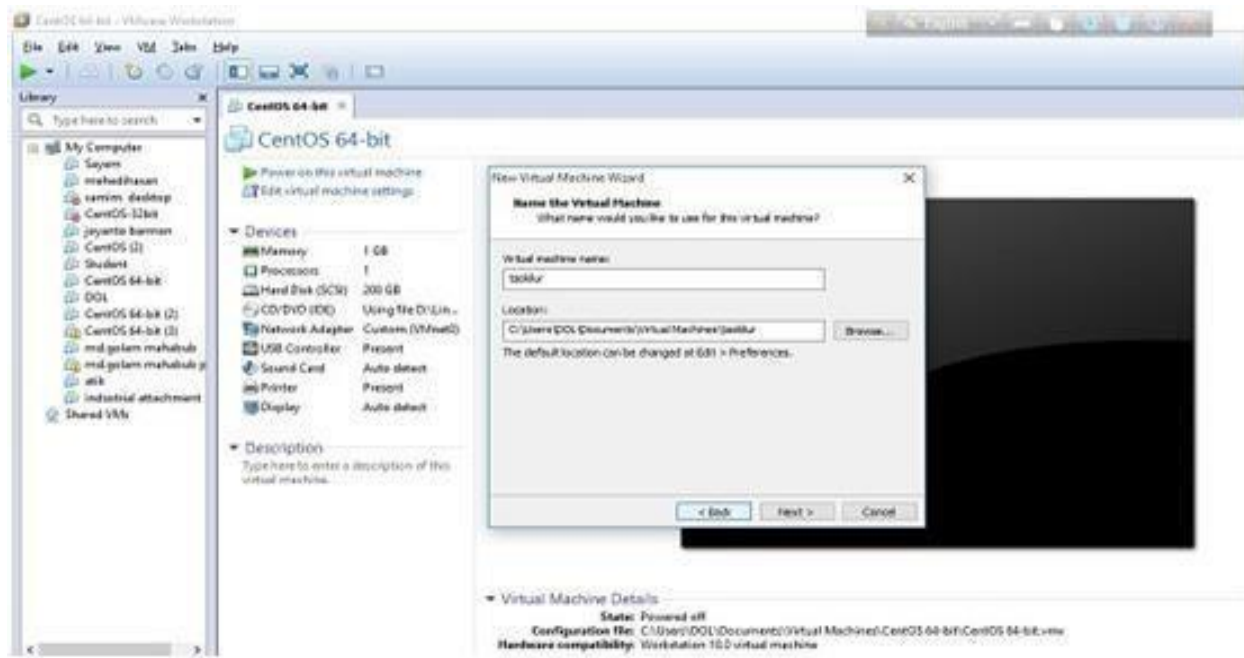


Figure 3.4: Screen Print create a new virtual machine

Step2: After that, go to the virtual machine settings and add the IOS storage CD/DVD location. Then, under Network Adapter, add an additional network adapter. In this network adapter 1, click custom and select Vmnet08 (NAT) for network adapter 1 and Vmnet0 for network adapter 2. Then, as shown in Figure 3.5, click OK to start the installation.

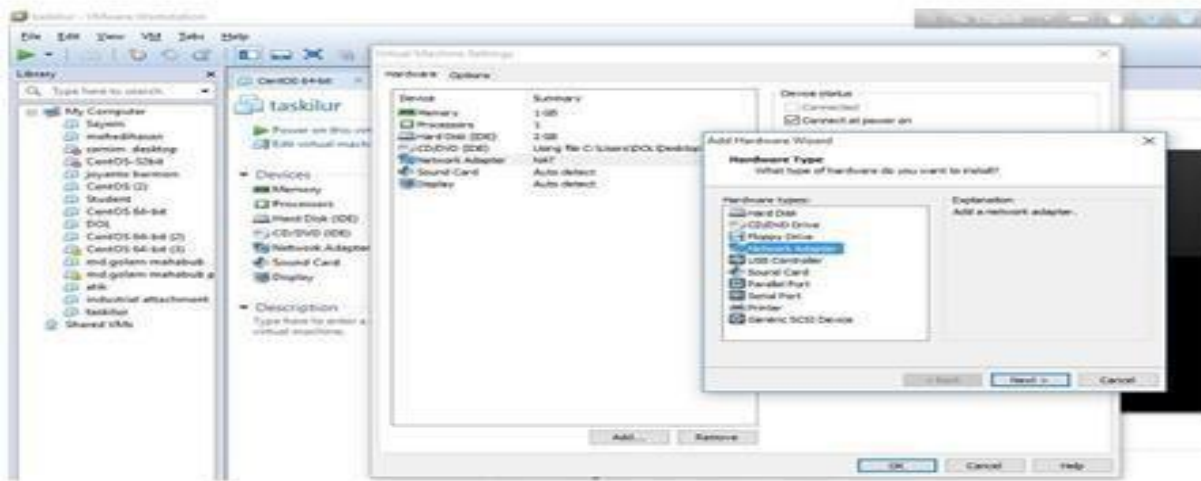


Figure 3.5: Screen Print adding network adapter

Configuration network adapter which is shown in figure 3.6.

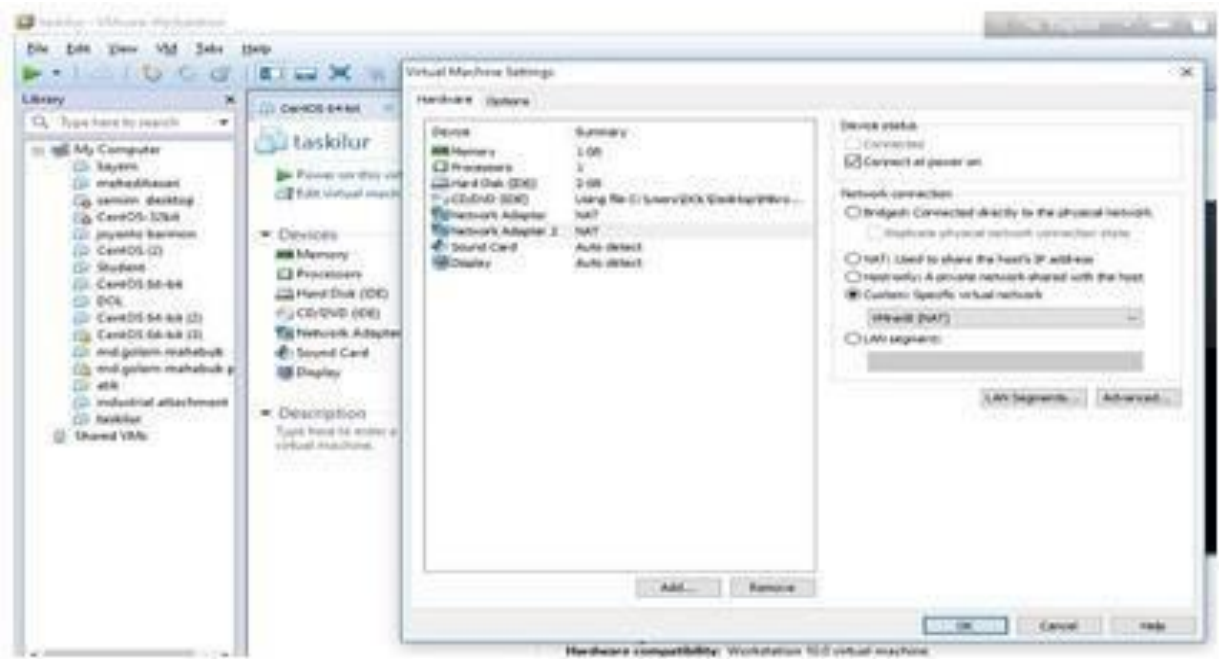


Figure 3.6: Screen Print to configuration network adapter

A print to complete install which shown in figure 3.7.



Figure 3.7: Screen Print to complete install.

### 3.6 Static routing

Assigning IP addresses to the WAN and LAN interfaces is the first step in configuring a MikroTik router. So, to configure your new MikroTik router's WAN and LAN IP addresses, follow the steps below.

On the power MikroTik router, set up a MikroTik router. Then connect the UTP cable to the MikroTik LAN port and the PC via the other port. Also, give ISP a WAN connection in a port. Open Win box now. [8].

**Step1:** Enter your IP address and MAC address into WinboxGUI. Click on the Mac address, then in the login field, type 'admin' (this is the default), and then OK. As demonstrated in Figure 3.8, there is no need to input a password.

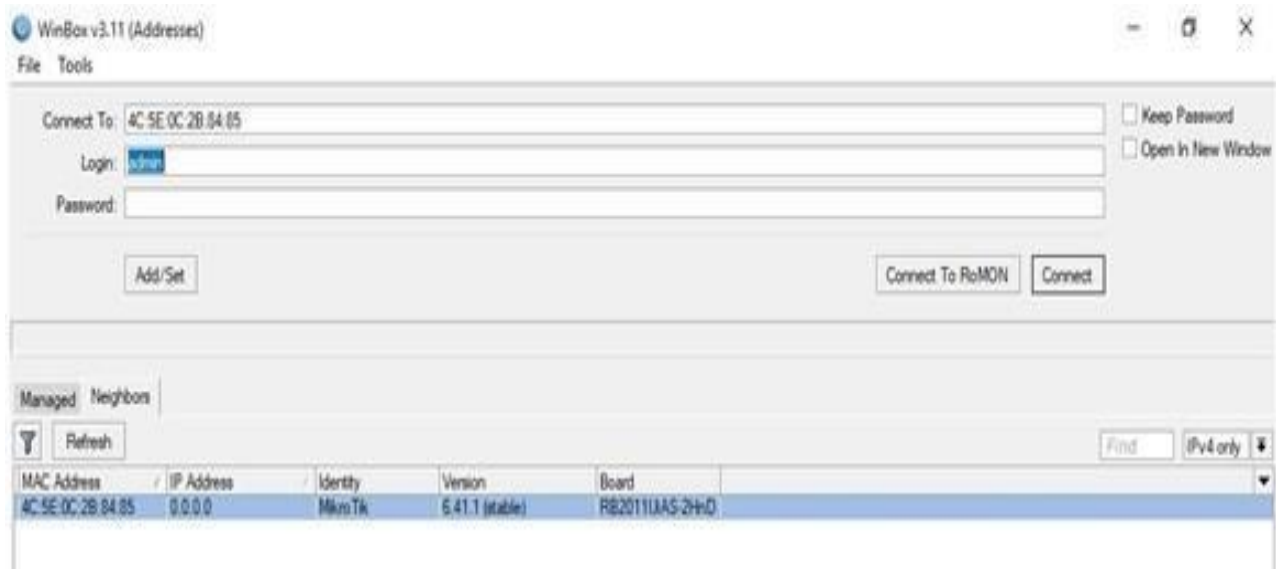


Figure 3.8: Screen Print to connecting win box interface

Step2: Now go to the text and click ip, then pick address list and click plus, then give two ip addresses, one Lan and the other Wan, and then select the cross button as shown in figure 3.9.

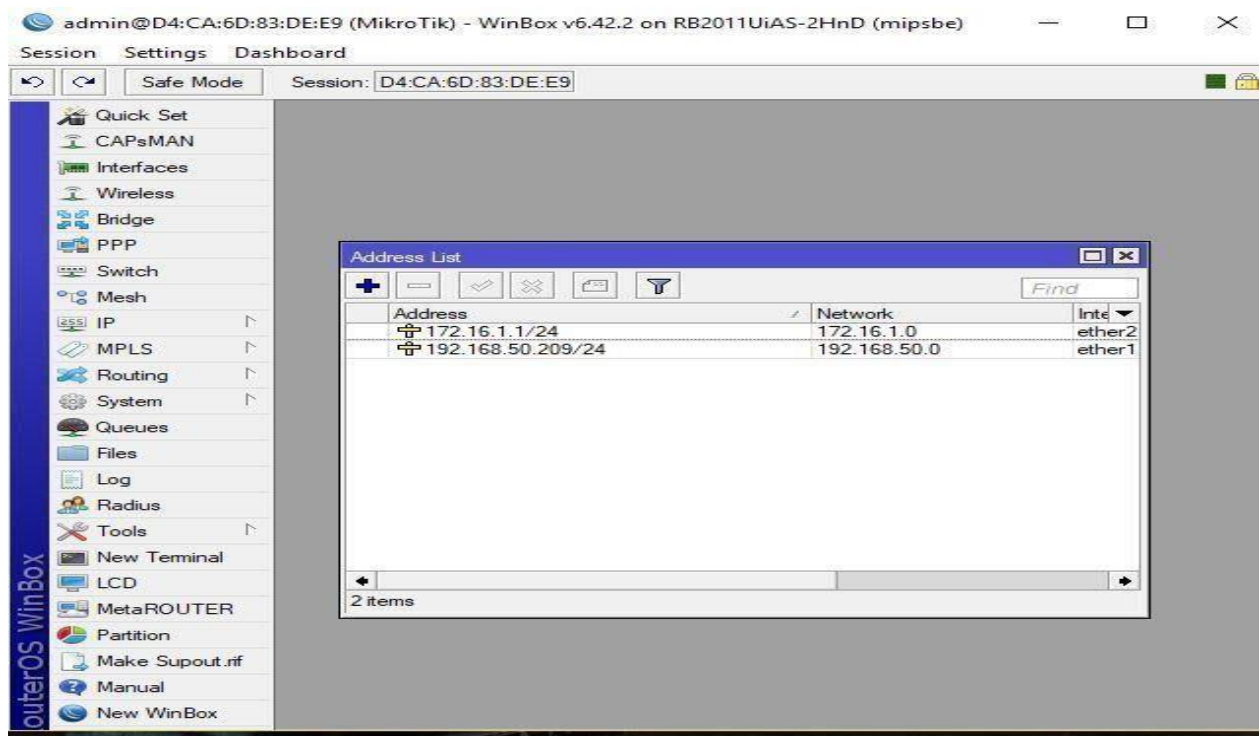


Figure3.9: The address List

Step3: Insert the Gateway in the document by first going to ip, then clicking route, and coming up with a text here a gateway option, put the gateway as shown in figure 3.10.



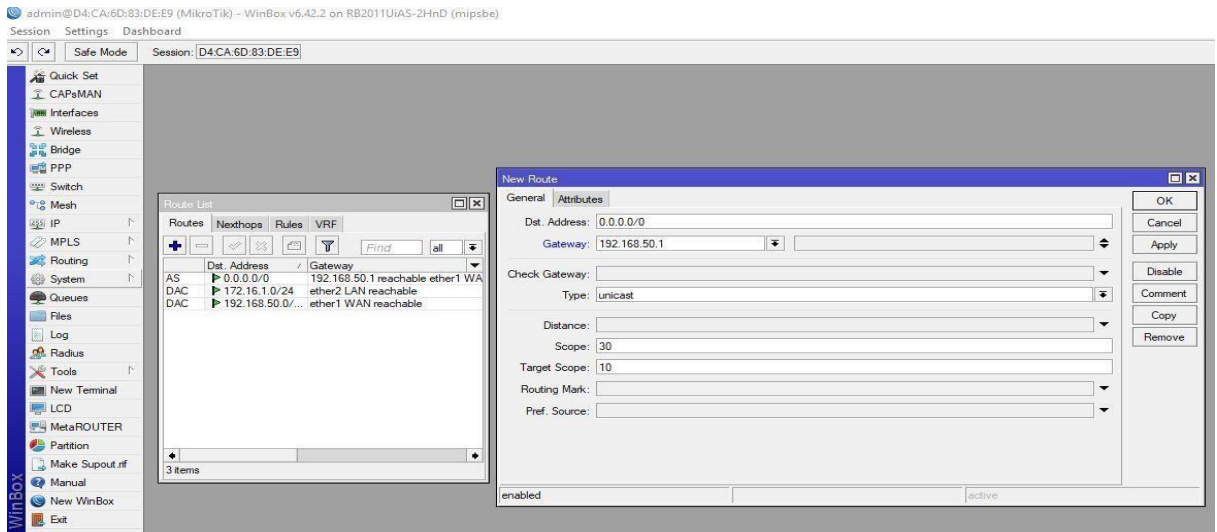


Figure3.10: The Gateway in the text

Step4: To set up a DNS server, first pick IP, then go to DNS and enter the DNS as shown in Figure 3.11.

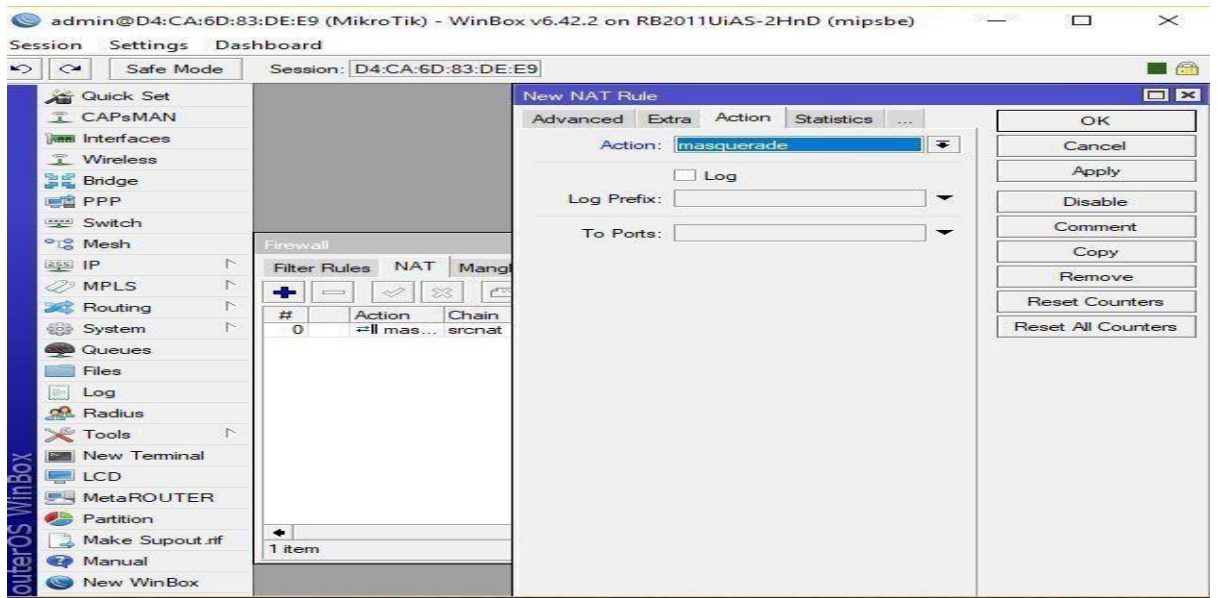


Figure3.11: Farewell Setup

Step5: DNS Server set up at first we should select Ip then go to DNS and put the DNS which is shown in the figure 3.12.

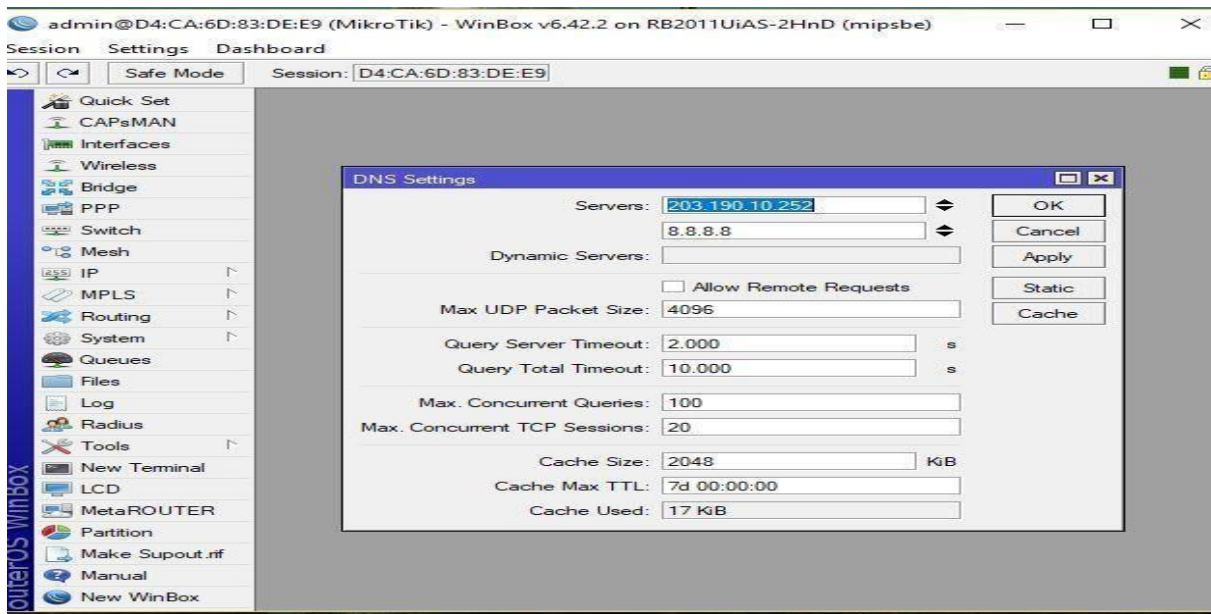


Figure 3.12: The DNS server

Step6: We go to the interface list and display the interface list to see which port of the router is enabled, as shown in figure 3.13.

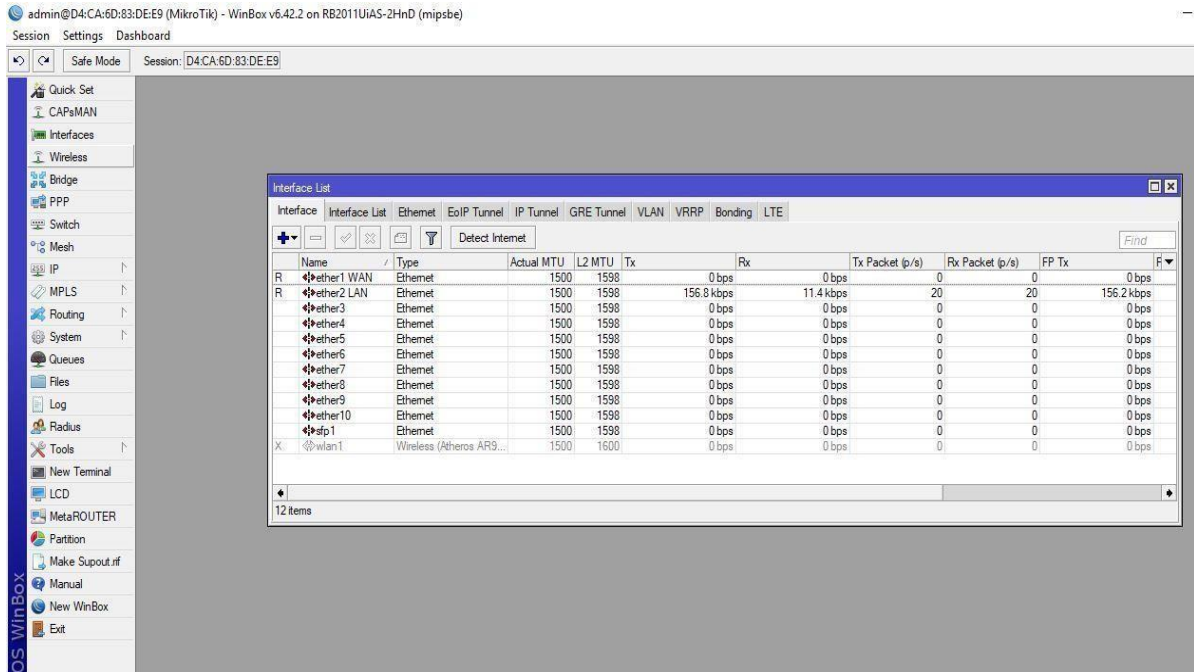


Figure 3.13: The enable port of the router

Step7: We'll proceed to DHCP setup and pick next and last to get a message that says "successful," as seen in figure 3.14.

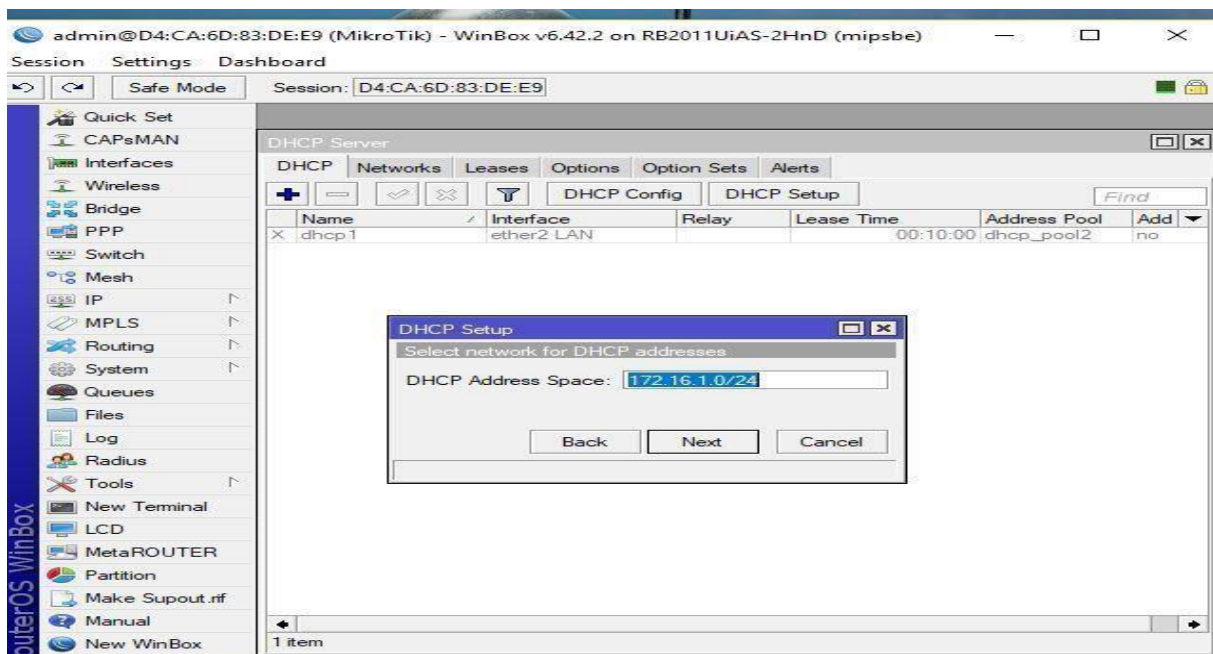


Figure 3.14: DHCP setup

It is successfully setup which is shown in figure 3.15.



Figure3.15: The successful of the text

Step8: Bridge is a method of using another router port as a switch without using the Lan or Wan ports. Select the Bridge port first, then the port displayed in the figure 3.16.

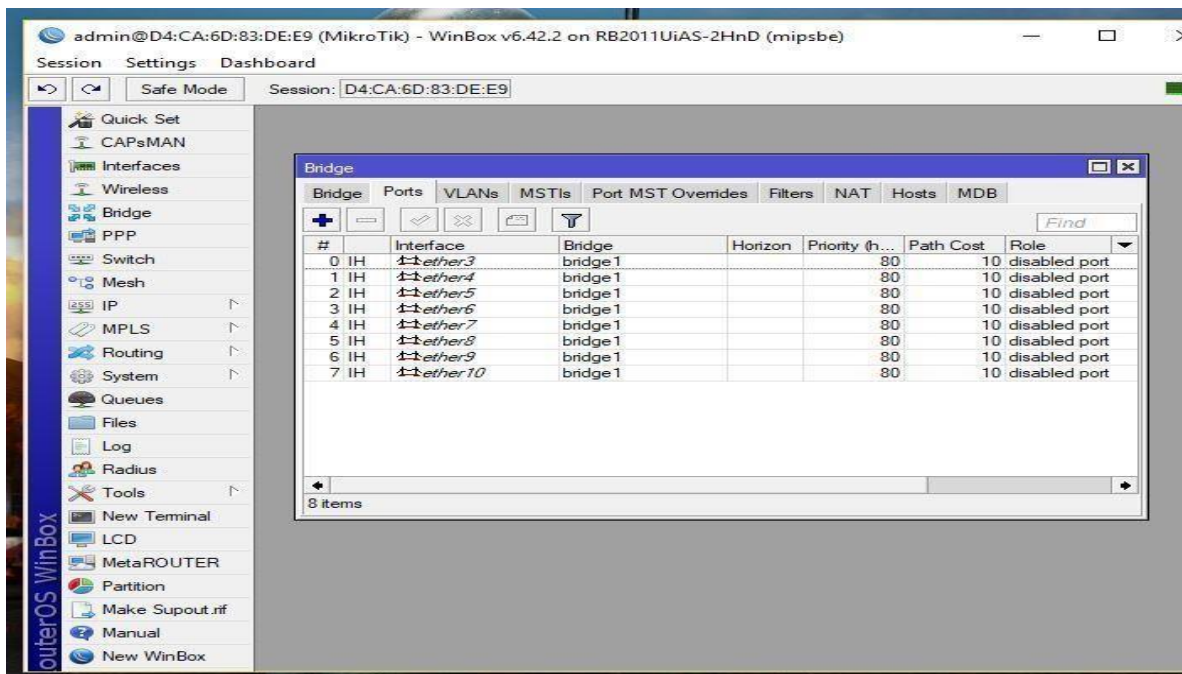


Figure3.16 The Port of the Bridge

A static routing which is shown in figure 3.17.

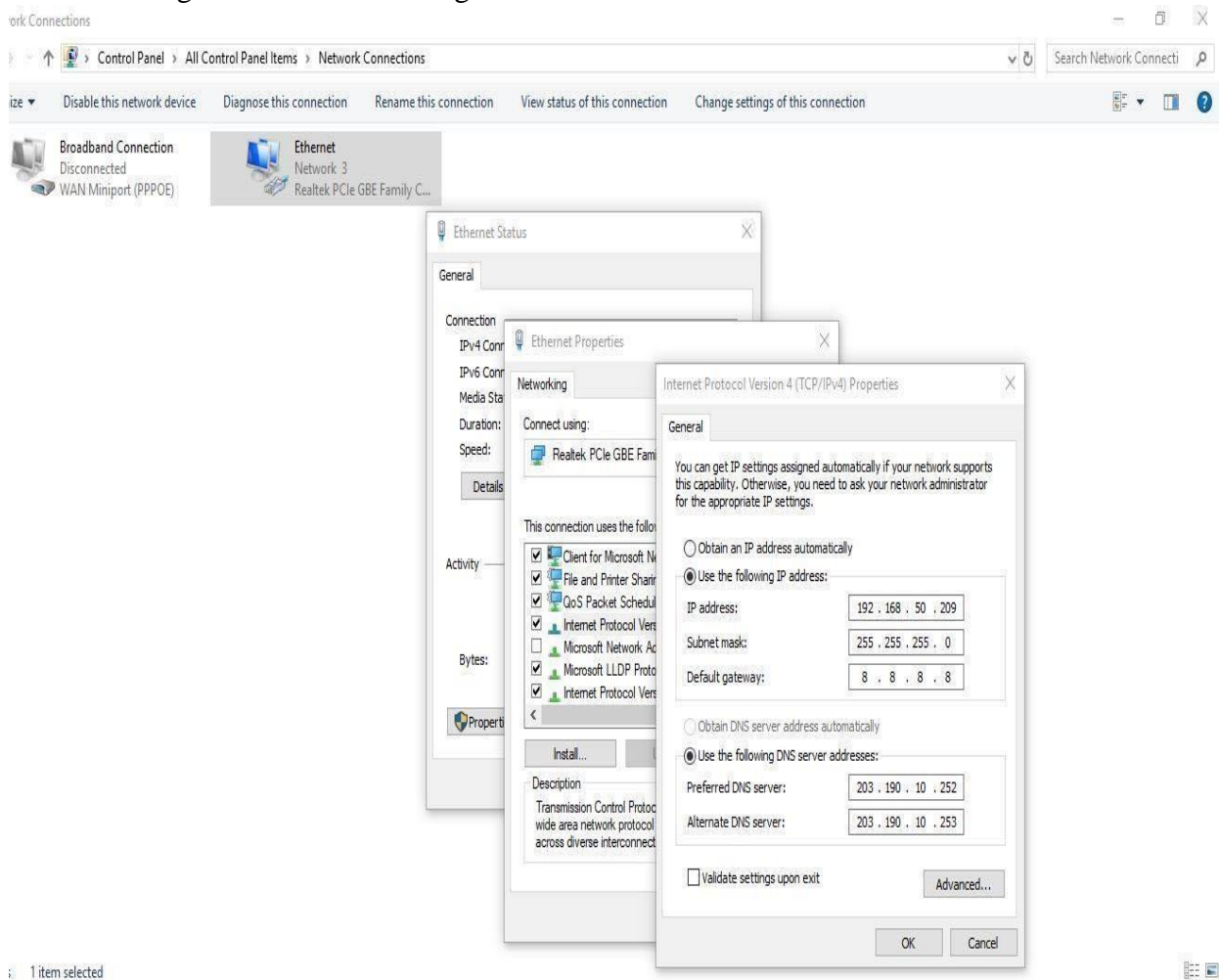


Figure3.17 The figure of a static routing to putting ip

### 3.7 Dynamic routing

Dynamic routing is a system in which the IP address is stored in the router rather than on our computer, as seen in Figure 3.18.

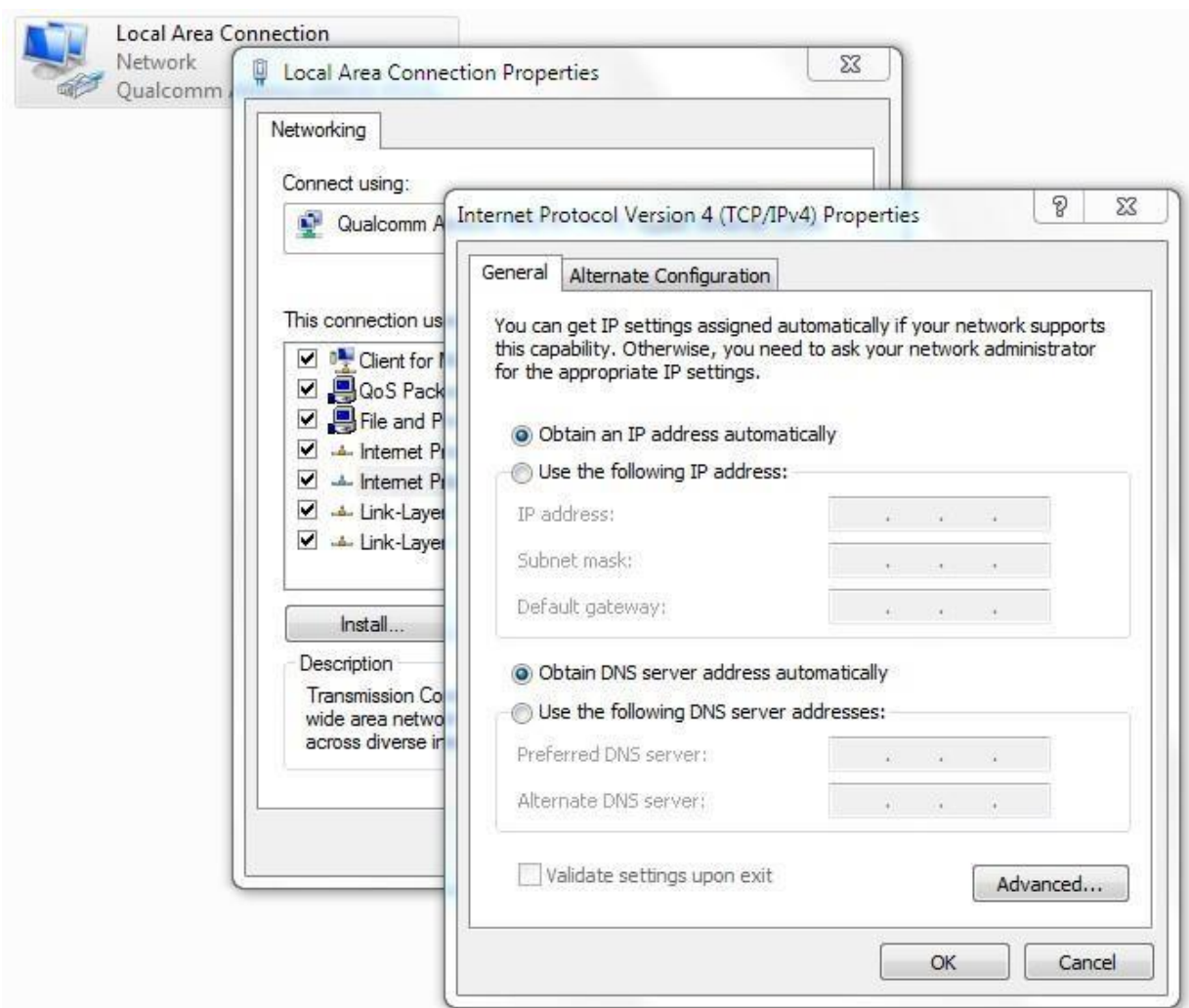


Figure3.18: Dynamic routing

### 3.8 Linux

The Linux kernel serves as the foundation for a number of free and open-source operating systems. Linux is often packaged in a form known as a Linux distribution for desktop and server use. The Linux kernel is the defining component of a Linux distribution. It was first released on September 17, 1991, by Linux Thorvald-Sen.

Linux is well-known for a number of features. It's a free and open operating system. Different operating systems have various advantages. Operating systems such as Microsoft Windows and Apple's Mac OS bring together a variety of software that is maintained on our computer [2].

### 3.9 Creating Linux Partition

Partitioning is an important element of the Linux operating system. This separation, I believe, primarily divides two portions. (1) Part of the installation (2) Part of the disk partition Linux must establish at least three primary partitions during the installation process [4].

#### 1. root (/). 2. /boot. 3. Swap.

- **Root Partition: /**

Where have or see "/" is defined as a Root Partition. The root directory is where all files (excluding those in /boot) are stored. A minimum of 128MB of RAM and 2GB of HDD space is required. My workstation has 1024 MB of RAM and an 80 GB hard disk drive.

- **/boot is the boot partition.**

The boot drive (200 MB) contains both the operating system kernel (which enable your machine to boot Linux) and data required during the bootstrap process. Due to space limits, these files must be stored in a native ext3 partition. Most users will be fine with a 200 MB disc partition. The file is 137.1 Megabytes.

- **Swap Partition: swap**

This swap partition serves as an aid to virtual memory. In other words, when there is insufficient RAM to store the data that our system is working with, data is written to a swap partition. Partition

Swap should be equivalent to 2x physical RAM for up to 2 GB of physical RAM, followed by 1x physical RAM for any amount above 2 GB, but not less than 32 MB. A swap partition of 2 to 4 GB and a root partition of at least 10 GB are required.

### 1.Disk partition

Disk partitioning is divided into two categories. A disk drive is partitioned into one or more logical disks. Each partition creates its own disk, complete with its own file system. A partition table [3] is used to hold partition information. Primary Partitions

### 2.Extended Partitions

The original partitioning scheme for PC hard disks allowed only four partitions, called primary partitions. To create more than four partitions, one of these four

### 3.10Setup Linux in VMware

VMware is an interface that is used to create a Linux operating system environment. It functions similarly to a router but is not a true router.

Step1: There are two types of installations available. We are able to accept any I consider customs to be advanced, as seen by the figure 3.19.



Figure 3.19: Screen Print to choose configuration type.



Step2: Now choose your operating system and version, which is a crucial step because it affects your computer's setup. Then click the next button, as indicated in the diagram 3.20.



Figure 3.20: Screen Print to add OS location.

Step3: Here are four alternatives for determining what type of network to create. I would like to contribute something. Because the guest operating system requires its own IP address, it uses a bridge network for direct access to Ethernet networks. The second is NAT, which uses an IP address to access the dial-up and external connections. The third option is to utilize host only, which allows networking between a private virtual network on the host computer, and the fourth option is to not use the internet. We also make an effort to use 1st and 4th. Fourth is what I use. Then I choose the controller I prefer. There are three possibilities shown here. We employ LSI logic and select the disk type that I utilize. Selecting the type of I/O controller is done here. There are three types of disks here: IDE, SCSI, and SATA. I use SATA, as shown in the diagram 3.21.



Figure3.21: Screen Print to selecting OS & version

Step4: The size of the virtual machine's HDD is given here. Click on the disk storage file system and then on the disk to create several files. Then, as illustrated in the diagram, proceed to the next Figure 3.22.

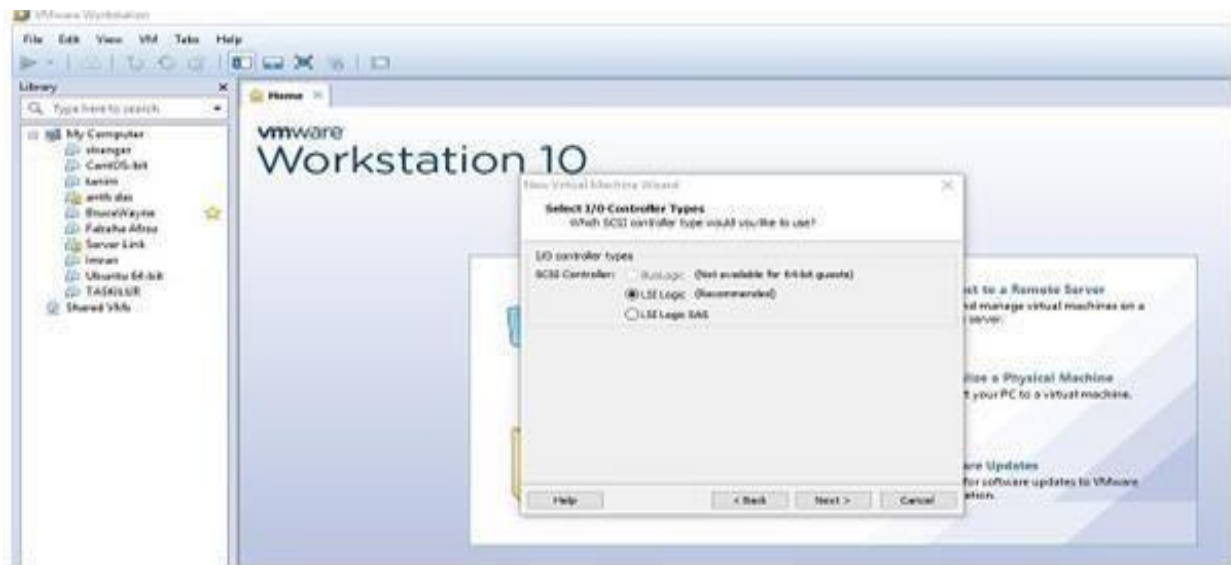


Figure3.22: Screen Print to selecting I/O controller type

Figure 3.23 shows how to print to give hard disk space for storage.

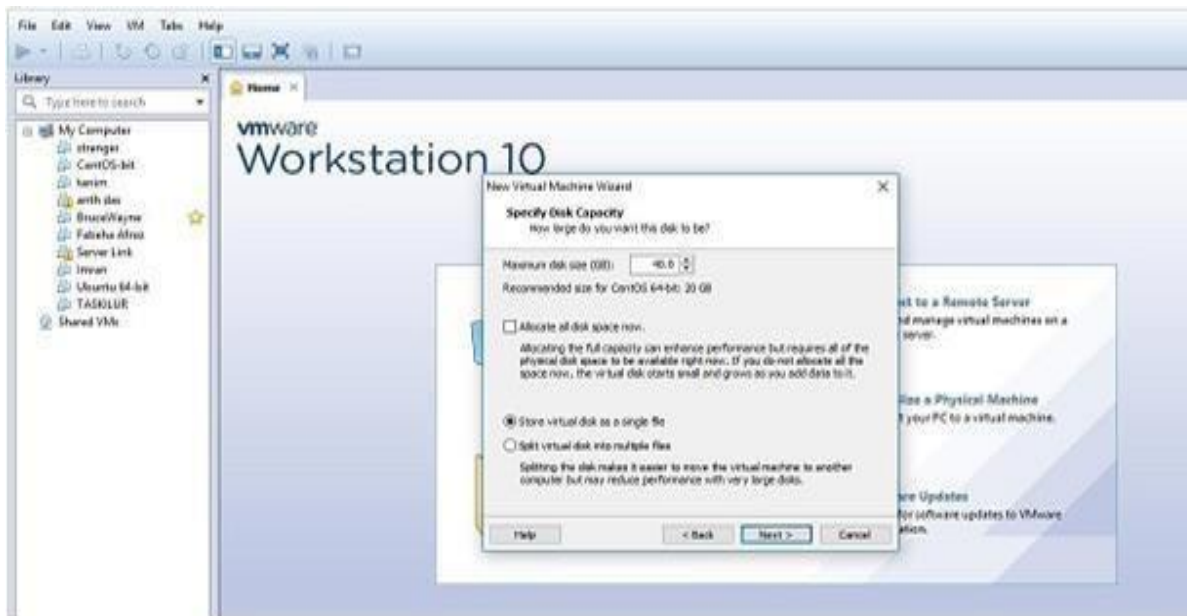


Figure 3.23: Screen Print to giving hard disk space for storage.

Step5: Now choose your preferred language from the drop-down menu. Select English, then click the type of disk partition you want to use, and then click the next button. Figure 3.24. shows OS loading on a CD/DVD.

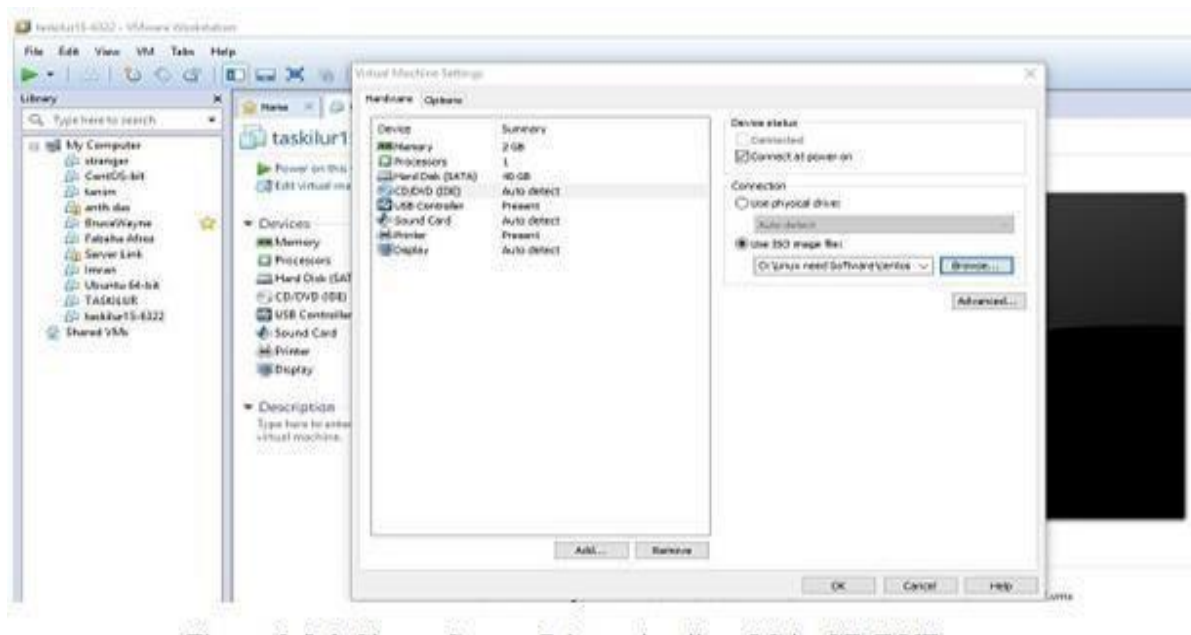


Figure 3.24: Screen Print to loading OS in CD/DVD.

I select languages English which is shown in figure 3.25.

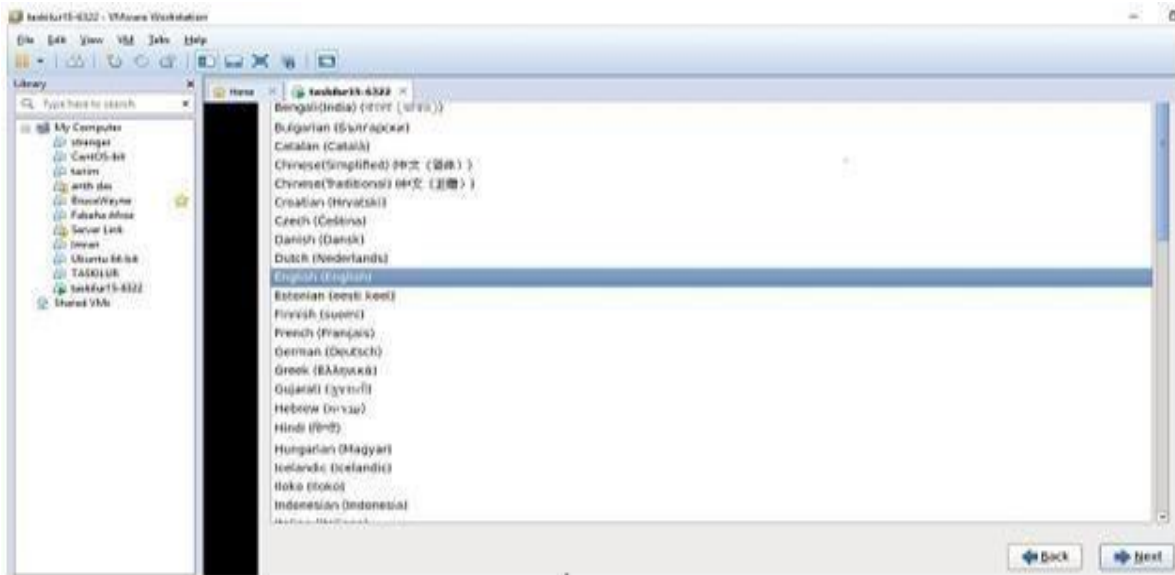


Figure 3.25: Screen Print to choosing languages.

Step6: Now installing Centos6 which is shown in the figure 3.26.



Figure3.26: Screen print to installation OS.

Step7: After the installation is complete, we are presented with the window GUI of the Linux operating system, as illustrated in figure 3.27.



Figure 3.27: Screen Print to GUI of Linux OS

### 3.11 Cents uses the Linux Run-Level.

In Linux, the run level command is extremely significant. We may use that command to crack root's and any other user's passwords. Once you've resolved that issue, Single User Mode will be restored.

# Shutdown (Init 0).

# Mode for a single user (Init 1)

# Multi-User Mode (Init 2) NFS isn't possible without it. # Init 3 = Multi-User Mode in Full. NFS is a network file system. # Init 4 is not in use.

# X-11, Window GUI Mode, Init 5 # Reboot = Init 6

### 3.12 Linux Centos's Basic Commands

Here are some fundamental Linux commands. Details can be found here. Reboot is the same as init 6.t

Cal, cal 2018, cal 28 1993 = Show a calendar Date or time = date is displayed or changed.

ls tas1 ls tas1 ls tas1 ls tas1 pwd stands for Present Working Directory.

Shutdown = power off, init 0, shutdown -h now; shutdown -h now; shutdown -h now; shutdown -h now; shutdown -h now Touch tas1 to make a new file (File name).

Make a directory with the command mkdir sweet1 (directory name).

cd/root/Desktop = Change Working Directory (directory path). Logout refers to the process of removing the current user from the system.

### **3.13 Password Management and User Creation**

Set New User's Password = sweet123 (username).

Adding a user = sweet57 user add (username).

sweet57 ushered sweet57 ushered sweet57 ushered sweet57 ushered sweet57 ushered sweet57 ushered (username).

Disable/Remove Password = given -d sweet57 (username). -r 6322 -r 6322 -r 6322 -r 6322 -r 6322 -r 6322 -r 6322 (username)

### **3.14 Network cabling systems**

We found some twisted pair cable Cat5, Cat5e, Cat6, Cat7 its support up to 100mbps to 10gbps, as shown in figure 3.28.



Figure3.28: The Twisted pair cable

### Fiber optic

A fiber optic cable is used to receive internet over a long distance and can carry data at speeds ranging from 10 Gbps to 40 Gbps, as shown in figure 3.29.



Figure3.29: A fiber optic cable

## **CHAPTER 4**

### **COMPETENCIES AND SMART PLAN**

#### **4.1 Competencies Earned**

It is expected that we will be able to understand what we are learning, or that we will be able to learn the implications of compatibility or ramifications, or that we will be able to work as a learning process. In two data centers, install and decommission network and server devices. Linux software for LDAP Health, for example, will be available in the future. It assists us in organizing any internships project calculations, item collections, and searches to determine why we require internships, as well as participating in a new look at the Linux Lab web site.

#### **4.2 Smart Plan**

Many businesses should have a well-thought-out strategy in order to succeed. Develop a sensible plan to make anything small at first. It contributes to the company's long-term success.

#### **4.3 Reflections**

Daffodil Online Ltd. began operations in 2002. They have upgraded their operations and service offering over the last year in response to customer recommendations and time constraints. We are proud for the DOL training center its help us to learn this topic very good.



## **CHAPTER 5**

### **CONCLUSION AND FUTURE CAREER**

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

Daffodil Online Ltd is where we are doing our internship. It aids in the advancement of our careers. We are proud of this Training Center since it is a clever center. There are many companies in our country that have many opportunities to work in computer networking

#### **5.2 Scope for Future Career**

In our country, Bangladesh, there are a lot of companies that are growing and require some professional engineers to assist them save data and communicate from one computer to another. They need a lot of engineers to enhance their firm, therefore we will show that training is beneficial in the future.

## References

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## APPENDICES

### Appendices A: Reflection on the Internship

My internship's main purpose in a professional setting is to apply what I've learned in class to real-world challenges. This internship has given me the opportunity to strengthen my skills and understand how they can benefit me.

### Appendix B: Company Detail



Name	Daffodil Online Limited
Address	Dhaka-1207, Bangladesh, 102, Shukrabad (3rd floor), Mirpur Road, Dhanmondi.
Telephone	+8802-48119586
E-mail	info@daffodilnet.com
Website	www.daffodilnet.com
Type	Internet Service Provider with a National Reach

# Plagiarism Report

Shown the figure 5.1 plagiarism report

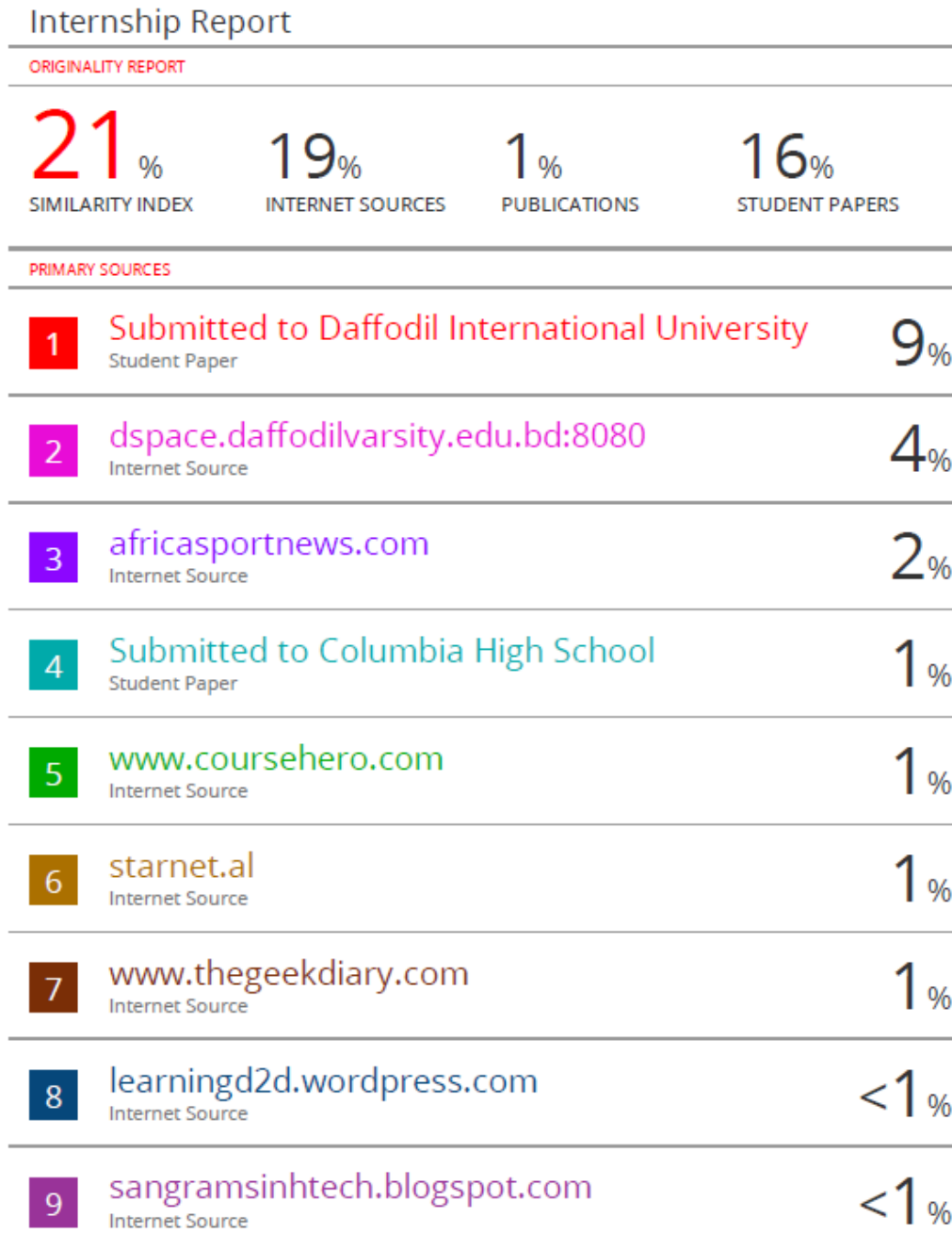


Figure 5.1 Plagiarism report

