

ISP SERVER CONFIGURATION ON LINUX AND MIKROTIK PLATFORM

BY

Sandip Hossen Sajib

ID: 162-15-8036

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

Supervised By

Shaon Bhatta Shuvo

Senior Lecturer

Department of CSE

Daffodil International University

Co-Supervised By

Md Jueal Mia

Lecturer

Department of CSE

Daffodil International University



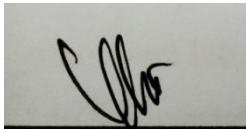
DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

AUGUST 2019

APPROVAL

This Internship titled “ISP Server Installation and Configuration on Linux Platform MikroTik”, submitted by **Sandip Hossen Sajib** 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 03 August 2019.



BOARD OF EXAMINERS

Dr. Syed Akhter Hossain

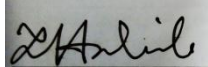
Chairman

Professor and Head

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Daffodil International University



Md. Tarek Habib

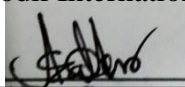
Internal Examiner

Associate Professor

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Daffodil International University



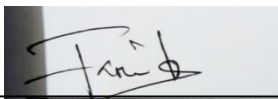
Abdus Sattar

External Examiner

Assistant Professor

Department of Computer Science and Engineering

Jahangirnagar University



Dr. Dewan Md. Farid

External Examiner

Associate Professor

Department of Computer Science and Engineering

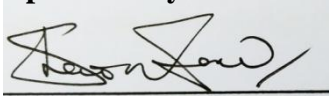
United International University

DECLARATION

I hereby declare that, this internship report is prepared by me, Sandip Hossen Sajib, ID No: 162-15-8036 to the department of Computer Science and Engineering, Daffodil International University. Under the supervision of **Shaon Bhatta Shuvo, Senior Lecturer, Department of CSE, Daffodil International University.**

I also declare that neither this internship report nor any part of this internship report has been submitted elsewhere for award of any Degree or Diploma. I also declare that, I collect information from Daffodil Online Limited (DOL), Data Center and Internet Service Provider (ISP) Based Company, Books and Internet.

Supervised by:



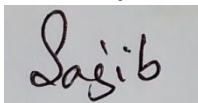
Shaon Bhatta Shuvo

Senior Lecturer

Department of CSE

Daffodil International University

Submitted by:



SandipHossenSajib

ID: 162-15-8036

Department of CSE

Daffodil International University

ACKNOWLEDGEMENT

First of all, I thank you very much and I express my gratitude to the great God for his blessings.

I am grateful and I extend my deepest greetings to the Supervisor **Shaon Bhatta Shuvo, Senior Lecturer and MdJueal Mia, Lecturer** of CSE Department, Daffodil International University, Dhaka.

For deeper knowledge, this internal bleaching system and network administration should be interested in running. Its endless tolerance, learning direction, continual stimulation, continuous and job supervision, constructive criticism, valuable advice, many low-quality drafts have made it possible to complete these internships at all levels through reading and correction.

I am also grateful to Md. Imran Hossain, System admin, and Md. KabirulKaiyum, Assistant support Engineer (Network & Training) of Daffodil Online Limited. I cannot continue my internship at the company without their continuous support. Other members of the organization have been very helpful in my internship.

I should like to express my gratitude to Dr. Syed Akhter Hossain, Professor, and Head, Department of CSE for his kind help to finish my internship and also for the support of the faculty members of the CSE department.

I am thankful to the entire course of the Daffodil International University which participated in the discussion while completing the course.

In the end, parents have to be persistent in their support and acknowledge the patients they deserve.

ABSTRACT

We make network calls if two and more computers are interconnected and are able to exchange data or information. We want to increase the number of PCs and exchange data or data from one to another while we need to have some special PCs called the server. There are different types of tasks on the network, which is why the server has different functions. For example-DSN server, Web server, mail server, proxy server, FTP server, firewall. They each work differently and it's impossible to maintain a network without them. If the network is connected to the Internet and we want to protect your information they must install the server using the Linux operating system. That's why I choose this topic in my report "ISP (Linux platform) server installation and Configuration ". The report discusses the objectives of the specific server used in the ISP, the hardware requirements for the server, the software and installation process of the software, the configuration of the server, and the steps with simple troubleshooting of the server.

TABLE OF CONTENTS

CONTENTS	PAGE
Approval	i
Declaration	ii
Acknowledgement	iii
Abstract	iv
Table of contents	v, vi
List of Figure	vii,viii
CHAPTER	
CHAPTER 1: INTRODUCTION	1-2
1.1 Introduction	1
1.2 Motivations	1
1.3 Internship Objectives	2
1.4 Introduction to the Company	2
1.5 Report Layout	2
CHAPTER 2: INTERNSHIP ENTERPRISE	3-5
2.1 About The Company	3
2.2 Product and Market Situation	3
2.3 Target Group	4
2.4 SWOT Analysis	4
2.5Organizational Structure	5
CHAPTER 3: INTERNSHIP ROLES AND RESPONSIBILITIES	6-36
3.1 Daily Task and Activities	6
3.2 Events and Activities	7
3.3 Project Task and Activities	7
3.4.1 Creating Linux Partition	7
3.4.2 Linux Run-Level Used by Centos	8

3.4.3 The Basic Command of Linux Centos	8
3.4.4 User Create and Password Management	9
3.4.5 To Know About the Logged In User	9
3.4.6 To Copy or Move a File	9
3.4.7 Vi Editor	9
3.4.8 Install/Update/Remove Packages in Centos	10
3.4.9 Compress and Decompress A Directory Using Tar And Untar	10
3.4.10 How to Add Change Delete and Display IP Address In Centos	11
3.4.11 Server Configuration	13-22
3.5 MikroTik Router	23
3.6 RouterOS	23
3.7 Features	23
3.8 Release history	24
3.9 Router Board	25
3.10 Cloud Core Router	25
3.11 Propose Network Diagram (MikroTik Configuration):	26
3.11.1 Initial Step	27-32
3.12 .OSPF Configuration:	33-35
3.13 Challenges	36
CHAPTER 4: COMPETENCIES AND SMART PLAN	37
4.1 Competencies Earned	37
4.2 Smart Plan	37
4.3 Reflections	37
CHAPTER 5: CONCLUSION AND FUTURE CAREER	38
5.1 Discussion and Conclusion	38
5.2 Scope for Further Career	38
REFERENCES	39
APPENDICES	40-41

LIST OF FIGURES

FIGURES	PAGE
Figure 2.5: Shows Organogram of Daffodil Online Limited	5
Figure 3.1: Shows in tar and untar	11
Figure 3.2: Shows IP address in CentOS	11
Figure 3.3: Shows address in eth port	12
Figure 3.4: Shows set ip address in eth port permanently	12
Figure 3.5: Shows set ip address in sysconfig file eth port permanently	12
Figure 3.6: Shows Screen Print yum install bind	15
Figure 3.7: Shows Screen Print Edit using vi editor named,conf file.	16
Figure 3.8: Shows Screen Print Edit Enter a web address of forward zone	16
Figure 3.9: Shows Screen Print Enter A IP Address For Reverse Zone.	17
Figure 3.10: Shows Screen Print edit Forward Zone File for abc.com	17
Figure 3.11: Shows Screen Print edit Forward Zone File for abc.com	18
Figure 3.12: Shows Screen Print edit Reverse Zone File	18
Figure 3.13: Shows Screen Print edit Reverse Zone File	18
Figure 3.14: Shows Screen Print service named restart	19
Figure 3.15: Shows Screen Print service named status	19
Figure 3.16: Shows Screen Print abc.com open in browser	19
Figure 3.17: Shows Screen Print POP3 and SMTP host and Port Configuration	22
Figure 3.18: Shows MikroTik Router 750G Series	25
Figure 3.19: MikroTik Cloud Core Router 1036 Series	26
Figure 3.20: Shows Network Diagram	26
Figure 3.21: Shows Screen Print Reset MikroTik Router	27
Figure 3.22: Shows Screen Print IP Address	28
Figure 3.23: Shows Screen Print Gateway	28
Figure 3.24: Shows Screen Print NAT Rule	29
Figure 3.25: Shows Screen Print Firewall	29
Figure 3.26: Shows Screen Print Bridge Settings	30
Figure 3.27: Shows Screen Print Bridge Ports Assign	30
Figure 3.28: Shows Screen Print DHCP Setup	31

Figure 3.29: Shows Screen Print IP address pool of the local LAN	31
Figure 3.30: Shows Screen Print DNS Service	32
Figure 3.31: Shows Screen Print Wireless Setting	32
Figure 3.32: Shows Screen Print Wireless Security Setting	33
Figure 3.33: Shows Screen Print Router Home Page	33
Figure 3.34: Shows Screen Print OSPF Network WAN Configuration	34
Figure 3.35: Shows Screen Print OSPF Network LAN Configuration	34
Figure 3.36: Shows Screen Print OSPF Network Address	35
Figure 3.37: Shows Screen Print OSPF Network Area Selection	35

CHAPTER 1

INTRODUCTION

1.1 Introduction

We now need a day of safety to use our real-life routines. Like this, network security is very essential because today we do most of our work through the Internet. For example, online banking, data transfer, virtual data backup, etc. The reason why network security is a lot of concern for everyone today. Because network security is a complex issue but if someone tries to implement it in real life it won't be too complicated for him.

The entire field of network security is vast in an evolutionary measure. The range of research encircle a brief history of the start of the Internet and dating with the current development of network security. To understand the ways and means of preventing attacks, here is a review.

It is for everyone to know that the basic network security process starts with a user name and password. Then it comes to antiviruses. It is also very common for everyone. Then, if we consider a firewall, it's not as popular as many of our countries never use firewalls or do not have any idea about it. We are working on the Linux operating system, where someone can customize more security processes according to its requirement or according to the company's requirements. As an example, it might be possible to put on a SE-Linux, IP Tables, PPOE, and so much security steps if one is needed.

1.2 Motivation

I am currently following my bachelor on Computer Science and Engineering at the Daffodil International University, I am studying the practical knowledge that the substance will complement the knowledge of the textbook and to achieve a broader perspective. During the internship, I learned the details of Linux network and server Management and MikroTik. As an Internet service provider, I am very good at passing my points, communicating with people and providing them with good service. My skills lie in my aptitudes and understand the situation.

1.3 Internship Objectives

The eventual goal of my internship is to ready as a qualified person in an aggressive job market. So it's so effective for expertise development. So I want to collect some great qualities to give myself as efficient.

Internships are designed to give job acquaintance, where students still at school, to combine work experiences with academic instruction, and to graduate from students classrooms.

1.4 Introduction to the Company

Daffodil Online Limited has selected its-self as a public country's top Internet Services providers (ISPs). They are the most accomplished in the field of they are the morals in lived bonding they are customers. Since our birthright has seen increase upwards of the decades, They are very proud of what they have fulfilled, and they are also excited to see the perspective for an equally encouraging time ahead.

That's what you get to know that they're in action in 2002 years starting. In the last years, they extended the envelope of actions and services in agreement with customer guidance and consider the time dictates. They worked with many national plans of actions and international firms to earn a stature.

1.5 Report Layout

Chapter No (I) I narrated the purpose of internships, the incentive for internships and Introduction to the Company.

Chapter No (II) I have narrated the mechanism of my intranet. And this chapter shows information on where the Internship is connected to the program. It also includes links to how internships work, about the company, what services are offered on the market, and the role of Linux in job markets.

Chapter No (III) I have narrated daily work and actions, incidents and actions and provocations.

Chapter No (IV) I have narrated the achievement, the bright master plan, the reflection.

Chapter No (V) I have narrated the concluding and the circumference of the future. I talk about the later scope of Linux and write the termination.

CHAPTER 2

INTERNSHIP ENTERPRISE

2.1 About the Company

Daffodil Online Limited is satisfied pathfinders and mature ASPs /ISPs in Bangladesh. It provides a one-stop desegregated ICT service and solutions from 2002, July. To distribute corporate, SMEs and isolated clients, They have own fiber optic-radio link-on-the-wall essence. It uses and upgrades the assistances wherever.

The foundation Solutions Department to dispense a sophisticated network. The DOL is a highly-powerful adept engineering and administration team certified and actively involved in the world's leading computing associations including Microsoft, Sun, Cisco, Linux, Oracle, and the ACS, IEEE, ACM, PMI, and BCS. As a category survey, dangling 3 major stages such as education, race- property.

2.2 Products and Market Situation

Daffodil Online Limited has selected himself as one of the country's foremost Internet service providers (ISPs). They are the most adept and mature companies of ICT fundamental with lived bonding. Since for decades of extension they are intensely pleasing of that we have executed, as well as more excited about our perspectives. Daffodil Online Limited offers various. As follows

➤ IT Services

- The solution of the corporate Internet.
- Security solution.
- Domain-registration as well as web-hosting.
- Website development.
- The solution of open-source application
- Internet Service Provider
- The solution of proxy & DNS Server solution, Mail Server.

➤ Professional Training Services

- ISP Setup and administration using Linux.
- Training Course on Certified Ethical Hacking (CEH).
- ISP Setup and Administration using MikroTik.
- Web site Development with Joomla.
- PHP and MYSQL for Website Development.
- E-commerce & Open source Joomla Virtue Mart.
- Red Hat Certified Security Specialist (RHCSS).
- Red Hat Certified Engineer (RHCE).

2.3 Target Group

There are start-ups at the customer base of company's including every consumer as well as every medium to small businesses. To focus on the SOHO of the company's clients because it is the perfect target for our new fast-speed offerings.

2.4 SWOT Analysis

The SWOT analysis is a serviceable strategy to understand your brawniness and debility, as well as identify both chances that are unlatched to you as well as the threat you look toward.

Strengths:

Conveying in the middle of isolated people at distances.

Online business set.

Data collection.

Weaknesses:

To miscalculate the level of efficiency imperative to persist in the new centric area,

Price several customs as well as service possibility.

2.5 Organization Structure:



Figure 2.5: Shows Organogram of Daffodil Online Limited.

CHAPTER 3

TASKS, PROJECTS, AND ACTIVITIES

3.1 Daily Task and Activities

First Month I have learned the following tasks:

I was learning about Components of Network.

I was understanding the Basics of Linux.

I was learning Linux HDD Partitions.

I was learning as well as understanding the Run Level of Linux.

I was Installation of Linux.

Second Month I have learned the following tasks:

Basic Commands of CentOS.

Management of Linux User and Password.

File as well as Directory retrieve.

File and Directories copy, move, rename.

File as well as Directories Compressed and Decompressed.

Crontab.

Mount Unmount Drive.

3rd Month I have learned the following tasks:

Permissions of File and Directory.

Using YUM Install, Update as well as Remove Package.

Conviction of IP Addressing.

IP Address Configuring in CentOS.

Fourth Month I have learned the following tasks:

Learning, understanding as well as configuring NFS Server.

Learning, understanding as well as configuring WEB Server.

Learning, understanding as well as configuring FTP Server.

Learning, understanding as well as configuring DNS Server.

Learning, understanding as well as configuring MAIL Server.
Learning, understanding as well as configuring PROXY Server.
Remote Login Service.
Concept of Firewall.
Backup as well as Monitoring.
MikroTik

3.2 Events and Activities

Monitor and Maintain Computer Systems and Network.
Setting up user accounts, permissions, and passwords.
Troubleshooting servers and routers.
Troubleshooting local area networks and switches.
Fixing network faults.
Technical support for people using the network.
Day to day admin and monitoring of network use.
Suggesting IT solutions to business problems.
Client Support over the phone or Physical move to client Ends.
Checking Fiber Optical Media Convertor & Fiber Optic Transmission devices.

3.3 Project Task and Activities

Centos Install

3.4.1 Create Partition of Linux

Created at least three partitions root (/), boot, as well as a swap.

Root Partition: /

A Root Partition there is where “/” The root directory has detected all files (except in /boot) are on the root partition. Minimum 5 GB HDD Space needed.

Boot Partition: /boot

Boot partition (200 MB) A /boot partition, operating system kernel. Reason of restrictions, I could need to create/add an ext3 partition to grip these files. A 200 MB boot partition is adequate.

SWAP Partition:

Partition Exchange is taken to carry virtual memory. Otherwise, the data is written down to a partition of swap when your system processing when there is not enough RAM. Swap of physical RAM 2 GB up is equal to 2x physical RAM, again with an extra 1x physical RAM for any size up to 2 GB. It will not be fewer than 32 MB.

3.4.2 Linux Run-Level Used by Centos

init 0 = Shut Down the system.

init 1 = Single User Mode.

init 2 = Multi User Mode.

init 3 = Full Multi User Mode.

init 4 = Unused.

init 5 = X-Window (GUI Mode)

init 6 = Reboot the system.

See current run-level = who -r

3.4.3 The Basic Command of Linux Centos

Shutdown = poweroff, init 0, shutdown -h now.

Reboot = reboot or init6 .

Logout = log the current user off the system.

Display a calendar = cal 2019, cal 10 1989

Display or change date or time = date .

Present Working Directory = PWD.

Create a blank file = touch helal1(filename).

Create a directory = mkdirsajib(directory name).

List information about file = ls .

Chang Working Directory = cd /root/Desktop(directory path)

3.4.4 User Create and Password Management

Adding a user = `addusersajib(username)`.

Set a Password to New User = `passwdajib(username)`.

Password Disable/Remove = `passwd -d sajib(username)`.

Verify user information = `finger sajib(username)`.

Locking an account = `passwd -l sajib(username)`.

Unlock an account = `passwd -u sajib(username)`.

Delete a user = `userdelsajib(username)`.

Delete a user with home directory = `userdel -r sajib(username)`.

3.4.5 To Know About the Logged In User

`w`

`who`

`who am i`

3.4.6 To Copy or Move a File

Copy = `cp filename destination` example: `cp file1 /home/sandip/hossen`

Move = `mv filename destination` example: `mv file1 /home/sandip/hossen`

3.4.7 Vi Editor

To Edit A File = `vi sajib(file name)`

To insert Text = press `insert` or `i` key

To delete the character = press `x` or `dd` key

To copy line = press `esc` key and type `5yy` to copy 5 line.

To paste = press `p` for paste.

To set line number = `:set nu`

To delete line number = `set nu`

Search something = `/abc` for search abc

For Go top of the lines = `:0`

For Go bottom of the lines = `:$`

For Go Specific Line = such as `:50` to go 50 no line.

To save the document = `:wq` {save the current changes and exits vi editor}

=: `w` {save the current changes but does not exist vi editors}

=: `q` {exits vi editor without saving any changes}

3.4.8 Install/Update/Remove Packages in Centos

- Install a package using yum install

Yum install (package name)

e.g. yum install MySQL

- Uninstall a package using yum

yum remove (package name)

e.g yum remove MySQL

- Update a package using yum

yum update (package name)

e.g yum update firefox

- Search a package using yum

yum search (package name)

e.g yum search firefox

- Display Additional Information about a Package

yum info (package name)

e.g yum info firefox

- View All Available Package

yum list | less

- View Already Installed Package

yum list installed

- List of all available software group

yum grouplist

- Install a specific soft group

yum groupinstallDNS nameserver

3.4.9 Compress and Decompress A Directory Using Tar and Untar

Compressing a directory :

tar cvf archive_name.tar dir_name/

e.g : 3.1 tar cvf backup.tar cls

or, tar cvzf mytarfile.tar.gz /home

Extract A Compressed Directory:

Tar xvf backup.tar

Or, tar xvzf mytarfile.tar.gz

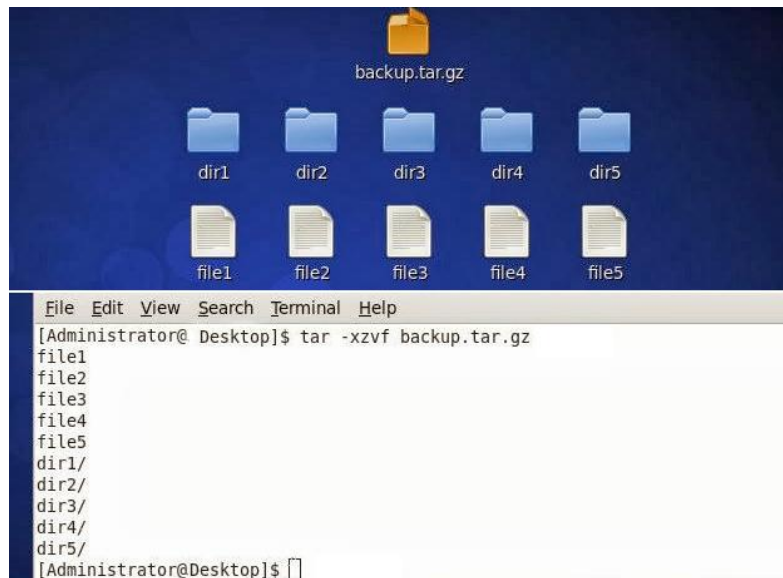


Figure 3.1: Shows in tar and untar

3.4.10 How to Add Change Delete and Display IP Address In Centos

To see ip address: ifconfig or ifconfig eth0 in an interface IP address in Centos:

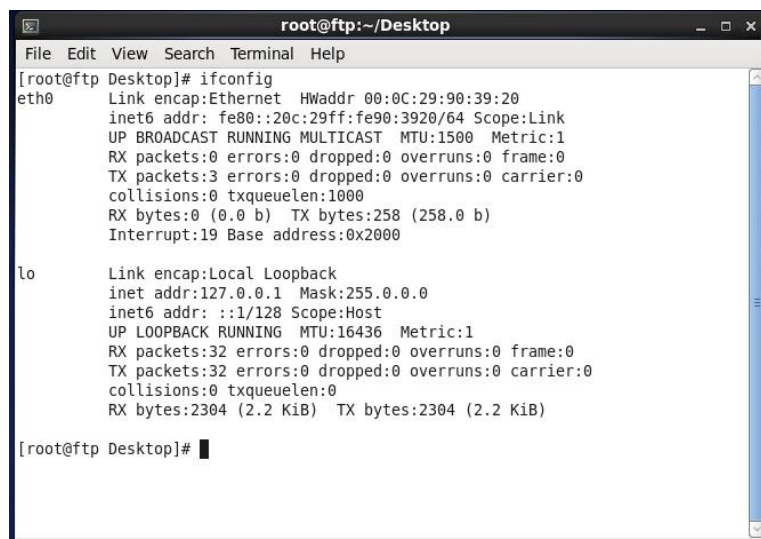
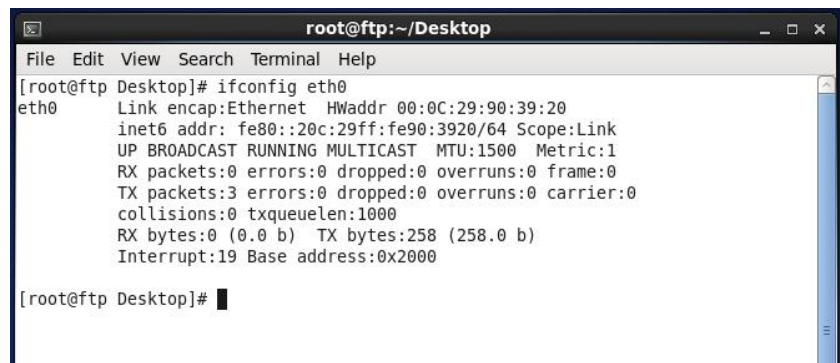


Figure 3.2: Shows IP address in CentOS

The IP address and Mac address in command ifconfig eth0:

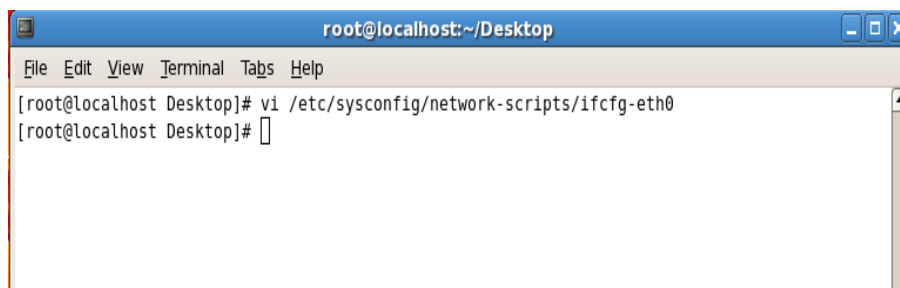


```
root@ftp:~/Desktop
File Edit View Search Terminal Help
[root@ftp Desktop]# ifconfig eth0
eth0      Link encap:Ethernet  HWaddr 00:0C:29:90:39:20
          inet6 addr: fe80::20c:29ff:fe90:3920/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:3 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 b)  TX bytes:258 (258.0 b)
          Interrupt:19 Base address:0x2000

[root@ftp Desktop]#
```

Figure 3.3: Shows address in eth port

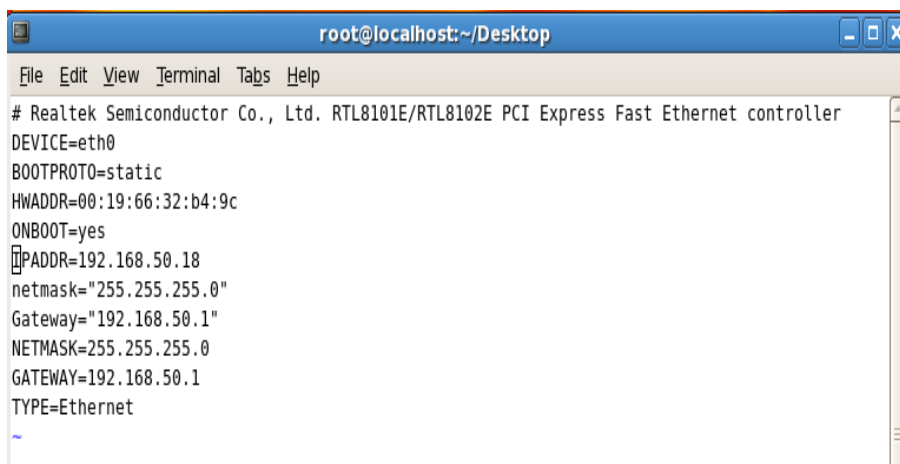
Setup IP Address Permanently:



```
root@localhost:~/Desktop
File Edit View Terminal Tabs Help
[root@localhost Desktop]# vi /etc/sysconfig/network-scripts/ifcfg-eth0
[root@localhost Desktop]#
```

Figure 3.4: Shows set ip address in eth port permanently

Edit ip address: vi /etc/sysconfig/network-scripts/ifcfg-eth0:



```
root@localhost:~/Desktop
File Edit View Terminal Tabs Help
# Realtek Semiconductor Co., Ltd. RTL8101E/RTL8102E PCI Express Fast Ethernet controller
DEVICE=eth0
BOOTPROTO=static
HWADDR=00:19:66:32:b4:9c
ONBOOT=yes
IPADDR=192.168.50.18
netmask="255.255.255.0"
Gateway="192.168.50.1"
NETMASK=255.255.255.0
GATEWAY=192.168.50.1
TYPE=Ethernet
~
~
```

Figure 3.5: Shows set IP address in system config file eth port permanently

3.4.11 Server Configuration

Internet service provider [ISP] server configuration is a very important purpose. Server selection is important for each server service. Many servers remain in Linux operating systems. These servers can be configured with DNS servers, DHCP servers, FTP servers, NFS servers, proxy servers, mail servers, Web servers, samba servers Internet service providers [ISP].

Web Server

The Web server computer that provides the Web page. Each Web server has an IP address and possibly a domain name. For example, if you enter URL <http://facebook.com> in your browser, this sends the request to the Web server whose domain name is facebook.com. The server then collects the index name page. HTML and sends it to your browser.

Centos 6.3 Web Server Configuration Requirements

To set up your own web site on a computer, an operating system, a Web server, a domain name, a name server requires the IP address.

The computer can be used on any system that is capable of running Linux. The language of the operating system, we must, you guessed using the Centaur 6.3. The Apache Web server can be easily supported when the sensor operating system is up and running once specified. A domain name can be registered in the Domain name registration services.

Your ISP provides static IP addresses, and then you need to add your domain to the static IP address. This is achieved by using a name server. Most domain registration services will dispense this service for you.

If you manufacture your domain name and your name server, your Web server will be installed and configured in the next step.

Domain Name System (DNS)

The IP address of the host computer is determined by which is convenient for them, but it is not always easy for people working with the name. Therefore, the IP address of the hostname does not need to be converted to a translation table. With millions of new machines on the internet every day, it will be impossible to keep everyone on the

table for this sort of up-to-date sorting. This is where DNS will come in. DNS- Domain Name System | The DNS-IP address of the net machine for all machines that have changed the name. This translates as the name and address and addresses some other factors, such as [or complexity "Map "].

As a mapping ftp.linux.org, in this case, an association between two things is the name of a machine, and the machine's IP number [or address] 199.249.150.4. In the machine name, the IP number contains the other way to DNS-mapping; That's what the Breverse mapping tells you.

For DNS-unease, network administration is more opaque areas, either. This is part of the project, we have a cache-only server and a primary DNS server for a domain that is going to be set up, starting with a simple DNS-description to try to clarify how to set up the server name.

A net-wide database of DNS. Take care of what we've done. We trash, then we and others, it's going to get out of the garbage. Is consistent and DNS-space compatible and we will get better service from it. Debug it, learn it, and we have admins who will be another good admin of mismanagement from the net reading to his knees.

Serving as a program in Unix name. The combination of this, the Internet Software Consortium, is a part of the Bpackage, on the B-pack. Most Linux distributions are included in the name and are typically installed, depending on the case/usr/sbin/, usually from a package called binding, at the top or bottom of the package. Most DNS implementations, including the use of red caps for Linux, are one of the most in bind "Berkeley Internet Name domain " Projects that maintain DNS related software switches that run under Linux. The most well-known program is "naming ", that daemon responds to DNS queries from the remote machine. Currently, the Forma 8/9 is being used for DNS purposes. To access the database, a DNS server is required for its site. A DNS server is also known as a name server [NS]. These servers come in three variations.

- Master [also called primary]
- Slave [also called secondary]
- Caching

DNS SERVER CONFIGURATION

WORKS OF DNS:

It converts the name to IP address.

And IP Address to Name.

ZONE FILES:

Forward Zone File: name to IP address.

Reverse Zone File: IP Address to Name

PACKAGE NAME: bind

DEFAULT PORT: 53

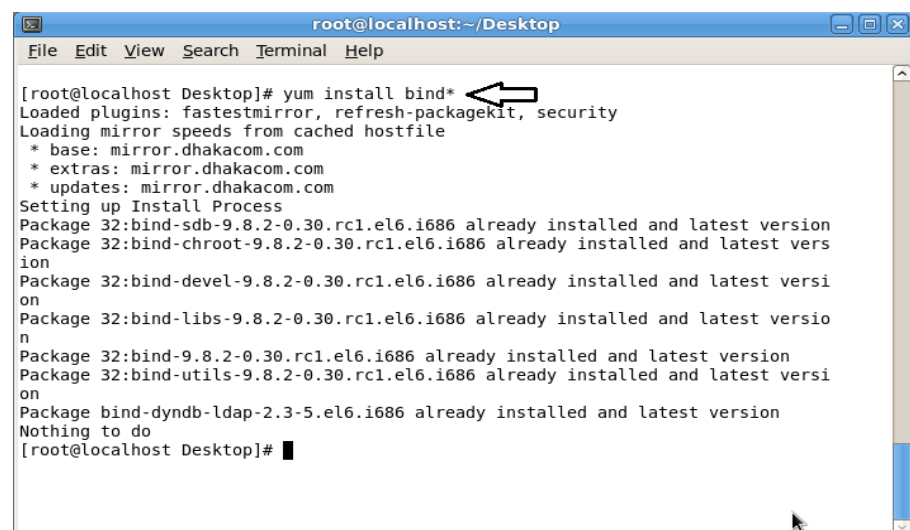
CONFIGURATIONS FILE NAME: named.config

STEP: 1

At first, we have to install package of DNS name bind: yum install bind*

There Show Already install because of its already installed in my pc.

Install DNS in command yum install bind* :



```
root@localhost:~/Desktop
File Edit View Search Terminal Help

[root@localhost Desktop]# yum install bind*
Loaded plugins: fastestmirror, refresh-packagekit, security
Loading mirror speeds from cached hostfile
 * base: mirror.dhakacom.com
 * extras: mirror.dhakacom.com
 * updates: mirror.dhakacom.com
Setting up Install Process
Package 32:bind-sdb-9.8.2-0.30.rc1.el6.i686 already installed and latest version
Package 32:bind-chroot-9.8.2-0.30.rc1.el6.i686 already installed and latest version
Package 32:bind-devel-9.8.2-0.30.rc1.el6.i686 already installed and latest version
Package 32:bind-libs-9.8.2-0.30.rc1.el6.i686 already installed and latest version
Package 32:bind-9.8.2-0.30.rc1.el6.i686 already installed and latest version
Package 32:bind-utils-9.8.2-0.30.rc1.el6.i686 already installed and latest version
Package bind-dyndb-ldap-2.3-5.el6.i686 already installed and latest version
Nothing to do
[root@localhost Desktop]#
```

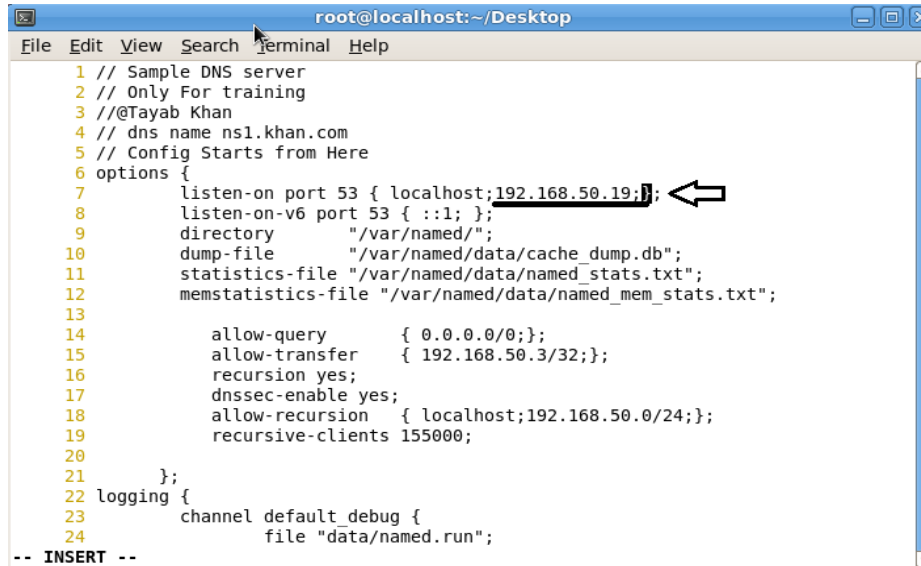
Figure 3.6: Shows Screen Print yum install bind.

STEP: 2

Edit the configuration file using vi editor : vi /var/named/chroot/etc/named.conf

And go to line no 7 enter localhost IP address.

My pc IP address is 192.168.50.19 :



```
root@localhost:~/Desktop
File Edit View Search Terminal Help
1 // Sample DNS server
2 // Only For training
3 //@Tayab Khan
4 // dns name ns1.khan.com
5 // Config Starts from Here
6 options {
7     listen-on port 53 { localhost;192.168.50.19; } ←
8     listen-on-v6 port 53 { ::1; };
9     directory      "/var/named/";
10    dump-file       "/var/named/data/cache_dump.db";
11    statistics-file "/var/named/data/named_stats.txt";
12    memstatistics-file "/var/named/data/named_mem_stats.txt";
13
14    allow-query     { 0.0.0.0/0; };
15    allow-transfer  { 192.168.50.3/32; };
16    recursion yes;
17    dnssec-enable yes;
18    allow-recursion { localhost;192.168.50.0/24; };
19    recursive-clients 155000;
20
21 };
22 logging {
23     channel default_debug {
24         file "data/named.run";
25     };
26 }
-- INSERT --
```

Figure 3.7: Shows Screen Print Edit using vi editor named.conf file.

STEP: 3

Enter a web address of forwarding zone. I used abc.com for testing:



```
root@localhost:~/Desktop
File Edit View Search Terminal Help
13
14     allow-query     { 0.0.0.0/0; };
15     allow-transfer  { 192.168.50.3/32; };
16     recursion yes;
17     dnssec-enable yes;
18     allow-recursion { localhost;192.168.50.0/24; };
19     recursive-clients 155000;
20
21 };
22 logging {
23     channel default_debug {
24         file "data/named.run";
25         severity dynamic;
26     };
27 };
28
29 zone "." IN {
30     type hint;
31     file "named.ca";
32 };
33 //#####
34
35 zone "abc.com" IN { ←
```

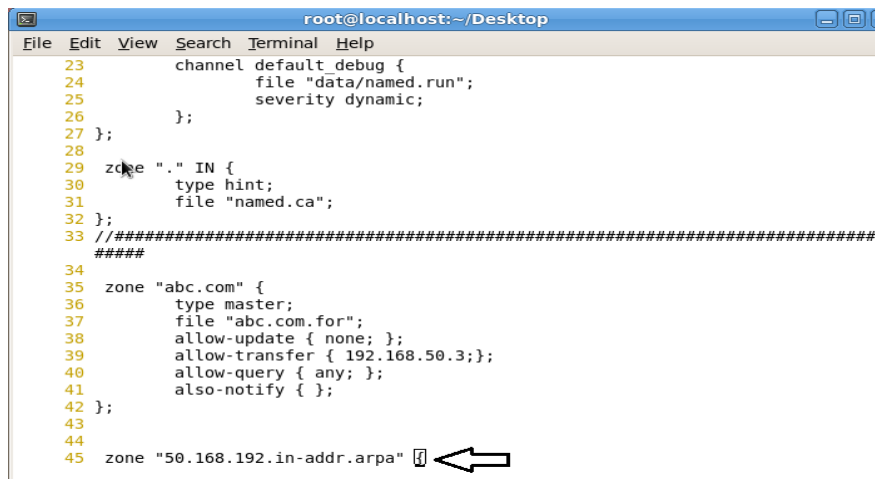
Figure 3.8: Shows Screen Print Edit Enter a web address of the forward zone

STEP: 4

Enter AN IP Address For Reverse Zone:

We Have To Write IP Address In Backward Method:

192.168.50.19 as 50.168.192 without Network Portion



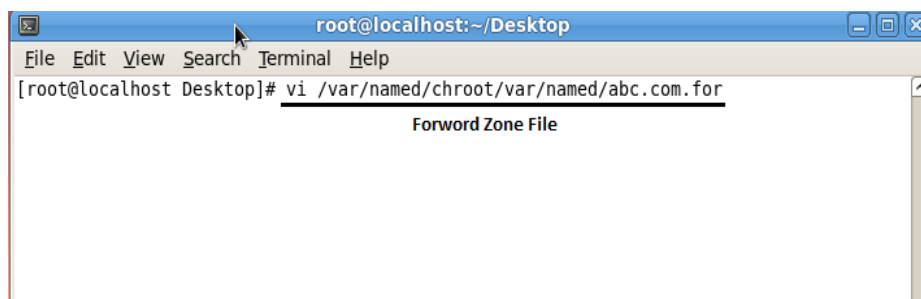
```
root@localhost:~/Desktop
File Edit View Search Terminal Help
23 channel default_debug {
24     file "data/named.run";
25     severity dynamic;
26 };
27 };
28
29 zone "." IN {
30     type hint;
31     file "named.ca";
32 };
33 //#####
34 #####
35 zone "abc.com" {
36     type master;
37     file "abc.com.for";
38     allow-update { none; };
39     allow-transfer { 192.168.50.3; };
40     allow-query { any; };
41     also-notify { };
42 };
43
44
45 zone "50.168.192.in-addr.arpa" {
```

Figure 3.9: Shows Screen Print Enter an IP Address For Reverse Zone

STEP: 5

Forward zone file command in the command

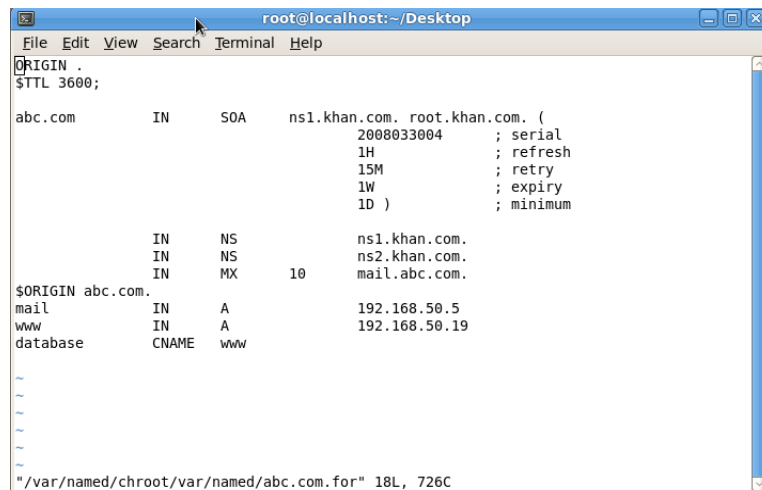
vi /var/named/chroot/var/named/abc.com



```
root@localhost:~/Desktop
File Edit View Search Terminal Help
[root@localhost Desktop]# vi /var/named/chroot/var/named/abc.com.for
Forward Zone File
```

Figure 3.10: Shows Screen Print edit Forward Zone File for abc.com

Forward zone file creates:



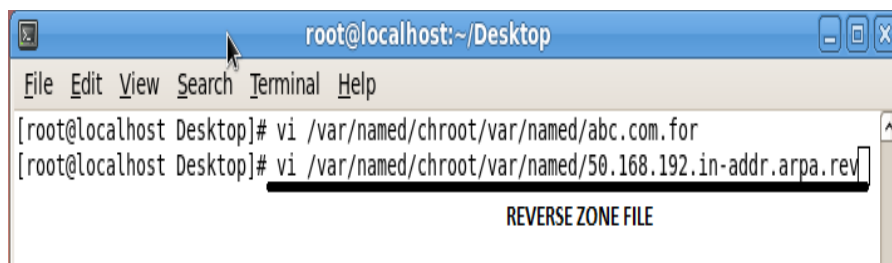
```
root@localhost:~/Desktop
File Edit View Search Terminal Help
$ORIGIN .
$TTL 3600;
abc.com      IN      SOA     ns1.khan.com. root.khan.com. (
                2008033004 ; serial
                1H        ; refresh
                15M       ; retry
                1W        ; expiry
                1D        ; minimum
                IN      NS      ns1.khan.com.
                IN      NS      ns2.khan.com.
                IN      MX      10  mail.abc.com.
$ORIGIN abc.com.
mail         IN      A       192.168.50.5
www          IN      A       192.168.50.19
database     CNAME   www

"/var/named/chroot/var/named/abc.com.for" 18L, 726C
```

Figure 3.11: Shows Screen Print edit Forward Zone File for abc.com

STEP: 6

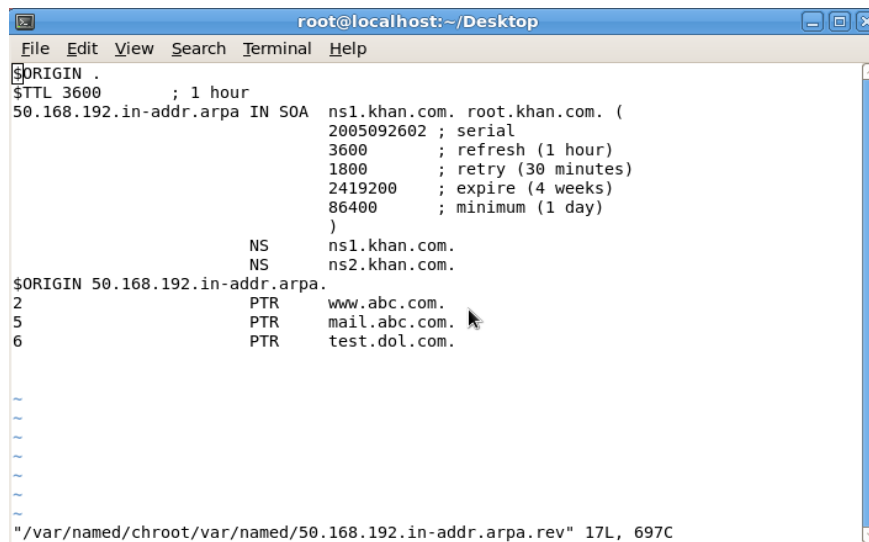
Reverse zone file command:



```
root@localhost:~/Desktop
File Edit View Search Terminal Help
[root@localhost Desktop]# vi /var/named/chroot/var/named/abc.com.for
[root@localhost Desktop]# vi /var/named/chroot/var/named/50.168.192.in-addr.arpa.rev
REVERSE ZONE FILE
```

Figure 3.12: Shows Screen Print edit Reverse Zone File

Edit reverse zone file full configuration file:



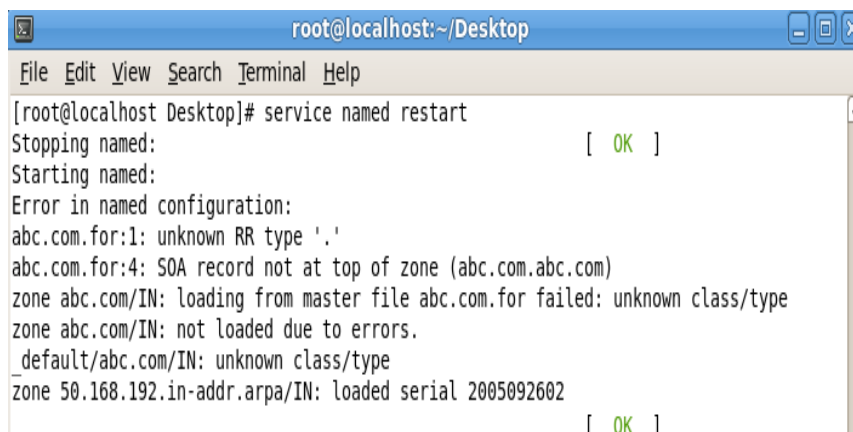
```
root@localhost:~/Desktop
File Edit View Search Terminal Help
$ORIGIN .
$TTL 3600 ; 1 hour
50.168.192.in-addr.arpa IN SOA ns1.khan.com. root.khan.com. (
                2005092602 ; serial
                3600      ; refresh (1 hour)
                1800     ; retry (30 minutes)
                2419200  ; expire (4 weeks)
                86400    ; minimum (1 day)
                )
                NS      ns1.khan.com.
                NS      ns2.khan.com.
$ORIGIN 50.168.192.in-addr.arpa.
2 PTR www.abc.com.
5 PTR mail.abc.com.
6 PTR test.dol.com.

"/var/named/chroot/var/named/50.168.192.in-addr.arpa.rev" 17L, 697C
```

Figure 3.13: Shows Screen Print edit Reverse Zone File

STEP: 7

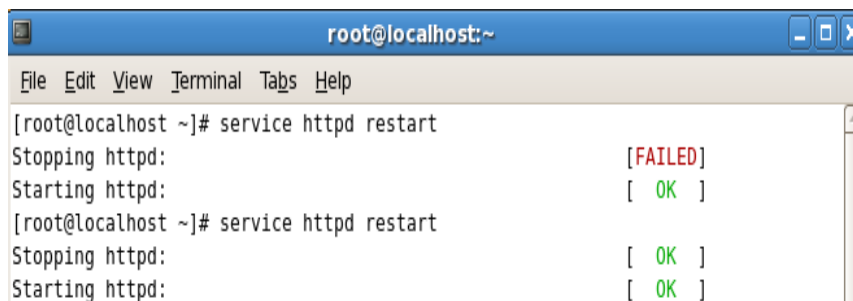
Restart the Service show:



```
root@localhost:~/Desktop
File Edit View Search Terminal Help
[root@localhost Desktop]# service named restart
Stopping named: [ OK ]
Starting named:
Error in named configuration:
abc.com.for:1: unknown RR type '.'
abc.com.for:4: SOA record not at top of zone (abc.com.abc.com)
zone abc.com/IN: loading from master file abc.com.for failed: unknown class/type
zone abc.com/IN: not loaded due to errors.
_default/abc.com/IN: unknown class/type
zone 50.168.192.in-addr.arpa/IN: loaded serial 2005092602
[ OK ]
```

Figure 3.14: Shows Screen Print service named restart

Restart Web Server Service:



```
root@localhost:~
File Edit View Terminal Tabs Help
[root@localhost ~]# service httpd restart
Stopping httpd: [FAILED]
Starting httpd: [ OK ]
[root@localhost ~]# service httpd restart
Stopping httpd: [ OK ]
Starting httpd: [ OK ]
```

Figure 3.15: Shows Screen Print service named status

STEP: 8

Go to Browser and type abc.com:

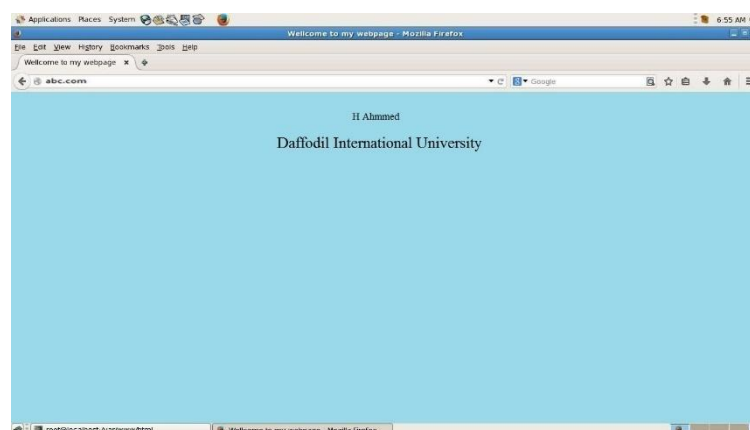


Figure 3.16: Shows Screen Print abc.com open in browser

Mail Server

Often "mail-server ", according to an email server that acts as your virtual post office, is a computer on your network. For local users who are storing email in a storage area on a mail server where the mail server, you must decide how to respond to a specific message destination, which consists of a set of rules defined by the user, mail The user account on the server recognizes a database with Le Pen and will be dealt with, and the other is the communication module element that handles message transfer from the mail server and e-mail client.

Postmaster is typically referred to as the person responsible for maintaining the e-mail server (s) (System activity monitoring, editing users). Most mail servers [9] During the normal operation to work without manual intervention.

Mail Server Configuration

MUA = Mail user agent. Ex: Outlook, Eudora, Ms. Outlook, Pine.

MTA=Mail Transfer Agent. Ex: Gmail, Exim, Sendmail, Post mail.

MDA=Mail Delivery Agent. Ex: Pros mail, Mail drop.

SMTP=Simple Mail Transfer Protocol. Used for sending, default port: 25.

POP3=Post Office Protocol 3.used for receiving, Default Port: 110.

IMAP=Internet Message Access Protocol. Used for receiving, Default Port: 143.

Here I have used their popular packages which are very easy to configure.

Send mail (for sending)

Dovecot (for receipt)

Set mail server CentOS 6

Sending and configuring mail

Installing and configuring Dove

Creating users and testing

Step 1: Assign a static IP before installation and add a host entry for your domain

/Eb/Host file that IP as: 192.168.0.15 daffodil.com

Step 2: Install the SendMail using: Yum-y Install the Sendmail.

Step 3: Install the doughnut using: Yum-y Install the Dover.

Install telnet using \ Step 4: Install Yum-y telnet.

Step 5: Edit the SendMail configuration file by using now: VI/EGB

Now search the line:/masql and perform this line:

DNL (MASQUERADE_AS (' Daffil. less ') dnl) and then save the file.

Step 6: Restart the service mail.

Step 7: Telnet localhost 25.

Tries:: 1...

Associated with localizing.

The character of escaping ' ^] '.

220 mail.daffodil.com ESMTP Postfix

This is localhost {type this command}

250-mail.daffodil.com

250-The crushing

250-size 10240000

250-Vafi

250-Tron

250-Startups

250-Plain-login authentication

250-authentication = PlainText Login

250-Increase

250-8 Bitumen

250 DSN

{Type this command} exit

221 2.0.0 Goodbye

Connection closed by foreign host.

Step 8: Configuring the Dover

Step 9: Add the following line to the/etc/dovecot/Dovecot. f file and at the end of the file after the installation is opened. Please ensure that the SendMail configuration between Mail_location and Home_mailbox is used in the same name.

Protocol = IMAP Popu

Mail_location = Maildir: ~/Mail

Pop3_uidl_format =% 08Xu% 08Xu

Step 10: Service Dockcut is going to start Dovecat service:

Step 11: Test pop-up connectivity now.

Telnet localhost 110

Tries:: 1...

Associated with localizing.

The character of escaping ' ^] ' !

+ OK Dovecat Reddy.

Quit

+ OK log out

Connection closed by foreign host.

Step 12: Creating Users and testing

Now create the user to test your configuration.

User Add-S Hossein-S/bin/Nolan

And create passwords for user-created

PasswdSajib

Step 13: Now I can check my Configuration details.



Figure 3.17: Screen printing shows pop-up and SMTP host and port configurations.

Step 14: Now I can send and receive mail using this server. In any matter.

Please check the log file/load/logical/Maillogs. Now my mail server is ready.

Or here's another way to check the mail server:

- Telnet localhost 25.
- Mail: helal@daffodilnet.com
- Reply to: mail@yahoo.com or mail@gmail.com
- This is a test mail from mail server testing.

Access.

3.5 MikroTik Router

MikroTik Ltd is a Latvian manufacturer of computer networking equipment in the internationally known MikroTik. It sells wireless products and routers. Founded in 1995, rising wireless technology is the intent of sales in the market. The agency 2014 as much as 100 employees. The company's products are known as expensive routers and Ethernet radio relay lines with low price options.

3.6 RouterOS

The main product of MikroTik is an operating system based on the Linux kernel, known as the routers of MikroTik. Installed on the company's proprietary hardware (Router Board series), or standard x86-based computer, it implements a network router and several additional features such as firewalls, virtual private network (VPN) services, and a The computer turns on the Interconnect network of clients, bandwidth rendering and service quality, wireless access point functions and other commonly used features. It is also possible to work as a prisoner-portal based hotspot in the system.

3.7 Features

Routers support many applications used by Internet service providers. such as

- It can be used as a router
- It supplies OSPF, BGP, Multiprotocol Label Switching (VPS/Pipelas), open flow, etc.

- It can be used as a switch or bridge
- Pipe provides client-server
- VPN-provides virtual private network.
- Provides firewall rules
- DHCP Server service provided
- Provide hotspot systems based on Wi-Fi and captive portals
- Bandwidth management is very easy
- Simple GUI interface
- Easy Administration
- Supports both IPv4 and IPv6

Products are supported by Mikrotik through a forum and a wiki, providing examples of assorted and subjective instances of the configuration. Routers also support Internet Protocol version 6 (IPv6) alongside Internet Protocol version 4 (IPv4).

The software supports the Linux kernel 2.6.16, except for wireless, where the installation of the Isotherm is supported by all network interfaces that only support the chips, 3. X version.

3.8 Release history

MikroTik has published different versions of the routers at different times. Below are some of the retention checks.

- Routers version 6: May 2013
- Routers version 5: March 2010
- Routers version 4: October 2009
- Routers version 3: January 2008 [12]

3.9 Router Board

The company produces a series of integrated circuit boards, marketed under the name Router board, as well as the accessory components that implement a complete hardware operating platform for routers.

Router line with routers is marketed to small to medium-sized wireless internet service providers at 3.18, usually providing broadband wireless access to remote areas. The product includes pre-assembled small office/Home Office (SOHO) router, wireless 802.11 n midi and TDMA devices for indoor and outdoor use, and free routers in the form of printed circuit boards (PCBs) for integration into custom solutions. Also, router Board line mini PCI and Mini PCI Express is a series of wireless adapters, supporting a range of IEEE 802.11 protocol, and is designed to be used together with the router's board lineup.

In all cases, the in-house advanced Linux kernel patches are required for hardware support, not available by Mikrotik, many router board boards and their versions are supported by third-party Linux-based firmware, noticeable openwork [13]

750G Series Mikrotik router:



Figure 3.18: Shows MikroTik Router 750G Series

3.10 Cloud Core Router

November 2012 MikroTik Cloud Core Router 3.19 Image integrated unit that supports 16 to 36 CPU cores, 12 1000 base-T Ethernet interfaces, and four SFP (Mezic) interfaces, as well as "Fast path " packets. Forwarding within the interface

(with claim 24 million packets per second forwarding rate). This unit targets medium-sized network providers and strives to be a well-priced alternative for other well-known brands.

MikroTik Cloud Core Router 1036 Series:



Figure 3.19: MikroTik Cloud Core Router 1036 Series

3.11 Propose Network Diagram (MikroTik Configuration)

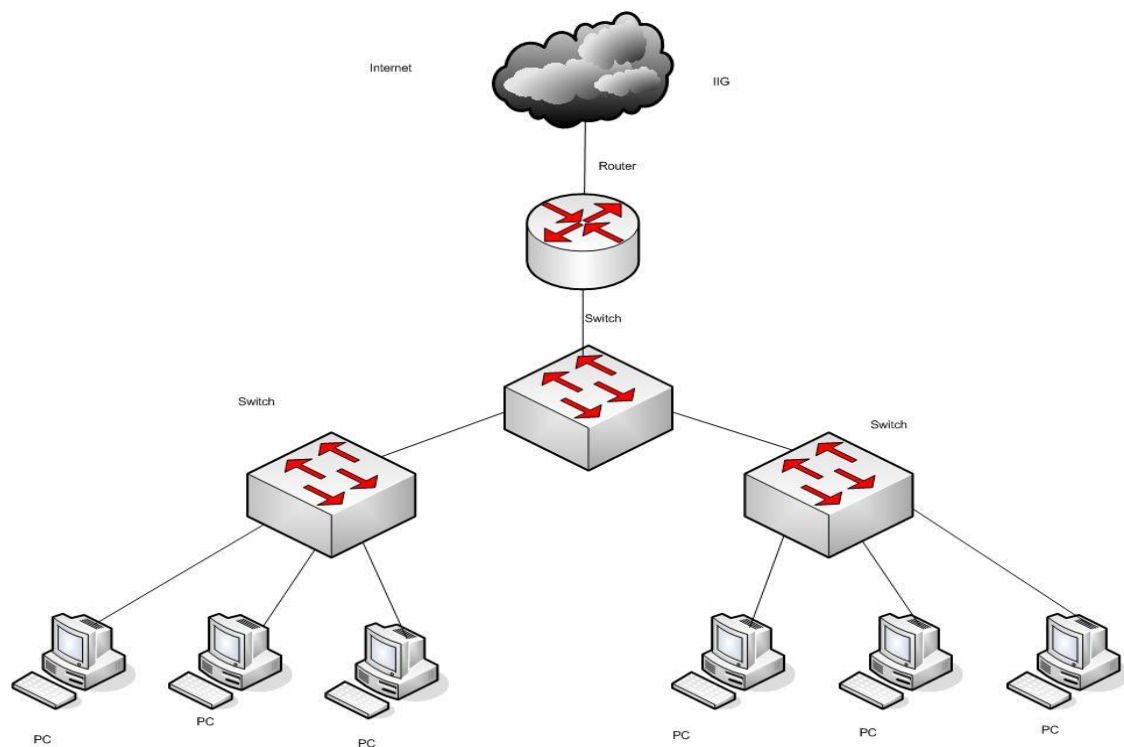


Figure 3.20: Shows Network Illustration

Winbox is a graphical configuration utility of a router OS of Mikrotik. First, we should download the Winbox. After downloading the winbox it can go directly because no installation is needed 3.20 Network Illustration.

3.11.1 Initial Step

- Let the MikroTik router get
- Spile an extractor cable into the LAN port of Mikrotik and other ports to the PC.
- Browse through the window.
- Click the icon and hair to display an IP address and MAC address. Click on Mac and then enter ' Admin ' in the login box and do not need to provide a password.

Mikrotik reset command :

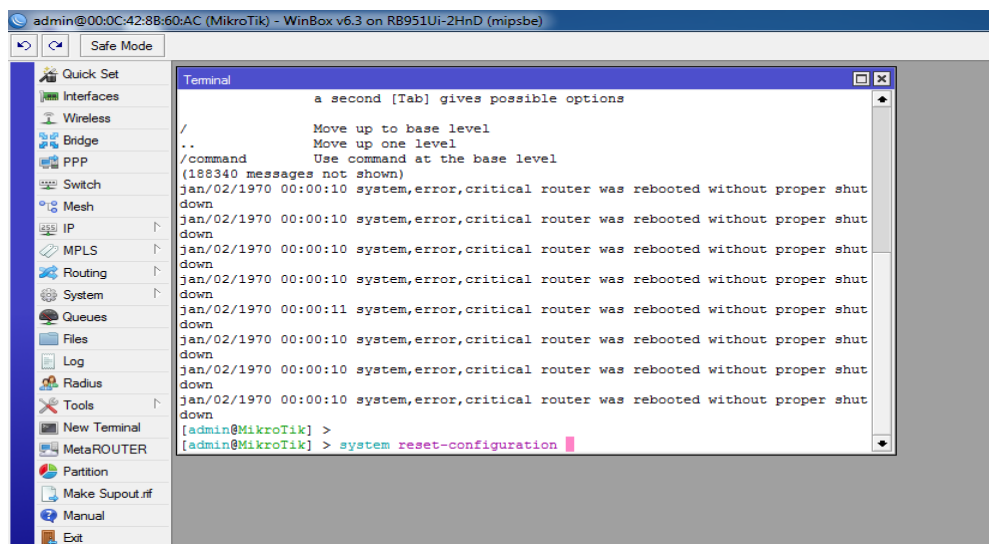


Figure 3.21: Shows Screen Print Reset MikroTik Router

Step 2:

To set routes or gateways

Process:

IP > root > "+" > gateway

N. B: Here an issue must be noticed that the address will be 0.0.0.0/0 (the default route). Then we can set up our gateway.

Apply>Ok.

IP add set in MikroTik router

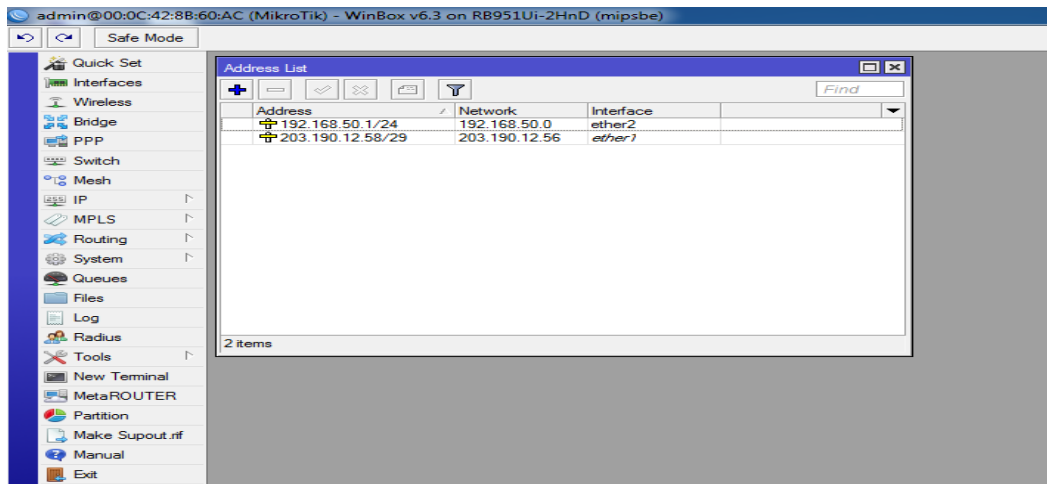


Figure 3.22: Shows Screen Print IP Address

Setup route IP add:

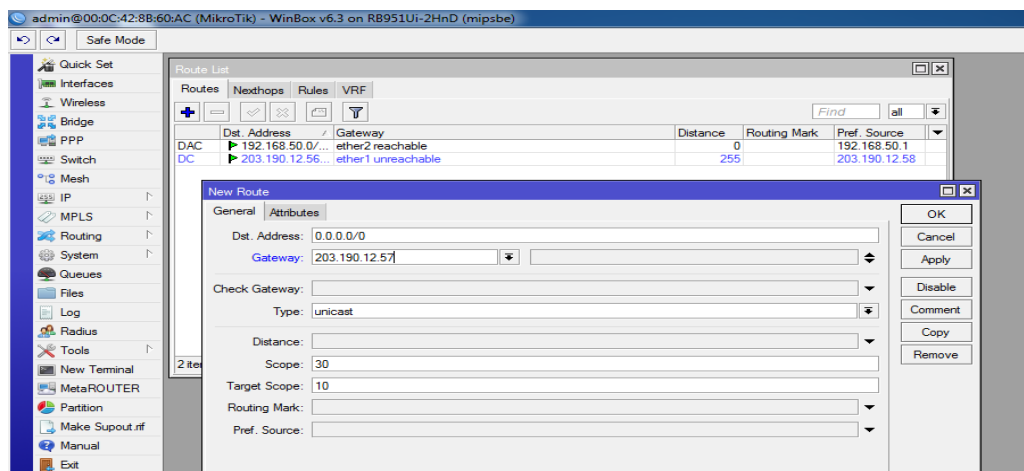


Figure 3.23: Shows Screen Print Gateway

Step 3

Process:

IP > Firewall > NAT > “+”

General:

Chain: scant

Src. Address: local block/IP with a subnet mask of the network.

Action:

Masquerade

Apply>Ok.

Local network IP address NAT rule:

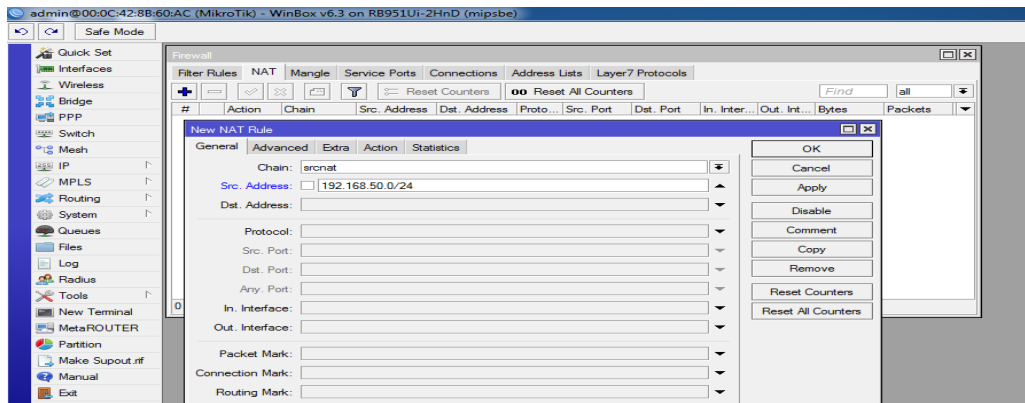


Figure 3.24: Shows Screen Print NAT Rule

Shows in Screen Print Firewall:

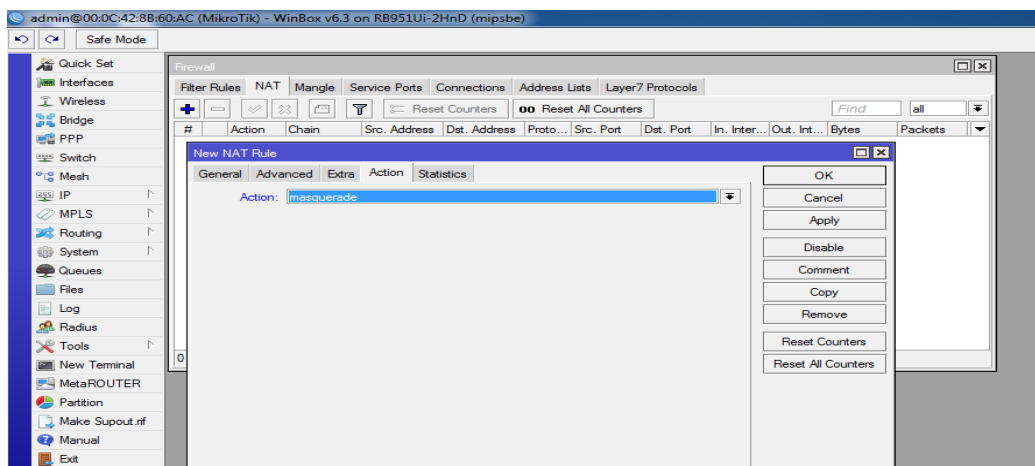


Figure 3.25: Shows Screen Print Firewall

Step 4:

Doing the task of bridging the related ports with each other 3.26 in figure

Process:

Bridge> “+” > (bridge n, here n=1,2,3....)

Settings:

Tick mark to 3 options

Bridge Settings Screen Print shows:

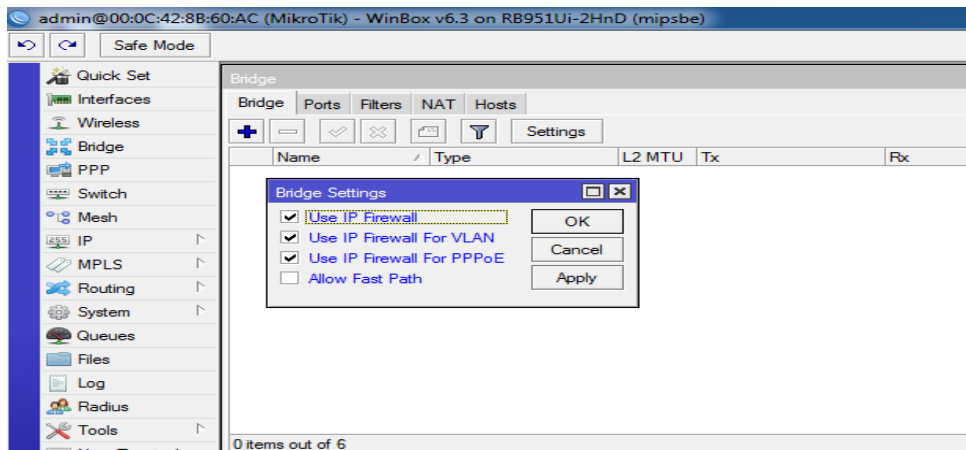


Figure 3.26: Shows Screen Print Bridge Settings

Ports:

- ether2
- ether3_LAN
- ether4
- ether5
- wlan1

Router interface port in graphically 3.27 show

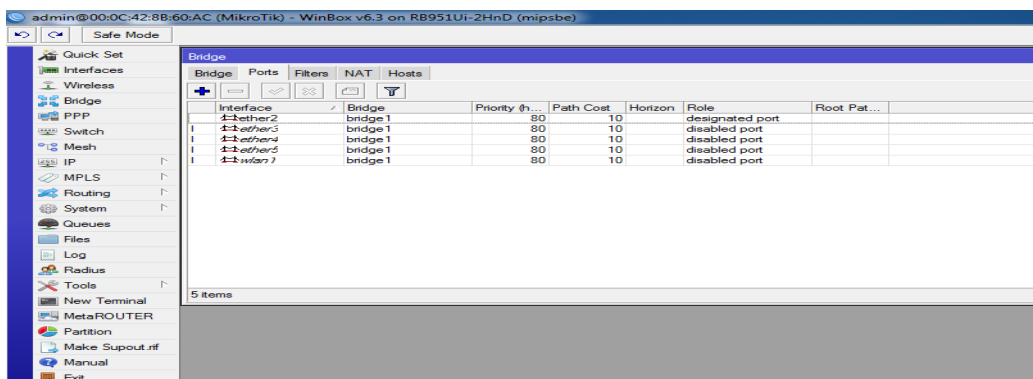


Figure 3.27: Shows Screen Print Bridge Ports Assign

Step 5:

Knowing the profile of the bridge with the DHCP Server 3.28 figure

Process:

IP > DHCP Server > Interface: bridge 1 (bridge name)

DHCP Setup Screen Print:

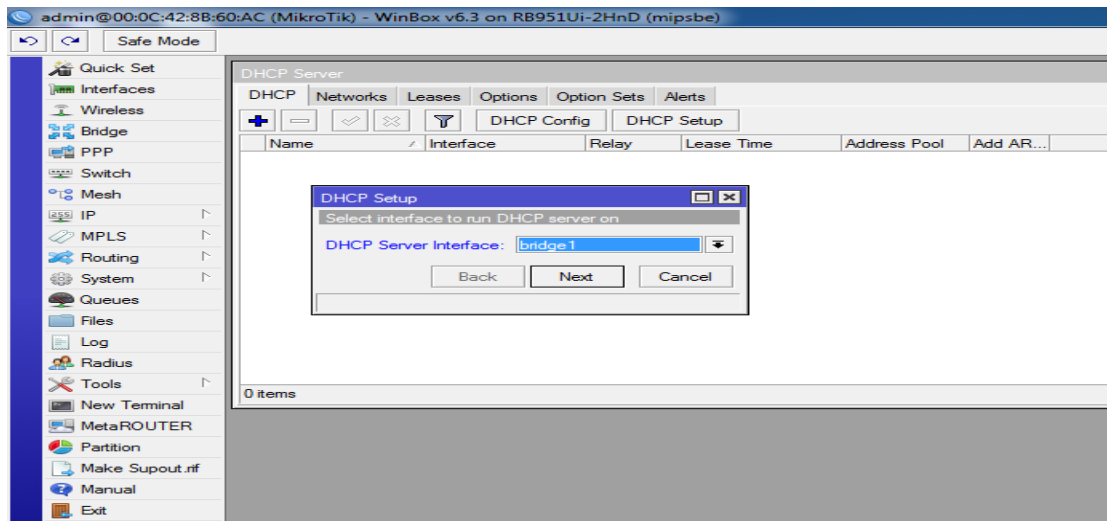


Figure 3.28: Shows Screen Print DHCP Setup

Local Network IP pool address:

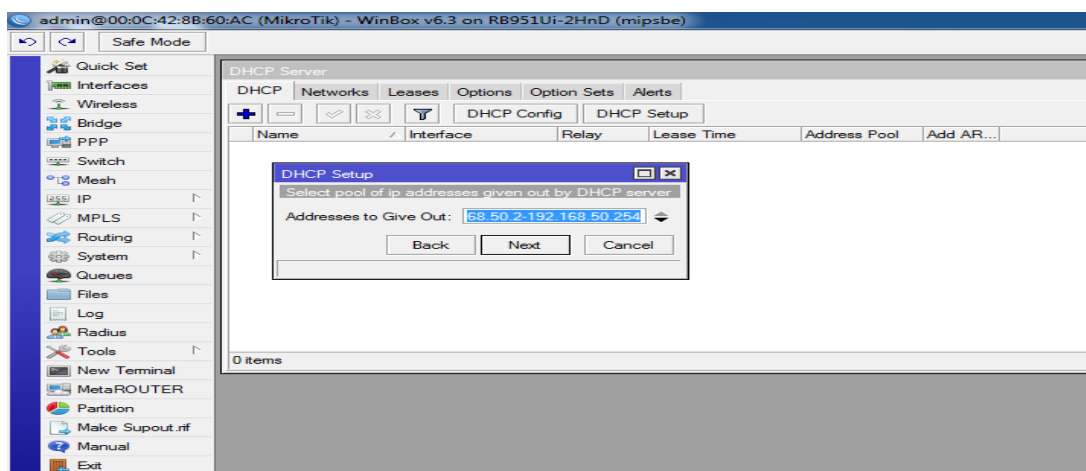


Figure 3.29: Shows Screen Print IP address pool of the local LAN.

Setup DNSIP address:

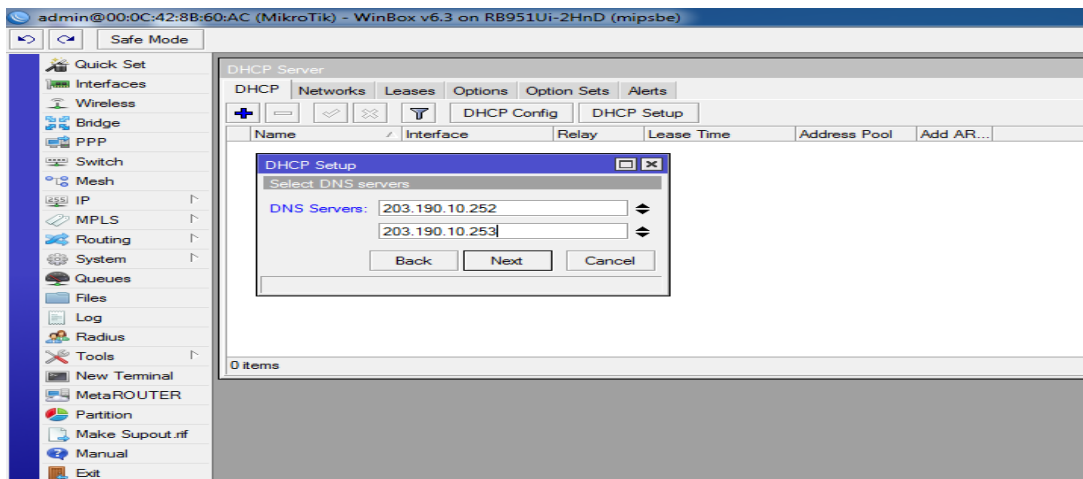


Figure 3.30: Shows Screen Print DNS Service

Step 6:

Wireless LAN configuration

Process

Wireless > Wlan1 (enabling it with tick mark) > Mode: ap bridge

Wireless setting SSID Mode:

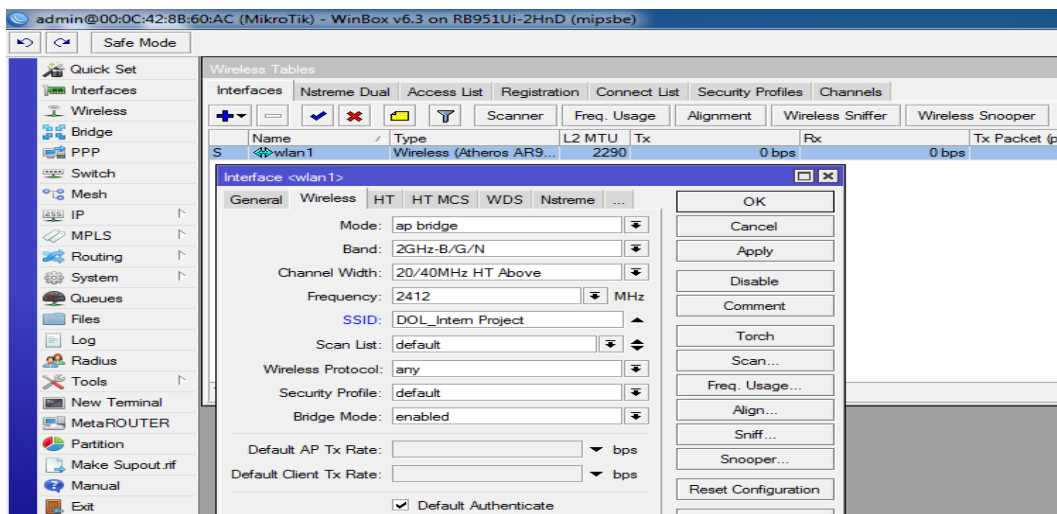


Figure 3.31: Shows Screen Print Wireless Setting

Wireless password setting:

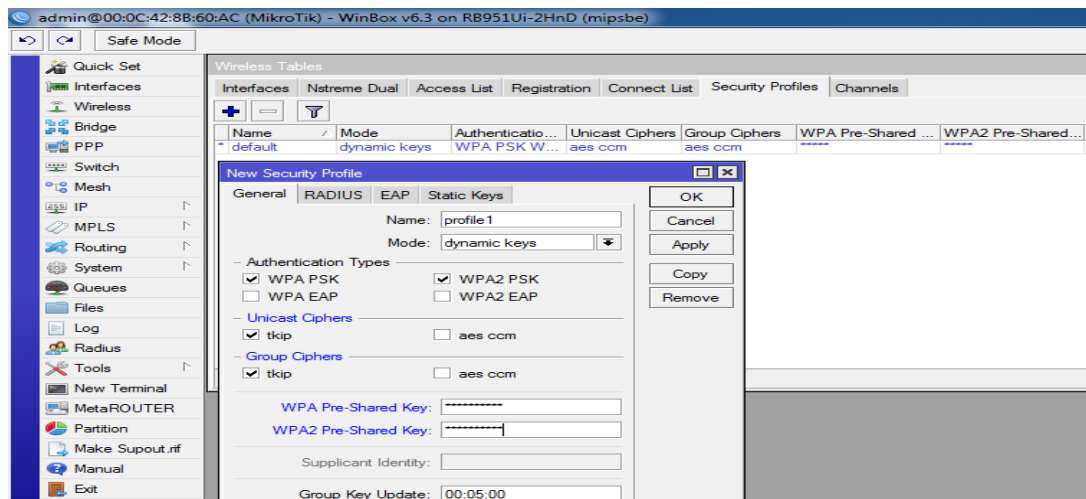


Figure 3.32: Shows Screen Print Wireless Security Setting

3.12.OSPF Configuration

For the project network, I have configured the Mikrotik router with an existing OSPF system that is supplied from the Juniper router in the data center. As a result, it becomes the relative point-to-point OSPF for the network. The OSPF configuration in the Mikrotik router is given below with both GUI and command-line interfaces.

GUI configuration;

STEP 1:

Routing protocol OSPF selecting:

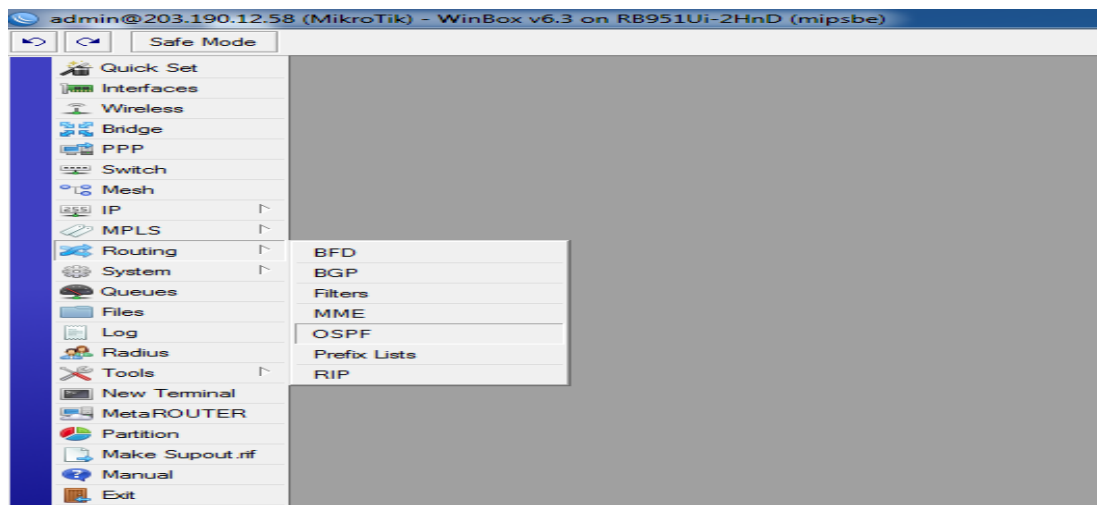


Figure 3.33: Shows Screen Print Router Home Page

STEP 2: Network Configuration

Here I have configured the network for OSPF. At first I have configured the WAN

Network and then the LAN network:

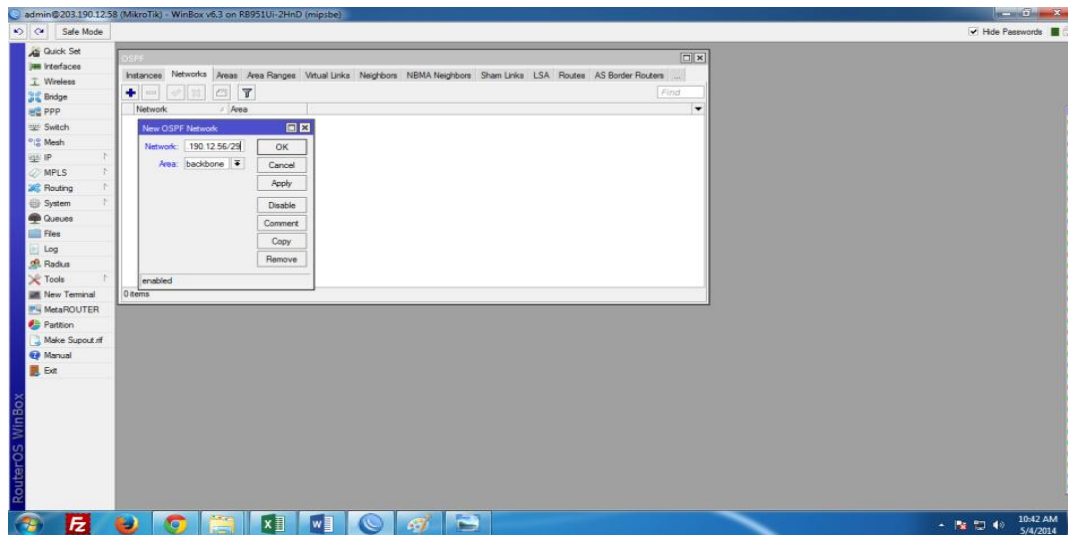


Figure 3.34: Shows Screen Print OSPF Network WAN Configuration

OSPF LAN network configuration:

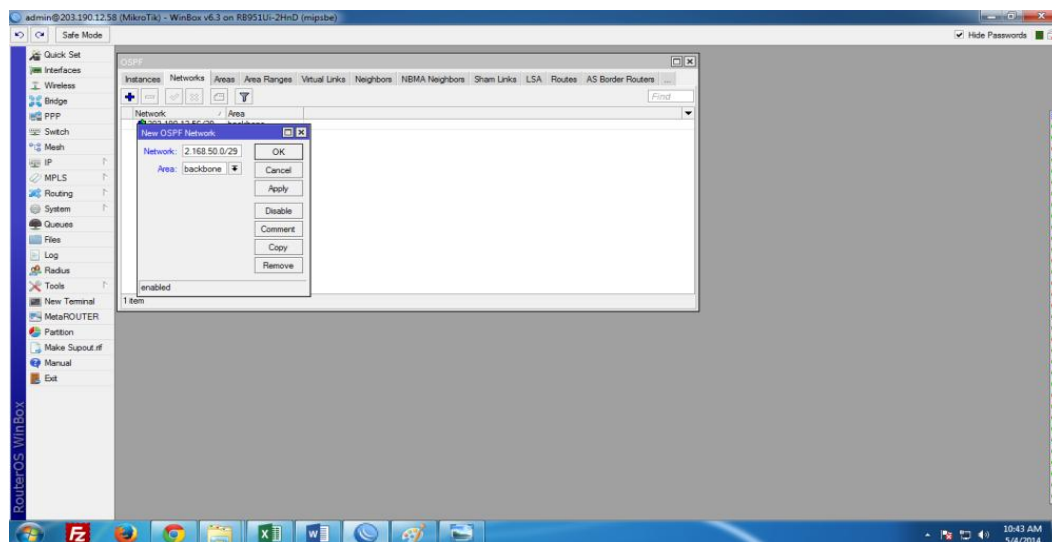


Figure 3.35: Shows Screen Print OSPF Network LAN Configuration

OSPF LAN and WANIP address setup:

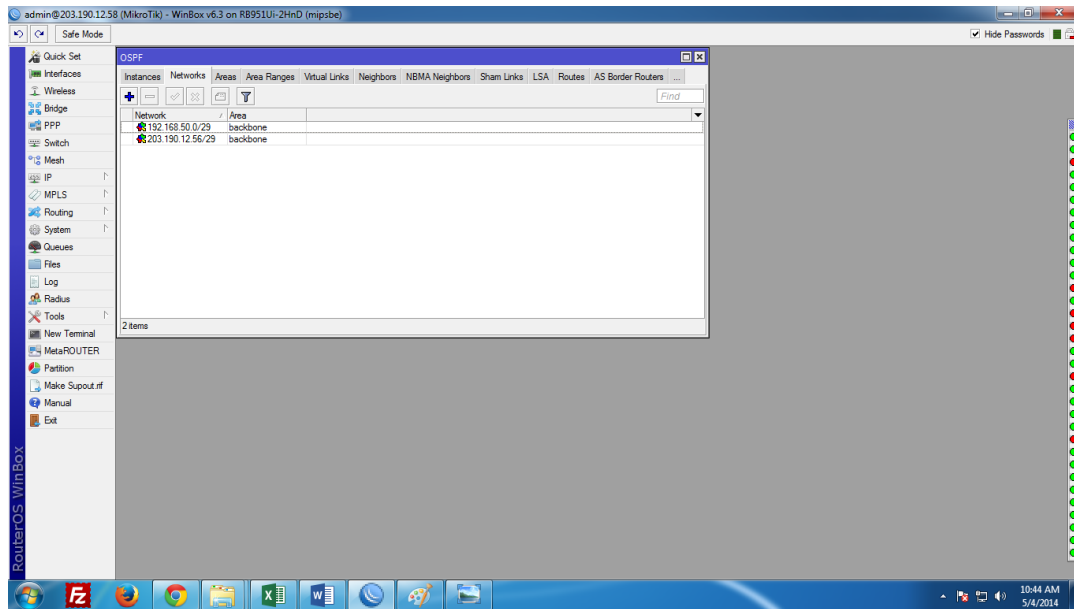


Figure 3.36: Shows Screen Print OSPF Network Address

STEP 3:

Area Selection:

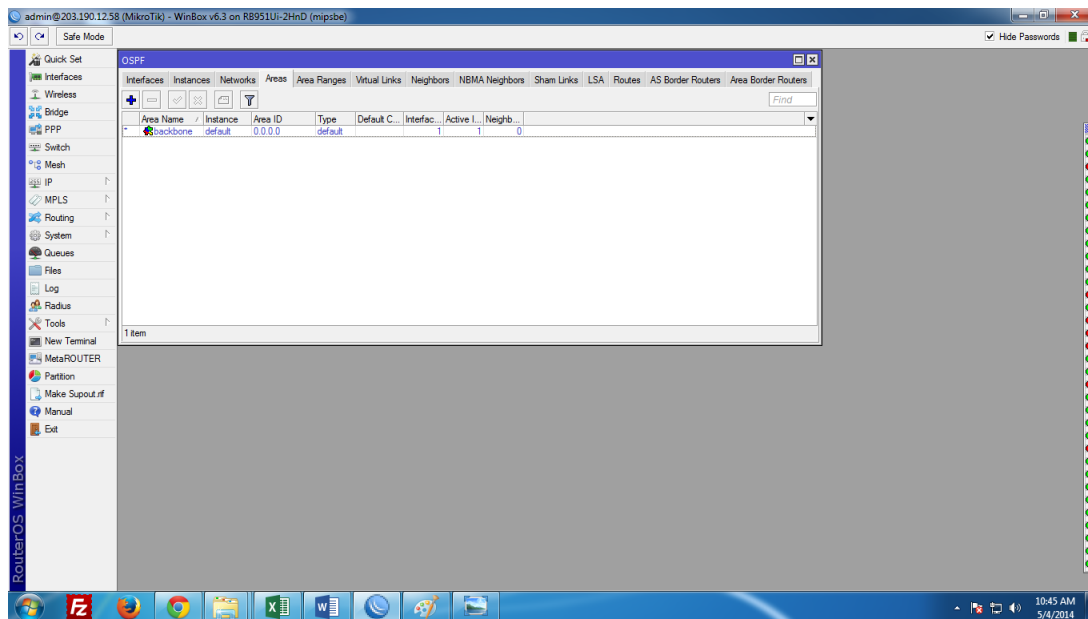


Figure 3.37: Shows Screen Print OSPF Network Area Selection

3.13 Challenges

No job challenge, but four months of my internship experience and after listening to the happy hour to share friends, I found that there are some common challenges the intern has. I think it's one of those interns three things: Honorary/Nate, temporary, and they have a recon to gain experience. Sometimes not enough work: I don't have enough work assigned. I'm bored, underutilized, tempted to use Facebook to finger my desk.

Too much work: Because the intern just is delighted to get a foot in the door, some workspace can take advantage of young workers by providing them very long-hour dull repetitive work. Afraid to question: Suddenly, there was a work going on, and I finally got a chance to prove myself!

Compete with another intern: Luckily I was an intern; We ask each other and we can easily team up with projects where we have worked in such a collaborative relationship. The Intern for future job openings, or a recommendation for a better letter will be competing in other office environments, so may not be friendly. A new lifestyle: as a recent varsity graduate, I could be using a new lifestyle that could be quite striking. Instead of waking up at night and going to a few classes a day, I sat on the desk 9-5. I'm probably living with my parents to save money. Hours and new living conditions clearly make it even more difficult than ever.

CHAPTER 4

COMPETENCIES AND SMART PLAN

4.1 Competencies Earned

Achievement of learning results in a learning process as a result of a learner's capacities, understanding or being able to do so, a statement said. Both the network and server machines installed and DACC on the two databases. The leading role in the implementation of the advanced Linux software, for example, LDAP ha, is linked to program learning results, field, and internship evaluation. Students ' Union office funding results from many student intern learning: Gathering and information are organized into an internship project description: Participate in the design of the Web site of the Linux lab. The result of learning. & Configure software and upgrades; Install, configure, and test Network employer Services • Furthermore, consistent with the learning outcomes, internships on-site supervisors will provide an orientation about organizational policies and procedures.

4.2 Smart Plan

Every company should have smart plans for success. Basically, the combination of some common things makes a smart plan.

4.3 Reflections

Daffodil Online Ltd. started its operation in 2002. In previous years, they extended the portfolio of operations and services in accordance with customer recommendations and consider the time demands. They worked with many national projects and international organizations to earn a reputation. They use the latest technologies and upgrades to the services where needed. They are able to provide sophisticated network and telecommunications solutions to the corporate Network Solutions division with a highly efficient technical skills group.

CHAPTER 5

CONCLUSION AND FUTURE CAREER

5.1 Discussion and Conclusion

The review within the net has been a surprising and rewarding experience. I have seen the future and can help me with the opportunity of the network so many have been able to ensure that. Through this internship I've known, one of the main topics and time management skills as well as motivation. When I first started, I thought we could sit eight hours a week, six days a week. I once realized there was no pause during my hours overlapping, so I did my day job. Organize and prepare questions that I need to learn to react at the right time. I used to learn to motivate internships and time management for many hours in the office. The company has come up with various offers and ideas for use until now. I still keep my options open, but I'm working for Bangladesh University in the world. Enjoy this line of work. I continue to work hard for my position and learn about art and expect to meet new people. It was a wonderful experience, and I hope the other intern got a lot out of it!

5.2 Scope for Further Career

Career opportunities are available in different areas under Linux. The circumference of the carrier on Linux is not just a Linux platform, it covers a lot of different areas: desktop application development, kernel-device driver development their huge demand today is open source software and open-source software developers and Network engineers. Many companies migrate today via Linux and open-source software. The most efficient open-source solution for companies like Google, Yahoo, Boeing, Lufthansa, wiki.org. There is a huge demand for skilled professionals on Linux, Mikrotik.

References

- [1] Get ideas about Daffodil Online Limited (DOL), available at http://www.daffodilnet.com/index.php?option=com_content&view=article&id=54&Itemid=112, last accessed 02 July 2019, 11.30 pm.
- [2] Career opportunities in Linux, available at <https://goinggnu.wordpress.com/2007/07/09/the-career-opportunities-in-linux/>, last accessed 02 July 2019, 12.00 am
- [3] about configuring DNS, available at http://www.linuxhomenetworking.com/wiki/index.php/Quick_HOWTO_:_Ch18_:_Configuring_DNS#.VTK2KPA0-1k, last accessed 03 July 2019, 10:00 am
- [4] about the proposed partition scheme, available at www.centos.org/docs/5/html/5.2/Installation_Guide/s2-diskpartrecommen-ppc.html, last accessed 04 July 2019, 4.00 pm.
- [5] about internships, available at <http://ashleydotson.blogspot.sg/2009/08/in-review-this-internship-has-been.html>, last accessed 04 July 2019, 10:20 am
- [6] Get ideas about file and directory details, available at <http://www.bitpapers.com/2012/12/linux-working-with-files.html>. 04 July 2019, 11.20 pm
- [7] Get the Web server concept, last accessed at http://www.webopedia.com/TERM/W/Web_server.html 04 July 2019, 10.30 am
- [8] Get ideas about DNS servers, available at http://compnetworking.about.com/od/dns_domainnamesystem/f/dns_servers.htm, end access 08 July 2019, 11:00 pm
- [9] mail server, https://www.centos.org/docs/5/html/Deployment_Guide-en-US/ch-email.html, last accessed 10 July 2019, 11:00 pm Get ideas
- [10] Get a sense of Mikrotik router, <https://en.wikipedia.org/wiki/MikroTik> 11 July 2019, 11:00 pm
- [11] The rates get ideas, <http://www.revolv.com/main/index.php?s=MikroTik> 11 Apr 2019, 12:00 am

Appendices

Appendix A: Internship Reflection

The primary goal of my internship in the professional setting is to apply the knowledge gained in classrooms to practical solutions to real-world problems. And learn about professionally relevant computational and professional setting relationships, new knowledge, skills, and ability to determine how to plan. Join the network with other professional's supervisors and professional relationships. I am a professional in the field exposure with the client and learning from professional etiquette and an understanding of the professional supervisor and dealing with other employees, as well as learning from the benefits through interaction. I am doing the right business etiquette while I take responsibility for my internship. I am implementing the Mission/vision of an organization, how to communicate with colleagues, how to share power, how it is structured, how to make decisions, how to understand the culture of a professional organization, and accountability and response.

No degree agency. My internship Supervisor offers the opportunity to take a professional opinion at the end of the evaluation and experience of running internships through separate meetings. The internship experience will be able to prepare for life in the community, leadership, and service of the world, my gift of work.

No degree agency. My internship Supervisor offers the opportunity to take a professional opinion at the end of the evaluation and experience of running internships through separate meetings. The internship experience will be able to prepare for life in the community, leadership, and service of the world, my gift of work.

Appendix B: Company Detail



Head Office

Name	Daffodil Online Limited
Address	102, Shukrabad (3rd floor), Mirpur Road, Dhanmondi, Dhaka - 1207, Bangladesh
Telephone	02-9143258-60
Fax	880-2-8116103
E-mail	info@daffodilnet.com
Website	www.daffodilnet.com
Type of Organization	NationwideInternet Service Provider (ISP)
Employees	12

Internship Report Plagiarism Check:

The screenshot shows a plagiarism check report in a software interface titled 'feedback studio'. The main content area displays a 'TABLE OF CONTENTS' for a document. The table lists sections and their corresponding page numbers. A sidebar on the right, titled 'Match Overview', shows an overall plagiarism score of 28% and a list of four matches with their respective percentages.

CONTENTS		PAGE
Approval		i
Dedication		ii
Acknowledgement		iii
Abstract		iv
Table of contents		v-vi
List of Figures		vii-viii
CHAPTER		
CHAPTER 1: INTRODUCTION		
i.1 Introduction		1
i.2 Motivations		1
i.3 Internship Objectives		2

Match Overview		
28%		
1	Submitted to Talhaul H. Student Paper	22% >
2	Alpaca (AI) Software ... Intern Paper	3% >
3	AI Paper Review ... Intern Paper	3% >
4	AI Software Review ... Intern Paper	<1% >