

INTERNSHIP ON MIKROTIK ROUTER AND LINUX (OS)

BY

Jannatul Nuran Durdana

ID: 163-15-8355

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

Supervised By

Md. Rayhan Amin

Lecturer

Department of CSE

Daffodil International University

Co-Supervised By

Anup Majumder

Lecturer

Department of CSE

Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY


DHAKA, BANGLADESH

5TH DECEMBER 2019

APPROVAL

This Project titled “**Mikrotik Router and Linux Operating System**”, submitted by Jannatul Nuran Durdana, ID No: 163-15-8355 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 05th December 2019.

BOARD OF EXAMINERS


Dr. Syed Akhter Hossain
Professor and Head

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

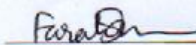
Chairman



Abdus Sattar
Assistant Professor

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner



Farah Sharmin
Senior Lecturer

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner



Dr. Md. Saddam Hossain
Assistant Professor

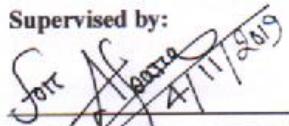
Department of Computer Science and Engineering
United International University

External Examiner

DECLARATION

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

Supervised by:



Md. Rayhan Amin

Lecturer

Department of CSE

Daffodil International University

Co-Supervised by:

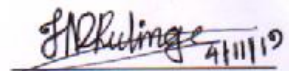
Anup Majumder

Lecturer

Department of CSE

Daffodil International University

Submitted by:



Jannatul Nuran Durdana

ID: 163-15-8355

Department of CSE

©Daffodil International University

ACKNOWLEDGEMENT

To begin with, we express our heartiest thanks and thankfulness to transcendent God for His divine blessing makes us possible to complete the most recent year adventure/passage level position successfully.

We incredibly grateful and wish our critical our commitment to Md. Rayhan Amin, Lecturer, Department of CSE Daffodil International University, Dhaka. Significant Knowledge and unmistakable interest of our administrator in the field of "Mikrotik Router and Linux Operating System" to finish this endeavor. His ceaseless tirelessness, shrewd heading, predictable help, unfaltering and vivacious supervision, profitable investigation, noteworthy appeal, scrutinizing various inferior drafts and reconsidering them at all stage have made it possible to complete this endeavor

We should thank our entire course mate in Daffodil International University, who shared in this inspect while completing the course work.

Finally, we ought to perceive with due respect the unfaltering assistance and patients of our people.

ABSTRACT

Whenever at least two PCs are prepared for interconnect and data or data, at that point we will mastermind them. We have to begin our PC volume and exchange information or information together and after that we should call some extraordinary PC servers. The framework has various capacities that are like the remarkable kind of server. For instance - static, PPPOE, website block, Tuesday firewall, interface, root, DNS, DHCP, VLAN, NAT, ARP, FTP server and scaffold. Every one of them does the contrary work and is difficult to hold a framework without them. On the off chance that the framework is associated with the Internet and we need to ensure your information, at that point they need to set up the server utilizing the Linux working framework. The explanation behind my report's choice is "Server Installation and Configuration ISP (Linux Platform)". For the predetermined server utilizing SSP, the essential for the server, programming and preparing of the item, the procedure of server taking care of and direct examination of the server were told.

TABLE OF CONTENTS

CONTENTS	PAGE NO
Acknowledgment	ii
Abstract	iii
List of Tables	iv-v
List of Figures	vi
 CHAPTER	
CHAPTER 1: Introduction	1-3
1.1 Introduction	1
1.2 Motivation	1
1.3 Internship objectives	2
1.4 Introduction to the Company	2
1.5 Report Layout	2-3
CHAPTER 2: Organization	4-6
2.1 Introduction	4
2.2 Product and Market Situation	4-5
2.3 Target Group	5
2.4 SWOT Analysis	5-6
2.5 Organization Structure	6
CHAPTER 3: Tasks, Projects and Activities	7-29
3.1 Daily Task and Activities	7-8
3.2 Event Task and Activities	8-9
3.3 Project Task and Activities	9-28
3.4 Challenges	29
CHAPTER 4: Competencies and Smart Plan	30-31
4.1 Competencies Earned	30
4.2 Smart plan	30

4.3 Reflections	31
CHAPTER 5: Conclusion and Future Career	32-33
5.1 Discussion and Conclusion	32
5.2 Scope for Future Career	32-33
REFERENCE	34
APPENDICES	35
Appendix A: Internship Reflection	
Appendix B: Company Detail	

LIST OF FIGURES

FIGURES	PAGE NO
Figure 2.4.1: Shows Screen SWOT elaborate	5
Figure 3.1: The screen shows the MikroTik router installed	9
Figure 3.2: Displays the screen display of Winbox	10
Figure 3.3: WAN shows the screen print port	11
Figure 3.4: The LAN screen displays the print port	11
Figure 3.5: Screen printed IP address shows WAN	12
Figure 3.6: Screen printed IP address shows LAN	12
Figure 3.7: The Screen Print Gateway connection shows up	13
Figure 3.8: Screen print shows IP DNS setting	13
Figure 3.9: Screen print NAT finishing display	14
Figure 3.10: Screen Print Ping End Display	14
Figure 3.11: Shows Screen Print getting IP in pc	15
Figure 3.12: Screen print setup display DHCP	15
Figure 3.13: Print all process of screen display and successfully DHCP setup	16
Figure 3.14: Screen creation shows PPPOE	17
Figure (3.15-17): Shows Screen Print create of BRIDGE process (1-3)	18-19
Figure (3.18-19): Centos shows the installation process (1-2)	20
Figure 3.20: The show in Centos shows the final process	21
Figure 3.21: Screen Display Screen Print Partition	22
Figure 3.22: Screen Centos shows the user's login page print	23
Figure 3.23: Shows Screen Print terminal	24
Figure 3.24: Simple Network with FTP Server	25
Figure (3.25-26): Print a installation screen and print a Vi configuration screen	25-26
Figure 3.27: Screen print 12 line of an anonymous enable No	26
Figure:3.28: ASCII screen can be printed and downloaded	28
Figure 3.29: Create screen print user and password set	27
Figure 3.30: Restart a service network screen print	28
Figure. 3.31: Print a username and password screen diagram	28

CHAPTER 1

INTRODUCTION

1.1 Introduction

At the point when at least two PCs are prepared for interconnect and data or data, at that point we'll orchestrate them. We've to begin the PC sound and exchange information / information together. Afterward we had to call several outstanding PC servers. This framework has a various of capacities as a special type of server. For example - Static, PPPOE, instead of website online, firewall Sunday, interface, root, DNS, DHCP, FTP server, VLAN, ARP, NAT and scaffolding. Every one of their did the contrary job & difficult to hold without their framework. In the remote possibility that the frame related to the Internet and required to safeguard your information, at that point they need to configure the server utilizing the Linux framework. The reason behind the choice of my report "Server Installation and Configuration ISP (Linux Platform)". For servers that have been determined utilizing the SSP, which is important for server, programming and prepare the items, take care and inspection procedures server directly from the server told.

1.2 Motivation

I do not now mistaken looking after my Bachelor of Engineering CSE. at Daffodil International University. Now I already understood the moral of progressively down to earth data that will unquestionably supplement the learning obviously books and will have the option to feature an increasingly complete perspective on this. In a transient activity, I realized I had talent quietly on the Linux server framework and the organization and thin parts of the Mikrotik. How to get to the website provider, I have contacted my mind well overall, talking to people, the transmission of their needs and give them a superior organization. My capacity to peruse, comprehend my sentiments significantly, rapidly works, but so noteworthy.

1.3 Objectives of the Internship

My entry level program area is housed in a certificate being forced action to exhibit ultimate goal. Thus, it is profoundly compelling in headway of expertise. It could present something of extraordinary quality myself as an expert. Construction scheduling short work still means to deal with office work, help setting dynamic arrangements and progress to work in the study room.

1.4 Company Introduction

I'm a manager while to get my preparation, Versatile Technology Ltd.. Versatile Technology Ltd. commended himself as one of the principles of co-ops specialist ISPs itself in my country. That relationship is the best known and settled in the ICT sector, where biz morale fundamental identified of long-term federation with the customer. Appears to be a crack in refurbishing the whole decennial, they're optimistic about what they have achieved, and likewise. In their dreams for the future, there was a huge increase so full of energy.

You may be convinced that their exercises began in 2005. In preceding years, they have elaborate their portfolio, work organization as reported by the purchaser proposition and solicitation sharp time. They work with a wide range of national business associations and open and complete preferences. They utilize the latest advances and improvements in the organization where necessary. Enterprise Network Solutions Division they are gifted in achieving effectiveness state framework-tech and media transmission framework with certain talents deeply interesting collection.

1.5 Report Layout

Chapter One : Described throughout the introduction of things after the motivation, internship objects.

Chapter Two : Then covered the objective SWOT analysis, organizational structure group.

Chapter Three : Featured training, manager responsibilities, various types of routing configuration (DHCP, Brigade, DNS, NAT) and basic Linux commands are described.

Chapter Four : Described skills so smart plan Earned and reflection.

Chapter Five: My report describes the conclusion and professional range of Linux operating system and Mikrotik.

CHAPTER 2

ORGANIZATION

2.1 Introduction

My business a while to get my preparation, Versatile Technology Ltd.. Versatile Technology Ltd. commended himself as one of the principles of co-ops specialist ISPs itself in my country. That relationship is the best known and settled in the ICT sector, where biz morale fundamental identified of long-term federation with the customer. Appears to be a crack in refurbishing the whole decennial, they're optimistic about what they have achieved, and likewise. In their dreams for the future, there was a huge increase so full of energy. You may be convinced that their exercises began in 2005. In preceding years, they have elaborate their portfolio, work organization as reported by the purchaser proposition and solicitation sharp time. They work with a wide range of national business associations and open and complete preferences. They utilize the latest advances and improvements in the organization where necessary. Enterprise Network Solutions Division they are gifted in achieving effectiveness state framework-tech and media transmission framework with certain talents deeply interesting collection.

2.2 Market Situation & Product

Bangladesh is deserving populace, and his goal is to be digitized by 2021. In this manner, each division and each association in our nation ought to be digitized. Therefore, IT Master and IT specialists need a tremendous number in the accompanying hardly any years. So Vesatile Online Limited gauges a basic piece of displaying movement by giving different organization as:

- Net service
- Ensure security
- Creating and developing Web Site
- Make IT Guru through efficient training

- Marketing
- Communications
- Provides a wide range of technical support for the nation
- Provides a variety of online services to users
- Provide support for the development server installation systems

So in the end, I can say that the Versatile Technology Ltd. is an important thing of computer based publicizing.

2.3. Community Target

Versatile Online Technology give numerous administrations and collection of their objectives is provided below:

- 1) Multinational association and corporate house,
- 2) Safety solution,
- 3) Domain fixation and web hosting,
- 4) Improvement of Website,
- 5) Professional courses and training,
- 6) Opening the provision of the application of the source,
- 7) Internet specialist co-op (ISP),

2.4 SWOT Analysis

SWOT means strengths, weaknesses, opportunities and threats.



Fig. 2.4.1: The display of SWOT

Qualities are characterized in three different ways Location, Uniqueness, Management.

Area: Busy midtown territory

Uniqueness: Alternative to cheap food

The executives: Wide running aptitude

Deficiencies is lack of capital and lack of fame and degree is the development of areas and showcase collection target and finally dangers are issues of rivalry and opening day.

2.5 Organizational Formation

There is such a significant number of associations in the nation and there have possess authoritative figure. Four sorts of hierarchical structure useful, at that point divisional after that grid, and flatarchy.

The network structure is testing because it can communicate with different supervisors difficult detailing and learning. In this way, it is important for workers to know their work, duty and employment inclinations.

Autarky: Although the last four authoritarian structures may work for some associations, another cross race hierarchical structure might be useful for removing or small organizations.

CHAPTER 3

PROJECTS, TASKS & PERFORMANCES

3.1 Everyday Performances

I'm a manager while to get my preparation, Versatile Technology Ltd.. Versatile Technology Ltd. commended himself as one of the principles of co-ops specialist ISPs itself in my country. That relationship is the best known and settled in the ICT sector, where biz morale fundamental identified of long-term federation with the customer. Appears to be a crack in refurbishing the whole decennial, they're optimistic about what they have achieved, and likewise. In their dreams for the future, there was a huge increase so full of energy. You may be convinced that their exercises began in 2005. In preceding years, they have elaborate their portfolio, work organization as reported by the purchaser proposition and solicitation sharp time. They work with a wide range of national business associations and open and complete preferences. They utilize the latest advances and improvements in the organization where necessary. Enterprise Network Solutions Division they are gifted in achieving effectiveness state framework-tech and media transmission framework with certain talents deeply interesting collection.

Collection month to month, month – 1, this is the first month that I learned is restricted in position while the Versatile and do the accompanying:

- IP inclined
- Sub nets
- Design of the ISP on lines
- LAN Interfaces, WAN Intefaces
- Gateway, DNS, NAT, ping
- DHCP server

Second month, this is the 2nd month of temporary job on constrained Versatile Technology Ltd. I trained and done the following:

- PPPOE
- Bridge
- Queue, Bandwidth
- Block Web sites, configure Mangle

3rd month, Versatile Technology temporary employment is limited to the last. I trained and achieved accompanies them:

- Creation of Linux.
- Order practices Linux.
- Difficult plate segment.
- Add, Delete, and Lock.
- To use of the wood.
- Basic Linux commands.
- Man, adaptation, memoir.
- Collect the client and different approvals in document.

4th month, Versatile online temporary post is limited to the last, I learned accompanying works are carried out:

- Information of various types of indexes.
- Duplicate files and registry, remove, alter, disrupt, edit.
- User company and other authorizations.
- Shell scrip.
- Managed command and backup.

3.2 Activities & Incident task

In training area, the most significant thing is to provide multiplication instruction to gifted and expert instructors. DOL does not talk about this topic. To be the good

educator, DOL maintains a fundamental asylum. To start with, competitors will sit for composed tests, at that point will have a meeting. At last, the applicant must give 3/4-exhibit classes. We should create human capital to tend to our challenge for the 21st century and training is a standout among other furniture struggle against poverty and segregation. From his expression, the online Daffodil Ltd tried to create and pass on new expertness and learning in innovative and professional education and provide important capabilities and gear for the occupation of the 21st century advertising. through which we react to understudies. Ultimately, the applicant is chosen or rejected. We usually emphasize the applicant.

To guarantee practical advancement in the public eye, So, toward the end, Versatile Online Ltd is making specialized specialists in IT division in the nation and any foreign country.

3.3 Projects's Task and Performances

3.3.1 MikroTik Router

MikroTik ls Ltd., also conversant worldwide as MikroTik. American Equipment Manufacturers Networks Group. Sold out items remotely and switch. Established in 1995, the market innovation in Europe stock was sold. By 2015, the organization has more than 200 workers, the elements of the organization are known for their choices minimal effort costly Ethernet switch .



Figure 3.1: Display the configured of MikroTik Router

3.3.2 Winbox Interface Menu

We do not have a lot of assignment including the menu interface. Basically, the menu interface is then used to interface or interfaces remark. Here, in our business, we will change the name ether1 as Ether 1-WAN, which will provide a superior comprehension of the association Ether 1 WAN. It may be noted with Ether 1 that is used for WAN association.

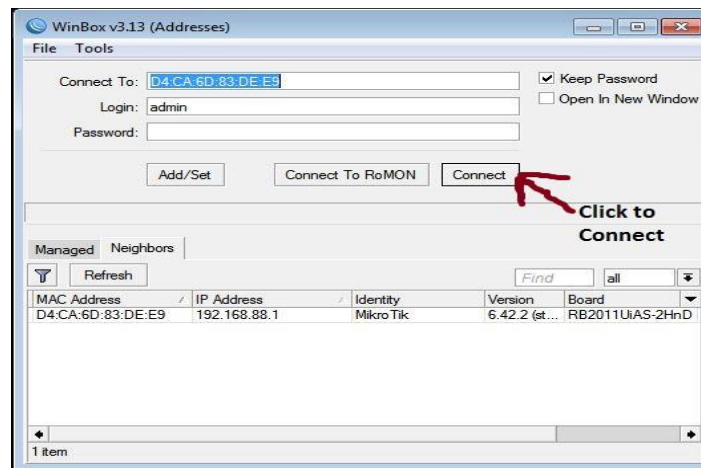


Figure 3.2: Display the on-screen Winbox

3.3.3 Static Configuration

Formation of total employment microcontroller framework switch, we just need to set the interface. Provide a password for the virtual machine (if set secret key, generally leaves the field remove the secret word) . An Interface WAN, LAN

- The IP address WAN, LAN
- Gateway
- DNS
- NAT
- IP set computer
- Ping
- Interfaces WAN, LAN

Interface WAN, LAN

Firstly, we click then again click Quick Setup ether port 1 then the statement is-one is the WAN port

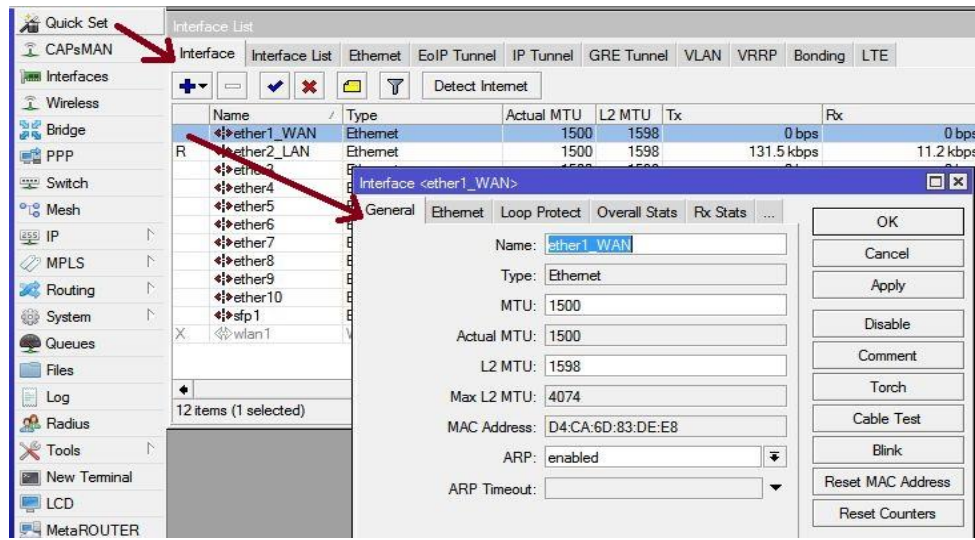


Figure 3.3: Shows the WAN screen print port No

Now we click quick set then click to ether port 2 then declaration either-2 is port no of LAN

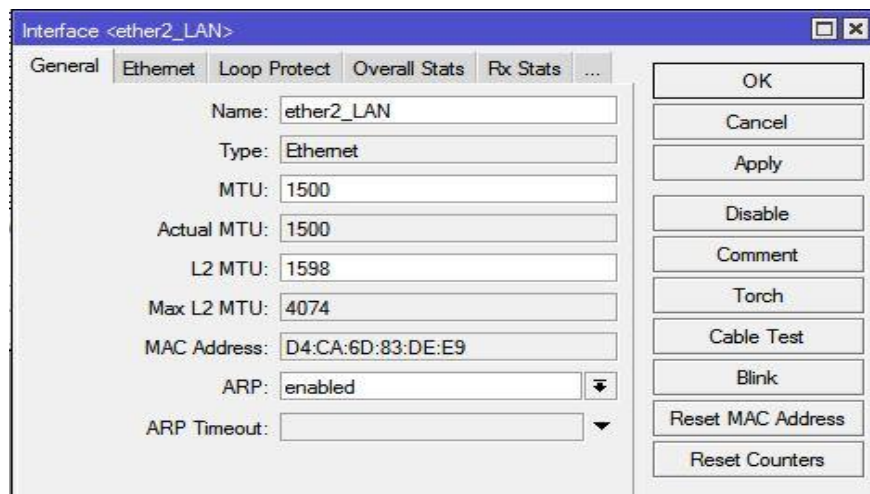


Figure 3.4: Displays the LAN screen print port No

IP address WAN, LAN

IP > Address > Address List > + > Address 10.10.10.120/24 > interface (ether1_WAN)

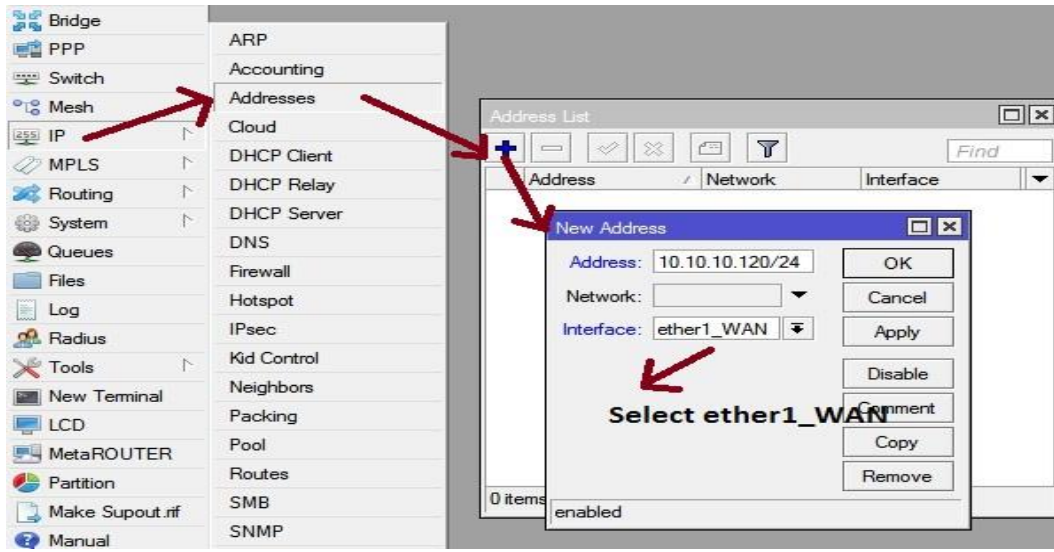


Figure 3.5: Screen printed IP address shows WAN Port configure

IP > Address > Address List > + > Address 192.168.0.1/24 > interface (ether2_LAN)

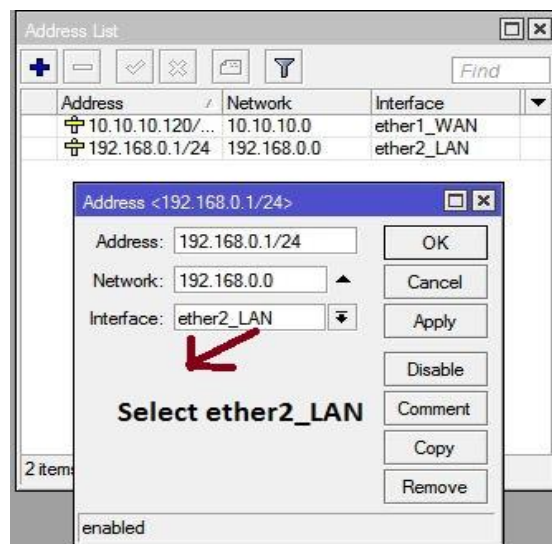


Figure 3.6: Shows screen printing IP address LAN port

Gateway

IP > routes > + > Gateway 10.10.10.1 > Apply > ok

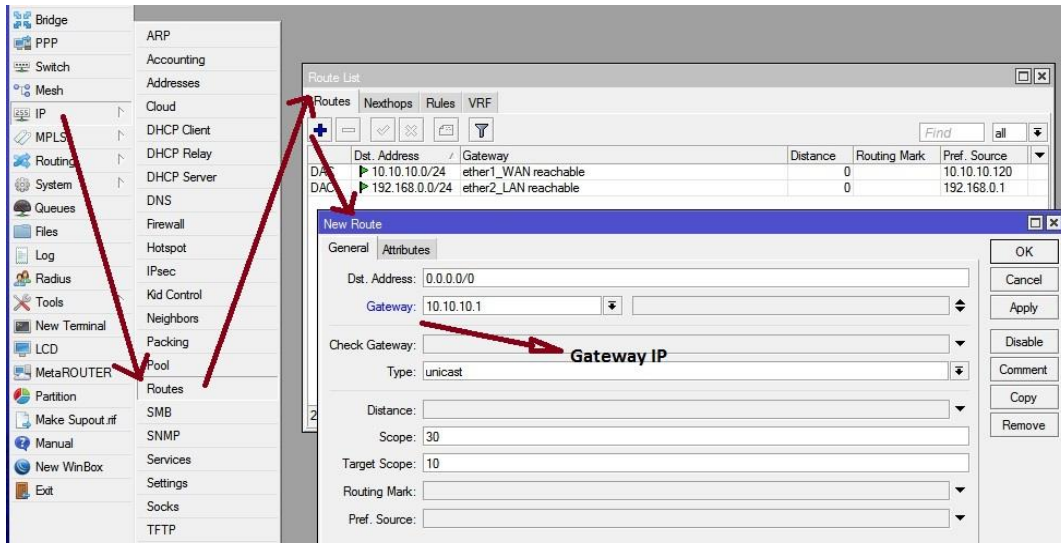


Figure 3.7: showing up the design of screen Print Gateway connection

DNS

Domain name system IP > DNS > server 203.190.10.252

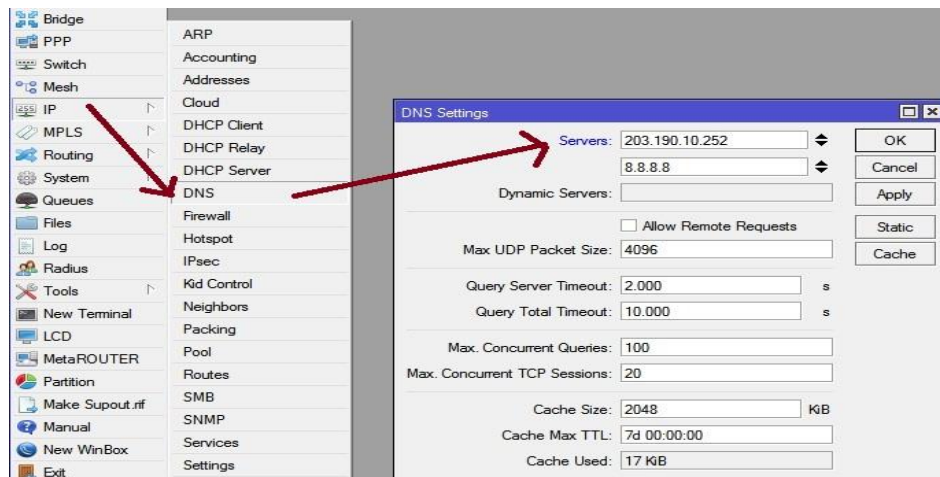


Figure 3.8: Shows IP DNS setting Criteria

NAT

Network address translation IP > Firewall > NAT > + > Action masquerade

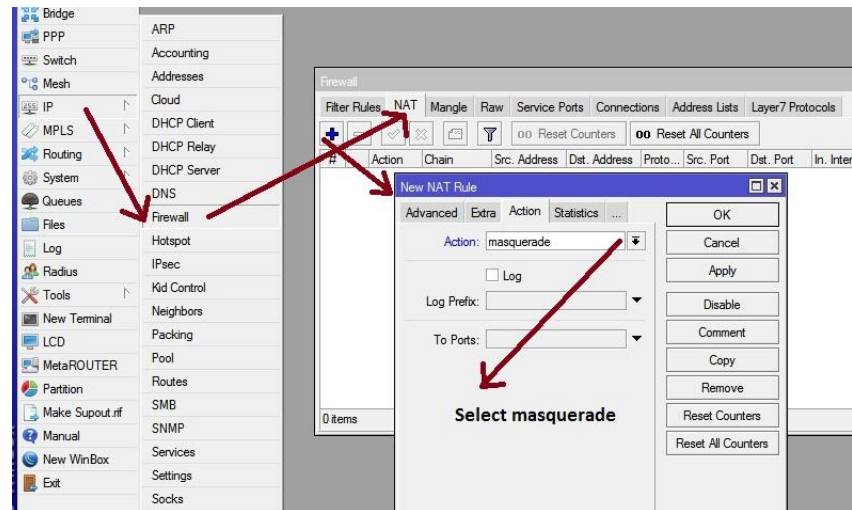


Figure. 3.9: Shows the NAT finishing display window

Ping

After that command ping 8.8.8.8 to the new terminal click then press enter a command

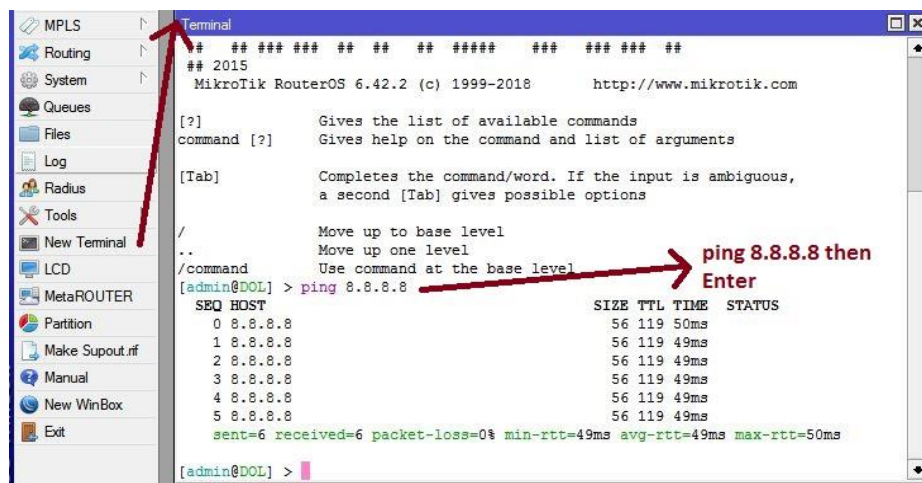


Figure. 3.10: Showing Ping end display

IP set Compute

Snap to web association symbol at that point system setting after that change connector alternative then Ethernet, Now snap to right fasten then properties and use IP address and DNS server address

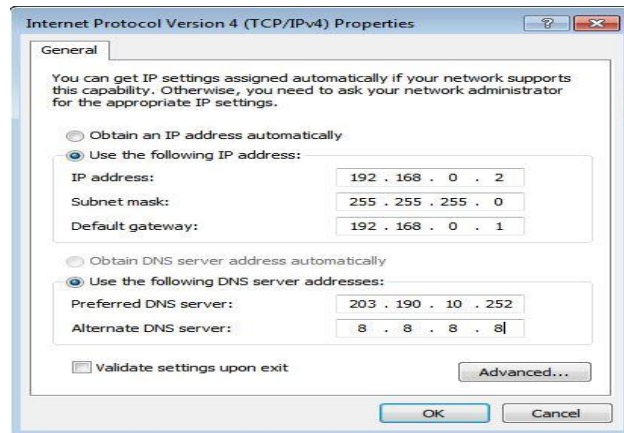


Figure 3.11: Shows Screen Print getting IP in pc configure

3.3.4 DHCP Server

The DHCP server incorporates both server and customer part. DHCP hand-off, DHCP customer, different DHCP systems, static and dynamic DHPP arrangements, radio help tiny switch working frameworks incorporate DHCP or Dynamic Host Control Protocol. DHCP is utilized for simple dissemination of IP addresses in neighborhood.

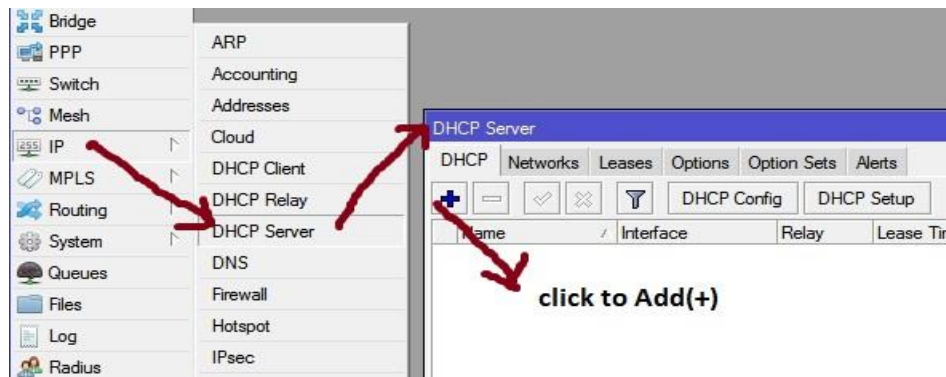


Figure 3.12: Screen print setup display DHCP configure

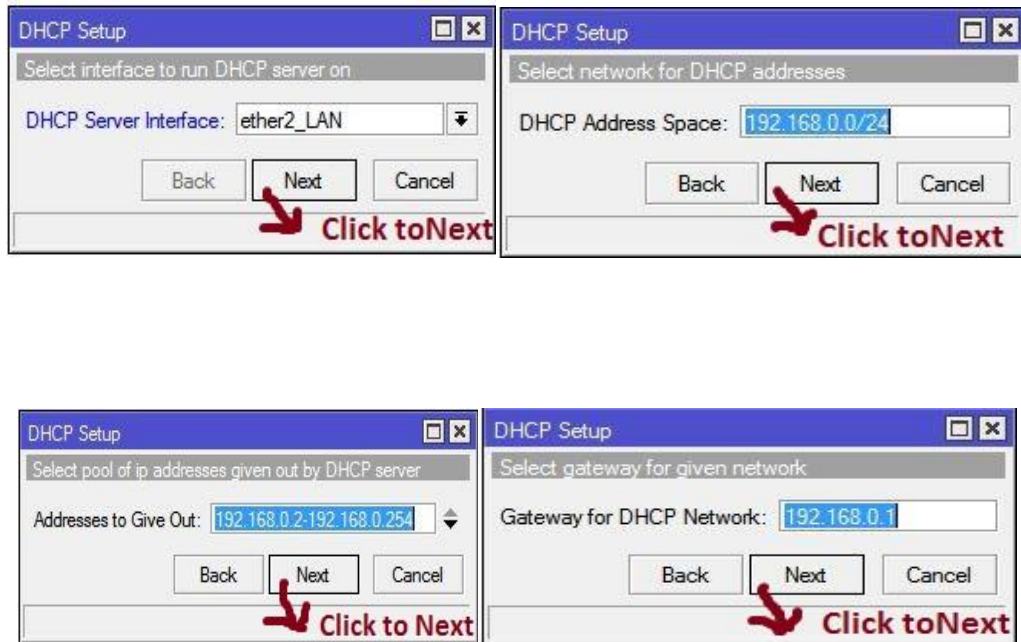


Figure 3.13: Print all process of screen display and successfully DHCP setup

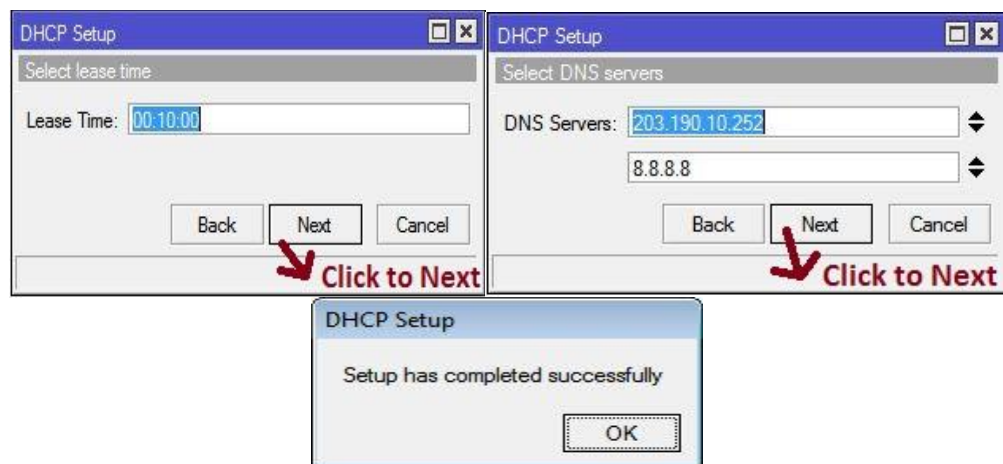


Figure. 3.13: Print all process of screen display and successfully DHCP setup window

3.3.5 PPPOE

Point-to-Point Protocol over Ethernet first thing in the PPPOE IP then pool then add (+) and create name then given address

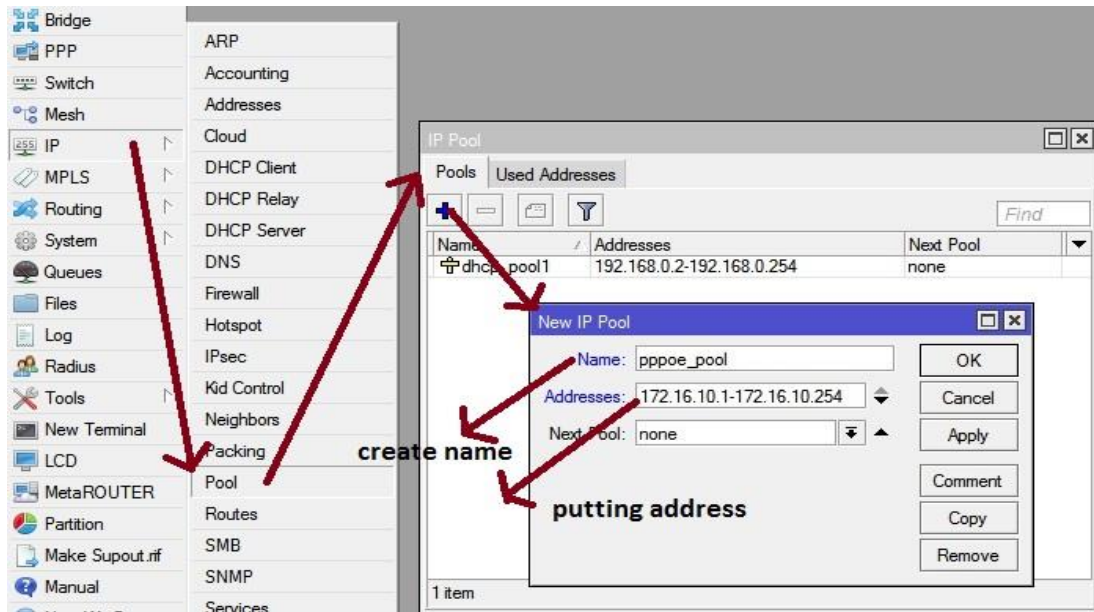


Figure. 3.14: Screen creation shows PPPOE diagram

3.3.6 Bridge

The extension can make a sensible interface. This extension interface empowers to consolidate between at least two physical interfaces or physical and consistent interfaces. Name other interface and snap OK. Thus, to make a scaffold association, make another interface with the given name, click "connect". At that point click on the extension tab "+" will open another window.

Step :1

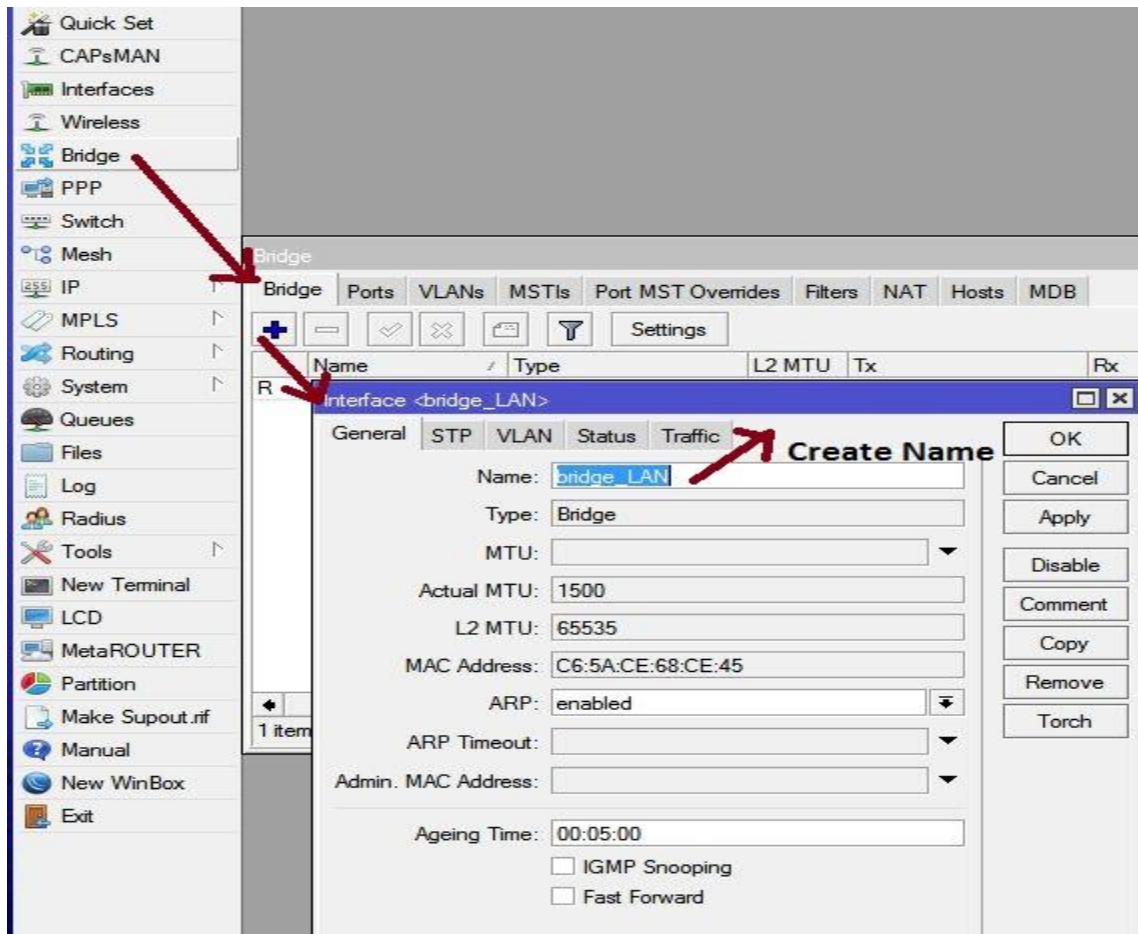


Figure. 3.15: Shows Screen Print create of BRIDGE process (1) diagram

Step 2

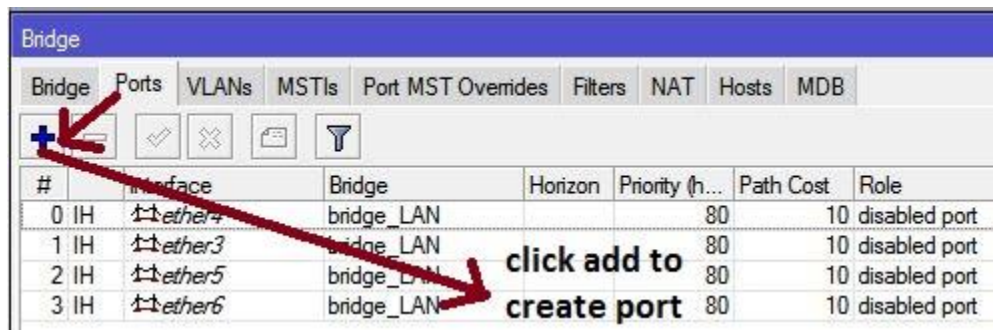


Figure. 3.16: Shows Screen Print create of BRIDGE process (2) diagram

Step 3

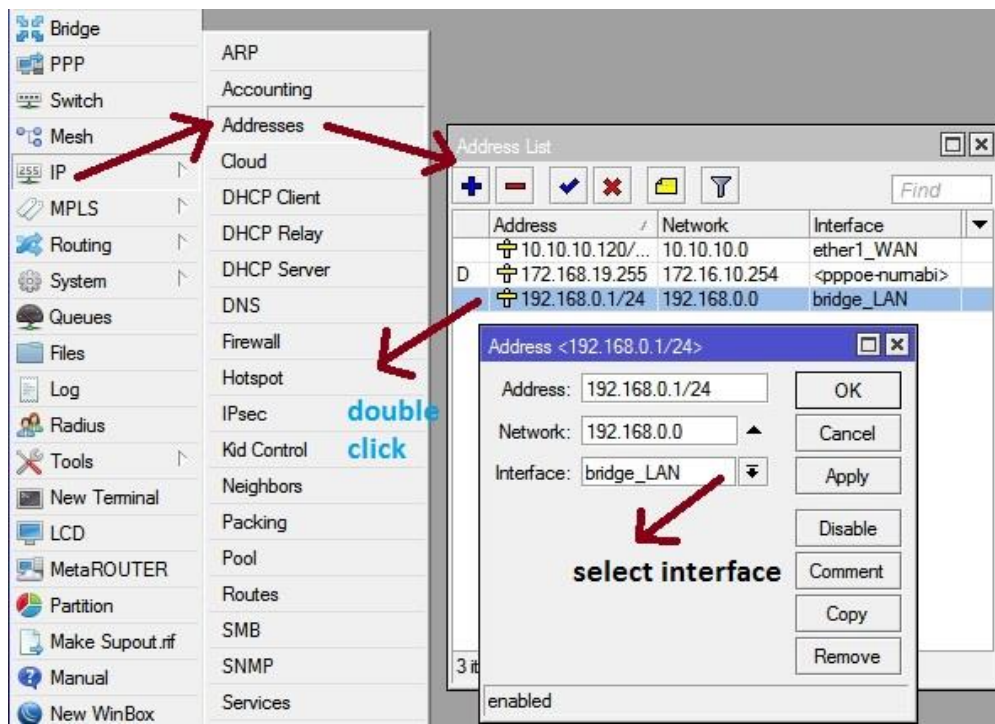


Figure. 3.17: Shows Screen Print create of BRIDGE process (3) diagram

3.3.7 LINUX

Linux is the best-known and most-used [open source](#) operating system. As an operating system, Linux is software that sits underneath all of the other software on a computer, receiving requests from those programs and relaying these requests to the computer's hardware.

For the purposes of this page, we use the term “Linux” to refer to the Linux kernel, but also the set of programs, tools, and services that are typically bundled together with the Linux kernel to provide all of the necessary components of a fully functional operating system. Some people, particularly members of the Free Software Foundation, refer to this collection as GNU/Linux, because many of the tools included are GNU components. However, not all Linux installations use GNU components as a part of their operating system. [Android](#), for example, uses a Linux kernel but relies very little on GNU tools.

3.3.8 Installation Centos diagram

CentOS Linux OS version. Centers have been setting up for enterprise operating systems, it is a distribution of Linux operating systems depends on RHEL (Red Hat Enterprise Linux) and currently the most popular Linux distributions for web servers system.

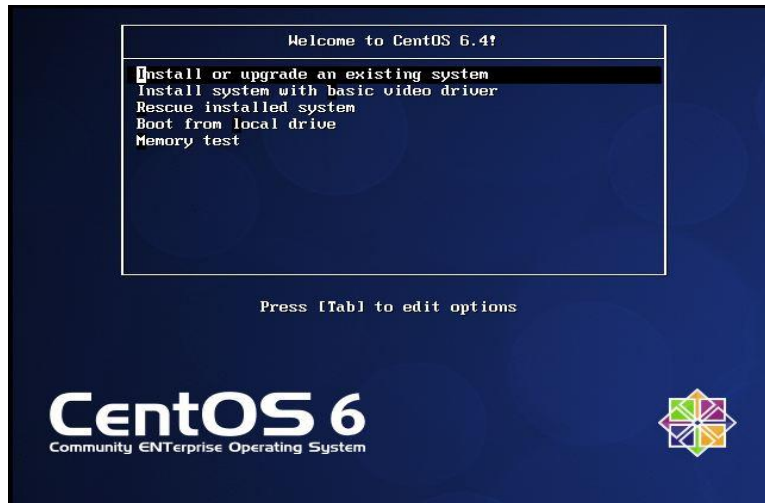


Figure. 3.18: Centos shows the installation process (1) diagram

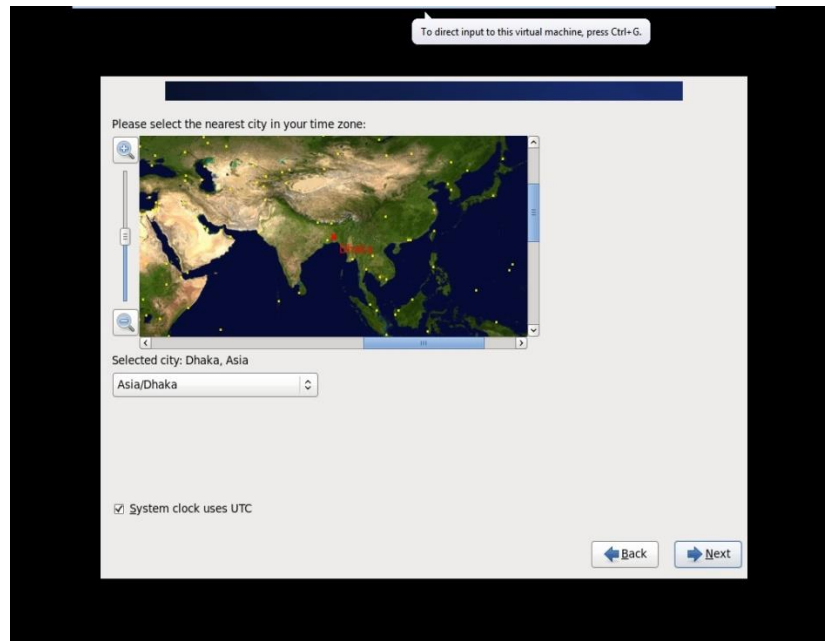


Figure. 3.19: Centos shows the installation process (2) set time zone setting



Figure. 3.20: Show in Centos shows the final process diagram

3.3.9 Building a Partition of Linux

Creating Linux in Partition

To install Linux, we need to create root / boot, (/), swap, / home for our partitions in the system.

Root Partition: /

There is a root partition where "/" is located on the root partition, where all the files (except boots) are located in the root directory system. Minimum 5 GB HDD space is needed for this system.

Boot Partition: /boot

Parcel Boot (200 MB): The segment mounted on/boot/with the records utilized during the bootstrap procedure contain the working framework portion (which enables your framework to boot Linux). Because of limitations, you should make a nearby ext3 parcel to hold these documents. For most clients, a 200 MB boot segment is adequate.

SWAP Partition: swap

Segment swap is utilized to help virtual memory. In different hands, the information is kept in touch with a swap segment when there isn't sufficient RAM to store the prepared information on your framework. Segment Swap 2 GB virtual RAM for 2 GB of physical RAM, and afterward any sum over 2 GB ought to be equivalent to 1x physical RAM, yet it can't be under 32 MB

/home Partition: /home

Fill the mount point / home and maximum allowed size in the system

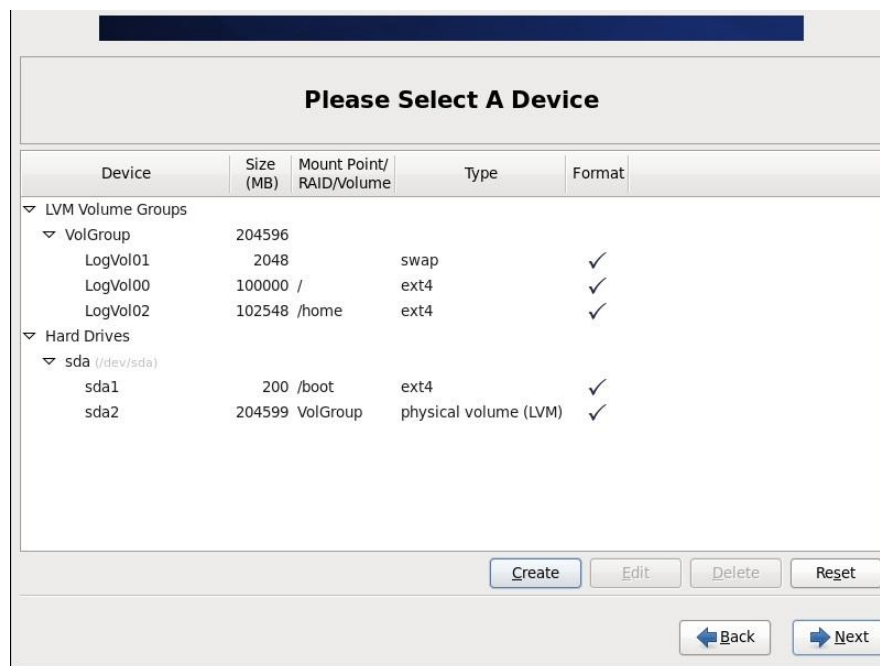


Figure 3.21: Display Screen Print Partition diagram

3.3.10 Files and Directories

A gathering of registries and/or different indexes. Since an index can do it.

On the off chance that there are different indexes, we get a registry arrangement. Top degree of control

Unique catalog Files and indexes can be named by away. Unique registry

Is alluded to as/Other catalogs are determined by the way. Framed the way

Discrete by name/by a record can be indicated by way. In the event that it's the index, at that point

The way could end with a/. A flat out way index begins with order process and name registry or document under it. For instance:/and so on/hostname specifies the host name of the above document host name in the root index of the root registry.

3.3.11 User login and Terminal Interface

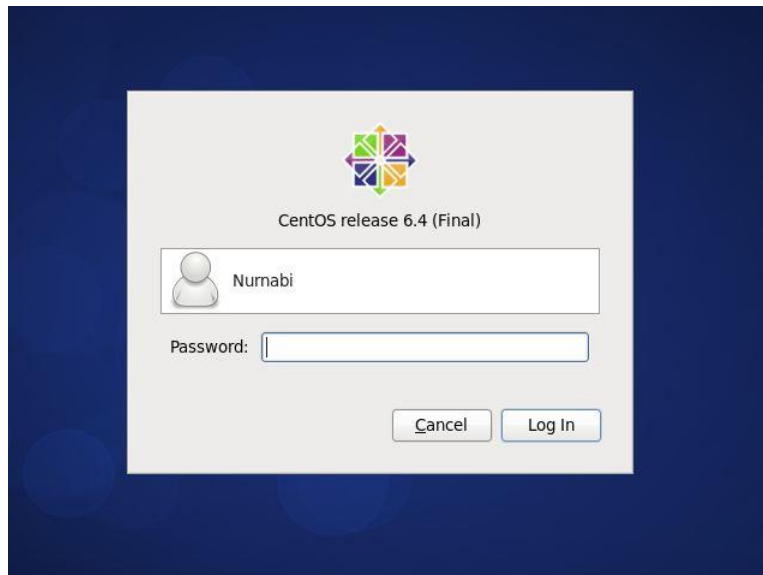


Figure. 3.22: Screen Centos shows the user's login page print diagram

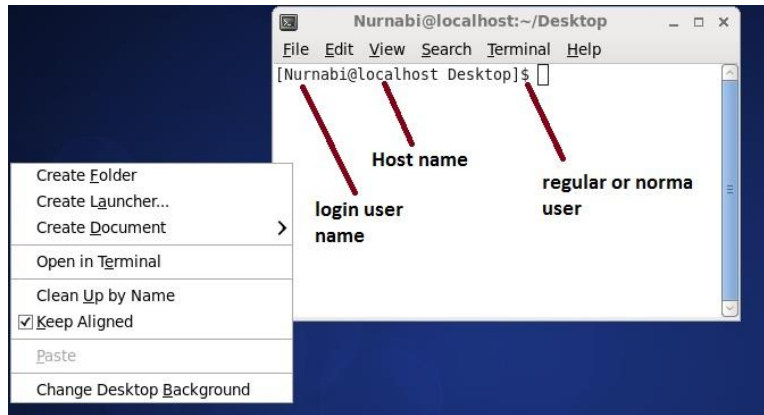


Figure 3.23: Shows Screen Print terminal diagram

3.3.12 Basic Command

- uname
- uname -a
- cat/proc/meminfo
- date
- cal
- cal 2019
- hostname
- pwd
- poweroff
- init 0
- shutdown -h now
- Whoami
- /root/home
- clear
- history
- df -Th
- lsblk
- lscpu
- cat/etc/redhat -release
- free -m

3.3.13 FTP Server (File Transfer Protocol) criteria

FTP is a widely used network protocol for transferring files between computers over a TCP/IP-based network, such as the Internet. FTP lets people and applications exchange and share data within their offices and across the Internet. FTP was one of the first technologies developed to solve this common need, and it remains, with several generations of enhancements, the second most popular protocol used today (after HTTP or the "World Wide Web").

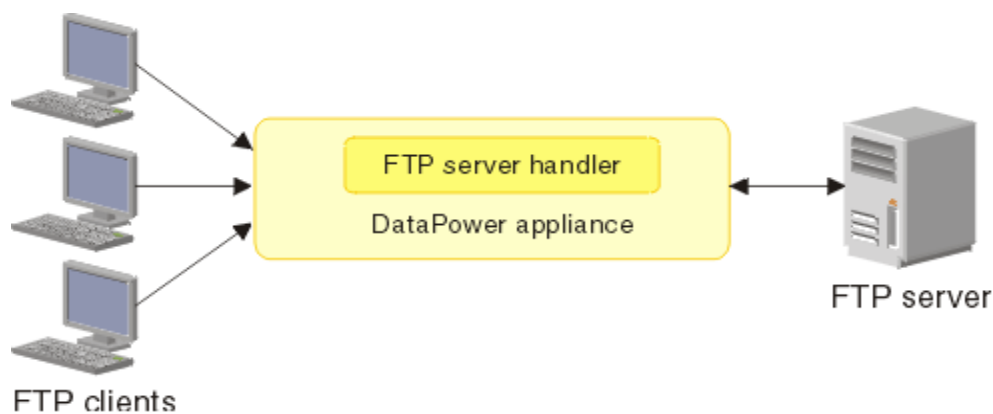


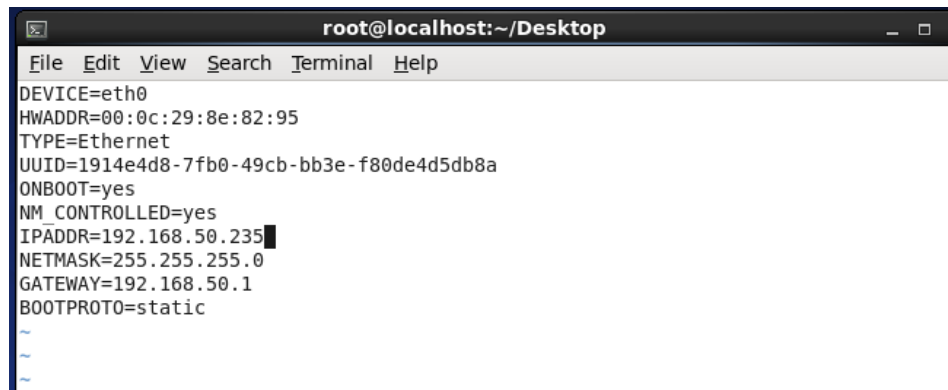
Figure. 3.24: Simple Network with FTP Server diagram

Step 1 Install yum and the command is given bellow: yum install vsftpd

```
[root@localhost Desktop]# yum install vsftpd*
Loaded plugins: fastestmirror, refresh-packagekit, security
Loading mirror speeds from cached hostfile
* base: mirror.dhakacom.com
* extras: mirror.dhakacom.com
* updates: mirror.dhakacom.com
base | 3.7 kB | 00:00
extras | 3.4 kB | 00:00
updates | 3.4 kB | 00:00
Setting up Install Process
Package vsftpd-2.2.2-24.el6.x86_64 already installed and latest version
Nothing to do
[root@localhost Desktop]#
```

Figure 3.25: Show of a Yum installation

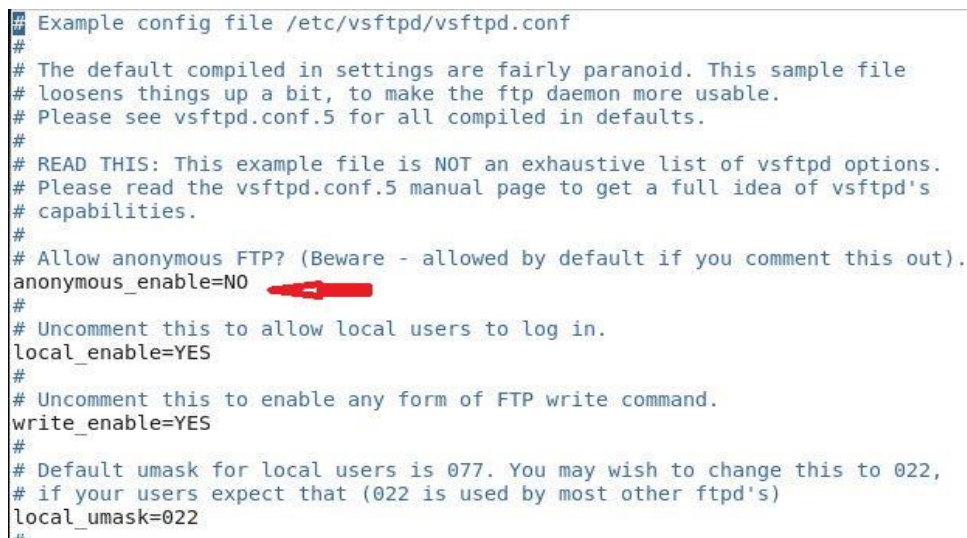
Step 2 Now input vi editor and command vi /etc/vsftpd/vsftpd.conf Then press Enter key



```
root@localhost:~/Desktop
File Edit View Search Terminal Help
DEVICE=eth0
HWADDR=00:0c:29:8e:82:95
TYPE=Ethernet
UUID=1914e4d8-7fb0-49cb-bb3e-f80de4d5db8a
ONBOOT=yes
NM_CONTROLLED=yes
IPADDR=192.168.50.235
NETMASK=255.255.255.0
GATEWAY=192.168.50.1
BOOTPROTO=static
~
~
~
```

Figure. 3.26: Print screen of a Vi Configuration diagram

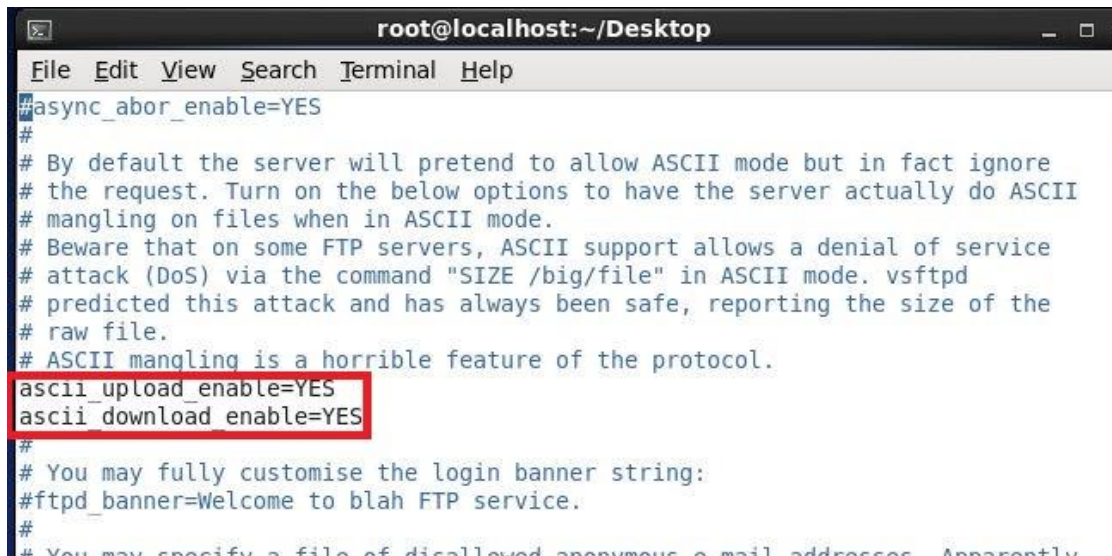
Step 3 Now click the “Esc” button and enter the command then display this page. If the line changes then I will delete YES and write NO and save the page sets



```
# Example config file /etc/vsftpd/vsftpd.conf
#
# The default compiled in settings are fairly paranoid. This sample file
# loosens things up a bit, to make the ftp daemon more usable.
# Please see vsftpd.conf.5 for all compiled in defaults.
#
# READ THIS: This example file is NOT an exhaustive list of vsftpd options.
# Please read the vsftpd.conf.5 manual page to get a full idea of vsftpd's
# capabilities.
#
# Allow anonymous FTP? (Beware - allowed by default if you comment this out).
anonymous_enable=NO
#
# Uncomment this to allow local users to log in.
local_enable=YES
#
# Uncomment this to enable any form of FTP write command.
write_enable=YES
#
# Default umask for local users is 077. You may wish to change this to 022,
# if your users expect that (022 is used by most other ftpd's)
local_umask=022
#
```

Figure. 3.27: Screen show 12 line of an anonymous enable No

Step 4 We have to download and download ASCII to press Esc button and write commands = Yes then show this page. Press the Enter key. Save this page setting



```
root@localhost:~/Desktop
File Edit View Search Terminal Help
#async_abor_enable=YES
#
# By default the server will pretend to allow ASCII mode but in fact ignore
# the request. Turn on the below options to have the server actually do ASCII
# mangling on files when in ASCII mode.
# Beware that on some FTP servers, ASCII support allows a denial of service
# attack (DoS) via the command "SIZE /big/file" in ASCII mode. vsftpd
# predicted this attack and has always been safe, reporting the size of the
# raw file.
# ASCII mangling is a horrible feature of the protocol.
ascii_upload_enable=YES
ascii_download_enable=YES
#
# You may fully customise the login banner string:
#ftpd_banner=Welcome to blah FTP service.
#
# You may specify a file of disallowed anonymous e-mail addresses. Apparently
```

Figure 3.28: ASCII screen can be printed and downloaded file

Step 5 User created and set the password



```
root@localhost:~/Desktop
File Edit View Search Terminal Help
[root@localhost Desktop]# useradd Nurnabi
[root@localhost Desktop]# cat /etc/passwd |grep Nurnabi
Nurnabi 505:507::/home/Ripon:/bin/bash
[root@localhost Desktop]# usermod -s /sbin/nologin Nurnabi
[root@localhost Desktop]# cat /etc/passwd |grep Nurnabi
Nurnabi 505:507::/homeNurnabi/sbin/nologin
[root@localhost Desktop]# passwd Ripon
Changing password for user Nurnabi
New password:
BAD PASSWORD: it is too simplistic/systematic
Retype new password:
passwd: all authentication tokens updated successfully.
[root@localhost Desktop]#
```

Figure. 3.29: Create screen print user and password set

Step 6 Now I restart and press the network key again by restarting the command

```
[root@localhost ~]# service NetworkManager status [ OK ]
NetworkManager (pid 1405) is running...
[root@localhost ~]# service NetworkManager stop
Stopping NetworkManager daemon: [ OK ]
[root@localhost ~]# check NetworkManager off
bash: check: command not found
[root@localhost ~]# check NetworkManager off
bash: check: command not found
[root@localhost ~]# chack NetworkManager off
bash: chack: command not found
[root@localhost ~]# check Networkmanager off
bash: check: command not found
[root@localhost ~]# chkconfig NetworkManager off
[root@localhost ~]# service NetworkManager status
NetworkManager is stopped
[root@localhost ~]# service network restart
Shutting down interface eth0: [ OK ]
Shutting down loopback interface: [ OK ]
Bringing up loopback interface: [ OK ]
Bringing up interface eth0: [ OK ]
[root@localhost ~]#
```

Figure. 3.30: Restart a service network screen print diagram

Step 7 Then I will open the browser and ftp: //192.168.50.235 and will show this page.
Here I'll type the username and password setting in diagram

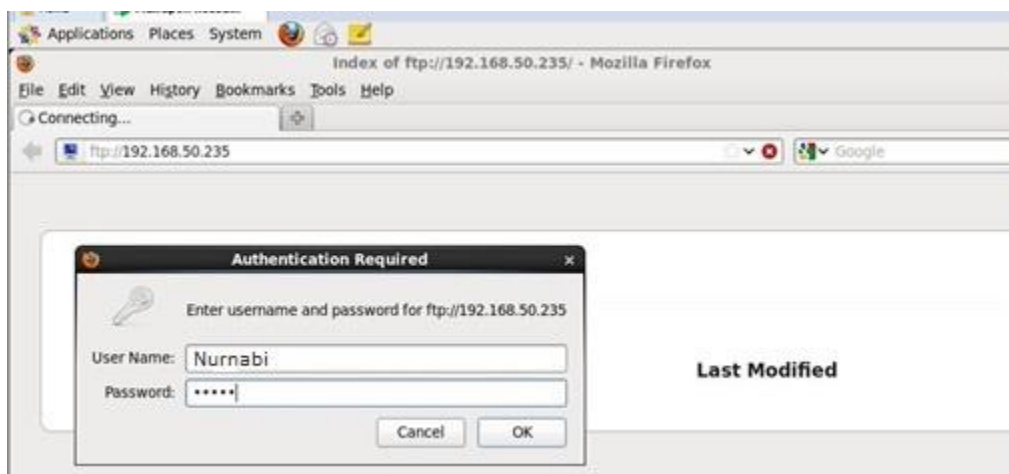


Figure. 3.31: Print a username and password screen diagram

3.4 Challenges

It is hard to think about joining as a strong association when your transitory area can be reestablished. Brief errands there is a probability of noteworthy undertakings engaged with workplaces up until this point, and afterward they can be tried and how the framework decides how to look. Brief area is their own boundary! I will cover some of the concerns with many soldiers help.

But remember all. As an intern these may face various challenges in the given

Given below:

- Get in with work spacing.
- Some systems have the power to achieved
- Compare with quality and the official decency.
- Building relationships associated with such authorization.
- Expert to see the self-offensive activity.
- Get some awards from the organization.
- Usage candied dialect with the authority for similarity.
- Disclose the incidental range with clients of various levels.
- Efficient and keep cool customer convenience.
- In the end all lining is facing several different problems add above.

Last of all, I can say that you can't reach success without test. Alongside these rows, in the process of your prosperity, each of our exams will be taken seriously in the system.

CHAPTER 4

SMART PLAN AND COMPETENCIES

4.1 Competencies Earned

Explicit questions towards the end of the frame, the question of Linux, and understanding of driving. Because conditions indicating situation, we are present two new mistakes. I accept the Model Framework, Model Linux provide an answer that was later expanded or later. radial carbide plant quality and rotation device manufacturer excellent cutting application.

Screenplay: see about meeting basic Linux first-class, college, life sciences, server and storage bar structure response, national security through the core development strategies.

4.2 Smart Planning

A training outcome is showing a technique depends on what comes understudy, and he has the power to obtain or other to do so. For the gift and extradition system and Datacenter Server machine, for example, drive a part of the Linux programming capacity to spend, for example LDAP HA, adjustment of the review program performance, evaluation of the position impermanent and field. The office stores the Association of many students new results of universal education: Collecting and sorting a business point of temporary position of interest. Submit a review dilapidated Linux. Design review the results and the formation of programming and redesigns; brain, orchestrate and control the sorting of the administrations of the employer. Moreover, the statement of results always, the work of temporary employment in the hierarchical technique and monitoring system on site.

4.3 Reflections

Your brief location can be restored, while it's miles tough to recognize about joining the marketing organization as a supportive. Brief responsibilities can nevertheless be vital in the environmental surroundings after which they are able to fall into the exam and you'll must decide how the method will be found. Temporary region is without their very own barrier! I am going to cover some issues with many assisted fighters.

Finally, we are able to say that there is no success if there's no take a look at. Similarly to these strains, inside the method of your prosperity, every of our tests could be taken critically.

CHAPTER 5

CONCLUSION AND CAREER

5.1 Conclusion

Growing this brief job purpose and creating ISP setup and management at the Linux platform. The access-level role centers offer fundamental information communicate, Linux necessities, Linux machine administration, and advance network setting and more portion. However it's far completely loose because of the whole management. This is about all styles of system advantages, web server programs, telnet, ssh, ftp, dns, mail and greater. There may be an extremely good chance to study the framework programming in Linux with interference. Since the source code is available to us and the guideline and co-worker's average machine, we can perform a little searches. Diverse elements of Linux were created as experimental or entrepreneurial features, as an instance, postgraduate posts. Fully included, firm UNIX working framework, with plenty of unfastened-contact programming equipped to support the Linux elite machine administration, makes Linux programming a best that makes it a minimum attempt, stable, bedstead processing layer suitable for company server conditions. These complete hand-courses will assist you examine and adapt the function, management, and control of the studying server for challenge-based gadget management. Learn the way you need to introduce additional, update programming components with the greater element current paperwork and enhance server security. Linux OS is the useful framework that provides strong output, solid and powerful authentication of successful management. We do no longer make decisions in this effective structure.

5.2 Scope for Career

In a short time of this temporary work initiative, I mechanically carried out put Linux on pupa Linux to implement future automation for computerized auto completion extensions for soc Linux. Diploma payment initiatives / tasks and fixed time-gauge. In this situation

there may be internet availability devices, for example, a web program and an electronic mail patron that allows the client to take a shot at the internet without having to get the essential framework for their gadgets - no matter whether or not windows is working. Impressions gadget, for instance, cellular smartphone and pad and further netbook device - small laptop right gadget, a small a part of their larger accomplice's principal advantages, extra sturdy effective bundles

Linux is an incredible and huge work framework that you may research with the aid of education, i appear to signify any one start running with Linux in your new and a rookie. I'm able to restore it and maybe it is able to make it much less tough. There is no defect in representing particular authority in a particular programming dialect, but it does not let you symbolize it. What's a Linux programmer and engineering paintings discipline? What are the favelas choice approach to get a transient job at a starting?? Computer and notice pad laptop framework bios release Linux, which enables customers to begin their devices inside a few seconds.

REFERENCES

- [1] All information about Linux: [http://www.webopedia.com/TERM/L/linux_os.html] visit this site 20th July 2019 at 11:00pm.
- [2] Linux installation, Partition, Basic command, Shell and kernel, group
- [3] [<http://www.placementprofession.com/2011/09/linux-interview-question.html>] visit this site 7th July 2019 at 09:00pm.
- [4] About DOL available info at: [<http://www.daffodilnet.com/>] visit this site 1st July 2019 at 11:30pm.
- [5] [<https://books.google.com.bd/books?id=EQWwCAAAQBAJ>] last time visit this site 28 June 2019 at 4:00pm
- [6] Department information: www.centos.org/docs/5/html/5.2/Installation_Guide/s2-diskpartrecommen-ppc.html, last time visit on on 27 June 2019, 11.00pm.
- [7] All information about server: [https://en.wikipedia.org/wiki/File_Transfer_Protocol] last time visit at 23 June 2019 at 2:00pm.
- [8] Get ideas about MikroTik Router [<https://en.wikipedia.org/wiki/MikroTik>] last time visit 2 June 2019, 09:00am

APPENDICES

Appendix A: Internship Reflection

I probably would guarantee that every assistant was given an extraordinary activities to provide safe working conditions, efficient progress. UNIX and Linux Server shell hooks general popularity with the business enterprise open source open-framework-speaking Linux open source operating framework. In fact, the form of painting used for the layout of the Linux server. Theoretically, Linux is seen as the most simple, adaptable, effective server capabilities-primarily based. My motive is to provide a safe workplace. Studying of the business enterprise Linux server from the server, we can communicate about the cause of working on a painting while and make the association. Today, most sources using Linux sport framework. Global framework.

Appendix B: Company Detail

I am a temporary trading company for my training, future technology in the limited line. Narcissus in line ltd. Praised as a company leading ISP provider in Bangladesh. It seems to be an extreme improvement of the entire decade of the last decade are very happy for what they have done, and likewise have a big boom in its prospects for the future. They work with many companies throughout the country and the authorities and corporations are quite preferential. This is an organization with experience and established ICT in their main rules of the trading company is related to long-term relationships with their customers. Modern improvement and reconstruction of the administration where they wanted. His department enterprise networking solutions is professional in acquiring the maximum green specialized collection was superior skills and the means of transmission of the machine. You may be convinced that their sports began in 2002. In previous years, increased its portfolio of process and administration in accordance with the recommendation of the buyer and request a revered time.