

PROFESSIONAL TRAINING REPORT

at

**Sathyabama Institute of Science and Technology
(Deemed to be University)**

Submitted in partial fulfillment of the requirements for the award

of Bachelor of Technology Degree in
Information Technology

By

KAVEYHA G

(Reg. No.39120052)



DEPARTMENT OF INFORMATION TECHNOLOGY

SCHOOL OF COMPUTING

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

JEPPIAAR NAGAR, RAJIV GANDHI SALAI,

CHENNAI - 600 119

NOVEMBER 2021



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited with "A" Grade by NAAC

Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119.

Phone: 044 - 2450 3150 / 51 / 52 / 54 / 55 Fax: 044 - 2450 2344

www.sathyabama.ac.in



SCHOOL OF COMPUTING

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **KAVEYHA G (Reg No. 39120052)** and who carried out the project entitled "**SAMBA SERVER CONFIGURATION**" under our supervision from June 2021 to November 2021.

INTERNAL GUIDE

Dr. A. SIVASANGARI M.E., Ph.D.,

HEAD OF THE DEPARTMENT

Dr. R. SUBHASHINI M.E., Ph.D.,

Submitted for Viva voce Examination held on _____

Internal Examiner

External Examiner

DECLARATION

I **KAVEYHA G (Reg No:39120052)** hereby declare that the Project Report entitled "**SAMBA SERVER CONFIGURATION**" done by me under the guidance of **Dr. A. SIVASANGARI M.E., Ph.D.**, is submitted in partial fulfillment of the requirements for the award of Bachelor of Technology degree in Information Technology.

DATE:

PLACE: CHENNAI

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

I am pleased to acknowledge our sincere thanks to Board of management of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey our thanks to **Dr. T. SASIKALA M.E., Ph.D.**, Dean, School of Computing and **Dr. R. SUBHASHINI M.E., Ph.D.**, Head of the Department, Department of Computer Science and Engineering for providing us the necessary support and details at the right time during the progressive reviews.

I would like to express our sincere and deep sense of gratitude to our Project Guide **Dr. A. SIVASANGARI M.E., Ph.D.**, for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express our thanks to all Teaching and Non-teaching staff members of the Department of **INFORMATION TECHNOLOGY** who were helpful in many ways for the completion of the project.

TRAINING CERTIFICATE



Red Hat

Certificate of Participation

Kaveyha G

has attended and successfully completed

Red Hat Certified System Administrator, ON-LINE course

at Sathyabama Institute of Science and Technology

held from 1st Sep 2021 to 22nd Sep 2021




Authorised Signatory
S.No : 2021/ADV/11970
Date : 27th Oct 2021

ABSTRACT

Samba is the standard Windows interoperability suite of programs for Linux and Unix. Samba is an important component to seamlessly integrate Linux/Unix Servers and Desktops into Active Directory environments. Samba is configured using the smb.conf file. This is a simple text file designed to look a lot like those *.ini files used in Windows. The goal, of course, is to give network administrators familiar with Windows something comfortable to play with. Over time, though, the number of things that can be configured in Samba has grown, and the percentage of Network Admins willing to edit a Windows *.ini file has shrunk. For some people, that makes managing the smb.conf file a bit daunting. It can function both as a domain controller or as a regular domain member. To develop a efficient Samba server for a corporate to promote their business Developing a well defined file accessing system. Developing the external programs to link with other applications like mail, database, news, chat etc.

CHAPTER No.	TITLE	PAGE NO.
	ABSTRACT LIST OF FIGURES	i ii
1.	INTRODUCTION 1.1 LINUX 1.2 OUTLINE OF THE PROJECT 1.3 ORGANIZATION OF THE REPORT	1 1 1
2.	AIM 2.1 AIM 2.2 PROBLEM STATEMENT 2.3 LITERATURE REVIEW 2.4 SCOPE	2 2 2 3
3.	ALGORITHMS AND METHODS 3.1 GENERAL 3.2 ALGORITHM 3.3 PROJECT DESCRIPTION 3.4 SUMMARY	4 5 5 5
4.	SYSTEM IMPLEMENTATION 4.1 REQUIREMENTS 4.2 ROLE OF LINUX	7 7

	4.3 RESULTS	8-9
CHAPTER NO	TITLE	PAGE NO
5.	CONCLUSION AND FUTURE WORK	
	5.1 CONCLUSION	10
	5.2 FUTURE WORK	10
	REFERENCES	20
	APPENDIX	
	A. STEP BY STEP PROCEDURE	11-17
	B. SOURCE CODE	18-19

FIGURE NO.	LIST OF FIGURE	PAGE NO.
3.3.1	SAMBA SERVER WITH FILES SHARING AND PRINTER	6

CHAPTER 1

INTRODUCTION

1.1 LINUX

Linux is considered one of the most popular operating systems for security researchers and hackers. The open source operating system is usually used for building technologies as it offers developers much room for changes. Linux is used on many servers, hardware platforms, gaming platforms etc. So it is necessary for anyone, who is seeking a career in system administrator or wants to become a Linux pro or to understand, join best Linux training course in Noida.

1.2 OUTLINE OF THE PROJECT

- To develop a efficient Samba server for a corporate to promote their business
- Developing a well defined file accessing system.
- Developing the external programs to link with other applications like mail, database, news, chat etc.

1.3 ORGANIZATION OF THE REPORT

Chapter 2 deals with Aim, Problem Statement, Literature Review and Scope. Chapter 3 deals with General, Algorithm, Project description. Chapter 4 deals with Requirement, Role of Linux and Results and Discussion. Chapter 5 deals with Conclusion and Future work.

CHAPTER 2

AIM & SCOPE

2.1 AIM

To create and manage the Samba server, share files and directories for dedicated users and groups and enable the users for accessing the files and directories.

2.2 PROBLEM STATEMENT

Samba is an important component to seamlessly integrate Linux/Unix Servers and Desktops into Active Directory environments. It can function both as a domain controller or as a regular domain member. Samba is a software package that gives network administrators flexibility and freedom in terms of setup, configuration, and choice of systems and equipment. Because of all that it offers, Samba has grown in popularity, and continues to do so, every year since its release in 1992.

2.3 LITERATURE REVIEW

Samba 4 has grown up and now meets all the important requirements of corporate IT.

This book currently shows you for version 4.3 how to create users and groups, manage printers and set up shares. In addition to these basics, which are prepared for you in a practical scenario, you will also find the technical background explained in an understandable way. The provision of a file server cluster with CTDB, complex trust relationships and the installation on all major distributions are just some of the topics with which you will familiarize yourself step by step.

- Manage domains, migration, printing, GPOs, groupware.
- Cluster with CTDB, domain trusts, user administration with scripts, with full practical scenario.
- Current for Samba 4.3.

2.4 SCOPE

As the value of Linux grows, employers are more interested than ever in choosing IT professionals who understand this open-source operating system. You have the power to make yourself one of those coveted employees by joining Linux training course in Noida. Along with other certifications you can obtain to further your IT career, Linux training is a crucial place to start for both established and aspiring IT professionals.

CHAPTER 3

ALGORITHMS AND METHODS

3.1 GENERAL

To create and manage the Samba server, share files and directories for dedicated users and groups and enable the users for accessing the files and directories. Samba server can access linux desktop files from a laptop, share files and directories with Windows and macOS users. We can enable the users for accessing the files and directories. Samba is an extremely **useful networking tool** for anyone who has both Windows and Unix systems on his network. Running on a Unix system, it allows Windows to share files and printers on the Unix host, and it also allows Unix users to access resources shared by Windows systems.

3.2 ALGORITHM

1. Open a terminal window on your Samba server.
2. Login to root user with `sudo su`
3. Type the root user password
4. Create a new group with the command `addgroup smbgrp`.
5. Create a new user with the command `useradd shares -G smbgrp`.
6. Create a Samba password for the user with the command `smbpasswd -a shares`.
7. Type and verify a password for the user.
8. Create the folder with the command `mkdir -p /samba/shares`.
9. Change the permissions of the folder with the command `chmod -R 0770 /samba/shares`.
10. Change the ownership of the folder with the command `chown root:smbgrp /samba/shares`.

3.3 PROJECT DESCRIPTION

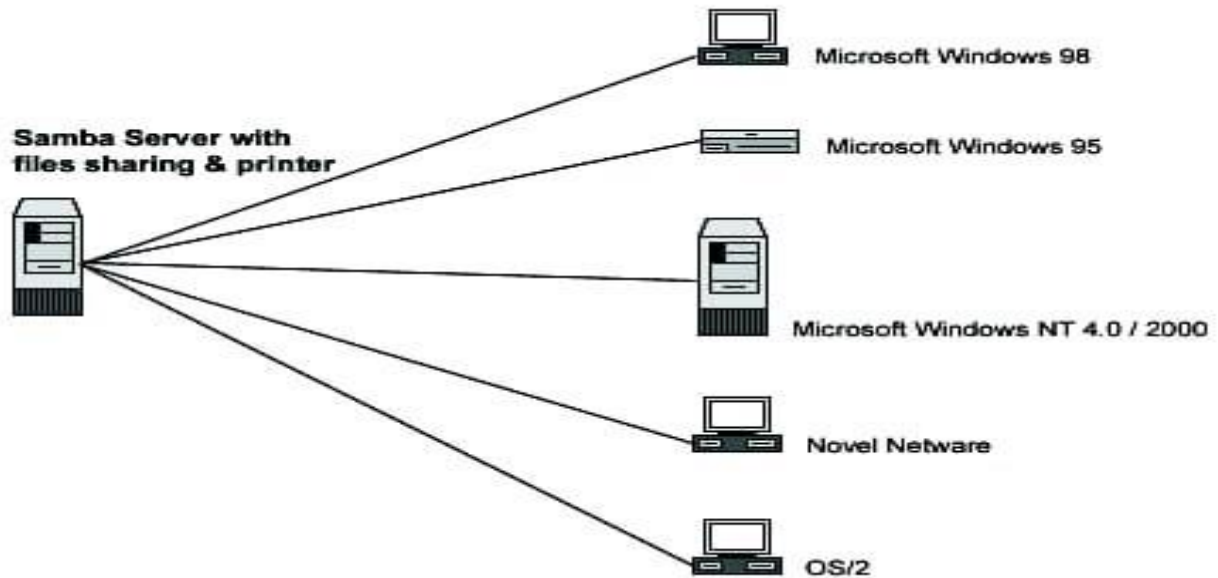
Samba is the standard Windows interoperability suite of programs for Linux and Unix.

Samba is an important component to seamlessly integrate Linux/Unix Servers and Desktops into Active Directory environments. It can function both as a domain controller or as a regular domain member.

Samba is a software package that gives network administrators flexibility and freedom in terms of setup, configuration, and choice of systems and equipment. Because of all that it offers, Samba has grown in popularity, and continues to do so, every year since its release in 1992

Samba consists of two key programs, plus a bunch of other stuff that we'll get to later. The two key programs are `smbd` and `nmdbd`. Their job is to implement the four basic modern-day CIFS services, which are:

- File & print services
- Authentication and Authorization
- Name resolution
- Service announcement (browsing).



3.3.1 SAMBA SERVER WITH FILES SHARING AND PRINTER

Still, learning the ins and outs of `smb.conf` is a worth-while penance. Each of the `smb.conf` variables has a purpose, and a lot of fine tuning can be accomplished. The file structure contents are fully documented, so as to give administrators a running head start, and `smb.conf` can be manipulated using `swat`, which at least makes it nicer to look at.

Samba is configured using the `smb.conf` file. This is a simple text file designed to look a lot like those `*.ini` files used in Windows. The goal, of course, is to give network administrators familiar with Windows something comfortable to play with. Over time, though, the number of things that can be configured in Samba has grown, and the percentage of Network Admins willing to edit a Windows `*.ini` file has shrunk. For some people, that makes managing the `smb.conf` file a bit daunting.

CHAPTER 4

SYSTEM IMPLEMENTATION

4.1 REQUIREMENTS

I. HARDWARE REQUIREMENTS

- Intel machines with 4 GB RAM/ 40 GB HDD - 5 NOS

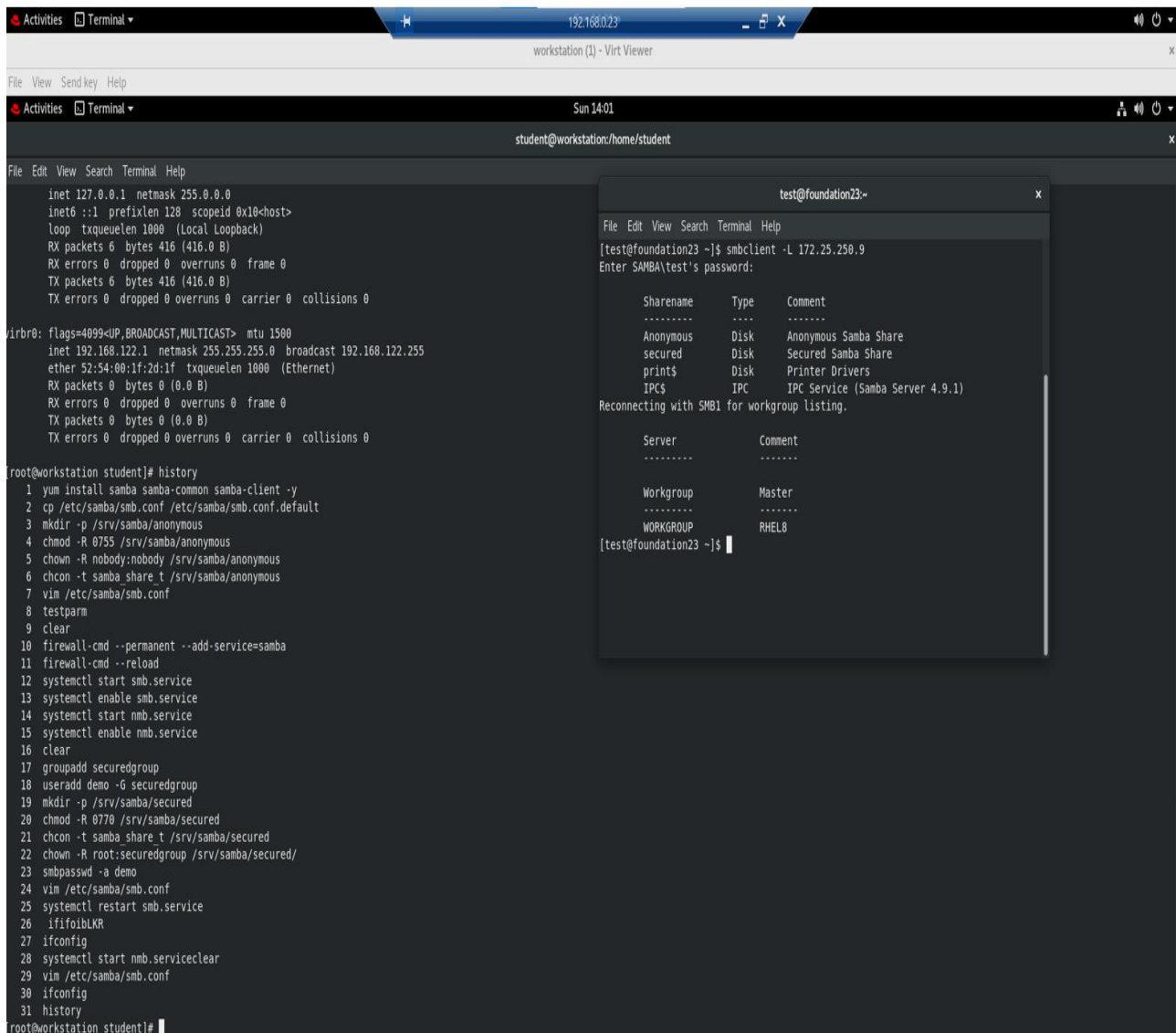
II. SOFTWARE REQUIREMENTS

- Red Hat Enterprise server 8.0
- Samba
- Cifs packages

4.2 ROLE OF LINUX

Samba is a suite of applications that implements the Server Message Block (SMB) protocol. Many operating systems, including Microsoft Windows, use the SMB protocol for client-server networking. Samba enables Linux / Unix machines to communicate with Windows machines in a network. Samba is open source software. Originally, Samba was developed in 1991 for fast and secure file and print share for all clients using the SMB protocol. Since then it has evolved and added more capabilities. Today Samba provides a suite of applications enabling seamless networking and interoperability between *nix and Windows.

4.3 RESULTS



```
root@workstation student]# history
1  yum install samba samba-common samba-client -y
2  cp /etc/samba/smb.conf /etc/samba/smb.conf.default
3  mkdir -p /srv/samba/anonymous
4  chmod -R 0755 /srv/samba/anonymous
5  chown -R nobody:nobody /srv/samba/anonymous
6  chcon -t samba_share_t /srv/samba/anonymous
7  vim /etc/samba/smb.conf
8  testparm
9  clear
10 firewall-cmd --permanent --add-service=samba
11 firewall-cmd --reload
12 systemctl start smb.service
13 systemctl enable smb.service
14 systemctl start nmb.service
15 systemctl enable nmb.service
16 clear
17 groupadd securedgroup
18 useradd demo -G securedgroup
19 mkdir -p /srv/samba/secured
20 chmod -R 0770 /srv/samba/secured
21 chcon -t samba_share_t /srv/samba/secured
22 chown -R root:securedgroup /srv/samba/secured/
23 smbpasswd -a demo
24 vim /etc/samba/smb.conf
25 systemctl restart smb.service
26 ifconfig
27 ifconfig
28 systemctl start nmb.service
29 vim /etc/samba/smb.conf
30 ifconfig
31 history
root@workstation student]#
```

```
test@foundation23~$ smbclient -L 172.25.250.9
Enter SAMBA\test's password:

Sharename      Type           Comment
-----
Anonymous      Disk           Anonymous Samba Share
secured         Disk           Secured Samba Share
print$          Disk           Printer Drivers
IPC$            IPC            IPC Service (Samba Server 4.9.1)

Reconnecting with SMB1 for workgroup listing.

Server          Comment
-----
Workgroup       Master
WORKGROUP       RHEL8

[test@foundation23 ~]$
```

```
Activities Terminal 192.168.0.23 test@foundation23~
File Edit View Search Terminal Help
[test@foundation23 ~]$ smbclient -L 172.25.250.9
Enter SAMBA\test's password:

  Sharename      Type      Comment
  -----
  Anonymous      Disk      Anonymous Samba Share
  secured         Disk      Secured Samba Share
  print$         Disk      Printer Drivers
  IPC$           IPC       IPC Service (Samba Server 4.9.1)
Reconnecting with SMB1 for workgroup listing.

  Server          Comment
  -----
  Workgroup        Master
  -----
  WORKGROUP        RHEL8
[test@foundation23 ~]$
```

CHAPTER 5

CONCLUSION AND FUTURE WORK

5.1 CONCLUSION

The samba server in Linux has been considered as one of the most powerful servers that makes it easy for the other operating systems to access the shared files and useful resources like printers. It is the open-source software which means it will be available to you for free.

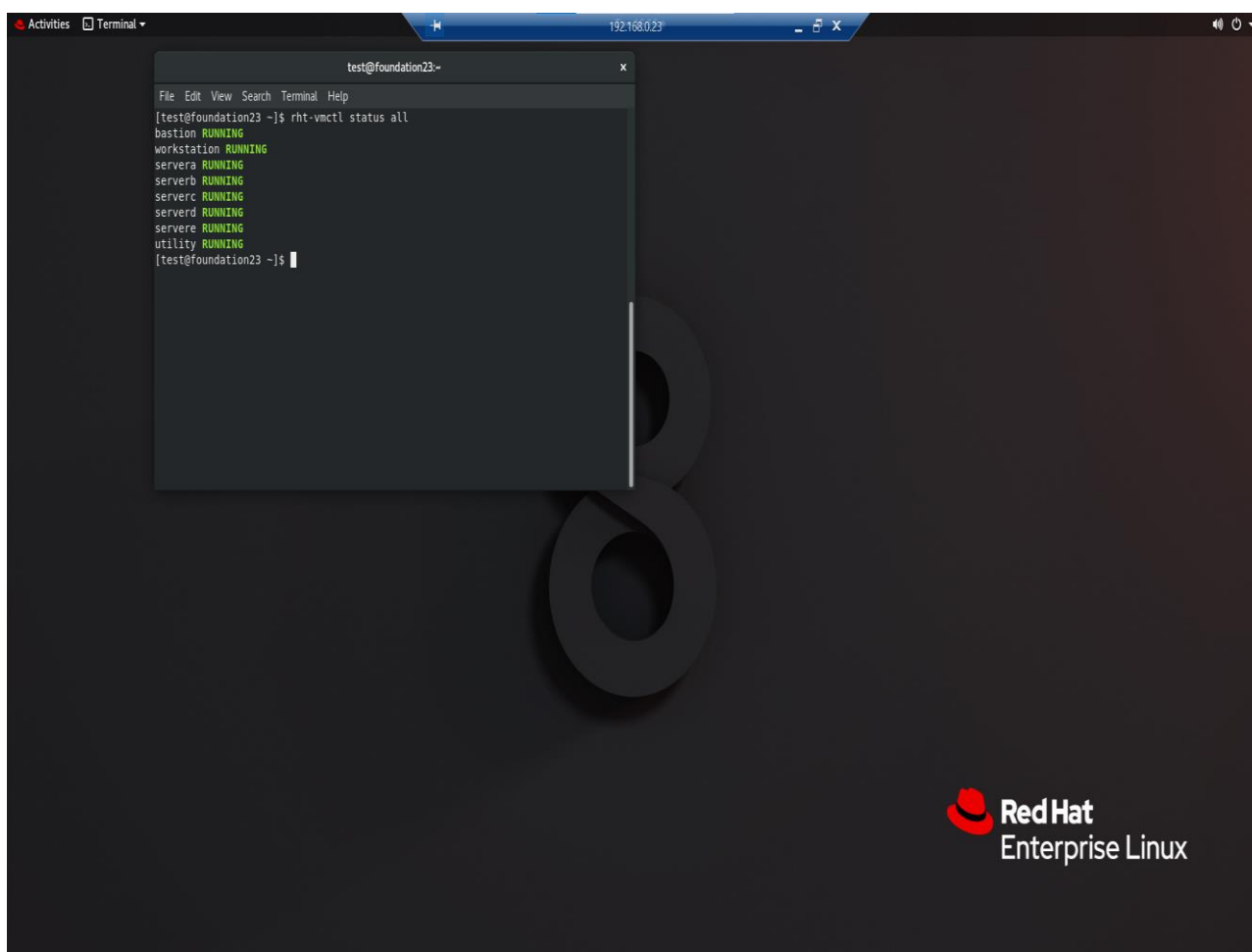
- Students can implement the Samba technologies for corporate
- Can Develop the interface programming for web with external applications

5.2 FUTURE WORK

Samba server can share files and directories with Windows and macOS users. Creating a file in linux by installing samba configuration, keeping the linux as a server side we can share it in windows as client side, by using linux IP configuration. By using this method it is possible to share files and directories in windows. It is also possible for macOS users.

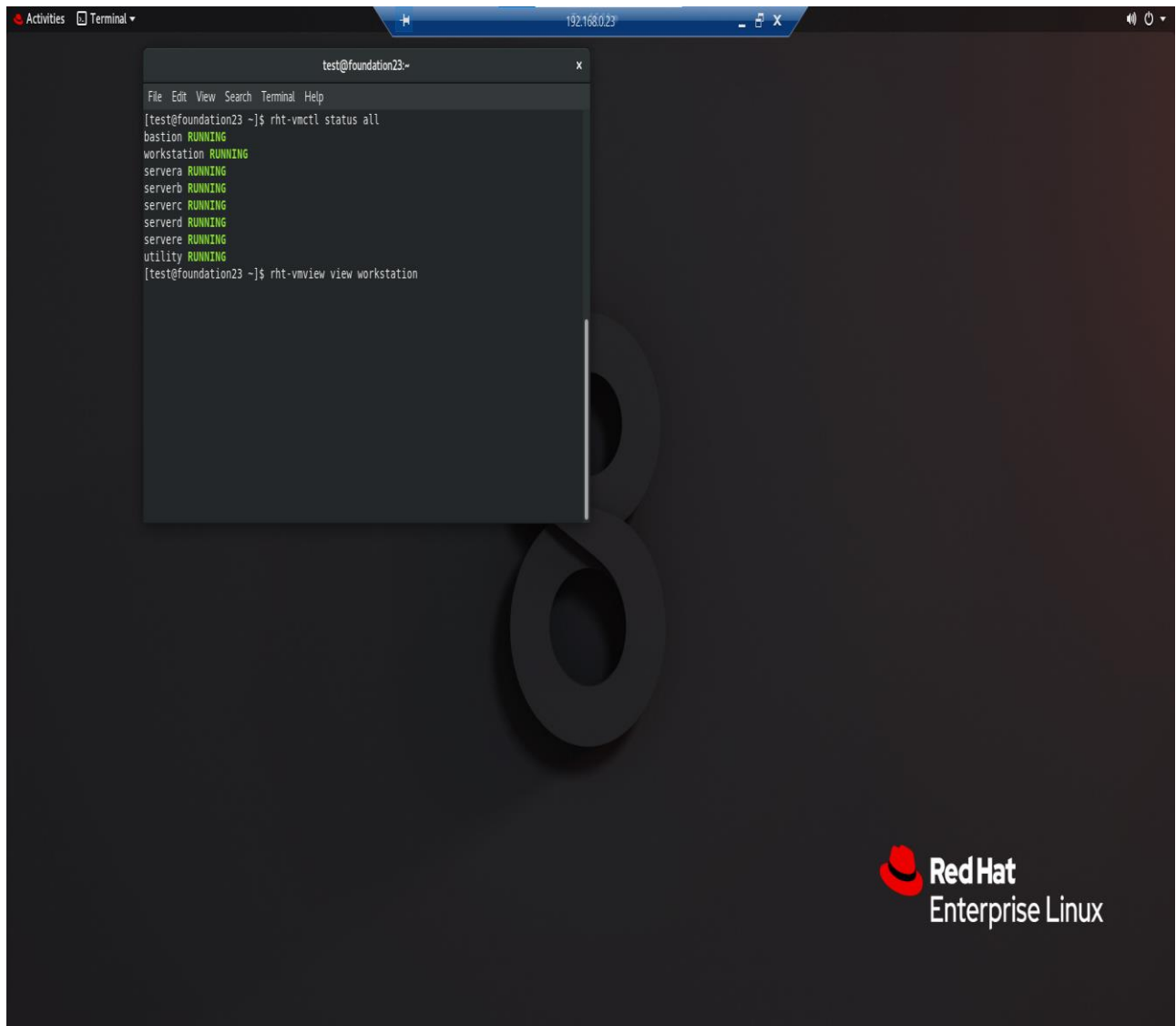
APPENDICES

A. STEP BY STEP PROCEDURE :



The screenshot shows a terminal window titled "test@foundation23" with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal displays the command `[test@foundation23 ~]$ rht-vmctl status all` and its output, which lists the status of various components. The output shows that all components are in a "RUNNING" state. The background of the desktop features a large, stylized "9" and the Red Hat Enterprise Linux logo in the bottom right corner.

```
test@foundation23 ~$ rht-vmctl status all
bastion RUNNING
workstation RUNNING
servera RUNNING
serverb RUNNING
serverc RUNNING
serverd RUNNING
servere RUNNING
utility RUNNING
[test@foundation23 ~]$
```



```
Activities | Virt Viewer | 192.168.0.23 | workstation (1) - Virt Viewer x
File View Send key Help
Activities | Terminal | Tue 16:18 | student@workstation/home/student x
File Edit View Search Terminal Help
[student@workstation ~]$ sudo su
[sudo] password for student:

(process:15945): dconf-WARNING **: 20:36:56.459: failed to commit changes to dconf: Error spawning command line "dbus-launch --autolaunch=dd16b92489fe465999d7d4115b8154e7 --binary-syntax --close-stderr": Child process exited with code 1
[root@workstation student]# yum install samba samba-common samba-client
Last metadata expiration check: 0:50:34 ago on Mon 08 Nov 2021 07:46:37 PM IST.
Package samba-common-4.9.1-8.el8.noarch is already installed.
Dependencies resolved.
=====
Package      Arch Version      Repository      Size
=====
Installing:
samba        x86_64 4.9.1-8.el8   rhel-8.0-for-x86_64-baseos-rpms 708 k
samba-client x86_64 4.9.1-8.el8   rhel-8.0-for-x86_64-baseos-rpms 636 k
Installing dependencies:
samba-common-tools x86_64 4.9.1-8.el8   rhel-8.0-for-x86_64-baseos-rpms 461 k
samba-libs       x86_64 4.9.1-8.el8   rhel-8.0-for-x86_64-baseos-rpms 177 k
=====
Transaction Summary
=====
Install 4 Packages

Total download size: 1.9 M
Installed size: 5.6 M
Is this ok [y/N]: y
Downloading Packages:
(1/4): samba-common-tools-4.9.1-8.el8.x86_64.rpm 4.8 MB/s | 461 kB 00:00
(2/4): samba-libs-4.9.1-8.el8.x86_64.rpm 4.5 MB/s | 177 kB 00:00
(3/4): samba-4.9.1-8.el8.x86_64.rpm 3.7 MB/s | 708 kB 00:00
(4/4): samba-client-4.9.1-8.el8.x86_64.rpm 2.8 MB/s | 636 kB 00:00
-----
Total 8.7 MB/s | 1.9 MB 00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      : 1/1
  Installing     : samba-libs-4.9.1-8.el8.x86_64 1/4
  Running scriptlet: samba-libs-4.9.1-8.el8.x86_64 1/4
  Installing     : samba-common-tools-4.9.1-8.el8.x86_64 2/4
  Installing     : samba-4.9.1-8.el8.x86_64 3/4
  Running scriptlet: samba-4.9.1-8.el8.x86_64 3/4
  Installing     : samba-client-4.9.1-8.el8.x86_64 4/4
  Running scriptlet: samba-client-4.9.1-8.el8.x86_64 4/4
  Verifying      : samba-4.9.1-8.el8.x86_64 1/4
  Verifying      : samba-client-4.9.1-8.el8.x86_64 2/4
  Verifying      : samba-common-tools-4.9.1-8.el8.x86_64 3/4
  Verifying      : samba-libs-4.9.1-8.el8.x86_64 4/4
```

```
Activities  Virt Viewer  192.168.0.23  workstation (1) - Virt Viewer
File View Send key Help
Activities  Terminal  Tue 16:21  student@workstation/home/student
File Edit View Search Terminal Help
Running scripts: samba-client-4.9.1-8.el8.x86_64 4/4
Verifying : samba-4.9.1-8.el8.x86_64 1/4
Verifying : samba-client-4.9.1-8.el8.x86_64 2/4
Verifying : samba-common-tools-4.9.1-8.el8.x86_64 3/4
Verifying : samba-libs-4.9.1-8.el8.x86_64 4/4

Installed:
samba-4.9.1-8.el8.x86_64      samba-client-4.9.1-8.el8.x86_64
samba-common-tools-4.9.1-8.el8.x86_64  samba-libs-4.9.1-8.el8.x86_64

Complete!
[root@workstation student]# mkdir /public
[root@workstation student]# mkdir /private
[root@workstation student]# ls -ldZ /public/
drwxr-xr-x. 2 root root unconfined_u:object_r:default_t:s0 6 Nov  8 20:37 /public/
[root@workstation student]# semanage fcontext -a -t samba_share_t 'public(/.*)?'
[root@workstation student]# semanage fcontext -a -t samba_share_t 'private(/.*)?'
[root@workstation student]# restorecon -vvRF /public/
Relabeled /public from unconfined_u:object_r:default_t:s0 to system_u:object_r:default_t:s0
[root@workstation student]# restorecon -vvRF /private/
Relabeled /private from unconfined_u:object_r:default_t:s0 to system_u:object_r:default_t:s0
[root@workstation student]# ls -ldZ /public/
drwxr-xr-x. 2 root root system_u:object_r:default_t:s0 6 Nov  8 20:37 /public/
[root@workstation student]# ls -ldZ /private/
drwxr-xr-x. 2 root root system_u:object_r:default_t:s0 6 Nov  8 20:38 /private/
[root@workstation student]# chmod 777 /public/
[root@workstation student]# chmod 777 /private/
[root@workstation student]# vim /etc/samba/smb.conf
[root@workstation student]# testparm
Load smb config files from /etc/samba/smb.conf
rlimit max: increasing rlimit max (1024) to minimum Windows limit (16384)
Processing section "[homes]"
Processing section "[printers]"
Processing section "[print$]"
Processing section "[samba-public]"
Processing section "[samba-private]"
Loaded services file OK.
Server role: ROLE_STANDALONE

Press enter to see a dump of your service definitions

# Global parameters
[global]
    printcap name = cups
    security = USER
    idmap config * : backend = tdb
    cups options = raw

[homes]
```

```
Activities  Virt Viewer  192.168.0.237  workstation (1) - Virt Viewer
File View Send key Help

Activities  Terminal  Tue 16:22  student@workstation:/home/student
File Edit View Search Terminal Help

[homes]
    browseable = No
    comment = Home Directories
    inherit acls = Yes
    read only = No
    valid users = %S %D%WAS

[printers]
    browseable = No
    comment = All Printers
    create mask = 0600
    path = /var/tmp
    printable = Yes

[print$]
    comment = Printer Drivers
    create mask = 0664
    directory mask = 0775
    force group = @printadmin
    path = /var/lib/samba/drivers
    write list = @printadmin root

[samba-public]
    comment = Public Samba Share
    guest ok = Yes
    path = /public
    read only = No

[samba-private]
    comment = Private Samba Share
    path = /private
    read list = user2
    valid users = user1 user2
    write list = user1

[root@workstation student]# useradd user1
[root@workstation student]# useradd user2
[root@workstation student]# systemctl start smb.service
[root@workstation student]# systemctl enable smb.service
Created symlink /etc/systemd/system/multi-user.target.wants/smb.service → /usr/lib/systemd/system/smb.service.
[root@workstation student]# systemctl start nmb.service
[root@workstation student]# systemctl enable nmb.service
Created symlink /etc/systemd/system/multi-user.target.wants/nmb.service → /usr/lib/systemd/system/nmb.service.
[root@workstation student]# firewall-cmd --permanent --add-service=samba
success
```

```
Activities  Virt Viewer  192.168.0.23  workstation (1) - Virt Viewer
File View Send key Help
Activities  Terminal  Tue 16:23  student@workstation:/home/student
File Edit View Search Terminal Help

ether 52:54:00:00:fa:09  txqueuelen 1000  (Ethernet)
RX packets 53255  bytes 14612492 (13.9 MiB)
RX errors 0  dropped 48  overruns 0  frame 0
TX packets 4843  bytes 342310 (334.2 KiB)
TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
inet 127.0.0.1  netmask 255.0.0.0
inet6 ::1  prefixlen 128  scopeid 0x10<host>
loop  txqueuelen 1000  (Local Loopback)
RX packets 6  bytes 416 (416.0 B)
RX errors 0  dropped 0  overruns 0  frame 0
TX packets 6  bytes 416 (416.0 B)
TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

virbr0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
inet 192.168.122.1  netmask 255.255.255.0  broadcast 192.168.122.255
ether 52:54:00:70:bc:47  txqueuelen 1000  (Ethernet)
RX packets 0  bytes 0 (0.0 B)
RX errors 0  dropped 0  overruns 0  frame 0
TX packets 0  bytes 0 (0.0 B)
TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

[root@workstation student]# history
1  yum install samba samba-common samba-client
2  mkdir /public
3  mkdir /private
4  ls -ldZ /public/
5  semanage fcontext -a -t samba_share_t 'public(/.*)?'
6  semanage fcontext -a -t samba_share_t 'private(/.*)?'
7  restorecon -vRF /public/
8  restorecon -vRF /private/
9  ls -ldZ /public/
10 ls -ldZ /private/
11 chmod 777 /public/
12 chmod 777 /private/
13 vim /etc/samba/smb.conf
14 testparm
15 useradd user1
16 useradd user2
17 systemctl start smb.service
18 systemctl enable smb.service
19 systemctl start smb.service
20 systemctl enable smb.service
21 firewall-cmd --permanent --add-service=samba
22 firewall-cmd --reload
23 ifconfig
24 history
[root@workstation student]#
```

```
Activities Terminal 192.168.0.23 test@foundation23~
File Edit View Search Terminal Help
[test@foundation23 ~]$ smbclient -L 172.25.250.9
Enter SAMBA\test's password:

Sharename      Type      Comment
-----
Anonymous     Disk     Anonymous Samba Share
secured        Disk     Secured Samba Share
print$         Disk     Printer Drivers
IPC$           IPC      IPC Service (Samba Server 4.9.1)
Reconnecting with SMB1 for workgroup listing.

Server          Comment
-----
Workgroup        Master
WORKGROUP        RHEL8
[test@foundation23 ~]$
```

B. SOURCE CODE :

```
sudo su
```

```
yum install samba samba-common samba-client
```

```
mkdir /public  
mkdir /private
```

```
ls -ldZ /public/
```

```
semanage fcontext -a -t samba_share_t 'public(/.*)?'  
semanage fcontext -a -t samba_share_t 'private(/.*)?'
```

```
restorecon -vvRF /public/  
restorecon -vvRF /private/
```

```
ls -ldZ /public/  
ls -ldZ /private/
```

```
chmod 777 /public/  
chmod 777 /private/
```

```
vim /etc/samba/smb.conf
```

```
[global]  
workgroup = WORKGROUP  
server string = Samba Server %v  
netbios name = rhel8  
security = user  
map to guest = bad user  
dns proxy = no
```

```
[samba-public]  
comment = Public Samba Share  
path = /public  
public = yes  
browseable = yes  
writeable = yes
```

```
[samba-private]
comment = Private Samba Share
path = /private
public = no
valid users = user1 user2
write list = user1
read list = user2
browseable = yes
```

testparm

```
useradd user1
useradd user2
```

```
smbpasswd -a user1
smbpasswd -a user2
```

```
systemctl start smb.service
systemctl enable smb.service
systemctl start nmb.service
systemctl enable nmb.service
```

```
firewall-cmd --permanent --add-service=samba
firewall-cmd --reload
```

Open a new terminal (client side)

```
sudo su
```

```
yum install samba-client cifs-utils
```

```
smbclient -L 172.25.250.9
```

REFERENCES

- [1] <https://www.educba.com/samba-server-in-linux/>
- [2] <https://www.linuxandubuntu.com/>
- [3] [*"Samba - Release Notes Archive"*](#). Retrieved 8 September 2015.
- [4] <https://access.redhat.com/>
- [5] [*"Linux.com"*](#). Retrieved 21 September 2015.
- [6] <https://www.learnitguide.net/2016/08/configure-samba-server-on-rhel7-cento>