

The background features a series of concentric circles in light gray, some solid and some dashed. A large, solid green oval is positioned in the upper right quadrant, containing the main title text. A thick, dark gray curved line sweeps across the lower left portion of the slide.

SAMBA Server Objectives Tasks in PDF file

SAMBA Objectives

1. Configure Samba server on **server.example.com** and define **/samba** directory as samba share
 - a) Share should show up with name **sambashare** on client side.
 - b) Share should be **browsable**.
 - c) Share should be **writable**
 - d) Mount the share on **client.example.com** on directory **/samba_mount** with **smb1** user.

Commands: (On server.example.com)

yum install samba samba-client samba-common (To install Samba Service)

systemctl start smb nmb (To start Samba Service)

systemctl enable smb nmb (To Enable Samba Service to Start at Boot)

mkdir /samba (To create the Directory to be shared)

semanage fcontext -a -t samba_share_t "/samba(/.*)?" (To Set Selinux context type)

restorecon -Rv /samba (To Restore context)

vim /etc/samba/smb.conf (To Define export)

[sambashare] (We need to define Under Share definition section)

comment = samba_share

path = /samba

writable = yes

:wq

firewall-cmd --add-service=samba --permanent (To configure Firewall)

firewall-cmd --reload (To reload firewall)

smbpasswd -a smb1 (To create Samba user)

Commands: (On client.example.com)

yum install samba-client cifs-utils (To install Samba Client)

mkdir /samba_mount (To create mount directory)

smbclient -L server.example.com (To discover Samba Share)

mount -o user=smb1 //server.example.com/sambashare /samba_mount (To test mounting share)

umount /samba_mount (To unmount the share)

vim /etc/fstab (To mount the share persistently)

```
//server.example.com/sambashare    /samba_mount    _netdev ,username=smb1,password=password    0    0
```

:wq

mount -a (To mount through fstab)

mount (To Verify the mounted share)

2. Configure samba share **/smbaclient** on server.example.com.
 - a) Share should be accessible only to **client.example.com** host.
 - b) Share should be **read only**.
 - c) Set the WORKGROUP to **mydomain**.
 - d) Mount this persistently on **/smbclient** on **client.example.com** with **smb2** user.

Commands: (On server.example.com)

yum install samba samba-common samba-client (To install Samba Service)

smbpasswd -a smb2 (To create samba user profile for smb2 user)

systemctl start smb nmb (To start Samba Service)

systemctl enable smb nmb (To Enable Samba Service to Start at Boot)

mkdir /smbaclient (To create the Directory to be shared)

semanage fcontext -a -t samba_share_t "/smbaclient(/.*)?" (To Set Selinux context type)

restorecon -Rv /smbaclient (To Restore context)

vim /etc/samba/smb.conf (To Define share)

// In Global Section

WORKGROUP = mydomain

hostname lookups = yes

// Under Share Definition Section

[smbaclient]

comment = samba_client

path = /smbaclient

hosts allow = client.example.com

writable = no :wq

firewall-cmd --add-service=samba --permanent (To configure Firewall)

firewall-cmd --reload (To reload firewall)

Commands: (On client.example.com)

`yum install samba-client cifs-utils` (To install Samba Client)

`mkdir /smbclient` (To create mount point)

`smbclient -L server.example.com` (To discover Samba Share)

`mount -o username=smb2 //server.example.com/samba_client /smbclient` (To test mounting share)

`umount /smbclient` (To unmount the share)

`vim /etc/fstab` (To mount the share persistently)

`//server.example.com/samba_client /smbclient _netdev ,username=smb2,password=password 0 0`

`:wq`

`mount -a` (To mount through fstab)

`mount` (To Verify the mounted share)

3. Configure Samba Share **/smbmulti** on **server.example.com**.

- a) Share name should be **smbmulti** and should be **browsable**.
- b) Mount this share as multiuser mount on **client.example.com** on directory **/smbmulti_mnt** with user **smb1** and mount should be persistent and **smb1** user credentials should not be shown in fstab file.
- b) Only Users **harry** and **riya** should be able to access the share with **read/write** permissions with password **"rhce"**

Commands: (On server.example.com)

yum install samba samba-common samba-client (To install Samba Service)

systemctl start smb nmb (To start Samba Service)

systemctl enable smb nmb (To Enable Samba Service to Start at Boot)

mkdir /smbmulti (To create the Directory to be shared)

semanage fcontext -a -t samba_share_t "/smbmulti(/.*)?" (To Set Selinux context type)

restorecon -Rv /smbmulti (To Restore context)

vim /etc/samba/smb.conf (To Define share)

firewall-cmd --add-service=samba --permanent (To configure Firewall)

firewall-cmd --reload (To reload firewall)

smbpasswd -a harry (Create samba user 'harry' with password 'rhce')

smbpasswd -a riya (Create samba user 'riya' with password 'rhce')

// Under Share Definition section

[smbmulti]

comment = multiuser

path = /smbmulti

valid users = harry riya smb1

write list = harry riya

browsable = yes

:wq

Commands: (On client.example.com)

yum install samba-client cifs-utils (To install Samba Client)

mkdir /smbmulti_mnt (To create mount point)

smbclient -L server.example.com (To discover Samba Share)

mount -o username=smb1 //server.example.com/smbmulti /smbmulti_mnt (To test mounting share)

umount /smbmulti_mnt (To unmount the share)

vim /root/creds (To create Credentials file)

username=smb1

password=password

:wq

vim /etc/fstab (To mount the share persistently)

//server.example.com/smbmulti /smbmulti_mnt _netdev ,multiuser,sec=ntlmssp,credentials=/root/creds 0 0

:wq

mount -a (To mount through fstab)

mount (To Verify the mounted share)

su - harry (To elevate the permissions of user harry)

cifscreds add server.example.com (To elevate permissions of user riya)

su - riya

cifscreds add server.example.com (To elevate permissions of user riya)

Verify access for users riya and harry. They must have full access on this share

https://www.samba.org/samba/docs/using_samba/ch06.html -Check this link for different options/parameters which can be used in smb.conf)

4. Configure samba share `/samba_mike` on `server.example.com`

a) Share should be named as `mike_admin`

b) Share should be **read only**. Use user `smb1` credentials to mount this share on `client.example.com` on `/mike_admin` directory.

c) User `mike` should be able to access the share as admin from `client.example.com` only.

Commands: (On `server.example.com`)

`yum install samba samba-common samba-client` (To install Samba Service)

`systemctl start smb nmb` (To start Samba Service)

`systemctl enable smb nmb` (To Enable Samba Service to Start at Boot)

`mkdir /samba_mike` (To create the Directory to be shared)

`semanage fcontext -a -t samba_share_t "/samba_mike(/.*)?"` (To Set Selinux context type)

`restorecon -Rv /samba_mike` (To Restore context)

`vim /etc/samba/smb.conf` (To Define share)

`firewall-cmd --add-service=samba --permanent` (To configure Firewall)

`firewall-cmd --reload` (To reload firewall)

`smbpasswd -a mike` (To create Samba user profile for mike user)

// Under Share Definition section

`[mike_admin]`

`comment = mike_admin`

`path = /samba_mike`

`admin users = mike`

`read only = yes`

`write list = mike`

`hosts allow = 192.168.122.20`

`:wq`

Commands: (On client.example.com)

`yum install samba-client cifs-utils` (To install Samba Client)

`mkdir /mike_admin` (To create mount point)

`smbclient -L server.example.com` (To discover Samba Share)

`mount -o username=smb1 //server.example.com/mike_admin /mike_admin` (To test mounting share)

`umount /mike_admin` (To unmount the share)

`vim /etc/fstab` (To mount the share persistently)

`//server.example.com/mike_admin /mike_admin _netdev ,multiuser,sec=ntlmssp,credentials=/root/creds 0 0`

`:wq`

`mount -a` (To mount through fstab)

`mount` (To Verify the mounted share)

`su - mike`

`cifscreds add server.example.com` (To elevate the access of mike to admin permissions)

Verify User mike has admin access on this share!!

5. Configure Samba share `/smbagroup` on `server.example.com`.
- a) Share should be named as `group_share`.
 - b) Mount the share on `client.example.com` with `smb1` user on directory `/smbgroup`.
 - c) Only members of group `smb` (users `smb3` and `smb4`) should be able to access this share with write permissions and files created by them should have group ownership set to `smb` (Group Collaboration).

Commands: (On `server.example.com`)

`yum install samba samba-common samba-client` (To install Samba Service)

`systemctl start smb nmb` (To start Samba Service)

`systemctl enable smb nmb` (To Enable Samba Service to Start at Boot)

`mkdir /smbagroup` (To create the Directory to be shared)

`semanage fcontext -a -t samba_share_t "/smbagroup(/.*)?"` (To Set Selinux context type)

`restorecon -Rv /smbagroup` (To Restore context)

`groupadd -g 3333 smb` (To create group with GID 3333)

`usermod -aG smb3 smb` (To assign Group `smb` to `smb3` user)

`usermod -aG smb4 smb` (To assign Group `smb` to `smb4` user)

`smbpasswd -a smb3` (To Create Samba profile for `smb3` user)

`smbpasswd -a smb4` (To Create Samba profile for `smb4` user)

`chown :smb /smbagroup` (To set the Group ownership to `smb`)

`chmod g+rwX /smbagroup` (To provide write permissions at group level)

`vim /etc/samba/smb.conf` (To define the share)

// Under Share Definitions section

`[group_share]`

`comment = group_share`

`path = /smbagroup`

`valid users = +smb smb1`

`write list = +smb`

`force group = +smb`

`:wq`

`firewall-cmd --add-service=samba --permanent` (To configure Firewall)

`firewall-cmd --reload` (To reload firewall)

Commands: (On client.example.com)

yum install samba-client cifs-utils (To install Samba Client)

mkdir /smbgroup (To create mount point)

smbclient -L server.example.com (To discover Samba Share)

groupadd -g 3333 smb (To create group with GID 3333)

usermod -aG smb3 smb (To assign Group smb to smb3 user)

usermod -aG smb4 smb (To assign Group smb to smb4 user)

mount -o username=smb1 //server.example.com/sambagroup /smbgroup (To test mounting share)

umount /smbgroup (To unmount the share)

vim /etc/fstab (To mount the share persistently)

//server.example.com/sambagroup /smbgroup _netdev ,multiuser,sec=ntlmssp,credentials=/root/creds 0 0

:wq

mount -a (To mount through fstab)

mount (To Verify the mounted share)

su - smb3

cifscreds add server.example.com (To elevate the access of smb3 user)

su – smb4

cifscreds add server.example.com (To elevate the access of smb4 user)

Create test files with smb3 and smb4 user and verify if group ownership is set to smb group !!!

6. Configure samba share `/smbahost` on `server.example.com`.
- a) Share should be accessible only to **harry** with write permissions and denied for user **smb3** and **smb4**.
 - b) Share should be **read only** .
 - c) Share should be accessible by **example.com (192.168.122.0/24)** domain but denied for **insecure.com (10.1.1.0/24)** domain.
 - d) Mount this persistently on `/smbhost` on `client.example.com` with **smb2** user.

Commands: (On server.example.com)

yum install samba samba-common samba-client (To install Samba Service)

systemctl start smb nmb (To start Samba Service)

systemctl enable smb nmb (To Enable Samba Service to Start at Boot)

mkdir /smbahost (To create the Directory to be shared)

semanage fcontext -a -t samba_share_t "/smbahost(/.*)?" (To Set Selinux context type)

restorecon -Rv /smbahost (To Restore context)

vim /etc/samba/smb.conf (To Define share)

// In Global Section

hostname lookups = yes

// Under Share Definition Section

[smbahost]

comment = harry share

path = /smbahost

valid users = harry smb2

write list = harry

invalid users = smb3 smb4

hosts allow = 192.168.122.

writable = no

:wq

smbpasswd -a harry (To Create Samba profile for harry user)

smbpasswd -a smb2 (To Create Samba profile for smb2 user)

firewall-cmd --add-service=samba --permanent (To configure Firewall)

firewall-cmd --reload (To reload firewall)

Commands: (On client.example.com)

yum install samba-client cifs-utils (To install Samba Client)

mkdir /smbhost (To create mount point)

smbclient -L server.example.com (To discover Samba Share)

mount -o username=smb2 //server.example.com/sambahost /smbhost (To test mounting share)

umount /smbhost (To unmount the share)

vim /etc/fstab (To mount the share persistently)

//server.example.com/sambahost /smbhost _netdev ,username=smb2,password=password 0 0

:wq

mount -a (To mount through fstab)

mount (To Verify the mounted share)

su - harry (To elevate the permissions of user harry)

cifscreds add server.example.com

Verify user harry must have write access to this share !!

Also verify share is accessible from others hosts on the same domain but denied for rest world !!!