

## How to Configure Samba Server

On Server machine

```
[root@server0 ~]# hostname
server0.example.com
[root@server0 ~]#
[root@server0 ~]# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.25.0.11 netmask 255.255.255.0 broadcast
172.25.0.255
    inet6 fe80::5054:ff:fe00:b prefixlen 64 scopeid 0x20<link>
    ether 52:54:00:00:00:0b txqueuelen 1000 (Ethernet)
    RX packets 23659 bytes 86202924 (82.2 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 16403 bytes 3206540 (3.0 MiB)
    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 0 (Local Loopback)
    RX packets 40 bytes 2936 (2.8 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 40 bytes 2936 (2.8 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[root@server0 ~]# yum install samba* -y

[root@server0 ~]# systemctl start smb
[root@server0 ~]# systemctl enable smb
ln -s '/usr/lib/systemd/system/smb.service'
'/etc/systemd/system/multi-user.target.wants/smb.service'
[root@server0 ~]#
[root@server0 ~]# firewall-cmd --permanent --add-service=samba
success
[root@server0 ~]#
[root@server0 ~]# firewall-cmd --reload
success
[root@server0 ~]#
[root@server0 ~]# mkdir /publicdata
[root@server0 ~]#
[root@server0 ~]# mkdir /privatedata
[root@server0 ~]#
[root@server0 ~]# touch /publicdata/abc{1..3}
[root@server0 ~]#
[root@server0 ~]# touch /privatedata/xyz{1..3}
[root@server0 ~]#
[root@server0 ~]# echo "this is read only file" > /publicdata/abc1
[root@server0 ~]#
[root@server0 ~]# cat /publicdata/abc1
this is read only file
```

```

[root@server0 ~]#
[root@server0 ~]# echo "this is my writeable file" >
/privatedata/xyz1
[root@server0 ~]#
[root@server0 ~]# cat /privatedata/xyz1
this is my writeable file
[root@server0 ~]#
[root@server0 ~]# chmod 777 /privatedata
[root@server0 ~]#
[root@server0 ~]# useradd alok
[root@server0 ~]#
[root@server0 ~]# useradd sachin
[root@server0 ~]#
[root@server0 ~]# smbpasswd -a sachin
New SMB password:redhat
Retype new SMB password:redhat
Added user sachin.
[root@server0 ~]#
[root@server0 ~]# smbpasswd -a alok
New SMB password:redhat
Retype new SMB password:redhat
Added user alok.
[root@server0 ~]#
[root@server0 ~]# vim /etc/samba/smb.conf

```

On line number 95 allow the network .....

```

hosts allow = 127. 172.25.0.

```

Now go in bottom of this file and add these lines...

```

[network]
comment = This is my public files.
path = /publicdata
public = yes
writable = no
printable = no
browseable = yes
[cloud]
comment = This is my private files.
path = /privatedata
public = no
writable = yes
printable = no
browseable = yes
valid users = alok sachin

```

save and quit

```
[root@server0 ~]# systemctl restart smb
[root@server0 ~]#
[root@server0 ~]#
[root@server0 ~]# testparm
```

```
[root@server0 ~]# getenforce
Enforcing
[root@server0 ~]#
[root@server0 ~]# ls -ld /publicdata
drwxr-xr-x. 2 root root 39 Aug 26 11:46 /publicdata
[root@server0 ~]#
[root@server0 ~]# ls -ldZ /publicdata
drwxr-xr-x. root root unconfined_u:object_r:default_t:s0 /publicdata
[root@server0 ~]#
[root@server0 ~]#
[root@server0 ~]# chcon -R -t samba_share_t /publicdata
[root@server0 ~]#
[root@server0 ~]# chcon -R -t samba_share_t /privatedata
[root@server0 ~]#
[root@server0 ~]# ls -ldZ /publicdata
drwxr-xr-x. root root unconfined_u:object_r:samba_share_t:s0
/publicdata
[root@server0 ~]#
[root@server0 ~]# systemctl restart smb
[root@server0 ~]#
[root@server0 ~]# netstat -tunlp | grep 445
tcp        0      0 0.0.0.0:445          0.0.0.0:*
LISTEN     9959/smbd
tcp6       0      0 :::445              :::*
LISTEN     9959/smbd
[root@server0 ~]#

***** Server Side is ready
*****
```

Go on Desktop Machine ...and access the samba server .... ?

First method :- how to perform get and put operation directly ?

```
[root@desktop0 ~]# ping 172.25.0.11
PING 172.25.0.11 (172.25.0.11) 56(84) bytes of data.
64 bytes from 172.25.0.11: icmp_seq=1 ttl=64 time=0.517 ms
64 bytes from 172.25.0.11: icmp_seq=2 ttl=64 time=0.943 ms
^C
--- 172.25.0.11 ping statistics ---
```

```
2 packets transmitted, 2 received, 0% packet loss, time 1000ms
rtt min/avg/max/mdev = 0.517/0.730/0.943/0.213 ms
```

```
[root@desktop0 ~]#
```

```
[root@desktop0 ~]#
```

```
[root@desktop0 ~]# yum install samba-client -y
```

```
[root@desktop0 ~]# smbclient -L //172.25.0.11
```

```
Enter root's password: {press Enter}
```

```
Anonymous login successful
```

```
Domain=[MYGROUP] OS=[Unix] Server=[Samba 4.1.1]
```

Sharename	Type	Comment
-----	----	-----
network	Disk	This is my public files.
cloud	Disk	This is my private files.
IPC\$	IPC	IPC Service (Samba Server Version

```
4.1.1)
```

```
Anonymous login successful
```

```
Domain=[MYGROUP] OS=[Unix] Server=[Samba 4.1.1]
```

Server	Comment
-----	-----

Workgroup	Master
-----	-----

```
[root@desktop0 ~]#
```

```
[root@desktop0 ~]# smbclient //172.25.0.11/network
```

```
Enter root's password:
```

```
Anonymous login successful
```

```
Domain=[MYGROUP] OS=[Unix] Server=[Samba 4.1.1]
```

```
smb: \>
```

```
smb: \> ls
```

.	D	0	Mon Aug 26 11:46:08
2019			
..	D	0	Mon Aug 26 11:45:56
2019			
abc1	N	23	Mon Aug 26 11:46:30
2019			
abc2	N	0	Mon Aug 26 11:46:08
2019			
abc3	N	0	Mon Aug 26 11:46:08
2019			

```
40913 blocks of size 262144. 27770 blocks available
```

```
smb: \>
```

```
smb: \> get abc1
```

```
getting file \abc1 of size 23 as abc1 (11.2 KiloBytes/sec) (average  
11.2 KiloBytes/sec)
```

```
smb: \>
```

```

smb: \>
smb: \>
smb: \>
smb: \> mget abc1 abc2
Get file abc1? y
getting file \abc1 of size 23 as abc1 (11.2 KiloBytes/sec) (average
11.2 KiloBytes/sec)
Get file abc2? y
getting file \abc2 of size 0 as abc2 (0.0 KiloBytes/sec) (average 9.6
KiloBytes/sec)
smb: \>
smb: \>
smb: \> prompt
smb: \>
smb: \> mget abc*
getting file \abc1 of size 23 as abc1 (22.5 KiloBytes/sec) (average
11.2 KiloBytes/sec)
getting file \abc2 of size 0 as abc2 (0.0 KiloBytes/sec) (average 10.0
KiloBytes/sec)
getting file \abc3 of size 0 as abc3 (0.0 KiloBytes/sec) (average 9.0
KiloBytes/sec)
smb: \>
smb: \> lcd /tmp
smb: \>
smb: \> get abc1
getting file \abc1 of size 23 as abc1 (11.2 KiloBytes/sec) (average
9.4 KiloBytes/sec)
smb: \>
smb: \> exit
[root@desktop0 ~]#
[root@desktop0 ~]# ls
abc1 abc2 abc3 anaconda-ks.cfg
[root@desktop0 ~]#
[root@desktop0 ~]# ls /tmp
abc1 abc2 abc3 rht systemd-private-QfgTWp systemd-private-ShhUa8
[root@desktop0 ~]#

[root@desktop0 ~]# echo "testing page" > linux
[root@desktop0 ~]#
[root@desktop0 ~]# ls
+ abc1 abc2 abc3 anaconda-ks.cfg linux
[root@desktop0 ~]#
[root@desktop0 ~]# smbclient //172.25.0.11/cloud -U alok
Enter alok's password:
Domain=[MYGROUP] OS=[Unix] Server=[Samba 4.1.1]
smb: \>
smb: \> ls
. D 0 Mon Aug 26 11:46:15
2019
.. D 0 Mon Aug 26 11:45:56
2019

```

```

    xyz1                N          26  Mon Aug 26 11:47:44
2019
    xyz2                N           0  Mon Aug 26 11:46:15
2019
    xyz3                N           0  Mon Aug 26 11:46:15
2019

```

40913 blocks of size 262144. 27770 blocks available

smb: \>

```

smb: \> get xyz1
getting file \xyz1 of size 26 as xyz1 (12.7 KiloBytes/sec) (average
12.7 KiloBytes/sec)
smb: \>
smb: \> put linux
putting file linux as \linux (12.7 kb/s) (average 12.7 kb/s)
smb: \>
smb: \> ls
.                D           0  Mon Aug 26 12:31:17
2019
..               D           0  Mon Aug 26 11:45:56
2019
    xyz1         N          26  Mon Aug 26 11:47:44
2019
    xyz2         N           0  Mon Aug 26 11:46:15
2019
    xyz3         N           0  Mon Aug 26 11:46:15
2019
    linux        A          13  Mon Aug 26 12:31:17
2019

```

40913 blocks of size 262144. 27770 blocks available

smb: \>

smb: \> exit

```

[root@desktop0 ~]# ls
abc1 abc2 abc3 anaconda-ks.cfg linux xyz1
[root@desktop0 ~]#

```

how to perform mounting steps....

```

[root@desktop0 ~]# mkdir /read
[root@desktop0 ~]#
[root@desktop0 ~]# mkdir /write
[root@desktop0 ~]#
[root@desktop0 ~]# yum install cifs-utils -y

[root@desktop0 ~]# mount -t cifs //172.25.0.11/network /read -o
guests
[root@desktop0 ~]#

```

```

[root@desktop0 ~]#
[root@desktop0 ~]# ls /read
abc1 abc2 abc3
[root@desktop0 ~]#
[root@desktop0 ~]# mount -t cifs //172.25.0.11/cloud /write -o
username=alok
Password for alok@//172.25.0.11/cloud: redhat
[root@desktop0 ~]#
[root@desktop0 ~]# ls /write
linux xyz1 xyz2 xyz3
[root@desktop0 ~]# vim /etc/fstab

//172.25.0.11/network /read cifs defaults,guests 0 0
//172.25.0.11/cloud /write cifs
defaults,username=alok,password=redhat 0 0

```

```

save and quit
[root@desktop0 ~]# mount -a
[root@desktop0 ~]#
[root@desktop0 ~]# df -TH

```

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/vda1	xfs	11G	3.3G	7.6G	31%	/
devtmpfs	devtmpfs	950M	0	950M	0%	/dev
tmpfs	tmpfs	966M	82k	966M	1%	/dev/shm
tmpfs	tmpfs	966M	18M	948M	2%	/run
tmpfs	tmpfs	966M	0	966M	0%	/sys/fs/cgroup
//172.25.0.11/network	cifs	11G	3.5G	7.3G	33%	/read
//172.25.0.11/cloud	cifs	11G	3.5G	7.3G	33%	/write

```

[root@desktop0 ~]#

```

```

[root@desktop0 ~]# ls /read
abc1 abc2 abc3
[root@desktop0 ~]# cat /read/abc1
this is read only file
[root@desktop0 ~]#
[root@desktop0 ~]# touch /read/abc4
touch: cannot touch "/read/abc4": Permission denied
[root@desktop0 ~]#
[root@desktop0 ~]#
[root@desktop0 ~]# ls /write
linux xyz1 xyz2 xyz3
[root@desktop0 ~]#
[root@desktop0 ~]# touch /write/xyz5
[root@desktop0 ~]# cp -rf /home /write
[root@desktop0 ~]#
[root@desktop0 ~]# ls /write
home linux xyz1 xyz2 xyz3 xyz5
[root@desktop0 ~]#

```

How to pass username and password with file method?

```
[root@desktop0 ~]# vim /root/username.txt
```

```
username=alok  
password=redhat
```

```
savd and quit
```

```
[root@desktop0 ~]#
```

```
[root@desktop0 ~]# vim /etc/fstab
```

```
//172.25.0.11/cloud /write cifs  
defaults,credentials=/root/username.txt 0 0
```

```
save and quit
```

```
[root@desktop0 ~]# mount -a
```

```
[root@desktop0 ~]#
```

```
[root@desktop0 ~]# df -TH
```

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/vda1	xfs	11G	3.3G	7.6G	31%	/
devtmpfs	devtmpfs	950M	0	950M	0%	/dev
tmpfs	tmpfs	966M	82k	966M	1%	/dev/shm
tmpfs	tmpfs	966M	18M	948M	2%	/run
tmpfs	tmpfs	966M	0	966M	0%	/sys/fs/cgroup
//172.25.0.11/network	cifs	11G	3.5G	7.3G	33%	/read
//172.25.0.11/cloud	cifs	11G	3.5G	7.3G	33%	/write

```
[root@desktop0 ~]#
```

On Server machine

```
[root@server0 ~]# ls /publicdata
```

```
abc1 abc2 abc3
```

```
[root@server0 ~]#
```

```
[root@server0 ~]# ls /privatedata
```

```
home linux xyz1 xyz2 xyz3 xyz5
```

```
[root@server0 ~]#
```

```
[root@server0 ~]# firefox
```

```
smb://172.25.0.11
```

How to Access samba on any windows machine:---

```
Run:----- \\172.25.0.11\network
```

or



\\172.25.0.11\cloud

username: alok  
password: redhat

\*\*\*\*\*  
\*\*\*\*\*