**Samba Server Installation and Configuration on CentOS 7**

**This tutorial exists for these OS versions**

* **CentOS 7**
* [CentOS 6.4](https://www.howtoforge.com/centos-6.4-samba-standalone-server-with-tdbsam-backend)
* [CentOS 6.3](https://www.howtoforge.com/centos-6.3-samba-standalone-server-with-tdbsam-backend)
* [CentOS 6.2](https://www.howtoforge.com/centos-6.2-samba-standalone-server-with-tdbsam-backend)
* [CentOS 5.6](https://www.howtoforge.com/centos-5.6-samba-standalone-server-with-tdbsam-backend)
* [CentOS 5.3](https://www.howtoforge.com/centos-5.3-samba-standalone-server-with-tdbsam-backend)

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This tutorial explains how to configure a Samba server on CentOS 7 with anonymous & secured samba shares. Samba is an Open Source/Free Software suite that provides seamless file and print services to SMB/CIFS clients like Windows. Samba is freely available, unlike other SMB/CIFS implementations, and allows for interoperability between Linux/Unix servers and Windows-based clients.

**1 Preliminary Note**

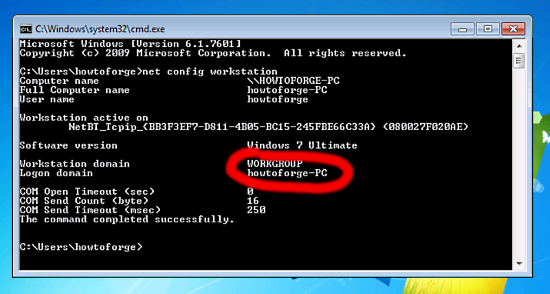
I have a fresh installed CentOS 7 server, on which I am going to install the samba server. Off-course you need to have one windows machine to check the samba server that must be reachable with the CentOS 7 server. My Centos 7 server have hostname *server1.example.com* & IP as *192.168.0.100*

Note:

* The Windows machine must be on same workgroup. To check the value in windows machine run the command at cmd prompt

*net config workstation*

It will be like this:

[](https://www.howtoforge.com/images/samba_configuration_with_centos_7.0/big/1.png)

Your windows machine must be at same Workstation domain as in CentOS 7.0 server, i.e. *WORKGROUP* in my case.

* To make the Windows machine reachable in Windows proceed like this. In the run terminal & add  the entry of your server IP address:

*notepad C:\Windows\System32\drivers\etc\hosts*

In my case it was like this, just save the values.

[...]  
192.168.0.100 server1.example.com centos

**2 Anonymous Samba sharing**

First I will explain the methodology to install Samba with an anonymous share. To install the Samba software, run:

*yum install samba samba-client samba-common*

It will install the current Samba version from the CentOS software repository.

Now to configure samba, edit the file */etc/samba/smb.conf.* Before making changes, I will make the backup of original file as  */etc/samba/smb.conf.bak*

*cp -pf /etc/samba/smb.conf /etc/samba/smb.conf.bak*

As I want to start with an empty file, I'll use the cat command to empty smb.conf. That's faster than deleting all the lines in vi.

*cat /dev/null > /etc/samba/smb.conf*

Further, give the entries like this

*vi /etc/samba/smb.conf*

[global]

workgroup = WORKGROUP

server string = Samba Server %v

netbios name = centos

security = user

map to guest = bad user

dns proxy = no

#============================ Share Definitions ==============================

[Anonymous]

path = /samba/anonymous

browsable =yes

writable = yes

guest ok = yes

read only = no

*mkdir -p /samba/anonymous  
systemctl enable smb.service  
systemctl enable nmb.service  
systemctl restart smb.service  
systemctl restart nmb.service*

Further CentOS 7 Firewall-cmd will block the samba access, to get rid of that we will run:

*firewall-cmd --permanent --zone=public --add-service=samba*

*[root@server1 ~]# firewall-cmd --permanent --zone=public --add-service=samba*

*success*

*[root@server1 ~]#*

 Finally, reload the firewall to apply the changes.

*firewall-cmd --reload*

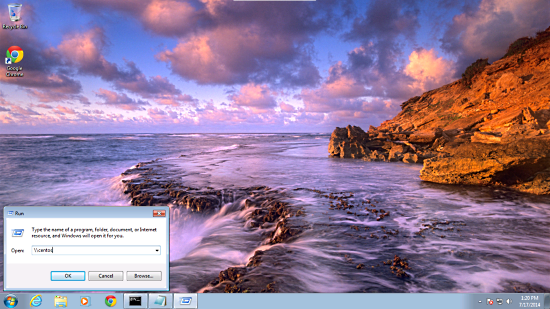
*[root@server1 ~]# firewall-cmd --reload*

*success*

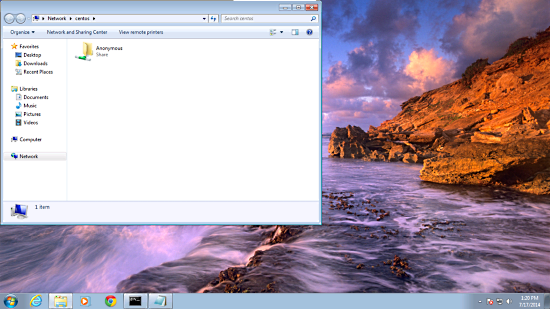
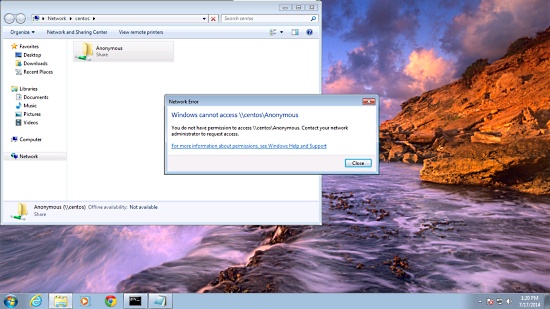
*[root@server1 ~]#*

Now you can access the Centos 7 share in Windows as follows. Go to the *Run* prompt and type *\\centos*:

*\\centos*

[](https://www.howtoforge.com/images/samba_configuration_with_centos_7.0/big/2.png)

From a Windows machine, just browse the folder and try to create a text file, but you will get an error of permission denied.

[](https://www.howtoforge.com/images/samba_configuration_with_centos_7.0/big/3.png)  
  
[](https://www.howtoforge.com/images/samba_configuration_with_centos_7.0/big/4.png)

Check the permission of the shared folder.

*ls -l*

*drwxr-xr-x. 2 root root 6 Jul 17 13:41 anonymous  
[root@server1 samba]#*

To allow access by the anonymous user, set the permissions as follows:

*cd /samba*

*chmod -R 0755 anonymous/  
chown -R nobody:nobody anonymous/*

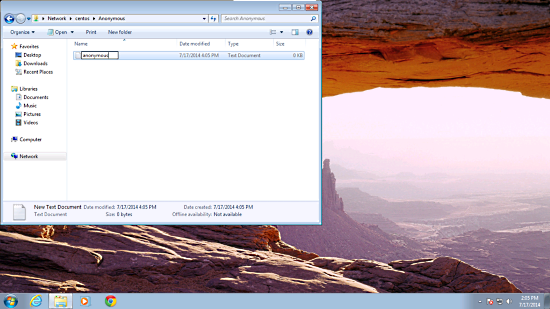
*ls -l anonymous/*

*total 0  
drwxr-xr-x. 2 nobody nobody 6 Jul 17 13:41 anonymous  
[root@server1 samba]#*

Further, we need to allow the SELinux for the samba configuration as follows:

*chcon -t samba\_share\_t anonymous/*

Now the anonymous user can browse & create the folder contents.

[](https://www.howtoforge.com/images/samba_configuration_with_centos_7.0/big/5.png)

You can cross check the content at the server also.

*ls -l anonymous/*

*total 0  
-rwxr--r--. 1 nobody nobody 0 Jul 17 16:05 anonymous.txt  
[root@server1 samba]#*

**3. Secured samba server**

Therefore, I will create a group *smbgrp* & user *srijan* to access the samba server with proper authentication.

*groupadd smbgrp*

*useradd srijan -G smbgrp*

*smbpasswd -a srijan*

*[root@server1 samba]# smbpasswd -a srijan*

*New SMB password:****<--yoursambapassword***

*Retype new SMB password:****<--yoursambapassword***

*Added user srijan.*

*[root@server1 samba]#*

Now create a folder with the name *secured* in the /samba folder and give permissions like this:

*mkdir -p /samba/secured*

Again we will have to allow to listen through SELinux:

*cd /samba  
chmod -R 0777 secured/  
chcon -t samba\_share\_t secured/*

Again edit the configuration file as :

*vi /etc/samba/smb.conf*

[...]  
[secured]

path = /samba/secured

valid users = @smbgrp

guest ok = no

writable = yes

browsable = yes

*systemctl restart smb.service*

*systemctl restart nmb.service*

Further, check the settings as follows:

*testparm*

*[root@server1 samba]# testparm*

*Load smb config files from /etc/samba/smb.conf*

*rlimit\_max: increasing rlimit\_max (1024) to minimum Windows limit (16384)*

*Processing section "[Anonymous]"*

*Processing section "[secured]"*

*Loaded services file OK.*

*Server role: ROLE\_STANDALONE*

*Press enter to see a dump of your service definitions* ***<--ENTER***

*[global]*

*netbios name = CENTOS*

*server string = Samba Server %v*

*map to guest = Bad User*

*dns proxy = No*

*idmap config \* : backend = tdb*

*[Anonymous]*

*path = /samba/anonymous*

*read only = No*

*guest ok = Yes*

*[secured]*

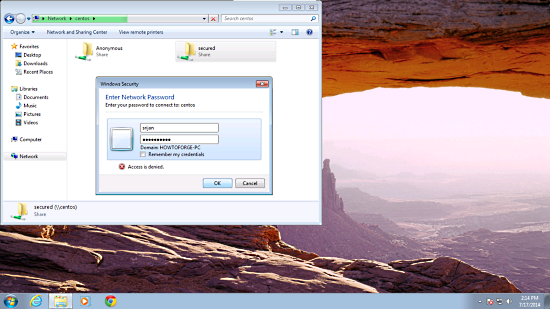
*path = /samba/secured*

*valid users = @smbgrp*

*read only = No*

*[root@server1 samba]#*

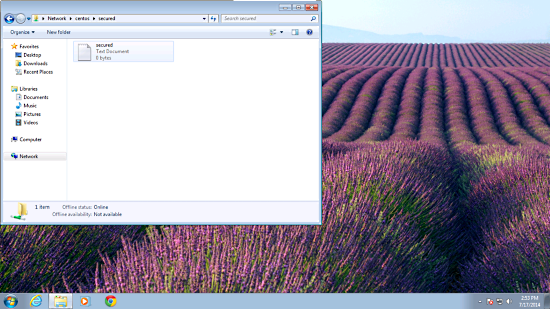
Now at windows machine check the folder now with the proper credentials

[](https://www.howtoforge.com/images/samba_configuration_with_centos_7.0/big/6.png)

You will again face the issue of permissions to give write permission to the user *srijan* do:

*cd /samba  
chown -R srijan:smbgrp secured/*

Now samba users have the permissions to write into the folder. Cheers, you have done with samba server in CentOS 7 :)

[](https://www.howtoforge.com/images/samba_configuration_with_centos_7.0/big/7.png)

https://www.howtoforge.com/images/pdficon_small.png [vi](javascript:void(0);)