

Configuring: How do I use Samba to share folders on a Bright Head Node?

How do I share folders using Samba on a Bright Head Node?

Basically: `/etc/samba/smb.conf` needs to be modified to add the required share, and shorewall rules should be added to allow traffic through the firewall. This can be done with the following recipes for a public share and a private share:

1. Public Share

The following configurations will allow any user to access the shared folder without authentication.

a. Install Samba server on the head node.

```
# yum install samba
```

b. Modify `smb.conf`:

```
# cat /etc/samba/smb.conf
```

```
[global]
```

```
workgroup = BCM
```

```
security = share
```

```
log file = /var/log/samba/log.%m
```

```
max log size = 50
```

```
[samba]
```

```
path = /samba
```

```
browsable = yes
```

```
read only = no
```

```
public = yes
```

```
writable = yes
```

```
available = yes
```

```
guest ok = yes
```

Configuring: How do I use Samba to share folders on a Bright Head Node?

```
guest account = nobody
```

Note: The name of the share "[samba]" can differ from the path of the share. For example, you can use "[localstore]" as the name of the share to point to "/local/storage/samba" path:

```
[localstore]
```

```
path = /local/storage/samba
```

```
browsable = yes
```

```
writable = yes
```

c. Restart Samba service.

```
# service smb restart
```

d. Modify shorewall rules to allow Samba traffic:

```
# cat /etc/shorewall/rules
```

```
[...]
```

```
#LAST LINE -- ADD YOUR ENTRIES BEFORE THIS ONE -- DO NOT REMOVE
```

```
SMB(Accept) net fw
```

e. Restart shorewall service.

```
# service shorewall restart
```

This way users will be able to access the /samba share on the head node without authentication.

2. Private Share

The following configurations will allow only registered users to access the shared folder with their credentials.

Please note that in order for these instructions to work, you will need to enable access to the LDAP server on port 389, which is unencrypted.

a. Enable Slapd access on TCP port 389

Configuring: How do I use Samba to share folders on a Bright Head Node?

Edit `/etc/sysconfig/slapd` and modify the `SLAPD_URLS` line to :
`SLAPD_URLS="ldaps:/// ldapi:/// ldap://"`
Restart the `slapd` service with `"service slapd restart"`.

b. Modify `smb.conf`:

```
# cat /etc/samba/smb.conf

[global]

workgroup = CM

security = user

passdb backend = ldapsam:ldap://localhost/

ldap suffix = dc=cm,dc=cluster

ldap admin dn = cn=root,dc=cm,dc=cluster

ldap group suffix = ou=Groups

ldap passwd sync = yes

ldap ssl = off

log file = /var/log/samba/log.%m

max log size = 50

[samba]

path = /samba

browsable = yes

writable = yes
```

c. Modify `slapd.conf` by adding the following lines:

```
# cat /cm/local/apps/openldap/etc/slapd.conf

[...]
```

Configuring: How do I use Samba to share folders on a Bright Head Node?

```
include /cm/local/apps/openldap/etc/schema/samba.schema
```

```
[...]
```

```
access to attrs=sambaNTPassword
```

```
by self write
```

```
by anonymous auth
```

```
by * none
```

```
[...]
```

the `sambaNTpassword` text in the preceding extract is entered literally. There is no substitution done.

d. Copy the samba schema to the expected location:

```
# cp /etc/openldap/schema/samba.schema  
/cm/local/apps/openldap/etc/schema/
```

e. Add the root DN password to Samba:

```
# smbpasswd -w <smb_password>
```

The `<smb_password>` text in the preceding extract is replaced by the password of the root DN of the LDAP server. The password can be found in `cmd.conf` by running:

```
# grep LDAPPass /cm/local/apps/cmd/etc/cmd.conf
```

f. Register existing LDAP users to Samba:

example:

```
# smbpasswd -a cmsupport
```

Configuring: How do I use Samba to share folders on a Bright Head Node?

New SMB password:

Retype new SMB password:

```
Added user cmsupport.
```

This needs to be done for all the users.

g. Restart LDAP server:

```
# service ldap restart
```

h. Restart Samba service.

```
# service smb restart
```

i. Modify shorewall rules to allow Samba traffic:

```
# cat /etc/shorewall/rules
```

```
[...]
```

```
#LAST LINE -- ADD YOUR ENTRIES BEFORE THIS ONE -- DO NOT REMOVE
```

```
SMB(Accept) net fw
```

j. Restart shorewall service

```
# service shorewall restart
```

k. Verify you'll be able to access the samba share:

```
# smbclient //<hostname>/samba -U cmsupport
```

```
Enter cmsupport's password:
```

```
Domain=[CM] OS=[Unix] Server=[Samba 3.6.9-167.el6_5]
```

```
smb: \>
```

Configuring: How do I use Samba to share folders on a Bright Head Node?

3. Private Share with Active Directory as a backend for users

a. Modify smb.conf:

```
[global]

workgroup = BCM

realm = BCM.LOCAL

security = ADS

password server = win2008.bcm.local

max disk size = 307200

load printers = No

printing = bed

printcap name = /dev/null

#idmap config ACME: default = yes

#idmap config ACME: backend = rid

ldap suffix = dc=acme,dc=local

ldap admin dn = CN=Administrator,CN=Users,DC=bcm,DC=local

ldap passwd sync = yes

ldap ssl = off

log level = 3

log file = /var/log/samba/log.%m

max log size = 50
```

Configuring: How do I use Samba to share folders on a Bright Head Node?

```
#username level = 2
```

```
#username map = /root/smb.map
```

```
[projects]
```

```
path = /projects-data
```

```
browsable = yes
```

```
writable = yes
```

```
create mask = 0644
```

```
directory mask = 0755
```

```
[home]
```

```
path = /home-data
```

```
browsable = yes
```

```
writable = yes
```

```
create mask = 0644
```

```
directory mask = 0775
```

b. save the password in secrets.tdb (assuming you have already integrated with AD).

```
# smbpasswd -w Administrator
```

c. restart smb service and follow the steps outlined in no. 2 starting from point "h."

Unique solution ID: #1163

Author: Frank Furter

Last update: 2018-11-23 03:48