

SFTP SERVER CONFIGURATION STEPS

```
[root@nm ~]# mkdir -p /data/sftp
[root@nm ~]# chmod 701 /data
[root@nm ~]# groupadd sftpusers
[root@nm ~]# useradd -g sftpusers -d /upload -s /sbin/nologin sibasftpuser
[root@nm ~]# cat /etc/passwd | grep -i sibasftpuser
sibasftpuser:x:1000:1000::/upload:/sbin/nologin
[root@nm ~]# cat /etc/passwd | grep -i root
root:x:0:0:root:/root:/bin/bash
operator:x:11:0:operator:/root:/sbin/nologin
dockerroot:x:992:986:Docker User:/var/lib/docker:/sbin/nologin
[root@nm ~]# passwd sibasftpuser
Changing password for user sibasftpuser.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@nm ~]#
[root@nm ~]# mkdir -p /data/sibasftpuser/upload
[root@nm ~]# chown -R root:sftpusers /data/sibasftpuser
[root@nm ~]# chown -R sibasftpuser:sftpusers /data/sibasftpuser/upload
[root@nm ~]# ls -ld /data/
drwx-----x. 4 root root 38 Dec 28 13:23 /data/
[root@nm ~]# ls -ld /data/sibasftpuser/
drwxr-xr-x. 3 root sftpusers 20 Dec 28 13:23 /data/sibasftpuser/
[root@nm ~]# ls -ld /data/sibasftpuser/upload/
drwxr-xr-x. 2 sibasftpuser sftpusers 6 Dec 28 13:23 /data/sibasftpuser/upload/
[root@nm ~]# vim /etc/ssh/sshd_config
```

```

# Override default of no subsystems
#Subsystem sftp /usr/libexec/openssh/sftp-server
Subsystem sftp internal-sftp

# Example of overriding settings on a per-user basis
#Match User anoncvs
#       X11Forwarding no
#       AllowTcpForwarding no
#       PermitTTY no
#       ForceCommand cvs server
KerberosAuthentication no
PubkeyAuthentication yes
UsePAM yes
AuthorizedKeysCommand /usr/bin/sss_ssh_authorizedkeys
GSSAPIAuthentication yes
ChallengeResponseAuthentication yes
AuthorizedKeysCommandUser nobody

##### SFTP SETTINGS#####

Match Group sftpusers
ChrootDirectory /data/%u
ForceCommand internal-sftp

```

[root@nm ~]# systemctl restart sshd

[root@nm ~]# systemctl status sshd

- sshd.service - OpenSSH server daemon

Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; vendor preset: enabled)

Active: active (running) since Fri 2018-12-28 13:30:40 EST; 18s ago

Docs: man:sshd(8)

man:sshd_config(5)

Main PID: 4157 (sshd)

CGroup: /system.slice/sshd.service

└─4157 /usr/sbin/sshd -D

Dec 28 13:30:40 nm.xavier01.com systemd[1]: Stopped OpenSSH server daemon.

Dec 28 13:30:40 nm.xavier01.com systemd[1]: Starting OpenSSH server daemon...

Dec 28 13:30:40 nm.xavier01.com sshd[4157]: Server listening on 0.0.0.0 port 22.

Dec 28 13:30:40 nm.xavier01.com sshd[4157]: Server listening on :: port 22.

Dec 28 13:30:40 nm.xavier01.com systemd[1]: Started OpenSSH server daemon.

Hint: Some lines were ellipsized, use -l to show in full.

```
[root@nm ~]# systemctl status sshd -l
```

- sshd.service - OpenSSH server daemon

Loaded: loaded (/usr/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)

Active: active (running) since Fri 2018-12-28 13:30:40 EST; 27s ago

Docs: man:sshd(8)

man:sshd_config(5)

Main PID: 4157 (sshd)

CGroup: /system.slice/ssh.service

└─4157 /usr/sbin/sshd -D

Dec 28 13:30:40 nm.xavier01.com systemd[1]: Stopped OpenSSH server daemon.

Dec 28 13:30:40 nm.xavier01.com systemd[1]: Starting OpenSSH server daemon...

Dec 28 13:30:40 nm.xavier01.com sshd[4157]: Server listening on 0.0.0.0 port 22.

Dec 28 13:30:40 nm.xavier01.com sshd[4157]: Server listening on :: port 22.

Dec 28 13:30:40 nm.xavier01.com systemd[1]: Started OpenSSH server daemon.

```
[root@nm ~]#
```

```
[root@nm ~]# sftp
```

usage: sftp [-1246aCfpqrv] [-B buffer_size] [-b batchfile] [-c cipher]

[-D sftp_server_path] [-F ssh_config] [-i identity_file] [-l limit]

[-o ssh_option] [-P port] [-R num_requests] [-S program]

[-s subsystem | sftp_server] host

sftp [user@]host[:file ...]

sftp [user@]host[:dir[/]]

sftp -b batchfile [user@]host

```
[root@nm ~]# sftp sibaftuser@192.168.1.110
```

The authenticity of host '192.168.1.110 (<no hostip for proxy command>)' can't be established.

ECDSA key fingerprint is SHA256:pVhwPi46fBGjazzWotlFboS/lkcF6g4GxbsYR/g7kZ8.

ECDSA key fingerprint is MD5:41:de:b2:23:6d:31:12:ce:be:71:0e:84:c4:8e:e0:6e.

Are you sure you want to continue connecting (yes/no)? yes

Warning: Permanently added '192.168.1.110' (ECDSA) to the list of known hosts.

Password:

Connected to 192.168.1.110.

sftp> ?

Available commands:

bye	Quit sftp
cd path	Change remote directory to 'path'
chgrp grp path	Change group of file 'path' to 'grp'
chmod mode path	Change permissions of file 'path' to 'mode'
chown own path	Change owner of file 'path' to 'own'
df [-hi] [path]	Display statistics for current directory or filesystem containing 'path'
exit	Quit sftp
get [-afPpRr] remote [local]	Download file
reget [-fPpRr] remote [local]	Resume download file
reput [-fPpRr] [local] remote	Resume upload file
help	Display this help text
lcd path	Change local directory to 'path'
lls [ls-options [path]]	Display local directory listing
lmkdir path	Create local directory
ln [-s] oldpath newpath	Link remote file (-s for symlink)
lpwd	Print local working directory
ls [-1afhlnrSt] [path]	Display remote directory listing
lumask umask	Set local umask to 'umask'
mkdir path	Create remote directory
progress	Toggle display of progress meter
put [-afPpRr] local [remote]	Upload file
pwd	Display remote working directory
quit	Quit sftp
rename oldpath newpath	Rename remote file

rm path	Delete remote file
rmdir path	Remove remote directory
symlink oldpath newpath	Symlink remote file
version	Show SFTP version
!command	Execute 'command' in local shell
!	Escape to local shell
?	Synonym for help

sftp> ls

sftp> ll

anaconda-ks.cfg sibalv

sftp> cd /var

Couldn't stat remote file: No such file or directory

sftp> pwd

Remote working directory: /upload

sftp> lpwd

Local working directory: /root

sftp> lcd /tmp/

sftp> lpwd

Local working directory: /tmp

sftp> mkdir testsftp

sftp> lpwd

Local working directory: /tmp

sftp> ll

openldap-tlsmc-certs--

5BC1A0212A769016127A58449C1F813044D43EAEF4C1D645825AE6A18EEACFB1 tmp.A4XAvZJdcC
tmp.DO1Evt5hGy tmp.mnFpM1Svn0 tmp.rnxFjWmOG8

systemd-private-06646fb6360744fbaaab7ecbdd0dd230-chrond.service-PZL9IU
tmp.a71VDsEWFv tmp.EJ4UwNI7ul tmp.MnHUxIJqIN tmp.sQni9TvJFw

testsfptmp.bPm03lO4rr tmp.hzlRnOjhxM

tmp.oEtiRVTvzQ tmp.TbnhaFm2go

tmp.3xjHSBJ9FItmp.BQfHfNbJgt tmp.kV5T5crgQA

tmp.pxBZEFXz7X tmp.tzLnoEsBCA

tmp.7W7OEt5P9s
tmp.qzY7ba5cFJ tmp.ZvD7YFSNW6

tmp.CeqVT7e6KG tmp.IKMHPkKZHO

sftp> lcd testsftp/

sftp> pwd

Remote working directory: /upload

sftp> lpwd

Local working directory: /tmp/teststftp

sftp> ltouch sftpfile

Invalid command.

sftp>

sftp> lpwd

Local working directory: /tmp/teststftp

sftp> put sftpfile

Uploading sftpfile to /upload/sftpfile

sftpfile

100% 0 0.0KB/s 00:00

sftp> lcd /

sftp> pwd

Remote working directory: /upload

sftp> lpwd

Local working directory: /

sftp> get sftpfile

Fetching /upload/sftpfile to sftpfile

sftp> !

[root@nm /]#