sshfs Mount over SSH

CONCEPTS

> sshfs speaks SFTP over a normal ssh login: if ssh <host> works, sshfs <host>: <dir> works. Run it as your own user, not root.

Your programs ls, cp, editor
↓ FUSE
sshfs local mountpoint
↓ ssh + sftp
sftp-server on the remote host
↓ disk
Remote dir /srv/data

MOUNT AND UNMOUNT

`sshfs <user>@<host>:<dir> <mountpoint>`
Mount a remote directory

`sshfs <host>: <mountpoint>`
Mount the remote home directory

`fusermount3 -u <mountpoint>`
Unmount (Linux)

`sshfs -p <port> <host>: <mountpoint>`
Use a non-default SSH port

`sshfs -o IdentityFile=<key> <host>: <mountpoint>`
Pick the key to log in with

`sshfs -o ro <host>: <mountpoint>`
Mount read-only

`sshfs -C <host>: <mountpoint>`
Compress traffic (slow links)

`findmnt -t fuse.sshfs`
List active sshfs mounts

RECONNECT AND HANGS

`sshfs -o reconnect,ServerAliveInterval=15 <host>: <mountpoint>`
Recover after the link drops

`pkill -f 'sshfs.*<mountpoint>'`
Kill a hung sshfs, freeing stuck programs

RECONNECT AND HANGS (cont.)

> A frozen mount (ls hangs, cd stalls) usually means a dead connection with no keepalive: set ServerAliveInterval together with reconnect.

PERMISSIONS AND SYMLINKS

`sshfs -o allow_other <host>: <mountpoint>`
Let other local users use the mount

`sshfs -o allow_other,default_permissions <host>: <mountpoint>`
Enforce file modes locally too

`sshfs -o idmap=user <host>: <mountpoint>`
Map remote user's IDs to yours

SPEED AND CACHING

`sshfs -o dcache_timeout=<s> <host>: <mountpoint>`
Cache directory data longer (default 20 s)

MOUNTING AT BOOT

`mkdir -p <mountpoint>`
Create the mountpoint first

fstab line

```
<user>@<host>:<dir> <mountpoint>
fuse.sshfs \
  _netdev,reconnect,ServerAliveInterval=
15,IdentityFile=<key> 0 0
# one line in the real file
```

RECIPES

Mount a server for the day

```
mkdir -p ~/mnt/box
sshfs -o
reconnect,ServerAliveInterval=15
<user>@<host>:/srv/data ~/mnt/box
ls ~/mnt/box
fusermount3 -u ~/mnt/box
```