

SSH connections

connects to a server (default port 22)

```
$ ssh user@server
```

uses a specific port declared in sshd_config

```
$ ssh user@server -p other_port
```

runs a script on a remote server

```
$ ssh user@server script_to_run
```

compresses and downloads from a remote server

```
$ ssh user@server "tar cvzf - ~/source" > output.tgz
```

specifies other ssh key for connection

```
$ ssh -i ~/.ssh/specific_ssh_fkey
```

SSH service

starts ssh service

```
$ (sudo) service ssh start
```

checks ssh service status

```
$ (sudo) service ssh status
```

stops ssh service

```
$ (sudo) service ssh stop
```

restarts ssh service

```
$ (sudo) service ssh restart
```

SCP (Secure Copy)

copies a file from a remote server to a local machine

```
$ scp user@server:/directory/file.ext local_destination/
```

copies a file between two servers

```
$ scp user@server:/dir/file.ext user@server:/dir
```

copies a file from a local machine to a remote server

```
$ scp local_destination/file.ext user@server:/directory
```

uses a specific port declared for SSH in sshd_config

```
$ scp -P port
```

copies recursive a whole folder

```
$ scp -r user@server:/directory local_destination/
```

copies all files from a folder

```
$ scp user@server:/directory/* local_destination/
```

copies all files from a server folder to the current folder

```
$ scp user@server:/directory/* .
```

compresses data on network using gzip

```
$ scp -C
```

prints verbose info about the current transfer

```
$ scp -v
```

SSH keys

generates a new ssh key

```
$ ssh-keygen -t rsa -b 4096
```

sends the key to the server

```
$ ssh-copy-id user@server
```

converts ids_rsa into ppk

```
$ puttygen current_key -o keyname.ppk
```

SSH config

opens config file (usual location)

```
$ sudo nano /etc/ssh/sshd_config
```

changes default SSH port (22)

```
Port 9809
```

disables root login

```
PermitRootLogin no
```

restricts access to specific users

```
AllowUsers user1, user2
```

enables login through ssh key

```
PubkeyAuthentication yes
```

disables login through password

```
PasswordAuthentication no
```

disables usage of files .rhosts and .shosts

```
IgnoreRhosts yes
```

disables a less secure type of login

```
HostbasedAuthentication no
```

number of unauthenticated connections

before dropping

```
MaxStartups 10:30:100
```

no. of failed tries before the servers stops

accepting new tries

```
MaxAuthTries 3
```

max current ssh sessions

```
MaxSessions 1
```

disables interactive password authentication

```
ChallengeResponseAuthentication no
```

no empty password allowed

```
PermitEmptyPasswords no
```

disables Rhost authentication

```
RhostsAuthentication no
```

disables port forwarding (blocks i.e MySQL Workbench)

```
AllowTcpForwarding no
```

```
X11Forwarding no
```

prints much more info about SSH connections

```
LogLevel VERBOSE
```

Full articles about cyber security at
<https://blowstack.com/blog/cyber-security>