

# SSH Access

## Root user

Login as root. Default setting in `/etc/sshd_config` is `PasswordAuthentication yes`.

Attach a USB stick to the box which contains an `authorized_keys` file with the public keys of the machines you want to use to SSH access to the box.

```
mkdir /root/.ssh
chmod 700 /root/.ssh
cp /volumeUSB1/authorized_keys /root/.ssh
chmod 400 /root/.ssh/authorized_keys
```

## Non-root user

Log into the web interface

```
Control Panel > Users > User Home > Enable user home services
```

This enables path `/var/services/homes` and below this, all users which are registered to the system.

Adding a user through the web interface does not set all necessary settings for SSH / shell access:

1. create directory `/var/services/homes` and `/var/services/homes/<username>` with proper privileges as root
2. copy `.profile` from `/root` to `/var/services/homes/<username>` and edit it's contents
3. you might wish to change the default prompt to `PS1="\u@\h:\w\$ "` in `.profile`
4. if you installed `sudo`, also add `SUDO_PS1` with the same prompt to `.profile`

Do the following as root:

```
chmod 4755 /bin/busybox
cd /var/services/homes/username
mkdir .ssh
chown username:users .ssh
cp /root/.ssh/authorized_keys .ssh
chown username:users .ssh/authorized_keys
chmod 400 .ssh/authorized_keys
cp /root/.profile /var/services/homes/username
vi .profile
-- change the line that reads "HOME=/root" to
"HOME=/var/services/homes/username"
chmod 600 .profile
vi /etc/passwd
-- make sure your home is /var/services/homes/username and change shell from
/sbin/nologin to /bin/sh or /bin/ash
```

## Hardening

```
# vi /etc/ssh/sshd_config
Port 50111
LoginGraceTime 15
PermitRootLogin without-password
PasswordAuthentication no
```

## Tunneling

If you want to establish tunnels to services on the NAS, you need to enable TCP forwarding:

```
# vi /etc/ssh/sshd_config
AllowTcpForwarding yes
PermitTunnel yes
```

## Check configuration

Check configuration of sshd\_config before reloading or restarting:

```
# sshd -t
# /etc/init.d/ssh reload
```

## Update for DSM5

Set the SSH Port in Control Panel / Terminal.

## Trouble shooting

Make sure the NAS is configured correctly to access the internet, e.g. default gateway and DNS settings must be correct.

Enable telnet in web interface > Control Panel > Terminal

```
telnet box # as username
ssh -v -v -v box # as root
```

## Articles

[Pubkey SSH for non-root users](#)

[Enabling the Command Line Interface](#)

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