

Log in to a Synology DiskStation using SSH keys as a user other than root

<https://chainsawonatireswing.com/2012/01/16/log-in-to-a-synology-diskstation-using-ssh-keys-as-a-user-other-than-root/>

In a previous post—[SSH into your Synology DiskStation with SSH Keys](#)—I covered how to log in to your DiskStation using SSH keys instead of a password. By default, though, the DiskStation is set up only for root to use keys, as only root has a home directory. However, it's not a good idea to always log in as root, as you can do *anything* on the system as root, include delete essential files & make other potentially disastrous boo-boos. But if you want to log in via SSH keys as another user, you first have to create & edit `.ssh/authorized_keys` for that user. But where do you put that file?

By default, the only user with a home directory on the system is root, at `/root`. If you try to log in as admin, or any other user, you'll see this message:

```
Could not chdir to home directory /var/services/homes/admin: No such file or directory
```

And then you'll still log in, but you'll be at `/`. So here's how to create a home folder & `.ssh` folder for admin; just duplicate this process for any other user with whom you want to use SSH keys.

The Synology DiskStation has a built-in ability to create home folders for every user—it's just a bit hidden.

Go to Control Panel > User > User Home. Check the box next to Enable User Home Service & choose a volume that you want your users' home directories to reside. That's the simple part. Now if you log in as admin, you'll see that you have your own home directory:

```
$ ssh admin@IP
admin@IPs password:
```

```
BusyBox v1.16.1 (2011-11-26 14:58:46 CST) built-in shell (ash)
Enter 'help' for a list of built-in commands.
```

```
> pwd
/volume1/homes/admin
```

Yup, that worked. But what about `.ssh`? Easy. Log in as root, & just copy the `.ssh` folder from root's home to admin's home:

```
$ ssh root@IP
> cp -R .ssh /volume1/homes/admin
> ls -l /volume1/homes/admin/
drwx-----2 root root 4096 Jan 15 13:11 .ssh
```

We're not done, though. Notice that admin's `.ssh` is owned by root, which isn't gonna work when admin tries to log in. So, while still logged in as root, we need to change ownership of that directory & its contents:

```
> chown -R admin:users .ssh
> ls -l
drwx-----2 adminusers 4096 Jan 15 13:11 .ssh
```

Now exit as root & try logging in as admin:

```
> exit
```

```
Connection to IP closed.
```

```
$ ssh admin@IP
```

```
BusyBox v1.16.1 (2011-11-26 14:58:46 CST) built-in shell (ash)
Enter 'help' for a list of built-in commands.
```

```
>
```