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OpenSSH using stepstones.

You might be working in an environment where you always ssh from your machine to the *middle machine* and then connect to the *destination machine*. What a waste of time, lets see how you could automate it. The middle machine is frequently referred to as **stepstone host**.

Requirements

A workstation. In this example, the hostname is **workstation**.

A stepstone machine, the machine in the middel. The hostname is **stepstone** in this example.

The command **nc** (netcat) installed on the **stepstone**.

A destination machine, likely a server or your other workstation. (at work for example.) The hostname is **destination** in this example.

Implementing it

On your workstation, add this snippet to `~/.ssh/config`

```
Host destination
ProxyCommand ssh stepstone nc %h %p
```

Replace **destination** with the machine your will eventually will connect to. Replace **stepstone** with the machine that is in the middle. Normally, you always login to that box first, then continue.

After you have altered your `~/.ssh/config` go ahead and try to connect directly to your **destination machine**.

```
workstation $ ssh destination
username@stepstone's password:
username@destination's password:
destination $
```

Wow your automated it! The only thing is these stupid passwords. Check out how to implement ssh-keys into your session and how to distribute keys. This is not required, but after a few days of password typing, you will want to setup ssh-keys properly.

Extras

Here is a snippet of a more complicated configuration:

```
Host stepstone
User myotherusername

Host 192.168.1.*
User yourusername
Port 2222
ProxyCommand ssh stepstone nc %h %p
```

If I connect to stepstone, I will use the username **myotherusername**. In the bottom declaration a * is used. This implies that all machines in the 192.168.1.0/24 network will be using this part of the configuration. When logging in to a machine in the 192.168.1.0/24 network, then you will use the username **yourusername**.

You can do *many* tricks with openssh, check out the manpage of ssh for more information.

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