

## GNU/Linux Administration - Support #829

### Persistent Reverse SSH Tunnel Using AutoSSH on Arch Linux

07/27/2016 09:29 PM - Daniel Curtis

<b>Status:</b>	Closed	<b>Start date:</b>	07/27/2016
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Daniel Curtis	<b>% Done:</b>	100%
<b>Category:</b>	Server	<b>Estimated time:</b>	0.50 hour
<b>Target version:</b>	Arch Linux	<b>Spent time:</b>	1.00 hour

#### Description

This is a guide for setting up a persistent reverse SSH tunnel using AutoSSH on Arch Linux.

Once completed, the service that will autostart at boot will open port 5000 on the remote SSH connection that will allow SSH connections back to the originating host.

#### Prepare the Environment

- Switch to the root user then switch to the:

```
sudo -s
```

- Make sure the system is up to date:

```
pacman -Syu
```

- Generate a root ssh keypair:

```
ssh-keygen -t ed25519
```

- Copy the ssh public key to the remote host:

```
ssh-copy-id bob@ssh.example.com
```

#### AutoSSH

- Install autossh:

```
pacman -S autossh
```

#### Host Config

- Create a .ssh config file:

```
nano ~/.ssh/config
```

- And add the following:

```
Host remote-tunnel-home
  HostName ssh.example.com
```

```
User          bob
Port          7022
IdentityFile  ~/.ssh/id_ed25519
RemoteForward 5000 localhost:22
ServerAliveInterval 30
ServerAliveCountMax 3
```

## Systemd Service

- Create the autossh reverse tunnel service file:

```
nano /etc/systemd/system/autossh-reverse-tunnel-home.service
```

- And add the following:

```
[Unit]
Description=AutoSSH tunnel to remote SSH host on local port 5000
After=network.target

[Service]
Environment="AUTOSSH_GATETIME=0"
ExecStart=/usr/bin/autossh -M 0 -N remote-tunnel-home

[Install]
WantedBy=multi-user.target
```

- Refresh the systemd units:

```
systemctl daemon-reload
```

- Start and enable the service at boot:

```
systemctl start autossh-reverse-tunnel-home
systemctl enable autossh-reverse-tunnel-home
```

## Resources

- [https://raymii.org/s/tutorials/Autossh\\_persistent\\_tunnels.html](https://raymii.org/s/tutorials/Autossh_persistent_tunnels.html)
- <https://www.everythingcli.org/ssh-tunnelling-for-fun-and-profit-autossh/>
- <https://blog.sleeplessbeastie.eu/2014/12/23/how-to-create-persistent-reverse-ssh-tunnel/>
- [https://wiki.archlinux.org/index.php/Secure\\_Shell#Run\\_autossh\\_automatically\\_at\\_boot\\_via\\_systemd](https://wiki.archlinux.org/index.php/Secure_Shell#Run_autossh_automatically_at_boot_via_systemd)

## History

### #1 - 07/27/2016 09:37 PM - Daniel Curtis

- Description updated
- Status changed from New to Resolved
- % Done changed from 0 to 100

### #2 - 07/27/2016 09:47 PM - Daniel Curtis

- Description updated

### #3 - 08/05/2016 08:58 PM - Daniel Curtis

- Status changed from Resolved to Closed

### #4 - 08/06/2016 10:49 PM - Daniel Curtis

- Description updated