Just the commands - fast setup for a secure Linux server

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What?

- Debian jessie 8.7
- vi

→ change for your favorite text editor, and probably valid for Ubuntu as well.

Make sure you have the latest version of all packages:

```
sudo apt-get update && sudo apt-get upgrade
```

```
 //ST: !
==== Network Time Protocol
```

```
aptitude install ntp
```

Then define your time zone (the one where your server is located):

```
dpkg-reconfigure tzdata
```

```
 //ST: !
==== changing SSH port
 vi /etc/ssh/sshd_config
```

Text to change in the file: change port SSH 22 by a new port (**let's say 1234**), write the new port down somewhere

```
service sshd restart
```

```
 //ST: !
==== Installing the sudo command:
```

```
apt-get install sudo
```

```
 //ST: !
==== Adding a new user (let's call it "myUser")
```

```
adduser myUser
```

```
 //ST: !
==== Enabling server connections via myUser
```

```
vi /etc/ssh/sshd_config
```

AllowUsers myUser

Then restart the SSH service:

```
service sshd restart
```

```
 //ST: !
====  Disabling connection through root
```

```
vi /etc/ssh/sshd_config
```

```
Text to change in the file:
```

```
PermitRootLogin no
```

```
From there on, you cannot login to the server from root, only from myUser.
```

To switch to root privileges:

```
su -
```

```
 //ST: !
==== enable SSH key auth
```

- Generate a key with puttygen (SSH-2 RSA 1024).
- Parameters to change in `/etc/ssh/sshd_config`:

ChallengeResponseAuthentication no

X11Forwarding no

UsePAM no

```
 //ST: !
LogLevel DEBUG3 (this should be added, the parameter is not listed by default)
```

- Save the file, then:

```
   service sshd restart
```

- Add your public key to /home/myUser/.ssd/authorized_keys

```
   //ST: !
   Make sure that:
```

- you have put the keys in /home/myUser/.ssd/authorized_keys (not just in the root user folder)
- your key starts with "the "ssh-rsa" (the first "s" might be missing ...)
- the key doesn't break in several lines
- do chmod 700 ~/.ssh on the home folder
- use tail -f /var/log/auth.log for debugging

```
   //ST: !
   When SSH key login works, go back to `/etc/ssh/sshd_config` and do:
```

PasswordAuthentication no

then: service sshd restart

```
 //ST: !
Things will not work the first time, useful tips:
```

- http://askubuntu.com/a/306832
- http://stackoverflow.com/a/20923212/798502

```
   //ST: !
   ==== installing the undifficult firewall
```

```
   sudo apt-get update
```

```
apt-get install ufw
```

```
  //ST: !
==== denying all incoming traffic except for SSH port
```

```
ufw default deny incoming
```

```
sudo ufw allow 1234/tcp
```

```
ufw enable
```

```
  //ST: !
==== install and config of Psad
```

First, making sure the firewall logs the traffic:

```
iptables -A INPUT -j LOG
iptables -A FORWARD -j LOG
```

```
apt-get install psad
```

```
  //ST: !
Then modify some options in the config file, which is situated here:
```

```
vi /etc/psad/psad.conf
```

Here are some options I modified: my psad config file

```
  //ST: !
Then we whitelist our own server:
```

```
vi /etc/psad/auto_dl
```

where I put just 2 values:

127.0.0.1   0; # localhost

xx.xx.xxx.xxx   0; # Server IP (replace xx.xx.xxx.xxx by your actual server IP)

```
 //ST: !
==== disabling clear password auth
```

```
vi /etc/ssh/sshd_config
```

Text to change in the file:

ChallengeResponseAuthentication no

PasswordAuthentication no

UsePAM no

```
service sshd restart
```

```
 //ST: !
== the end
//ST: The end!
```

Author of this tutorial: Clement Levallois

All resources on linux security: https://seinecle.github.io/linux-security-tutorials/