# Installing Saltstack Server on Ubuntu

Saltstack is a configuration management tool, it is able to automate the deployment of Software and Services in order to quickly set up an environment. It is similar to Puppet in the way it has a Master Client setup, in this case though it is called Master and Minion. Saltstack is based on python and the modules are composed of a series of state files, with the extension of .sls Furthermore, SLS files are in YAML format.

**Step 1) Install dependencies**

Saltstack primarily uses Python so make sure this is installed:  
 sudo apt-get install -y python python3 python-software-properties software-properties-common

**Step 2) Add apt-repository**

Next we shall add the Apt repository for Saltstack, since we do not need to use an old version, simply use the following command.

sudo add-apt-repository ppa:saltstack/salt

**Step 3) Adding the saltstack repository key**.

To fully complete the top, we will need to add a PPA key, we will need to run these commands.

echo deb http://ppa.launchpad.net/saltstack/salt/ubuntu `lsb\_release -sc` main | sudo tee /etc/apt/sources.list.d/saltstack.list

wget -q -O- "http://keyserver.ubuntu.com:11371/pks/lookup?op=get&search=0x4759FA960E27C0A6" | sudo apt-key add -

Please note that both these commands run on one line.

**Step 4) Updating the Apt-Cache**

We will need to update the apt-cache after this, this can be done by running:

sudo apt-get update

**Step 5) Installing Saltstack Master**

To install the Saltstack packages we will need to run the following command.

sudo apt-get install -y salt-master

**Step 6) Configuring Saltstack Master**

Salt server will work with the default settings. The default ports are 4505 and 4506.

Should you want to change this, the configuration files for salt are located in /etc/salt -> the config file is simply the name of the component /etc/salt/<component-name>. In this case, it would be server. /etc/salt/server.

You can read more about this here: <https://docs.saltstack.com/en/latest/ref/configuration/master.html#configuration-salt-master>

**Step 7) Starting the Salt-server**

As the salt server is installed, we can now start this service, this can be done by running the following command.

salt-master

However, you may want to daemonise this if you don’t want to run Salt in the foreground. You can use this command instead.

salt-master -d

# Installing Saltstack Client on Ubuntu

Now that we have installed our server we would like to install the saltstack minion on a client. We will also be showing how you can connect both the salt server and minion together.

**ON THE CLIENT**

**Step 1) Follow Steps 1 – 4 on the server guide.**

**Step 2) To install saltstack minion run this command.**

sudo apt-get install -y salt-minion

**Step 3) Configure the salt minion configuration so it knows where the Master server is.**

First using your favourite editor, modify the minion configuration file.

sudo nano /etc/salt/minion

Add the following:  
 master: <server ipaddress>

You can find more information here: <https://docs.saltstack.com/en/latest/ref/configuration/minion.html#configuration-salt-minion>

Step 4) Copying the Master’s public key signature

***ON THE SERVER***

For the client to be able to connect to the Saltstack master, it first needs its public key, you can get its signature by entering the following command:

sudo salt-key -F master

It will output something similar to this:



You will need to copy **master.pub** signature,

***ON THE MINION***

On the minion, you will need to modify the config file /etc/salt/minion again.

You will need to set this value:

master\_finger: <master.pub signature>