```
Eliass-MBP-2:~ eliassun$ vagrant box add generic/ubuntu1604
==> box: Loading metadata for box 'generic/ubuntu1604'
    box: URL: https://vagrantcloud.com/generic/ubuntu1604
This box can work with multiple providers! The providers that it
can work with are listed below. Please review the list and choose
the provider you will be working with.

1) hyperv
2) libvirt
3) parallels
4) virtualbox
5) vmware_desktop

Enter your choice: 4
==> box: Adding box 'generic/ubuntu1604' (v1.9.8) for provider: virtualbox
    box: Downloading: https://vagrantcloud.com/generic/boxes/ubuntu1604/versions/1.9.8/providers/virtualbox.box
    box: Download redirected to host: vagrantcloud-files-production.s3.amazonaws.com
An error occurred while downloading the remote file. The error
message, if any, is reproduced below. Please fix this error and try
again.

OpenSSL SSL_read: SSL_ERROR_SYSCALL, errno 54
Eliass-MBP-2:~ eliassun$ ls ~/.vagrant.d/
boxes/                  insecure_private_key  tmp/
data/                   rgloader/
gems/                   setup_version
Eliass-MBP-2:~ eliassun$ ls ~/.vagrant.d/tmp/box7
box70f91072c912ff0e0dbe0ec7e374ce44a1fba6aa
box7194575a2f4c28d794ca40f3a0eaf79fc6b80028
Eliass-MBP-2:~ eliassun$ ls ~/.vagrant.d/tmp/box*
/Users/eliassun/.vagrant.d/tmp/box70f91072c912ff0e0dbe0ec7e374ce44a1fba6aa
/Users/eliassun/.vagrant.d/tmp/box7194575a2f4c28d794ca40f3a0eaf79fc6b80028
Eliass-MBP-2:~ eliassun$ rm -rf ~/.vagrant.d/tmp/box*
Eliass-MBP-2:~ eliassun$ vagrant box add generic/ubuntu1804
==> box: Loading metadata for box 'generic/ubuntu1804'
    box: URL: https://vagrantcloud.com/generic/ubuntu1804
This box can work with multiple providers! The providers that it
can work with are listed below. Please review the list and choose
the provider you will be working with.

1) hyperv
2) libvirt
3) parallels
4) virtualbox
5) vmware_desktop

Enter your choice: 4
==> box: Adding box 'generic/ubuntu1804' (v1.9.8) for provider: virtualbox
    box: Downloading: https://vagrantcloud.com/generic/boxes/ubuntu1804/versions/1.9.8/providers/virtualbox.box
    box: Download redirected to host: vagrantcloud-files-production.s3.amazonaws.com
==> box: Successfully added box 'generic/ubuntu1804' (v1.9.8) for 'virtualbox'!
Eliass-MBP-2:~ eliassun$ mdkir ~/ubuntu1804
-bash: mdkir: command not found
Eliass-MBP-2:~ eliassun$ sudo mdkir ~/ubuntu1804
Password:
sudo: mdkir: command not found
Eliass-MBP-2:~ eliassun$ mkdir ~/ubuntu1804
Eliass-MBP-2:~ eliassun$ cd ~
Eliass-MBP-2:~ eliassun$ ls
AndroidStudioProjects        disk
Applications                 file1
Creative Cloud Files         jni
Desktop                      jsproject
Documents                    pmd-eclipse.log
Downloads                    shell2.c
Force_Disp.csv               sqlite-autoconf-3250200
Library                      sqlite-autoconf-3250200.tar
Movies                       ubuntu1804
Music                        version-control
Pictures                     week1.R
Public                       week11.R
VirtualBox VMs               workshop
cis39s                       ying
cis45
Eliass-MBP-2:~ eliassun$ cd ubuntu1804/
Eliass-MBP-2:ubuntu1804 eliassun$ ls
Eliass-MBP-2:ubuntu1804 eliassun$ nano Vagrantfile
Eliass-MBP-2:ubuntu1804 eliassun$ ls
Eliass-MBP-2:ubuntu1804 eliassun$ vim Vagrantfile
Eliass-MBP-2:ubuntu1804 eliassun$ vim Vagrantfile
Eliass-MBP-2:ubuntu1804 eliassun$ vagrant up
Bringing machine 'ubuntu-1804' up with 'virtualbox' provider...
==> ubuntu-1804: Importing base box 'generic/ubuntu1804'...
==> ubuntu-1804: Matching MAC address for NAT networking...
==> ubuntu-1804: Setting the name of the VM: ubuntu1804_ubuntu-1804_1555215833131_24205
==> ubuntu-1804: Fixed port collision for 22 => 2222. Now on port 2200.
==> ubuntu-1804: Clearing any previously set network interfaces...
==> ubuntu-1804: Preparing network interfaces based on configuration...
    ubuntu-1804: Adapter 1: nat
    ubuntu-1804: Adapter 2: hostonly
==> ubuntu-1804: Forwarding ports...
    ubuntu-1804: 22 (guest) => 2200 (host) (adapter 1)
==> ubuntu-1804: Running 'pre-boot' VM customizations...
==> ubuntu-1804: Booting VM...
==> ubuntu-1804: Waiting for machine to boot. This may take a few minutes...
    ubuntu-1804: SSH address: 127.0.0.1:2200
    ubuntu-1804: SSH username: vagrant
    ubuntu-1804: SSH auth method: private key
    ubuntu-1804:
    ubuntu-1804: Vagrant insecure key detected. Vagrant will automatically replace
    ubuntu-1804: this with a newly generated keypair for better security.
    ubuntu-1804:
    ubuntu-1804: Inserting generated public key within guest...
    ubuntu-1804: Removing insecure key from the guest if it's present...
    ubuntu-1804: Key inserted! Disconnecting and reconnecting using new SSH key...
==> ubuntu-1804: Machine booted and ready!
==> ubuntu-1804: Checking for guest additions in VM...
    ubuntu-1804: The guest additions on this VM do not match the installed version of
    ubuntu-1804: VirtualBox! In most cases this is fine, but in rare cases it can
    ubuntu-1804: prevent things such as shared folders from working properly. If you see
    ubuntu-1804: shared folder errors, please make sure the guest additions within the
    ubuntu-1804: virtual machine match the version of VirtualBox you have installed on
    ubuntu-1804: your host and reload your VM.
    ubuntu-1804:
    ubuntu-1804: Guest Additions Version: 5.2.18
    ubuntu-1804: VirtualBox Version: 6.0
==> ubuntu-1804: Setting hostname...
==> ubuntu-1804: Configuring and enabling network interfaces...
Eliass-MBP-2:ubuntu1804 eliassun$ ssh vagrant@127.0.0.1:2200
ssh: Could not resolve hostname 127.0.0.1:2200: nodename nor servname provided, or not known
Eliass-MBP-2:ubuntu1804 eliassun$ vagrant ssh
```

```
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$ quit

Command 'quit' not found, did you mean:

  command 'quilt' from deb quilt
  command 'qgit' from deb qgit
  command 'quot' from deb quota
  command 'luit' from deb x11-utils
  command 'quiz' from deb bsdgames

Try: apt install <deb name>

vagrant@ubuntu-1804:~$ exit
logout
Connection to 127.0.0.1 closed.
Eliass-MBP-2:ubuntu1804 eliassun$ pwd
/Users/eliassun/ubuntu1804
Eliass-MBP-2:ubuntu1804 eliassun$ ls
Vagrantfile
Eliass-MBP-2:ubuntu1804 eliassun$ vagrant up
Bringing machine 'ubuntu-1804' up with 'virtualbox' provider...
==> ubuntu-1804: Machine already provisioned. Run `vagrant provision` or use the `--provision`
==> ubuntu-1804: flag to force provisioning. Provisioners marked to run always will still run.
Eliass-MBP-2:ubuntu1804 eliassun$ vagrant SSH
Usage: vagrant [options] <command> [<args>]

    -v, --version                    Print the version and exit.
    -h, --help                       Print this help.

Common commands:
    box             manages boxes: installation, removal, etc.
    cloud           manages everything related to Vagrant Cloud
    destroy         stops and deletes all traces of the vagrant machine
    global-status   outputs status Vagrant environments for this user
    halt            stops the vagrant machine
    help            shows the help for a subcommand
    init            initializes a new Vagrant environment by creating a Vagrantfile
    login
    package         packages a running vagrant environment into a box
    plugin          manages plugins: install, uninstall, update, etc.
    port            displays information about guest port mappings
    powershell      connects to machine via powershell remoting
    provision       provisions the vagrant machine
    push            deploys code in this environment to a configured destination
    rdp             connects to machine via RDP
    reload          restarts vagrant machine, loads new Vagrantfile configuration
    resume          resume a suspended vagrant machine
    snapshot        manages snapshots: saving, restoring, etc.
    ssh             connects to machine via SSH
    ssh-config      outputs OpenSSH valid configuration to connect to the machine
    status          outputs status of the vagrant machine
    suspend         suspends the machine
    up              starts and provisions the vagrant environment
    upload          upload to machine via communicator
    validate        validates the Vagrantfile
    version         prints current and latest Vagrant version
    winrm           executes commands on a machine via WinRM
    winrm-config    outputs WinRM configuration to connect to the machine

For help on any individual command run `vagrant COMMAND -h`

Additional subcommands are available, but are either more advanced
or not commonly used. To see all subcommands, run the command
`vagrant list-commands`.

Eliass-MBP-2:ubuntu1804 eliassun$ vagrant ssh
Last login: Sat Apr 13 21:25:02 2019 from 10.0.2.2
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$
vagrant@ubuntu-1804:~$ sudo apt-get update -y
Get:1 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Hit:2 http://us.archive.ubuntu.com/ubuntu bionic InRelease
Get:3 http://us.archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
Get:4 http://us.archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
Get:5 http://security.ubuntu.com/ubuntu bionic-security/main amd64 Packages [296 kB]
Get:6 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 Packages [574 kB]
Get:7 http://us.archive.ubuntu.com/ubuntu bionic-updates/main i386 Packages [488 kB]
Get:8 http://security.ubuntu.com/ubuntu bionic-security/main i386 Packages [216 kB]
Get:9 http://security.ubuntu.com/ubuntu bionic-security/main Translation-en [106 kB]
Get:10 http://us.archive.ubuntu.com/ubuntu bionic-updates/main Translation-en [212 kB]
Get:11 http://us.archive.ubuntu.com/ubuntu bionic-updates/restricted amd64 Packages [6,996 B]
Get:12 http://us.archive.ubuntu.com/ubuntu bionic-updates/restricted i386 Packages [6,960 B]
Get:13 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe i386 Packages [745 kB]
Get:14 http://security.ubuntu.com/ubuntu bionic-security/restricted i386 Packages [4,280 B]
Get:15 http://security.ubuntu.com/ubuntu bionic-security/restricted amd64 Packages [4,296 B]
Get:16 http://security.ubuntu.com/ubuntu bionic-security/restricted Translation-en [2,192 B]
Get:17 http://security.ubuntu.com/ubuntu bionic-security/universe amd64 Packages [131 kB]
Get:18 http://security.ubuntu.com/ubuntu bionic-security/universe i386 Packages [127 kB]
Get:19 http://security.ubuntu.com/ubuntu bionic-security/universe Translation-en [74.2 kB]
Get:20 http://security.ubuntu.com/ubuntu bionic-security/multiverse i386 Packages [3,900 B]
Get:21 http://security.ubuntu.com/ubuntu bionic-security/multiverse amd64 Packages [3,748 B]
Get:22 http://security.ubuntu.com/ubuntu bionic-security/multiverse Translation-en [1,952 B]
Get:23 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 Packages [756 kB]
Get:24 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe Translation-en [201 kB]
Get:25 http://us.archive.ubuntu.com/ubuntu bionic-updates/multiverse amd64 Packages [6,388 B]
Get:26 http://us.archive.ubuntu.com/ubuntu bionic-updates/multiverse i386 Packages [6,544 B]
Get:27 http://us.archive.ubuntu.com/ubuntu bionic-backports/main i386 Packages [1,024 B]
Get:28 http://us.archive.ubuntu.com/ubuntu bionic-backports/main amd64 Packages [1,024 B]
Get:29 http://us.archive.ubuntu.com/ubuntu bionic-backports/main Translation-en [448 B]
Get:30 http://us.archive.ubuntu.com/ubuntu bionic-backports/universe i386 Packages [3,460 B]
Get:31 http://us.archive.ubuntu.com/ubuntu bionic-backports/universe amd64 Packages [3,468 B]
Fetched 4,235 kB in 7s (583 kB/s)
Reading package lists... Done
vagrant@ubuntu-1804:~$ sudo apt-get upgrade -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
Calculating upgrade... Done
The following packages have been kept back:
  linux-cloud-tools-generic linux-cloud-tools-virtual linux-generic
  linux-headers-generic linux-image-generic linux-tools-generic
The following packages will be upgraded:
  apport apt apt-utils busybox-initramfs busybox-static distro-info-data file
```

```
  libidn11 libmagic-mgc libmagic1 libnss-systemd libntfs-3g88 libpam-modules
  libpam-modules-bin libpam-runtime libpam-systemd libpam0g libparted2
  libpolkit-agent-1-0 libpolkit-backend-1-0 libpolkit-gobject-1-0 libruby2.5
  libseccomp2 libsystemd0 libudev1 libunistring2 libxcb1
  linux-cloud-tools-common linux-tools-common ntfs-3g open-iscsi parted
  policykit-1 python3-apport python3-distro-info python3-httplib2
  python3-problem-report ruby2.5 snapd systemd systemd-sysv udev ufw
  unattended-upgrades wget
51 upgraded, 0 newly installed, 0 to remove and 6 not upgraded.
Need to get 32.2 MB of archives.
After this operation, 111 kB of additional disk space will be used.
Get:1 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libnss-systemd amd64 237-3ubuntu10.19 [105 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libudev1 amd64 237-3ubuntu10.19 [53.5 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 udev amd64 237-3ubuntu10.19 [1,102 kB]
Get:4 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpam-systemd amd64 237-3ubuntu10.19 [108 kB]
Get:5 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 systemd amd64 237-3ubuntu10.19 [2,901 kB]
Get:6 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libsystemd0 amd64 237-3ubuntu10.19 [204 kB]
Get:7 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpam0g amd64 1.1.8-3.6ubuntu2.18.04.1 [55.1 kB]
Get:8 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpam-modules-bin amd64 1.1.8-3.6ubuntu2.18.04.1 [36.7 kB]
Get:9 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpam-modules amd64 1.1.8-3.6ubuntu2.18.04.1 [242 kB]
Get:10 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpam-runtime all 1.1.8-3.6ubuntu2.18.04.1 [37.1 kB]
Get:11 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 systemd-sysv amd64 237-3ubuntu10.19 [11.5 kB]
Get:12 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libapt-pkg5.0 amd64 1.6.10 [805 kB]
Get:13 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 snapd amd64 2.37.4+18.04.1 [14.7 MB]
Get:14 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libapt-inst2.0 amd64 1.6.10 [55.6 kB]
Get:15 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 apt amd64 1.6.10 [1,165 kB]
Get:16 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 apt-utils amd64 1.6.10 [208 kB]
Get:17 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libseccomp2 amd64 2.3.1-2.1ubuntu4.1 [39.1 kB]
Get:18 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 ntfs-3g amd64 1:2017.3.23-2ubuntu0.18.04.1 [385 kB]
Get:19 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libntfs-3g88 amd64 1:2017.3.23-2ubuntu0.18.04.1 [146 kB]
Get:20 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 open-iscsi amd64 2.0.874-5ubuntu2.7 [280 kB]
Get:21 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libunistring2 amd64 0.9.9-0ubuntu2 [368 kB]
Get:22 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 busybox-initramfs amd64 1:1.27.2-2ubuntu3.2 [165 kB]
Get:23 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 distro-info-data all 0.37ubuntu0.3 [4,528 B]
Get:24 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 file amd64 1:5.32-2ubuntu0.2 [22.1 kB]
Get:25 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libmagic1 amd64 1:5.32-2ubuntu0.2 [68.5 kB]
Get:26 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libmagic-mgc amd64 1:5.32-2ubuntu0.2 [184 kB]
Get:27 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libidn11 amd64 1.33-2.1ubuntu1.2 [46.6 kB]
Get:28 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 busybox-static amd64 1:1.27.2-2ubuntu3.2 [918 kB]
Get:29 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 parted amd64 3.2-20ubuntu0.2 [42.4 kB]
Get:30 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libparted2 amd64 3.2-20ubuntu0.2 [123 kB]
Get:31 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 policykit-1 amd64 0.105-20ubuntu0.18.04.5 [53.5 kB]
Get:32 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpolkit-backend-1-0 amd64 0.105-20ubuntu0.18.04.5 [36.3 kB]
Get:33 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpolkit-agent-1-0 amd64 0.105-20ubuntu0.18.04.5 [14.9 kB]
Get:34 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpolkit-gobject-1-0 amd64 0.105-20ubuntu0.18.04.5 [36.4 kB]
Get:35 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libxcb1 amd64 1.13-2~ubuntu18.04 [45.5 kB]
Get:36 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python3-distro-info all 0.18ubuntu0.18.04.1 [9,296 B]
Get:37 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 ufw all 0.36-0ubuntu0.18.04.1 [146 kB]
Get:38 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 wget amd64 1.19.4-1ubuntu2.2 [316 kB]
Get:39 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 grub-pc amd64 2.02-2ubuntu8.13 [138 kB]
Get:40 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 grub2-common amd64 2.02-2ubuntu8.13 [533 kB]
Get:41 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 grub-pc-bin amd64 2.02-2ubuntu8.13 [900 kB]
Get:42 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 grub-common amd64 2.02-2ubuntu8.13 [1,771 kB]
Get:43 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python3-httplib2 all 0.9.2+dfsg-1ubuntu0.1 [28.6 kB]
Get:44 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python3-problem-report all 2.20.9-0ubuntu7.6 [9,884 B]
Get:45 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python3-apport all 2.20.9-0ubuntu7.6 [81.7 kB]
Get:46 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 apport all 2.20.9-0ubuntu7.6 [124 kB]
Get:47 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libruby2.5 amd64 2.5.1-1ubuntu1.2 [3,066 kB]
Get:48 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 linux-cloud-tools-common all 4.15.0-47.50 [56.2 kB]
Get:49 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 linux-tools-common all 4.15.0-47.50 [169 kB]
Get:50 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 ruby2.5 amd64 2.5.1-1ubuntu1.2 [48.6 kB]
Get:51 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 unattended-upgrades all 1.1ubuntu1.18.04.10 [40.4 kB]
Fetched 32.2 MB in 15s (2,134 kB/s)
Extracting templates from packages: 100%
Preconfiguring packages ...
(Reading database ... 105316 files and directories currently installed.)
Preparing to unpack .../libnss-systemd_237-3ubuntu10.19_amd64.deb ...
Unpacking libnss-systemd:amd64 (237-3ubuntu10.19) over (237-3ubuntu10.13) ...
Preparing to unpack .../libudev1_237-3ubuntu10.19_amd64.deb ...
Unpacking libudev1:amd64 (237-3ubuntu10.19) over (237-3ubuntu10.13) ...
Setting up libudev1:amd64 (237-3ubuntu10.19) ...
(Reading database ... 105316 files and directories currently installed.)
Preparing to unpack .../udev_237-3ubuntu10.19_amd64.deb ...
Unpacking udev (237-3ubuntu10.19) over (237-3ubuntu10.13) ...
Preparing to unpack .../libpam-systemd_237-3ubuntu10.19_amd64.deb ...
Unpacking libpam-systemd:amd64 (237-3ubuntu10.19) over (237-3ubuntu10.13) ...
Preparing to unpack .../systemd_237-3ubuntu10.19_amd64.deb ...
Unpacking systemd (237-3ubuntu10.19) over (237-3ubuntu10.13) ...
Preparing to unpack .../libsystemd0_237-3ubuntu10.19_amd64.deb ...
Unpacking libsystemd0:amd64 (237-3ubuntu10.19) over (237-3ubuntu10.13) ...
Setting up libsystemd0:amd64 (237-3ubuntu10.19) ...
(Reading database ... 105316 files and directories currently installed.)
Preparing to unpack .../libpam0g_1.1.8-3.6ubuntu2.18.04.1_amd64.deb ...
Unpacking libpam0g:amd64 (1.1.8-3.6ubuntu2.18.04.1) over (1.1.8-3.6ubuntu2) ...
Setting up libpam0g:amd64 (1.1.8-3.6ubuntu2.18.04.1) ...
(Reading database ... 105316 files and directories currently installed.)
Preparing to unpack .../libpam-modules-bin_1.1.8-3.6ubuntu2.18.04.1_amd64.deb ...
Unpacking libpam-modules-bin (1.1.8-3.6ubuntu2.18.04.1) over (1.1.8-3.6ubuntu2) ...
Setting up libpam-modules-bin (1.1.8-3.6ubuntu2.18.04.1) ...
(Reading database ... 105316 files and directories currently installed.)
Preparing to unpack .../libpam-modules_1.1.8-3.6ubuntu2.18.04.1_amd64.deb ...
Unpacking libpam-modules:amd64 (1.1.8-3.6ubuntu2.18.04.1) over (1.1.8-3.6ubuntu2) ...
Setting up libpam-modules:amd64 (1.1.8-3.6ubuntu2.18.04.1) ...
(Reading database ... 105316 files and directories currently installed.)
Preparing to unpack .../libpam-runtime_1.1.8-3.6ubuntu2.18.04.1_all.deb ...
Unpacking libpam-runtime (1.1.8-3.6ubuntu2.18.04.1) over (1.1.8-3.6ubuntu2) ...
Setting up libpam-runtime (1.1.8-3.6ubuntu2.18.04.1) ...
Setting up systemd (237-3ubuntu10.19) ...
(Reading database ... 105316 files and directories currently installed.)
Preparing to unpack .../systemd-sysv_237-3ubuntu10.19_amd64.deb ...
Unpacking systemd-sysv (237-3ubuntu10.19) over (237-3ubuntu10.13) ...
Preparing to unpack .../libapt-pkg5.0_1.6.10_amd64.deb ...
Unpacking libapt-pkg5.0:amd64 (1.6.10) over (1.6.8) ...
Setting up libapt-pkg5.0:amd64 (1.6.10) ...
(Reading database ... 105316 files and directories currently installed.)
Preparing to unpack .../snapd_2.37.4+18.04.1_amd64.deb ...
Unpacking snapd (2.37.4+18.04.1) over (2.37.1+18.04) ...
Preparing to unpack .../libapt-inst2.0_1.6.10_amd64.deb ...
Unpacking libapt-inst2.0:amd64 (1.6.10) over (1.6.8) ...
Preparing to unpack .../archives/apt_1.6.10_amd64.deb ...
Unpacking apt (1.6.10) over (1.6.8) ...
Setting up apt (1.6.10) ...
(Reading database ... 105317 files and directories currently installed.)
Preparing to unpack .../apt-utils_1.6.10_amd64.deb ...
Unpacking apt-utils (1.6.10) over (1.6.8) ...
Preparing to unpack .../libseccomp2_2.3.1-2.1ubuntu4.1_amd64.deb ...
Unpacking libseccomp2:amd64 (2.3.1-2.1ubuntu4.1) over (2.3.1-2.1ubuntu4) ...
Setting up libseccomp2:amd64 (2.3.1-2.1ubuntu4.1) ...
(Reading database ... 105317 files and directories currently installed.)
Preparing to unpack .../ntfs-3g_1%3a2017.3.23-2ubuntu0.18.04.1_amd64.deb ...
Unpacking ntfs-3g (1:2017.3.23-2ubuntu0.18.04.1) over (1:2017.3.23-2) ...
Preparing to unpack .../libntfs-3g88_1%3a2017.3.23-2ubuntu0.18.04.1_amd64.deb
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Preparing to unpack .../open-iscsi_2.0.874-5ubuntu2.7_amd64.deb ...
Unpacking open-iscsi (2.0.874-5ubuntu2.7) over (2.0.874-5ubuntu2.6) ...
Preparing to unpack .../libunistring2_0.9.9-0ubuntu2_amd64.deb ...
Unpacking libunistring2:amd64 (0.9.9-0ubuntu2) over (0.9.9-0ubuntu1) ...
Setting up libunistring2:amd64 (0.9.9-0ubuntu2) ...
(Reading database ... 105317 files and directories currently installed.)
Preparing to unpack .../00-busybox-initramfs_1%3a1.27.2-2ubuntu3.2_amd64.deb ...
Unpacking busybox-initramfs (1:1.27.2-2ubuntu3.2) over (1:1.27.2-2ubuntu3.1) ...
Preparing to unpack .../01-distro-info-data_0.37ubuntu0.3_all.deb ...
Unpacking distro-info-data (0.37ubuntu0.3) over (0.37ubuntu0.2) ...
Preparing to unpack .../02-file_1%3a5.32-2ubuntu0.2_amd64.deb ...
Unpacking file (1:5.32-2ubuntu0.2) over (1:5.32-2ubuntu0.1) ...
Preparing to unpack .../03-libmagic1_1%3a5.32-2ubuntu0.2_amd64.deb ...
Unpacking libmagic1:amd64 (1:5.32-2ubuntu0.2) over (1:5.32-2ubuntu0.1) ...
Preparing to unpack .../04-libmagic-mgc_1%3a5.32-2ubuntu0.2_amd64.deb ...
Unpacking libmagic-mgc (1:5.32-2ubuntu0.2) over (1:5.32-2ubuntu0.1) ...
Preparing to unpack .../05-libidn11_1.33-2.1ubuntu1.2_amd64.deb ...
Unpacking libidn11:amd64 (1.33-2.1ubuntu1.2) over (1.33-2.1ubuntu1.1) ...
Preparing to unpack .../06-busybox-static_1%3a1.27.2-2ubuntu3.2_amd64.deb ...
Unpacking busybox-static (1:1.27.2-2ubuntu3.2) over (1:1.27.2-2ubuntu3.1) ...
Preparing to unpack .../07-parted_3.2-20ubuntu0.2_amd64.deb ...
Unpacking parted (3.2-20ubuntu0.2) over (3.2-20ubuntu0.1) ...
Preparing to unpack .../08-libparted2_3.2-20ubuntu0.2_amd64.deb ...
Unpacking libparted2:amd64 (3.2-20ubuntu0.2) over (3.2-20ubuntu0.1) ...
Preparing to unpack .../09-policykit-1_0.105-20ubuntu0.18.04.5_amd64.deb ...
Created symlink /run/systemd/system/polkit.service -> /dev/null.
Unpacking policykit-1 (0.105-20ubuntu0.18.04.5) over (0.105-20ubuntu0.18.04.4) ...
Preparing to unpack .../10-libpolkit-backend-1-0_0.105-20ubuntu0.18.04.5_amd64.deb ...
Unpacking libpolkit-backend-1-0:amd64 (0.105-20ubuntu0.18.04.5) over (0.105-20ubuntu0.18.04.4) ...
Preparing to unpack .../11-libpolkit-agent-1-0_0.105-20ubuntu0.18.04.5_amd64.deb ...
Unpacking libpolkit-agent-1-0:amd64 (0.105-20ubuntu0.18.04.5) over (0.105-20ubuntu0.18.04.4) ...
Preparing to unpack .../12-libpolkit-gobject-1-0_0.105-20ubuntu0.18.04.5_amd64.deb ...
Unpacking libpolkit-gobject-1-0:amd64 (0.105-20ubuntu0.18.04.5) over (0.105-20ubuntu0.18.04.4) ...
Preparing to unpack .../13-libxcb1_1.13-2~ubuntu18.04_amd64.deb ...
Unpacking libxcb1:amd64 (1.13-2~ubuntu18.04) over (1.13-1) ...
Preparing to unpack .../14-python3-distro-info_0.18ubuntu0.18.04.1_all.deb ...
Unpacking python3-distro-info (0.18ubuntu0.18.04.1) over (0.18) ...
Preparing to unpack .../15-ufw_0.36-0ubuntu0.18.04.1_all.deb ...
Unpacking ufw (0.36-0ubuntu0.18.04.1) over (0.35-5) ...
Preparing to unpack .../16-wget_1.19.4-1ubuntu2.2_amd64.deb ...
Unpacking wget (1.19.4-1ubuntu2.2) over (1.19.4-1ubuntu2.1) ...
Preparing to unpack .../17-grub-pc_2.02-2ubuntu8.13_amd64.deb ...
Unpacking grub-pc (2.02-2ubuntu8.13) over (2.02-2ubuntu8.12) ...
Preparing to unpack .../18-grub2-common_2.02-2ubuntu8.13_amd64.deb ...
Unpacking grub2-common (2.02-2ubuntu8.13) over (2.02-2ubuntu8.12) ...
Preparing to unpack .../19-grub-pc-bin_2.02-2ubuntu8.13_amd64.deb ...
Unpacking grub-pc-bin (2.02-2ubuntu8.13) over (2.02-2ubuntu8.12) ...
Preparing to unpack .../20-grub-common_2.02-2ubuntu8.13_amd64.deb ...
Unpacking grub-common (2.02-2ubuntu8.13) over (2.02-2ubuntu8.12) ...
Preparing to unpack .../21-python3-httplib2_0.9.2+dfsg-1ubuntu0.1_all.deb ...
Unpacking python3-httplib2 (0.9.2+dfsg-1ubuntu0.1) over (0.9.2+dfsg-1) ...
Preparing to unpack .../22-python3-problem-report_2.20.9-0ubuntu7.6_all.deb ...
Unpacking python3-problem-report (2.20.9-0ubuntu7.6) over (2.20.9-0ubuntu7.5) ...
Preparing to unpack .../23-python3-apport_2.20.9-0ubuntu7.6_all.deb ...
Unpacking python3-apport (2.20.9-0ubuntu7.6) over (2.20.9-0ubuntu7.5) ...
Preparing to unpack .../24-apport_2.20.9-0ubuntu7.6_all.deb ...
Unpacking apport (2.20.9-0ubuntu7.6) over (2.20.9-0ubuntu7.5) ...
Preparing to unpack .../25-libruby2.5_2.5.1-1ubuntu1.2_amd64.deb ...
Unpacking libruby2.5:amd64 (2.5.1-1ubuntu1.2) over (2.5.1-1ubuntu1.1) ...
Preparing to unpack .../26-linux-cloud-tools-common_4.15.0-47.50_all.deb ...
Unpacking linux-cloud-tools-common (4.15.0-47.50) over (4.15.0-46.49) ...
Preparing to unpack .../27-linux-tools-common_4.15.0-47.50_all.deb ...
Unpacking linux-tools-common (4.15.0-47.50) over (4.15.0-46.49) ...
Preparing to unpack .../28-ruby2.5_2.5.1-1ubuntu1.2_amd64.deb ...
Unpacking ruby2.5 (2.5.1-1ubuntu1.2) over (2.5.1-1ubuntu1.1) ...
Preparing to unpack .../29-unattended-upgrades_1.1ubuntu1.18.04.10_all.deb ...
Unpacking unattended-upgrades (1.1ubuntu1.18.04.10) over (1.1ubuntu1.18.04.9) ...
Setting up libapt-inst2.0:amd64 (1.6.10) ...
Setting up libnss-systemd:amd64 (237-3ubuntu10.19) ...
Setting up ufw (0.36-0ubuntu0.18.04.1) ...
Installing new version of config file /etc/default/ufw ...
Replacing config file /etc/ufw/before.rules with new version
Replacing config file /etc/ufw/before6.rules with new version
Setting up libruby2.5:amd64 (2.5.1-1ubuntu1.2) ...
Setting up linux-cloud-tools-common (4.15.0-47.50) ...
Setting up libparted2:amd64 (3.2-20ubuntu0.2) ...
Processing triggers for mime-support (3.60ubuntu1) ...
Processing triggers for ureadahead (0.100.0-20) ...
Setting up apt-utils (1.6.10) ...
Processing triggers for install-info (6.5.0.dfsg.1-2) ...
Setting up systemd-sysv (237-3ubuntu10.19) ...
Setting up distro-info-data (0.37ubuntu0.3) ...
Processing triggers for initramfs-tools (0.130ubuntu3.7) ...
update-initramfs: Generating /boot/initrd.img-4.15.0-46-generic
Setting up parted (3.2-20ubuntu0.2) ...
Setting up libmagic-mgc (1:5.32-2ubuntu0.2) ...
Setting up libmagic1:amd64 (1:5.32-2ubuntu0.2) ...
Setting up python3-problem-report (2.20.9-0ubuntu7.6) ...
Setting up busybox-initramfs (1:1.27.2-2ubuntu3.2) ...
Processing triggers for libc-bin (2.27-3ubuntu1) ...
Setting up linux-tools-common (4.15.0-47.50) ...
Setting up udev (237-3ubuntu10.19) ...
update-initramfs: deferring update (trigger activated)
Setting up grub-common (2.02-2ubuntu8.13) ...
update-rc.d: warning: start and stop actions are no longer supported; falling back to defaults
Setting up python3-httplib2 (0.9.2+dfsg-1ubuntu0.1) ...
Setting up wget (1.19.4-1ubuntu2.2) ...
Setting up unattended-upgrades (1.1ubuntu1.18.04.10) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Setting up libntfs-3g88 (1:2017.3.23-2ubuntu0.18.04.1) ...
Setting up busybox-static (1:1.27.2-2ubuntu3.2) ...
Processing triggers for dbus (1.12.2-1ubuntu1) ...
Setting up libxcb1:amd64 (1.13-2~ubuntu18.04) ...
Setting up libidn11:amd64 (1.33-2.1ubuntu1.2) ...
Processing triggers for rsyslog (8.32.0-1ubuntu4) ...
Setting up libpolkit-gobject-1-0:amd64 (0.105-20ubuntu0.18.04.5) ...
Setting up ruby2.5 (2.5.1-1ubuntu1.2) ...
Setting up python3-distro-info (0.18ubuntu0.18.04.1) ...
Setting up libpam-systemd:amd64 (237-3ubuntu10.19) ...
Setting up grub-pc-bin (2.02-2ubuntu8.13) ...
Setting up libpolkit-agent-1-0:amd64 (0.105-20ubuntu0.18.04.5) ...
Setting up grub2-common (2.02-2ubuntu8.13) ...
Setting up file (1:5.32-2ubuntu0.2) ...
Setting up python3-apport (2.20.9-0ubuntu7.6) ...
Setting up open-iscsi (2.0.874-5ubuntu2.7) ...
Setting up snapd (2.37.4+18.04.1) ...
Installing new version of config file /etc/apparmor.d/usr.lib.snapd.snap-confine.real ...
md5sum: /etc/apparmor.d/usr.lib.snapd.snap-confine: No such file or directory
snapd.failure.service is a disabled or a static unit, not starting it.
snapd.snap-repair.service is a disabled or a static unit, not starting it.
Setting up libpolkit-backend-1-0:amd64 (0.105-20ubuntu0.18.04.5) ...
Setting up ntfs-3g (1:2017.3.23-2ubuntu0.18.04.1)
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Setting up apport (2.20.9-0ubuntu7.6) ...
apport-autoreport.service is a disabled or a static unit, not starting it.
Setting up policykit-1 (0.105-20ubuntu0.18.04.5) ...
Removed /run/systemd/system/polkit.service.
Setting up grub-pc (2.02-2ubuntu8.13) ...
Sourcing file `/etc/default/grub'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-4.15.0-46-generic
Found initrd image: /boot/initrd.img-4.15.0-46-generic
Found linux image: /boot/vmlinuz-4.15.0-45-generic
Found initrd image: /boot/initrd.img-4.15.0-45-generic
done
Processing triggers for initramfs-tools (0.130ubuntu3.7) ...
update-initramfs: Generating /boot/initrd.img-4.15.0-46-generic
Processing triggers for libc-bin (2.27-3ubuntu1) ...
vagrant@ubuntu-1804:~$ sudo apt-add-repository ppa:webupd8team/java
 Oracle Java (JDK) Installer (automatically downloads and installs Oracle JDK8). There are no actual Java files in this PPA.

Important -> Why Oracle Java 7 And 6 Installers No Longer Work: http://www.webupd8.org/2017/06/why-oracle-java-7-and-6-installers-no.html

Update: Oracle Java 9 has reached end of life: http://www.oracle.com/technetwork/java/javase/downloads/jdk9-downloads-3848520.html

The PPA supports Ubuntu 18.10, 18.04, 16.04, 14.04 and 12.04.

More info (and Ubuntu installation instructions):
- http://www.webupd8.org/2012/09/install-oracle-java-8-in-ubuntu-via-ppa.html

Debian installation instructions:
- Oracle Java 8: http://www.webupd8.org/2014/03/how-to-install-oracle-java-8-in-debian.html

For Oracle Java 11, see a different PPA -> https://www.linuxuprising.com/2018/10/how-to-install-oracle-java-11-in-ubuntu.html
 More info: https://launchpad.net/~webupd8team/+archive/ubuntu/java
Press [ENTER] to continue or Ctrl-c to cancel adding it.

Hit:1 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:2 http://us.archive.ubuntu.com/ubuntu bionic InRelease
Hit:3 http://us.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:4 http://us.archive.ubuntu.com/ubuntu bionic-backports InRelease
Get:5 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic InRelease [15.4 kB]
Get:6 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic/main amd64 Packages [1,556 B]
Get:7 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic/main i386 Packages [1,556 B]
Get:8 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic/main Translation-en [928 B]
Fetched 19.4 kB in 3s (6,708 B/s)
Reading package lists... Done
vagrant@ubuntu-1804:~$ sudo apt-add-repository ppa:webupd8team/java
 Oracle Java (JDK) Installer (automatically downloads and installs Oracle JDK8). There are no actual Java files in this PPA.

Important -> Why Oracle Java 7 And 6 Installers No Longer Work: http://www.webupd8.org/2017/06/why-oracle-java-7-and-6-installers-no.html

Update: Oracle Java 9 has reached end of life: http://www.oracle.com/technetwork/java/javase/downloads/jdk9-downloads-3848520.html

The PPA supports Ubuntu 18.10, 18.04, 16.04, 14.04 and 12.04.

More info (and Ubuntu installation instructions):
- http://www.webupd8.org/2012/09/install-oracle-java-8-in-ubuntu-via-ppa.html

Debian installation instructions:
- Oracle Java 8: http://www.webupd8.org/2014/03/how-to-install-oracle-java-8-in-debian.html

For Oracle Java 11, see a different PPA -> https://www.linuxuprising.com/2018/10/how-to-install-oracle-java-11-in-ubuntu.html
 More info: https://launchpad.net/~webupd8team/+archive/ubuntu/java
Press [ENTER] to continue or Ctrl-c to cancel adding it.

Err:1 http://security.ubuntu.com/ubuntu bionic-security InRelease
  Temporary failure resolving 'security.ubuntu.com'
Err:2 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic InRelease
  Temporary failure resolving 'ppa.launchpad.net'
Err:3 http://us.archive.ubuntu.com/ubuntu bionic InRelease
  Temporary failure resolving 'us.archive.ubuntu.com'
Err:4 http://us.archive.ubuntu.com/ubuntu bionic-updates InRelease
  Temporary failure resolving 'us.archive.ubuntu.com'
Err:5 http://us.archive.ubuntu.com/ubuntu bionic-backports InRelease
  Temporary failure resolving 'us.archive.ubuntu.com'
Reading package lists... Done
W: Failed to fetch http://us.archive.ubuntu.com/ubuntu/dists/bionic/InRelease  Temporary failure resolving 'us.archive.ubuntu.com'
W: Failed to fetch http://us.archive.ubuntu.com/ubuntu/dists/bionic-updates/InRelease  Temporary failure resolving 'us.archive.ubuntu.com'
W: Failed to fetch http://us.archive.ubuntu.com/ubuntu/dists/bionic-backports/InRelease  Temporary failure resolving 'us.archive.ubuntu.com'
W: Failed to fetch http://security.ubuntu.com/ubuntu/dists/bionic-security/InRelease  Temporary failure resolving 'security.ubuntu.com'
W: Failed to fetch http://ppa.launchpad.net/webupd8team/java/ubuntu/dists/bionic/InRelease  Temporary failure resolving 'ppa.launchpad.net'
W: Some index files failed to download. They have been ignored, or old ones used instead.
vagrant@ubuntu-1804:~$ sudo apt-get update
Err:1 http://us.archive.ubuntu.com/ubuntu bionic InRelease
  Temporary failure resolving 'us.archive.ubuntu.com'
Err:2 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic InRelease
  Temporary failure resolving 'ppa.launchpad.net'
Err:3 http://security.ubuntu.com/ubuntu bionic-security InRelease
  Temporary failure resolving 'security.ubuntu.com'
Err:4 http://us.archive.ubuntu.com/ubuntu bionic-updates InRelease
  Temporary failure resolving 'us.archive.ubuntu.com'
Err:5 http://us.archive.ubuntu.com/ubuntu bionic-backports InRelease
  Temporary failure resolving 'us.archive.ubuntu.com'
Reading package lists... Done
W: Failed to fetch http://us.archive.ubuntu.com/ubuntu/dists/bionic/InRelease  Temporary failure resolving 'us.archive.ubuntu.com'
W: Failed to fetch http://us.archive.ubuntu.com/ubuntu/dists/bionic-updates/InRelease  Temporary failure resolving 'us.archive.ubuntu.com'
W: Failed to fetch http://us.archive.ubuntu.com/ubuntu/dists/bionic-backports/InRelease  Temporary failure resolving 'us.archive.ubuntu.com'
W: Failed to fetch http://security.ubuntu.com/ubuntu/dists/bionic-security/InRelease  Temporary failure resolving 'security.ubuntu.com'
W: Failed to fetch http://ppa.launchpad.net/webupd8team/java/ubuntu/dists/bionic/InRelease  Temporary failure resolving 'ppa.launchpad.net'
W: Some index files failed to download. They have been ignored, or old ones used instead.
vagrant@ubuntu-1804:~$ sudo apt-get install oracle-java8-installer
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu gsfonts gsfonts-x11
  java-common libbinutils libfontenc1 oracle-java8-set-default x11-common
  xfonts-encodings xfonts-utils
Suggested packages:
  binutils-doc binfmt-support visualvm ttf-baekmuk | ttf-unfonts
  | ttf-unfonts-core ttf-kochi-gothic | ttf-sazanami-gothic ttf-kochi-mincho
  | ttf-sazanami-mincho ttf-arphic-uming firefox | firefox-2 | iceweasel
  | mozilla-firefox | iceape-browser | mozilla-browser | epiphany-gecko
  | epiphany-webkit | epiphany-browser | galeon | midbrowser
  | moblin-web-browser | xulrunner | xulrunner-1.9 | konqueror
  | chromium-browser | midori | google-chrome
The following NEW packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu gsfonts gsfonts-x11
  java-common libbinutils libfontenc1 oracle-java8-installer
  oracle-java8-set-default x11-common xfonts-encodings xfonts-utils
0 upgraded, 13 newly installed, 0 to remove and 6 not upgraded.
Need to get 6,429 kB of archives.
After this operation, 22.0 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
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Get:2 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libbinutils amd64 2.30-21ubuntu1~18.04 [362 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 binutils-x86-64-linux-gnu amd64 2.30-21ubuntu1~18.04 [1,855 kB]
Get:4 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 binutils amd64 2.30-21ubuntu1~18.04 [3,392 B]
Get:5 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 java-common all 0.63ubuntu1~02 [7,032 B]
Get:6 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 gsfonts all 1:8.11+urwcyr1.0.7~pre44-4.4 [3,120 kB]
Ign:7 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic/main amd64 oracle-java8-installer all 8u201-1~webupd8~1
Get:8 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 libfontenc1 amd64 1:1.1.3-1 [13.9 kB]
Get:9 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 x11-common all 1:7.7+19ubuntu7.1 [22.5 kB]
Get:10 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 xfonts-encodings all 1:1.0.4-2 [573 kB]
Get:11 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 xfonts-utils amd64 1:7.7+6 [91.5 kB]
Get:12 http://us.archive.ubuntu.com/ubuntu bionic/universe amd64 gsfonts-x11 all 0.25 [7,264 B]
Ign:13 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic/main amd64 oracle-java8-set-default all 8u201-1~webupd8~1
Get:7 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic/main amd64 oracle-java8-installer all 8u201-1~webupd8~1 [32.5 kB]
Get:13 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic/main amd64 oracle-java8-set-default all 8u201-1~webupd8~1 [6,984 B]
Fetched 6,429 kB in 30s (214 kB/s)
Preconfiguring packages ...
Selecting previously unselected package binutils-common:amd64.
(Reading database ... 105319 files and directories currently installed.)
Preparing to unpack .../binutils-common_2.30-21ubuntu1~18.04_amd64.deb ...
Unpacking binutils-common:amd64 (2.30-21ubuntu1~18.04) ...
Selecting previously unselected package libbinutils:amd64.
Preparing to unpack .../libbinutils_2.30-21ubuntu1~18.04_amd64.deb ...
Unpacking libbinutils:amd64 (2.30-21ubuntu1~18.04) ...
Selecting previously unselected package binutils-x86-64-linux-gnu.
Preparing to unpack .../binutils-x86-64-linux-gnu_2.30-21ubuntu1~18.04_amd64.deb ...
Unpacking binutils-x86-64-linux-gnu (2.30-21ubuntu1~18.04) ...
Selecting previously unselected package binutils.
Preparing to unpack .../binutils_2.30-21ubuntu1~18.04_amd64.deb ...
Unpacking binutils (2.30-21ubuntu1~18.04) ...
Selecting previously unselected package java-common.
Preparing to unpack .../java-common_0.63ubuntu1~02_all.deb ...
Unpacking java-common (0.63ubuntu1~02) ...
Setting up binutils-common:amd64 (2.30-21ubuntu1~18.04) ...
Setting up libbinutils:amd64 (2.30-21ubuntu1~18.04) ...
Setting up binutils-x86-64-linux-gnu (2.30-21ubuntu1~18.04) ...
Setting up binutils (2.30-21ubuntu1~18.04) ...
Selecting previously unselected package oracle-java8-installer.
(Reading database ... 105590 files and directories currently installed.)
Preparing to unpack .../oracle-java8-installer_8u201-1~webupd8~1_all.deb ...
Unpacking oracle-java8-installer (8u201-1~webupd8~1) ...
Setting up java-common (0.63ubuntu1~02) ...
Setting up oracle-java8-installer (8u201-1~webupd8~1) ...
No /var/cache/oracle-jdk8-installer/wgetrc file found.
Creating /var/cache/oracle-jdk8-installer/wgetrc and
using default oracle-java8-installer wgetrc settings for it.
Downloading Oracle Java 8...
--2019-04-13 21:36:50--  http://download.oracle.com/otn-pub/java/jdk/8u201-b09/42970487e3af4f5aa5bca3f542482c60/jdk-8u201-linux-x64.tar.gz
Resolving download.oracle.com (download.oracle.com)... failed: Temporary failure in name resolution.
wget: unable to resolve host address 'download.oracle.com'
download failed
Oracle JDK 8 is NOT installed.
dpkg: error processing package oracle-java8-installer (--configure):
 installed oracle-java8-installer package post-installation script subprocess returned error exit status 1
E: Sub-process /usr/bin/dpkg returned an error code (1)
vagrant@ubuntu-1804:~$ java -version

Command 'java' not found, but can be installed with:

apt install default-jre
apt install openjdk-11-jre-headless
apt install openjdk-8-jre-headless

Ask your administrator to install one of them.

vagrant@ubuntu-1804:~$ sudo apt-get install oracle-java8-installer
Reading package lists... Done
Building dependency tree
Reading state information... Done
oracle-java8-installer is already the newest version (8u201-1~webupd8~1).
0 upgraded, 0 newly installed, 0 to remove and 6 not upgraded.
1 not fully installed or removed.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n] N
Abort.
vagrant@ubuntu-1804:~$ java -version

Command 'java' not found, but can be installed with:

apt install default-jre
apt install openjdk-11-jre-headless
apt install openjdk-8-jre-headless

Ask your administrator to install one of them.

vagrant@ubuntu-1804:~$ sudo add-apt-repository ppa:webupd8team/java
 Oracle Java (JDK) Installer (automatically downloads and installs Oracle JDK8). There are no actual Java files in this PPA.

Important -> Why Oracle Java 7 And 6 Installers No Longer Work: http://www.webupd8.org/2017/06/why-oracle-java-7-and-6-installers-no.html

Update: Oracle Java 9 has reached end of life: http://www.oracle.com/technetwork/java/javase/downloads/jdk9-downloads-3848520.html

The PPA supports Ubuntu 18.10, 18.04, 16.04, 14.04 and 12.04.

More info (and Ubuntu installation instructions):
- http://www.webupd8.org/2012/09/install-oracle-java-8-in-ubuntu-via-ppa.html

Debian installation instructions:
- Oracle Java 8: http://www.webupd8.org/2014/03/how-to-install-oracle-java-8-in-debian.html

For Oracle Java 11, see a different PPA -> https://www.linuxuprising.com/2018/10/how-to-install-oracle-java-11-in-ubuntu.html
 More info: https://launchpad.net/~webupd8team/+archive/ubuntu/java
Press [ENTER] to continue or Ctrl-c to cancel adding it.

Hit:1 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic InRelease
Hit:2 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:3 http://us.archive.ubuntu.com/ubuntu bionic InRelease
Hit:4 http://us.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:5 http://us.archive.ubuntu.com/ubuntu bionic-backports InRelease
Reading package lists... Done
vagrant@ubuntu-1804:~$ sudo apt update
Hit:1 http://us.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://us.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://us.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:4 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic InRelease
Hit:5 http://security.ubuntu.com/ubuntu bionic-security InRelease
Reading package lists... Done
Building dependency tree
Reading state information... Done
6 packages can be upgraded. Run 'apt list --upgradable' to see them.
vagrant@ubuntu-1804:~$ sudo apt install oracle-java8-set-default
Reading package lists... Done
Building dependency tree
```

```
The following NEW packages will be installed:
  oracle-java8-set-default
0 upgraded, 1 newly installed, 0 to remove and 6 not upgraded.
1 not fully installed or removed.
Need to get 0 B/6,984 B of archives.
After this operation, 20.5 kB of additional disk space will be used.
Setting up oracle-java8-installer (8u201-1~webupd8~1) ...
Using wget settings from /var/cache/oracle-jdk8-installer/wgetrc
Downloading Oracle Java 8...
--2019-04-13 21:54:54--  http://download.oracle.com/otn-pub/java/jdk/8u201-b09/42970487e3af4f5aa5bca3f542482c60/jdk-8u201-linux-x64.tar.gz
Resolving download.oracle.com (download.oracle.com)... failed: Temporary failure in name resolution.
wget: unable to resolve host address 'download.oracle.com'
download failed
Oracle JDK 8 is NOT installed.
dpkg: error processing package oracle-java8-installer (--configure):
 installed oracle-java8-installer package post-installation script subprocess returned error exit status 1
Errors were encountered while processing:
 oracle-java8-installer
E: Sub-process /usr/bin/dpkg returned an error code (1)
vagrant@ubuntu-1804:~$ ping www.google.com
PING www.google.com (172.217.6.68) 56(84) bytes of data.
64 bytes from 172.217.6.68: icmp_seq=1 ttl=63 time=17.6 ms
64 bytes from 172.217.6.68: icmp_seq=2 ttl=63 time=17.8 ms
64 bytes from 172.217.6.68: icmp_seq=3 ttl=63 time=15.3 ms
64 bytes from 172.217.6.68: icmp_seq=4 ttl=63 time=15.1 ms
^C
--- www.google.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 5763ms
rtt min/avg/max/mdev = 15.158/16.485/17.812/1.248 ms
vagrant@ubuntu-1804:~$ ping download.oracle.com
ping: download.oracle.com: Temporary failure in name resolution
vagrant@ubuntu-1804:~$ ping download.oracle.com
ping: download.oracle.com: Temporary failure in name resolution
vagrant@ubuntu-1804:~$ ping 192.168.1.1
PING 192.168.1.1 (192.168.1.1) 56(84) bytes of data.
64 bytes from 192.168.1.1: icmp_seq=1 ttl=63 time=2.74 ms
64 bytes from 192.168.1.1: icmp_seq=2 ttl=63 time=2.68 ms
^C
--- 192.168.1.1 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 2.688/2.717/2.747/0.059 ms
vagrant@ubuntu-1804:~$ sudo vim /etc/resolv.conf
vagrant@ubuntu-1804:~$ ping download.oracle.com
PING e14618.d.akamaiedge.net (184.29.106.250) 56(84) bytes of data.
64 bytes from a184-29-106-250.deploy.static.akamaitechnologies.com (184.29.106.250): icmp_seq=1 ttl=63 time=13.6 ms
64 bytes from a184-29-106-250.deploy.static.akamaitechnologies.com (184.29.106.250): icmp_seq=2 ttl=63 time=14.9 ms
^C
--- e14618.d.akamaiedge.net ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1002ms
rtt min/avg/max/mdev = 13.687/14.296/14.906/0.621 ms
vagrant@ubuntu-1804:~$ sudo apt install oracle-java8-set-default
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  oracle-java8-set-default
0 upgraded, 1 newly installed, 0 to remove and 6 not upgraded.
1 not fully installed or removed.
Need to get 0 B/6,984 B of archives.
After this operation, 20.5 kB of additional disk space will be used.
Setting up oracle-java8-installer (8u201-1~webupd8~1) ...
Using wget settings from /var/cache/oracle-jdk8-installer/wgetrc
Downloading Oracle Java 8...
--2019-04-13 21:58:36--  http://download.oracle.com/otn-pub/java/jdk/8u201-b09/42970487e3af4f5aa5bca3f542482c60/jdk-8u201-linux-x64.tar.gz
Resolving download.oracle.com (download.oracle.com)... 184.29.106.250
Connecting to download.oracle.com (download.oracle.com)|184.29.106.250|:80... connected.
HTTP request sent, awaiting response... 302 Moved Temporarily
Location: https://edelivery.oracle.com/otn-pub/java/jdk/8u201-b09/42970487e3af4f5aa5bca3f542482c60/jdk-8u201-linux-x64.tar.gz [following]
--2019-04-13 21:58:36--  https://edelivery.oracle.com/otn-pub/java/jdk/8u201-b09/42970487e3af4f5aa5bca3f542482c60/jdk-8u201-linux-x64.tar.gz
Resolving edelivery.oracle.com (edelivery.oracle.com)... 104.96.122.181, 2001:559:19:6088::366, 2001:559:19:6086::366
Connecting to edelivery.oracle.com (edelivery.oracle.com)|104.96.122.181|:443... connected.
HTTP request sent, awaiting response... 302 Moved Temporarily
Location: http://download.oracle.com/otn-pub/java/jdk/8u201-b09/42970487e3af4f5aa5bca3f542482c60/jdk-8u201-linux-x64.tar.gz?AuthParam=1555218038_4a048c1251c3cb15545cf7d01ec49e97 [followi
ng]
--2019-04-13 21:58:36--  http://download.oracle.com/otn-pub/java/jdk/8u201-b09/42970487e3af4f5aa5bca3f542482c60/jdk-8u201-linux-x64.tar.gz?AuthParam=1555218038_4a048c1251c3cb15545cf7d01e
c49e97
Connecting to download.oracle.com (download.oracle.com)|184.29.106.250|:80... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://download.oracle.com/otn-pub/java/jdk/8u201-b09/42970487e3af4f5aa5bca3f542482c60/jdk-8u201-linux-x64.tar.gz?AuthParam=1555218038_4a048c1251c3cb15545cf7d01ec49e97 [follow
ing]
--2019-04-13 21:58:36--  https://download.oracle.com/otn-pub/java/jdk/8u201-b09/42970487e3af4f5aa5bca3f542482c60/jdk-8u201-linux-x64.tar.gz?AuthParam=1555218038_4a048c1251c3cb15545cf7d01
ec49e97
Connecting to download.oracle.com (download.oracle.com)|184.29.106.250|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 191817140 (183M) [application/x-gzip]
Saving to: 'jdk-8u201-linux-x64.tar.gz'

     0K ........ ........ ........ ........ ........ ........  1% 1.75M 1m43s
  3072K ........ ........ ........ ........ ........ ........  3% 2.19M 91s
  6144K ........ ........ ........ ........ ........ ........  4% 2.27M 85s
  9216K ........ ........ ........ ........ ........ ........  6% 2.21M 82s
 12288K ........ ........ ........ ........ ........ ........  8% 2.13M 80s
 15360K ........ ........ ........ ........ ........ ........  9% 2.38M 77s
 18432K ........ ........ ........ ........ ........ ........ 11% 2.14M 76s
 21504K ........ ........ ........ ........ ........ ........ 13% 2.37M 73s
 24576K ........ ........ ........ ........ ........ ........ 14% 2.32M 72s
 27648K ........ ........ ........ ........ ........ ........ 16% 1.98M 71s
 30720K ........ ........ ........ ........ ........ ........ 18% 2.02M 70s
 33792K ........ ........ ........ ........ ........ ........ 19% 2.08M 69s
 36864K ........ ........ ........ ........ ........ ........ 21% 2.25M 67s
 39936K ........ ........ ........ ........ ........ ........ 22% 2.22M 65s
 43008K ........ ........ ........ ........ ........ ........ 24% 2.20M 64s
 46080K ........ ........ ........ ........ ........ ........ 26% 2.54M 62s
 49152K ........ ........ ........ ........ ........ ........ 27% 2.86M 60s
 52224K ........ ........ ........ ........ ........ ........ 29% 2.73M 58s
 55296K ........ ........ ........ ........ ........ ........ 31% 2.79M 56s
 58368K ........ ........ ........ ........ ........ ........ 32% 2.73M 54s
 61440K ........ ........ ........ ........ ........ ........ 34% 1.93M 53s
 64512K ........ ........ ........ ........ ........ ........ 36% 2.25M 52s
 67584K ........ ........ ........ ........ ........ ........ 37% 2.28M 50s
 70656K ........ ........ ........ ........ ........ ........ 39% 2.36M 49s
 73728K ........ ........ ........ ........ ........ ........ 40% 2.18M 48s
 76800K ........ ........ ........ ........ ........ ........ 42% 2.46M 46s
 79872K ........ ........ ........ ........ ........ ........ 44% 2.36M 45s
 82944K ........ ........ ........ ........ ........ ........ 45% 2.54M 43s
 86016K ........ ........ ........ ........ ........ ........ 47% 2.58M 42s
 89088K ........ ........ ........ ........ ........ ........ 49% 2.21M 41s
 92160K ........ ........ ........ ........ ........ ........ 50% 2.13M 39s
 95232K ........ ........ ........ ........ ........ ........ 52% 2.72M 38s
 98304K ........ ........ ........ ........ ........ ........ 54% 2.64M 37s
101376K ........ ........ ........ ........ ........ ........ 55% 2.25M 35s
104448K ........ ........ ........ ........ ........ ........ 57% 1.63M 34s
```

```
110592K ........ ........ ........ ........ ........ ........  60% 2.35M 32s
113664K ........ ........ ........ ........ ........ ........  62% 2.42M 30s
116736K ........ ........ ........ ........ ........ ........  63% 2.52M 29s
119808K ........ ........ ........ ........ ........ ........  65% 2.75M 27s
122880K ........ ........ ........ ........ ........ ........  67% 2.71M 26s
125952K ........ ........ ........ ........ ........ ........  68% 2.72M 25s
129024K ........ ........ ........ ........ ........ ........  70% 2.66M 23s
132096K ........ ........ ........ ........ ........ ........  72% 2.69M 22s
135168K ........ ........ ........ ........ ........ ........  73% 2.65M 20s
138240K ........ ........ ........ ........ ........ ........  75% 2.68M 19s
141312K ........ ........ ........ ........ ........ ........  77% 2.75M 18s
144384K ........ ........ ........ ........ ........ ........  78% 2.54M 17s
147456K ........ ........ ........ ........ ........ ........  80% 2.37M 15s
150528K ........ ........ ........ ........ ........ ........  81% 2.15M 14s
153600K ........ ........ ........ ........ ........ ........  83% 2.36M 13s
156672K ........ ........ ........ ........ ........ ........  85% 2.20M 11s
159744K ........ ........ ........ ........ ........ ........  86% 2.25M 10s
162816K ........ ........ ........ ........ ........ ........  88% 2.56M 9s
165888K ........ ........ ........ ........ ........ ........  90% 2.44M 8s
168960K ........ ........ ........ ........ ........ ........  91% 2.64M 6s
172032K ........ ........ ........ ........ ........ ........  93% 2.35M 5s
175104K ........ ........ ........ ........ ........ ........  95% 1.98M 4s
178176K ........ ........ ........ ........ ........ ........  96% 2.42M 3s
181248K ........ ........ ........ ........ ........ ........  98% 2.40M 1s
184320K ........ ........ ........ ........ ........ ......   100% 2.35M=78s

2019-04-13 21:59:54 (2.35 MB/s) - 'jdk-8u201-linux-x64.tar.gz' saved [191817140/191817140]

Download done.
Removing outdated cached downloads...
update-alternatives: error: no alternatives for java
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/ControlPanel to provide /usr/bin/ControlPanel (ControlPanel) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/java to provide /usr/bin/java (java) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/javaws to provide /usr/bin/javaws (javaws) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/jcontrol to provide /usr/bin/jcontrol (jcontrol) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/jjs to provide /usr/bin/jjs (jjs) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/keytool to provide /usr/bin/keytool (keytool) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/orbd to provide /usr/bin/orbd (orbd) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/pack200 to provide /usr/bin/pack200 (pack200) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/policytool to provide /usr/bin/policytool (policytool) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/rmid to provide /usr/bin/rmid (rmid) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/rmiregistry to provide /usr/bin/rmiregistry (rmiregistry) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/servertool to provide /usr/bin/servertool (servertool) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/tnameserv to provide /usr/bin/tnameserv (tnameserv) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/bin/unpack200 to provide /usr/bin/unpack200 (unpack200) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/lib/jexec to provide /usr/bin/jexec (jexec) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/appletviewer to provide /usr/bin/appletviewer (appletviewer) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/extcheck to provide /usr/bin/extcheck (extcheck) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/idlj to provide /usr/bin/idlj (idlj) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jar to provide /usr/bin/jar (jar) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jarsigner to provide /usr/bin/jarsigner (jarsigner) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/javac to provide /usr/bin/javac (javac) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/javadoc to provide /usr/bin/javadoc (javadoc) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/javafxpackager to provide /usr/bin/javafxpackager (javafxpackager) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/javah to provide /usr/bin/javah (javah) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/javap to provide /usr/bin/javap (javap) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/javapackager to provide /usr/bin/javapackager (javapackager) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jcmd to provide /usr/bin/jcmd (jcmd) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jconsole to provide /usr/bin/jconsole (jconsole) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jdb to provide /usr/bin/jdb (jdb) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jdeps to provide /usr/bin/jdeps (jdeps) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jhat to provide /usr/bin/jhat (jhat) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jinfo to provide /usr/bin/jinfo (jinfo) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jmap to provide /usr/bin/jmap (jmap) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jmc to provide /usr/bin/jmc (jmc) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jps to provide /usr/bin/jps (jps) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jrunscript to provide /usr/bin/jrunscript (jrunscript) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jsadebugd to provide /usr/bin/jsadebugd (jsadebugd) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jstack to provide /usr/bin/jstack (jstack) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jstat to provide /usr/bin/jstat (jstat) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jstatd to provide /usr/bin/jstatd (jstatd) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/jvisualvm to provide /usr/bin/jvisualvm (jvisualvm) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/native2ascii to provide /usr/bin/native2ascii (native2ascii) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/rmic to provide /usr/bin/rmic (rmic) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/schemagen to provide /usr/bin/schemagen (schemagen) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/serialver to provide /usr/bin/serialver (serialver) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/wsgen to provide /usr/bin/wsgen (wsgen) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/wsimport to provide /usr/bin/wsimport (wsimport) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/bin/xjc to provide /usr/bin/xjc (xjc) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-oracle/jre/lib/amd64/libnpjp2.so to provide /usr/lib/mozilla/plugins/libjavaplugin.so (mozilla-javaplugin.so) in auto mode
Oracle JDK 8 installed

#####Important########
To set Oracle JDK8 as default, install the "oracle-java8-set-default" package.
E.g.: sudo apt install oracle-java8-set-default
On Ubuntu systems, oracle-java8-set-default is most probably installed
automatically with this package.
#####################

Selecting previously unselected package oracle-java8-set-default.
(Reading database ... 105629 files and directories currently installed.)
Preparing to unpack .../oracle-java8-set-default_8u201-1~webupd8~1_all.deb ...
Unpacking oracle-java8-set-default (8u201-1~webupd8~1) ...
Processing triggers for mime-support (3.60ubuntu1) ...
Setting up oracle-java8-set-default (8u201-1~webupd8~1) ...
Processing triggers for libc-bin (2.27-3ubuntu1) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for shared-mime-info (1.9-2) ...
W: APT had planned for dpkg to do more than it reported back (5 vs 9).
   Affected packages: oracle-java8-installer:amd64
vagrant@ubuntu-1804:~$ java -version
java version "1.8.0_201"
Java(TM) SE Runtime Environment (build 1.8.0_201-b09)
Java HotSpot(TM) 64-Bit Server VM (build 25.201-b09, mixed mode)
vagrant@ubuntu-1804:~$ whois java

Command 'whois' not found, but can be installed with:

apt install whois
Please ask your administrator.

vagrant@ubuntu-1804:~$ where java
where: command not found
vagrant@ubuntu-1804:~$ ls /usr/lib/jvm/
java-8-oracle
vagrant@ubuntu-1804:~$ ls /usr/lib/jvm/java-8-oracle/
bin             lib             src.zip
COPYRIGHT       LICENSE         THIRDPARTYLICENSEREADME-JAVAFX.txt
include         man             THIRDPARTYLICENSEREADME.txt
javafx-src.zip  README.html
jre             release
vagrant@ubuntu-1804:~$ vim ~/.bashrc
```

```
vagrant@ubuntu-1804:~$ env $JAVA_HOME
env: '/usr/lib/jvm/java-8-oracle': Permission denied
vagrant@ubuntu-1804:~$ java
Usage: java [-options] class [args...]
           (to execute a class)
   or  java [-options] -jar jarfile [args...]
           (to execute a jar file)
where options include:
    -d32          use a 32-bit data model if available
    -d64          use a 64-bit data model if available
    -server       to select the "server" VM
                  The default VM is server,
                  because you are running on a server-class machine.


    -cp <class search path of directories and zip/jar files>
    -classpath <class search path of directories and zip/jar files>
                  A : separated list of directories, JAR archives,
                  and ZIP archives to search for class files.
    -D<name>=<value>
                  set a system property
    -verbose:[class|gc|jni]
                  enable verbose output
    -version      print product version and exit
    -version:<value>
                  Warning: this feature is deprecated and will be removed
                  in a future release.
                  require the specified version to run
    -showversion  print product version and continue
    -jre-restrict-search | -no-jre-restrict-search
                  Warning: this feature is deprecated and will be removed
                  in a future release.
                  include/exclude user private JREs in the version search
    -? -help      print this help message
    -X            print help on non-standard options
    -ea[:<packagename>...|:<classname>]
    -enableassertions[:<packagename>...|:<classname>]
                  enable assertions with specified granularity
    -da[:<packagename>...|:<classname>]
    -disableassertions[:<packagename>...|:<classname>]
                  disable assertions with specified granularity
    -esa | -enablesystemassertions
                  enable system assertions
    -dsa | -disablesystemassertions
                  disable system assertions
    -agentlib:<libname>[=<options>]
                  load native agent library <libname>, e.g. -agentlib:hprof
                  see also, -agentlib:jdwp=help and -agentlib:hprof=help
    -agentpath:<pathname>[=<options>]
                  load native agent library by full pathname
    -javaagent:<jarpath>[=<options>]
                  load Java programming language agent, see java.lang.instrument
    -splash:<imagepath>
                  show splash screen with specified image
See http://www.oracle.com/technetwork/java/javase/documentation/index.html for more details.
vagrant@ubuntu-1804:~$ echo "deb http://www.apache.org/dist/cassandra/debian 311x main" | sudo tee -a /etc/apt/sources.list.d/cassandra.sources.list
deb http://www.apache.org/dist/cassandra/debian 311x main
vagrant@ubuntu-1804:~$ curl https://www.apache.org/dist/cassandra/KEYS | sudo apt-key add -
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  244k  100  244k    0     0   155k      0  0:00:01  0:00:01 --:--:--  155k
OK
vagrant@ubuntu-1804:~$ sudo apt-get update
Hit:1 http://us.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic InRelease
Get:3 http://us.archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
Get:5 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Get:4 http://dl.bintray.com/apache/cassandra 311x InRelease [3,183 B]
Get:6 http://dl.bintray.com/apache/cassandra 311x/main amd64 Packages [683 B]
Get:7 http://dl.bintray.com/apache/cassandra 311x/main i386 Packages [683 B]
Get:8 http://us.archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
Fetched 257 kB in 1s (260 kB/s)
Reading package lists... Done
vagrant@ubuntu-1804:~$ sudo apt-get install cassandra
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libopts25 libpython-stdlib libpython2.7-minimal libpython2.7-stdlib ntp
  python python-minimal python2.7 python2.7-minimal sntp
Suggested packages:
  cassandra-tools ntp-doc python-doc python-tk python2.7-doc binfmt-support
The following NEW packages will be installed:
  cassandra libopts25 libpython-stdlib libpython2.7-minimal
  libpython2.7-stdlib ntp python python-minimal python2.7 python2.7-minimal
  sntp
0 upgraded, 11 newly installed, 0 to remove and 6 not upgraded.
Need to get 34.6 MB of archives.
After this operation, 58.9 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:2 http://us.archive.ubuntu.com/ubuntu bionic/universe amd64 libopts25 amd64 1:5.18.12-4 [58.2 kB]
Get:1 http://dl.bintray.com/apache/cassandra 311x/main amd64 cassandra all 3.11.4 [29.8 MB]
Get:3 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 ntp amd64 1:4.2.8p10+dfsg-5ubuntu7.1 [640 kB]
Get:4 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython2.7-minimal amd64 2.7.15~rc1-1ubuntu0.1 [334 kB]
Get:5 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python2.7-minimal amd64 2.7.15~rc1-1ubuntu0.1 [1,304 kB]
Get:6 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 python-minimal amd64 2.7.15~rc1-1 [28.1 kB]
Get:7 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython2.7-stdlib amd64 2.7.15~rc1-1ubuntu0.1 [1,912 kB]
Get:8 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python2.7 amd64 2.7.15~rc1-1ubuntu0.1 [238 kB]
Get:9 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 libpython-stdlib amd64 2.7.15~rc1-1 [7,620 B]
Get:10 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 python amd64 2.7.15~rc1-1 [140 kB]
Get:11 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 sntp amd64 1:4.2.8p10+dfsg-5ubuntu7.1 [86.9 kB]
Fetched 34.6 MB in 15s (2,278 kB/s)
Selecting previously unselected package libopts25:amd64.
(Reading database ... 105634 files and directories currently installed.)
Preparing to unpack .../0-libopts25_1%3a5.18.12-4_amd64.deb ...
Unpacking libopts25:amd64 (1:5.18.12-4) ...
Selecting previously unselected package ntp.
Preparing to unpack .../1-ntp_1%3a4.2.8p10+dfsg-5ubuntu7.1_amd64.deb ...
Unpacking ntp (1:4.2.8p10+dfsg-5ubuntu7.1) ...
Selecting previously unselected package libpython2.7-minimal:amd64.
Preparing to unpack .../2-libpython2.7-minimal_2.7.15~rc1-1ubuntu0.1_amd64.deb ...
Unpacking libpython2.7-minimal:amd64 (2.7.15~rc1-1ubuntu0.1) ...
Selecting previously unselected package python2.7-minimal.
Preparing to unpack .../3-python2.7-minimal_2.7.15~rc1-1ubuntu0.1_amd64.deb ...
Unpacking python2.7-minimal (2.7.15~rc1-1ubuntu0.1) ...
Selecting previously unselected package python-minimal.
Preparing to unpack .../4-python-minimal_2.7.15~rc1-1_amd64.deb ...
Unpacking python-minimal (2.7.15~rc1-1) ...
Selecting previously unselected package libpython2.7-stdlib:amd64.
Preparing to unpack .../5-libpython2.7-stdlib_2.7.15~rc1-1ubuntu0.1_amd64.deb ...
Unpacking libpython2.7-stdlib:amd64 (2.7.15~rc1-1ubuntu0.1) ...
Selecting previously unselected package python2.7
```