

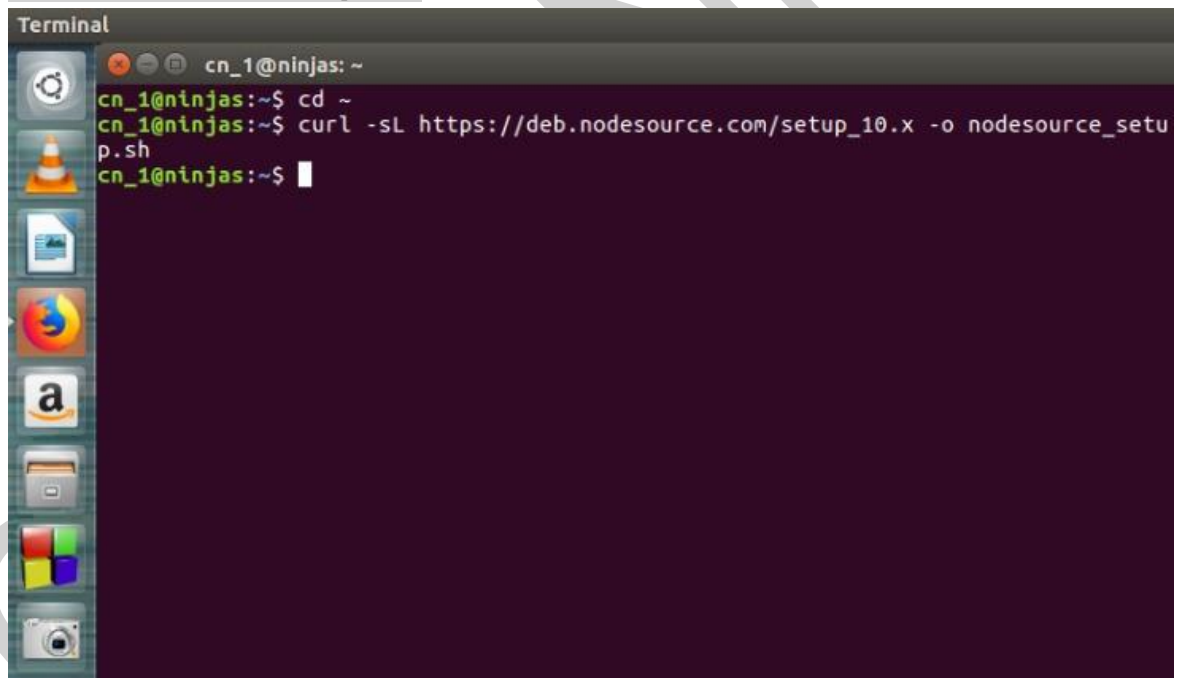
Install Node.js and NPM on Ubuntu

- 1) First, install the PPA in order to get access to its contents. PPA is a unique software repository intended for non standard software/updates; it helps you to share out software and updates directly to Ubuntu users.

From your home directory, use curl to retrieve the installation script for your preferred version, making sure to replace **10.x** with your preferred version string (if different):

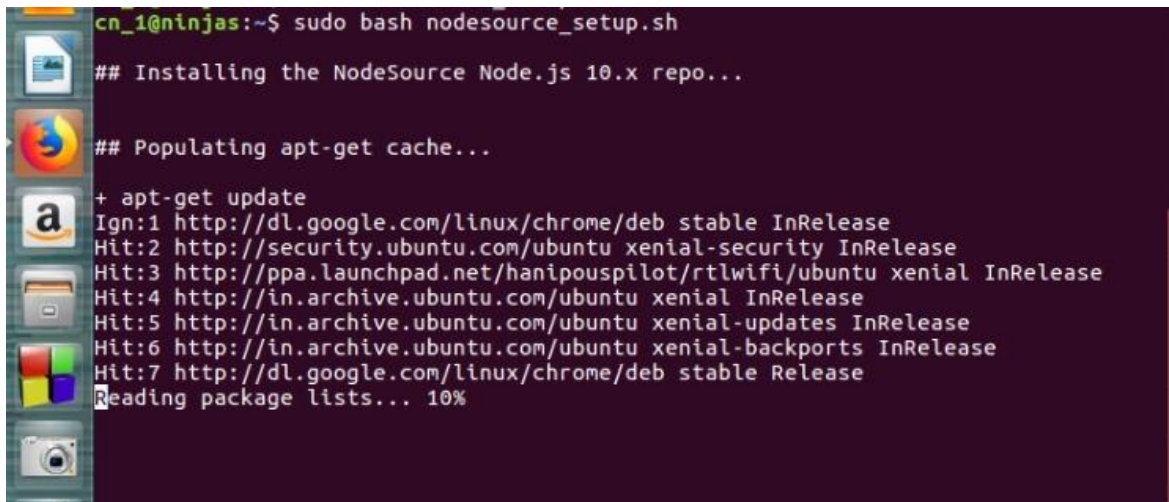
```
cd ~
```

```
curl -sL https://deb.nodesource.com/setup_10.x -o  
nodesource_setup.sh
```



- 2) Run the script under sudo:

```
sudo bash nodesource_setup.sh
```

A terminal window with a dark purple background. The prompt is 'cn_1@ninjas:~\$'. The command 'sudo bash nodesource_setup.sh' has been entered. The output shows the installation of the NodeSource Node.js 10.x repository, followed by an 'apt-get update' command. The update process lists several sources and their release status, including 'http://dl.google.com/linux/chrome/deb stable InRelease', 'http://security.ubuntu.com/ubuntu xenial-security InRelease', 'http://ppa.launchpad.net/hanipouspilot/rtlwifi/ubuntu xenial InRelease', 'http://in.archive.ubuntu.com/ubuntu xenial InRelease', 'http://in.archive.ubuntu.com/ubuntu xenial-updates InRelease', 'http://in.archive.ubuntu.com/ubuntu xenial-backports InRelease', and 'http://dl.google.com/linux/chrome/deb stable Release'. The process is currently at 10% completion.

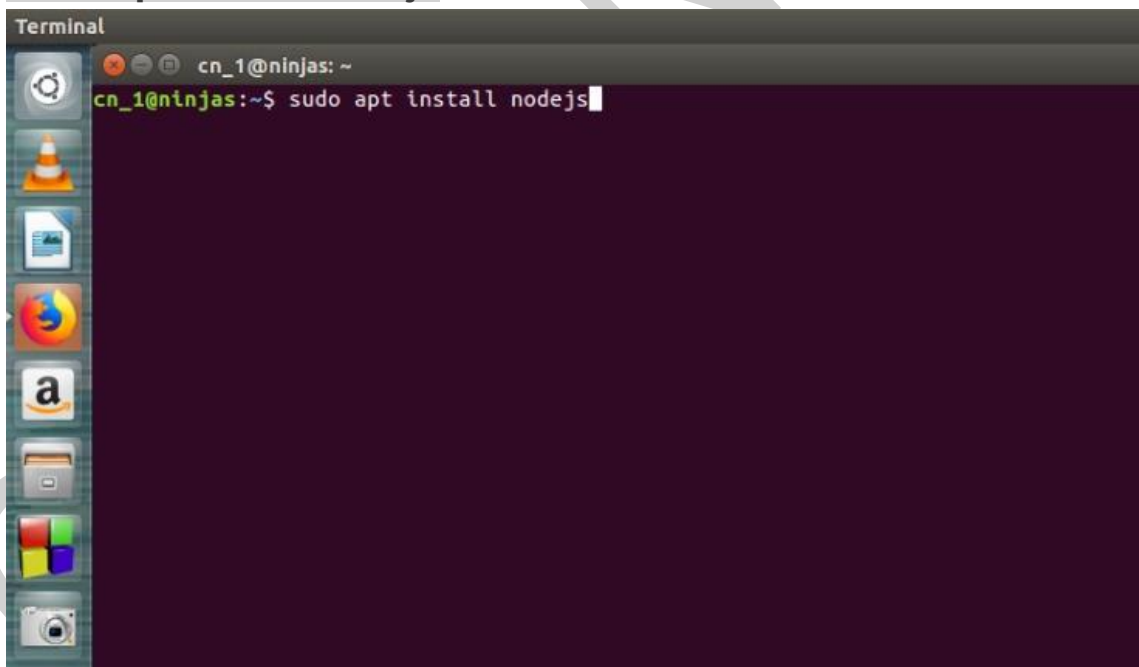
```
cn_1@ninjas:~$ sudo bash nodesource_setup.sh
## Installing the NodeSource Node.js 10.x repo...

## Populating apt-get cache...

+ apt-get update
Ign:1 http://dl.google.com/linux/chrome/deb stable InRelease
Hit:2 http://security.ubuntu.com/ubuntu xenial-security InRelease
Hit:3 http://ppa.launchpad.net/hanipouspilot/rtlwifi/ubuntu xenial InRelease
Hit:4 http://in.archive.ubuntu.com/ubuntu xenial InRelease
Hit:5 http://in.archive.ubuntu.com/ubuntu xenial-updates InRelease
Hit:6 http://in.archive.ubuntu.com/ubuntu xenial-backports InRelease
Hit:7 http://dl.google.com/linux/chrome/deb stable Release
Reading package lists... 10%
```

- 3) The PPA will be added to your configuration and your local package cache will be updated automatically. After running the setup script from Nodesource, you can install the Node.js package in the same way you did above:

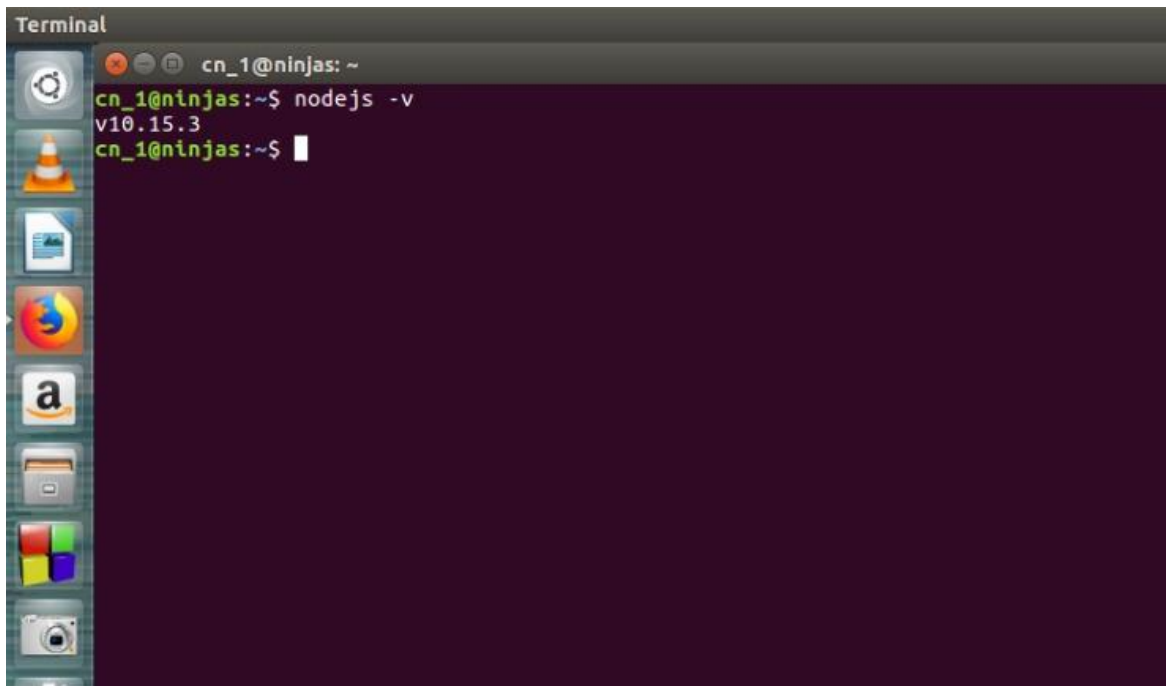
sudo apt install nodejs

A terminal window titled 'Terminal' with a dark purple background. The prompt is 'cn_1@ninjas: ~'. The command 'sudo apt install nodejs' has been entered and is waiting for execution.

```
Terminal
cn_1@ninjas: ~
cn_1@ninjas:~$ sudo apt install nodejs
```

- 4) To check which version of Node.js you have installed after these initial steps, type:

nodejs -v

A terminal window titled "Terminal" with a dark purple background. The window shows a user prompt "cn_1@ninjas: ~" and the command "nodejs -v" being executed. The output is "v10.15.3". The prompt "cn_1@ninjas:~\$" is shown again. On the left side of the terminal, there is a vertical dock with several application icons: a gear, a traffic cone, a document, a Firefox logo, an Amazon logo, a folder, a Windows logo, and a camera.

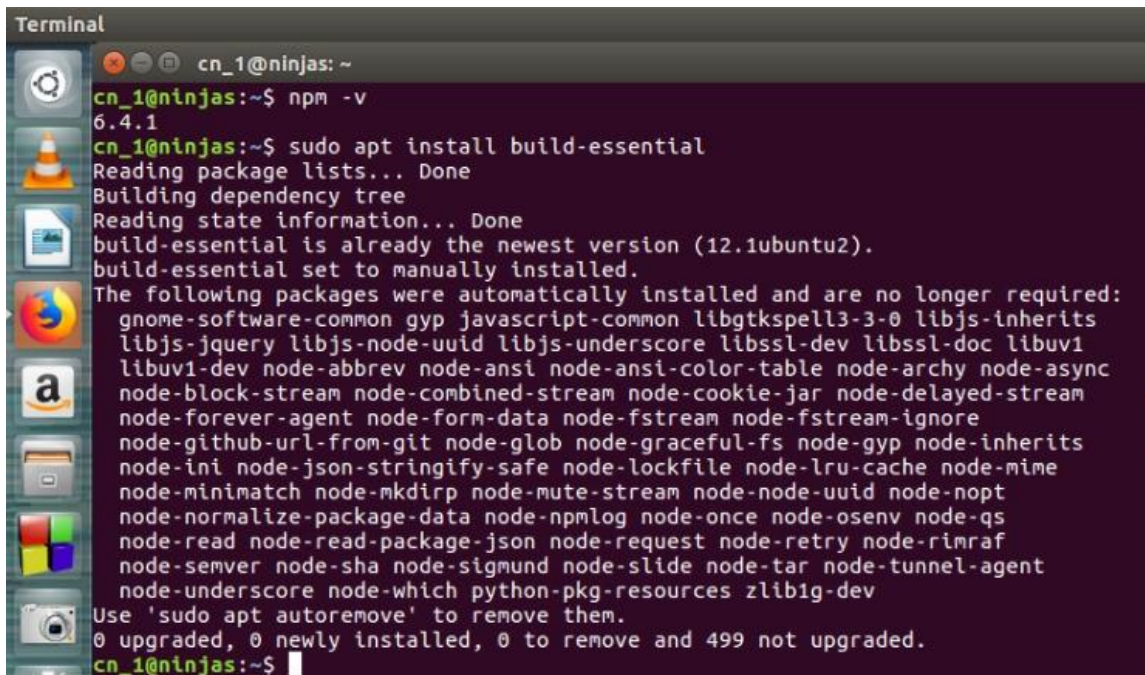
```
Terminal
cn_1@ninjas: ~
cn_1@ninjas:~$ nodejs -v
v10.15.3
cn_1@ninjas:~$
```

- 5) npm uses a configuration file in your home directory to keep track of updates. It will be created the first time you run npm. Execute this command to verify that npm is installed and to create the configuration file:

npm -v

- 6) In order for some npm packages to work (those that require compiling code from source, for example), you will need to install the build-essential package:

sudo apt install build-essential

A terminal window titled "Terminal" with a dark background and light text. The prompt is "cn_1@ninjas: ~". The user enters "npm -v" and the output is "6.4.1". Then the user enters "sudo apt install build-essential". The terminal shows the package lists being read, the dependency tree being built, and state information being read. It then states that "build-essential" is already the newest version (12.1ubuntu2) and is set to manually installed. A long list of packages that were automatically installed and are no longer required is displayed, including gnome-software-common, gyp, javascript-common, libgtkspell3-3-0, libjs-inherits, libjs-jquery, libjs-node-uuid, libjs-underscore, libssl-dev, libssl-doc, libuv1, libuv1-dev, node-abbrev, node-ansi, node-ansi-color-table, node-archy, node-async, node-block-stream, node-combined-stream, node-cookie-jar, node-delayed-stream, node-forever-agent, node-form-data, node-fstream, node-fstream-ignore, node-github-url-from-git, node-glob, node-graceful-fs, node-gyp, node-inherits, node-ini, node-json-stringify-safe, node-lockfile, node-lru-cache, node-mime, node-minimatch, node-mkdirp, node-mute-stream, node-node-uuid, node-nopt, node-normalize-package-data, node-npmlog, node-once, node-osenv, node-qs, node-read, node-read-package-json, node-request, node-retry, node-rimraf, node-semver, node-sha, node-sigmund, node-slide, node-tar, node-tunnel-agent, node-underscore, node-which, python-pkg-resources, and zlib1g-dev. It suggests using "sudo apt autoremove" to remove them. Finally, it shows "0 upgraded, 0 newly installed, 0 to remove and 499 not upgraded." and the prompt returns to "cn_1@ninjas:~\$".

```
Terminal
cn_1@ninjas: ~
cn_1@ninjas:~$ npm -v
6.4.1
cn_1@ninjas:~$ sudo apt install build-essential
Reading package lists... Done
Building dependency tree
Reading state information... Done
build-essential is already the newest version (12.1ubuntu2).
build-essential set to manually installed.
The following packages were automatically installed and are no longer required:
gnome-software-common gyp javascript-common libgtkspell3-3-0 libjs-inherits
libjs-jquery libjs-node-uuid libjs-underscore libssl-dev libssl-doc libuv1
libuv1-dev node-abbrev node-ansi node-ansi-color-table node-archy node-async
node-block-stream node-combined-stream node-cookie-jar node-delayed-stream
node-forever-agent node-form-data node-fstream node-fstream-ignore
node-github-url-from-git node-glob node-graceful-fs node-gyp node-inherits
node-ini node-json-stringify-safe node-lockfile node-lru-cache node-mime
node-minimatch node-mkdirp node-mute-stream node-node-uuid node-nopt
node-normalize-package-data node-npmlog node-once node-osenv node-qs
node-read node-read-package-json node-request node-retry node-rimraf
node-semver node-sha node-sigmund node-slide node-tar node-tunnel-agent
node-underscore node-which python-pkg-resources zlib1g-dev
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 499 not upgraded.
cn_1@ninjas:~$
```

You now have the necessary tools to work with npm packages that require compiling code from source.