Installing Angular and Verifying a Compatible Version of Node is Installed

Checking Node.js Version and Installing a Specific Version, if necessary

0. Open a terminal session.

1. **Determine current version of node.js installed on your computer: `node -v`**

   Expected output: `v##.##.##`

   If the number after the `v` is an **even number**, **you are good** to go. **Skip down near the end of these instructions to install Angular.**

   If the number after the `v` is an **odd number**, **you must uninstall the current version of nodejs and install an even numbered version to use Angular**.

   We will be removing all installations of **node** and **npm** before reinstalling them. They may be stored in two locations on your machine, your `/usr/local/bin` folder and the `root/bin` folder. We will remove them from both locations:

   To uninstall the current version of **node.js** and **npm** from typical locations:

   1. `sudo rm -rf /usr/local/bin/npm` - remove npm from the root usr/local/bin folder
   2. `sudo rm -rf /usr/local/bin/node` - remove node from the root usr/local/bin folder
   3. `cd ~` - go to the Home directory
   4. `cd ../..` - go to the root directory of the drive
   5. `cd bin` - change to the bin directory
   6. `sudo rm -rf npm` - remove npm from the root bin folder
   7. `sudo rm -rf node` - remove node from the root bin folder
   8. Exit the terminal session
   9. Start a new terminal session
   10. Check to be sure node.js is removed: `node -v`

       (this should result with a message saying node is not installed
       If it still shows a node version, close the Practice Lab and re-enter it,
       Then do the `node -v` command again, if it stills display a version,
       contact your instructor)

   Proceed with the rest of these steps.

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We will be using a tool called **cURL** to install a specific, even numbered, version of **`node.js`** as required by Angular.

Client URL (cURL) lets you exchange data between your device and a server through a command-line interface (CLI).

2. **Determine if `curl` is installed on your computer: `curl -V`**

   Expected output should look something like this
   (your version may be different than the one shown *(7.68.0)* this is OK):

```
curl 7.68.0 (x86_64-pc-linux-gnu) libcurl/7.68.0
OpenSSL/1.1.1fzlib/1.2.11
brotli/1.0.7 libidn2/2.2.0 libpsl/0.21.0 (+libidn2/2.2.0)
libssh/0.9.3/openssl/zlib nghttp2/1.40.0 librtmp/2.3
Release-Date: 2020-01-08
Protocols: dict file ftp ftps gopher http https imap imaps ldap ldaps
```

2a. **If you do not see that `curl` is installed, install it: `sudo apt install curl`**

   When the installation is done, repeat step 2 to be sure **curl** is installed.

3. **Use curl to download a specific version of node.js:**

   `curl -fsSL https://deb.nodesource.com/setup_20.x | sudo -E bash -`

   `-fsSL` limits the messaging from curl

   `https://deb.nodesource.com/setup_20.x` is the URL of the file to retrieve

   `|` (pipe) sends the output from the a command to another command & executes the other command.

   In this case we are sending the bash script created by curl to a bash environment, to be executed to effect the download of the file specified by the URL (**`https://deb.nodesource.com/setup_20.x`**)

   `-E` tells **sudo** to send the current bash environment to the new bash environment being initiated so the new environment knows everything this one does.

   `bash` - starts a new bash shell environment

   `-` tells bash to use the standard input device (keyboard), which it will do anyhow.

   Expected output:

   There will be a multitude of messages generated. Some might indicate an error has occurred. What is important is that your see the following at the end of the messages:

```
2024-02-28 17:48:23 - Repository configured successfully. To install
Node.js, run: apt-get install nodejs -y
```

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4. **Install the file downloaded from the `curl` command (the version of node.js we want):**

   `sudo apt-get install nodejs -y`

5. **Close the terminal window to destroy the current environment.**

6. **Open a new terminal window in order to create a new environment.**

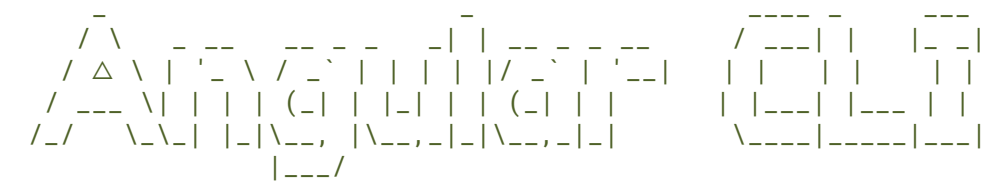
7. **Verify the expected version of node.js was installed: `node -v`**

   Expected output: **`v20.11.1`** *(your last two numbers may not be* **`11.1`***, that's OK)*

You are now ready to install Angular:

1. Unassign any existing command assigned to ng: **`sudo apt purge ng-common ng-latin`**
2. Install Angular: **`sudo npm install -g @angular/cli`**
3. Verify Angular has been installed: **`ng version`**

   Expected output should look something like this. If you are asked a question, it doesn't matter to Angular how you answer (**Y** or N). Your version numbers may be different, its OK:



```
Angular CLI: 17.1.1
Node: 20.11.0
Package Manager: npm 10.2.1
OS: win32 x64

Angular:
...

Package                      Version
------------------------------------------------------
@angular-devkit/architect    0.1701.1 (cli-only)
@angular-devkit/core         17.1.1 (cli-only)
@angular-devkit/schematics   17.1.1 (cli-only)
@schematics/angular          17.1.1 (cli-only)
```

Congratulations! You have successfully installed Angular!