

## Linux Install Guide (last performed when using Ubuntu v14.x)

### Overview:

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### 0. About *Lexos*

*Lexos* is an integrated workflow of tools to facilitate the computational analyses of texts, presented in a web-based interface. *Lexos* is written primarily in Python 2.7.11 using the [Flask](#) microframework, based on Werkzeug and Jinja 2. A heavy dose of Javascript and CSS is included on the front-end. We increasingly incorporate the wiz from [D3.js](#) in our visualizations and the power in the [scikit-learn](#) modules for text and statistical processing.

### 1. Install Python

Install a free distribution of Python v2.7 called Anaconda<sup>1</sup>.

a) Visit the website: <http://continuum.io/downloads>

b) On the website, locate Choose Your Installer on the screen; click on the Linux link.

c) Download the Anaconda installer (Linux 64-bit Python v2.7).

d) After locating the install script (e.g., in Downloads/ ), **run the (bash) shell installer**

**bash Anaconda-4.0.0-Linux-x86\_64.sh**

*(note: a newer version of Anaconda may have a new version number; check your exact filename).*

### 2. Install additional packages

Now that Anaconda has been installed, we can verify that we have installed it correctly. Then we will install the two additional packages we need to run *Lexos*.

a. **Open a new terminal** (this is important to ensure that your \$PATH includes Anaconda).

b. **Verify that Anaconda is installed** by typing in the terminal the following command:

**python -V**

*You should see a response that looks like :*

*Python 2.7.11 :: Anaconda 4.0.0 (64-bit) If you do not see “:: Anaconda 4.0.0” then you did not open a new terminal (see (a) above) or you did not update your PATH variable during the Anaconda installation (back on Step #1) and thus, you should return to Step #1 and reinstall Anaconda correctly.*

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<sup>1</sup> **Anaconda** is a free distribution of the Python programming language for large-scale data processing, predictive analytics, and scientific computing, that aims to simplify package management and deployment. As of June 2016, Anaconda includes 820+ of the most popular Python packages, including most of the packages needed for *Lexos*.

c. Make sure that your package installer (pip) is up to date:

```
pip install -U pip
```

d. Install three additional needed packages

```
pip install gensim
```

```
pip install chardet
```

```
pip install natsort
```

### 3. Download and extract *Lexos*

a. Go to the *Lexos* github page: <https://github.com/WheatonCS/Lexos>

b. At the bottom of the right-side navigation bar you will see a button to “**Download ZIP**”. Click this button to download a zipped file which contains the file folder which holds all the necessary source code for *Lexos*. **Extract** the contents of the .ZIP file **to your Desktop**. *If you want you can change the name of the containing folder from Lexos-master to just Lexos, but be sure to use the new name you used when in the command line on the subsequent steps.*

### 4. Start *Lexos*

a. Open a new terminal window

b. On the command line, use the cd command to navigate inside the Lexos-master folder.

```
cd Desktop/Lexos-master
```

c. **Start *Lexos*** -- On the command line enter:

```
python lexos.py
```

*It may take a minute the first time you run the command because Python has to reconfigure some of the project files for your computer, but shortly after you should see the following:*

- \* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
- \* Restarting with stat

*Note: You must keep the “python lexos.py” command running while you use Lexos. You may minimize the terminal window, but do not close the terminal window.*

#### d. Using *Lexos* with your browser

To interact with the program you need to open your favorite web browser (Firefox or Chrome) and in the URL-address bar enter:

```
localhost:5000
```

*Because your computer is acting as both the web server and the user of Lexos, you may need to hit the Reset button in the top right corner of the Upload page to make sure files from any previous sessions are purged.*

*To quit Lexos simply close the command prompt window (where you entered `python lexos.py` ).*

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