# Astro-Nex installation on Linux

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This document describes the steps to install Astro-Nex on Linux.

It is a somewhat technical procedure. You have to execute a series of commands from the Linux Terminal. If you are not familiar with Linux, try to get help from someone with basic knowledge of Linux.

The ideal situation would be to have an installer package that would facilitate the task but, at the moment, it is not available.

If you have a technical profile and want to collaborate in the preparation of an installer for Linux (or for Mac), contact me.

#### Introduction

Astro-Nex is coded with the Python programming language. Although Python is already at version 3, Astro-Nex only works with Python 2. Fortunately, Linux allows both versions of Python to be installed at the same time.

Latetst Linux distributions (for instance Ubuntu 20.04 and Linux Mint 20.3 Cinnamon) only have Python 3 installed.

If only Python 3 is installed on your Linux distribution, you will need to install Python 2. Here we explain how to do it.

The Astro-Nex installation also requires several libraries. Here we explain also how to install them. If any library is missing, the system will notify you with error messages. In that case, you have to search the Internet for a way to install them.

#### 1. Install Python 2.7

In the Linux Terminal, enter the following commands:

sudo apt-add-repository universe sudo apt update sudo apt install python2

Check the installed versions with the commands:

python2.7 python3

## 2. Install libraries

In the Linux Terminal, enter the following commands:

sudo apt update

*wget http://archive.ubuntu.com/ubuntu/pool/universe/p/pygtk/python-gtk2\_2.24.0-5.1ubuntu2\_amd64.deb* 

sudo apt-get install ./python-gtk2\_2.24.0-5.1ubuntu2\_amd64.deb

sudo apt install curl

curl https://bootstrap.pypa.io/pip/2.7/get-pip.py --output get-pip.py

sudo python2 get-pip.py

pip2 install configobj

pip install ipython

pip install pytz

sudo pip install pillow

## 3. Additional steps

**3.1.** On the Astro-Nex website (www.astro-nex.net) click on the section:

Source code

This will download the Astro-Nex-1.2.3.tar.gz file

- **3.2.** Using the file manager, access the personal folder that has the name of your user (we will call it *My-user*) and:
- (1) Create a folder with the name *lib*,
- (2) Move the Astro-Nex-1.2.3.tar.gz file to the the My-user/lib folder
- **3.3.** On the Linux Terminal (from *My-user/lib*) write:

tar -xf Astro-Nex-1.2.3.tar.gz

This command unpacks and creates the *Astro-Nex-1-2-3* folder on *My-user/lib*.

**3.4.** Using the file manager, access the folder:

*My-user/lib/Astro-Nex-1.2.3/astronex/resources* 

Right click on the *Astro-Nex.ttf* font. On the menu, select:

Open with «Typographies» and, then, Install

This installs the *Astro-Nex.ttf* font.

**3.5.** On the Linux Terminal, situate yourself on *My-user/lib/Astro-Nex-1.2.3* and write:

python2 nex.py

If all went well, this boots Astro-Nex.

## 4. Create the icon on the Desk

4.1. With the file manager, create the folder *bin* in the folder *My-user*.

4. 2. Create a file with the name *nex.txt* in the folder *My-user/bin*.

4.3. With the text editor, insert the following instructions:

cd ~/Lib/Astro-Nex-1.2.3 exec python2 nex.py

4.4. Save the file.

4.5. Remove the .*txt* extension (using F2 or renaming).

4.6. Right click on the file. Select *Properties* and in the *Permissions* tab, mark it as "executable" (there is a checkbox for this).

4.7. On the Desktop, create a launcher. In «*Order*» put (or select): *Home/My-user/bin/nex* 

On the section *Icon* include the *iconex-48.png* file from *My-user/lib/Astro-Nex-1.2.3/astronex/resources*.

This creates the icon on the Desktop.