

JuliaPro

(v1.5.1-1)

Installation Manual and Quickstart Guide

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1. Objective

This guide details the installation procedure and usage of the base JuliaPro package and JuliaPro's Juno IDE.

2. Prerequisites

- `JuliaPro-1.5.1-1.sh` file (This file can be downloaded from <https://juliacomputing.com/>)
- An installation of CentOS 7, Ubuntu 14.04, or Ubuntu 16.04, RHEL 7
- 5 GB of disk space
- Installation of required system libraries using Administrator or sudo privileges
- Active Internet connection
- LinkedIn or Gmail or GitHub or JuliaComputing account (Either one of these accounts are required for authentication)

- `token.toml` , this file is required only if you're using a Linux machine that does not have GUI, instructions to download this file can be found in following section [Using JuliaPro in a non-GUI environment](#)

2.1 System Library Prerequisites

2.1.1 Prerequisites for Installation on CentOS 7

Following libraries are required only if you're installing JuliaPro on an environment which has GUI , if your Linux machine does not have a GUI environment or if you're not planning on using the JuliaPro IDE, then you don't need to install any of these prerequisites.

```
xclip
libXScrnSaver
```

These libraries need to be installed by a user with appropriate Administrator or sudo privileges using the built-in yum package manager.

```
sudo yum -y install xclip
sudo yum -y install libXScrnSaver
```

2.1.2 Prerequisites for Installation on Ubuntu

Following libraries are required only if you're installing JuliaPro on an environment which has GUI , if your Linux machine does not have a GUI environment or if you're not planning on using the JuliaPro IDE, then you don't need to install any of these prerequisites.

```
xclip
libgconf-2-4
```

This library need to be installed by a user with appropriate Administrator or sudo privileges using the built-in apt package manager.

```
sudo apt-get -y install xclip
sudo apt-get -y install libgconf-2-4
```

3. Installing JuliaPro

Once the system requirements are met, you can start the JuliaPro installation using the installation script.

To execute the `JuliaPro-1.5.1-1.sh` script, you might first need to change the execution permissions on the script. Use following command to change the execution permission

```
chmod 777 JuliaPro-1.5.1-1.sh
```

The `JuliaPro-1.5.1-1.sh` script takes one argument; The absolute path to the directory into which you wish to install JuliaPro.

Example:-

```
./JuliaPro-1.5.1-1.sh /home/julia/
```

Immediately after the execution of JuliaPro script, you will be prompted with following question

```
Do you want to configure your JuliaPro to work with your private JuliaTeam package server?
```

This question is applicable only for JuliaTeam customers, if you're an individual or your company or organization is not using JuliaTeam, then you can answer "No" and continue with the installation. If you press "No", the default package server `pkg.juliahub.com` will be used for all package and registry operations. You can download (Or update) packages and registries from this server even if you're not a JuliaTeam customer.

If your organization is using JuliaTeam, then you can configure JuliaPro to work with your private package server (JuliaTeam enables you to create private package server) by answering "Yes". Subsequently, you will be promoted to enter your private package server URL with following question.

```
Please enter your JuliaTeam package server URL through which JuliaPro should download packages and registries
```

Once you enter your private JuliaTeam package server URL, the installer will configure JuliaPro to download all the packages and registries from your private JuliaTeam server.

Upon completion of the installer, the contents of the JuliaPro installation directory can be viewed.

4. Using JuliaPro in a GUI environment

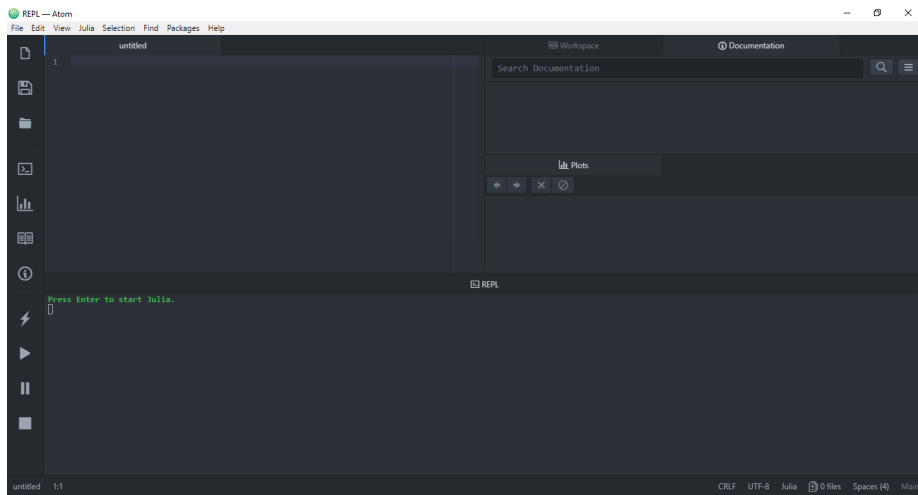
4.1 Launching JuliaPro

JuliaPro can be launched from the JuliaPro installation directory as shown below:

```
$ cd <juliapro>/JuliaPro-1.5.1-1
$ ./Launch_JuliaPro
```

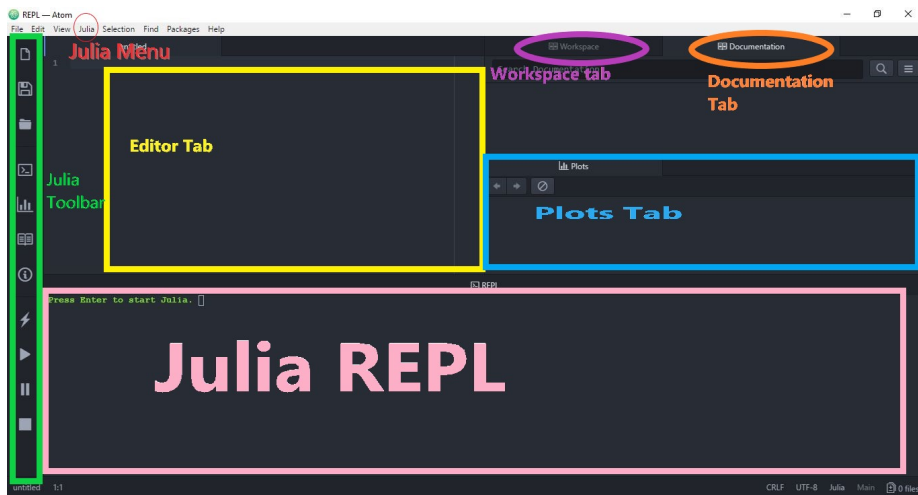
Where `<juliapro>` has to be replaced with the JuliaPro installation path.

Upon initially launching Juno, you will be presented with the following window.

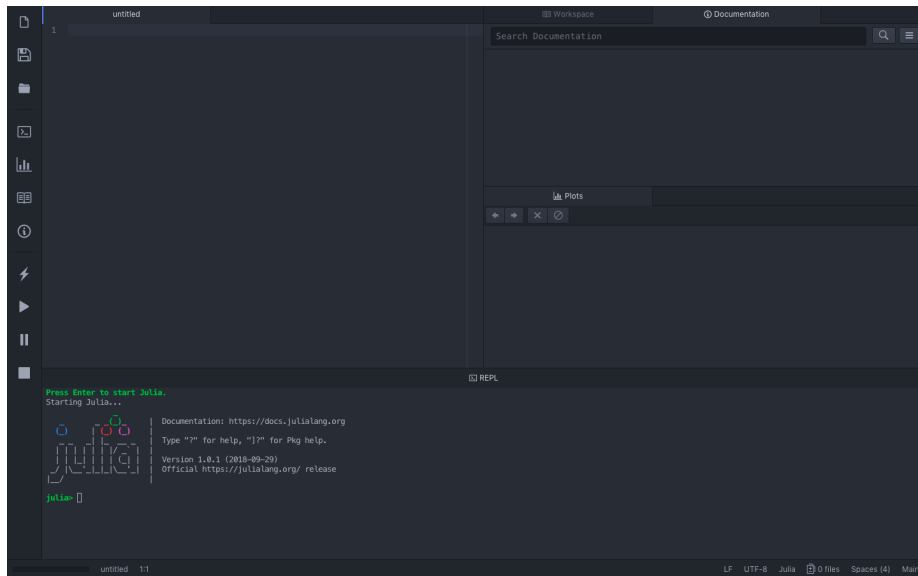


4.2 Getting Started with JuliaPro

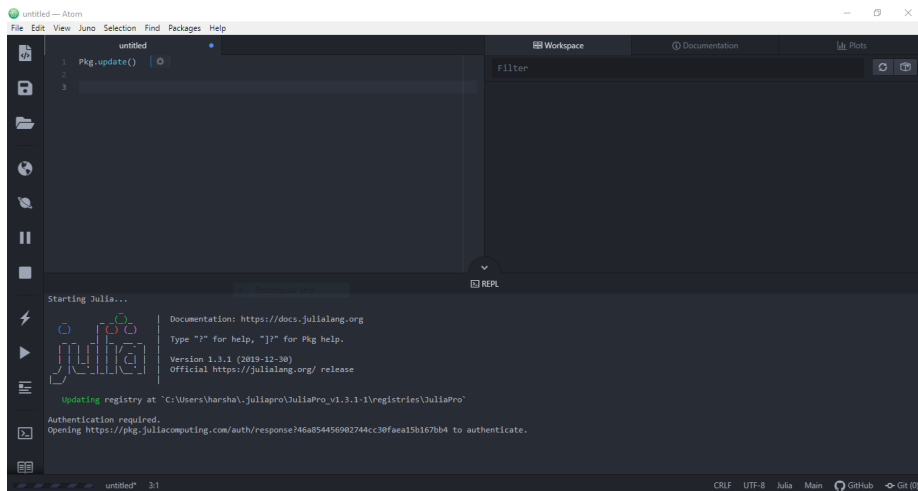
Naming convention for different layout (Panels) in Juno IDE can be seen below



You can start Julia by pressing enter in "Julia REPL" pane



By default, JuliaPro will download all the packages from `pkg.juliahub.com`, this website requires authentication, hence, you will go through the authentication process the first time you perform a `Pkg` operation; JuliaPro will open the authentication link in your default browser, once you successfully authenticate in your browser, JuliaPro will download a unique token for you and place it in the appropriate location. This token will be reused in your subsequent `Pkg` operations.

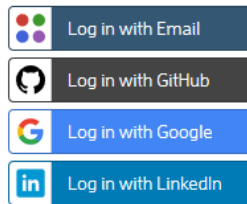


Once the URL link is open in your browser, you will be directed to authenticate by signing into either one of these accounts : LinkedIn or Gmail or GitHub or JuliaComputing account.



JuliaTeam Authentication

Please proceed to authenticate yourself for package operations.



Once the authentication is done, you will get a message in browser saying “Authenticated. You may close this browser window now.”

Authenticated. You may close this browser window now.

Your Pkg operation should continue as is, all your subsequent Pkg operations will use the token that JuliaPro just downloaded.

```
Starting Julia...
Documentation: https://docs.julialang.org
Type "?" for help, "]" for Pkg help.
Version 1.3.1 (2019-12-30)
Official https://julialang.org/ release

Updating registry at `C:\Users\harsha\.juliapro\JuliaPro_v1.3.1-1\registries\JuliaPro`
Authentication required.
Opening https://pkg.juliacomputing.com/auth/response?46a854456902744cc30faea15b167bb4 to authenticate.
Authentication successful.
```

If the automated browser authentication is failing, please use the instructions in following section to manually download the token and place it in the appropriate location: “Using JuliaPro in a non-GUI environment”

5. Using JuliaPro in a non-GUI environment

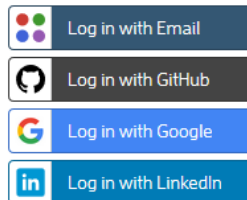
By default, JuliaPro will download all the packages from `pkg.juliahub.com`, this website requires authentication, hence, you have to download `token.toml` file to authenticate any requests from your JuliaPro installation to the server. This file can be downloaded by visiting following website in your browser <https://pkg.juliahub.com/auth>

Once you open the URL link, you will be directed to authenticate by signing into either one of these accounts : LinkedIn or Gmail or GitHub or JuliaComputing account.



JuliaTeam Authentication

Please proceed to authenticate yourself for package operations.



Once the authentication is done, your `token.toml` file download should begin immediately, if your download doesn't begin automatically, you can always click on "here" URL link to download the token

← → 🔄 <https://pkg.juliacomputing.com/auth/download/token.toml>

Authenticated to JuliaTeam

Your token file should begin downloading now.
Click [here](#) if it does not.

Once you have `token.toml`, rename this file as `auth.toml` and then you can move this file to the machine where you have installed JuliaPro, the default loca-

tion to place this file is `~/ .juliapro/JuliaPro_v1.5.1-1/servers/pkg.juliahub.com/auth.toml`
i.e create following path `.juliapro/JuliaPro_v1.5.1-1/servers/pkg.juliahub.com/`
in your home directory and place `auth.toml` in the path you just created. Once
you place the file in this location, all subsequent `Pkg` and `BinaryProvider.jl` op-
erations will use this token to authenticate the download from `pkg.juliahub.com`