

Install Racket Programming Language On Linux - OSTechNix

by sk · Published January 21, 2020 · Updated January 23, 2020

Racket is a general-purpose and multi-paradigm programming language based on **Lisp**. Racket is specifically based on **Scheme**, a Lisp-family language, which makes Racket a Scheme dialect. It is also known as programming language for creating new programming languages. Racket provides a graphical IDE called **DrRacket** for developing programs using the Racket programming languages. Racket is open source, cross-platform that runs on Linux, Mac OS and Windows. In this guide, we will see how to install Racket programming language on Linux.

If you're on Ubuntu and its variants like Linux Mint, use the [Racket official PPA](#) to install Racket.

```
$ sudo add-apt-repository ppa:plt/racket
$ sudo apt-get update
$ sudo apt-get install racket
```

On the Linux distributions, download latest Racker installer script from the [official download page](#).

```
$ wget https://mirror.racket-lang.org/installers/7.5/racket-7.5-x86_64-linux.sh
```

Go to the location where you downloaded the installer script and make it executable. In my case, the installer script is saved in the current directory.

To make the Racket installer script executable, simply run:

```
$ chmod +x racket-7.5-x86_64-linux.sh
```

Finally, run the Racket installer as shown below.

```
$ sudo ./racket-7.5-x86_64-linux.sh
```

You will be asked a couple questions. Please read them carefully and answer accordingly.

The first question is – **Do you want a Unix-style distribution?** You can choose either YES or NO. If you enter YES, all files will go into different directories according to the Unix conventions. If you choose NO, all files will be kept in a single directory which is easy very for erasing or moving in future. The **default value is NO**. I recommended you to choose NO as well. I go with the default value i.e. **No**.

This program will extract and install Racket v7.5.

Note: the required disk space for this installation is 525M.

```
Do you want a Unix-style distribution?
In this distribution mode files go into different directories according
to Unix conventions. A "racket-uninstall" script will be generated
to be used when you want to remove the installation. If you say 'no',
the whole Racket directory is kept in a single installation directory
(movable and erasable), possibly with external links into it -- this is
often more convenient, especially if you want to install multiple
versions or keep it in your home directory.
Enter yes/no (default: no) >no
[...]
```

The second question is – **Where do you want to install Racket?** You will be given five choices as listed below.

1. **/usr/racket** – This is the default location. System-wide installation. This is good if you want to let all users in the system to use Racket.
2. **/usr/local/racket** – Same as above (System wide installation).
3. **~/racket** (/home/user/racket) – Per-user installation. If you are a non-administrator, you can choose this option to install Racket in your \$HOME directory itself.
4. **./racket** (here in the current directory itself).
5. Any **custom location** of your choice.

All you have to do is just enter the number and hit ENTER to proceed. Usually it is good to install system-wide to let all users run Racket program. I go with default option i.e. **/usr/racket**

```
[...]
Where do you want to install the "racket" directory tree?
 1 - /usr/racket [default]
 2 - /usr/local/racket
 3 - ~/racket (/home/sk/racket)
 4 - ./racket (here)
Or enter a different "racket" directory to install in.
> 1
[...]
```

The third and final option is – **Where do you want to put the system links**, such as racket, drracket, raco etc. Choose a common directory (usually your \$PATH, for example **/usr/local/**), so you don't need to type the full path of the executable.

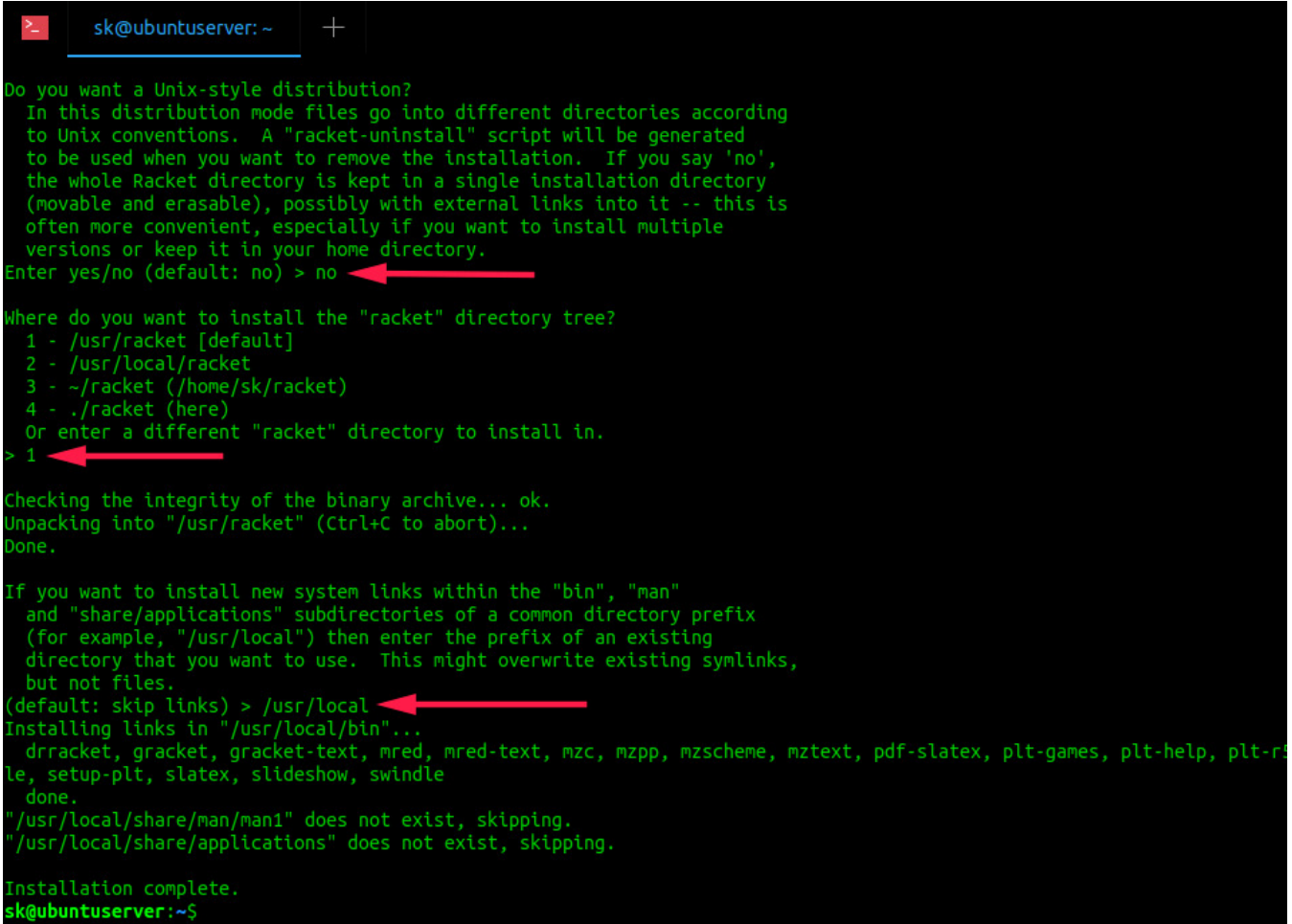
```
[...]
Checking the integrity of the binary archive... ok.
Unpacking into "/usr/racket" (Ctrl+C to abort)...
Done.
```

```

If you want to install new system links within the "bin", "man"
and "share/applications" subdirectories of a common directory prefix
(for example, "/usr/local") then enter the prefix of an existing
directory that you want to use. This might overwrite existing symlinks,
but not files.
(default: skip links) > /usr/local
Installing links in "/usr/local/bin"...
  drracket, gracket, gracket-text, mred, mred-text, mzc, mzpp, mzscheme, mztext, pdf-slatex, plt-games, plt-help, plt-r5rs, plt-r6rs,
done.
"/usr/local/share/man/man1" does not exist, skipping.
"/usr/local/share/applications" does not exist, skipping.

Installation complete.

```



```

sk@ubuntu: ~$
Do you want a Unix-style distribution?
In this distribution mode files go into different directories according
to Unix conventions. A "racket-uninstall" script will be generated
to be used when you want to remove the installation. If you say 'no',
the whole Racket directory is kept in a single installation directory
(movable and erasable), possibly with external links into it -- this is
often more convenient, especially if you want to install multiple
versions or keep it in your home directory.
Enter yes/no (default: no) > no
Where do you want to install the "racket" directory tree?
  1 - /usr/racket [default]
  2 - /usr/local/racket
  3 - ~/racket (/home/sk/racket)
  4 - ./racket (here)
Or enter a different "racket" directory to install in.
> 1
Checking the integrity of the binary archive... ok.
Unpacking into "/usr/racket" (Ctrl+C to abort)...
Done.

If you want to install new system links within the "bin", "man"
and "share/applications" subdirectories of a common directory prefix
(for example, "/usr/local") then enter the prefix of an existing
directory that you want to use. This might overwrite existing symlinks,
but not files.
(default: skip links) > /usr/local
Installing links in "/usr/local/bin"...
  drracket, gracket, gracket-text, mred, mred-text, mzc, mzpp, mzscheme, mztext, pdf-slatex, plt-games, plt-help, plt-r5rs,
  le, setup-plt, slatex, slideshow, swindle
done.
"/usr/local/share/man/man1" does not exist, skipping.
"/usr/local/share/applications" does not exist, skipping.

Installation complete.
sk@ubuntu: ~$

```

Racket has been installed now.

Verify Racket installation

If you have installed Racket using PPA, simply type the following command to enter into Racket console:

```
$ racket
```

If you've used the Racket installer script and changed different installation location, type any one of the following commands depending on where you installed it by answering the 2nd and 3rd questions during the installation process.

```
$ /usr/racket/bin/racket
```

Or,

```
$ /usr/local/racket/bin/racket
```

Or,

```
$ ~/racket/bin/racket
```

I used PPA, hence I entered into Racket console using command:

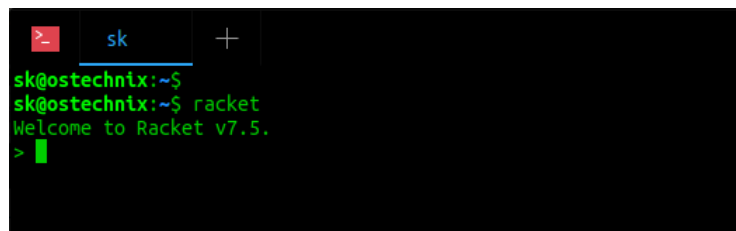
```
$ racket
```

This is how Racket command prompt looks like in my Ubuntu 18.04 desktop.

```

Welcome to Racket v7.5.
>

```



```
sk@ostechnix:~$  
sk@ostechnix:~$ racket  
Welcome to Racket v7.5.  
>
```

To read Racket documentation, type **help** in the Racket console and hit ENTER. This will open the Racket documentation page in your default web browser.

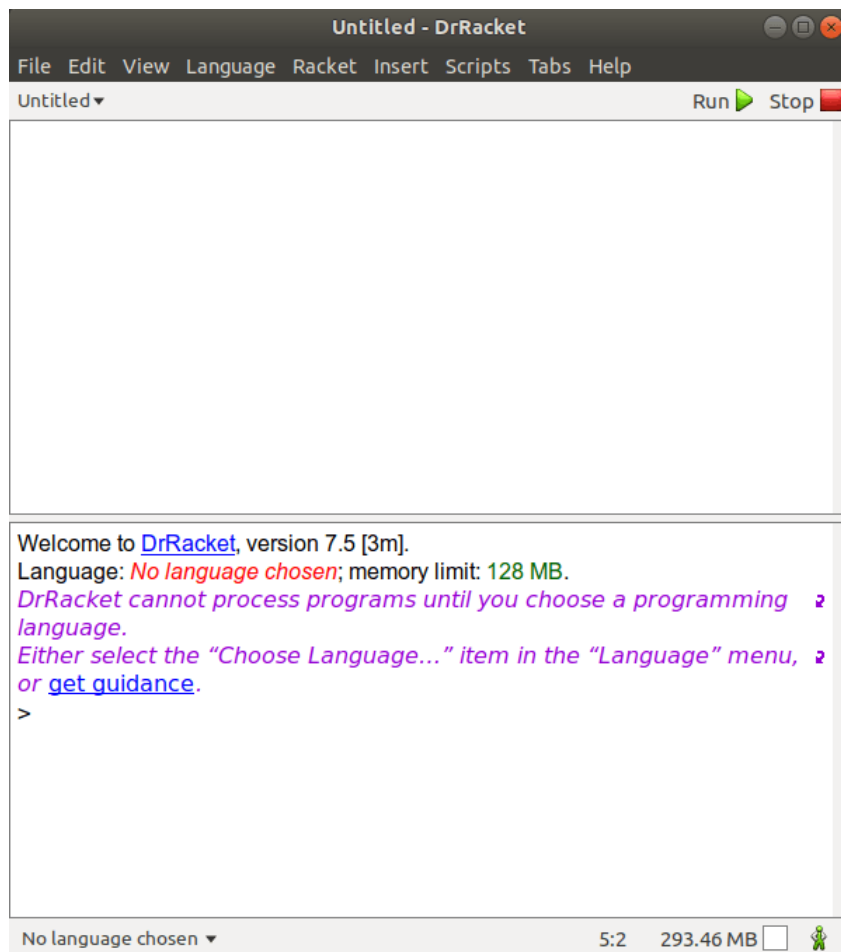
To exit from the console, press **Ctrl+D**.

If you don't like the command line way or you're a beginner, use **DrRacket** graphical IDE.

Launch DrRacket from Menu or Dash. You can also start DrRacket from Terminal using command:

```
$ drracket
```

The default interface of DrRacket will look like below.



Type your program in DrRacket interface and press "Run" button on the top right corner.

Here is a simple program to display the given text:

```
#lang racket  
(displayln "Welcome to OSTechNix!")
```

Output:



The screenshot shows the DrRacket IDE window titled "Untitled - DrRacket*". The menu bar includes File, Edit, View, Language, Racket, Insert, Scripts, Tabs, and Help. The toolbar contains icons for file operations, running, and stepping through code. The editor area contains the following Racket code:

```
#lang racket
(displayln "Welcome to OSTechNix!")
```

The output area below the editor shows the following text:

```
Welcome to DrRacket, version 7.5 [3m].
Language: racket, with debugging; memory limit: 128 MB.
Welcome to OSTechNix!
>
```

A red arrow points from the output "Welcome to OSTechNix!" to the corresponding string in the source code. The status bar at the bottom shows "Determine language from source", "4:2", and "417.82 MB".

Uninstall Racket

If you have installed Racket using PPA, simply run the following command to remove Racket:

```
$ sudo apt --purge remove racket
```

If you manually installed it using the installer, just remove the installation directory. Double check the path before removing it.

```
$ sudo rm -r /usr/racket
```

Finally, [find and delete the unused broken Symlinks](#) which are created during the installation process.

Hope this helps.

Suggested read:

- [How To Install Go Language In Linux](#)
- [How To Install NodeJS On Linux](#)
- [Install Rust Programming Language In Linux](#)
- [Getting Started With Haskell Programming Language](#)

Resource:

- [Racket Website](#)

Thanks for stopping by!

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Have a Good day!!