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How to Install Terraform (Infrastructure as Code) in Linux

Karthick | Last Updated: October 27, 2023 | Read Time: 2 mins | CentOS, Debian, Fedora, RedHat, Ubuntu

4 Comments

In this article, we will discuss what Terraform is and how to install Terraform on various Linux distributions using HashiCorp repositories.

What is Terraform?

Terraform is a popular cloud orchestration tool in the world of automation, which is used to deploy your infrastructure through the IAC (Infrastructure as code) approach.

Terraform is built by Hashicorp and released under Mozilla Public License. It supports public, private as well and hybrid cloud, as of now Terraform supports 145 providers, which include popular providers like AWS, Azure Cloud, GCP, Oracle Cloud, and many others.

Terraform architecture is very simple. All you need is to download the terraform binary to your local/server machine which is going to act as your base machine.

We have to mention the provider to work within our syntax file. Terraform will download the plugin for that particular provider automatically and will authenticate with the provider API to execute the plan.

What is Infrastructure as Code?

The process of provisioning and managing resources like Virtual Machines, Storage, Networks, Database, etc.. through machine-readable definition files, rather than interactive tools or hardware configurations.

Features

- Open-source.

- Declarative syntax.

- Pluggable Modules.

- Immutable infrastructure.

- Simple client-only architecture.

Let's get started…

Installing Terraform in Linux Distributions

The **Terraform** primary distribution packages come in `.zip` format, that includes single executable files that you can uncompress at any location on your Linux system.

However, for simpler integration with configuration management tools, terraform also offers package repositories for [Debian-based](#) and [RHEL-based systems](#), which enables you to install **Terraform** using your default package management tools called [APT](#), [Yum](#), or [DNF](#).

Install Terraform in Debian, Ubuntu & Mint

```
wget -O- https://apt.releases.hashicorp.com/gpg | sudo gpg --dearmor -o /us
echo "deb [signed-by=/usr/share/keyrings/hashicorp-archive-keyring.gpg] htt
sudo apt update
sudo apt install terraform
```

Install Terraform in RHEL and CentOS

```
sudo yum install -y yum-utils
sudo yum-config-manager --add-repo https://rpm.releases.hashicorp.com/RHEL/
sudo yum update
sudo yum -y install terraform
```

Install Terraform in Fedora

```
sudo dnf install -y dnf-plugins-core
sudo dnf config-manager --add-repo https://rpm.releases.hashicorp.com/fedor
sudo dnf update
sudo dnf -y install terraform
```

Now the installation can be verified by running a simple terraform version command.

```
$ terraform version
```



```
[karthick@TECMINT ~]$ terraform version
Terraform v0.14.0
```

Check Terraform Version

That's it for this article. The installation is very simple and easy to set up and some text editors like Sublime and VSCode come with language support for Terraform too.

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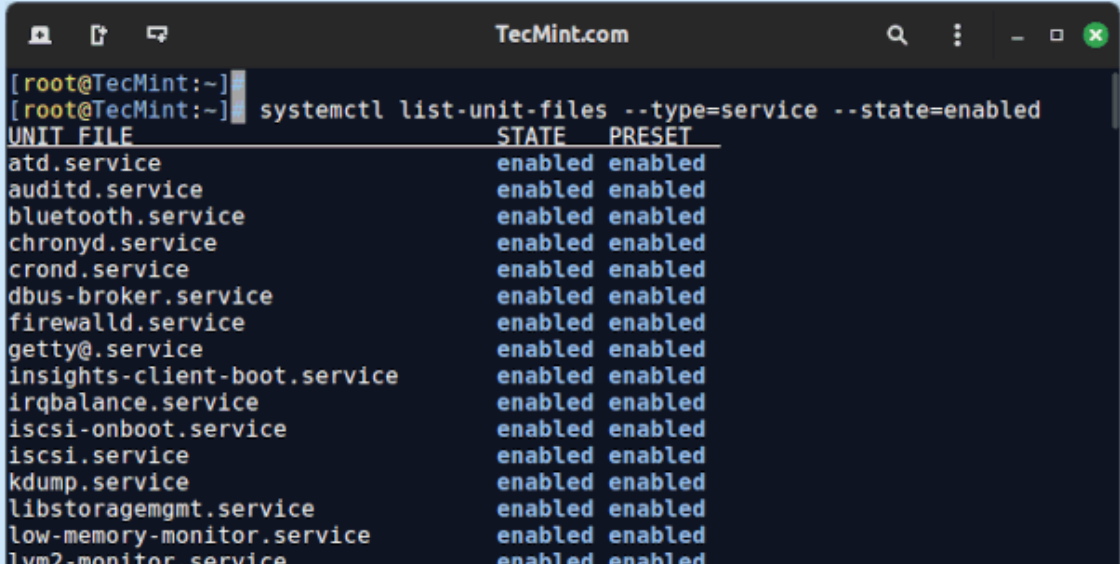## How to Install Oracle Database 23c in RHEL 8

Karthick

A passionate software engineer who loves to explore new technologies. He is a public speaker and loves writing about technology, especially about Linux and open source.

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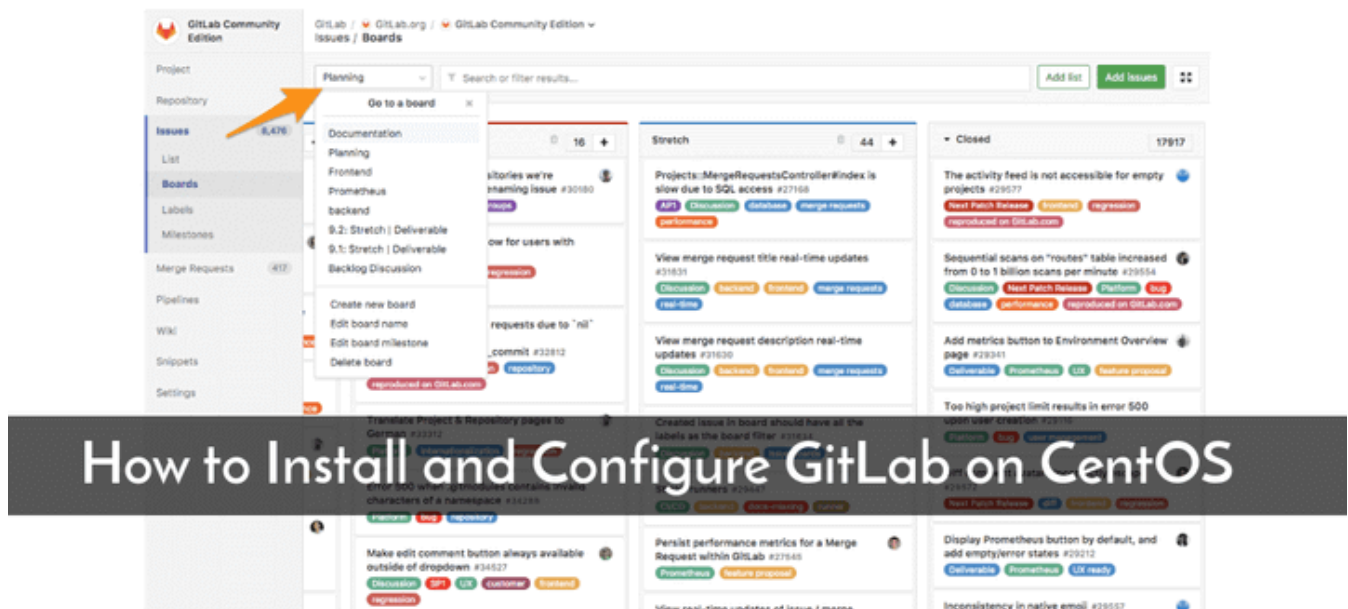

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Mike Bomba

[October 27, 2023 at 12:26 pm](#)

apt-key has been deprecated on Linux Mint 21 – another means needs to be used to import the key.

apt update has been updated to require a Release file. This command fails on Linux Mint 21 as used above.

[Reply](#)

Admin

Ravi Saive

[October 27, 2023 at 1:13 pm](#)

@Mike,

I've revised the installation instructions for Terraform on Debian-based distributions, including Linux Mint.

Reply

Pablo
March 4, 2021 at 9:33 am

Thanks for the article!

Just note when you're installing **Terraform** via the CLI on Debian family distros, you have to include below command to update package.

```
$ sudo apt update
```

If it's not executed you'll see something as below:

```
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package terraform
```

I guess the same is happening for the Red Had family distros.

Thanks,
Pablo

Reply

Admin

Ravi Saive

March 4, 2021 at 10:00 am

@Pablo,

Thanks for informing us, I have updated the article as per your suggestion…

Reply

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