URL:

- 1. https://linuxize.com/post/how-to-install-jenkins-on-centos-7/
- 2. https://linuxize.com/post/how-to-setup-a-firewall-with-firewalld-on-centos-7/

<u>Jenkins</u> is an open-source, Java-based automation server that offers an easy way to set up a continuous integration and continuous delivery (CI/CD) pipeline.

Continuous integration (CI) is a DevOps practice in which team members regularly commit their code changes to the version control repository, after which automated builds and tests are run. Continuous delivery (CD) is a series of practices where code changes are automatically built, tested and deployed to production.

This tutorial, will walk you through the steps of installing Jenkins on a CentOS 7 system using the official Jenkins repository.

Prerequisites

Before continuing with this tutorial, make sure you are logged in as a <u>user with</u> <u>sudo privileges</u>.

Installing Jenkins

To install Jenkins on your CentOS system, follow the steps below:

- 1. Jenkins is a Java application, so the first step is to install Java. Run the following command to install the OpenJDK 8 package:
- 2. sudo yum install java-1.8.0-openjdk-devel

- 3. The current version of Jenkins does not support Java 10 (and Java 11) yet. If you have multiple versions of Java installed on your machine make sure Java 8 is the default Java version.
- 4. The next step is to enable the Jenkins repository. To do that, import the GPG key using the following <u>curl</u> command:
- 5. curl --silent --location
 http://pkg.jenkins-ci.org/redhat-stable/jenkins.repo
 | sudo tee /etc/yum.repos.d/jenkins.repo
- 6. And add the repository to your system with:
- 7. sudo rpm --import
 https://jenkins-ci.org/redhat/jenkins-ci.org.key
- 8. Once the repository is enabled, install the latest stable version of Jenkins by typing:
- 9. sudo yum install jenkins
- 10. After the installation process is completed, start the Jenkins service with:
- 11. sudo systemctl start jenkins
- 12. To check whether it started successfully run:
- 13. systemctl status jenkins

You should see something similar to this:

Process: 2367 ExecStart=/etc/rc.d/init.d/jenkins start

(code=exited, status=0/SUCCESS)

14. CGroup: /system.slice/jenkins.service Finally enable the Jenkins service to start on system boot.

15. sudo systemctl enable jenkins

jenkins.service is not a native service, redirecting to /sbin/chkconfig.

16. Executing /sbin/chkconfig jenkins on

Adjust the Firewall

If you are installing Jenkins on a remote CentOS server that is <u>protected by a firewall</u> you need to port 8080.

Use the following commands to open the necessary port:

```
sudo firewall-cmd --permanent --zone=public --add-port=8080/tcp
sudo firewall-cmd --reload
```

Setting Up Jenkins

To set up your new Jenkins installation, open your browser and type your domain or IP address followed by port 8080:

```
http://your_ip_or_domain:8080
```