Prerequisites

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

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:

   ```
   sudo yum install java-1.8.0-openjdk-devel
   ```

   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.

2. The next step is to enable the Jenkins repository. To do that, import the GPG key using the following `curl` command:

   ```
   curl --silent --location http://pkg.jenkins-ci.org/redhat-stable/jenkins.repo | sudo tee /etc/yum.repos.d/jenkins.repo
   ```

   And add the repository to your system with:

```
sudo rpm --import https://jenkins-ci.org/redhat/jenkins-ci.org.key
```

3. Once the repository is enabled, install the latest stable version of Jenkins by typing:

```
sudo yum install jenkins
```

After the installation process is completed, start the Jenkins service with:

```
sudo systemctl start jenkins
```

To check whether it started successfully run:

```
systemctl status jenkins
```

You should see something similar to this:

```
● jenkins.service - LSB: Jenkins Automation Server
Loaded: loaded (/etc/rc.d/init.d/jenkins; bad; vendor preset: disabled)
Active: active (running) since Thu 2018-09-20 1421 UTC; 15s ago
     Docs: man:systemd-sysv-generator(8)
Process: 2367 ExecStart=/etc/rc.d/init.d/jenkins start (code=exited, status=0/SUCCESS)
CGroup: /system.slice/jenkins.service
```

Finally enable the Jenkins service to start on system boot.

```
sudo systemctl enable jenkins
```

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

Adjust the Firewall

If you are installing Jenkins on a remote CentOS server that is protected by a firewall you need to port `8080`.
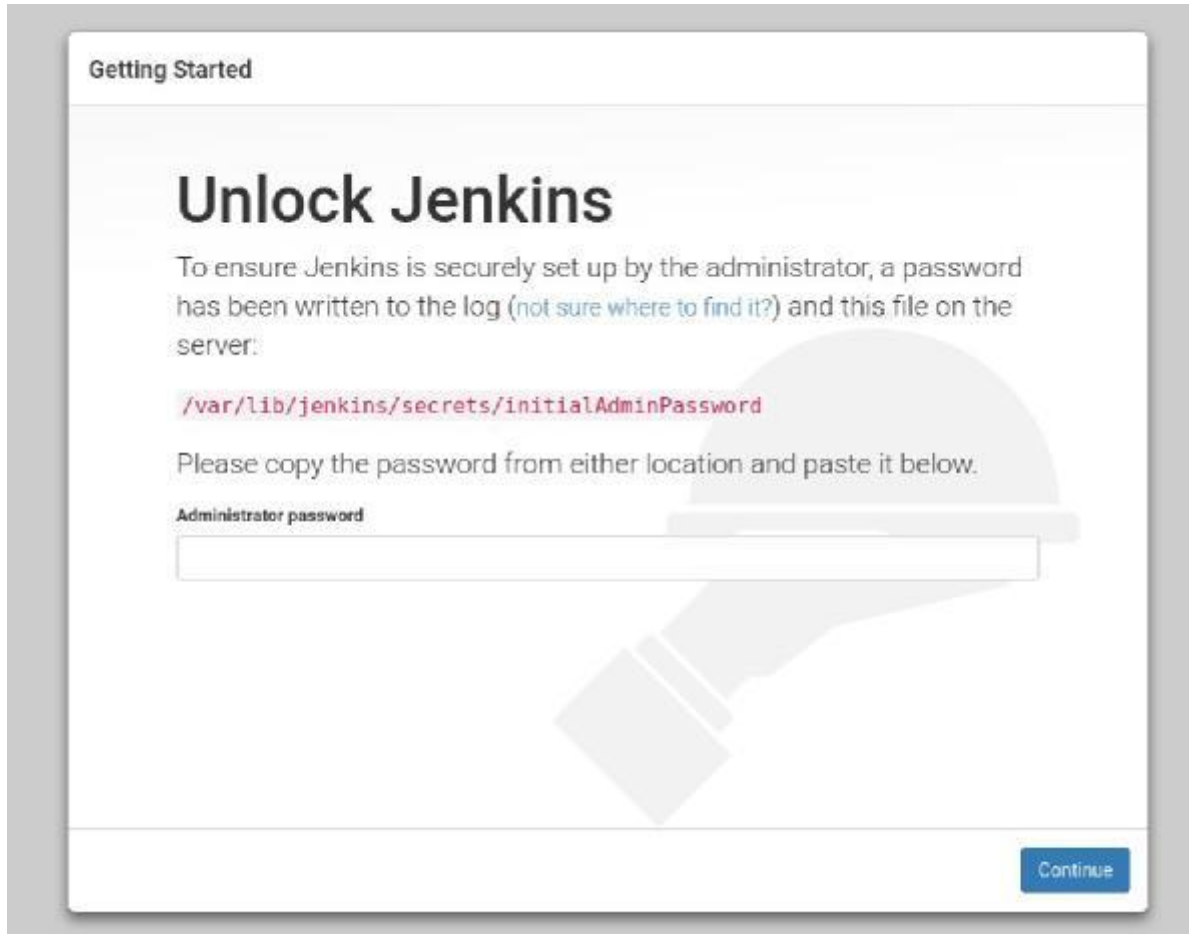
Use the following commands to open the necessary port:

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

A screen similar to the following will appear, prompting you to enter the Administrator password that is created during the installation:
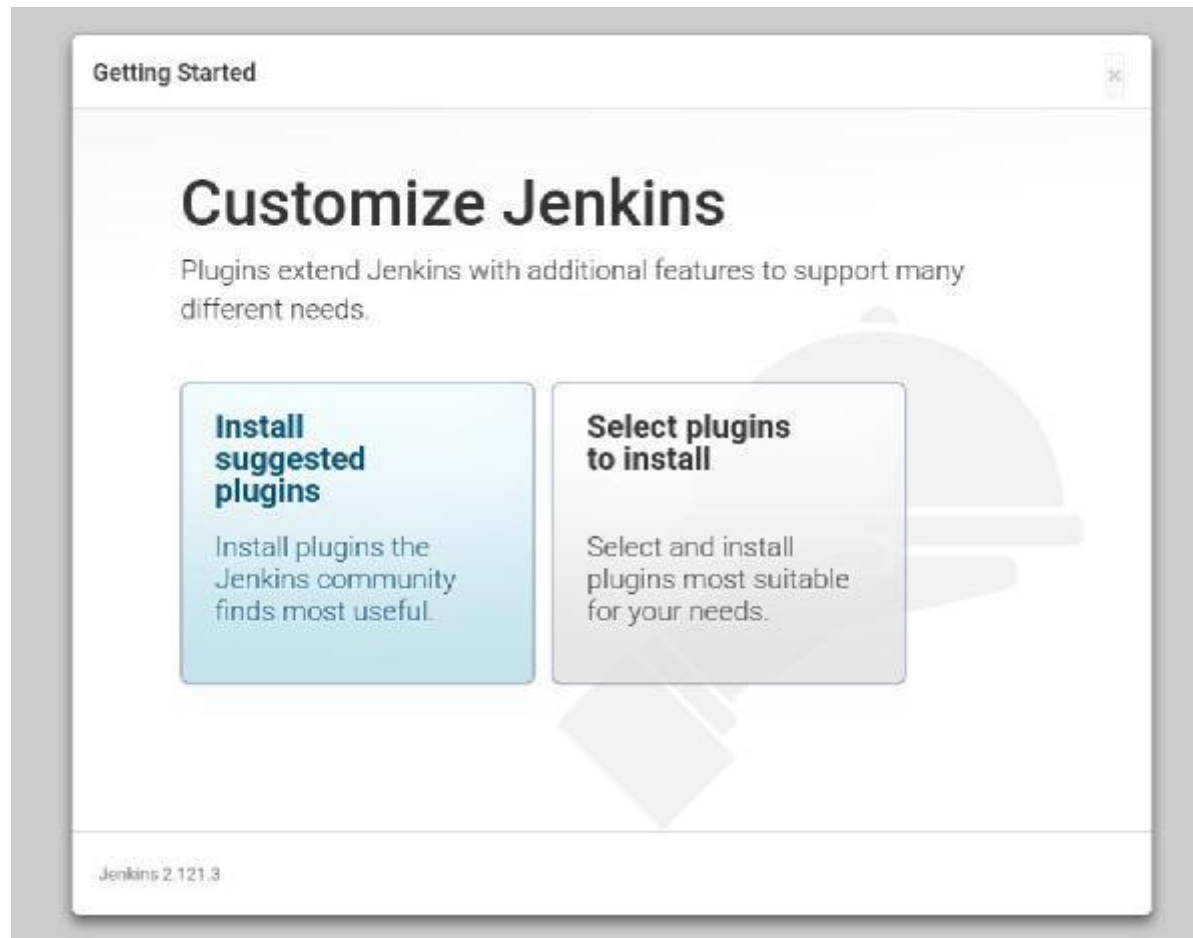

Use the following command to print the password on your terminal:

```
sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

You should see a 32-character long alphanumeric password as shown below:

```
2115173b548f4e99a203ee99a8732a32
```

the password from your terminal, paste it into the Administrator password field and click `Continue`.

On the next screen, you will be asked whether you want to install the suggested plugins or to select specific plugins. Click on the `Install suggested plugins` box, and the installation process will start immediately.

Once the installation is complete, you will be prompted to set up the first administrative user. Fill out all required information and click `Save and Continue`.

Getting Started

Create First Admin User

Username:	linuxize
Password:	....
Confirm password:	....
Full name:	Linuxize Tuts
E-mail address:	hello@linuxize.com

Jenkins 2.121.3   Continue as admin   Save and Continue

On the next page, you will be asked to set the URL for the Jenkins instance. The URL field will be populated with an automatically generated URL.

Getting Started

Instance Configuration

Jenkins URL: `http://192.168.121.214:8080`

The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the BUILD_URL environment variable provided to build steps.
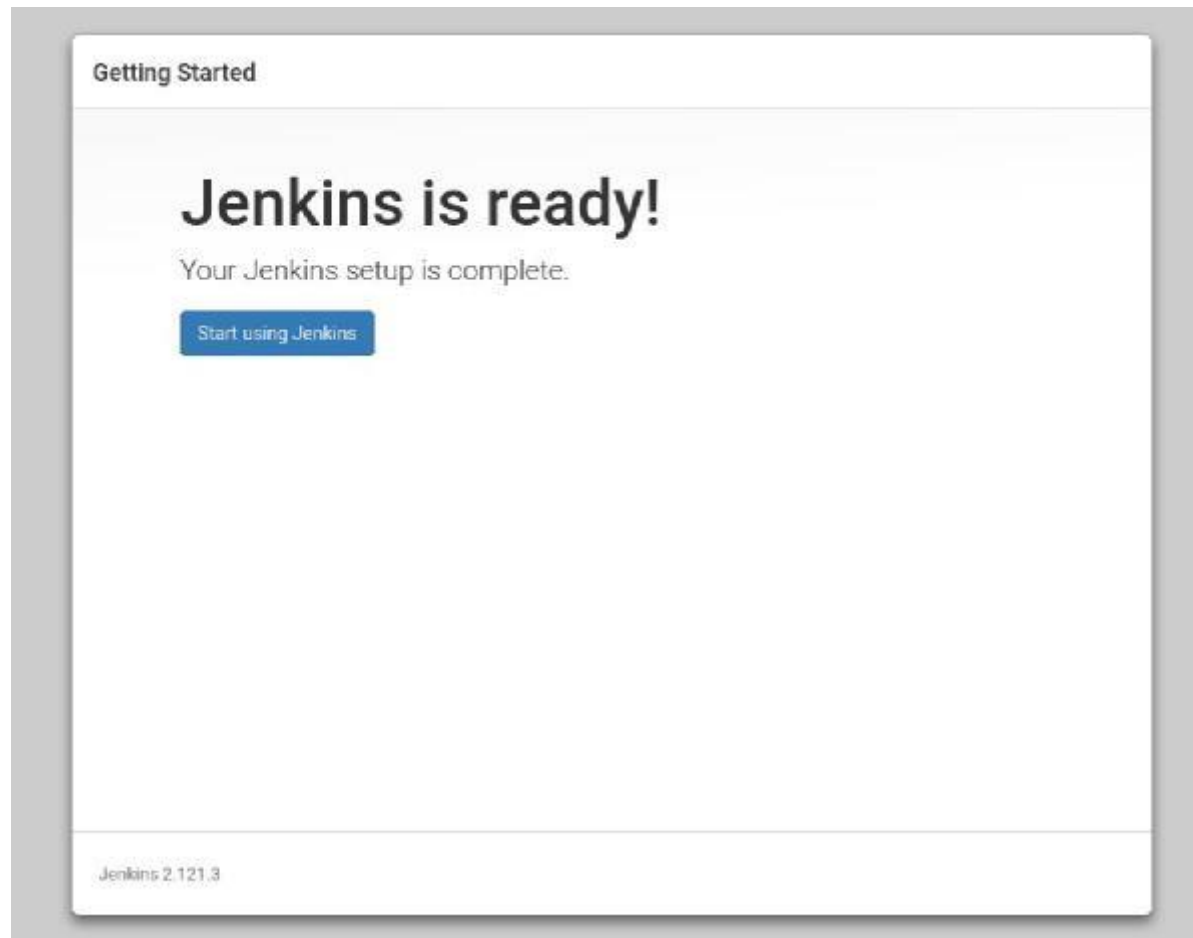
The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

Jenkins 2.121.3   Not now   Save and Finish

To complete the setup confirm the URL by clicking on the `Save and Finish` button.

Finally, click on the `Start using Jenkins` button and you will be redirected to the Jenkins dashboard logged in as the admin user you have created in one of the previous steps.

If you've reached this point, you've successfully installed Jenkins on your CentOS system.

Conclusion