Installing Jenkins on Windows

Hardware Requirements

Memory	2 GB RAM (Recommended)
Disk Space	We need at least 1 GB of space in our hard drive for Jenkins

Software Requirements

JDK	We need either Java Development (JDK) or Java Runtime Environment (JRE)
Operating System	Jenkins can be installed on Windows, Mac OS X, Ubuntu/Debian, Red Hat/Fedora/CentOS, openSUSE, FReeBSD, OpenBSD, Gentoo.
Java Container	The WAR (Web Application Resource) file can be run in any container that supports Servlet 2.4/JSP 2.0 or later. (For example Tomcat 5).

Release Types

Jenkins supports two types of releases based on the organization needs:

- o Long-term support release
- Weekly release

Long term support release (LTS): Long-term support releases (LTS) are available every 12 weeks. They are stable and are widely used and tested. Basically, this release is intended for end users.

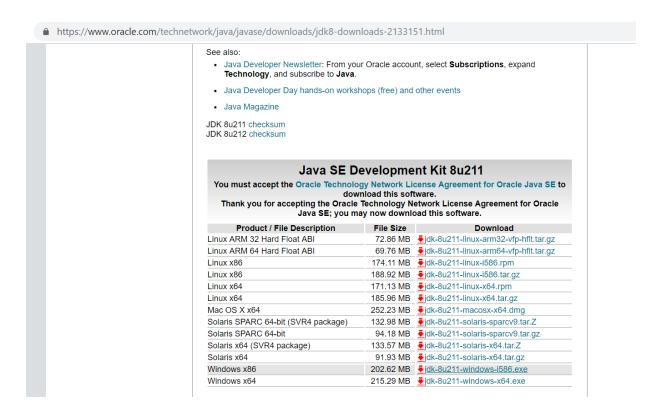
Weekly release: This release is available in every week by fixing bugs in its earlier version. These releases are intended towards plugin developers.

We will use the long term support release (LTS) though the process remains the same for Weekly release.

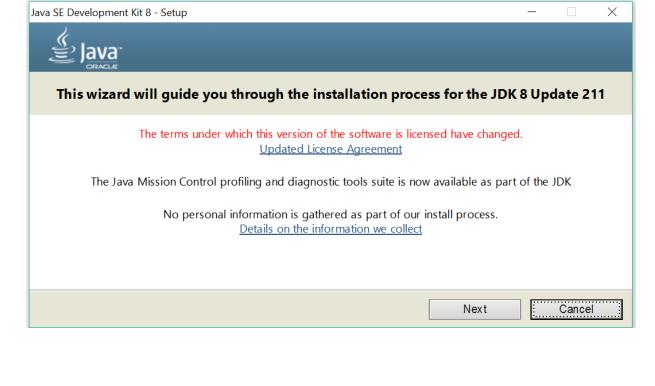
Install Java Version 8

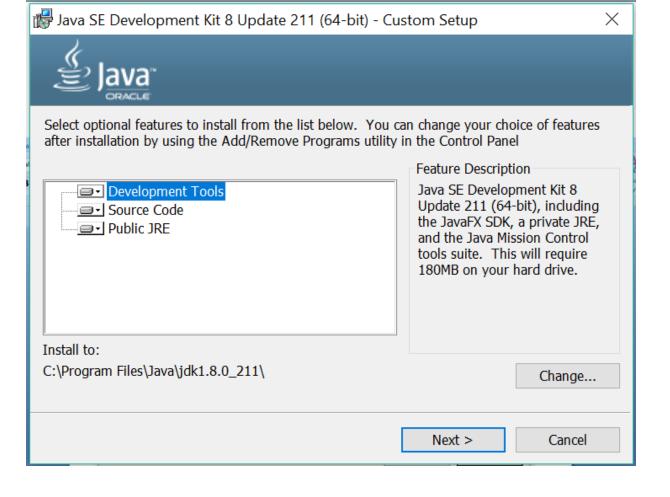
Since Jenkins is a Java based application, therefore Java is a must.

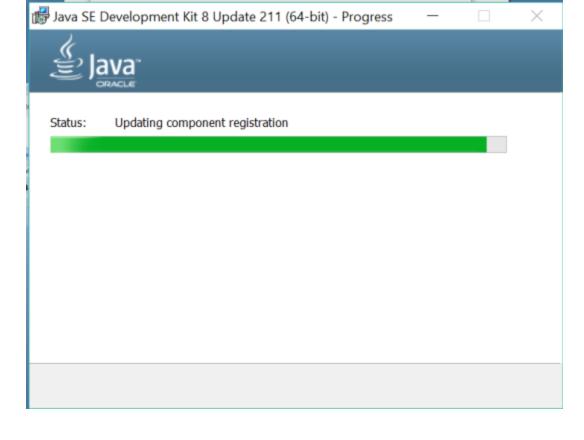
To download the Java **Click here**. Select file according to your platform.

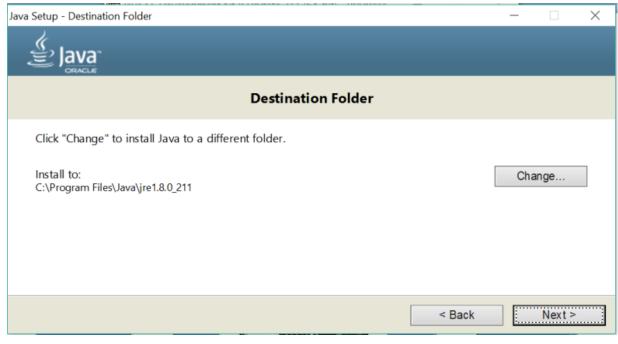


Then install the Java as follows:











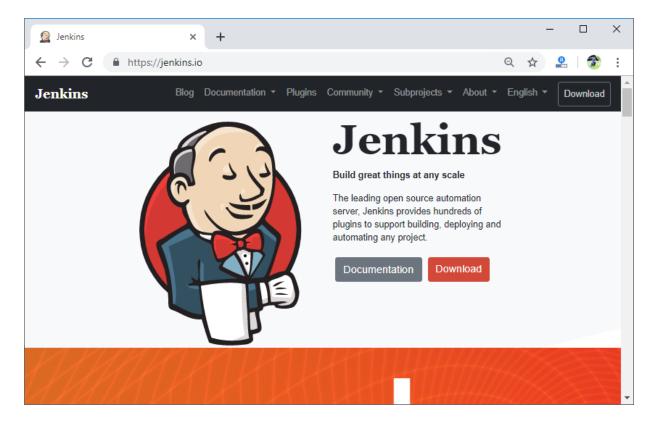


Download Jenkins war File

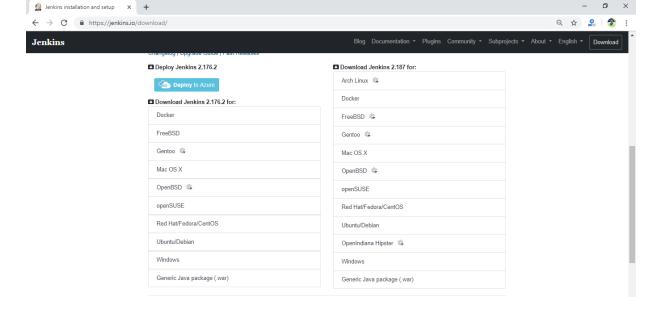
This war is required to install Jenkins.

The official website for Jenkins is https://jenkins.io/

When you click the given link, you will get the home page of the Jenkins official website as given below:



Click on the Download button.



Click on Generic Java Package (.war) to download the Jenkins war file.

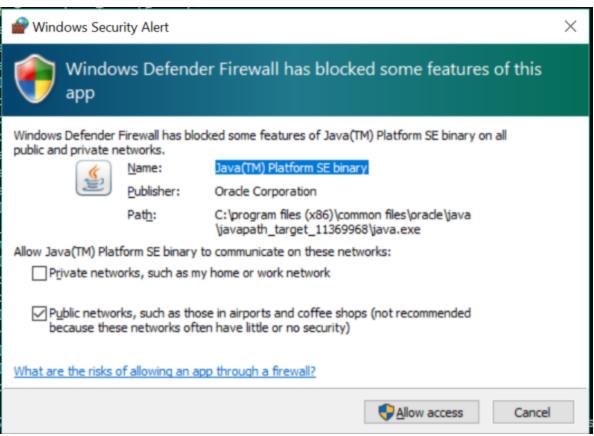
Starting Jenkins

Open the command prompt and go to the directory where the Jenkins.war file is located. And then run the following command:

C:/Java -jar Jenkins.war

When you run this command, various tasks will run, one of which is the extraction of the war file which is done by an embedded webserver called winstone.

```
Command Prompt - Java -jar Jenkins.war
Microsoft Windows [Version 10.0.17134.765]
(c) 2018 Microsoft Corporation. All rights reserved.
:\Users\Nikita>cd c:\jenkins tutorial
c:\Jenkins Tutorial>Java -jar Jenkins.war
unning from: C:\Jenkins Tutorial\jenkins.war
webroot: $user.home/.jenkins
[Winstone 2019/07/06 18:11:26] - Beginning extraction from war file
hudson home directory: C:\Users\Nikita\.jenkins found at: $user.home/.jenkins
[Winstone 2019/07/06 18:11:26] - HTTP Listener started: port=8080
[Winstone 2019/07/06 18:11:26] - AJP13 Listener started: port=8009
Jsing one-time self-signed certificate
[Winstone 2019/07/06 18:11:26] - Error starting listener instance
java.lang.reflect.InvocationTargetException
       at sun.reflect.NativeConstructorAccessorImpl.newInstanceO(Native Method)
       at sun.reflect.NativeConstructorAccessorImpl.newInstance(Unknown Source)
       at sun.reflect.DelegatingConstructorAccessorImpl.newInstance(Unknown Source)
       at java.lang.reflect.Constructor.newInstance(Unknown Source)
       at winstone.Launcher.spawnListener(Launcher.java:232)
       at winstone.Launcher.<init>(Launcher.java:205)
       at winstone.Launcher.main(Launcher.java:391)
       at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
       at sun.reflect.NativeMethodAccessorImpl.invoke(Unknown Source)
       at sun.reflect.DelegatingMethodAccessorImpl.invoke(Unknown Source)
       at java.lang.reflect.Method.invoke(Unknown Source)
       at Main. main(Main.java:214)
       at Main.main(Main.java:61)
 aused by: java.lang.NoClassDefFoundError: sun/security/x509/CertAndKeyGen
       at winstone.ssl.HttpsListener.<init>(HttpsListener.java:111)
       ... 13 more
 aused by: java.lang.ClassNotFoundException: sun.security.x509.CertAndKeyGen
```



Click on Allow access button to allow the access.

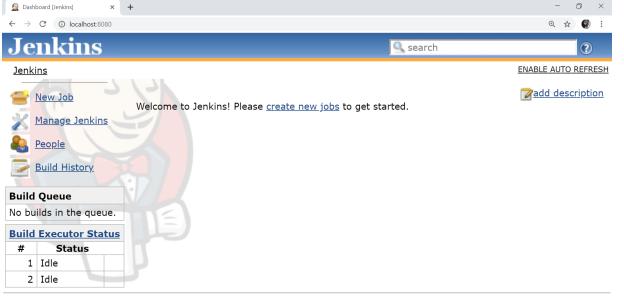
```
Command Prompt - Java -jar Jenkins.war
[Winstone 2019/07/06 18:11:26] - Winstone Servlet Engine v0.9.10 running: controlPort=disabled
Jul 06, 2019 6:11:27 PM hudson.model.Hudson$5 onAttained
INFO: Started initialization
Jul 06, 2019 6:11:27 PM hudson.model.Hudson$5 onAttained
INFO: Listed all plugins
Jul 06, 2019 6:11:27 PM hudson.model.Hudson$5 onAttained INFO: Prepared all plugins
Jul 06, 2019 6:11:27 PM hudson.model.Hudson$5 onAttained
INFO: Started all plugins
Jul 06, 2019 6:11:27 PM hudson.model.Hudson$5 onAttained
INFO: Augmented all extensions
Jul 06, 2019 6:11:27 PM hudson.model.Hudson$5 onAttained
INFO: Loaded all jobs
Jul 06, 2019 6:11:28 PM hudson.model.Hudson$5 onAttained
INFO: Completed initialization
Jul 06, 2019 6:11:28 PM hudson.TcpSlaveAgentListener <init>
INFO: JNLP slave agent listener started on TCP port 55609
Jul 06, 2019 6:12:31 PM hudson.model.DownloadService$Downloadable doPostBack
INFO: Obtained the updated data file for hudson.tasks.Ant.AntInstaller
Jul 06, 2019 6:12:31 PM hudson.model.DownloadService$Downloadable doPostBack
INFO: Obtained the updated data file for hudson.tasks.Maven.MavenInstaller
Jul 06, 2019 6:12:40 PM hudson.model.DownloadService$Downloadable doPostBack
INFO: Obtained the updated data file for hudson.tools.JDKInstaller
Jul 06, 2019 6:12:55 PM hudson.model.UpdateSite doPostBack
INFO: Obtained the latest update center data file for UpdateSource default
```

Accessing Jenkins

Now you can access the Jenkins. Open your browser and type the following url on your browser:

http://localhost:8080

This url will bring up the Jenkins dashboard.



Page generated: Jul 6, 2019 6:12:28 PM Jenkins ver. 1.409.1