

RUNNING JENKINS ON WINDOWS 11 USING DOCKER

(Total Time: 15 mins)

Prerequisites:

1. Make sure Docker Desktop is installed

MAC: <https://docs.docker.com/desktop/setup/install/mac-install/>

WINDOWS: <https://docs.docker.com/desktop/setup/install/windows-install/>

LINUX: <https://docs.docker.com/desktop/setup/install/linux/>

2. If you are using Windows , make sure WSL (Subsystem for Linux) is installed.

Documentation: <https://learn.microsoft.com/en-us/windows/wsl/install>

Docker Image:

Docker Image is available for Jenkins on Docker hub (344.7 MB Size).

Image Link and Documentation: <https://hub.docker.com/r/jenkins/jenkins>

Use the following command to pull the docker image from Docker Hub:

```
docker pull jenkins/jenkins:lts-jdk17
```

Terminal:

```
$ sudo docker pull jenkins/jenkins:lts-jdk17
lts-jdk17: Pulling from jenkins/jenkins
7b95fc61504: Pull complete
687044b042c5: Pull complete
e925b288a5ea: Pull complete
a9230f7c9c31: Pull complete
3bdc3c969d94: Pull complete
5687d4df0728: Pull complete
b1abef3ec803: Pull complete
501deb283b89: Pull complete
2f1ecb09fa36: Pull complete
68cdef480092: Pull complete
```

```
13cc39f8244a: Pull complete  
e0e73f34dee9: Pull complete  
1f8c1bd5a9a7: Download complete  
Digest: sha256:2d5da070b20b9eb2d23e95023f33c3c91b091e39d14068545bea92abf15dd15d  
Status: Downloaded newer image for jenkins/jenkins:lts-jdk17  
docker.io/jenkins/jenkins:lts-jdk17
```

Verify that Jenkins image has been downloaded:

```
Terminal:  
$ sudo docker image list --format table |grep jenkins  
jenkins/jenkins          lts-jdk17      2d5da070b20b    4  
weeks ago     800MB
```

Create a volume to persist data

```
Terminal:  
$ sudo docker volume create
```

confirm the creation of volume

```
Terminal:  
$ sudo docker volume list | grep -i jenkins  
local      jenkins
```

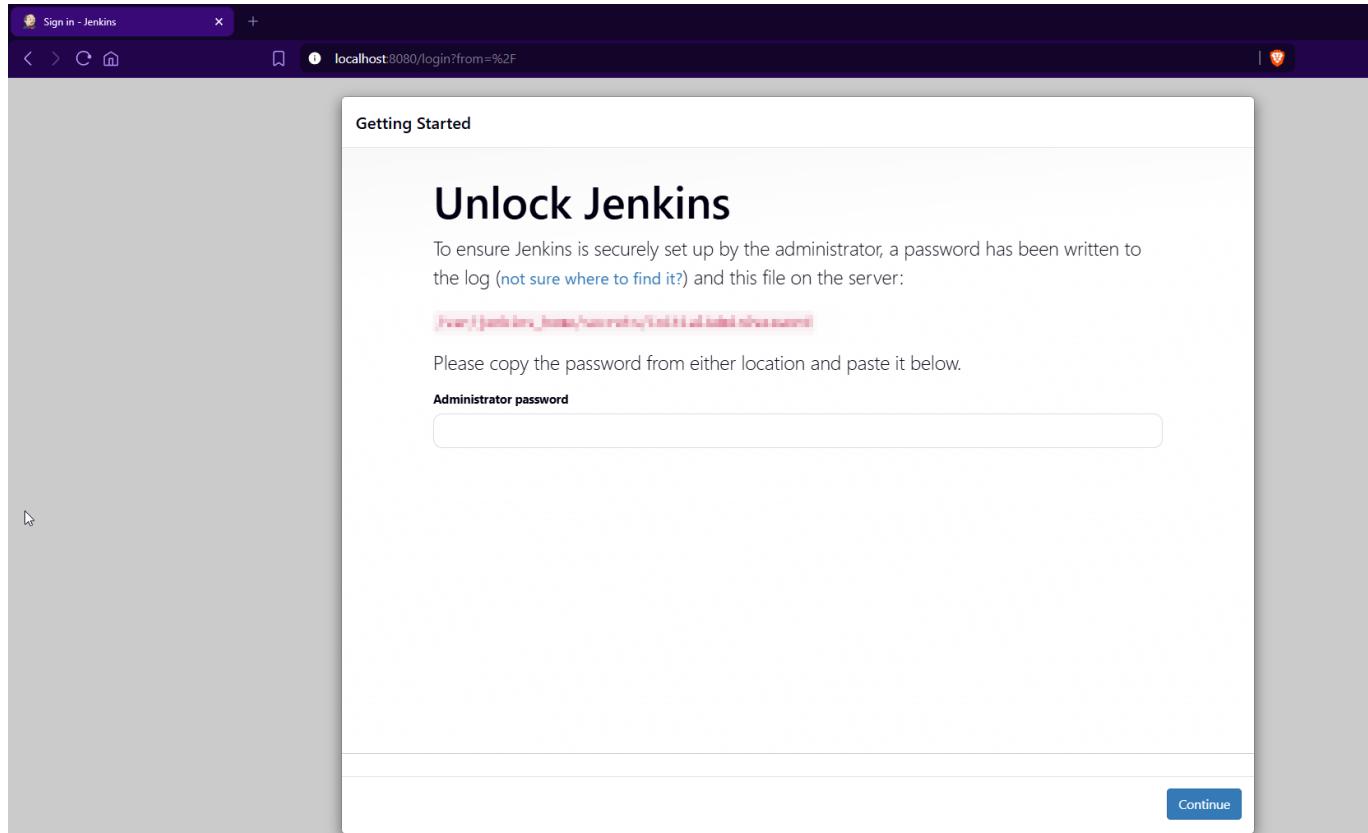
Use the Jenkins Docker Image to create a container

```
Terminal:  
$ docker run -d -p 8080:8080 --name jenkins -v jenkins:/home/siddh/jenkinsdata  
jenkins/jenkins:lts-jdk17  
60c0f41517005764bc2427f07a23c1191f1918104200a1cd9021c8e14c3ca1fe
```

Confirm the creation of the Jenkins container and make sure it is running

```
$ docker container ps  
CONTAINER ID   IMAGE           COMMAND           CREATED          NAMES  
STATUS         PORTS           NAMES  
60c0f4151700   jenkins/jenkins:lts-jdk17   "/usr/bin/tini -- /u..."   5 seconds ago   jenkins  
Up 5 seconds   0.0.0.0:8080->8080/tcp, [::]:8080->8080/tcp
```

Check on browser that the Jenkins application is responding



Use docker logs to retrieve the initial admin password

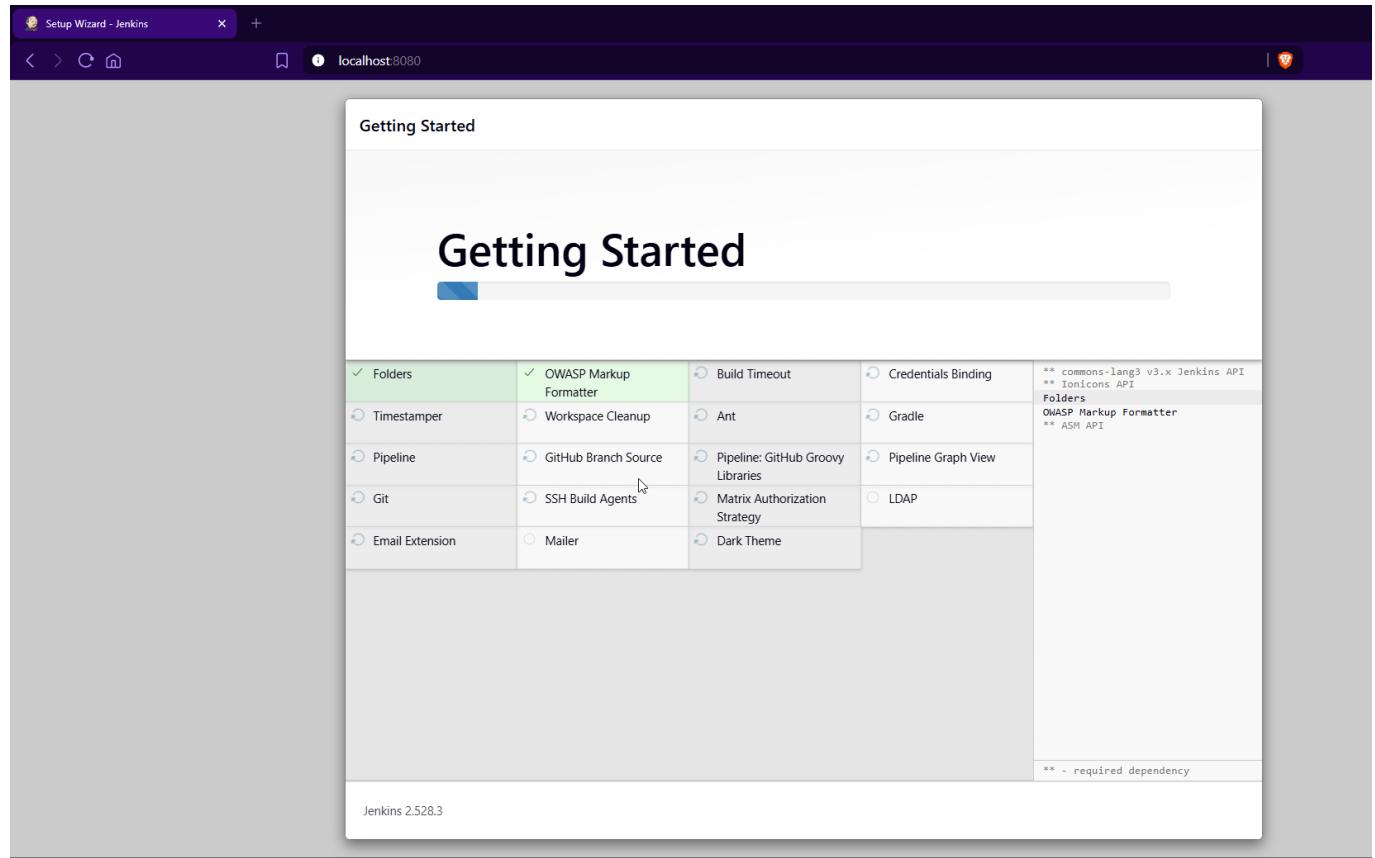
```
docker container logs jenkins
Running from: /usr/share/jenkins/jenkins.war
webroot: /var/jenkins_home/war
2026-01-07 12:56:16.174+0000 [id=1]      INFO      winstone.Logger#logInternal:
Beginning extraction from war file
2026-01-07 12:56:17.175+0000 [id=1]      WARNING
o.e.j.ee9.nested.ContextHandler#setContextPath: Empty contextPath
2026-01-07 12:56:17.230+0000 [id=1]      INFO
org.eclipse.jetty.server.Server#doStart: jetty-12.0.25; built: 2025-08-
11T23:52:37.219Z; git: a862b76d8372e24205765182d9ae1d1d333ce2ea; jvm 17.0.17+10
2026-01-07 12:56:17.682+0000 [id=1]      INFO
o.e.j.e.w.StandardDescriptorProcessor#visitServlet: NO JSP Support for /, did not
find org.eclipse.jetty.ee9.jsp.JettyJspServlet
2026-01-07 12:56:17.735+0000 [id=1]      INFO
o.e.j.s.DefaultSessionIdManager#doStart: Session workerName=node0
2026-01-07 12:56:18.230+0000 [id=1]      INFO
hudson.WebAppMain#contextInitialized: Jenkins home directory: /var/jenkins_home
found at: EnvVars.masterEnvVars.get("JENKINS_HOME")
2026-01-07 12:56:18.360+0000 [id=1]      INFO
o.e.j.s.handler.ContextHandler#doStart: Started
oeje9n.ContextHandler$CoreContextHandler@379ce046{Jenkins
v2.528.3,/,b=file:///var/jenkins_home/war/,a=AVAILABLE,h=oeje9n.ContextHandler$Cor
eContextHandler$CoreToNestedHandler@701bc94e{STARTED}}
2026-01-07 12:56:18.377+0000 [id=1]      INFO
o.e.j.server.AbstractConnector#doStart: Started ServerConnector@e322ec9{HTTP/1.1,
```

```
(http/1.1)}{0.0.0.0:8080}
2026-01-07 12:56:18.394+0000 [id=1]      INFO
org.eclipse.jetty.server.Server#doStart: Started oejs.Server@fcb4004{STARTING}
[12.0.25,sto=0] @2855ms
2026-01-07 12:56:18.395+0000 [id=35]      INFO      winstone.Logger#logInternal:
Winstone Servlet Engine running: controlPort=disabled
2026-01-07 12:56:18.518+0000 [id=33]      INFO      jenkins.model.Jenkins#<init>:
Starting version 2.528.3
2026-01-07 12:56:18.631+0000 [id=43]      INFO
jenkins.InitReactorRunner$1#onAttained: Started initialization
2026-01-07 12:56:18.649+0000 [id=63]      INFO
jenkins.InitReactorRunner$1#onAttained: Listed all plugins
2026-01-07 12:56:19.458+0000 [id=72]      INFO
jenkins.InitReactorRunner$1#onAttained: Prepared all plugins
2026-01-07 12:56:19.463+0000 [id=53]      INFO
jenkins.InitReactorRunner$1#onAttained: Started all plugins
2026-01-07 12:56:19.464+0000 [id=57]      INFO
jenkins.InitReactorRunner$1#onAttained: Augmented all extensions
2026-01-07 12:56:19.652+0000 [id=57]      INFO
jenkins.InitReactorRunner$1#onAttained: System config loaded
2026-01-07 12:56:19.653+0000 [id=69]      INFO
jenkins.InitReactorRunner$1#onAttained: System config adapted
2026-01-07 12:56:19.654+0000 [id=69]      INFO
jenkins.InitReactorRunner$1#onAttained: Loaded all jobs
2026-01-07 12:56:19.657+0000 [id=50]      INFO
jenkins.InitReactorRunner$1#onAttained: Configuration for all jobs updated
2026-01-07 12:56:19.682+0000 [id=86]      INFO      hudson.util.Retrier#start: Attempt
#1 to do the action check updates server
2026-01-07 12:56:20.010+0000 [id=60]      INFO      jenkins.install.SetupWizard#init:
[LF]>
[LF]> ****
[LF]> ****
[LF]> ****
[LF]> ****
[LF]> Jenkins initial setup is required. An admin user has been created and a
password generated.
[LF]> Please use the following password to proceed to installation:
[LF]>
[LF]> <secret admin password>
[LF]>
[LF]> This may also be found at: <path of the secret file>
[LF]>
[LF]> ****
[LF]> ****
[LF]> ****
[LF]> ****

2026-01-07 12:56:24.952+0000 [id=60]      INFO
jenkins.InitReactorRunner$1#onAttained: Completed initialization
2026-01-07 12:56:24.973+0000 [id=33]      INFO
hudson.lifecycle.Lifecycle#onReady: Jenkins is fully up and running
2026-01-07 12:56:26.971+0000 [id=86]      INFO
h.m.DownloadService$Downloadable#load: Obtained the updated data file for
hudson.tasks.Maven.MavenInstaller
```

```
2026-01-07 12:56:26.972+0000 [id=86]      INFO      hudson.util.Retrier#start:  
Performed the action check updates server successfully at the attempt #1
```

Plugins getting installed via wizard



Create the first admin user on the Jenkins application

The screenshot shows the Jenkins Setup Wizard - Create First Admin User page. The title bar says "Setup Wizard - Jenkins" and the address bar shows "localhost:8080". The main content area is titled "Getting Started" and "Create First Admin User". It contains five input fields: "Username", "Password", "Confirm password", "Full name", and "E-mail address". At the bottom left is the Jenkins version "Jenkins 2.528.3". On the right are two buttons: "Skip and continue as admin" and a blue "Save and Continue" button.

Jenkins application is now ready for use

The screenshot shows the Jenkins Dashboard. The title bar says "Dashboard - Jenkins" and the address bar shows "localhost:8080". The dashboard features a "Welcome to Jenkins!" message, a "Build Queue" section (empty), a "Build Executor Status" section (empty), and a "Create a job" button. Below these are sections for "Set up a distributed build" with links to "Set up an agent", "Configure a cloud", and "Learn more about distributed builds". At the bottom right are links for "REST API" and "Jenkins 2.528.3".