

# RUNNING JENKINS ON WINDOWS 11 USING DOCKER

## *(Total Time: 15 mins)*

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### 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
7b95fcd61504: 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
```

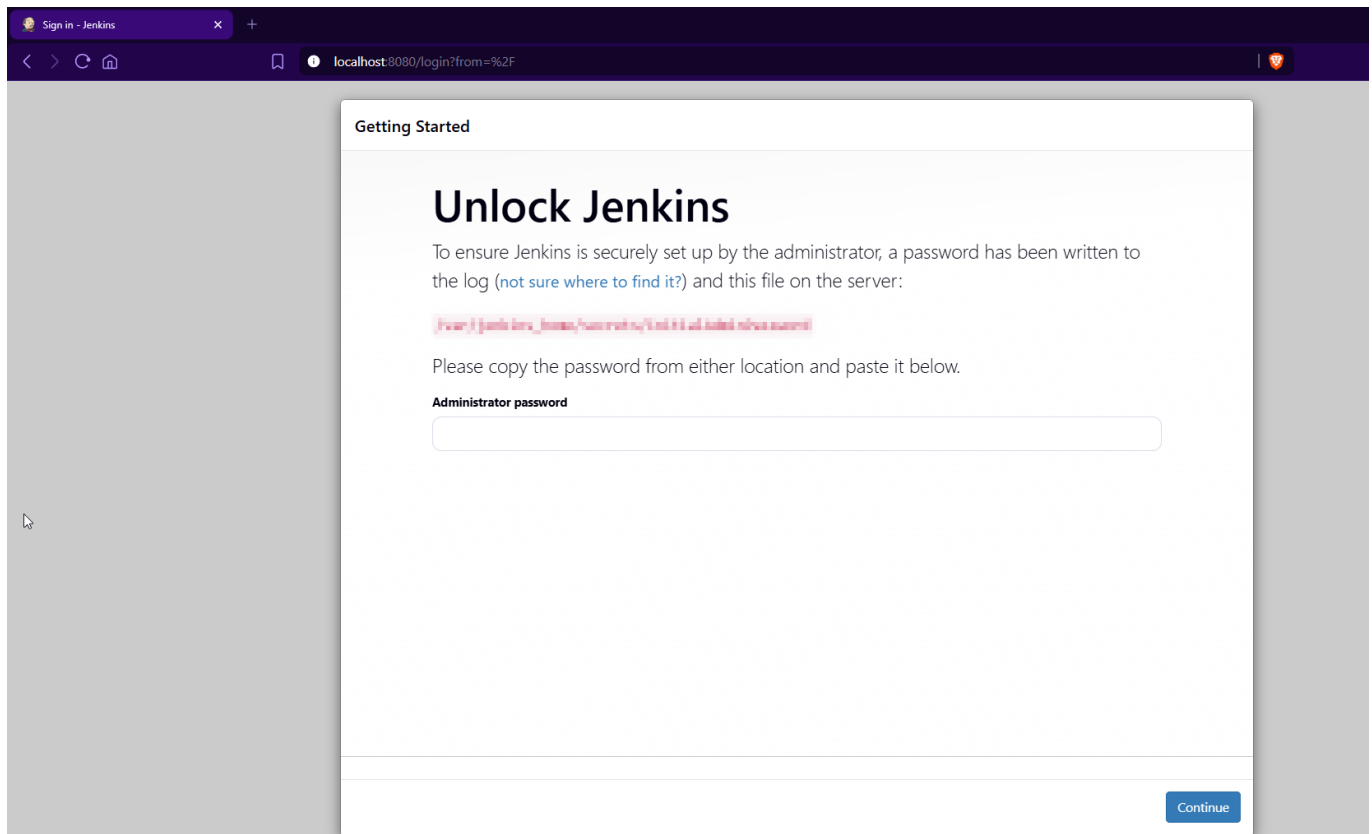
Use the Jenkins Docker Image to create a container

```
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
STATUS        PORTS          NAMES
60c0f4151700   jenkins/jenkins:lts-jdk17          "/usr/bin/tini -- /u..."             5 seconds ago
Up 5 seconds   0.0.0.0:8080->8080/tcp, [::]:8080->8080/tcp   jenkins
```

Check on browser that the Jenkins application is responding



Use docker logs to retrieve the initial admin password

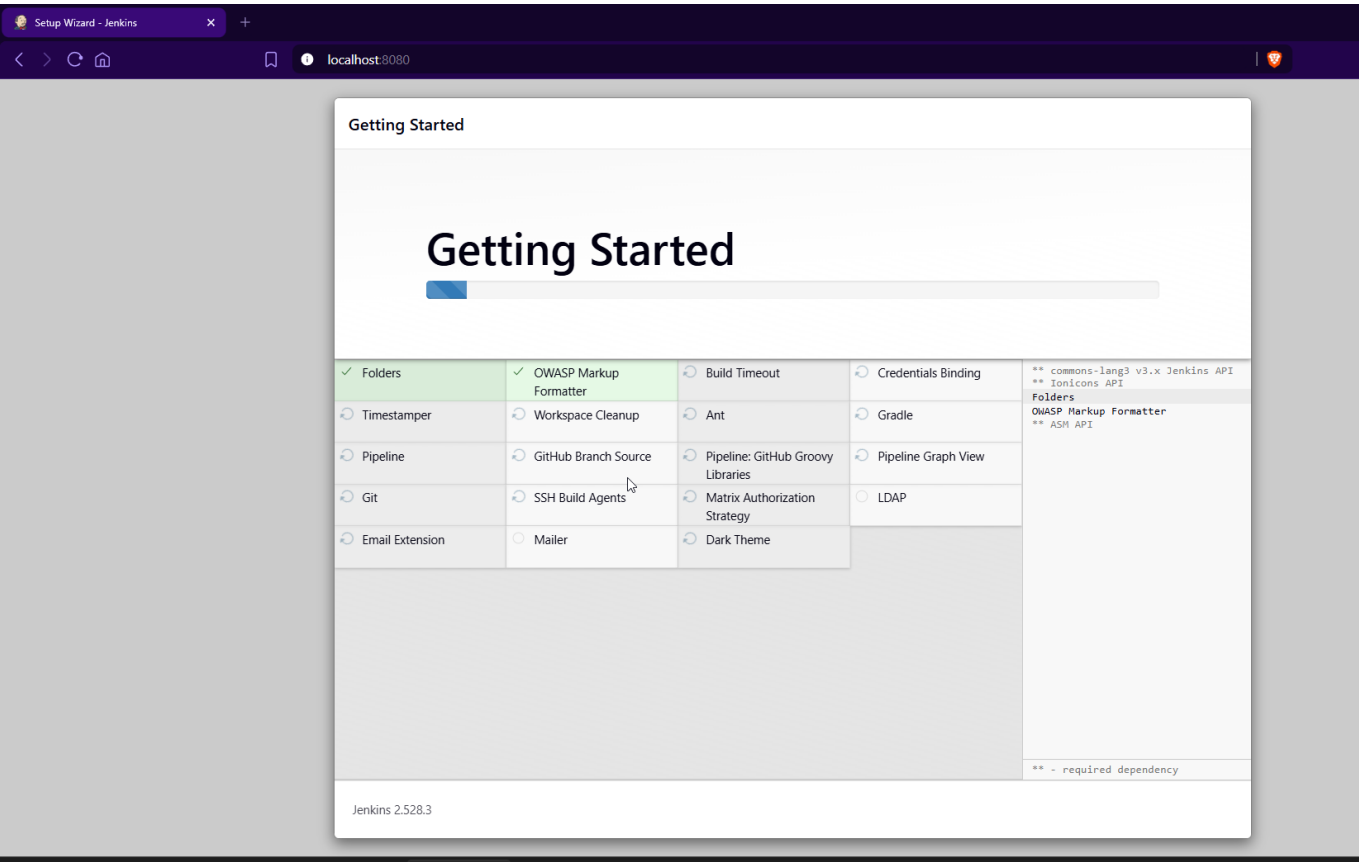
```
docker container logs jenkins
Running from: /usr/share/jenkins/jenkins.war
webroot: /var/jenkins_home/war
2026-01-07 12:56:16.174+0000 [id=1]      INFO      winstone.Logger#logInternal:
Beginning extraction from war file
2026-01-07 12:56:17.175+0000 [id=1]      WARNING
o.e.j.ee9.nested.ContextHandler#setContextPath: 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]> *****

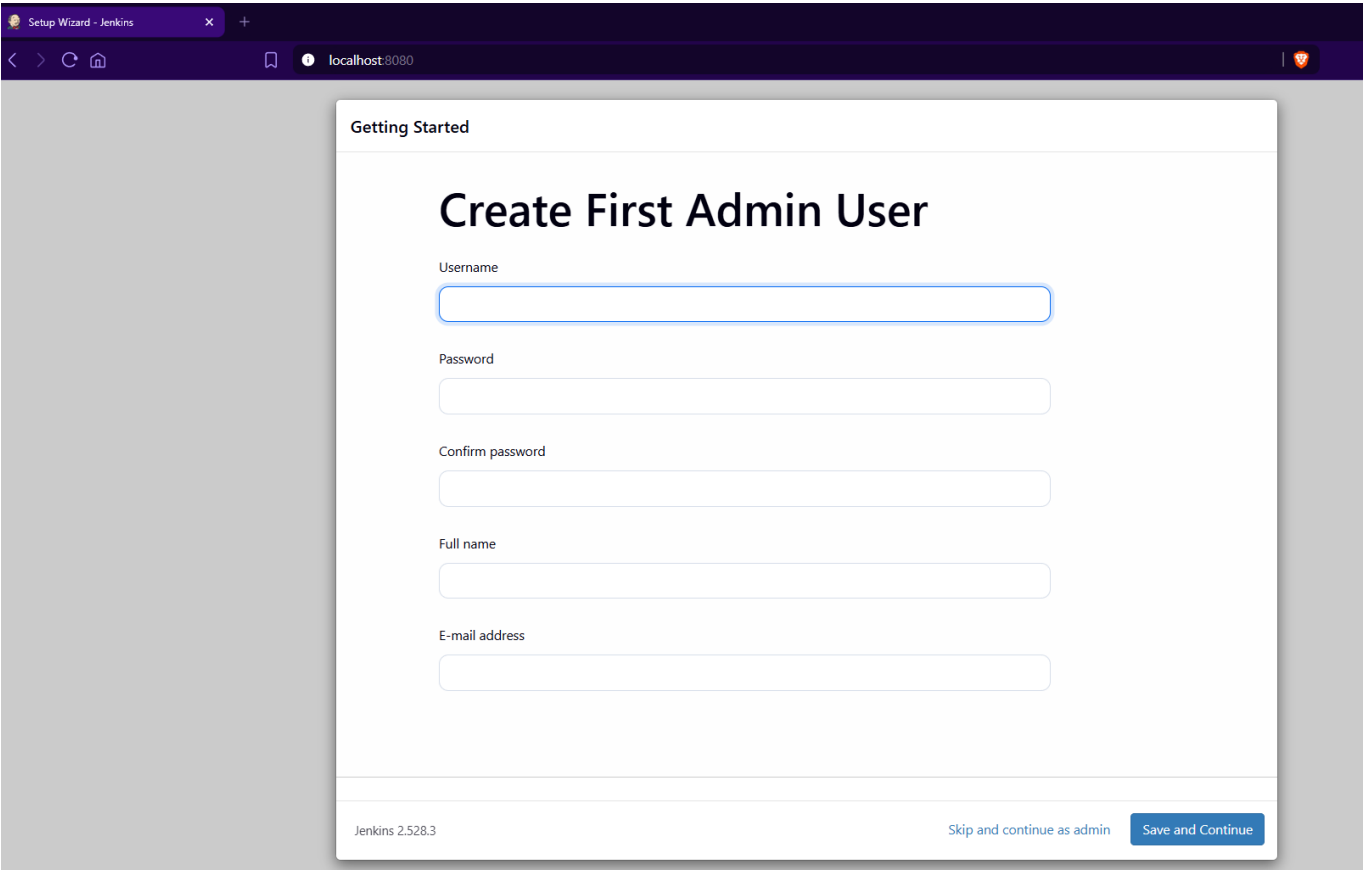
2026-01-07 12:56:24.952+0000 [id=60]     INFO
jenkins.InitReactorRunner$1#onAttained: Completed initialization
2026-01-07 12:56:24.973+0000 [id=33]     INFO
hudson.lifecycle.Lifecycle#onReady: Jenkins is fully up and running
2026-01-07 12:56:26.971+0000 [id=86]     INFO
h.m.DownloadService$Downloadable#load: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



Jenkins application is now ready for use

