Downloading and running Jenkins in Docker

```
root@DESKTOP-8OOG2HF:JENKINS# docker network create jenkins
e97226cb6edee721a2233aea907b52f005e18747c1119ea80ae67272152b0016
root@DESKTOP-8OOG2HF:JENKINS# docker run \
  --name jenkins-docker \
  --rm \
  --detach \
  --privileged \
  --network jenkins \
  --network-alias docker \
  --env DOCKER_TLS_CERTDIR=/certs \
  --volume jenkins-docker-certs:/certs/client \
  --volume jenkins-data:/var/jenkins_home \
  --publish 2376:2376 \
  docker:dind \
  --storage-driver overlay2
Unable to find image 'docker:dind' locally
dind: Pulling from library/docker
4abcf2066143: Already exists
6a25a43dc0fd: Pull complete
4f4fb700ef54: Pull complete
8453b14f8be1: Pull complete
a5449a857d65: Pull complete
3dde2c9dd264: Pull complete
44b786ed2257: Pull complete
36fa2b1e15e2: Pull complete
4b17757db9c4: Pull complete
aa8480c0a982: Pull complete
97024fa66b69: Pull complete
a1c9909845b0: Pull complete
ab157ace34a1: Pull complete
b94f5802f12d: Pull complete
e8f3ade57aa7: Pull complete
a6a8e9699976: Pull complete
Digest: sha256:0d70c541ee98e66b8f7ece8c0e9f7910732466e337a9087c2ac2868ef0775092
Status: Downloaded newer image for docker:dind
8a61808a0a9850623fac47cab7c32a583e401eec4e39bf1caff293b61852e636
```

root@DESKTOP-8OOG2HF:JENKINS# vim Dockerfile

```
root@DESKTOP-8OOG2HF:JENKINS# cat Dockerfile
FROM jenkins/jenkins:2.440.1-jdk17
USER root
RUN apt-get update && apt-get install -y lsb-release
RUN curl -fsSLo /usr/share/keyrings/docker-archive-keyring.asc \
  https://download.docker.com/linux/debian/gpg
RUN echo "deb [arch=$(dpkg --print-architecture) \
  signed-by=/usr/share/keyrings/docker-archive-keyring.asc] \
  https://download.docker.com/linux/debian \
  $(lsb_release -cs) stable" > /etc/apt/sources.list.d/docker.list
RUN apt-get update && apt-get install -y docker-ce-cli
USER jenkins
RUN jenkins-plugin-cli --plugins "blueocean docker-workflow"
```

```
root@DESKTOP-8OOG2HF:JENKINS# docker build -t myjenkins-blueocean:2.440.1-1 . --load
[+] Building 51.6s (11/11) FINISHED                                    docker-container:strange_perlman
 => [internal] load build definition from Dockerfile                                              0.1s
 => => transferring dockerfile: 605B                                                              0.0s
 => [internal] load metadata for docker.io/jenkins/jenkins:2.440.1-jdk17                          0.8s
 => [internal] load .dockerignore                                                                 0.1s
 => => transferring context: 2B                                                                   0.0s
 => [1/6] FROM docker.io/jenkins/jenkins:2.440.1-jdk17@sha256:01c0b0cf789fa24253090fccea264df223b  0.1s
 => => resolve docker.io/jenkins/jenkins:2.440.1-jdk17@sha256:01c0b0cf789fa24253090fccea264df223b  0.1s
 => CACHED [2/6] RUN apt-get update && apt-get install -y lsb-release                             0.0s
 => CACHED [3/6] RUN curl -fsSLo /usr/share/keyrings/docker-archive-keyring.asc  https://downloa  0.0s
 => CACHED [4/6] RUN echo "deb [arch=$(dpkg --print-architecture)  signed-by=/usr/share/keyrings  0.0s
 => CACHED [5/6] RUN apt-get update && apt-get install -y docker-ce-cli                           0.0s
 => CACHED [6/6] RUN jenkins-plugin-cli --plugins "blueocean docker-workflow"                     0.0s
 => exporting to docker image format                                                             50.4s
 => => exporting layers                                                                          11.3s
 => => exporting manifest sha256:fbfb502a1733f1f7048a273fbe4fdc30ea781b2aeacffac392328b9a787bad9a  0.0s
 => => exporting config sha256:053cb2f29b0e5ab1ae88ead04e6163374ba06df74e00218a0511f2e8d8e615870  0.0s
 => => sending tarball                                                                           39.1s
 => importing to docker                                                                          21.7s
```

```
root@DESKTOP-8OOG2HF:JENKINS# ps aux | grep jenkins
asfiya     25922  0.0  0.0   2472   856 ?        Ss   11:07   0:00 /usr/bin/tini -- /usr/local/bin/jenkins.sh
asfiya     25954  5.6 21.9 6604116 1810808 ?     Sl   11:07   3:03 java -Duser.home=/var/jenkins_home -D...jenkins.model.Jenkins.slaveAgentPort=50000 -Dhudson.lifecycle=hudson.lifecycle.ExitLif
ecycle -jar /usr/share/jenkins/jenkins.war
root       86275  0.0  0.0   4028  2004 pts/2    S+   11:55   0:00 grep --color=auto jenkins
```

root@DESKTOP-8OOG2HF:JENKINS# docker container ls

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

2a4f128a7e7e myjenkins-blueocean:2.440.1-1 "/usr/bin/tini -- /u…" About an hour ago Up About an hour 0.0.0.0:8080->8080/tcp, :::8080->8080/tcp, 0.0.0.0:50000->50000/tcp, :::50000->50000/tcp jenkins-blueocean

root@DESKTOP-8OOG2HF:JENKINS# ip r l

root@DESKTOP-8OOG2HF:JENKINS# docker container exec -it 2a4f128a7e7e /bin/bash

jenkins@2a4f128a7e7e:~$ cd /var/

jenkins@2a4f128a7e7e:/var$ ls

backups cache **jenkins_home** lib local lock log mail opt run spool tmp

jenkins@2a4f128a7e7e:/var$ cd /var/jenkins_home/

jenkins@2a4f128a7e7e:~$ ls

config.xml hudson.model.UpdateCenter.xml identity.key.enc jobs nodeMonitors.xml plugins secret.key.not-so-secret updates users

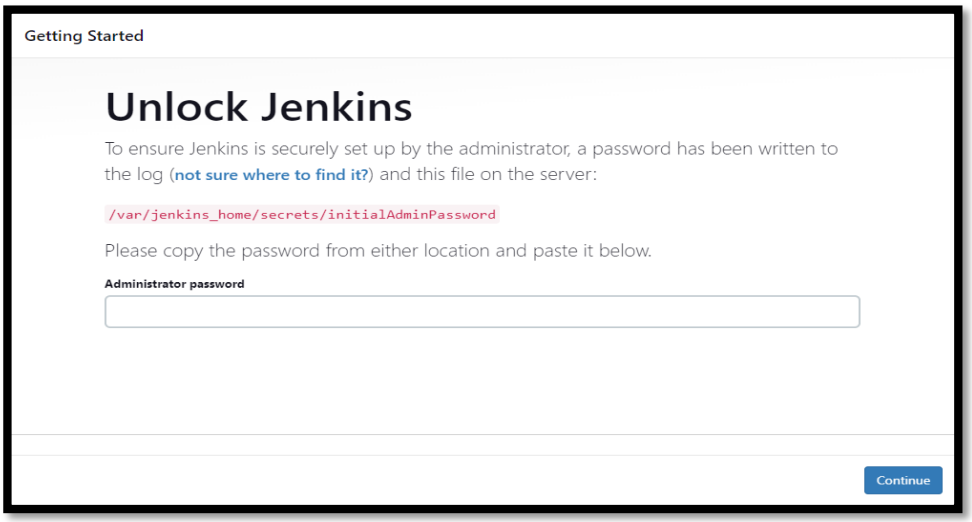
copy_reference_file.log hudson.plugins.git.GitTool.xml jenkins.telemetry.Correlator.xml logs nodes secret.key **secrets** userContent war

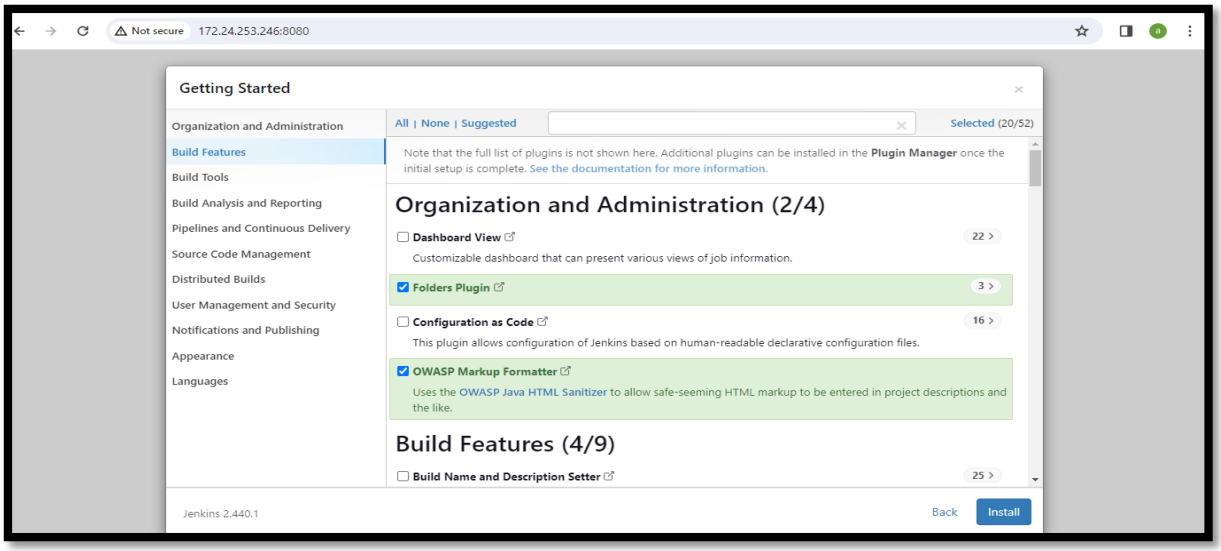
jenkins@2a4f128a7e7e:~$ cd /var/jenkins_home/secrets

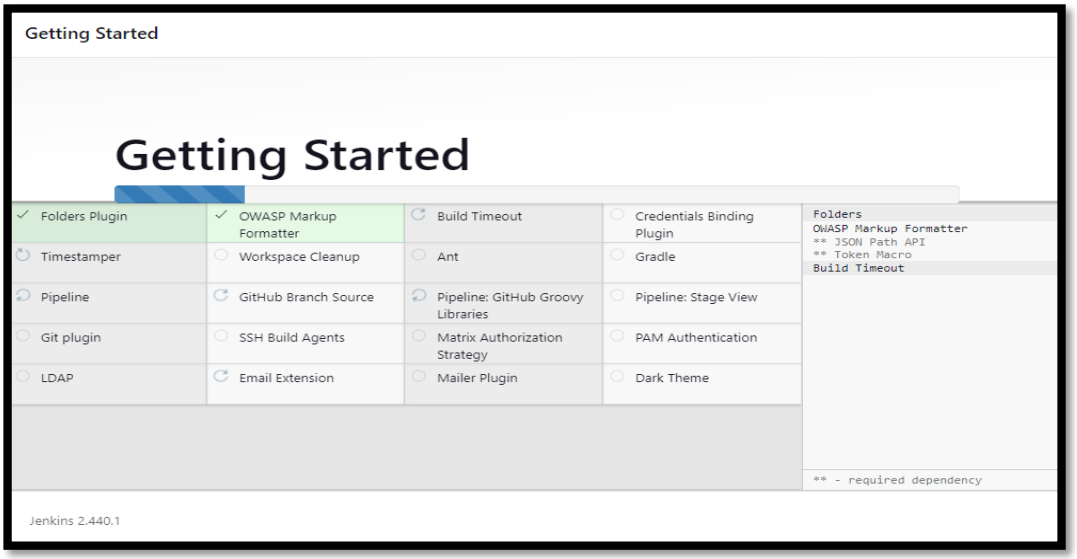
jenkins@2a4f128a7e7e:~/secrets$ ls

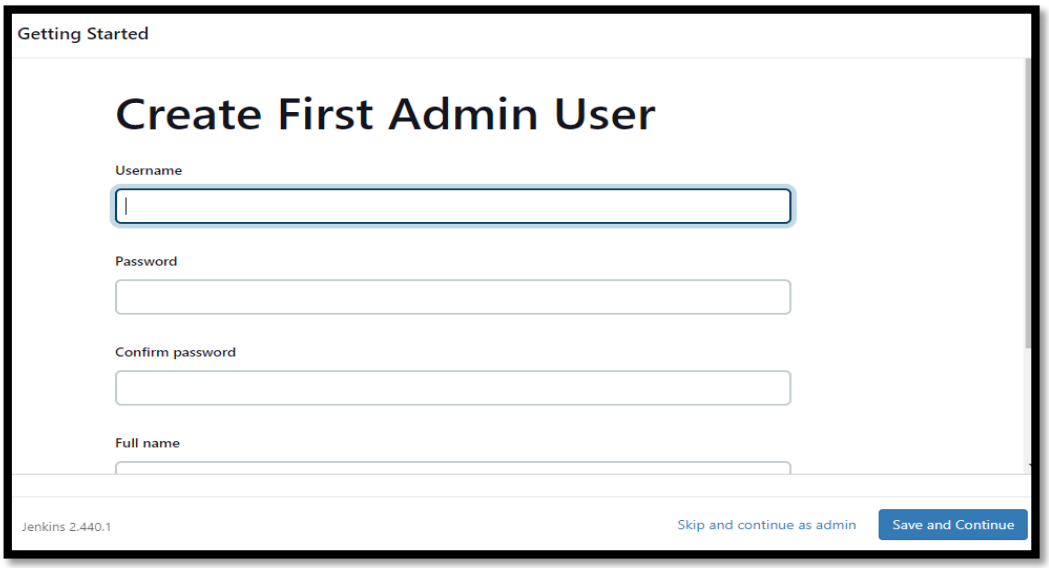
initialAdminPassword jenkins.model.Jenkins.crumbSalt master.key org.jenkinsci.main.modules.instance_identity.InstanceIdentity.KEY

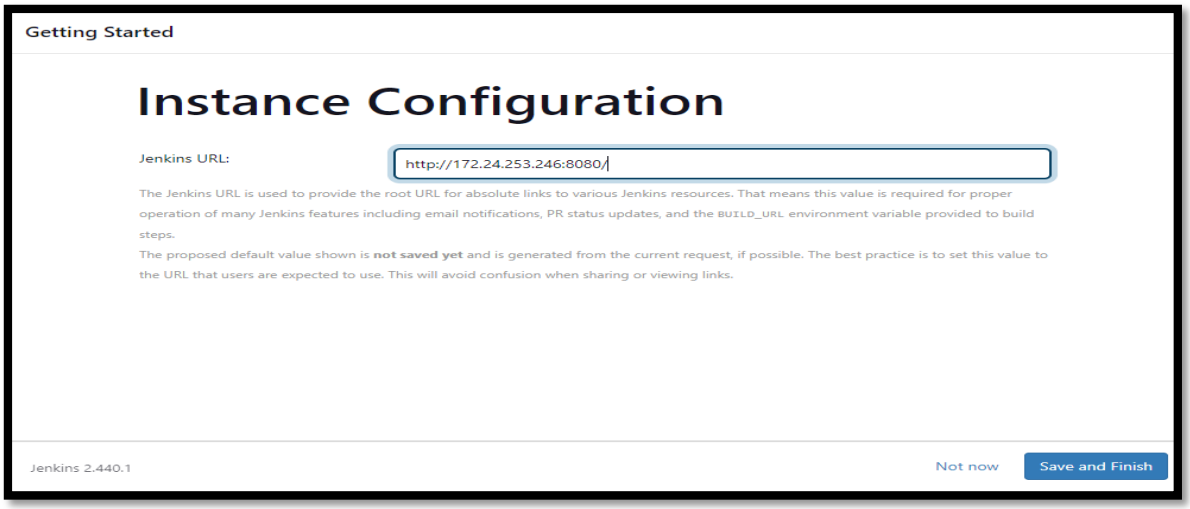
jenkins@2a4f128a7e7e:~/secrets$ cat initialAdminPassword

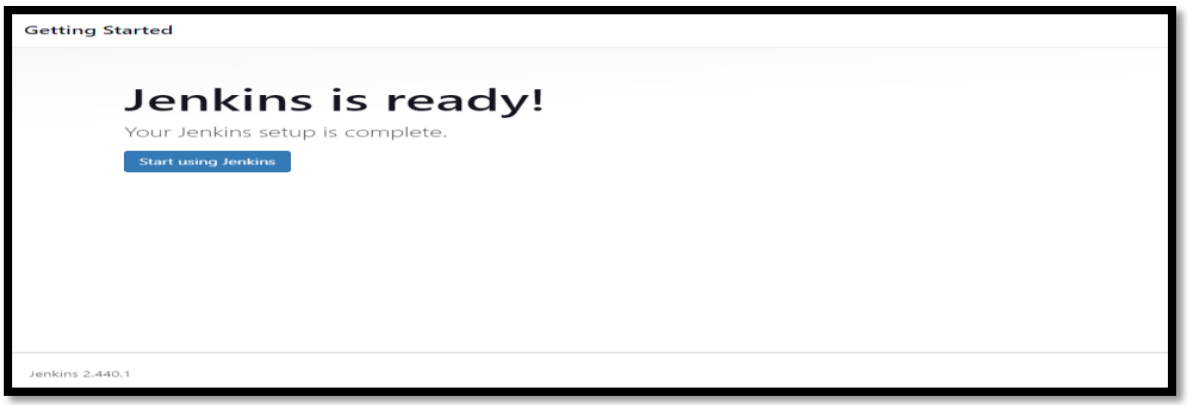


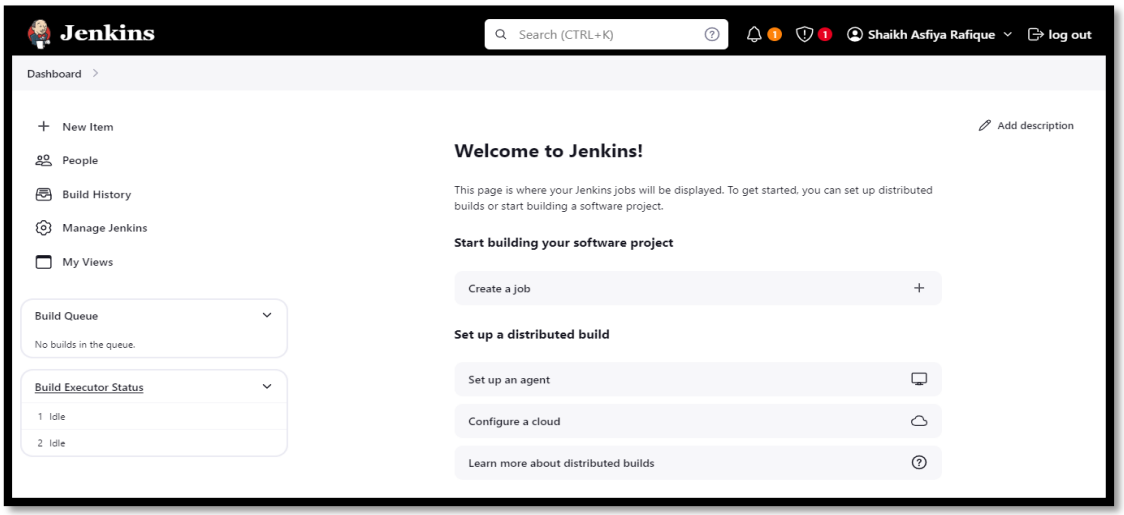

Not secure 172.24.253.246:8080
Getting Started
Organization and Administration
Build Features
Build Tools
Build Analysis and Reporting
Pipelines and Continuous Delivery
Source Code Management
Distributed Builds
User Management and Security
Notifications and Publishing
Appearance
Languages
All | None | Suggested
Selected (20/52)
Note that the full list of plugins is not shown here. Additional plugins can be installed in the Plugin Manager once the initial setup is complete. See the documentation for more information.
Organization and Administration (2/4)
Dashboard View
Customizable dashboard that can present various views of job information.
Folders Plugin
Configuration as Code
This plugin allows configuration of Jenkins based on human-readable declarative configuration files.
OWASP Markup Formatter
Uses the OWASP Java HTML Sanitizer to allow safe-seeming HTML markup to be entered in project descriptions and the like.
Build Features (4/9)
Build Name and Description Setter
Jenkins 2.440.1
Back
Install


Getting Started
Getting Started
Folders Plugin
OWASP Markup Formatter
Build Timeout
Credentials Binding Plugin
Timestamper
Workspace Cleanup
Ant
Gradle
Pipeline
GitHub Branch Source
Pipeline: GitHub Groovy Libraries
Pipeline: Stage View
Git plugin
SSH Build Agents
Matrix Authorization Strategy
PAM Authentication
LDAP
Email Extension
Mailer Plugin
Dark Theme
Folders
OWASP Markup Formatter
** JSON Path API
** Token Macro
Build Timeout
** - required dependency
Jenkins 2.440.1


Getting Started
Create First Admin User
Username
Password
Confirm password
Full name
Jenkins 2.440.1
Skip and continue as admin
Save and Continue


Getting Started
Instance Configuration
Jenkins URL:
http://172.24.253.246:8080/
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 2.440.1
Not now
Save and Finish


Getting Started
Jenkins is ready!
Your Jenkins setup is complete.
Start using Jenkins
Jenkins 2.440.1


Jenkins
Search (CTRL+K)
Shaikh Asfiya Rafique
log out
Dashboard
New Item
People
Build History
Manage Jenkins
My Views
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle
Add description
Welcome to Jenkins!
This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.
Start building your software project
Create a job
Set up a distributed build
Set up an agent
Configure a cloud
Learn more about distributed builds