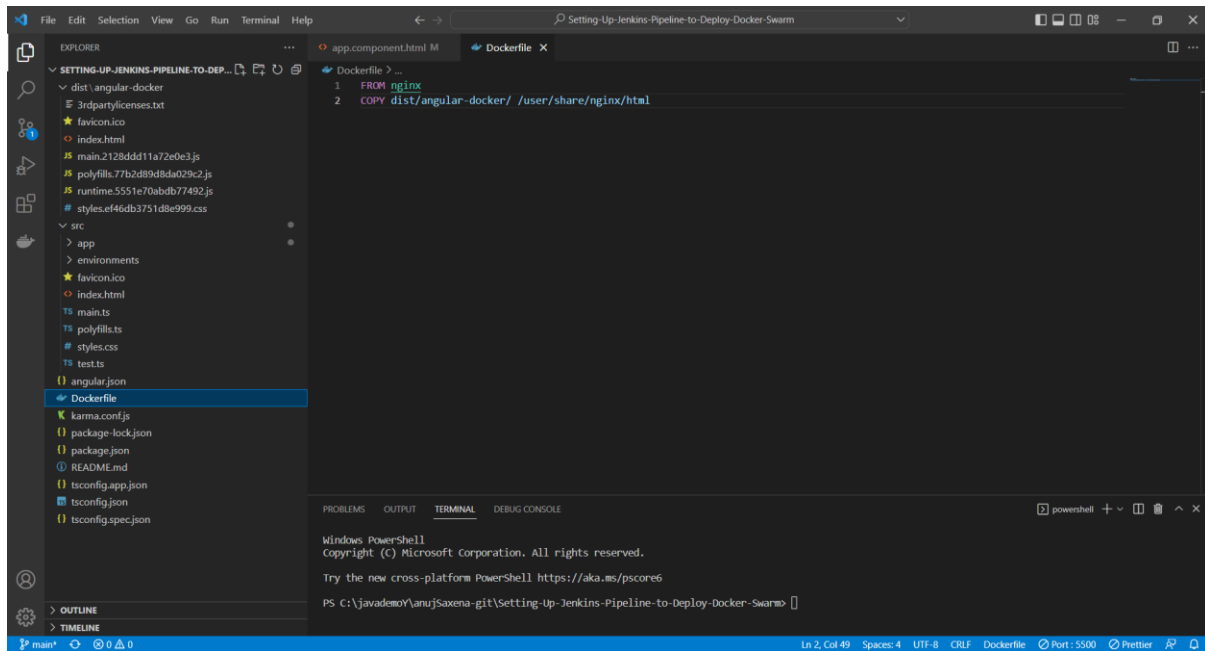


# Setting-up Jenkins pipeline To deploy Docker Image

## 1. Create Angular Project in vss

- After creating the Project :

➤ **Add Dockerfile**



## 2. Now Create an EC2 Instance With User Data In it.

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

**Name and tags** [info](#)

Name  
DeplyBox [Add additional tags](#)

**Application and OS Images (Amazon Machine Image)** [info](#)  
An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below.

Search our full catalog including 1000s of application and OS images

Recents Quick Start

Amazon Linux macOS Ubuntu Windows Red Hat S [Browse more AMIs](#)  
Including AMIs from AWS, Marketplace and the Community

**Summary**

Number of instances [info](#)  
1

Software Image (AMI)  
Amazon Linux 2 Kernel 5.10 AML...[read more](#)  
ami-026b57f3c383c2e0c

Virtual server type (instance type)  
t2.micro

Firewall (security group)  
New security group

Storage (volumes)  
1 volume(s) - 8 GiB

**Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier

Cancel [Launch instance](#)

**Instance type**  
t2.micro [Free tier eligible](#) [Compare instance types](#)  
Family: t2 1 vCPU 1 GiB Memory  
On-Demand Linux pricing: 0.0116 USD per Hour  
On-Demand Windows pricing: 0.0162 USD per Hour

**Key pair (login)** [info](#)  
You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required  
depjk [Create new key pair](#)

**Network settings** [info](#) [Edit](#)

Network [info](#)  
vpc-0f6ee4d9b89463e2f

Subnet [info](#)  
No preference (Default subnet in any availability zone)

Auto-assign public IP [info](#)  
Enable

Firewall (security groups) [info](#)

**Summary**

Number of instances [info](#)  
1

Software Image (AMI)  
Amazon Linux 2 Kernel 5.10 AML...[read more](#)  
ami-026b57f3c383c2e0c

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Cancel [Launch instance](#)

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

Services Search for services, features, blogs, docs, and more [Alt+S]

Select

Metadata version info

Select

Metadata response hop limit info

Select

Allow tags in metadata info

Select

User data info

```
#!/bin/bash
sudo yum update -y

# Install Java
sudo amazon-linux-extras install -y java-openjdk17
sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo
sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key
sudo yum install -y epel-release
sudo yum install -y java-17-openjdk-devel
sudo /usr/sbin/alternatives --config java <<< '1'

# Install Maven
sudo wget http://repos.fedorapeople.org/repos/dchen/apache-maven/epel-
```

Summary

Number of instances info

1

Software Image (AMI)

Amazon Linux 2 Kernel 5.10 AMI...read more  
ami-026b57f3c383c2eec

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

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1 volume(s) - 8 GiB

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Cancel Launch instance

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

Services Search for services, features, blogs, docs, and more [Alt+S]

Select

Metadata response hop limit info

Select

Allow tags in metadata info

Select

User data info

```
apache-maven.repo -O /etc/yum.repos.d/epel-apache-maven.repo
sudo sed -i s/$/releasever/6/g /etc/yum.repos.d/epel-apache-maven.repo
sudo yum install -y apache-maven

# Install git
sudo yum install git -y

# Install Jenkins
sudo yum install -y jenkins
sudo systemctl start jenkins
sudo systemctl enable jenkins

sudo java -version
sudo mvn --version
sudo git version
```

☐ User data has already been base64 encoded

Summary

Number of instances info

1

Software Image (AMI)

Amazon Linux 2 Kernel 5.10 AMI...read more  
ami-026b57f3c383c2eec

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier

Cancel Launch instance

Now add docker and align ec2-user & Jenkins with it.

The screenshot shows the AWS Management Console interface. The browser address bar displays the URL: `us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#EditUserData:instanceId=i-002798a6e64bed2d9`. The console header includes the AWS logo, a search bar, and navigation links. The breadcrumb trail indicates the path: `EC2 > Instances > i-002798a6e64bed2d9 > Edit user data`.

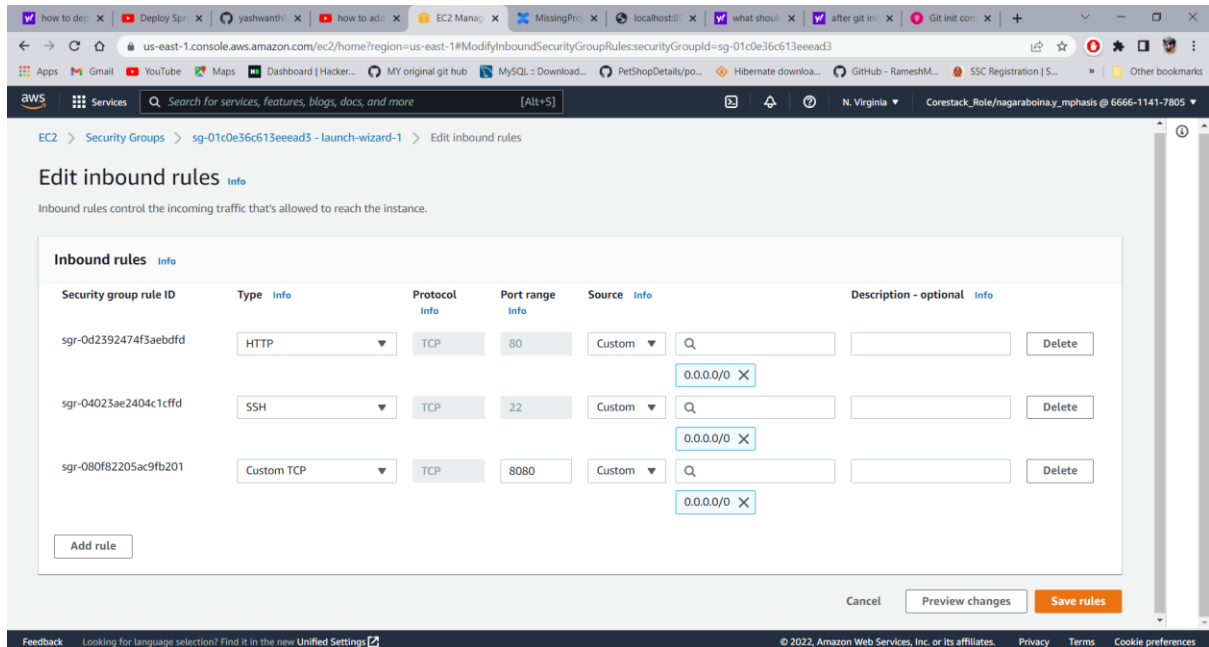
The main content area is titled "Edit user data" with an "Info" link. It displays the "Instance ID" as `i-002798a6e64bed2d9 (Dockerjenk)`. Under the "Current user data" section, it shows the user data currently associated with the instance, which includes a script to install Docker and set up the `ec2-user` and `jenkins` users:

```
# Install docker
sudo yum install -y docker
sudo systemctl start docker
sudo systemctl enable docker
sudo usermod -aG docker ec2-user
sudo usermod -aG docker jenkins
```

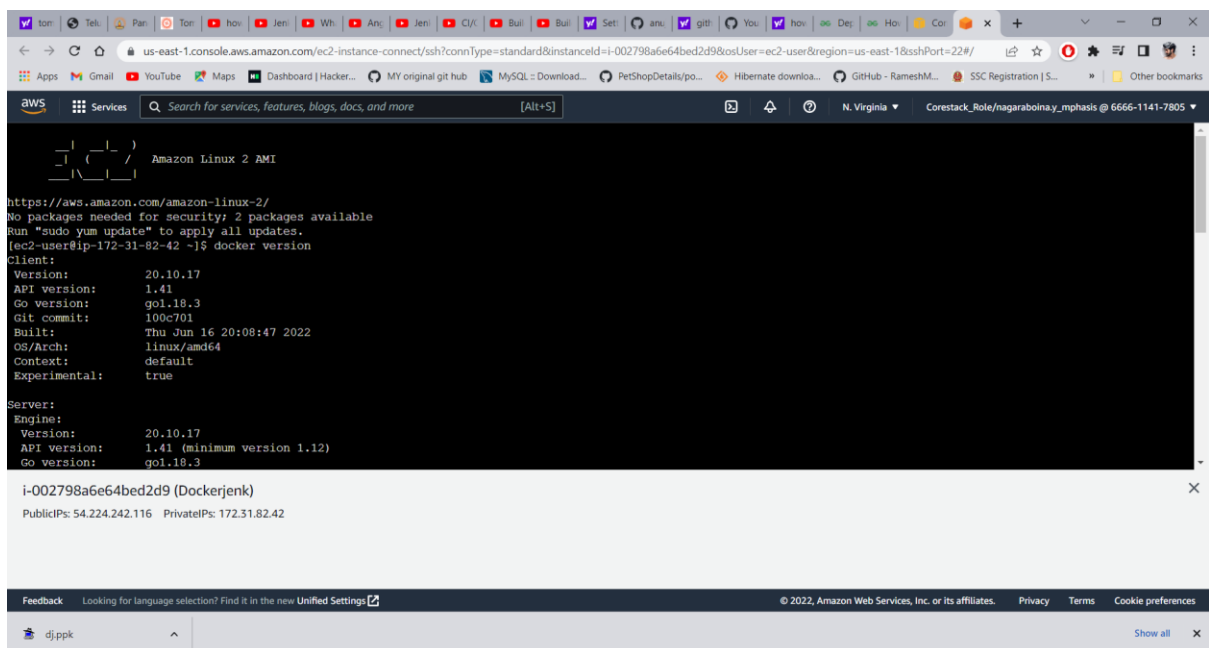
Below the user data, there is a "Copy user data" button. A blue information box states: "To edit your instance's user data you first need to stop your instance." At the bottom of the panel, there are "Cancel" and "Save" buttons.

The footer of the console shows the "Feedback" link, a language selection prompt, the copyright notice "© 2022, Amazon Web Services, Inc. or its affiliates.", and links for "Privacy", "Terms", and "Cookie preferences". The bottom status bar displays the file names `im2.png`, `im1.png`, and `dj.ppk`, along with a "Show all" link and a close button.

### 3. Add The Port -8080 to Security Groups.



### 4 . In EC2 Connect :



us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-002798a6e64bed2d9&osUser=ec2-user&region=us-east-1&sshPort=22#

Search for services, features, blogs, docs, and more [Alt+S]

N. Virginia Corestack\_Role/nagaraboina\_y\_mphasis @ 6666-1141-7805

```
Engine:
  Version: 20.10.17
  API Version: 1.41 (minimum version 1.12)
  Go version: go1.18.3
  Git commit: a89b042
  Built: Thu Jun 16 20:09:24 2022
  OS/Arch: linux/amd64
  Experimental: false
containerd:
  Version: 1.6.6
  GitCommit: 10c12954828e7c7c9b6e0ea9b0c02b01407d3ae1
runc:
  Version: 1.1.3
  GitCommit: 1e7bb5b773162b57333d57f612fd72e3f8612d94
docker-init:
  Version: 0.19.0
  GitCommit: de40ad0
[ec2-user@ip-172-31-82-42 ~]$ java -version
openjdk version "17.0.4.1" 2022-08-12 LTS
OpenJDK Runtime Environment Corretto-17.0.4.9.1 (build 17.0.4.1+9-LTS)
OpenJDK 64-Bit Server VM Corretto-17.0.4.9.1 (build 17.0.4.1+9-LTS, mixed mode, sharing)
[ec2-user@ip-172-31-82-42 ~]$ mvn --version
Apache Maven 3.5.2 (138edd61fd100ec658bfa2d307c43b76940a5d7d; 2017-10-18T07:58:13Z)
Maven home: /usr/share/apache-maven
```

i-002798a6e64bed2d9 (Dockerjenk)

PublicIPs: 54.224.242.116 PrivateIPs: 172.31.82.42

Feedback Looking for language selection? Find it in the new Unified Settings

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djppk Show all

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-002798a6e64bed2d9&osUser=ec2-user&region=us-east-1&sshPort=22#

Search for services, features, blogs, docs, and more [Alt+S]

N. Virginia Corestack\_Role/nagaraboina\_y\_mphasis @ 6666-1141-7805

```
Version: 1.6.6
GitCommit: 10c12954828e7c7c9b6e0ea9b0c02b01407d3ae1
runc:
  Version: 1.1.3
  GitCommit: 1e7bb5b773162b57333d57f612fd72e3f8612d94
docker-init:
  Version: 0.19.0
  GitCommit: de40ad0
[ec2-user@ip-172-31-82-42 ~]$ java -version
openjdk version "17.0.4.1" 2022-08-12 LTS
OpenJDK Runtime Environment Corretto-17.0.4.9.1 (build 17.0.4.1+9-LTS)
OpenJDK 64-Bit Server VM Corretto-17.0.4.9.1 (build 17.0.4.1+9-LTS, mixed mode, sharing)
[ec2-user@ip-172-31-82-42 ~]$ mvn --version
Apache Maven 3.5.2 (138edd61fd100ec658bfa2d307c43b76940a5d7d; 2017-10-18T07:58:13Z)
Maven home: /usr/share/apache-maven
Java version: 17.0.4.1, vendor: Amazon.com Inc.
Java home: /usr/lib/jvm/java-17-amazon-corretto.x86_64
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "5.10.135-122.509.amzn2.x86_64", arch: "amd64", family: "unix"
[ec2-user@ip-172-31-82-42 ~]$ git version
git version 2.37.1
[ec2-user@ip-172-31-82-42 ~]$ docker version
Version: 20.10.17
```

i-002798a6e64bed2d9 (Dockerjenk)

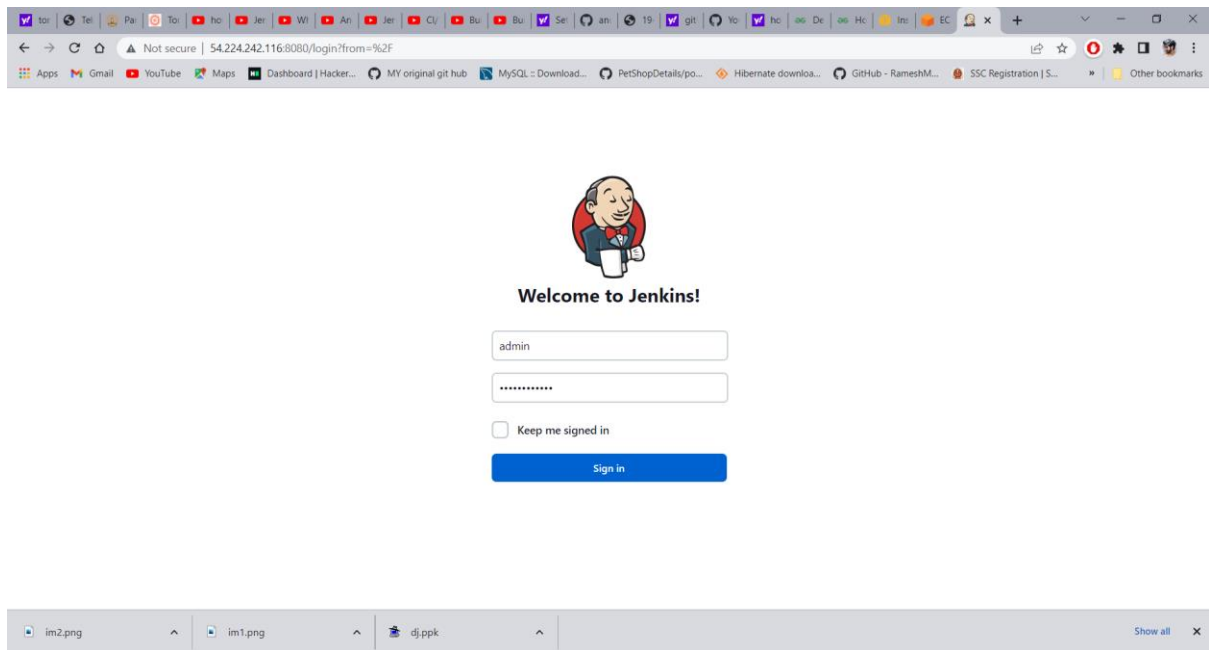
PublicIPs: 54.224.242.116 PrivateIPs: 172.31.82.42

Feedback Looking for language selection? Find it in the new Unified Settings

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djppk Show all


## 5..Now set up Jenkins.



The screenshot shows a web browser window with the Jenkins login page. The address bar indicates the URL is `54.224.242.116:8080/login?from=%2F`. The page features the Jenkins logo (a man in a suit) and the text "Welcome to Jenkins!". Below this, there are two input fields: the first contains the text "admin", and the second contains a series of asterisks representing a password. A checkbox labeled "Keep me signed in" is present below the password field. A blue "Sign in" button is located at the bottom of the login form. The browser's bookmark bar is visible at the bottom, showing various links like "im2.png", "im1.png", and "dj.ppk".

Not secure | 54.224.242.116:8080/login?from=%2F

Apps Gmail YouTube Maps Dashboard | Hacker... MY original git hub MySQL :: Download... PetShopDetails/po... Hibernate downloa... GitHub - RameshM... SSC Registration | S... Other bookmarks



**Welcome to Jenkins!**

admin

\*\*\*\*\*

☐ Keep me signed in

Sign in

im2.png im1.png dj.ppk Show all X

Getting Started

# Getting Started

✓ Folders	✓ OWASP Markup Formatter	✓ Build Timeout	✓ Credentials Binding	Folders <ul style="list-style-type: none"><li>** JavaBeans Activation Framework (JAF) API</li><li>** JavaMail API</li><li>** bouncycastle API</li><li>** Instance Identity</li><li>** Mina SSHD API :: Common</li><li>** Mina SSHD API :: Core</li><li>** SSH server</li></ul>
⚙ Timestampers	⚙ Workspace Cleanup	⚙ Ant	⚙ Gradle	OWASP Markup Formatter <ul style="list-style-type: none"><li>** Structs</li><li>** Token Macro</li></ul>
⚙ Pipeline	⚙ GitHub Branch Source	⚙ Pipeline: GitHub Groovy Libraries	⚙ Pipeline: Stage View	Build Timeout <ul style="list-style-type: none"><li>** Credentials</li></ul>
⚙ Git	⚙ SSH Build Agents	⚙ Matrix Authorization Strategy	⚙ PAM Authentication	
⚙ LDAP	⚙ Email Extension	⚙ Mailer		

Jenkins 2.361.2

Jenkins

Search (CTRL+K)

admin log out

Dashboard > Manage Jenkins > Update Center

Back to Dashboard

Manage Jenkins

Manage Plugins

## Installing Plugins/Upgrades

Preparation

- Checking internet connectivity
- Checking update center connectivity
- Success

Folders

- JavaBeans Activation Framework (JAF) API
- JavaMail API
- bouncycastle API
- Instance Identity
- Mina SSHD API :: Common
- Mina SSHD API :: Core
- SSH server

OWASP Markup Formatter

- Structs
- Token Macro

Build Timeout

Credentials

- Tailored API



tor | Tel | Par | Tor | ho | Jen | Wh | An | Jer | Cl | Bui | Bui | Set | an | git | Yo | ho | De | Ho | EC | EC | x

← → ↻ ⚠ Not secure | 54.224.242.116:8080/manage/credentials/ 

🔖 ☆ 🔍 🗑 📄 📄 📄

Apps Gmail YouTube Maps Dashboard | Hacker... MY original git hub MySQL : Download... PetShopDetails/po... Hibernate downloa... GitHub - RameshM... SSC Registration | S... Other bookmarks

Jenkins

🔍 Search (CTRL+K) 

🔔 1 👤 admin ⌵ 🚪 log out

Dashboard > Manage Jenkins > Credentials

Credentials

T	P	Store	Domain	ID	Name
---	---	-------	--------	----	------

Stores scoped to Jenkins

P	Store	Domains
👤 System		(global)

Icons: S M L

REST API Jenkins 2.361.2

dj.ppk

⌵

Show all X

tor | Tel | Par | Tor | ho | Jen | Wh | An | Jer | Cl | Bui | Bui | Set | an | git | Yo | ho | De | Ho | EC | EC | x

← → ↻ ⚠ Not secure | 54.224.242.116:8080/manage/credentials/store/system/domain/\_/ 

🔖 ☆ 🔍 🗑 📄 📄 📄

Jenkins

🔍 Search (CTRL+K) 

🔔 1 👤 admin ⌵ 🚪 log out

Dashboard > Manage Jenkins > Credentials > System > Global credentials (unrestricted) >

Global credentials (unrestricted)

+ Add Credentials

Credentials that should be available irrespective of domain specification to requirements matching.

ID	Name	Kind	Description
👤 dockerhub	yashwanth465/*****	Username with password	🔗

Icons: S M L

REST API Jenkins 2.361.2

dj.ppk

⌵

Show all X

## 6 . In command prompt:

```
Command Prompt
my-alpine      latest      8dee897d8326  8 weeks ago  5.54MB
alpine         latest      9c6f07244728  8 weeks ago  5.54MB

C:\Users\as954>docker run -d -p 80:80 my-angular123
87a48fe7e48c6f23874ae71fba283cfbe4997d5e0246a9de577db24bb2f5e071

C:\Users\as954>docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                               NAMES
87a48fe7e48c   my-angular123  "/docker-entrypoint..."  2 minutes ago  Up 2 minutes  0.0.0.0:80->80/tcp                 beautiful_vivsesvaraya
85bdebe670fb   jenkins/jenkins:lts-jdk11  "/usr/bin/tini -- /u..."  10 hours ago  Up 10 hours  0.0.0.0:8080->8080/tcp, 0.0.0.0:50000->50000/tcp  keen_banzai

C:\Users\as954>docker run -d -p 81:80 my-angular123
66b566629f001578bb9d6891cf55f0772558bdf81e806c0548b0ecbac8d0d4d

C:\Users\as954>docker run -d -p 83:80 my-angular123
ee0836fd182d90ca3213cc032751004655f3d842b376c95b19e3628d9f853dda

C:\Users\as954>docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                               NAMES
ee0836fd182d   my-angular123  "/docker-entrypoint..."  8 minutes ago  Up 8 minutes  0.0.0.0:83->80/tcp                 sleepy_fernat
66b566629f00   my-angular123  "/docker-entrypoint..."  8 minutes ago  Up 8 minutes  0.0.0.0:81->80/tcp                 priceless_shannon
23dc314a0d5a   my-angular123:latest  "/docker-entrypoint..."  11 minutes ago  Up 11 minutes  80/tcp                             heuristic_colden
87a48fe7e48c   my-angular123  "/docker-entrypoint..."  17 minutes ago  Up 16 minutes  0.0.0.0:80->80/tcp                 beautiful_vivsesvaraya
85bdebe670fb   jenkins/jenkins:lts-jdk11  "/usr/bin/tini -- /u..."  10 hours ago  Up 9 hours  0.0.0.0:8080->8080/tcp, 0.0.0.0:50000->50000/tcp  keen_banzai

C:\Users\as954>

C:\Users\as954>docker run -d -p 80:80 my-angular123
87a48fe7e48c6f23874ae71fba283cfbe4997d5e0246a9de577db24bb2f5e071

C:\Users\as954>docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                               NAMES
87a48fe7e48c   my-angular123  "/docker-entrypoint..."  2 minutes ago  Up 2 minutes  0.0.0.0:80->80/tcp                 beautiful_vivsesvaraya
85bdebe670fb   jenkins/jenkins:lts-jdk11  "/usr/bin/tini -- /u..."  10 hours ago  Up 10 hours  0.0.0.0:8080->8080/tcp, 0.0.0.0:50000->50000/tcp  keen_banzai

C:\Users\as954>docker run -d -p 81:80 my-angular123
66b566629f001578bb9d6891cf55f0772558bdf81e806c0548b0ecbac8d0d4d

C:\Users\as954>docker run -d -p 83:80 my-angular123
ee0836fd182d90ca3213cc032751004655f3d842b376c95b19e3628d9f853dda

C:\Users\as954>docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                               NAMES
ee0836fd182d   my-angular123  "/docker-entrypoint..."  8 minutes ago  Up 8 minutes  0.0.0.0:83->80/tcp                 sleepy_fernat
66b566629f00   my-angular123  "/docker-entrypoint..."  8 minutes ago  Up 8 minutes  0.0.0.0:81->80/tcp                 priceless_shannon
23dc314a0d5a   my-angular123:latest  "/docker-entrypoint..."  11 minutes ago  Up 11 minutes  80/tcp                             heuristic_colden
87a48fe7e48c   my-angular123  "/docker-entrypoint..."  17 minutes ago  Up 16 minutes  0.0.0.0:80->80/tcp                 beautiful_vivsesvaraya
85bdebe670fb   jenkins/jenkins:lts-jdk11  "/usr/bin/tini -- /u..."  10 hours ago  Up 9 hours  0.0.0.0:8080->8080/tcp, 0.0.0.0:50000->50000/tcp  keen_banzai

C:\Users\as954>docker stop ee0836fd182d
ee0836fd182d

C:\Users\as954>docker stop 66b566629f00
66b566629f00

C:\Users\as954>docker stop 23dc314a0d5a
23dc314a0d5a

C:\Users\as954>docker stop 87a48fe7e48c
87a48fe7e48c

C:\Users\as954>docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                               NAMES
85bdebe670fb   jenkins/jenkins:lts-jdk11  "/usr/bin/tini -- /u..."  10 hours ago  Up 9 hours  0.0.0.0:8080->8080/tcp, 0.0.0.0:50000->50000/tcp  keen_banzai

C:\Users\as954>
```

