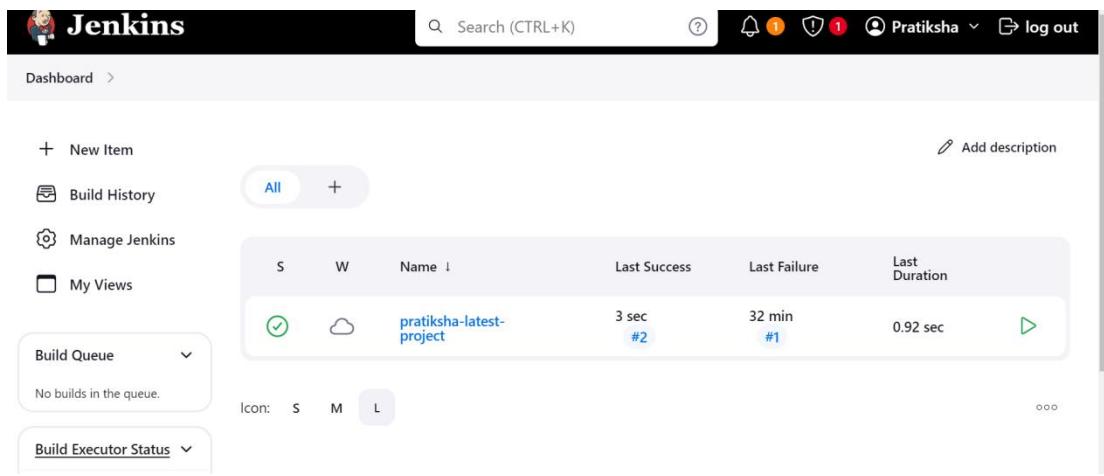


# DevOps Project



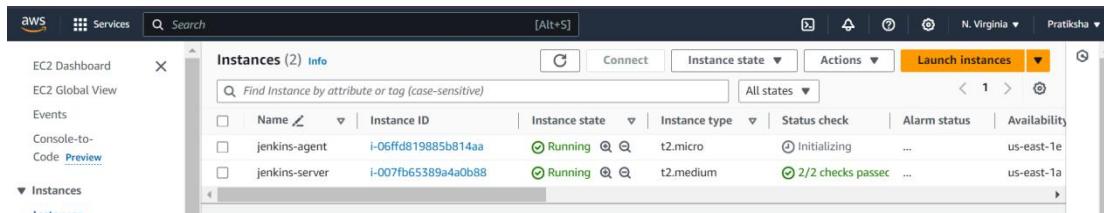
The screenshot shows the Jenkins dashboard. On the left, there are links for 'New Item', 'Build History' (with an 'All' button), 'Manage Jenkins', and 'My Views'. Below these are sections for 'Build Queue' (empty) and 'Build Executor Status'. The main area displays a table with columns: S, W, Name (sorted by name), Last Success, Last Failure, and Last Duration. A single row is shown for 'pratiksha-latest-project' with a green checkmark icon, a cloud icon, and the following details: Last Success (3 sec, #2), Last Failure (32 min, #1), and Last Duration (0.92 sec). At the bottom of the table, there are icons for S, M, and L.

## Requirements : CI/CD pipeline System

- Git - local version control system.
- GitHub - As Distributed version control system.
- Jenkins - Continous Integration tool.
- Ansible - Configuration Management & Deployment tool.
- Docker -Containerization

### ❖ Setup Jenkins Server

- Setup a Linux EC2 instance
- Install Java
- Install Jenkins
- Start Jenkins
- Access Web UI on port 8080



The screenshot shows the AWS EC2 Instances page. The sidebar includes links for 'EC2 Dashboard', 'EC2 Global View', 'Events', 'Console-to-Code Preview', and 'Instances'. The main area is titled 'Instances (2) Info' and lists two instances: 'jenkins-agent' (Instance ID: i-06ffd819885b814aa, State: Running, Type: t2.micro, Status: Initializing, Availability: us-east-1a) and 'jenkins-server' (Instance ID: i-007fb65389a4a0b88, State: Running, Type: t2.medium, Status: 2/2 checks passed, Availability: us-east-1a). There are buttons for 'Connect', 'Actions', and 'Launch instances'.

## Installation of Jenkins:

```
Installed products updated.

Installed:
  gpm-libs-1.20.7-29.el9.x86_64
  vim-common-2:8.2.2637-20.el9_1.x86_64
  vim-filesystem-2:8.2.2637-20.el9_1.noarch
  unzip-6.0-56.el9.x86_64
  vim-enhanced-2:8.2.2637-20.el9_1.x86_64
  wget-1.21.1-7.el9.x86_64

Complete!
[root@ip-172-31-34-69 ~]# [root@ip-172-31-34-69 ~]# wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins-ci.org/redhat-stable/jenkins.repo
--2024-07-27 11:55:57-- http://pkg.jenkins-ci.org/redhat-stable/jenkins.repo
Resolving pkg.jenkins-ci.org (pkg.jenkins-ci.org)... 52.202.51.185
Connecting to pkg.jenkins-ci.org (pkg.jenkins-ci.org)|52.202.51.185|:80... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://pkg.jenkins.io/redhat-stable/jenkins.repo [following]
--2024-07-27 11:55:57-- https://pkg.jenkins.io/redhat-stable/jenkins.repo
Resolving pkg.jenkins.io (pkg.jenkins.io)... 146.75.38.133, 2a04:4e42:79::645
Connecting to pkg.jenkins.io (pkg.jenkins.io)|146.75.38.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 85
Saving to: '/etc/yum.repos.d/jenkins.repo'

/etc/yum.repos.d/jenkins.rep 100%[=====] 85 --.-KB/s in 0s

2024-07-27 11:55:58 (2.83 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [85/85]

[root@ip-172-31-34-69 ~]# rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key
```

```
[root@ip-172-31-34-69 ~]# yum install jenkins -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.

Jenkins-stable
Dependencies resolved.
=====
Package           Architecture      Version       Repository     Size
=====
Installing:
jenkins          noarch          2.452.3-1.1   jenkins       89 M

Transaction Summary
=====
Install 1 Package

Total download size: 89 M
Installed size: 89 M
Downloading Packages:
jenkins-2.452.3-1.1.noarch.rpm
Total
Running transaction check
Transaction check succeeded.
Running transaction test
```

## Access Web UI on port 8080:

The image consists of four vertically stacked screenshots of a web browser displaying the Jenkins web interface.

- Top Screenshot:** Shows the Jenkins "Sign in to Jenkins" page. It features a cartoon Jenkins head logo on the left and a "Sign in to Jenkins" heading on the right. The URL in the address bar is 54.90.201.105:8080/login?from=%2F. The form includes fields for "Username" (Pratiksha) and "Password" (redacted), a "Keep me signed in" checkbox, and a blue "Sign in" button.
- Second Screenshot:** Shows the "Unlock Jenkins" step of the "Getting Started" wizard. It displays the message: "To ensure Jenkins is securely set up by the administrator, a password has been written to the log ([not sure where to find it?](#)) and this file on the server: /var/lib/jenkins/secrets/initialAdminPassword". It instructs the user to copy the password from either location and paste it into the "Administrator password" field (redacted). A "Continue" button is visible at the bottom right.
- Third Screenshot:** Shows the "Instance Configuration" step of the "Getting Started" wizard. It asks for the "Jenkins URL" and provides a default value of "http://184.73.97.19:8080/". A note explains that this URL is used for absolute links to various Jenkins resources. The URL is described as "not saved yet". At the bottom, there are "Not now" and "Save and Finish" buttons.
- Bottom Screenshot:** Shows the Jenkins 2.452.3 splash screen with the "Save and Finish" button highlighted.

The screenshot shows the Jenkins 'Getting Started' page. At the top, there's a navigation bar with icons for back, forward, search, and download. The URL is 184.73.97.19:8080. Below the header, the title 'Getting Started' is displayed. A table lists various Jenkins plugins:

Folders	Core	Build Triggers	Build Timeout	Credentials Binding
Timestamper	Workspace Cleanup	Ant	Gradle	OWASP Markup Formatter
Pipeline	GitHub Branch Source	Pipeline: GitHub Groovy Libraries	Pipeline Graph View	** ASG API
Git	SSH Build Agents	Matrix Authorization Strategy	PAM Authentication	** JSON Path API
LDAP	Email Extension	Mailer	Dark Theme	** Structs

On the right side, there's a sidebar with more plugin options like 'Pipeline: Step API', 'Token Macro', 'Build Timeout', and 'bouncycastle API'. At the bottom left, it says 'Jenkins 2.452.3'.

The screenshot shows the Jenkins 'Getting Started' page after setup completion. The title 'Jenkins is ready!' is prominently displayed. Below it, a message says 'Your Jenkins setup is complete.' There is a blue button labeled 'Start using Jenkins'. At the bottom left, it says 'Jenkins 2.452.3'.

The screenshot shows the Jenkins Dashboard. The top navigation bar includes the Jenkins logo, a search bar with placeholder 'Search (CTRL+K)', and user information for 'Pratiksha'. Below the header, the title 'Welcome to Jenkins!' is displayed. To the left, there's a sidebar with links for 'New Item', 'Build History', 'Manage Jenkins', and 'My Views'. A 'Build Queue' section shows 'No builds in the queue.' A 'Create a job' button with a '+' icon is located above the build queue. A 'Set up a distributed build' section includes a 'Set up an agent' button with a computer monitor icon. On the right side, there's a 'Build Executor Status' section showing '1 Idle' and '2 Idle'.

## Installation of Ansible and Docker:

```
[root@jenkins workspace]# sudo yum install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose -plugin
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.

Docker CE Stable - x86_64
Dependencies resolved.
=====
Package           Architecture Version      Repository   Size
=====
Installing:
containerd.io     x86_64       1.7.19-3.1.el9    docker-ce-stable 43 M
docker-buildx-plugin x86_64       0.16.1-1.el9    docker-ce-stable 14 M
docker-ce          x86_64       3:27.1.1-1.el9   docker-ce-stable 27 M
docker-ce-cli      x86_64       1:27.1.1-1.el9   docker-ce-stable 7.8 M
docker-compose-plugin x86_64       2.29.1-1.el9    docker-ce-stable 13 M
Installing dependencies:
container-selinux  noarch      3:2.229.0-1.el9_3 rhel-9-appstream-rhui-rpms 58 k
fuse-overlayfs    x86_64       1.13-1.el9     rhel-9-appstream-rhui-rpms 69 k
fuse3             x86_64       3.10.2-8.el9    rhel-9-appstream-rhui-rpms 57 k
fuse3-libs        x86_64       3.10.2-8.el9    rhel-9-appstream-rhui-rpms 93 k
iptables-nft     x86_64       1.8.10-2.el9    rhel-9-baseos-rhui-rpms 208 k
libnftnl          x86_64       1.2.6-2.el9    rhel-9-baseos-rhui-rpms 85 k
libslirp          x86_64       4.4.0-7.el9    rhel-9-appstream-rhui-rpms 72 k
slirp4netns       x86_64       1.2.3-1.el9    rhel-9-appstream-rhui-rpms 49 k
=====
[root@jenkins:~          x + v
Verifying : docker-ce-3:27.1.1-1.el9.x86_64
Verifying : docker-ce-cli-1:27.1.1-1.el9.x86_64
Verifying : docker-ce-rootless-extras-27.1.1-1.el9.x86_64
Verifying : docker-compose-plugin-2.29.1-1.el9.x86_64
Verifying : libslirp-4.4.0-7.el9.x86_64
Verifying : fuse-overlayfs-1.13-1.el9.x86_64
Verifying : fuse3-3.10.2-8.el9.x86_64
Verifying : slirp4netns-1.2.3-1.el9.x86_64
Verifying : libnftnl-1.2.6-2.el9.x86_64
Verifying : iptables-nft-1.8.10-2.el9.x86_64
Installed products updated.

Installed:
containerd.io-1.7.19-3.1.el9.x86_64
docker-ce-3:27.1.1-1.el9.x86_64
docker-ce-rootless-extras-27.1.1-1.el9.x86_64
fuse-overlayfs-1.13-1.el9.x86_64
iptables-nft-1.8.10-2.el9.x86_64
libslirp-4.4.0-7.el9.x86_64
=====
Complete!
[root@jenkins ~]# sudo systemctl start docker
[root@jenkins ~]# systemctl enable --now docker
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /usr/lib/systemd/system/docker.service.
[root@jenkins ~]# docker --version
Docker version 27.1.1, build 6312585
[root@jenkins ~]#
[root@ip-172-31-22-179:/var/lib          x + v
Complete!
[root@jenkins workspace]# docker --version
Docker version 27.1.1, build 6312585
[root@jenkins workspace]# yum install ansible-core -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.

Last metadata expiration check: 0:01:19 ago on Sun 04 Aug 2024 09:48:41 AM UTC.
Dependencies resolved.
=====
Package           Architecture Version      Repository   Size
=====
Installing:
ansible-core     x86_64       1:2.14.14-1.el9    rhel-9-appstream-rhui-rpms 2.6 M
Installing dependencies:
git-core          x86_64       2.43.5-1.el9_4   rhel-9-appstream-rhui-rpms 4.4 M
python3-cffi       x86_64       1.14.5-5.el9    rhel-9-appstream-rhui-rpms 257 k
python3-cryptography x86_64       36.0.1-4.el9    rhel-9-baseos-rhui-rpms 1.2 M
python3-packaging  noarch      20.9-5.el9     rhel-9-appstream-rhui-rpms 81 k
python3-poly       noarch      3.11-14.el9    rhel-9-appstream-rhui-rpms 111 k
python3-pycparser  noarch      2.20-6.el9     rhel-9-appstream-rhui-rpms 139 k
python3-pyparsing  noarch      2.4.7-9.el9    rhel-9-baseos-rhui-rpms 154 k
python3-resolvlib  noarch      0.5.4-5.el9    rhel-9-appstream-rhui-rpms 38 k
sshpass           x86_64       1.09-4.el9     rhel-9-appstream-rhui-rpms 30 k
=====
```

## Dockerfile:

```
root@ip-172-31-22-179:/var/lib/docker/tarballs/13344434-1334-43d1-8f3c-0e033a33a333# cat Dockerfile
FROM redhat/ubi9
RUN yum install httpd -y
COPY . /var/www/html
EXPOSE 80
CMD ["httpd", "-DFOREGROUND"]

root@ip-172-31-22-179:/var/lib/docker/tarballs/13344434-1334-43d1-8f3c-0e033a33a333# docker image build -t pratu-image .
[+] Building 12.5s (8/8) FINISHED
--> [internal] load build definition from Dockerfile
--> [internal] load metadata for docker.io/redhat/ubi9:latest
--> [internal] load .dockerrcignore
--> [internal] load build context: 2B
--> [1/3] FROM docker.io/redhat/ubi9:latest@sha256:1ee4d8c50d14d9c9e9229d9a039d793fc9aa803806d194c957a397cf
--> [2/3] RUN yum install httpd -y
--> [3/3] COPY . /var/www/html
--> [internal] export image manifest
--> [internal] writing image sha256:7a100ad9184bde6128b86d878e814a8a6bec6c22b6021bf9aa27563c4c7ecb422
--> [internal] naming to docker.io/library/pratu-image
[root@jenkins pratiksha-project]#
```

The screenshot shows the Jenkins configuration interface for a project named 'pratiksha-latest-project'. The 'Configure' screen is open, specifically under the 'Source Code Management' section. It displays a 'Git' configuration with a 'Repository URL' set to 'https://github.com/pratikshaa-01/pratiksha-project.git'. Below it, there's a 'Credentials' dropdown set to '- none -'. At the bottom of the configuration panel are 'Save' and 'Apply' buttons.

The screenshot shows the GitHub repository 'pratikshaa-01/pratiksha-project'. The 'Code' tab is selected, showing the 'master' branch. A file named 'deployment.yml' is visible. The repository listing at the bottom shows several files: 'css', 'fonts', 'images', 'js', 'ABOUT THIS TEMPLATE.txt', and 'Dockerfile'. The 'Dockerfile' was last updated 18 hours ago.

[github.com/new](https://github.com/new)

## Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk (\*).

Owner \* Repository name \*

pratiksha-01 / pratiksha-project

pratiksha-project is available.

Great repository names are short and memorable. Need inspiration? How about [solid-fortnight](#) ?

Description (optional)

Public Anyone on the internet can see this repository. You choose who can commit.

Private You choose who can see and commit to this repository.

pratiksha-01 / pratiksha-project

Type ⌘ to search

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

pratiksha-project / index.html in master

Cancel changes Commit changes...

Edit Preview Spaces 2 No wrap

```
1 <h1> Heyy Grrasians </h1>
```

Not secure 54.196.13.1:8080/job/pratiksha-latest-project/configure

Dashboard > pratiksha-latest-project > Configuration

## Configure

### Build Steps

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

Execute shell ?

Command

See the list of available environment variables

```
sudo docker image build . -t $JOB_NAME:$BUILD_NUMBER
```

Save Apply

```

root@ip-172-31-22-179:/var/lib/jenkins/workspace/pratiksha-project# cd ..
[root@jenkins workspace]# ls
Pratiksha_Job pratiksha-project
[root@jenkins workspace]# cd pratiksha-project/
[root@jenkins pratiksha-project]# ls
Dockerfile index.html
[root@jenkins pratiksha-project]# git status
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    Dockerfile

nothing added to commit but untracked files present (use "git add" to track)
[root@jenkins pratiksha-project]# git add .
[root@jenkins pratiksha-project]# git commit -m "first dockerfile"
[master f439ac8] first dockerfile
Committer: root <root@jenkins.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

  git config --global --edit

After doing this, you may fix the identity used for this commit with:

  git commit --amend --reset-author

1 file changed, 6 insertions(+)

```

```

root@ip-172-31-22-179:/var/lib/jenkins/workspace/pratiksha-project# git push origin master
Username for 'https://github.com': pratikshaa-1
Password for 'https://pratikshaa-1@github.com':
[root@jenkins pratiksha-project]# git push origin master
Username for 'https://github.com': pratikshaa-01
Password for 'https://pratikshaa-01@github.com':
remote: Support for password authentication was removed on August 13, 2021.
remote: Please see https://docs.github.com/get-started/getting-started-with-git/about-remote-repositories#cloning-with-https-urls for information on currently recommended modes of authentication.
fatal: Authentication failed for 'https://github.com/pratikshaa-01/pratiksha-project.git'
[root@jenkins pratiksha-project]# git push origin master
Username for 'https://github.com': pratikshaa-01
Password for 'https://pratikshaa-01@github.com':
remote: Permission to pratikshaa-01/pratiksha-project.git denied to pratikshaa-01.
fatal: unable to access 'https://github.com/pratikshaa-01/pratiksha-project.git/': The requested URL returned error: 403
[root@jenkins pratiksha-project]# git push origin master
Username for 'https://github.com': pratikshaa-01
Password for 'https://pratikshaa-01@github.com':
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 2 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 377 bytes | 377.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/pratikshaa-01/pratiksha-project.git
  ba5d1bf..f439ac8 master -> master
[root@jenkins pratiksha-project]#

```

The screenshot shows the Jenkins interface for a build named 'pratiksha-latest-project' under job '#2'. The 'Console Output' tab is selected. The log output displays the following sequence of commands:

```

Started by user Pratiksha
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/pratiksha-latest-project
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/pratiksha-latest-project/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/pratikshaa-01/pratiksha-project.git # timeout=10
Fetching upstream changes from https://github.com/pratikshaa-01/pratiksha-project.git
> git --version # timeout=10
> git -version # 'git version 2.43.5'
> git fetch --tags --force --progress -- https://github.com/pratikshaa-01/pratiksha-project.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
Checking out Revision f439ac88cab01b37ea9c441c09272745c360f4 (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f f439ac88cab01b37ea9c441c09272745c360f4 # timeout=10
Commit message: "first dockerfile"
> git rev-list --no-walk f439ac88cab01b37ea9c441c09272745c360f4 # timeout=10
[pratiksha-latest-project]$ /bin/sh -xe /tmp/jenkins915436446331986616.sh

```

← → ⌂ Not secure 54.196.13.1:8080/job/pratiksha-latest-project/lastSuccessfulBuild/console

Dashboard > pratiksha-latest-project > #2 > Console Output

```

#2 [internal] load metadata for docker.io/redhat/ubi9:latest
#2 DONE 0.1s

#3 [internal] load .dockerignore
#3 transferring context: 2B done
#3 DONE 0.0s

#4 [1/3] FROM docker.io/redhat/ubi9:latest@sha256:1ee4d8c50d14d9c9e9229d9a030d793fc9aa803806d194c957a307cf1d2b17
#4 DONE 0.0s

#5 [internal] load build context
#5 transferring context: 22.73kB 0.0s done
#5 DONE 0.0s

#6 [2/3] RUN YUM install httpd -y
#6 CACHED

#7 [3/3] COPY . /var/www/html
#7 DONE 0.0s

#8 exporting to image
#8 exporting layers 0.0s done
#8 writing image sha256:d9082ccdb3a9412390edc7848a26ca59c4d9f3d363b1991678f186db11c1bf8 done
#8 naming to docker.io/library/pratiksha-latest-project:2 done
#8 DONE 0.0s

Finished: SUCCESS

```

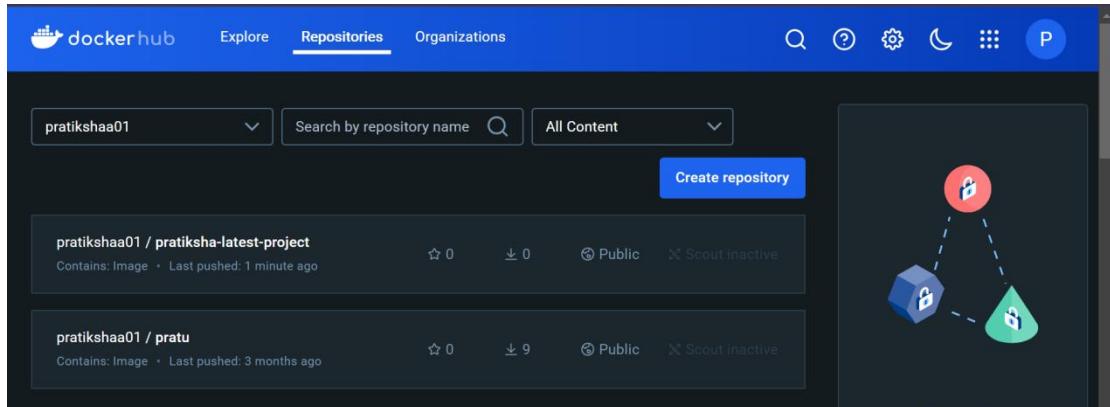
**root@jenkins:~** × + ▾

```

Username: pratikshaa01
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credential-stores

Login Succeeded
[root@jenkins pratiksha-latest-project]# docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED        SIZE
pratiksha-latest-project   2      ed9082ccdb3a    14 minutes ago  242MB
pratiksha-latest-project   3      ed9082ccdb3a    14 minutes ago  242MB
pratiksha-latest-project   4      ed9082ccdb3a    14 minutes ago  242MB
[root@jenkins pratiksha-latest-project]# docker image tag pratiksha-latest-project:4 pratikshaa01/pratiksha-latest-project:4
[root@jenkins pratiksha-latest-project]# docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED        SIZE
pratiksha-latest-project   2      ed9082ccdb3a    16 minutes ago  242MB
pratiksha-latest-project   3      ed9082ccdb3a    16 minutes ago  242MB
pratiksha-latest-project   4      ed9082ccdb3a    16 minutes ago  242MB
pratikshaa01/pratiksha-latest-project   4      ed9082ccdb3a    16 minutes ago  242MB
[root@jenkins pratiksha-latest-project]# docker image push pratikshaa01/pratiksha-latest-project:4
The push refers to repository [docker.io/pratikshaa01/pratiksha-latest-project]
52d14114ef8d1: Pushed
b33ec96f8de6: Pushed
624d0039f7ae: Mounted from redhat/ubi9
4: digest: sha256:a2f5f63f7bf540d328d42491a0aa9756fb3db54505e1ee86b0bd444a1f7edbee size: 949
[root@jenkins pratiksha-latest-project]# |

```



```

root@jenkins pratiksha-latest-project]# docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED        SIZE
pratikshaa01/pratiksha-latest-project  4        ed9082ccdb3a  18 minutes ago  242MB
pratiksha-latest-project                2        ed9082ccdb3a  18 minutes ago  242MB
pratiksha-latest-project                3        ed9082ccdb3a  18 minutes ago  242MB
pratiksha-latest-project                4        ed9082ccdb3a  18 minutes ago  242MB
[root@jenkins pratiksha-latest-project]# docker image tag pratiksha-latest-project:4 pratikshaa01/pratiksha-latest-project:latest
[root@jenkins pratiksha-latest-project]# docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED        SIZE
pratiksha-latest-project    2        ed9082ccdb3a  19 minutes ago  242MB
pratiksha-latest-project    3        ed9082ccdb3a  19 minutes ago  242MB
pratiksha-latest-project    4        ed9082ccdb3a  19 minutes ago  242MB
pratikshaa01/pratiksha-latest-project  4        ed9082ccdb3a  19 minutes ago  242MB
pratikshaa01/pratiksha-latest-project  latest   ed9082ccdb3a  19 minutes ago  242MB
[root@jenkins pratiksha-latest-project]# docker image push pratikshaa01/pratiksha-latest-project:latest
The push refers to repository [docker.io/pratikshaa01/pratiksha-latest-project]
52d1414ef8d1: Layer already exists
b33ec96f8de6: Layer already exists
624d0039f7ae: Layer already exists
latest: digest: sha256:a2f5f63f7bf540d328d42491a0aa9756fb3db54505e1ee86b0bd444a1f7edbee size: 949
[root@jenkins pratiksha-latest-project]#

```

(To avoid this unnecessary storage fire some commands)

Tag	OS	Type	Pulled	Pushed
latest		Image	3 minutes ago	a few seconds ago
4		Image	3 minutes ago	3 minutes ago

[See all](#)

```

root@jenkins:/project-autom  ~  +  ~
-----
- name: Deploying new webapp using last image
  hosts: localhost
  tasks:
    - name: forcefully removing running container
      shell:
        cmd: docker container rm --force webapp
    - name: running a new conatiner with latest image
      shell:
        cmd: docker container run -d --name webapp -p 80:80 pratikshaa01/pratiksha-latest-project

```

```
[root@jenkins project-automation]# ansible-playbook deployment.yml
[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not
match 'all'

PLAY [Deploying new webapp using last image] ****
TASK [Gathering Facts] ****
ok: [localhost]

TASK [forcefully removing running container] ****
changed: [localhost]

TASK [running a new container with latest image] ****
changed: [localhost]

PLAY RECAP ****
localhost : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

[root@jenkins project-automation]# docker container ls
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS
 NAMES
c851ffb7102b      pratiksha01/pratiksha-latest-project   "httpd -DFOREGROUND"   18 seconds ago   Up 17 seconds   0.0.0
.0:80->80/tcp, :::80->80/tcp   webapp
[root@jenkins project-automation]#
```



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Dashboard > pratiksha-latest-project > Configuration

**Configure**

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Command

See [the list of available environment variables](#)

```
sudo docker image build . -t $JOB_NAME:$BUILD_NUMBER
sudo docker image tag $JOB_NAME:$BUILD_NUMBER pratiksha01/$JOB_NAME:$BUILD_NUMBER
sudo docker image push pratiksha01/$JOB_NAME:$BUILD_NUMBER
sudo docker image tag pratiksha01/$JOB_NAME:$BUILD_NUMBER pratiksha01/$JOB_NAME:latest
sudo docker image push pratiksha01/$JOB_NAME:latest
sudo docker image rm pratiksha01/$JOB_NAME:$BUILD_NUMBER
sudo docker image rm $JOB_NAME:$BUILD_NUMBER
sudo ansible-playbook /project-automation/deployment.yml
```

## Tags

This repository contains 9 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	37 minutes ago	a few seconds ago
11		Image	37 minutes ago	a few seconds ago
10		Image	37 minutes ago	20 minutes ago
9		Image	37 minutes ago	28 minutes ago
8		Image	37 minutes ago	28 minutes ago

Dashboard > pratiksha-latest-project > #10 > Console Output

**Console Output**

```

Status
Changes
Console Output
View as plain text
Edit Build Information
Delete build #10
Timings
Git Build Data
← Previous Build

Started by user Pratiksha
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/pratiksha-latest-project
The recommended git tool (is) NONE
No credentials specified
> git rev-parse --git-dir > /var/lib/jenkins/workspace/pratiksha-latest-project/.git # timeout=10
Fetching changes from the remote Bit repository
> git config remote.origin.url https://github.com/pratkshaaa-01/pratiksha-project.git # timeout=10
Fetching upstream changes from https://github.com/pratkshaaa-01/pratiksha-project.git
> git fetch -v --tags --prune --progress -- https://github.com/pratkshaaa-01/pratiksha-project.git +refs/heads/*:refs/remotes/origin/*
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
Checking out Revision 4949e88ca0d1037eae4c41e9027245c360f4 (# refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -B master@{u} 4949e88ca0d1037eae4c41e9027245c360f4 # timeout=10
Commit message: "fix dockerfile"
> git rev-list --no-walk 4949e88ca0d1037eae4c41e9027245c360f4 # timeout=10
[pratiksha-latest-project] $ cd /tmp/jenkins31749307397690393.sh
+ sudo docker image build -t pratiksha-latest-project:10
# Building with 'aufs' instance using docker driver

# [internal] load build definition from Dockerfile
# transferring dockerfile: 1948 done
#1 DONE 0.8s

# [auth] redhat/ubi9:pull token for registry-1.docker.io
#2 DONE 0.8s

#3 [internal] load metadata for docker.io/redhat/ubi9:latest
#3 DONE 0.1s

#4 [internal] load .dockerignore
#4 transferring context: 2B done
#4 DONE 0.0s

#5 [internal] load build context
#5 DONE 0.0s

#6 [internal] load build context
#6 DONE 0.0s

#7 [2/2] RUN yum install httpd -y
#7 CACHED

#8 [3/3] COPY . /var/www/html
#8 CACHED

#9 exporting to image
#9 exporting layers done
#9 writing manifest sha256:ea980800cc0b3a94123998ec7849a26ca59c459f3a36301991678f186db11c1b78 done
#9 naming to docker.io/library/pratiksha-latest-project:10
#9 DONE 0.0s

+ sudo docker image tag pratiksha-latest-project:10 pratikshaam01/pratiksha-latest-project:10
+ sudo docker image push pratikshaam01/pratiksha-latest-project:10
The push refers to a repository [docker.io/pratikshaam01/pratiksha-latest-project]
52e541a4ef84: Preparing
033ac6f8a6: Preparing
024e00397fe: Preparing
033ac6f8a6: Layer already exists
024e00397fe: Layer already exists
024e00397fe: Layer already exists
10: digest: sha256:a2f5637b754bd32bd42491baa9756fb3d545951ee860b0bd4441f7edbe size: 949
+ sudo docker image tag pratikshaam01/pratiksha-latest-project:10 pratikshaam01/pratiksha-latest-project:latest
+ sudo docker image push pratikshaam01/pratiksha-latest-project:latest
The push refers to a repository [docker.io/pratikshaam01/pratiksha-latest-project]
Untagged: pratikshaam01/pratiksha-latest-project:latest
Untagged: pratikshaam01/pratiksha-latest-project:10
Untagged: pratikshaam01/pratiksha-latest-project@sha256:a2f5637b754bd32bd42491baa9756fb3d545951ee860b0bd4441f7edbe

#5 [internal] load build context
#5 CACHED

#6 [3/3] COPY . /var/www/html
#6 CACHED

#7 CACHED

#8 [2/2] RUN yum install httpd -y
#8 CACHED

#9 writing manifest sha256:ea980800cc0b3a94123998ec7849a26ca59c459f3a36301991678f186db11c1b78 done
#9 naming to docker.io/library/pratiksha-latest-project:10
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Untagged: pratikshaam01/pratiksha-latest-project@sha256:a2f5637b754bd32bd42491baa9756fb3d545951ee860b0bd4441f7edbe

#5 [internal] load build context
#5 CACHED

#6 [3/3] COPY . /var/www/html
#6 CACHED

#7 CACHED

#8 [2/2] RUN yum install httpd -y
#8 CACHED

#9 writing manifest sha256:ea980800cc0b3a94123998ec7849a26ca59c459f3a36301991678f186db11c1b78 done
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Untagged: pratikshaam01/pratiksha-latest-project@sha256:a2f5637b754bd32bd42491baa9756fb3d545951ee860b0bd4441f7edbe

#5 [internal] load build context
#5 CACHED
```

[You can check project on: <https://github.com/pratkshaaa-01/pratiksha-project.git>]

## Project Done By-Pratiksha