

## Capstone project

<https://github.com/Manikandan16497/devops-build.git>

54.145.91.173 -deploy site url

### 1. Git:

```
ubuntu@ip-172-31-44-192:~$ git --version
git version 2.34.1
```

```
git clone https://github.com/sriram-R-krishnan/devops-build
Cloning into 'devops-build'...
remote: Enumerating objects: 21, done.
remote: Total 21 (delta 0), reused 0 (delta 0), pack-reused 21 (from 1)
Receiving objects: 100% (21/21), 720.09 KiB | 13.59 MiB/s, done.
ubuntu@ip-172-31-44-192:~$
```

### 2. Docker:

```
ubuntu@ip-172-31-44-192:~$ sudo usermod -aG docker ubuntu
ubuntu@ip-172-31-44-192:~$ sudo systemctl start docker
ubuntu@ip-172-31-44-192:~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2024-08-19 02:07:07 UTC; 53s ago
     TriggeredBy: ● docker.socket
       Docs: https://docs.docker.com
      Main PID: 6767 (dockerd)
         Tasks: 8
        Memory: 45.8M
          CPU: 336ms
         CGroup: /system.slice/docker.service
                 └─6767 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock
```

### 3. Dockerfile:

```
FROM nginx:latest
WORKDIR /usr/share/nginx/html
COPY build/ .
EXPOSE 80
CMD ["nginx", "-g", "daemon off;"]
```



dev

devops-build / dockerfile



Manikandan16497 add all files

Code

Blame

Executable File · 7 lines (5 loc) · 109 Bytes



Code 55% faster with GitHub Copilot

```
1 FROM nginx:latest
2 WORKDIR /usr/share/nginx/html
3 COPY build/ .
4 EXPOSE 80
5 CMD ["nginx", "-g", "daemon off;"]
```

```
ubuntu@ip-172-31-44-192:~/devops-build$ vi dockerfile
ubuntu@ip-172-31-44-192:~/devops-build$ docker build -t nginximage .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/

Sending build context to Docker daemon  3.415MB
Step 1/5 : FROM nginx:latest
----> 5ef79149e0ec
Step 2/5 : WORKDIR /usr/share/nginx/html
----> Using cache
----> a722a093cf94
Step 3/5 : COPY build/ .
----> Using cache
----> 286636862b6a
Step 4/5 : EXPOSE 80
----> Using cache
----> 0817539628ca
Step 5/5 : CMD ["nginx", "-g", "daemon off;"]
----> Using cache
----> 4a739ed56028
Successfully built 4a739ed56028
Successfully tagged nginximage:latest
ubuntu@ip-172-31-44-192:~/devops-build$
```

```
ubuntu@ip-172-31-44-192:~/devops-build$ docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
nginximage          latest             4a739ed56028       8 hours ago        190MB
```

```
ubuntu@ip-172-31-44-192:~/devops-build$ docker run -d --name nignxcontainer -p 80:80 nginximage
a37f692768dc215436bd7422f001e02626aed0a83937b66a6e765d5b6791f957
ubuntu@ip-172-31-44-192:~/devops-build$ docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS    PORTS                               NAMES
a37f692768dc   nginximage "/docker-entrypoint..." 6 seconds ago    Up 4 seconds    0.0.0.0:80->80/tcp, :::80->80/tcp    nignxcontainer
ubuntu@ip-172-31-44-192:~/devops-build$
```

## Inbound rules (3)



Manage tags

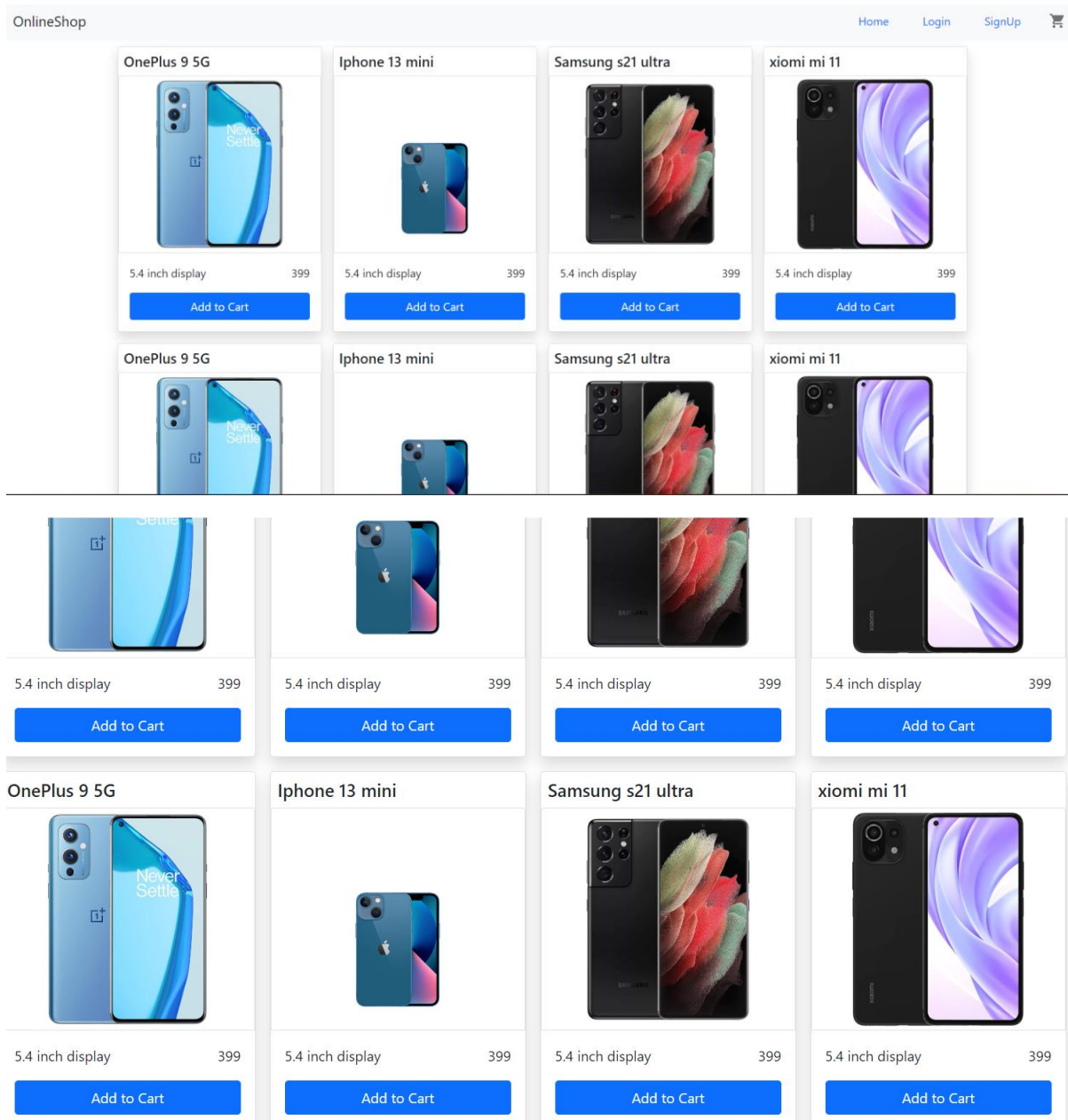
Edit inbound rules

Q Search

&lt; 1 &gt; ⚙

<input type="checkbox"/>	Name	Security group rule...	IP version	Type	Protocol	Port range
<input type="checkbox"/>	-	sgr-0e2325e368e07c4...	IPv4	SSH	TCP	22
<input type="checkbox"/>	-	sgr-0ab465c6fe63d4460	IPv4	Custom TCP	TCP	8080
<input type="checkbox"/>	-	sgr-0998beb3ce4cb14b1	IPv4	HTTP	TCP	80

#### 4. Deploy site:



#### 5. Docker compose:

```
ubuntu@ip-172-31-44-192:~$ docker-compose --version
docker-compose version 1.29.2, build 5becea4c
```

```
version: '3'

services:
  webcontainer:
    image: nginximage
    ports:
      - "8000:80"
```



dev

devops-build / docker-compose.yaml



Manikandan16497 add all files

Code

Blame

Executable File · 8 lines (6 loc) · 85 Bytes



Code 55% faster with GitHub Copilot

```
1  version: '3'
2
3  services:
4    webcontainer:
5      image: nginximage
6      ports:
7        - "8000:80"
```

```
ubuntu@ip-172-31-44-192:~/devops-build$ docker-compose up -d
Recreating devops-build_webcontainer_1 ... done
ubuntu@ip-172-31-44-192:~/devops-build$
```

```
ubuntu@ip-172-31-44-192:~/devops-build$ docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS    PORTS                               NAMES
ec36d805b306   nginximage "/docker-entrypoint..." About a minute ago    Up About a minute    0.0.0.0:8000->80/tcp, :::8000->80/tcp    devops-build_webcontainer_1
```

## 6. Build.sh:

```
#!/bin/bash
#build the docker image
docker build -t nginximage .
```



dev

devops-build / build.sh



Manikandan16497 Update build.sh ✓

Code

Blame

Executable File · 4 lines (3 loc) · 66 Bytes



Code 55% faster with GitHub Copilot

```
1  #!/bin/bash
2  #build the docker image
3  docker build -t nginximage .
```

```

ubuntu@ip-172-31-44-192:~/devops-build$ vi build.sh
ubuntu@ip-172-31-44-192:~/devops-build$ chmod 777 build.sh
ubuntu@ip-172-31-44-192:~/devops-build$ ./build.sh
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
             Install the buildx component to build images with BuildKit:
             https://docs.docker.com/go/buildx/

Sending build context to Docker daemon  3.417MB
Step 1/5 : FROM nginx:latest
----> 5ef79149e0ec
Step 2/5 : WORKDIR /usr/share/nginx/html
----> Using cache
----> a722a093cf94
Step 3/5 : COPY build/ .
----> Using cache
----> 286636862b6a
Step 4/5 : EXPOSE 80
----> Using cache
----> 0817539628ca
Step 5/5 : CMD ["nginx", "-g", "daemon off;"]
----> Using cache
----> 4a739ed56028
Successfully built 4a739ed56028
Successfully tagged nginximage:latest
ubuntu@ip-172-31-44-192:~/devops-build$

```

```

ubuntu@ip-172-31-44-192:~/devops-build$ docker images
REPOSITORY      TAG          IMAGE ID       CREATED        SIZE
nginximage      latest       4a739ed56028   8 hours ago    190MB

```

```

ubuntu@ip-172-31-44-192:~/devops-build$ docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS                               NAMES
cc36d805b306   nginximage "/docker-entrypoint..." 5 minutes ago    Up 5 minutes    0.0.0.0:8000->80/tcp, :::8000->80/tcp    devops-build-webcontainer_1
a37f692768dc   nginximage "/docker-entrypoint..." 13 minutes ago   Up 13 minutes    0.0.0.0:80->80/tcp, :::80->80/tcp        nginxcontainer

```

## 7. Deploy.sh:

```

ubuntu@ip-172-31-44-192:~/devops-build$ ls
Jenkinsfile  build  build.sh  deploy.sh  docker-compose.yaml  dockerfile

```

 dev  devops-build / deploy.sh 

 Manikandan16497 Update deploy.sh 

Code Blame Executable File · 16 lines (14 loc) · 451 Bytes  Code 55% faster with GitHub Copilot


```

1  #!/bin/bash
2  docker login -u amanikandan16497 -p dckr_pat_mG3VxBw0kBY3rMgv6Co4GkL0xFg
3  if [ $GIT_BRANCH = "dev" ]; then
4      # Build your project
5      sh 'chmod +x build.sh'
6      sh './build.sh'
7      docker tag nginximage amanikandan16497/dev
8      docker push amanikandan16497/dev
9
10 elif [ $GIT_BRANCH = "master" ]; then
11     sh 'chmod +x build.sh'
12     sh './build.sh'
13     docker tag nginximage amanikandan16497/prod
14     docker push amanikandan16497/prod
15 fi


```

## 8. Create repo in git:


```
/home/ubuntu/capstone/devops-build
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ cd ../../
ubuntu@ip-172-31-44-192:~$ l
capstone/ devops-build/ devops-build-old/ final--capstoneproject/
ubuntu@ip-172-31-44-192:~$ cd project/
ubuntu@ip-172-31-44-192:~/project$ l
Jenkinsfile* build.sh* deploy.sh* docker-compose.yaml* dockerfile*
ubuntu@ip-172-31-44-192:~/project$ cp -pR Jenkinsfile build.sh d
deploy.sh
docker-compose.yaml dockerfile
ubuntu@ip-172-31-44-192:~/project$ cp -pR Jenkinsfile build.sh deploy.sh docker-compose.yaml dockerfile /home/ubuntu/capstone/devops-build
ubuntu@ip-172-31-44-192:~$ l
capstone/ devops-build/ devops-build-old/ final--capstoneproject/
ubuntu@ip-172-31-44-192:~$ cd capstone/devops-build/
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ l
Jenkinsfile* build/ build.sh* deploy.sh* docker-compose.yaml* dockerfile*
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ git add .
Command 'git' not found, but can be installed with:
sudo apt install git
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ git add .
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ git commit -m "add all files"
[main 23cd6f5] add all files
5 files changed, 73 insertions(+)
create mode 100755 Jenkinsfile
create mode 100755 build.sh
create mode 100755 deploy.sh
create mode 100755 docker-compose.yaml
create mode 100755 dockerfile
ubuntu@ip-172-31-44-192:~/capstone/devops-build$
```







 **devops-build** Public Pin Watch 0


forked from [sriram-R-krishnan/devops-build](#)

 dev 2 Branches 0 Tags  t Add file Code

This branch is 2 commits ahead of [sriram-R-krishnan/devops-build:main](#) Contribute Sync fork

 **Manikandan16497** add all files f8312dc · 8 minutes ago 3 Commits

 build	Add files via upload	7 months ago
 Jenkinsfile	add all files	33 minutes ago
 build.sh	add all files	33 minutes ago
 deploy.sh	add all files	8 minutes ago
 docker-compose.yaml	add all files	33 minutes ago
 dockerfile	add all files	33 minutes ago

 [README](#)

## 9. Create 2 branches in git:

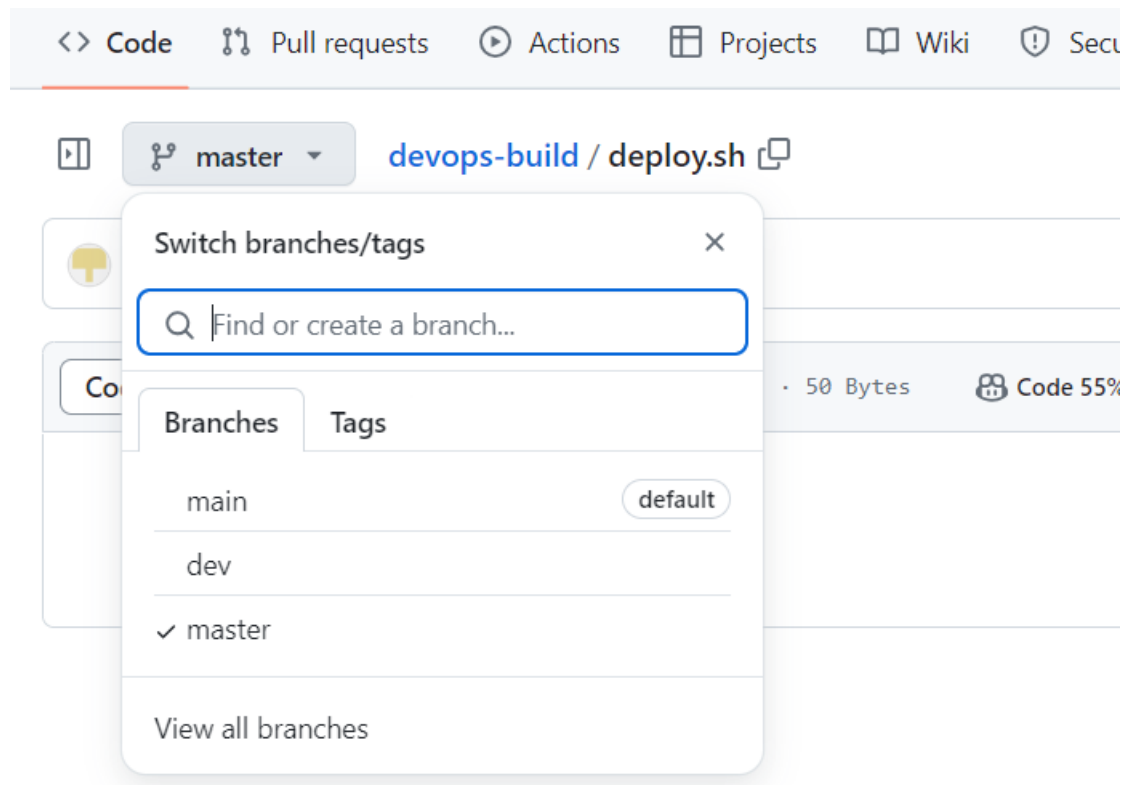
```
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ git branch
* dev
main
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ git branch master
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ git checkout master
Switched to branch 'master'
```

```
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ git branch
dev
main
* master
```

```

ubuntu@ip-172-31-44-192:~/capstone/devops-build$ git branch
  dev
  main
* master
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ git push origin master
Username for 'https://github.com': Manikandan16497
Password for 'https://Manikandan16497@github.com':
Enumerating objects: 11, done.
Counting objects: 100% (11/11), done.
Compressing objects: 100% (10/10), done.
Writing objects: 100% (10/10), 1.43 KiB | 487.00 KiB/s, done.
Total 10 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), done.
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:   https://github.com/Manikandan16497/devops-build/pull/new/master
remote:
To https://github.com/Manikandan16497/devops-build.git
 * [new branch]      master -> master
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ git merge dev
Already up to date.

```



## 10. Jenkins:

```

ubuntu@ip-172-31-44-192:~$ sudo systemctl start jenkins
ubuntu@ip-172-31-44-192:~$ sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/lib/systemd/system/jenkins.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2024-08-19 01:56:30 UTC; 1min 10s ago
     Main PID: 5109 (java)
       Tasks: 37 (limit: 1120)
      Memory: 321.4M
         CPU: 18.102s
    CGroup: /system.slice/jenkins.service
            └─5109 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

```

```

ubuntu@ip-172-31-44-192:~/devops-build$ vi Jenkinsfile

```



dev

devops-build / Jenkinsfile



Manikandan16497 add all files

Code

Blame

Executable File · 38 lines (33 loc) · 955 Bytes



Code 55% faster with GitHub Copilot

```
1  pipeline {
2      agent any
3
4      stages {
5          stage('changing file permission') {
6              steps {
7                  sh 'chmod +x build.sh'
8                  sh 'chmod +x deploy.sh'
9              }
10         }
11
12         stage('Build') {
13             steps {
14                 script {
15                     // Build Docker image using build script file
16                     sh './build.sh'
17                 }
18             }
19         }
20
21         stage('Login') {
22             steps {
23                 withCredentials([usernamePassword(credentialsId: 'docker-password-id', passwordVariable: 'DOCKER_PASSWORD', usernameVariable: 'DOCKER_USERNAME')]) {
24                     sh 'echo $DOCKER_PASSWORD | docker login -u $DOCKER_USERNAME --password-stdin'
25                 }
26             }
27         }
28         stage('Deploy') {
29             steps {
30                 script {
31                     sh './deploy.sh'
32                 }
33             }
34         }
35     }
36 }
```



# Unlock Jenkins

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
```

Please copy the password from either location and paste it below.

Administrator password

Continue

# Create First Admin User

Username

Password

Confirm password

Full name

E-mail address

# Instance Configuration

Jenkins URL:

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 2.462.1

Not now

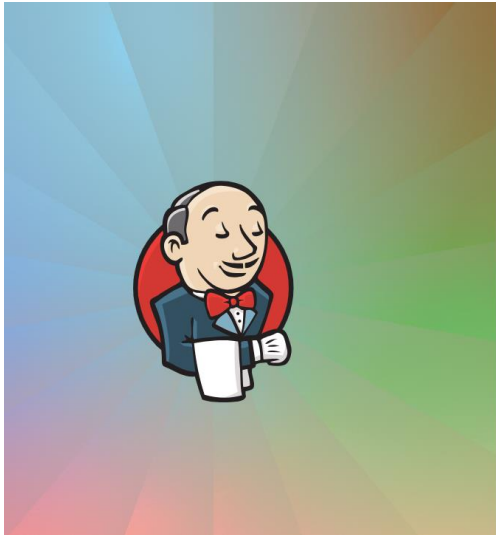
Save and Finish

## Getting Started

# Jenkins is ready!

Your Jenkins setup is complete.

Start using Jenkins



## Sign in to Jenkins

Username

admin

Password

.....

☐ Keep me signed in

Sign in

### Plugins

- Updates
- Available plugins
- Installed plugins
- Advanced settings
- Download progress**

### Download progress

Preparation	<ul style="list-style-type: none"><li>Checking internet connectivity</li><li>Checking update center connectivity</li><li>Success</li></ul>
Cloud Statistics	Success
Authentication Tokens API	Success
Docker Commons	Success
Apache HttpComponents Client 5.x API	Success
Docker API	Success
Docker	Success
Loading plugin extensions	Success

- [Go back to the top page](#)  
(you can start using the installed plugins right away)
- ☐ Restart Jenkins when installation is complete and no jobs are running

11. Add credentials for docker:

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

New credentials

Kind

Username with password

Scope ?

Global (Jenkins, nodes, items, all child items, etc)

Username ?

amanikandan16497

☐ Treat username as secret ?

Password ?

.....

Password ?

.....

ID ?

docker-password-id

Description ?



dockercredentials

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
 docker-password-id	amanikandan16497/***** (dockercredentials)	Username with password	dockercredentials 

Icon: S M L

## New Item

Enter an item name

capstone

Select an item type



### Freestyle project

Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.



### Pipeline

Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.



### Multi-configuration project

Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.



### Folder

OK

## Configuration :

Dashboard > capstone > Configuration

General

Enabled

Configure

General

Advanced Project Options

Pipeline

Description

capstone project

Plain text [Preview](#)

☐ Discard old builds ?

☐ Do not allow concurrent builds

☐ Do not allow the pipeline to resume if the controller restarts

☒ GitHub project

Project url ?

https://github.com/Manikandan16497/devops-build.git

SCM ?

Git

Repositories ?

Repository URL ?

https://github.com/Manikandan16497/devops-build.git

Credentials ?

amanikandan16497/\*\*\*\*\* (dockercredentials)

+ Add

Advanced

Branches to build ?

Branch Specifier (blank for 'any') ?

\*/dev

Add Branch

Repository browser ?

(Auto)

Additional Behaviours


Add ▾

cript Path ?

Jenkinsfile

Dashboard > capstone >

 Status

 Changes


 Build Now

 Configure

 Delete Pipeline

 GitHub

 Stages

 Rename

 Pipeline Syntax

 capstone

capstone project

## Permalinks

- [Last build \(#11\), 14 hr ago](#)
- [Last stable build \(#11\), 14 hr ago](#)
- [Last successful build \(#11\), 14 hr ago](#)
- [Last failed build \(#1\), 16 hr ago](#)
- [Last unsuccessful build \(#1\), 16 hr ago](#)
- [Last completed build \(#11\), 14 hr ago](#)



Build History

trend ▾

🔍 Filter...

/

 #12

| [Aug 20, 2024, 6:14 AM](#)

## 12. Create dev repo in docker:

### Create repository

Namespace  
amanikandan16497

Repository Name \*  
dev



Short description  
project

A short description to identify your repository. If the repository is public, this description is used to index your content on Docker Hub and in search engines, and is visible to users in search results.

#### Visibility

Using 0 of 1 private repositories. [Get more](#)

☒ Public   
Appears in Docker Hub search results

☐ Private   
Only visible to you

Cancel

Create

[Repositories](#) / [Create](#)

### Create repository

Namespace  
amanikandan16497

Repository Name \*  
prod

Short description  
project1

A short description to identify your repository. If the repository is public, this description is used to index your content on Docker Hub and in search engines, and is visible to users in search results.

#### Visibility

Using 0 of 1 private repositories. [Get more](#)

☐ Public   
Appears in Docker Hub search results

☒ Private   
Only visible to you

Cancel

Create

amanikandan16497

Search by repository name



All Content

amanikandan16497 / dev

Contains: No content • Created: 1 minute ago

amanikandan16497 / prod

Contains: No content • Created: less than a minute ago

amanikandan16497 / dev

Contains: No content • Created: 15 minutes ago

### 13. Webhook in github:

General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Rules

Actions

Webhooks

Environments

Codespaces

Pages

Security

Code security and analysis

Deploy keys

General

Repository name

devops-build

Rename

Template repository

Require contributors to sign off on web-based commits

Default branch

main

Social preview

Webhooks / Manage webhook

Settings

Recent Deliveries

We'll send a POST request to the URL below with details of any subscribed events. You can also specify which data format you'd like to receive (JSON, x-www-form-urlencoded, etc). More information can be found in our [developer documentation](#).

Payload URL \*

http://3.90.52.173:8080/github-webhook/

Content type \*

application/x-www-form-urlencoded

Secret

SSL verification

By default, we verify SSL certificates when delivering payloads.

Enable SSL verification

Disable (not recommended)

Webhooks / Manage webhook

Settings

Recent Deliveries

cf457240-5e34-11ef-8e5c-ec6a55e4103c

ping

redelivery

2024-08-19 19:41:47



#### 14. Multi branch pipeline:

#### 15. Add credentials for github:

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

## New credentials

Kind

Username with password

Scope ?

Global (Jenkins, nodes, items, all child items, etc)

Username ?

Manikandan16497

☐ Treat username as secret ?

Password ?

.....

ID ?

Create





#### 2 credentials added for docker and github

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
 docker-password-id	amanikandan16497/***** (dockercredentials)	Username with password	dockercredentials 
 cce66440-623f-4622-9cec-b808209020a4	Manikandan16497/*****	Username with password	

Icon: S M L

Enter an item name

multibranch

Select an item type



#### Freestyle project

Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.



#### Pipeline

Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.



#### Multi-configuration project

Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.



#### Folder

Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.



#### Multibranch Pipeline

Creates a set of Pipeline projects according to detected branches in one SCM repository.

OK

## 16. Multibranch configuration:

Dashboard > multibranch > Configuration



Orphaned Item Strategy



Appearance



Health metrics



Properties

Plain text [Preview](#)

#### Branch Sources

##### GitHub

Credentials ?

Manikandan16497/\*\*\*\*\*

+ Add

##### Repository HTTPS URL

Repository HTTPS URL ?

https://github.com/Manikandan16497/devops-build.git

Dashboard >

+ New Item

Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

My Views

All

+

Add description

S	W	Name	Last Success	Last Failure	Last Duration	
✓	☀	capstone	9 hr 54 min <a href="#">#11</a>	12 hr <a href="#">#1</a>	4.9 sec	▶
📱	☀	project	1 min 12 sec <a href="#">log</a>	N/A	2.8 sec	▶

17. Changes in dev branch:

Dashboard > project > Scan Repository

Status

Configure

Scan Repository Now

Scan Repository Log

View as plain text

Multibranch Pipeline Events

Delete Multibranch Pipeline

Build History

Project Relationship

Check File Fingerprint

GitHub

Rename


Pipeline Syntax

Credentials

✓ Scan Repository Log

Started by user [admin](#)  
[Tue Aug 20 02:05:15 UTC 2024] Starting branch indexing...  
02:05:16 Connecting to <https://api.github.com> using Manikandan16497/\*\*\*\*\*  
Examining [Manikandan16497/devops-build](#)  
  
Checking branches...  
  
Getting remote branches...  
  
Checking branch [main](#)  
  
Getting remote pull requests...  
    'Jenkinsfile' not found  
    Does not meet criteria  
  
Checking branch [dev](#)  
    'Jenkinsfile' found  
    Met criteria  
Changes detected: dev (89496c93db7237fbc5f475b1c3a050dab0967898 → 207dbcc199f4397532e5e52ba7d0385b6e966d83)  
Scheduled build for branch: dev  
  
Checking branch [master](#)  
    'Jenkinsfile' found  
    Met criteria  
  
Checking branch [dev](#)  
    'Jenkinsfile' found  
    Met criteria  
Changes detected: dev (89496c93db7237fbc5f475b1c3a050dab0967898 → 207dbcc199f4397532e5e52ba7d0385b6e966d83)  
Scheduled build for branch: dev  
  
Checking branch [master](#)  
    'Jenkinsfile' found  
    Met criteria  
No changes detected: master (still at 55b5005a6000a5860525002201d31254e076a565)  
  
3 branches were processed  
  
Checking pull-requests...  
  
0 pull requests were processed  
  
Finished examining Manikandan16497/devops-build  
  
[Tue Aug 20 02:05:16 UTC 2024] Finished branch indexing. Indexing took 0.91 sec  
Finished: SUCCESS

## 18. Docker hub images: [ change in dev repo]

 Explore **Repositories** Organizations

amanikandan16497

Search by repository name

All Content

Create repository

amanikandan16497 / dev

Contains: Image • Last pushed: 1 minute ago

☆ 0

↓ 1

Public

Scout inactive

amanikandan16497 / prod


Contains: Image • Last pushed: 7 minutes ago

☆ 0

↓ 0

Private

Scout inactive

 Explore **Repositories** Organizations

amanikandan16497 / [Repositories](#) / [dev](#) / [General](#)

**General** Tags Builds Collaborators Webhooks Settings

### amanikandan16497/dev

Updated 3 minutes ago

project

This repository does not have a category *INCOMPLETE*

### Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	9 minutes ago	3 minutes ago

amanikandan16497 / [Repositories](#) / [dev](#) / [Tags](#)

Using 1 of 1 private repositories.

General **Tags** Builds Collaborators Webhooks Settings

☐ Sort by **Newest** Filter Tags

TAG

latest

Last pushed 5 minutes ago by amanikandan16497

docker pull amanikandan16497/dev:latest

Copy

Digest	OS/ARCH	Last pull	Compressed Size
224d6df9af16	linux/amd64	11 minutes ago	68.42 MB



## amanikandan16497/dev:latest

MANIFEST DIGEST [sha256:224d6df9af162babaeb7e2536f2c94cf702144045ccfe00195c5ff6aeee901a5](#)



OS/ARCH  
linux/amd64

COMPRESSED SIZE ⓘ  
68.42 MB

LAST PUSHED  
5 minutes ago by [amanikandan16497](#)

TYPE  
Image

MANIFEST DIGEST  
[sha256:224d6df9...](#)



## 19. Changes in master branch:

### Multibranch Pipeline Events

```
[Tue Aug 20 02:14:56 UTC 2024] Received Push event to branch master in repository Manikandan16497/devops-build UPDATED event from 140.82.115.25 =>
http://34.230.65.140:8080/github-webhook/ with timestamp Tue Aug 20 02:14:51 UTC 2024
02:14:56 Connecting to https://api.github.com using Manikandan16497/*****
Examining Manikandan16497/devops-build

Checking branches...

Getting remote branch master...

Checking branch master

Getting remote pull requests from branch master...
'Jenkinsfile' found
Met criteria
Changes detected: master (55b5005a6000a5860525002201d31254e076a565 -> 2fb37ec831de8c1fc7463405b85d0d65cb003cc4)
Scheduled build for branch: master

1 branches were processed (query completed)

1 branches were processed

Finished examining Manikandan16497/devops-build
```

```
[Tue Aug 20 02:14:57 UTC 2024] Push event to branch master in repository Manikandan16497/devops-build UPDATED event from 140.82.115.25 =>
http://34.230.65.140:8080/github-webhook/ with timestamp Tue Aug 20 02:14:51 UTC 2024 processed in 0.64 sec
[Tue Aug 20 02:18:38 UTC 2024] Received Push event to branch master in repository Manikandan16497/devops-build UPDATED event from 140.82.115.250 =>
http://34.230.65.140:8080/github-webhook/ with timestamp Tue Aug 20 02:18:33 UTC 2024
02:18:39 Connecting to https://api.github.com using Manikandan16497/*****
Examining Manikandan16497/devops-build

Checking branches...

Getting remote branch master...

Checking branch master

Getting remote pull requests from branch master...
'Jenkinsfile' found
Met criteria
Changes detected: master (2fb37ec831de8c1fc7463405b85d0d65cb003cc4 -> c985643830ba8c0ac4f91f52d574925ab94bf2b4)
Scheduled build for branch: master

1 branches were processed (query completed)

1 branches were processed

Finished examining Manikandan16497/devops-build

[Tue Aug 20 02:18:39 UTC 2024] Push event to branch master in repository Manikandan16497/devops-build UPDATED event from 140.82.115.250 =>
http://34.230.65.140:8080/github-webhook/ with timestamp Tue Aug 20 02:18:33 UTC 2024 processed in 0.59 sec
```

```
Checking branches...

Getting remote branch master...

Checking branch master

Getting remote pull requests from branch master...
  'Jenkinsfile' found
  Met criteria
Changes detected: master (c985643830ba8c0ac4f91f52d574925ab94bf2b4 → e7e9da1eeb4b43a162d001a1460a69ef4a9595d9)
Scheduled build for branch: master

1 branches were processed (query completed)

1 branches were processed

Finished examining Manikandan16497/devops-build

[Tue Aug 20 02:20:58 UTC 2024] Push event to branch master in repository Manikandan16497/devops-build UPDATED event from 140.82.115.88 ⇒
http://34.230.65.140:8080/github-webhook/ with timestamp Tue Aug 20 02:20:53 UTC 2024 processed in 0.66 sec
```

## 20. Docker hub images: [ change in prod repo]

amanikandan16497

Search by repository name

All Content

amanikandan16497 / prod

Contains: Image • Last pushed: 6 minutes ago

General

Tags

Builds

Collaborators

Webhooks

Settings

amanikandan16497/prod

Updated 5 minutes ago

project1

This repository does not have a category

### Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	---	5 minutes ago

[See all](#)

amanikandan16497 / [Repositories](#) / [prod](#) / [Tags](#)

Using 1 of 1 private repositories.

General **Tags** Builds Collaborators Webhooks Settings

☐ Sort by

Newest

Filter Tags

Q

Delete

TAG

latest


Last pushed 6 minutes ago by amanikandan16497

docker pull amanikandan16497/prod:latest

Copy

Digest	OS/ARCH	Last pull	Compressed Size
224d6df9af16	linux/amd64	---	68.42 MB

amanikandan16497 / [Repositories](#) / [prod](#) / latest




**amanikandan16497/prod:latest**

MANIFEST DIGEST sha256:224d6df9af162babaeb7e2536f2c94cf702144045ccfe00195c5ff6aeee901a5

OS/ARCH	COMPRESSED SIZE	LAST PUSHED	TYPE	MANIFEST DIGEST
linux/amd64	68.42 MB	6 minutes ago by amanikandan16497	Image	sha256:224d6df9...


21. Github page:

 **devops-build** Public

forked from [sriram-R-krishnan/devops-build](#)

🌟 Pin

👁 Watch 0

 **master** had recent pushes 27 minutes ago

Compare & pull request

🔗 dev

🌿 3 Branches

🏷 0 Tags

🔍 Go to file

t


Add file

<> Code

This branch is 11 commits ahead of [sriram-R-krishnan/devops-build:main](#) .

🔗 Contribute

🔄 Sync fork

 **Manikandan16497**

Update build.sh ✓

207dbcc · 45 minutes ago

🕒 12 Commits

📁 build	Add files via upload	7 months ago
📄 Jenkinsfile	add all files	14 hours ago
📄 build.sh	Update build.sh	45 minutes ago
📄 deploy.sh	Update deploy.sh	11 hours ago
📄 docker-compose.yml	add all files	14 hours ago
📄 dockerfile	add all files	14 hours ago

master had recent pushes 28 minutes ago

Compare & pull request

master 3 Branches 0 Tags

Go to file

Add file

Code

This branch is 10 commits ahead of sriram-R-krishnan/devops-build:main

Contribute

Sync fork

Manikandan16497 Update build.sh

e7e9da1 · 28 minutes ago 11 Commits

build	Add files via upload	7 months ago
Jenkinsfile	add all files	14 hours ago
build.sh	Update build.sh	28 minutes ago
deploy.sh	Update deploy.sh	11 hours ago
docker-compose.yaml	add all files	14 hours ago
dockerfile	add all files	14 hours ago

## 22. Ec2 console:

Instances (1/3) Info									
Find Instance by attribute or tag (case-sensitive)									
	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP	
<input type="checkbox"/>	Jenkins	i-0c54a644edc979232	Stopped	t2.micro	-	View alarms +	us-east-1c	-	
<input checked="" type="checkbox"/>	project	i-0e104cd4c9fb914c5	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1c	ec2-34-231	
<input type="checkbox"/>	capstone	i-037fe2591c8e54fea	Stopped	t2.micro	-	View alarms +	us-east-1a	-	

## 23. Security groups:

Inbound rules (6)

Manage tags

Edit inbound rules

Q

Search

<

1

>

<input type="checkbox"/>	Name	Security group rule...	IP version	Type	Protocol	Port range
<input type="checkbox"/>	-	sgr-0e2325e368e07c4...	IPv4	SSH	TCP	22
<input type="checkbox"/>	-	sgr-0380e13cf1a46973a	IPv4	Custom TCP	TCP	9090
<input type="checkbox"/>	-	sgr-0b8d0c2ad2952f491	IPv4	Custom TCP	TCP	3000
<input type="checkbox"/>	-	sgr-0ab465c6fe63d4460	IPv4	Custom TCP	TCP	8080
<input type="checkbox"/>	-	sgr-08aff1cd5e7383d06	IPv4	Custom TCP	TCP	9100
<input type="checkbox"/>	-	sgr-0998beb3ce4cb14b1	IPv4	HTTP	TCP	80



## 24. Prometheus:

```
chown -R prometheus:prometheus /etc/prometheus/consoles
chown -R prometheus:prometheus /etc/prometheus/console_libraries

# setup systemd
echo '[Unit]
Description=Prometheus
Wants=network-online.target
After=network-online.target

[Service]
User=prometheus
Group=prometheus
Type=simple
ExecStart=/usr/local/bin/prometheus \
    --config.file /etc/prometheus/prometheus.yml \
    --storage.tsdb.path /var/lib/prometheus/ \
    --web.console.templates=/etc/prometheus/consoles \
    --web.console.libraries=/etc/prometheus/console_libraries

[Install]
WantedBy=multi-user.target' > /etc/systemd/system/prometheus.service

systemctl daemon-reload
systemctl enable prometheus
systemctl start prometheus
```

```
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ systemctl status prometheus
● prometheus.service - Prometheus
   Loaded: loaded (/etc/systemd/system/prometheus.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2024-08-20 02:33:18 UTC; 45s ago
     Main PID: 2819 (prometheus)
        Tasks: 5 (limit: 1120)
      Memory: 61.1M
         CPU: 130ms
    CGroup: /system.slice/prometheus.service
            └─2819 /usr/local/bin/prometheus --config.file /etc/prometheus/prometheus.yml --storage.tsdb.pa
```



Prometheus

[Alerts](#) [Graph](#) [Status](#) [Help](#)

☐ Use local time ☐ Enable query history ☒ Enable autocomplete ☒ Enable highlighting ☒ Enable linter



Expression (press Shift+Enter for newlines)

Table

[Graph](#)



Evaluation time



No data queried yet

Add Panel

## 25. Node exporter:

```
Wants=network-online.target
After=network-online.target

[Service]
User=node_exporter
Group=node_exporter
Type=simple
ExecStart=/usr/local/bin/node_exporter

[Install]
WantedBy=multi-user.target' > /etc/systemd/system/node_exporter.service

# enable node_exporter in systemctl
systemctl daemon-reload
systemctl start node_exporter
systemctl enable node_exporter

echo "Setup complete.
Add the following lines to /etc/prometheus/prometheus.yml:

- job_name: 'node_exporter'
  scrape_interval: 5s
  static_configs:
    - targets: ['localhost:9100']

"
```

```
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ sudo systemctl status node_exporter
● node_exporter.service - Node Exporter
   Loaded: loaded (/etc/systemd/system/node_exporter.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2024-08-20 02:37:10 UTC; 48s ago
     Main PID: 2892 (node_exporter)
        Tasks: 3 (limit: 1120)
       Memory: 2.0M
          CPU: 7ms
      CGroup: /system.slice/node_exporter.service
              └─2892 /usr/local/bin/node_exporter
```

# Node Exporter

## Prometheus Node Exporter

Version: (version=1.8.1, branch=HEAD, revision=400c3979931613db930ea035f39ce7b377cdbb5b)

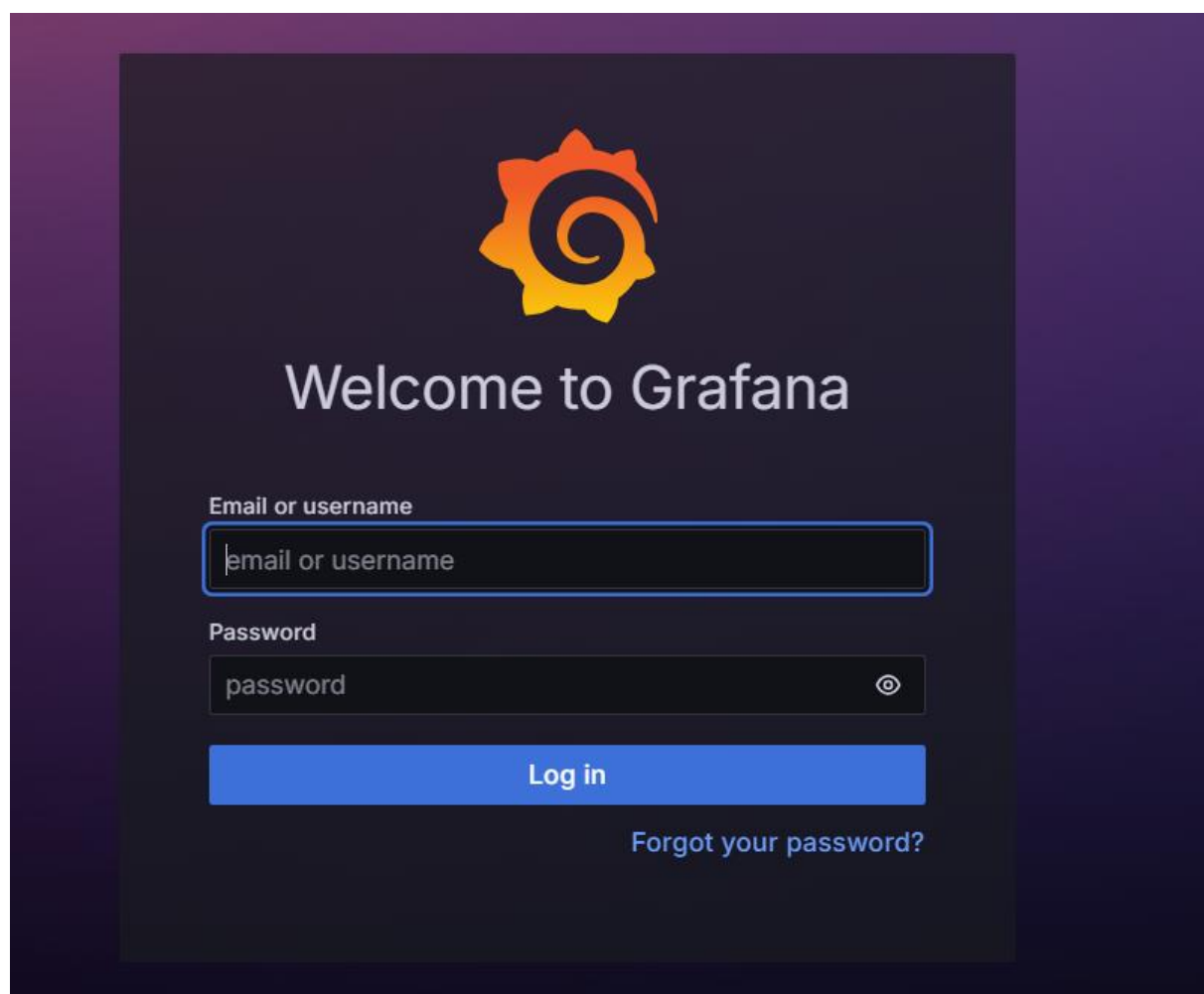
- [Metrics](#)

## 26. Grafana:

```
#!/bin/bash
echo 'deb https://packages.grafana.com/oss/deb stable main' >> /etc/apt/sources.list
curl https://packages.grafana.com/gpg.key | sudo apt-key add -
sudo apt-get update
sudo apt-get -y install grafana

systemctl daemon-reload
systemctl start grafana-server
systemctl enable grafana-server.service
```

```
ubuntu@ip-172-31-44-192:~/capstone/devops-build$ sudo systemctl status grafana-server
● grafana-server.service - Grafana instance
   Loaded: loaded (/lib/systemd/system/grafana-server.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2024-08-20 04:18:09 UTC; 1min 40s ago
     Docs: http://docs.grafana.org
   Main PID: 2958 (grafana)
    Tasks: 8 (limit: 1120)
   Memory: 177.3M
      CPU: 3.196s
   CGroup: /system.slice/grafana-server.service
           └─2958 /usr/share/grafana/bin/grafana server --config=/etc/grafana/grafana.ini --pidfile=/run/grafa
```



Home > Connections > Add new connection > Prometheus

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Prometheus

Open source time series database & alerting

Learn more

OverviewVersion history

Prometheus Data Source - Native Plugin

Grafana ships with built in support for Prometheus, the open-source service monitoring system and time series database.

Read more about it here:

http://docs.grafana.org/datasources/prometheus/

FromGrafana LabsSignatureCore

Home > Connections > Data sources > prometheus

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Name ⓘprometheusDefault🔴

Before you can use the Prometheus data source, you must configure it below or in the config file. For detailed instructions, [view the documentation](#).

Fields marked with \* are required

Connection

Prometheus server URL \* ⓘhttp://54.145.91.173:9090/

✓ Successfully queried the Prometheus API.

Next, you can start to visualize data by [building a dashboard](#), or by querying data in the [Explore view](#).

```
scrape_configs:
  # The job name is added as a label `job=<job_name>` to any
  - job_name: "prometheus"

  # metrics_path defaults to '/metrics'
  # scheme defaults to 'http'.

static_configs:
  - targets: ["localhost:9100"]
```

PrometheusAlertsGraphStatusHelp

Targets

All scrape poolsUnhealthyCollapse AllFilter by endpoint or labelsUnknownUnhealthyHealthy

prometheus (1/1 up) show less

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://localhost:9100/metrics	UP	instance="localhost:9100" job="prometheus"	2.445s ago	96.727ms	

