

Creating the EC2 instance and performing the task

IP address at the time of creation: 43.204.98.226

Login into the jenkins and Creating jenkins pipeline main1 and dev1

The screenshot shows the Jenkins Dashboard with a search bar and a sidebar menu. The main content area displays a table of build history. The table has columns for status (S), icon (W), name, last success, last failure, and last duration. The builds are listed as follows:

S	W	Name	Last Success	Last Failure	Last Duration
✓	☁	dev1	21 hr #2	22 hr #1	13 min
⋯	☀	guvidev	N/A	N/A	N/A
🖨	☀	main	23 hr log	N/A	7 sec
✓	☁	main1	21 hr #2	21 hr #1	5.4 sec

Below the table, there is a section for 'Build Queue' showing 'No builds in the queue.' and a section for 'Build Executor Status' showing '1 Idle' and '2 Idle'.

managing credentials for docker hub and github for permissions

The screenshot shows the Jenkins Credentials page. It has a sidebar menu and a main content area. The main content area is titled 'Credentials' and contains a table of credentials. The table has columns for type (T), icon (P), store, domain, ID, and name. The credentials are listed as follows:

T	P	Store	Domain	ID	Name
🔑	🔑	System	(global)	dockerhub_id	zehara19/***** (dockerhublogin)
🔑	🔑	System	(global)	git	zehara19/***** (github)

Below the table, there is a section for 'Stores scoped to Jenkins' showing a table with columns for type (P), store, and domains. The stores are listed as follows:

P	Store	Domains
🔑	System	(global)

At the bottom right of the page, there is a footer with the text 'REST API' and 'Jenkins 2.387.1'.

Configuring the main 1 pipeline

## Configure

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

## General

Enabled 

### Description

main branch

[Plain text] [Preview](#)

- ☐ Commit agent's Docker container ?
- ☐ Define a Docker template
- ☐ Discard old builds ?
- ☐ GitHub project
- ☐ This project is parameterized ?
- ☐ Throttle builds ?
- ☐ Execute concurrent builds if necessary ?

Advanced 

Save

Apply

## Configure

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

## Source Code Management

☐ None

☒ Git ?

### Repositories ?

#### Repository URL ?

https://github.com/zehara19/capstone1.git

#### Credentials ?

- none -

+ Add

Advanced 

Add Repository

### Branches to build ?

Save

Apply

Dashboard > main1 > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Branches to build ?

Branch Specifier (blank for 'any') ?

\*/master

Add Branch

Repository browser ?

(Auto)

Additional Behaviours

Add

Build Triggers

☒ Build after other projects are built ?

Projects to watch

dev1,

Save

Apply

Dashboard > main1 > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Build Steps

Execute shell ?

Command

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

docker tag zehara19/capstone-**public-dev**:latest zehara19/capstone-**prod**:latest  
docker push zehara19/capstone-**prod**:latest

Advanced

Add build step

Save

Apply

configuring the dev1 pipeline

Jenkins

Search (CTRL+K)

2

Dashboard > dev1 > Configuration

Configure

General

Advanced Project Options

Pipeline

General

Enabled

Description

dev

[Plain text] Preview

Discard old builds

Do not allow concurrent builds

Do not allow the pipeline to resume if the controller restarts

GitHub project

Pipeline speed/durability override

Preserve stashes from completed builds

This project is parameterized

Throttle builds

Save

Apply

Dashboard > dev1 > Configuration

Configure

General

Advanced Project Options

Pipeline

Build Triggers

Build after other projects are built

Build periodically

GitHub hook trigger for GITScm polling

Poll SCM

Schedule

\*\*\*\*\*

Do you really mean "every minute" when you say "\*\*\*\*\*"? Perhaps you meant "H \* \* \* \* \*" to poll once per hour

Would last have run at Saturday, March 18, 2023 at 6:59:21 AM Coordinated Universal Time; would next run at Saturday, March 18, 2023 at 6:59:21 AM Coordinated Universal Time.

Ignore post-commit hooks


Quiet period

Advanced Project Options

Save

Apply

## Configure

 General Advanced Project Options Pipeline

## Advanced Project Options

Advanced ▾

## Pipeline

## Definition

Pipeline script from SCM ▾

## SCM ?

Git ▾ ?

## Repositories ?

## Repository URL ?

## Credentials ?

Save

Apply

## Configure

 General Advanced Project Options Pipeline

## Credentials ?



Advanced ▾

Add Repository

## Branches to build ?

## Branch Specifier (blank for 'any') ?

Add Branch

## Repository browser ?

## Additional Behaviours

Save

Apply

Dashboard > dev1 > Configuration

Configure

General

Advanced Project Options

Pipeline

dev

Add Branch

Repository browser ?  
(Auto)

Additional Behaviours  
Add

Script Path ?  
Jenkinsfile

☒ Lightweight checkout ?

Pipeline Syntax

SaveApply

REST APIJenkins 2.387.1

Jenkins

Search (CTRL+K)

2

Dashboard > dev1 >

Status

Changes

Build Now

Configure

Delete Pipeline

Full Stage View

Rename

Pipeline Syntax

Git Polling Log

Build Historytrend

Filter builds...

#1  
Mar 18, 2023, 6:52 AM

#2  
Mar 17, 2023, 8:52 AM

Pipeline dev1

dev

Edit description

Disable Project

Stage View

Average stage times:  
(Average full run time: ~7min 0s)

	Declarative: Checkout SCM	Build	Deploy to the site	Push to Docker Dev	Declarative: Post Actions
#3 Mar 18 12:22 1 commit	915ms	30s	1s	6s	130ms
#2 Mar 17 14:22 No Changes	35s	10min 11s	7s	19s	127ms
#1 Mar 17 14:17 No Changes	4s	9s	575ms	496ms	1s

main 1 is to trigger the dev1 i.e dev branch that is merged with master branch whenever the user commit code in the github it trigger the jenkins and pushes into the docker hub to the dev repo

whenever the code commit happens in the master branch it pushed it into the prod repo in the docker hub

The docker images is pushed into the docker hub

Wasm is a fast, light alternative to Linux containers – try it out today with the [Docker+Wasm Beta](#).

dockerhub

Search Docker Hub

Explore Repositories Organizations Help

Upgrade

zehara19

zehara19

Search by repository name

All Content

Create repository

zehara19 / capstone-prod

Contains: Image | Last pushed: 5 minutes ago

Inactive

0

0

Private

zehara19 / capstone-public-dev

Contains: Image | Last pushed: 7 minutes ago

Inactive

0

0

Public

← → ↺

hub.docker.com/repository/docker/zehara19/capstone-public-dev/general

Error

zehara19 Repositories capstone-public-dev General

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

General Tags Builds Collaborators Webhooks Settings

zehara19 / capstone-public-dev

Description

public dev repo for capstone

Last pushed: 35 minutes ago

Docker commands

To push a new tag to this repository,

docker push zehara19/capstone-public-dev:tagname

Public View

Tags

IMAGE INSIGHTS INACTIVE [Activate](#)

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	---	35 minutes ago

[See all](#) [Go to Advanced Image Management](#)

Automated Builds

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

Available with Pro, Team and Business subscriptions. [Read more about automated builds.](#)

Upgrade



dockerhub

Search Docker Hub

Explore

Repositories

Organizations

Help

Upgrade

zehara19

zehara19

Repositories

capstone-prod

General

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

General

Tags

Builds

Collaborators

Webhooks

Settings

zehara19 / capstone-prod

Description

This repository does not have a description

Last pushed: 9 minutes ago

Docker commands

To push a new tag to this repository,

docker push zehara19/capstone-prod:tagname

Tags

IMAGE INSIGHTS INACTIVE

Activate

This repository contains 1 tag(s).

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

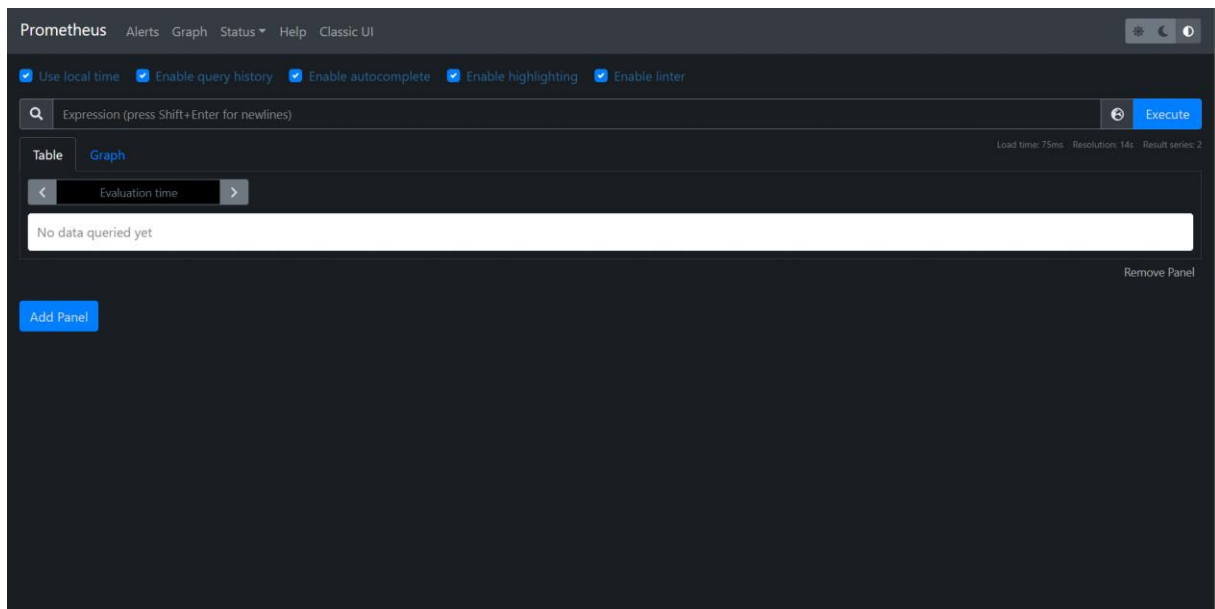
Automated Builds

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

Available with Pro, Team and Business subscriptions. [Read more about automated builds.](#)

Creating the monitoring tools for the monitoring instance for a real-time purpose

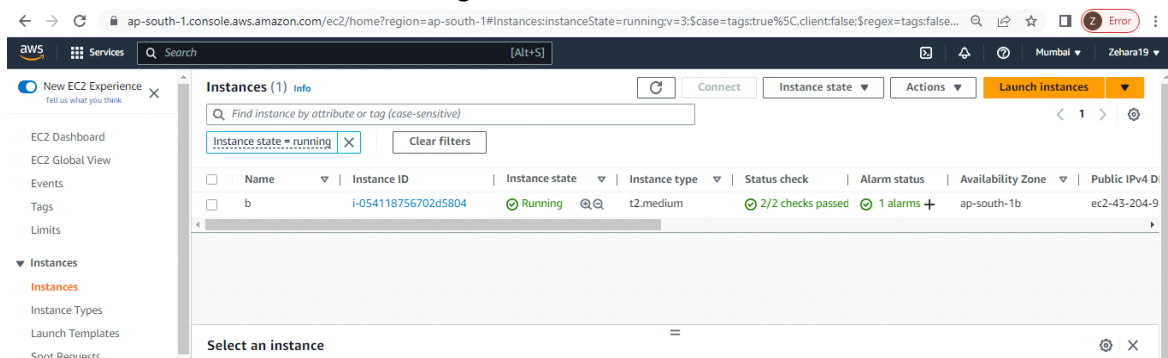
prometheus dashboard



I used to measure the total amount of CPU time in seconds in prometheus



Cloud Watch for the Instance. Enabling alarm status.



## Enabled subscriptions - Email notification

The screenshot displays the AWS Management Console for the 'zeharaSNS' topic. The left sidebar shows the navigation menu with 'Amazon SNS' selected. The main content area is divided into two sections: 'Details' and 'Subscriptions'. The 'Details' section shows the topic's name, ARN, display name, and type. The 'Subscriptions' section shows a list of subscriptions, with one subscription listed: 'b67142bb-b8d1-4d21-a662-63...' with endpoint 'zeharabanur030@gmail.com' and status 'Confirmed'.

**Amazon SNS** ×

Dashboard  
Topics  
Subscriptions  
▼ Mobile  
Push notifications  
Text messaging (SMS)  
Origination numbers

**zeharaSNS** Edit Delete Publish message ⓘ

**Details**

Name zeharaSNS	Display name cloudwatch1
ARN arn:aws:sns:ap-south-1:871922735458:zeharaSNS	Topic owner 871922735458
Type Standard	

< Subscriptions Access policy Data protection policy Delivery retry policy (HTTP/S) Delivery status logging Encryption 1 >

**Subscriptions (1)** Edit Delete Request confirmation Confirm subscription Create subscription

Q Search < 1 > ⓘ

ID	Endpoint	Status	Protocol
b67142bb-b8d1-4d21-a662-63...	zeharabanur030@gmail.com	Confirmed	EMAIL

Users can set notification alarms to be sent when something being monitored surpasses a specified threshold.

13:50

🕒 📶 VoLTE 4G 74



cloudwatch1 13:16

to me ▾



You are receiving this email because your Amazon CloudWatch Alarm "awsec2-i-054118756702d5804-GreaterThanOrEqualToThreshold-CPUUtilization" in the Asia Pacific (Mumbai) region has entered the ALARM state, because "Threshold Crossed: 1 datapoint [1.0173242567379872 (18/03/23 07:36:00)] was greater than or equal to the threshold (0.99)." at "Saturday 18 March, 2023 07:46:17 UTC".

View this alarm in the AWS Management Console:

<https://ap-south-1.console.aws.amazon.com/cloudwatch/deeplink.js?region=ap-south-1#alarmsV2:alarm/awsec2-i-054118756702d5804-GreaterThanOrEqualToThreshold-CPUUtilization>

#### Alarm Details:

- Name: awsec2-i-054118756702d5804-Gr  
eaterThanOrEqualToThreshold-CPUUtilization  
- Description: Created from EC2 Console  
- State Change: OK -> ALARM  
- Reason for State Change: Threshold Crossed: 1 datapoint  
[1.0173242567379872 (18/03/23 07:36:00)] was greater than or equal to  
the threshold (0.99).  
- Timestamp: Saturday 18 March, 2023 07:46:17 UTC  
- AWS Account: 871922735458  
- Alarm Arn: arn:aws:cloudwatch:ap-south-1:  
871922735458:alarm:awsec2-i-054118756702d5804-GreaterThanOrE  
qualToThreshold-CPUUtilization

#### Threshold:

- The alarm is in the ALARM state when the metric is  
GreaterThanOrEqualToThreshold 0.99 for at least 1 of the last 1 period(s)  
of 300 seconds.

#### Monitored Metric:

- MetricNamespace: AWS/EC2  
- MetricName: CPUUtilization  
- Dimensions: [InstanceId = i-054118756702d5804]  
- Period: 300 seconds  
- Statistic: Average  
- Unit: not specified

