

**Name - Parmeshwar\***

## **Assessment ( Git & Jenkins)**

### **Problem Statement: Automated Deployment of Web application**

**Q1) Design and develop tasks required to build CI CD pipeline using learned technologies to deploy Web application to cloud platform as a set of microservices on containerized platform such as docker.**

**Just to summarize, Fetch the Source code from GitHub as Version Control Web Based Platform & Pull in Jenkins to create a build using script and deploy on a containerization platform. Containerization platform which packages the application and all its dependencies together in the form of Container to ensure that the application works seamlessly in any environment.**

**Step 1) Created nodes and Connected successfully.**

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
	Built-in Node	Linux (amd64)	In sync	21.06 GB	0 B	21.06 GB	0ms
	production	Linux (amd64)	In sync	20.62 GB	0 B	20.62 GB	50ms
	staging	Linux (amd64)	In sync	21.81 GB	0 B	21.81 GB	43ms
Data obtained			37 sec	37 sec	37 sec	37 sec	37 sec

## Step 2) created the project and runs successfully

The screenshot shows the Jenkins Dashboard in a Firefox browser. The dashboard displays a table of build history for the '1st-jenkins-project'. The table has columns for 'S' (Status), 'W' (Workspace), 'Name', 'Last Success', 'Last Failure', and 'Last Duration'. The build '1st-jenkins-project' is shown with a status of 'S' (Success) and a duration of '2 min 49 sec'. The build is linked to a 'build-product' job, which is also shown with a status of 'S' and a duration of '19 sec'. The dashboard also shows a 'Build Queue' with 2 agents (0 of 4 executors busy) and a 'Build Executor Status' section.

S	W	Name	Last Success	Last Failure	Last Duration
S		1st-jenkins-project	N/A	N/A	N/A
S		build-product	2 min 49 sec #1	N/A	19 sec
S		first-jenkins-project	1 hr 30 min #11	N/A	0.38 sec
S		second-jenkins-project	24 min #12	1 hr 35 min #8	1.1 sec

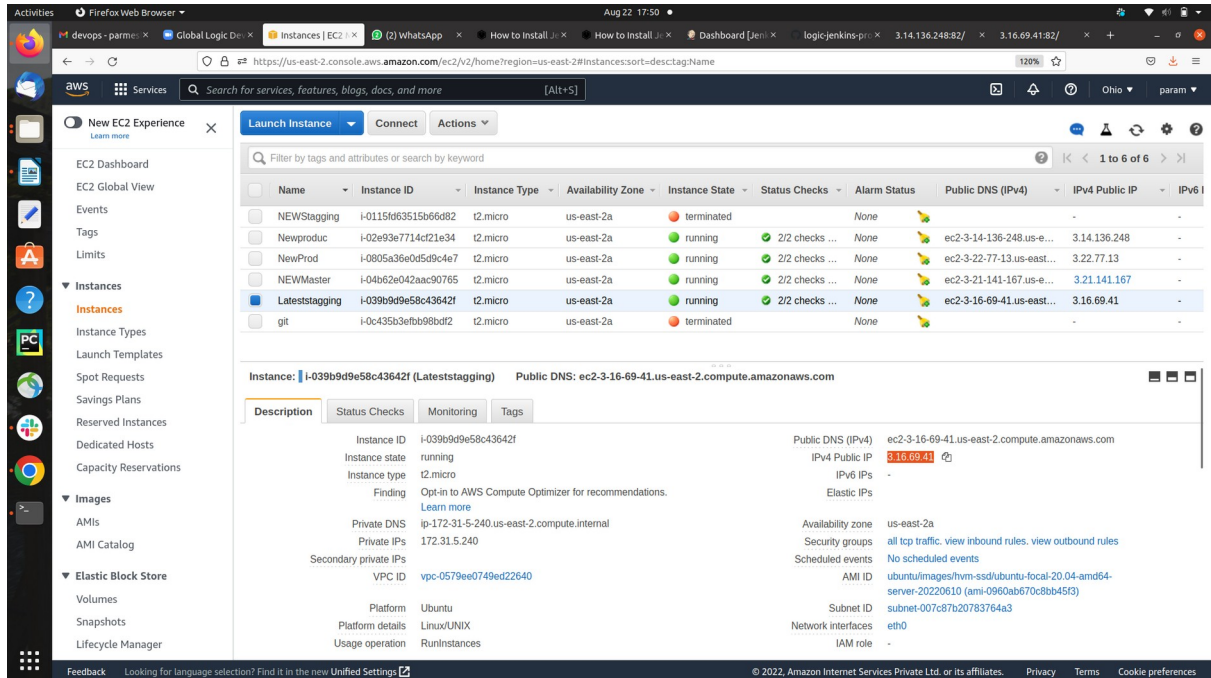
## step) Index.html page

The screenshot shows the GitHub repository page for 'logic-jenkins-project' in a Firefox browser. The repository is owned by 'paramsd1997' and is public. The 'index.html' file is selected, showing its content. The file is 109 bytes and contains 4 lines of HTML code. The code is as follows:

```
<h1> Jenkins </h1>
<h2> CI CD Pipeline</h2>
<h3> Enjoying the training </h3>
<h4> Thank to GlobalLogic </h4>
```

The repository page also shows the commit history, with the latest commit 'fca61f5' made 29 minutes ago. The repository has 1 contributor and 28 forks.

## step3)public ip of the Staggging node



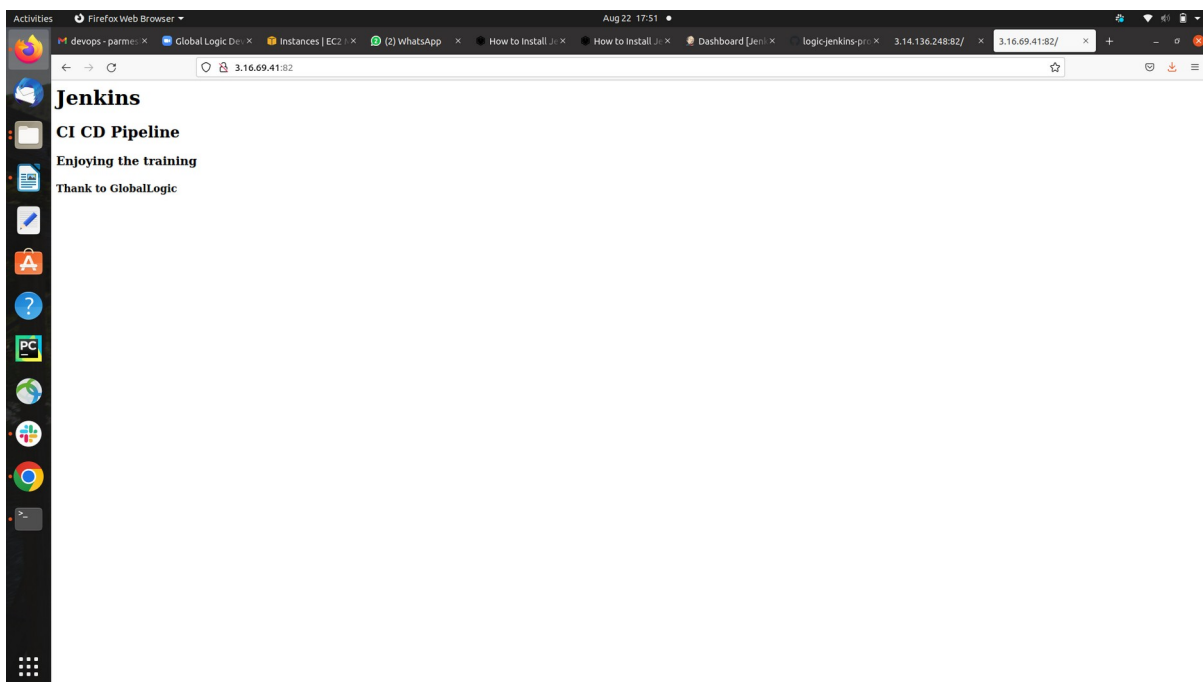
The screenshot shows the AWS Management Console for the 'us-east-2' region. The 'Instances' page is active, displaying a table of EC2 instances. The 'Lateststaging' instance is selected, and its details are shown below the table. The public IP address is highlighted in red.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6
NEWStaging	i-0115d63515b66d82	t2.micro	us-east-2a	terminated	2/2 checks ...	None	-	-	-
Newprod	i-02e93e7714cf21e34	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-3-14-136-248.us-e...	3.14.136.248	-
NewProd	i-0805a36e0d5d9c4e7	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-3-22-77-13.us-east...	3.22.77.13	-
NEWMaster	i-04b62e042aac90765	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-3-21-141-167.us-e...	3.21.141.167	-
Lateststaging	i-039b9d9e58c43642f	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-3-16-69-41.us-east...	3.16.69.41	-
git	i-0c435b3efb98bdf2	t2.micro	us-east-2a	terminated	2/2 checks ...	None	-	-	-

Instance: i-039b9d9e58c43642f (Lateststaging) Public DNS: ec2-3-16-69-41.us-east-2.compute.amazonaws.com

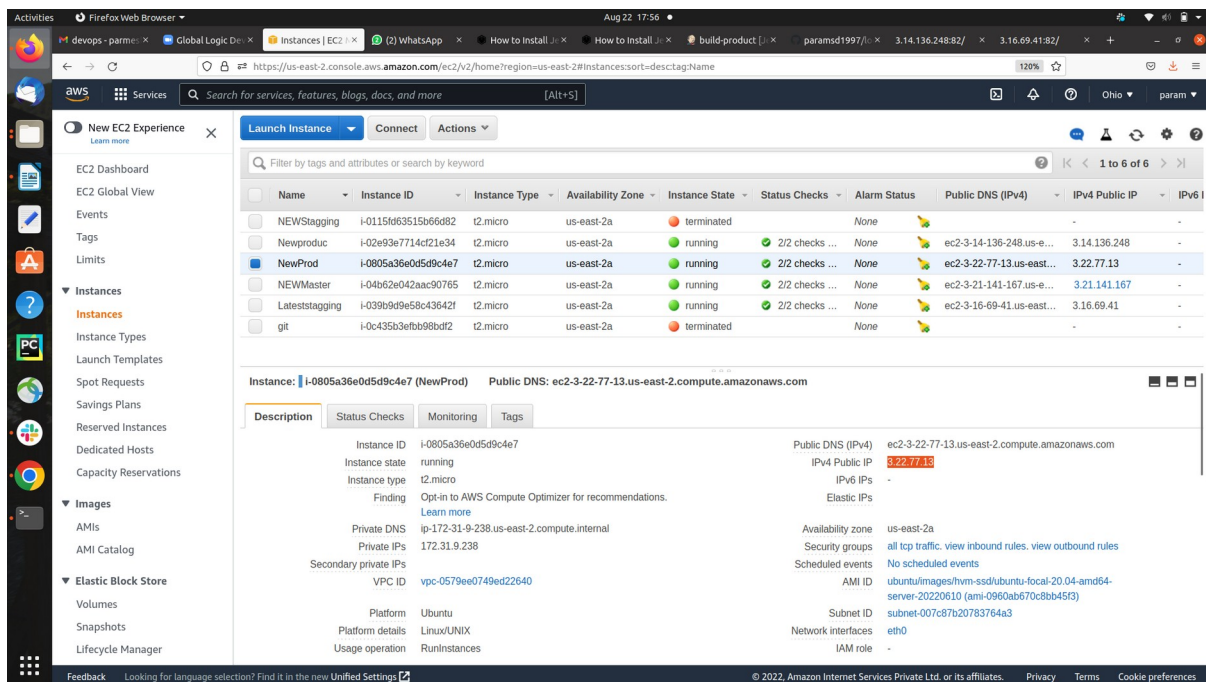
Description	Status Checks	Monitoring	Tags
Instance ID	i-039b9d9e58c43642f		
Instance state	running		
Instance type	t2.micro		
Finding	Opt-in to AWS Compute Optimizer for recommendations.		
Private DNS	ip-172-31-5-240.us-east-2.compute.internal		
Private IPs	172.31.5.240		
Secondary private IPs			
VPC ID	vpc-0579ee0749ed22640		
Platform	Ubuntu		
Platform details	Linux/UNIX		
Usage operation	RunInstances		
Public DNS (IPv4)	ec2-3-16-69-41.us-east-2.compute.amazonaws.com		
IPv4 Public IP	3.16.69.41		
IPv6 IPs	-		
Elastic IPs			
Availability zone	us-east-2a		
Security groups	all tcp traffic view inbound rules, view outbound rules		
Scheduled events	No scheduled events		
AMI ID	ubuntu/images/hvm-ssd/ubuntu-focal-20.04-amd64-server-20220610 (ami-0960ab670c8bb45f3)		
Subnet ID	subnet-007c87b20783764a3		
Network interfaces	eth0		
IAM role	-		

## output - Accessing the output with public ip of staging node



The screenshot shows a web browser displaying the Jenkins CI/CD Pipeline page. The page has a dark theme and includes the Jenkins logo, the title 'CI CD Pipeline', and a message 'Enjoying the training Thank to GlobalLogic'.

## step4) public ip of the production node



The screenshot shows the AWS Management Console for the 'us-east-2' region. The 'Instances' page is active, displaying a list of EC2 instances. The 'NewProd' instance (ID: i-0805a36e0d5d9c4e7) is selected, and its details are shown in the right-hand pane. The public IP address is 3.22.77.13.

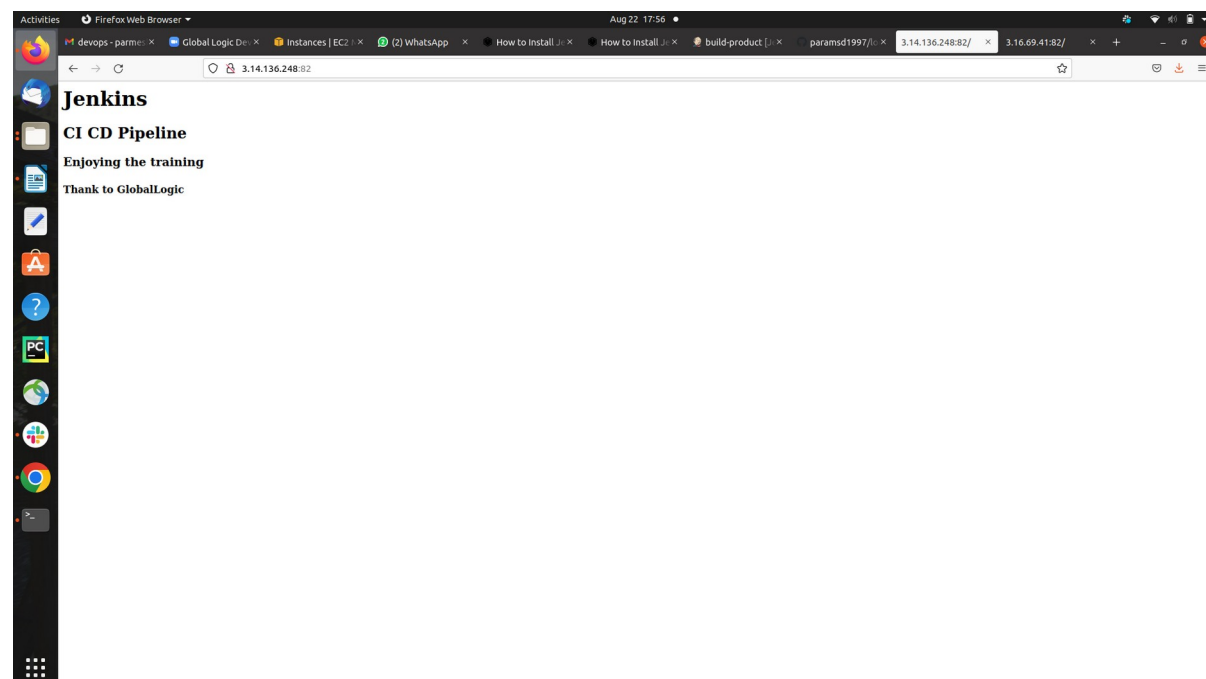
Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6
NEWStaging	i-0115d63515b66d82	t2.micro	us-east-2a	terminated	2/2 checks ...	None	-	-	-
Newproduc	i-02e93e7714cd21e34	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-3-14-136-248.us-e...	3.14.136.248	-
<b>NewProd</b>	<b>i-0805a36e0d5d9c4e7</b>	<b>t2.micro</b>	<b>us-east-2a</b>	<b>running</b>	<b>2/2 checks ...</b>	<b>None</b>	<b>ec2-3-22-77-13.us-east...</b>	<b>3.22.77.13</b>	-
NEWMaster	i-04b62e042aac90765	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-3-21-141-167.us-e...	3.21.141.167	-
Lateststaging	i-039b9d9e58c43642f	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-3-16-69-41.us-east...	3.16.69.41	-
git	i-0c435b3efb898df2	t2.micro	us-east-2a	terminated	2/2 checks ...	None	-	-	-

Instance: **i-0805a36e0d5d9c4e7 (NewProd)** Public DNS: ec2-3-22-77-13.us-east-2.compute.amazonaws.com

**Description**

Property	Value
Instance ID	i-0805a36e0d5d9c4e7
Instance state	running
Instance type	t2.micro
Finding	Opt-in to AWS Compute Optimizer for recommendations. <a href="#">Learn more</a>
Private DNS	ip-172-31-9-238.us-east-2.compute.internal
Private IPs	172.31.9.238
Secondary private IPs	-
VPC ID	vpc-0579ee0749ed22640
Platform	Ubuntu
Platform details	Linux/UNIX
Usage operation	RunInstances
Public DNS (IPv4)	ec2-3-22-77-13.us-east-2.compute.amazonaws.com
IPv4 Public IP	<b>3.22.77.13</b>
IPv6 IPs	-
Elastic IPs	-
Availability zone	us-east-2a
Security groups	all tcp traffic. <a href="#">view inbound rules</a> . <a href="#">view outbound rules</a>
Scheduled events	No scheduled events
AMI ID	ubuntu/images/hvm-ssd/ubuntu-focal-20.04-amd64-server-20220610 (ami-0960ab670c8bb45f3)
Subnet ID	subnet-007c87b20783764a3
Network interfaces	eth0
IAM role	-

## output - accessing the output with public ip of production node

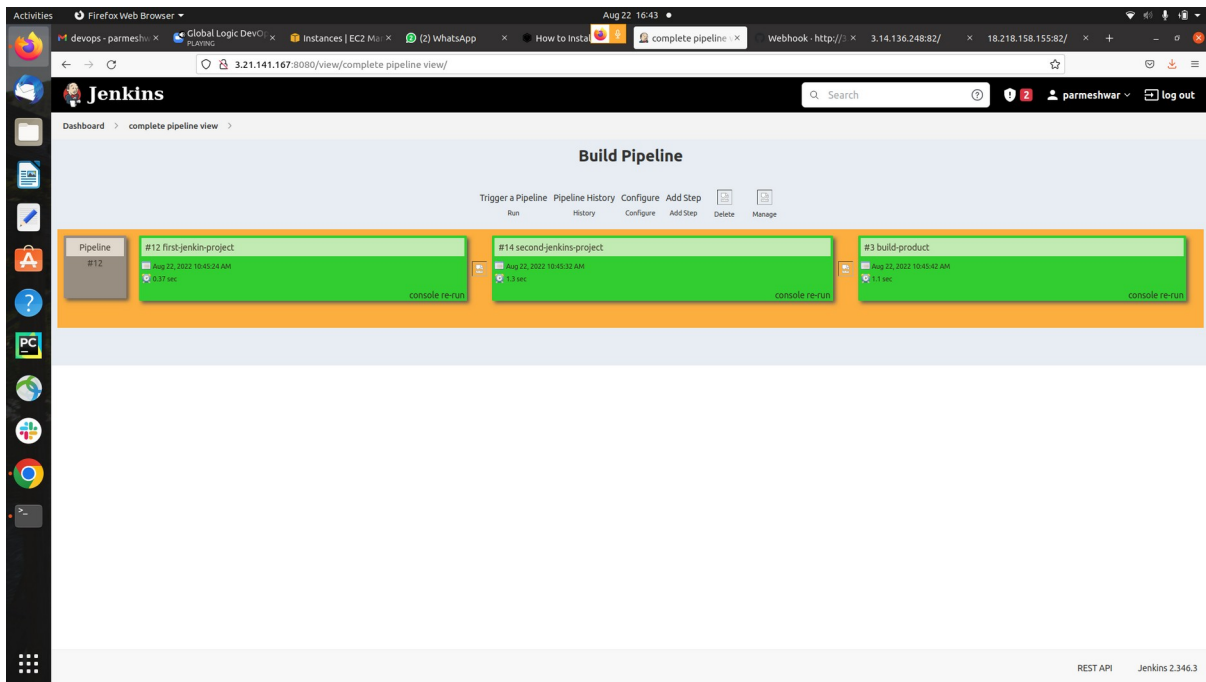


The screenshot shows the Jenkins CI/CD pipeline console output. The output text is:

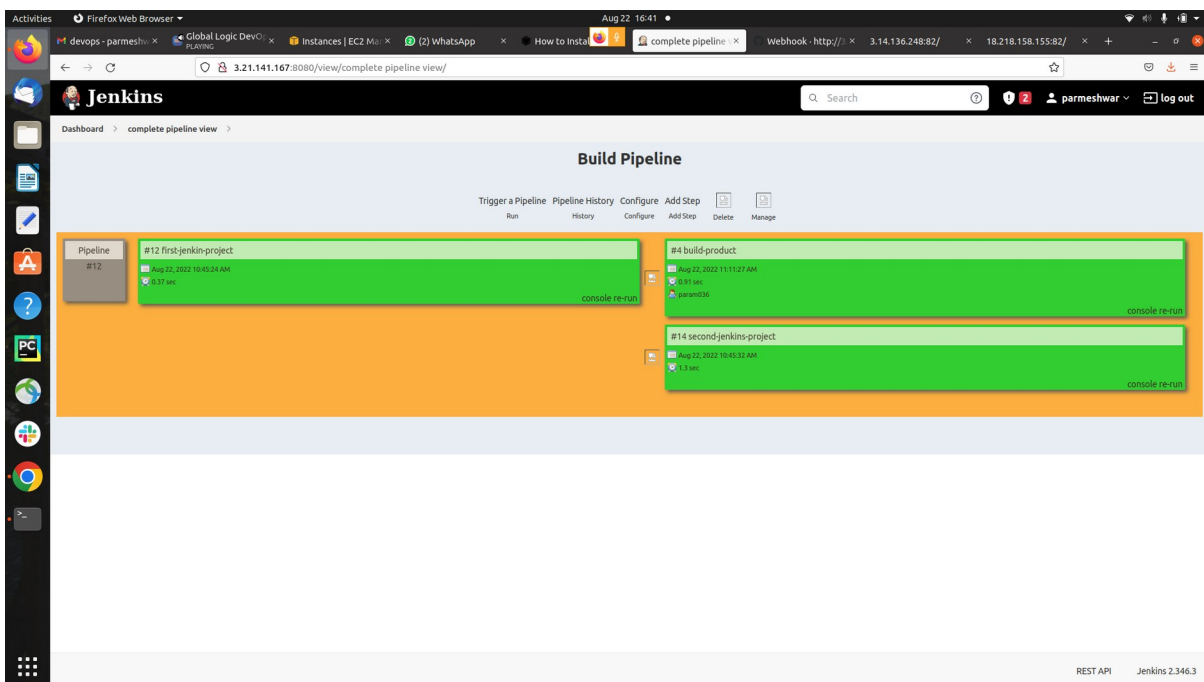
```
Jenkins
CI CD Pipeline
Enjoying the training
Thank to GlobalLogic
```

The browser address bar shows the URL `3.14.136.248:82`.

## step 4) pipeline setted successfully



## step 6) setted the pipeline parallely



# shell scripting

