

# PROJECT 1:

## Working with IAM Roles with S3 and bootstrapping with EC2

### Task1: Creating a bootstrapped instance

#### SS1: edit user data

The screenshot shows the 'Step 3: Configure Instance Details' page in the AWS Management Console. The 'Advanced Details' section is expanded, showing the 'User data' field. The 'User data' is configured as 'As text' and contains the following script:

```
#!/bin/bash
yum -y install httpd
service httpd start
```

At the bottom of the page, there are buttons for 'Cancel', 'Previous', 'Review and Launch', and 'Next: Add Storage'.

#### Ss2: list of ec2 instances with description

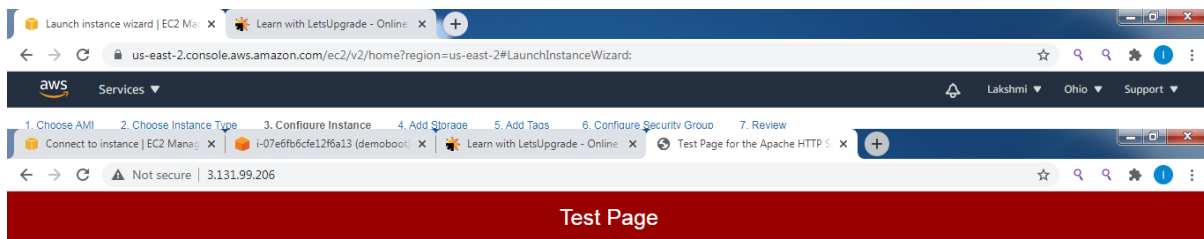
The screenshot shows the 'Instances' page in the AWS Management Console. A table lists the instances, and the details for a specific instance are shown below.

Name	Instance ID	Instance state	Instance type	Status check	Alarm Status	Availability zone
demoboot	i-07e6fb6cfe12f6a13	Running	t2.micro	2/2 checks ...	No alarms +	us-east-2b

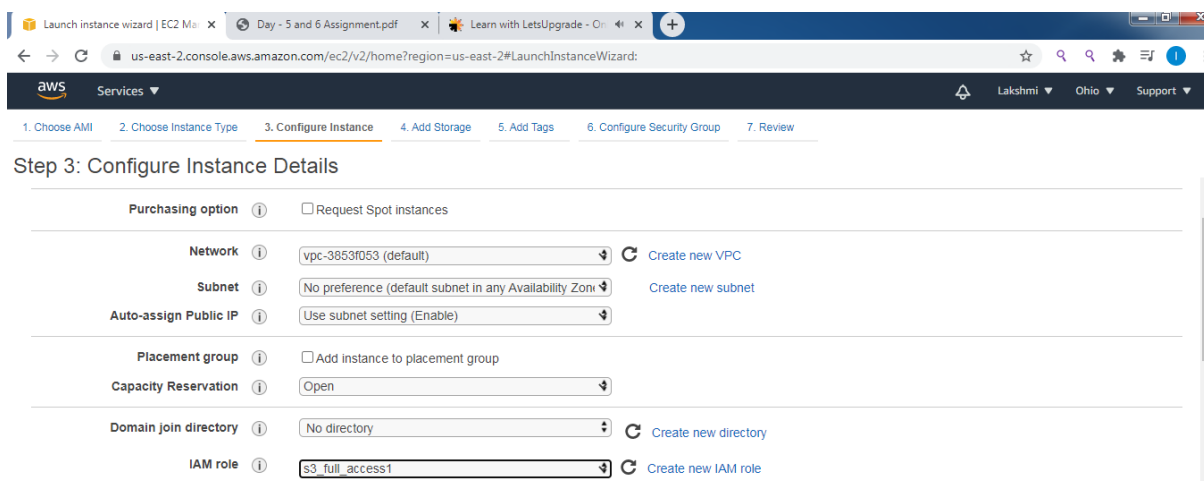
Instance: i-07e6fb6cfe12f6a13 (demoboot)		
Details	Security	Networking
<b>Instance summary</b> Info		
Instance ID i-07e6fb6cfe12f6a13 (demoboot)	Public IPv4 address 3.131.99.206   <a href="#">open address</a>	Private IPv4 addresses 172.31.26.228
Instance state Running	Public IPv4 DNS ec2-3-131-99-206.us-east-	Private IPv4 DNS ip-172-31-26-228.us-east-2.compute.internal

## Ss3: test page

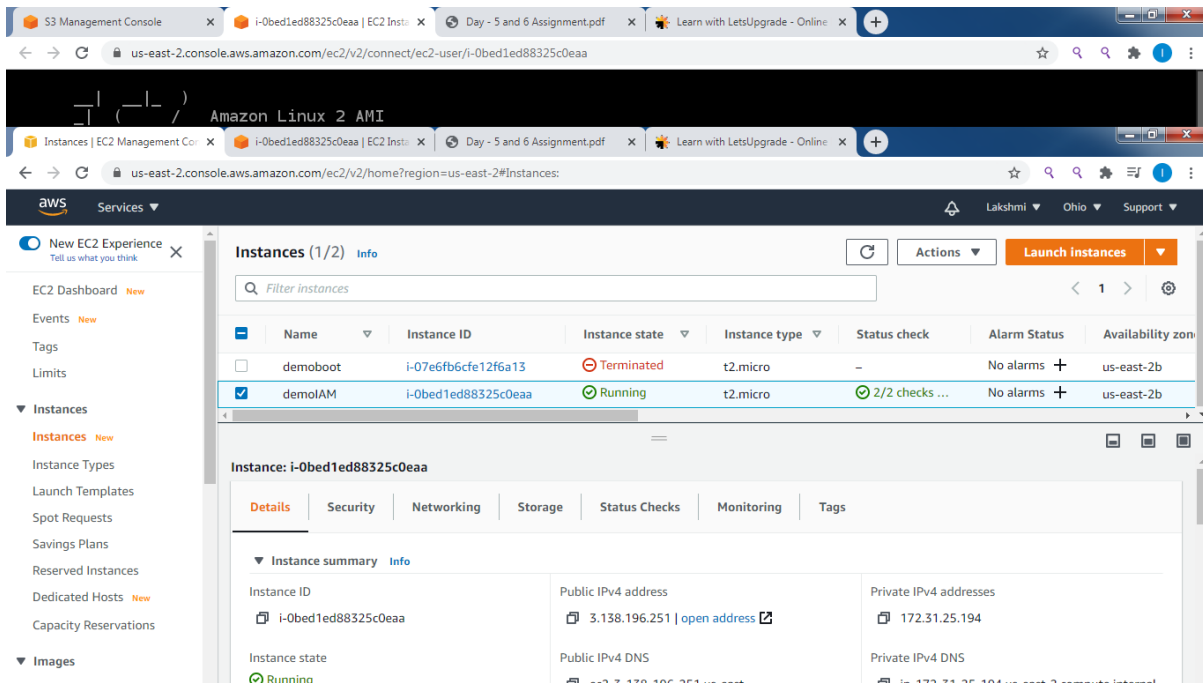


## Task 2: Checking bucket list and creating a new bucket from EC2 using IAM ROLES

### Ss1: user data



## ss2: list of ec2 instances with description



The screenshot shows the AWS Management Console with the EC2 Instances page. The console displays a list of instances, including 'demoboot' (Terminated) and 'demolAM' (Running). The 'demolAM' instance is selected, and its details are shown, including Instance ID, Public IPv4 address, Private IPv4 addresses, Instance state, Public IPv4 DNS, and Private IPv4 DNS.

Name	Instance ID	Instance state	Instance type	Status check	Alarm Status	Availability zone
demoboot	i-07e6fb6cfe12f6a13	Terminated	t2.micro	-	No alarms	us-east-2b
demolAM	i-0bed1ed88325c0eaa	Running	t2.micro	2/2 checks ...	No alarms	us-east-2b

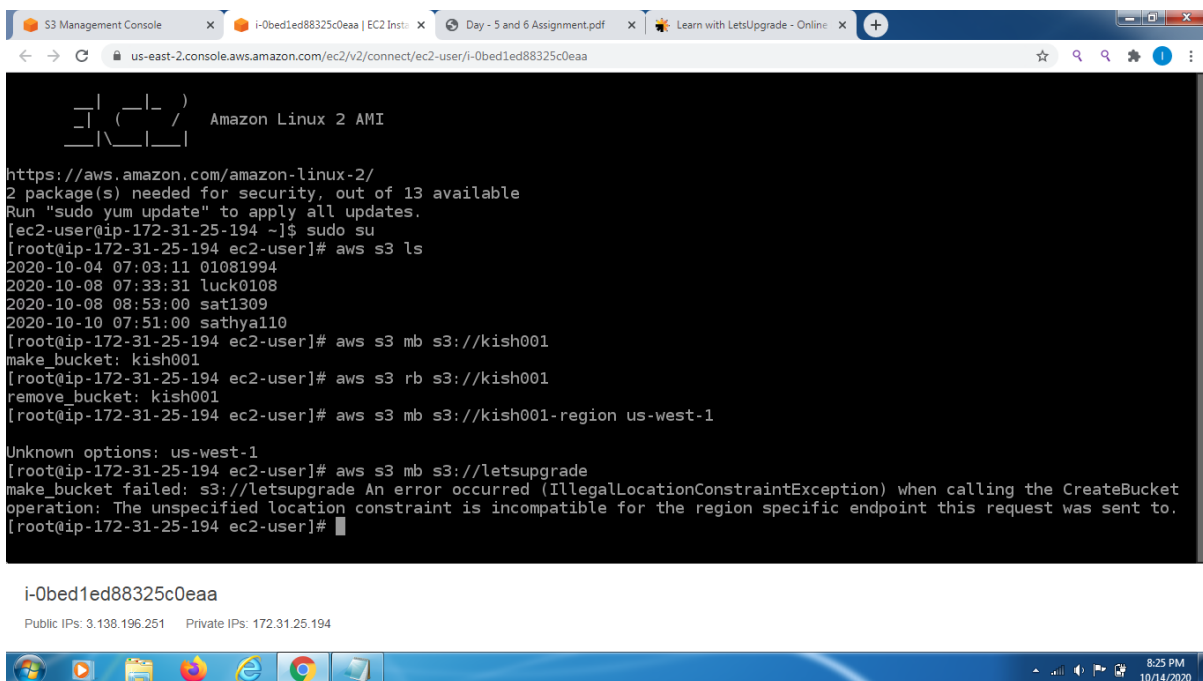
**Instance: i-0bed1ed88325c0eaa**

**Details** | Security | Networking | Storage | Status Checks | Monitoring | Tags

**Instance summary** | Info

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0bed1ed88325c0eaa	3.138.196.251   <a href="#">open address</a>	172.31.25.194
Instance state	Public IPv4 DNS	Private IPv4 DNS
Running	ec2-3-138-196-251.us-east-2.compute.amazonaws.com	ip-172-31-25-194.us-east-2.compute.internal

## Ss3: 3 commands to be executed and outputs displayed



The screenshot shows a terminal window on an Amazon Linux 2 AMI. The terminal displays the execution of three AWS S3 commands and their outputs:

```
https://aws.amazon.com/amazon-linux-2/
2 package(s) needed for security, out of 13 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-25-194 ~]$ sudo su
[root@ip-172-31-25-194 ec2-user]# aws s3 ls
2020-10-04 07:03:11 01081994
2020-10-08 07:33:31 luck0108
2020-10-08 08:53:00 sat1309
2020-10-10 07:51:00 sathya110
[root@ip-172-31-25-194 ec2-user]# aws s3 mb s3://kish001
make_bucket: kish001
[root@ip-172-31-25-194 ec2-user]# aws s3 rb s3://kish001
remove_bucket: kish001
[root@ip-172-31-25-194 ec2-user]# aws s3 mb s3://kish001-region us-west-1
Unknown options: us-west-1
[root@ip-172-31-25-194 ec2-user]# aws s3 mb s3://letsupgrade
make_bucket failed: s3://letsupgrade An error occurred (IllegalLocationConstraintException) when calling the CreateBucket operation: The unspecified location constraint is incompatible for the region specific endpoint this request was sent to.
[root@ip-172-31-25-194 ec2-user]#
```

i-0bed1ed88325c0eaa

Public IPs: 3.138.196.251 Private IPs: 172.31.25.194

## Task 3: Hosting a webpage using the bootstrap script on ec2.

### Ss1: user data

The screenshot shows the AWS Management Console's 'Launch instance wizard' at the 'Step 3: Configure Instance Details' stage. The 'User data' field is set to 'As text' and contains the following script:

```
#!/bin/bash
yum install httpd -y
aws s3 cp s3://kanuri2525/index.html /var/www/html
service httpd start
chkconfig httpd on
```

The bottom of the console shows a Windows taskbar with various application icons and a system clock indicating 6:44 PM on 10/15/2020.

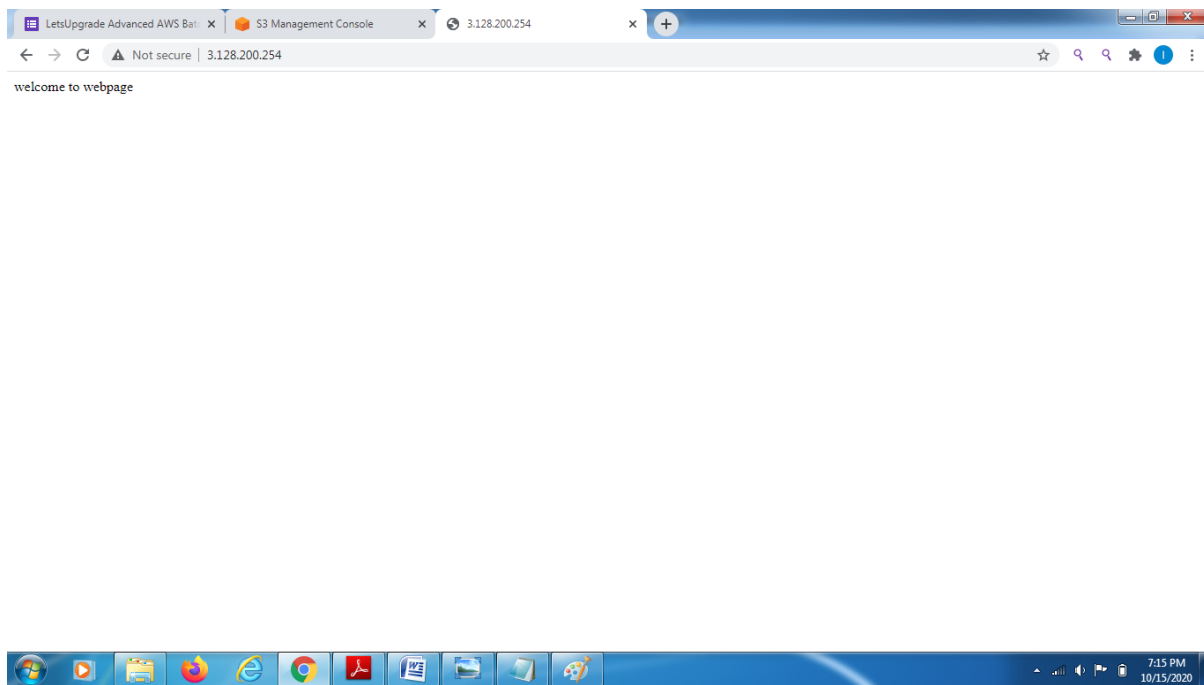
### Ss2: s3 bucket, index.html

The screenshot displays the AWS S3 Management Console for the bucket 'kanuri2525'. The 'Overview' tab is selected, showing a search bar and a table of objects. The table lists one object:

Name	Last modified	Size	Storage class
index.html	Oct 15, 2020 6:21:38 PM GMT+0530	18.0 B	Standard

The bottom of the console shows a Windows taskbar with various application icons and a system clock indicating 6:59 PM on 10/15/2020.

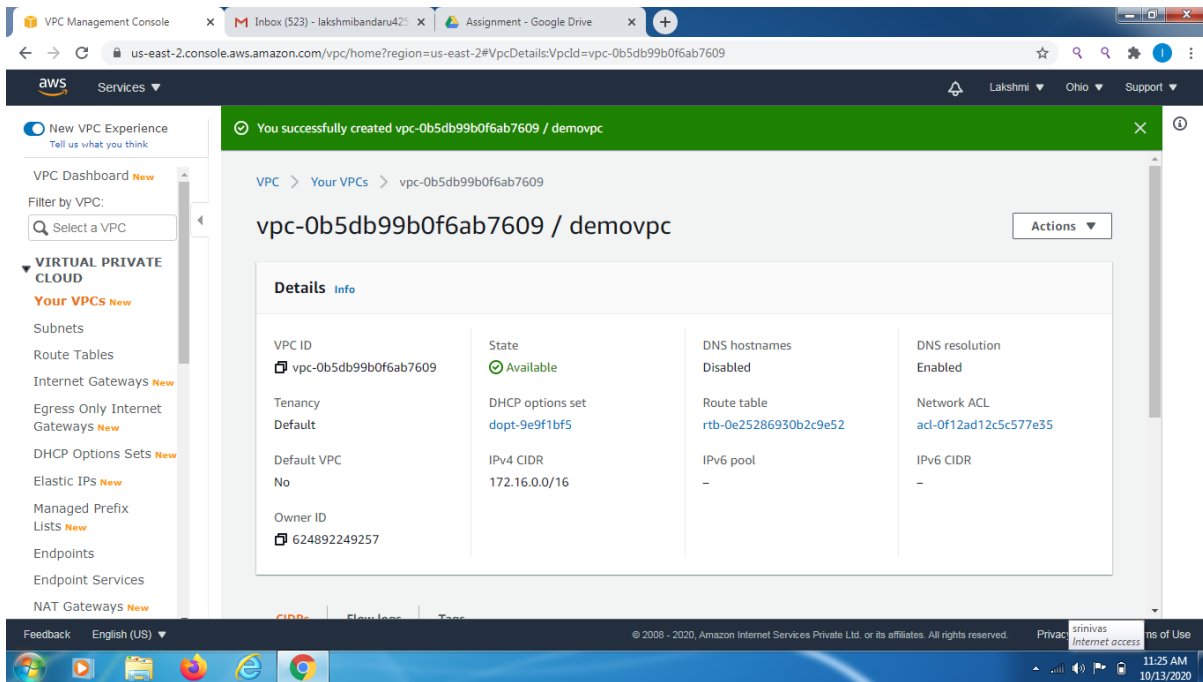
## Ss3: testing using public IP



## PROJECT 2: Creating an EC2 instance in custom VPC

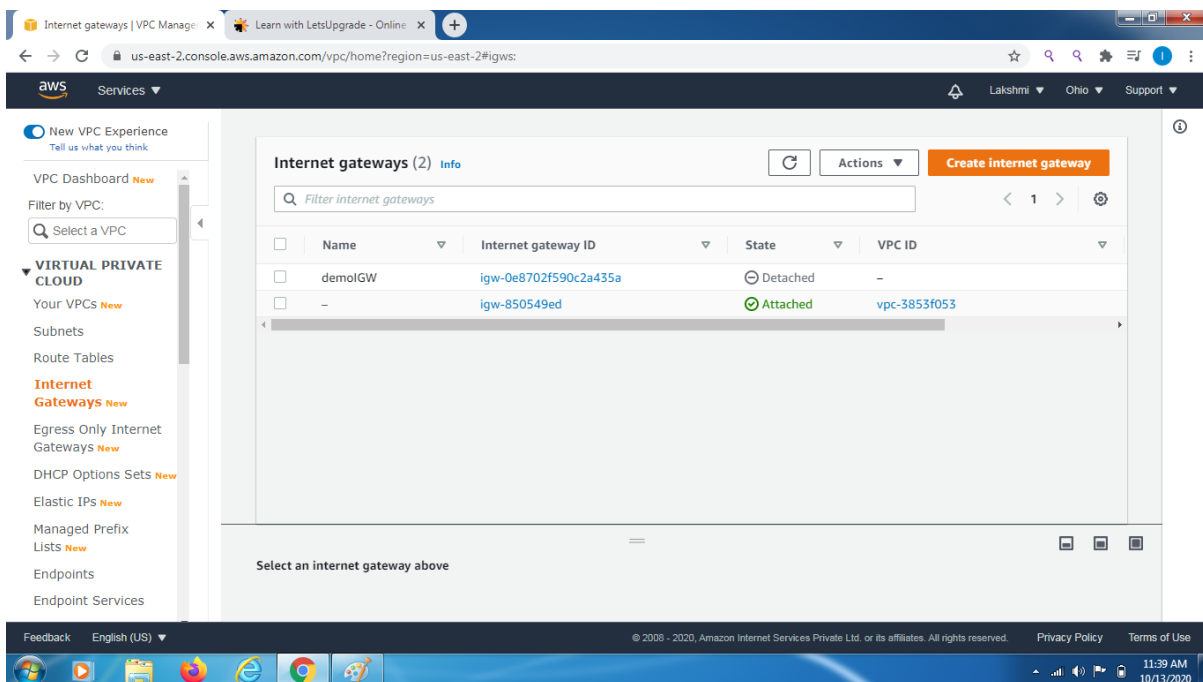
### Task1: Create a VPC

Ss1: vpc created



### Task 2: Create an Internet gateway

Ss2: igw with vpc associated



## Task3: Create a route table

## Ss3: route table with routes

The screenshot displays the AWS Management Console for Route Tables. The left sidebar shows the navigation menu with 'Route Tables' selected. The main content area shows a list of route tables, with 'rtb-0b662b8529833bd03' selected. Below the list, the 'Routes' tab is active, showing a table of routes.

Destination	Target	Status	Propagated
172.16.0.0/16	local	active	No
0.0.0.0/0	igw-0e8702f590c2a435a	active	No

## Task4: Create a subnet

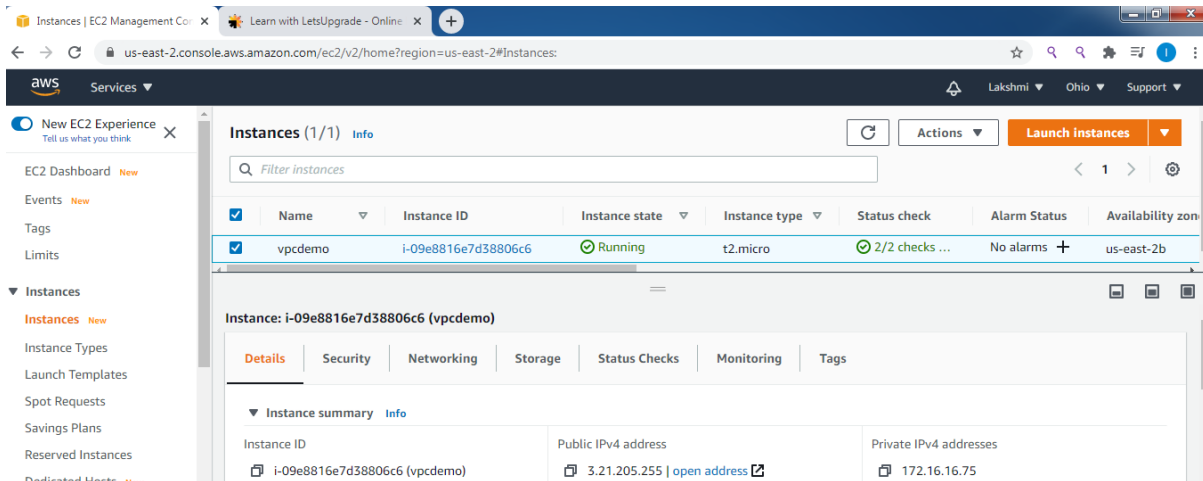
## Ss4: subnet screen

The screenshot displays the AWS Management Console for Subnets. The left sidebar shows the navigation menu with 'Subnets' selected. The main content area shows a list of subnets, with 'subnet-0108aee70ffe75342' selected. Below the list, the 'Description' tab is active, showing details for the selected subnet.

Subnet ID	VPC	State	IPv4 CIDR	Available IPv4 Addresses
subnet-0108aee70ffe75342	vpc-0b5db99b0f6ab7609   demovpc	available	172.16.16.0/24	250

## Task5: Create an EC2 in custom vpc

### Ss5: ec2 dashboard



## Task 6: Check ipconfig in VM command prompt.

### Ss6: cmd prompt: ipconfig

