

## Module 7: High Availability, Fault Tolerance And Disaster Recovery

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### Demo Document 1

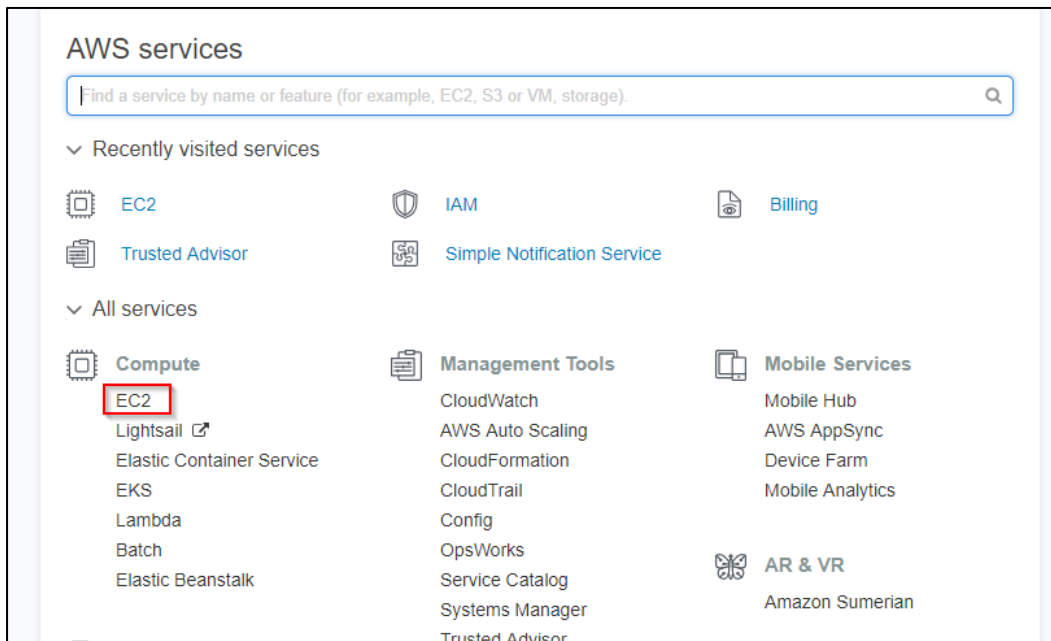
edureka!

**edureka!**

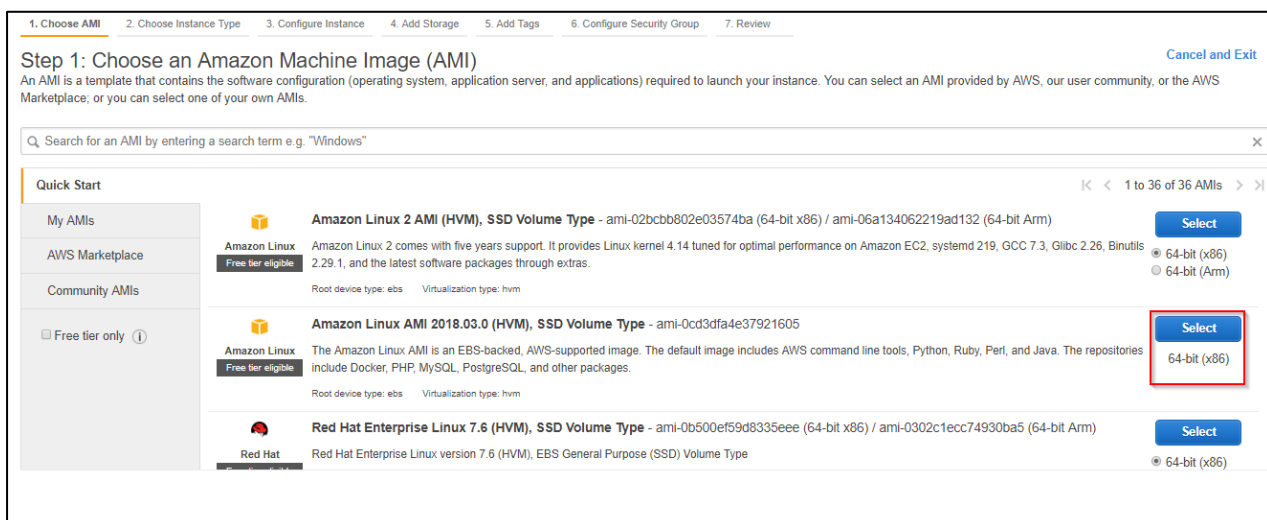
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### Creating An Custom AMI

**Step 1:** Go to AWS Management Console, select **EC2** instance



**Step 2:** Select **Amazon Linux AMI** and **t2. Micro instance type**



**Step 3:** Click on **Advanced Details** and enter the below commands to install httpd php website on the instance

Advanced Details

User data ⓘ ☒ As text ☐ As file ☐ Input is already base64 encoded

```
#!/bin/sh
yum -y install httpd php
chkconfig httpd on
/etc/init.d/httpd start
```

```
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chkconfig httpd on
/etc/init.d/httpd start
```

**Step 4:** Select the **security type** and change source to **Anywhere**

Description: launch-wizard-101 created 2019-03-19T18:54:57.654+05:30

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ
SSH	TCP	22	Anywhere 0.0.0.0/0, ::/0
All traffic	All	0 - 65535	Anywhere 0.0.0.0/0, ::/0

Add Rule

**Step 5:** Configure your existing **key-pair** or create a new one (on creating new key-pair do download it)

### Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Choose an existing key pair

Select a key pair

Edureka\_1

☒ I acknowledge that I have access to the selected private key file (Edureka\_1.pem), and that without this file, I won't be able to log into my instance.

Cancel

Launch Instances

**Step 6:** Check the **status** of instance and the moment it turn to green **copy** the IP address

Launch Instance

Connect

Actions

search : i-01c1bfe0802747a30

Add filter

	Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP
		i-01c1bfe0802747a30	t2.micro	us-east-2b	running	2/2 checks ...	None	ec2-18-223-102-188.us...	18.223.102.188

Instance: i-01c1bfe0802747a30Public DNS: ec2-18-223-102-188.us-east-2.compute.amazonaws.com

Description

Status Checks

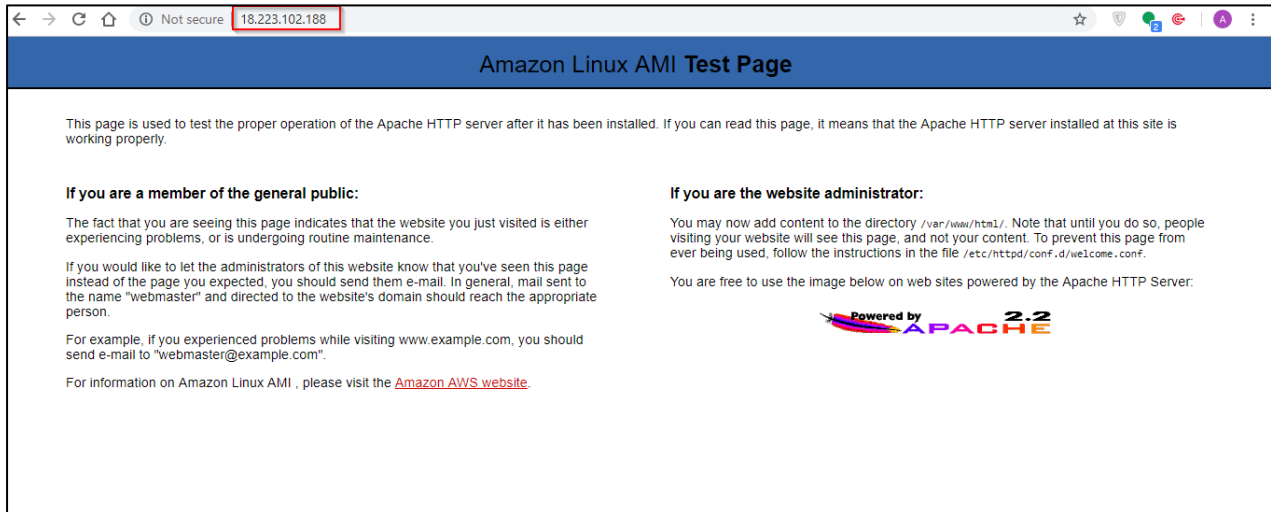
Monitoring

Tags

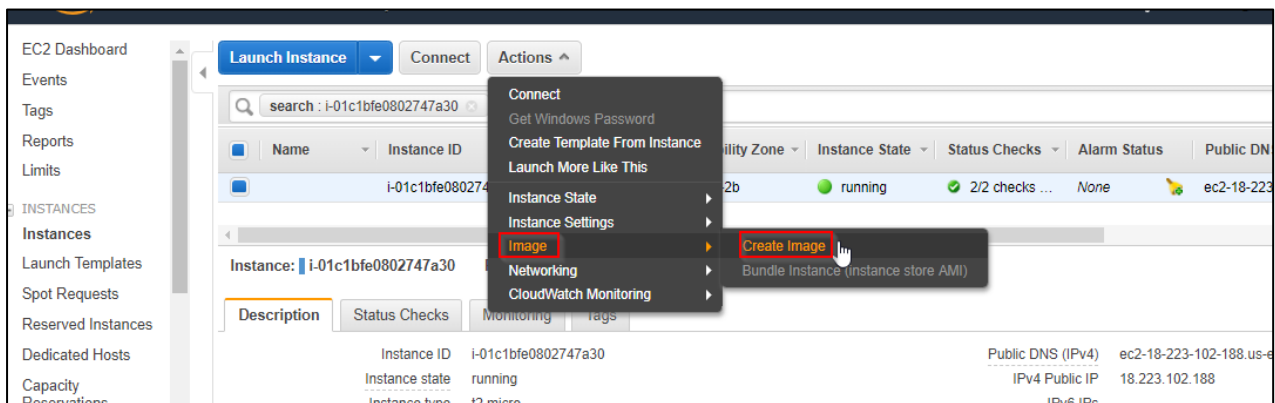
Instance ID	i-01c1bfe0802747a30	Public DNS (IPv4)	ec2-18-223-102-188.us-east-2.compute.amazonaws.com
Instance state	running	IPv4 Public IP	18.223.102.188
Instance type	t2.micro	IPv6 IPs	-
Elastic IPs		Private DNS	ip-172-31-28-254.us-east-2.compute.internal
Availability zone	us-east-2b	Private IPs	172.31.28.254

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**Step 7: Browse the IP address** to verify the installation of website



**Step 8:** To create an custom AMI of running application or website click on **Action>Image>Create Image**



**Step 9:** Enter an *Image name* and click on “create image”

**Create Image**

Instance ID ⓘ i-01c1bfe0802747a30

Image name ⓘ **Custom-Http image1**

Image description ⓘ

No reboot ⓘ ☐

**Instance Volumes**

Volume Type ⓘ	Device ⓘ	Snapshot ⓘ	Size (GiB) ⓘ	Volume Type ⓘ	IOPS ⓘ	Throughput (MB/s) ⓘ	Delete on Termination ⓘ	Encrypted ⓘ
Root	/dev/xvda	snap-040ce2c3f0d1a8f58	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

[Add New Volume](#)

Total size of EBS Volumes: 8 GiB  
When you create an EBS image, an EBS snapshot will also be created for each of the above volumes.

[Cancel](#) **Create Image**

**Step 10:** In the left navigation panel select “AMI’s”

**INSTANCES**

- Instances
- Launch Templates
- Spot Requests
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations

**IMAGES**

- AMIs**
- Bundle Tasks

**ELASTIC BLOCK STORE**

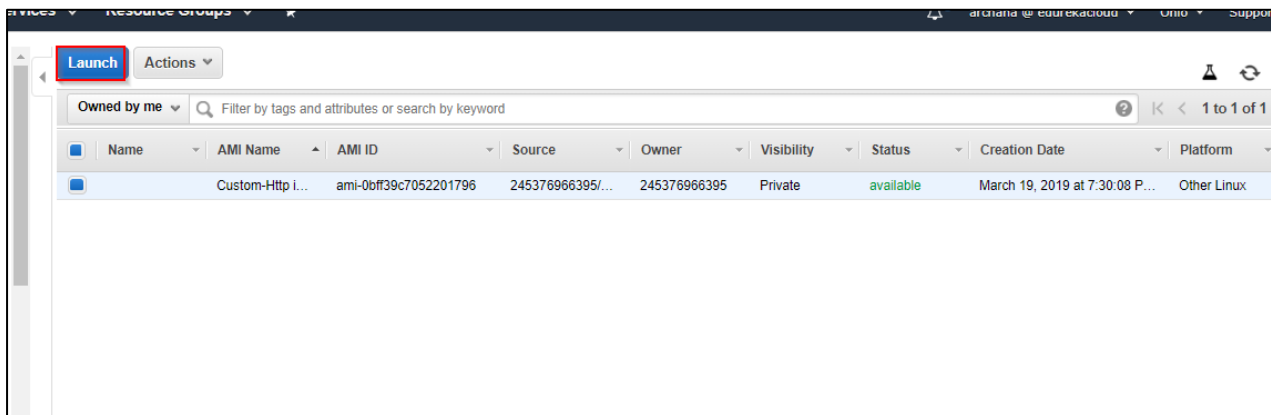
- Volumes

**Instance:** i-01c1bfe0802747a30 **Public DNS:** ec2-18-223-102-188.us-east-2.compute.amazonaws.com

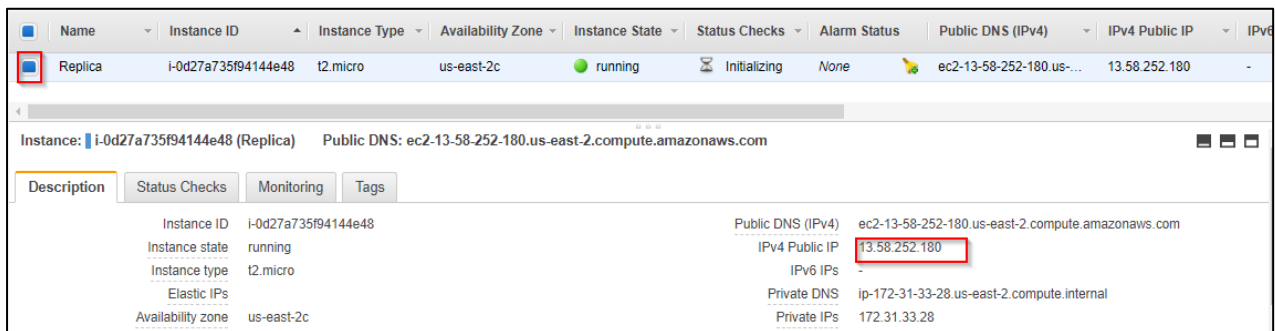
**Description** | Status Checks | Monitoring | Tags

Instance ID	i-01c1bfe0802747a30
Instance state	running
Instance type	t2.micro
Elastic IPs	
Availability zone	us-east-2b
Security groups	launch-wizard-104. <a href="#">view inbound rules</a> . <a href="#">view outbound rules</a>
Scheduled events	No scheduled events
AMI ID	amzn-ami-hvm-2018.03.0.20181129-x86_64-gp2 (ami-0cd3dfa4e37921605)

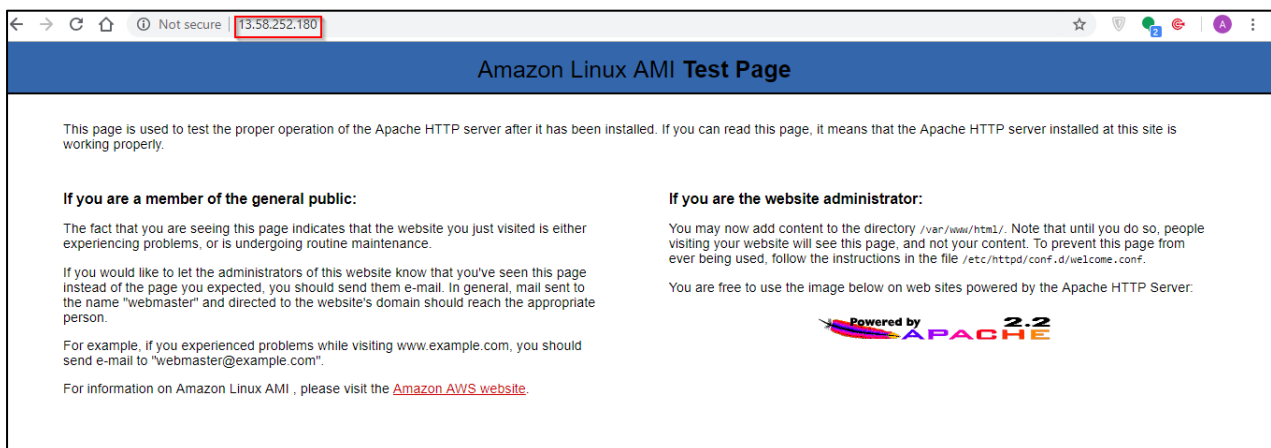
**Step 11:** configure the instance and finally click on “Launch”



**Step 12:** *Copy* the **IP address** of new instance (custom AMI)



**Step 13:** *Browse the IP address* to verify the replication of the instance



### Conclusion:

We have successfully created Custom Amazon Machine Image