

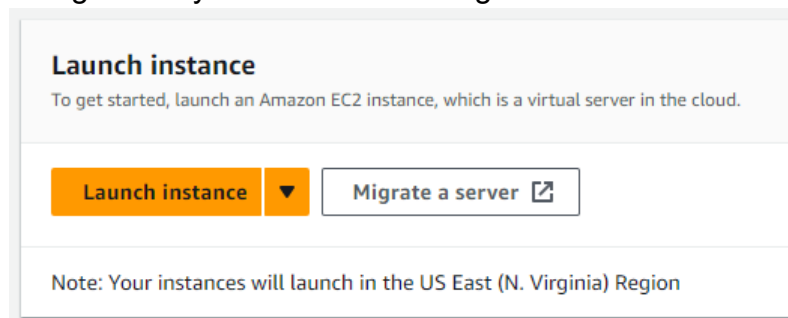
## Note

### Problem Statement:

You work for XYZ Corporation. You want to launch a new web-based application using AWS Virtual Machines. Configure the resources accordingly for the tasks. Tasks To Be Performed:

1. Create an instance in the US-East-1 (N. Virginia) region with an Ubuntu OS and install Nginx for making them web servers.
2. Change the default website with a page displaying the message: "Hello World"

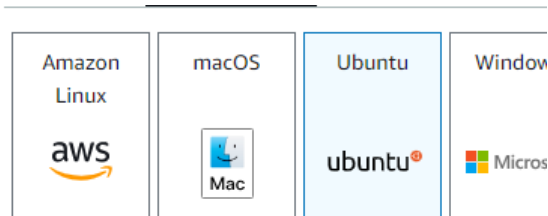
I'll log in to my AWS account and go to **EC2 Dashboard** and click **Launch instance**.



*I happen to be in the correct Region (N. Virginia)*

I'll name my instance **Web\_Server**

Pick Ubuntu:



### Amazon Machine Image (AMI)

Ubuntu Server 22.04 LTS (HVM), SSD Volume Type  
ami-053b0d53c279acc90 (64-bit (x86)) / ami-0a0c8eebcdd6dcb  
Virtualization: hvm ENA enabled: true Root device type: ebs

Instance type:

▼ Instance type Info

Instance type

t2.microFi

Family: t2 1 vCPU 1 GiB Memory Current generation: true  
On-Demand Windows base pricing: 0.0162 USD per Hour  
On-Demand SUSE base pricing: 0.0116 USD per Hour  
On-Demand RHEL base pricing: 0.0716 USD per Hour  
On-Demand Linux base pricing: 0.0116 USD per Hour

Additional costs apply for AMIs with pre-installed software

I'll make sure to **Allow** HTTP, HTTPS

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow speci instance.

☒ Create security group

☐ Select existing security group

We'll create a new security group called 'launch-wizard-61' with the following rules:

☒ Allow SSH traffic from

Helps you connect to your instance

Anywhere  
0.0.0.0/0

☒ Allow HTTPS traffic from the internet

To set up an endpoint, for example when creating a web server

☒ Allow HTTP traffic from the internet

To set up an endpoint, for example when creating a web server

In **Advanced details** I'll run some commands in **User data** to make some changes to the page

User data - optional Info

Upload a file with your user data or enter it in the field.

 Choose file

```
# Change the default website content
echo '<!DOCTYPE html>'
<html>
<head>
  <title>Hello World</title>
</head>
<body>
  <h1>Hello World</h1>
</body>
</html>' > /var/www/html/index.html

# Reload Nginx to pick up the new configuration
systemctl reload nginx
```

The full script:

```
#!/bin/bash
```

```
# Update package lists
```

```
apt-get update -y
```

```
# Install Nginx
```

```
apt-get install nginx -y
```

```
# Enable and start Nginx service
```

```
systemctl enable nginx
```

```
systemctl start nginx
```

```
# Change the default website content
```

```
echo '<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>Hello World</title>
```

```
</head>
```

```
<body>
```

```
    <h1>Hello World</h1>
```



```
</body>
```

```
</html>' > /var/www/html/index.html
```

```
# Reload Nginx to pick up the new configuration
```

```
systemctl reload nginx
```

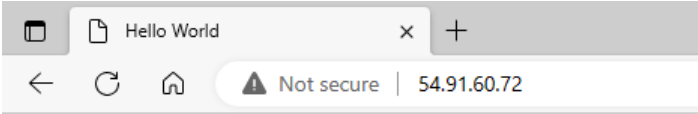
I'll wait for instance to be ready

Instances (1) <a href="#">Info</a>				
<input type="text" value="Find instance by attribute or tag (case-sensitive)"/>				
<input type="checkbox"/>	Name ▾	Instance ID	Instance state ▾	Instance type ▾
<input type="checkbox"/>	Web_Server	i-0f581d01b6e89e31c	 Running 	t2.micro

I'll get the instance's **Public IP**

Public IPv4 a... ▾
54.91.60.72

When I check in the browser the expected page appears:



**Hello World**