

Description:

Amazon Elastic Compute Cloud (Amazon EC2) provides scalable computing capacity in the Amazon Web Services (AWS) cloud. Using Amazon EC2 eliminates your need to invest in hardware up front so you can develop and deploy applications faster. You can use Amazon EC2 to launch as many or as few virtual servers as you need, configure security and networking, and manage storage. Amazon EC2 enables you to scale up or down to handle changes in requirements or spikes in popularity, reducing your need to forecast traffic.

Problem Statement:

Company ABC wants to move their product to AWS. They have the following things set up right now:

1. MySQL DB
2. Website (PHP)

The company wants high availability on this product, therefore wants Auto Scaling to be enabled on this website.

Steps To Solve:

1. Launch an EC2 Instance
2. Enable Auto Scaling on these instances (minimum 2)
3. Create an RDS Instance
4. Create Database & Table in RDS instance:
 - a. Database name: intel
 - b. Table name: data
 - c. Database password: intel123
5. Change hostname in website
6. Allow traffic from EC2 to RDS instance
7. Allow all-traffic to EC2 instance

1. Launch an EC2 Instance

2. Enable Auto Scaling on these instances (minimum 2)

Create launch template

Creating a launch template allows you to create a saved instance configuration that can be reused, shared and launched at a later time. Templates can have multiple versions.

Launch template name and description

Launch template name - required

mytemplate

Must be unique to this account. Max 128 chars. No spaces or special characters like '&', '"', '@'.

Template version description

for web application

Max 255 chars

Auto Scaling guidance [Info](#)

Select this if you intend to use this template with EC2 Auto Scaling

☐ Provide guidance to help me set up a template that I can use with EC2 Auto Scaling

► **Template tags**

► **Source template**

Launch template contents

Specify the details of your launch template below. Leaving a field blank will result in the field not being included in the launch template.

Summary

Software Image (AMI)
Canonical, Ubuntu, 24.04, amd64...[read more](#)
ami-0360c520857e3138f

Virtual server type (instance type)
t2.micro

Firewall (security group)
default

Storage (volumes)
1 volume(s) - 8 GiB

[Cancel](#) [Create launch template](#)

Application and OS Images (Amazon Machine Image) [Info](#)

An AMI contains the operating system, application server, and applications for your instance. If you don't see a suitable AMI below, use the search field or choose [Browse more AMIs](#).

Search our full catalog including 1000s of application and OS images

Quick Start

Don't include in launch template

Amazon Linux

macOS

Ubuntu

Windows

Red Hat

SUSE Linux

Debian

[Browse more AMIs](#)
Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type

ami-0360c520857e3138f (64-bit x86) / ami-026fcd8846a0b0f (64-bit ARM)

Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible

Description

Ubuntu Server 24.04 LTS (HVM),EB5 General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Canonical, Ubuntu, 24.04, amd64 noble image

Summary

Software Image (AMI)
Canonical, Ubuntu, 24.04, amd64...[read more](#)
ami-0360c520857e3138f

Virtual server type (instance type)
t2.micro

Firewall (security group)
default

Storage (volumes)
1 volume(s) - 8 GiB

[Cancel](#) [Create launch template](#)

Edge | Start Course | Intellipaat | AWS Management Console | Launch templates | EC2 | us-east-1 | Set inbound rule RDS

https://251985476962-ztjdprc.us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchTemplates:

Account ID: 2519-8547-6962 United States (N. Virginia) root

Launch Templates (1/1) Info

Search

| Launch Template ID | Launch Template Name | Default Version | Latest Version | Create Time | Created By |
|----------------------|----------------------|-----------------|----------------|--------------------------|--------------------------------|
| lt-084412031c252eb3e | mytemplate | 1 | 1 | 2025-08-27T09:42:12.000Z | arn:aws:iam::251985476962:root |

mytemplate (lt-084412031c252eb3e)

Launch template details

| | | | |
|----------------------|----------------------|-----------------|--------------------------------|
| Launch template ID | Launch template name | Default version | Owner |
| lt-084412031c252eb3e | mytemplate | 1 | arn:aws:iam::251985476962:root |

Actions Delete template

Launch template version details

Actions Delete template version

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26°C Cloudy Search 15:12 27-08-2025

Edge | Start Course | Intellipaat | AWS Management Console | Create Auto Scaling group | EC2 | Set inbound rule RDS

https://251985476962-ztjdprc.us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateAutoScalingGroup:

Account ID: 2519-8547-6962 United States (N. Virginia) root

Create Auto Scaling group

Choose launch template

Step 2: Choose instance launch options

Step 3 - optional: Integrate with other services

Step 4 - optional: Configure group size and scaling

Step 5 - optional: Add notifications

Step 6 - optional: Add tags

Step 7: Review

Choose launch template Info

Specify a launch template that contains settings common to all EC2 instances that are launched by this Auto Scaling group.

Name

Auto Scaling group name

Enter a name to identify the group.

auto-scaling-GP-27th-Aug

Must be unique to this account in the current Region and no more than 255 characters.

Launch template Info

For accounts created after May 31, 2023, the EC2 console only supports creating Auto Scaling groups with launch templates. Creating Auto Scaling groups with launch configurations is not recommended but still available via the CLI and API until December 31, 2023.

Launch template

Choose a launch template that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups.

mytemplate

Create a launch template

Version

Default (1)

Create a launch template version

Description

for web application

Launch template

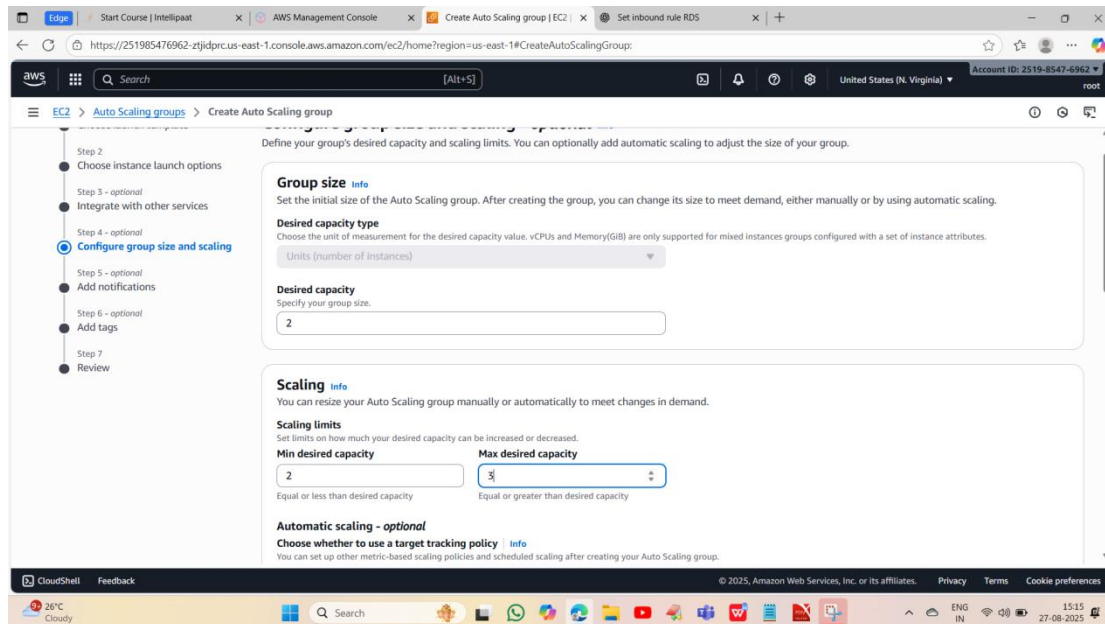
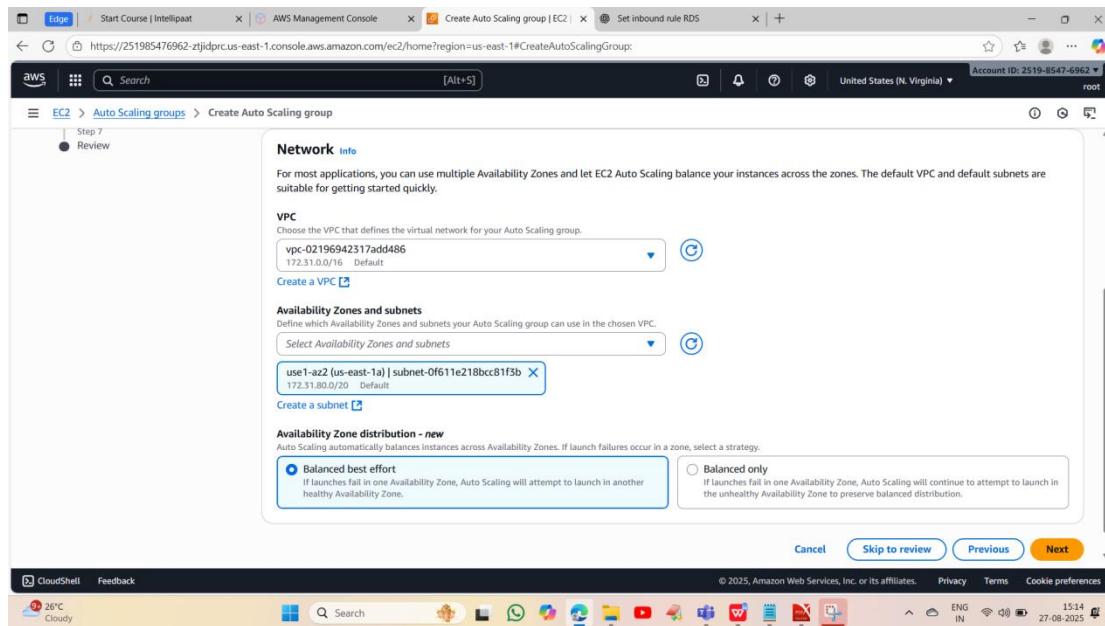
mytemplate

Instance type

t2.micro

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Attached i-07ae9d90899f2e164 to auto scaling group auto-scalingGP-27th-Aug

Instances (1/4) Info Last updated 1 minute ago [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

Find Instance by attribute or tag (case-sensitive) [All states](#)

| | Name | Instance ID | Instance state | Instance type | Status check | Alarm status | Availability Zone | Public IPv4 |
|-------------------------------------|------------|---------------------|----------------|---------------|-------------------|-------------------------------|-------------------|-------------|
| <input type="checkbox"/> | server3 | i-0694d02f91d4b1395 | Terminated | t2.micro | - | View alarms + | us-east-1b | - |
| <input type="checkbox"/> | server1 | i-02a5526ad9ad63c65 | Running | t2.micro | 2/2 checks passed | View alarms + | us-east-1a | ec2-54-15- |
| <input type="checkbox"/> | server2 | i-0450e8820e42b43dc | Running | t2.micro | 2/2 checks passed | View alarms + | us-east-1a | ec2-54-22- |
| <input checked="" type="checkbox"/> | web-server | i-07ae9d90899f2e164 | Running | t2.micro | Initializing | View alarms + | us-east-1a | ec2-54-20- |

i-07ae9d90899f2e164 (web-server)

[Details](#) [Status and alarms](#) [Monitoring](#) [Security](#) [Networking](#) [Storage](#) [Tags](#)

Instance summary Info

| | | |
|------------------------------------|--|---|
| Instance ID i-07ae9d90899f2e164 | Public IPv4 address 54.204.174.162 open address | Private IPv4 addresses 172.31.94.32 |
| IPv6 address - | Instance state Running | Public DNS ec2-54-204-174-162.compute-1.amazonaws.com open address |

3. Create an RDS Instance

Create database Info

Choose a database creation method

☒ **Standard create**
You set all of the configuration options, including ones for availability, security, backups, and maintenance.

☐ **Easy create**
Use recommended best-practice configurations. Some configuration options can be changed after the database is created.

Engine options Info

| | | |
|---|--|---|
| <input type="radio"/> Aurora (MySQL Compatible) | <input type="radio"/> Aurora (PostgreSQL Compatible) | <input checked="" type="radio"/> MySQL |
| <input type="radio"/> PostgreSQL | <input type="radio"/> MariaDB | <input type="radio"/> Oracle |
| <input type="radio"/> Microsoft SQL Server | <input type="radio"/> IBM Db2 | |

Edge | Start Course | Intellipaat | AWS Management Console | Instances | EC2 | us-east-1 | Create database | Aurora and RDS | Set inbound rule RDS

https://251985476962-ztjdprc-us-east-1.console.aws.amazon.com/rds/home?region=us-east-1#launch-dbinstance:

AWS Search [Alt+S] United States (N. Virginia) Account ID: 2519-8547-6962 root

Aurora and RDS > Create database

Settings

DB instance identifier [Info](#)
Type a name for your DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS Region.

intel

The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.

▼ **Credentials Settings**

Master username [Info](#)
Type a login ID for the master user of your DB instance.

intel

1 to 16 alphanumeric characters. The first character must be a letter.

Credentials management
You can use AWS Secrets Manager or manage your master user credentials.

☐ Managed in AWS Secrets Manager - most secure
RDS generates a password for you and manages it throughout its lifecycle using AWS Secrets Manager.

☒ Self managed
Create your own password or have RDS create a password that you manage.

☐ Auto generate password
Amazon RDS can generate a password for you, or you can specify your own password.

Master password [Info](#)

1

Password strength

Minimum constraints: At least 8 printable ASCII characters. Can't contain any of the following symbols: / * @

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Edge | Start Course | Intellipaat | Instances | EC2 | us-east-1 | Databases | Aurora and RDS | Set inbound rule RDS

https://251985476962-ztjdprc-us-east-1.console.aws.amazon.com/rds/home?region=us-east-1#databases:

AWS Search [Alt+S] United States (N. Virginia) Account ID: 2519-8547-6962 root

Aurora and RDS > Databases

Aurora and RDS

- Dashboard
- Databases**
- Query editor
- Performance insights
- Snapshots
- Exports in Amazon S3
- Automated backups
- Reserved instances
- Proxies
- Subnet groups
- Parameter groups
- Option groups
- Custom engine versions
- Zero-ETL integrations [New](#)
- Events
- Event subscriptions

Databases (1)

Filter by databases

Group resources Modify Actions Create database

| DB identifier | Status | Role | Engine | Region | Size |
|---------------|-----------|----------|-------------|------------|--------------|
| intel | Available | Instance | MySQL Co... | us-east-1a | db.t4g.micro |

4

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7. Allow all-traffic to EC2 instance

Edit inbound rules Info

Inbound rules control the incoming traffic that's allowed to reach the instance.

| Security group rule ID | Type | Protocol | Port range | Source | Description - optional |
|------------------------|-------------|----------|------------|--------|------------------------|
| sgr-051dc83bad834ba6e | All traffic | All | All | Custom | |

[Add rule](#) [Delete](#) [Cancel](#) [Preview changes](#) [Save rules](#)

6. Allow traffic from EC2 to RDS instance

Use EC2 Security Group to RDS

Connectivity & security

Endpoint & port

Endpoint: intelcs9loosm0qea-us-east-1.rds.amazonaws.com

Port: 3306

Networking

Availability Zone: us-east-1a

VPC: vpc-02196942317add486

Subnet group: default-vpc-02196942317add486

Subnets: subnet-012d590a3c6d19642, subnet-0f611e218bcc81f3b, subnet-0a9ed3914328bxd7c, subnet-08d2972ac79bd9d6d, subnet-0dfac280838582fa, subnet-0c3e601c1bdf99c4d

Security

VPC security groups: default (sg-01ae782fd787c833f) [Active](#)

Publicly accessible: No

Certificate authority: rds-ca-rsa2048-g1

Certificate authority date: May 26, 2061, 05:04 (UTC+05:30)

DB instance certificate expiration date: August 27, 2026, 15:30 (UTC+05:30)

Connect to EC2 and Update

The screenshot shows an AWS CloudShell terminal window. The terminal output displays the Ubuntu 24.04.3 LTS welcome message, system information (load, memory, swap, processes, users, IP), and the status of security updates. The updates are not enabled, and the user is prompted to enable them. The terminal also shows the last login time and the user's current shell prompt.

```
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.14.0-1011-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Wed Aug 27 10:13:41 UTC 2025

System load:  0.0          Processes:    109
Usage of /:   26.0% of 6.71GB   Users logged in: 0
Memory usage: 20%          IPv4 address for enX0: 172.31.94.59
Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

Last login: Wed Aug 27 10:09:28 2025 from 18.206.107.28
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-94-59:~$
```

i-00541d963387ca85d (webserver)
PublicIPs: 54.152.103.233 PrivateIPs: 172.31.94.59

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Install Apache server

The screenshot shows an AWS CloudShell terminal window. The terminal output displays the installation of Apache2 using apt. The output shows the progress of downloading and installing the package, including the size of the package and the amount of data fetched. The installation is successful, and the user is prompted to enter a password for the new user.

```
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [271 kB]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [175 kB]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1126 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [288 kB]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [378 kB]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [26.0 kB]
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [1773 kB]
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [395 kB]
Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:34 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [33.2 kB]
Get:35 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [6772 B]
Get:36 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:37 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [592 B]
Get:38 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Packages [39.9 kB]
Get:39 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main Translation-en [9152 B]
Get:40 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7084 B]
Get:41 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [272 B]
Get:42 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [30.2 kB]
Get:43 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [17.4 kB]
Get:44 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [19.2 kB]
Get:45 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [1304 B]
Get:46 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:47 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]
Get:48 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:49 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
Fetched 34.2 MB in 6s (5288 KB/s)
Reading package lists... Done
ubuntu@ip-172-31-94-59:~$ sudo apt install apache2
```

i-00541d963387ca85d (webserver)
PublicIPs: 54.152.103.233 PrivateIPs: 172.31.94.59

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Edge | Start Course | Intellipaat | ModifyInboundSecurityGr... | Databases | Aurora and R... | Instances | EC2 | us-east-1 | EC2 Instance Connect | us... | Set inbound rule RDS | + | - |

https://251985476962-ztjdpcrus-east-1.console.aws.amazon.com/ec2-instance-connect/ssh/home?region=us-east-1&connType=standard&instanceId=i-00541d963387ca85d&osUser=ubuntu&ssh... Account ID: 2519-8547-6962 root

```
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /usr/lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /usr/lib/systemd/system/apache-htcacheclean.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.5) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-94-59:~$ cd /var/www/html
```

i-00541d963387ca85d (webserver)
PublicIPs: 54.152.103.233 PrivateIPs: 172.31.94.59

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Create PHP Webpage

Edge | Start Course | Intellipaat | ModifyInboundSecurityGr... | Databases | Aurora and R... | Instances | EC2 | us-east-1 | EC2 Instance Connect | us... | Set inbound rule RDS | + | - |

https://251985476962-ztjdpcrus-east-1.console.aws.amazon.com/ec2-instance-connect/ssh/home?region=us-east-1&connType=standard&instanceId=i-00541d963387ca85d&osUser=ubuntu&ssh... Account ID: 2519-8547-6962 root

```
Enabling module deflate.
Enabling module status.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /usr/lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /usr/lib/systemd/system/apache-htcacheclean.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.5) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

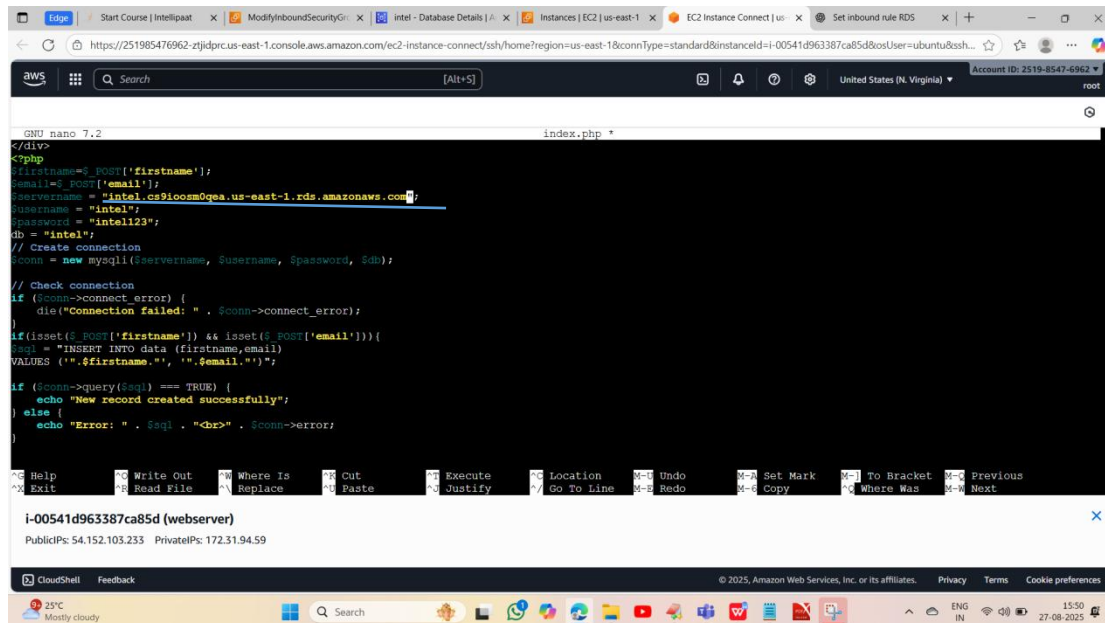
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-94-59:~$ cd /var/www/html
ubuntu@ip-172-31-94-59:/var/www/html$ sudo rm -r index.html
ubuntu@ip-172-31-94-59:/var/www/html$ sudo nano index.php
```

i-00541d963387ca85d (webserver)
PublicIPs: 54.152.103.233 PrivateIPs: 172.31.94.59

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5. Change hostname in website



The screenshot shows the AWS CloudShell interface with a terminal window. The terminal displays PHP code for a web form that connects to a MySQL database. The code is as follows:

```
#!/usr/bin/perl
use strict;
use warnings;

my $hostname = "intel.cs9ic0sm0qea.us-east-1-rds.amazonaws.com";
my $username = "intel";
my $password = "intel123";
my $db = "intel";

// Create connection
my $conn = new MySQLi($hostname, $username, $password, $db);

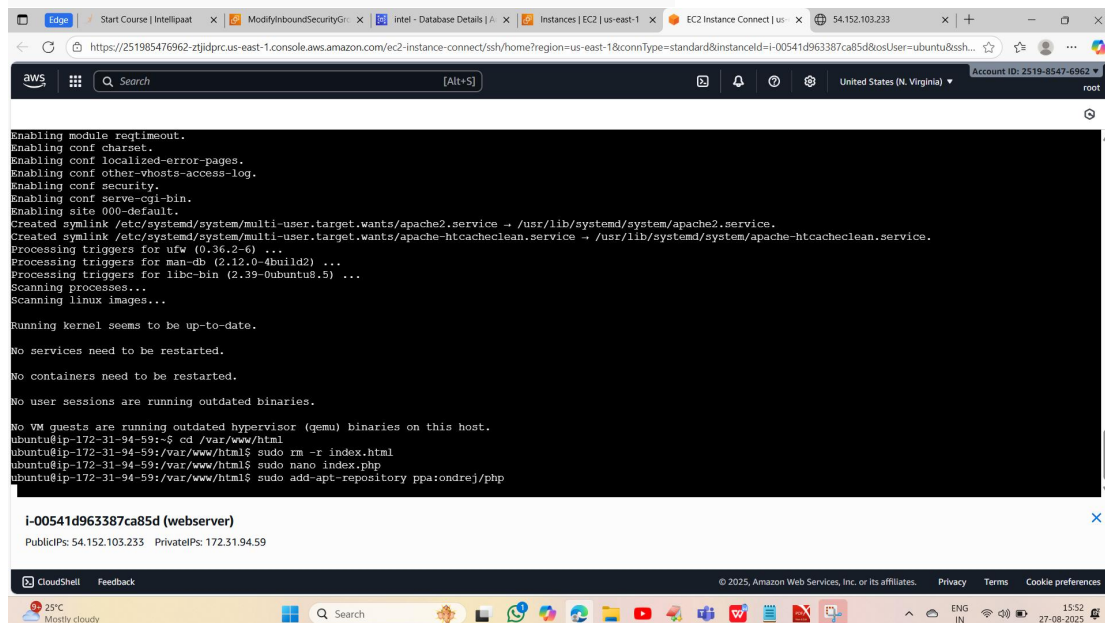
// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

if (isset($_POST['firstname']) && isset($_POST['email'])) {
    $sql = "INSERT INTO data (firstname, email)
VALUES ('".$_POST['firstname']."', '".$_POST['email']."')";

    if ($conn->query($sql) === TRUE) {
        echo "New record created successfully";
    } else {
        echo "Error: " . $sql . "<br>" . $conn->error;
    }
}
```

The terminal window title is "index.php *". The AWS CloudShell interface shows the instance ID "i-00541d963387ca85d (webserver)" and public/private IP addresses. The bottom of the screen shows the AWS CloudShell status bar with the date and time.

Add Repository and install PHP



The screenshot shows the AWS CloudShell interface with a terminal window. The terminal displays the output of system updates and PHP installation. The output is as follows:

```
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service -> /usr/lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service -> /usr/lib/systemd/system/apache-htcacheclean.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.5) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-94-59:~$ cd /var/www/html
ubuntu@ip-172-31-94-59:~$ sudo rm -r index.html
ubuntu@ip-172-31-94-59:~$ sudo nano index.php
ubuntu@ip-172-31-94-59:~$ sudo add-apt-repository ppa:ondrej/php
```

The terminal window title is "index.php *". The AWS CloudShell interface shows the instance ID "i-00541d963387ca85d (webserver)" and public/private IP addresses. The bottom of the screen shows the AWS CloudShell status bar with the date and time.

Edge | Start Course | Intellipaat | ModifyInboundSecurityGr... | intel - Database Details | Instances | EC2 | us-east-1 | EC2 Instance Connect | us... | 54.152.103.233

https://251985476962-ztjdpcrc.us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh/home?region=us-east-1&connType=standard&instanceId=i-00541d963387ca85d&osUser=ubuntu&ssh...

Account ID: 2519-8547-6962

root

You can get more information about the packages at <https://deb.sury.org>

BUGS&FEATURES: This PPA has a issue tracker:
<https://deb.sury.org/#bug-reporting>

Issues reported in a private email don't scale and most likely will be ignored. I simply don't have capacity to answer questions privately.

CAVEATS:

1. If you are using apache2, you are advised to add ppa:ondrej/apache2
2. If you are using nginx, you are advised to add ppa:ondrej/nginx

DONATION: If you like my work and you want to show appreciation, please consider donating regularly: <https://donate.sury.org/>

COMMERCIAL SUPPORT: Support for PHP packages for older Debian and Ubuntu release can be bought from <https://www.freexian.com/its/php/>
More info: <https://launchpad.net/~ondrej/+archive/ubuntu/php>

Adding repository.
Press [ENTER] to continue or Ctrl-c to cancel.

Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Get:5 <https://ppa.launchpadcontent.net/ondrej/php/ubuntu/noble> InRelease [24.3 kB]
Get:6 <https://ppa.launchpadcontent.net/ondrej/php/ubuntu/noble/main amd64> Packages [130 kB]
Get:7 <https://ppa.launchpadcontent.net/ondrej/php/ubuntu/noble/main Translation-en> [40.8 kB]
Fetched 196 kB in 1s (173 kB/s)
Reading package lists... Done
ubuntuip-172-31-94-59:/var/www/html\$ sudo apt install php5.6

i-00541d963387ca85d (webserver)
PublicIPs: 54.152.103.233 PrivateIPs: 172.31.94.59

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Edge | Start Course | Intellipaat | ModifyInboundSecurityGr... | intel - Database Details | Instances | EC2 | us-east-1 | EC2 Instance Connect | us... | 54.152.103.233

https://251985476962-ztjdpcrc.us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh/home?region=us-east-1&connType=standard&instanceId=i-00541d963387ca85d&osUser=ubuntu&ssh...

Account ID: 2519-8547-6962

root

update-alternatives: using /usr/bin/php5.6 to provide /usr/bin/php (php) in auto mode
update-alternatives: using /usr/bin/php.phar5.6 to provide /usr/bin/php.phar (php.phar) in auto mode

Creating config file /etc/php/5.6/cli/php.ini with new version
Setting up libapache2-mod-php5.6 (5.6.40-86+ubuntu24.04.1+deb.sury.org+1) ...

Creating config file /etc/php/5.6/apache2/php.ini with new version
Module mpm_event disabled.
Enabling module mpm_prefork.
apache2_switch mpm Switch to prefork
apache2_invoke: Enable module php5.6
Setting up php5.6 (5.6.40-86+ubuntu24.04.1+deb.sury.org+1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.5) ...
Processing triggers for php5.6-cli (5.6.40-86+ubuntu24.04.1+deb.sury.org+1) ...
Processing triggers for libapache2-mod-php5.6 (5.6.40-86+ubuntu24.04.1+deb.sury.org+1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.

ubuntuip-172-31-94-59:/var/www/html\$ sudo apt install php5.6-mysql

i-00541d963387ca85d (webserver)
PublicIPs: 54.152.103.233 PrivateIPs: 172.31.94.59

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Install MySQL server

```
Edge | Start Course | IntelliPaaS | ModifyInboundSecurityGr... | intel - Database Details | Instances | EC2 | us-east-1 | EC2 Instance Connect | us-east-1 | 54.152.103.233 | 54.152.103.233 | United States (N. Virginia) | Account ID: 2519-8547-6963 | root

https://251985476962-ztjdprc-us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh/home?region=us-east-1&connType=standard&instanceId=i-00541d963387ca85d&osUser=ubuntu&ssh...

Selecting previously unselected package php5.6-mysql.
(Reading database ... 72590 files and directories currently installed.)
Preparing to unpack .../php5.6-mysql_5.6.40-86+ubuntu24.04.1+deb.sury.org+1_amd64.deb ...
Unpacking php5.6-mysql (5.6.40-86+ubuntu24.04.1+deb.sury.org+1) ...
Setting up php5.6-mysql (5.6.40-86+ubuntu24.04.1+deb.sury.org+1) ...

Creating config file /etc/php/5.6/mods-available/mysqlnd.ini with new version

Creating config file /etc/php/5.6/mods-available/mysql.ini with new version

Creating config file /etc/php/5.6/mods-available/pdo_mysql.ini with new version

Creating config file /etc/php/5.6/mods-available/mysql.ini with new version
Processing triggers for libapache2-mod-php5.6 (5.6.40-86+ubuntu24.04.1+deb.sury.org+1) ...
Processing triggers for php5.6-cli (5.6.40-86+ubuntu24.04.1+deb.sury.org+1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-94-59:/var/www/html$ sudo apt install mysql-client -y

i-00541d963387ca85d (webserver)
PublicIPs: 54.152.103.233 PrivateIPs: 172.31.94.59

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25°C Mostly cloudy | Search | 15:54 27-08-2025
```

```
Edge | Start Course | IntelliPaaS | ModifyInboundSecurityGr... | intel - Database Details | Instances | EC2 | us-east-1 | EC2 Instance Connect | us-east-1 | 54.152.103.233 | 54.152.103.233 | United States (N. Virginia) | Account ID: 2519-8547-6963 | root

https://251985476962-ztjdprc-us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh/home?region=us-east-1&connType=standard&instanceId=i-00541d963387ca85d&osUser=ubuntu&ssh...

Setting up mysql-client (8.0.43-0ubuntu0.24.04.1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-94-59:/var/www/html$ sudo mysql -h intel.cs9ic0sm0qea.us-east-1.rds.amazonaws.com -u intel -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 32
Server version: 8.0.42 Source distribution

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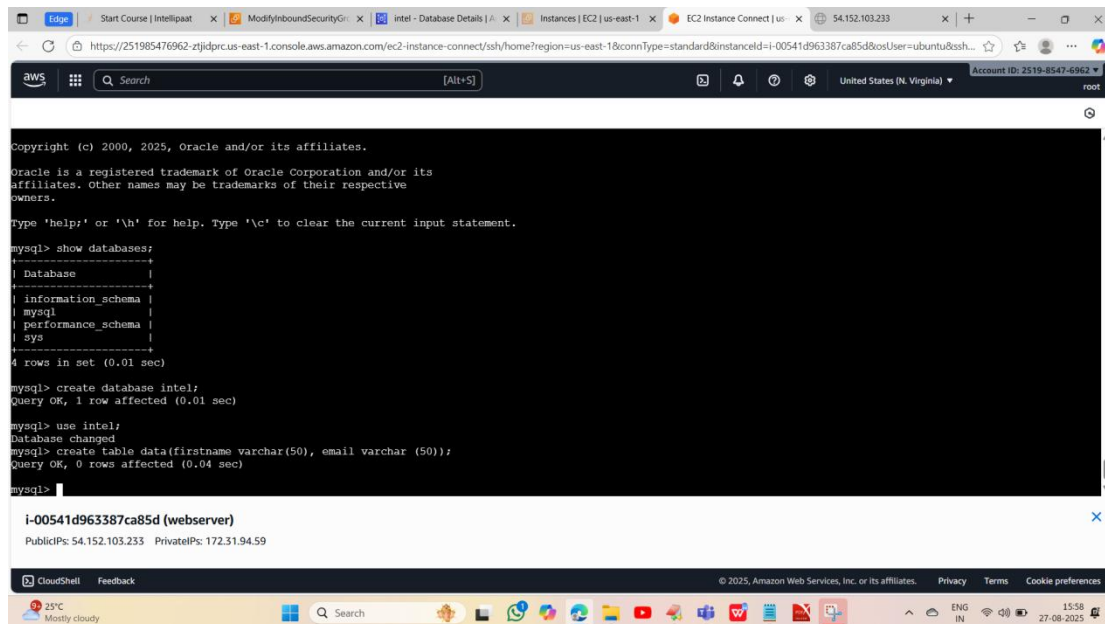
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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

Create Database & Table in RDS instance:

- Database name: intel
- Table name: data



The screenshot shows the AWS CloudShell interface. The terminal window displays the following commands and output:

```
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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
4 rows in set (0.01 sec)

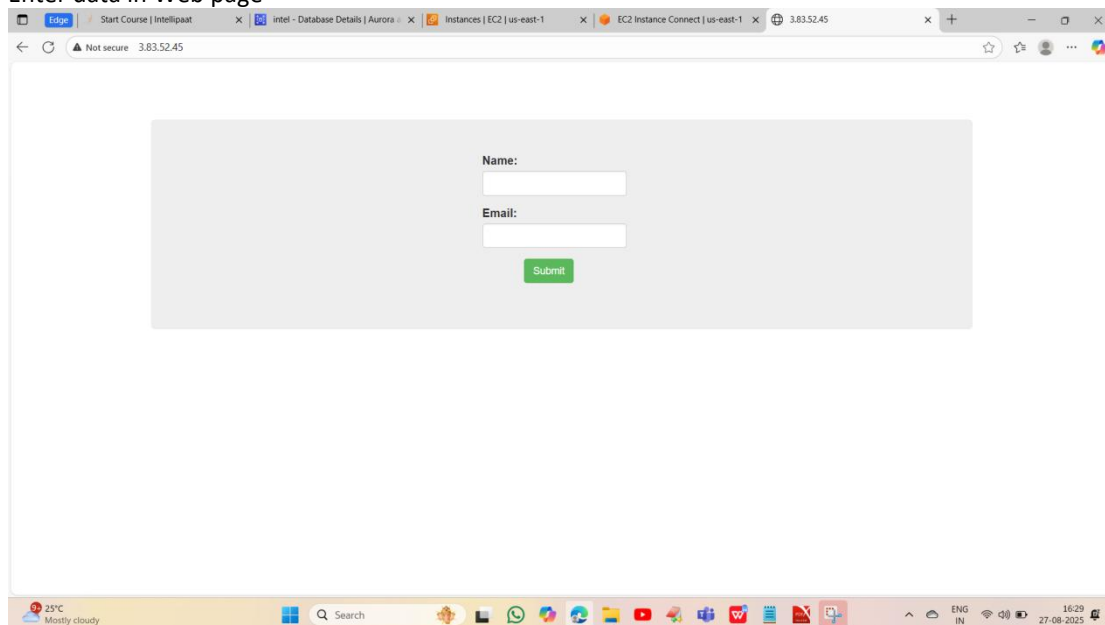
mysql> create database intel;
Query OK, 1 row affected (0.01 sec)

mysql> use intel;
Database changed
mysql> create table data(firstname varchar(50), email varchar(50));
Query OK, 0 rows affected (0.04 sec)

mysql>
```

Below the terminal, a box identifies the instance: **i-00541d963387ca85d (webserver)** with Public IP: 54.152.103.233 and Private IP: 172.31.94.59.

Enter data in Web page



The screenshot shows a web browser window with a simple form. The form has two input fields: "Name:" and "Email:". Below the "Email:" field is a green "Submit" button. The browser's address bar shows the URL "3.83.52.45".

Edge | Start Course | Intellipaat | Intel - Database Details | Aurora | Instances | EC2 | us-east-1 | EC2 Instance Connect | us-east-1 | 3.83.52.45

Not secure 3.83.52.45

Name:

Email:

Submit

New record created successfully

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Data from Web Page that stored in Database(intel)

Edge | Start Course | Intellipaat | Intel - Database Details | Aurora | Instances | EC2 | us-east-1 | EC2 Instance Connect | us-east-1 | 3.83.52.45

https://251985476962-ztjdprc.us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh/home?region=us-east-1&connType=standard&instanceId=i-02be688139c9916f9&osUser=ubuntu&ssh...

aws | Search | [Alt+5] | United States (N. Virginia) | Account ID: 2519-8547-6962 | root

```
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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database intel;
ERROR 1007 (HY000): Can't create database 'intel'; database exists
mysql> select *from data;
ERROR 1046 (3D000): No database selected
mysql> use intel;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select *from data;
+-----+-----+
| firstname | email |
+-----+-----+
| mahi      | mahi@gmail.com |
| bhavi     | bhavi@gmail.com |
| shyam     | shyam@gmail.com |
| renu      | renu@gmail.com |
+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

i-02be688139c9916f9 (myserver)

PublicIPs: 3.83.52.45 PrivateIPs: 172.31.95.115

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