

# ADVANCE DEVOPS EXP-1

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**D15A/60**

Aim: To understand the benefits of Cloud infrastructure and Setup AWS Cloud9 IDE, Launch AWS Cloud9 IDE and Perform Collaboration Demonstration.

## Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

### Name and tags [Info](#)


Name

[Add additional tags](#)

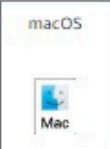
### ▼ Application and OS Images (Amazon Machine Image) [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below


#### Quick Start




Amazon Linux




macOS




Ubuntu




Windows



Red Hat



SUSE



[Browse more AMIs](#)

Including AMIs from AWS, Marketplace and the Community

### ▼ Instance type [Info](#) | [Get advice](#)

Instance type

t3.micro

Family: t3 2 vCPU 1 GiB Memory Current generations: true

On-Demand RHEL base pricing: 0.0396 USD per Hour

On-Demand SUSE base pricing: 0.0108 USD per Hour

On-Demand Linux base pricing: 0.0108 USD per Hour

On-Demand Windows base pricing: 0.02 USD per Hour

Free tier eligible

▼

☐ All generations


[Compare instance types](#)

Additional costs apply for AMIs with pre-installed software

### ▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required

 [Create new key pair](#)

## ▼ Network settings [Info](#)

[Edit](#)

Network [Info](#)

vpc-0775017352e40f883

Subnet [Info](#)

No preference (Default subnet in any availability zone)

Auto-assign public IP [Info](#)

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups) [Info](#)

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

☒ Create security group

☐ Select existing security group

We'll create a new security group called '**launch-wizard-1**' 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

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⚠ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only. ✕

**Success**  
Successfully initiated launch of Instance [i-0adcab46a9d7c2ae2](#)

**Instances (1) Info** Refresh Connect Instance state ▼ Actions ▼ Launch instances ▼

All states ▼ < 1 > Refresh

| <input type="checkbox"/> | Name ↗          | Instance ID         | Instance state ▼ | Instance type ▼ | Status check | Alarm status                  | Availability Zone ▼ | Public IPv4 DNS          | Pub  |
|--------------------------|-----------------|---------------------|------------------|-----------------|--------------|-------------------------------|---------------------|--------------------------|------|
| <input type="checkbox"/> | Vedang's Server | i-0adcab46a9d7c2ae2 | Running @        | t3.micro        | Initializing | <a href="#">View alarms +</a> | eu-north-1b         | ec2-13-61-2-113.eu-no... | 13.1 |

```
* Support: https://ubuntu.com/pro

System information as of Tue Aug 20 07:27:04 UTC 2024

System load: 0.17      Temperature:      -273.1 C
Usage of /: 22.7% of 6.71GB  Processes:      112
Memory usage: 24%      Users logged in: 0
Swap usage: 0%        IPv4 address for ens5: 172.31.37.143

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

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-37-143:~$
```

```
root@ip-172-31-37-143:/home/ubuntu# apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
```

```
root@ip-172-31-37-143:/home/ubuntu# systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
   Active: active (running) since Tue 2024-08-20 07:28:04 UTC; 2min 10s ago
     Docs: https://httpd.apache.org/docs/2.4/
    Main PID: 2454 (apache2)
      Tasks: 55 (limit: 1078)
     Memory: 5.5M (peak: 5.9M)
        CPU: 45ms
    CGroup: /system.slice/apache2.service
            └─2454 /usr/sbin/apache2 -k start
            └─2456 /usr/sbin/apache2 -k start
            └─2458 /usr/sbin/apache2 -k start
```

```
root@ip-172-31-37-143:/home/ubuntu# cd /var/www/html
root@ip-172-31-37-143:/var/www/html# /var/www/html
bash: /var/www/html: Is a directory
root@ip-172-31-37-143:/var/www/html#
```

The screenshot shows a web browser window with the address bar displaying '13.61.2.113'. The page title is 'Apache2 Default Page'. The main content area features the Ubuntu logo and a red button that says 'It works!'. Below this, there is a paragraph of text explaining that this is the default welcome page used to test the correct operation of the Apache2 server. A section titled 'Configuration Overview' follows, detailing the configuration system and providing a list of configuration files and their purposes. The browser's address bar shows 'Not secure' and the IP address '13.61.2.113'.

## Apache2 Default Page

# Ubuntu

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

### Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in `/usr/share/doc/apache2/README.Debian.gz`**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
/   |-- ports.conf
|-- mods-enabled
/   |-- *.load
/   |-- *.conf
|-- conf-enabled
/   |-- *.conf
|-- sites-enabled
/   |-- *.conf
```

- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
- `ports.conf` is always included from the main configuration file. It is used to determine the listening ports for incoming connections, and this file can be customized anytime.
- Configuration files in the `mods-enabled/`, `conf-enabled/` and `sites-enabled/` directories contain particular configuration snippets which manage modular, global configuration fragments, or