ADVANCE DEVOPS EXP-1

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

Pranav's Server   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

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

Recents | **Quick Start**

Amazon Linux	macOS	Ubuntu	Windows	Red Hat	SUSE Li
aws	Mac	ubuntu	Microsoft	Red Hat	SUS

Browse more AMIs
Including AMIs from AWS, Marketplace and the Community

▼ Instance type Info | Get advice

Instance type

t3.micro   Free tier eligible
Family: t3   2 vCPU   1 GiB Memory   Current generation: 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

⬤ 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*

Proceed without a key pair (Not recommended)   Default value ▼   ↻ Create new key pair

▼ Network settings Info   Edit

Network | Info
vpc-0246aa0b2b4afcc38

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-9**' with the following rules:

☑ Allow SSH traffic from   Anywhere
    Helps you connect to your instance   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.   ✕

Instances (2) Info

	Name		Instance ID	Instance state		Instance type		Status check	Alarm status	Availability Zone	Public IPv4 DNS		Publi
	Pranav's Server		i-0473b7ad796b995d5	⊘ Running ⊕ ⊖		t3.micro		⊕ Initializing	View alarms +	eu-north-1b	ec2-13-61-22-221.eu-n...		13.61

Find Instance by attribute or tag (case-sensitive)

All states ▾

Connect   Instance state ▾   Actions ▾   Launch instances ▾

‹ 1 ›

```
login as: ubuntu
Authenticating with public key "test-key"
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-1009-aws x86_64)

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

System information as of Mon Jul 29 17:28:10 UTC 2024

  System load:   0.02              Processes:              109
  Usage of /:    10.5% of 14.46GB  Users logged in:        0
  Memory usage:  20%               IPv4 address for enX0:  172.31.43.87
  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


The list of available updates is more than a week old.
```

```
root@ip-172-31-43-87:/# apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.58-1ubuntu8.4).
0 upgraded, 0 newly installed, 0 to remove and 26 not upgraded.
root@ip-172-31-43-87:/#
```

```
root@ip-172-31-43-87:/# 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 2024-07-30 05:02:47 UTC; 12min ago
       Docs: https://httpd.apache.org/docs/2.4/
    Process: 494 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Main PID: 527 (apache2)
      Tasks: 55 (limit: 1130)
     Memory: 8.3M (peak: 8.5M)
        CPU: 94ms
     CGroup: /system.slice/apache2.service
             ├─527 /usr/sbin/apache2 -k start
             ├─532 /usr/sbin/apache2 -k start
             └─533 /usr/sbin/apache2 -k start

Jul 30 05:02:45 ip-172-31-43-87 systemd[1]: Starting apache2.service - The Apache HTTP Server...
Jul 30 05:02:47 ip-172-31-43-87 systemd[1]: Started apache2.service - The Apache HTTP Server.
root@ip-172-31-43-87:/#
```

```
root@ip-172-31-43-87:/# cd /var/www/html/
root@ip-172-31-43-87:/var/www/html#
```


Apache2 Default Page

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 modules, global configuration fragments, or