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**Roll No: A014**

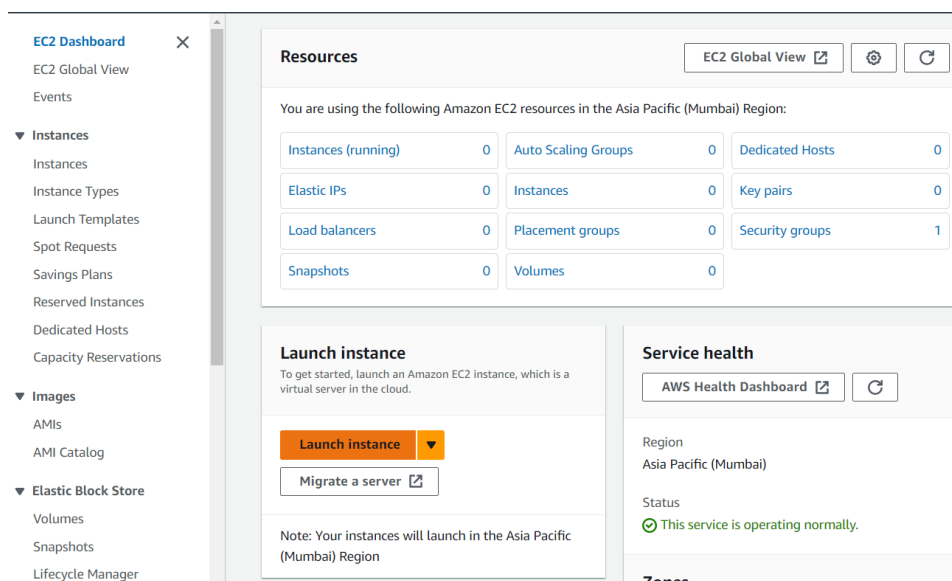
**SAP ID: 86062300052**

### **Practical 1: Infrastructure as a service using AWS.**

1. Implementing the Ubuntu machine using AWS ec2 and execute LINUX commands.

#### **Steps involved:**

Click on launch instance after searching for ec2 dashboard.



Name the instance and from the quick start menu select Ubuntu server.

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  
aws

macOS  
Mac

Ubuntu  
ubuntu

Windows  
Microsoft

Red Hat  
Red Hat

SUSE Li  
SUSE

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

Select appropriate Ubuntu server from Amazon Machine Image and the instance type.

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type  
ami-0ad21ae1d0696ad58 (64-bit (x86)) / ami-01f6c796d6dbc1e36 (64-bit (Arm))  
Virtualization: hvm   ENA enabled: true   Root device type: ebs

Free tier eligible ▼

Description

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

Architecture

64-bit (x86) ▼

AMI ID  
ami-0ad21ae1d0696ad58

Verified provider

▼ Instance type
Info | Get advice

Instance type

t2.micro  
Family: t2   1 vCPU   1 GiB Memory   Current generation: true  
On-Demand Linux base pricing: 0.0124 USD per Hour  
On-Demand Windows base pricing: 0.017 USD per Hour  
On-Demand RHEL base pricing: 0.0268 USD per Hour  
On-Demand SUSE base pricing: 0.0124 USD per Hour

Free tier eligible ▼

☒ All generations  
[Compare instance types](#)

Additional costs apply for AMIs with pre-installed software

Key-pair: It is used to ensure safe login and connection to your EC2 instance.

Create new key-pair by naming it and keeping the following settings same.

Create key pair

×

Key pair name

Key pairs allow you to connect to your instance securely.

Enter key pair name

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

☒ RSA  
RSA encrypted private and public key pair

☐ ED25519  
ED25519 encrypted private and public key pair

Private key file format

☒ .pem  
For use with OpenSSH

☐ .ppk  
For use with PuTTY

⚠ When prompted, store the private key in a secure and accessible location on your computer. **You will need it later to connect to your instance.** [Learn more](#)

Cancel

Create key pair

Allow all the following rules and then select launch instance.

▼ Network settings

Info

Edi

Network

Info

vpc-0fb49a4e4e37b6bb9

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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Write linux commands on the server.

```
Last login: Tue Jul 23 13:18:35 2024 from 13.233.177.3
ubuntu@ip-172-31-14-111:~$ date
Tue Jul 23 14:10:31 UTC 2024
ubuntu@ip-172-31-14-111:~$ mkdir dir1 dir2 dir3
ubuntu@ip-172-31-14-111:~$ ls
dir1  dir2  dir3
ubuntu@ip-172-31-14-111:~$ touch test.txt
ubuntu@ip-172-31-14-111:~$ cat test
cat: test: No such file or directory
ubuntu@ip-172-31-14-111:~$ ls
dir1  dir2  dir3  test.txt
ubuntu@ip-172-31-14-111:~$ cat test.txt
ubuntu@ip-172-31-14-111:~$ echo Hello! I am writing ubuntu linux commands
Hello! I am writing ubuntu linux commands
ubuntu@ip-172-31-14-111:~$
```

```
ubuntu@ip-172-31-14-111:~$ sudo apt install python3
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
python3 is already the newest version (3.12.3-0ubuntu1).
python3 set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 22 not upgraded.
ubuntu@ip-172-31-14-111:~$
```