

Enterprise Software Architecture

Lab – 1

Keval Sompura

IAM Credentials

URL: <https://225989365782.signin.aws.amazon.com/console>

Username: grader

Password: daJ8b1()

- Screenshots of your AWS Console showing the instance running and the volumes you have allocated on EBS.

The screenshot displays the AWS Management Console interface for EC2 instances. At the top, the 'Instances (1/1)' header is visible, along with buttons for 'Connect', 'Instance state', 'Actions', and 'Launch instances'. A search bar and a filter dropdown are also present. Below the header, a table lists the instance 'Keval-Lab1' with its ID 'i-0e27a6765e5101c47', state 'Running', type 't2.small', and public IP 'ec2-18-188-25-252.us-east-2.compute.amazonaws.com'. The instance is located in the 'us-east-2a' availability zone. Below the table, the 'Details' tab is selected for the instance 'i-0e27a6765e5101c47 (Keval-Lab1)'. The details section shows the instance summary, including the instance ID, IPv6 address, public IPv4 address (18.188.25.252), private IPv4 addresses (172.31.15.239), and public IPv4 DNS (ec2-18-188-25-252.us-east-2.compute.amazonaws.com).

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
Keval-Lab1	i-0e27a6765e5101c47	Running	t2.small	2/2 checks passed	View alarms +	us-east-2a	ec2-18-188-25-252.us-east-2.compute.amazonaws.com

i-0e27a6765e5101c47 (Keval-Lab1)

Details | Status and alarms | Monitoring | Security | Networking | Storage | Tags

Instance summary Info

Instance ID i-0e27a6765e5101c47	Public IPv4 address 18.188.25.252 open address	Private IPv4 addresses 172.31.15.239
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-18-188-25-252.us-east-2.compute.amazonaws.com open address

Instance summary for i-0e27a6765e5101c47 (Keval-Lab1) Info Connect Instance state ▼ Actions ▼

Updated less than a minute ago

Instance ID i-0e27a6765e5101c47	Public IPv4 address 18.188.25.252 open address	Private IPv4 addresses 172.31.15.239
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-18-188-25-252.us-east-2.compute.amazonaws.com open address
Hostname type IP name: ip-172-31-15-239.us-east-2.compute.internal	Private IP DNS name (IPv4 only) ip-172-31-15-239.us-east-2.compute.internal	
Answer private resource DNS name IPv4 (A)	Instance type t2.small	Elastic IP addresses -
Auto-assigned IP address 18.188.25.252 [Public IP]	VPC ID vpc-017fb9646ae5519d	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendation s. Learn more
IAM Role -	Subnet ID subnet-02e0d60f2cc42d5eb	Auto Scaling Group name -
IMDSv2 Required	Instance ARN arn:aws:ec2:us-east-2:225989365782:instance/i-0e27a6765e5101c47	Managed false

Volume allocated

i-0e27a6765e5101c47 (Keval-Lab1) Settings

Root device name /dev/xvda	Root device type EBS	EBS optimization disabled
------------------------------------------------------	--------------------------------	-------------------------------------

▼ **Block devices**

	Volume ID	Device name	Volume size (GiB)	Attachment status	Attachment time	Encrypted	KMS key
<input checked="" type="checkbox"/>	vol-058c34bb1fc096d8	/dev/xvda	8	Attached	2025/01/29 23:48 GMT-5	No	-
<input type="checkbox"/>	vol-0797258c17461b4ec	/dev/sdb	1	Attached	2025/01/29 23:48 GMT-5	No	-

b. Output of Linux command “fdisk -l” in the instance.

```
[root@ip-172-31-15-239 ~]# fdisk -l
Disk /dev/xvda: 8 GiB, 8589934592 bytes, 16777216 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
Disk identifier: 28D929C1-65BA-4C0F-A8A2-298E42BDB247
```

Device	Start	End	Sectors	Size	Type
/dev/xvda1	24576	16777182	16752607	8G	Linux filesystem
/dev/xvda127	22528	24575	2048	1M	BIOS boot
/dev/xvda128	2048	22527	20480	10M	EFI System

Partition table entries are not in disk order.

```
Disk /dev/xvdb: 1 GiB, 1073741824 bytes, 2097152 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
```

- c. Output of running docker inspect on the database and application containers.

➔ Will be included in the video.

- d. Output of Linux command “df” in instance

```
[ec2-user@ip-172-31-15-239 ~]$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
devtmpfs         4096          0      4096    0% /dev
tmpfs           1001456          0    1001456    0% /dev/shm
tmpfs            400584        652     399932    1% /run
/dev/xvda1      8310764 3136736     5174028   38% /
tmpfs           1001460          0    1001460    0% /tmp
/dev/xvdb       998060    47576     898056    6% /data
/dev/xvda128    10202       1310        8892   13% /boot/efi
tmpfs           200288          0     200288    0% /run/user/1000
```