

Task-1:

1. Create an EC2 service in the default subnet in the Ohio region

The screenshot shows the AWS CloudWatch Instances console. At the top, there are navigation links and a search bar. Below that is a table header with columns: Name, Instance ID, Instance state, Instance type, Status check, Alarm status, and Availability Zone. A single row is selected, showing 'simple-ec2' with Instance ID 'i-06df21a65fe59ac35', State 'Running', Type 't2.micro', and Availability Zone 'us-east-2a'. The status check shows '2/2 checks passed'.

Task-2:

2. Destroy the previous deployment

```
aws_instance.simple_ec2: Destroying... [id=i-06df21a65fe59ac35]
aws_instance.simple_ec2: Still destroying... [id=i-06df21a65fe59ac35, 00m10s elapsed]
aws_instance.simple_ec2: Still destroying... [id=i-06df21a65fe59ac35, 00m20s elapsed]
aws_instance.simple_ec2: Still destroying... [id=i-06df21a65fe59ac35, 00m30s elapsed]
aws_instance.simple_ec2: Destruction complete after 32s

Destroy complete! Resources: 1 destroyed.
root@ip-172-31-15-26:~/terraform_script#
```

3. Create a new EC2 instance with an Elastic IP

The screenshot shows two AWS CloudWatch consoles. The top one is for 'Elastic IP addresses' with one entry: Allocation ID 'eipalloc-0fb0851b09481f744', Reverse DNS record ' - ', Associated instance ID 'i-05f921b1081005121', Private IP address '172.31.8.127', and Association ID 'eipassoc-0e83ba51a4ef82c04'. The bottom one is for 'Instances' with one entry: 'ec2-with-eip' with Instance ID 'i-05f921b1081005121', State 'Running', Type 't2.micro', and Availability Zone 'us-east-2a'. The status check shows 'Initializing'.

Task-3:

1. Destroy the previous deployment

```
aws_eip.web_eip: Destroying... [id=eipalloc-0fb0851b09481f744]
aws_eip.web_eip: Destruction complete after 3s
aws_instance.web: Destroying... [id=i-05f921b1081005121]
aws_instance.web: Still destroying... [id=i-05f921b1081005121, 00m10s elapsed]
aws_instance.web: Still destroying... [id=i-05f921b1081005121, 00m20s elapsed]
aws_instance.web: Still destroying... [id=i-05f921b1081005121, 00m30s elapsed]
aws_instance.web: Still destroying... [id=i-05f921b1081005121, 00m40s elapsed]
aws_instance.web: Still destroying... [id=i-05f921b1081005121, 00m50s elapsed]
aws_instance.web: Destruction complete after 51s
```

2. Create 2 EC2 instances in Ohio and N.Virginia respectively

3. Rename Ohio's instance to 'hello-ohio' and Virginia's instance to 'hello-virginia'

The image contains two separate screenshots of the AWS CloudWatch Instances console. Both screenshots show a list of instances with the following details:

- Instances (1) Info**
- Last updated: less than a minute ago
- Actions: Connect, Instance state, Actions, Launch instances
- Search bar: Find Instance by attribute or tag (case-sensitive)
- Filter: Running
- Table headers: Name, Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone
- Data rows:
 - Instance 1: Name - hello-ohio, Instance ID - i-06b80cfb5d4e4fd12, Instance state - Running, Instance type - t2.micro, Status check - Initializing, Alarm status - View alarms +, Availability Zone - us-east-2a
 - Instance 2: Name - hello-virginia, Instance ID - i-044e3008d3f3b1c4d, Instance state - Running, Instance type - t2.micro, Status check - Initializing, Alarm status - View alarms +, Availability Zone - us-east-1b

Task-4:

1. Destroy the previous deployments

```
Plan: 0 to add, 0 to change, 2 to destroy.
aws_instance.ohio_ec2: Destroying... [id=i-06b80cfb5d4e4fd12]
aws_instance.virginia_ec2: Destroying... [id=i-044e3008d3f3b1c4d]
aws_instance.ohio_ec2: Still destroying... [id=i-06b80cfb5d4e4fd12, 00m10s elapsed]
aws_instance.virginia_ec2: Still destroying... [id=i-044e3008d3f3b1c4d, 00m10s elapsed]
aws_instance.ohio_ec2: Still destroying... [id=i-06b80cfb5d4e4fd12, 00m20s elapsed]
aws_instance.virginia_ec2: Still destroying... [id=i-044e3008d3f3b1c4d, 00m20s elapsed]
aws_instance.ohio_ec2: Still destroying... [id=i-06b80cfb5d4e4fd12, 00m30s elapsed]
aws_instance.virginia_ec2: Still destroying... [id=i-044e3008d3f3b1c4d, 00m30s elapsed]
aws_instance.ohio_ec2: Destruction complete after 31s
aws_instance.virginia_ec2: Destruction complete after 31s

Destroy complete! Resources: 2 destroyed.
root@ip-172-31-15-26:~/terraform_script#
```

2. Create a VPC with the required components using Terraform

3. Deploy an EC2 instance inside the VPC

The image contains two screenshots of the AWS CloudWatch Instances and VPCs consoles.

Instances (1) Info

- Last updated: less than a minute ago
- Actions: Connect, Instance state, Actions, Launch instances
- Search bar: Find Instance by attribute or tag (case-sensitive)
- Filter: Running
- Table headers: Name, Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone
- Data rows: simple-ec2 (Instance ID: i-0ff0c743fb1020876, State: Running, Type: t2.micro, Status check: Initializing, Availability Zone: us-east-2c)

VPCs

Your VPCs (2) Info

- Last updated: less than a minute ago
- Actions: Actions, Create VPC
- Search bar: Find VPCs by attribute or tag
- Table headers: Name, VPC ID, State, Encryption controls, Encryption control, Block Public
- Data rows:
 - simple-vpc (VPC ID: vpc-0687bc90634c9cad6, State: Available, Encryption controls: -, Encryption control: -, Block Public: Off)
 - (VPC ID: vpc-04c71b30a33654126, State: Available, Encryption controls: -, Encryption control: -, Block Public: Off)

Task-5:

1. Destroy the previous deployments

```
}

Plan: 0 to add, 0 to change, 7 to destroy.
aws_route_table_association.public_assoc: Destroying... [id=rtbassoc-049f626d8696a0a73]
aws_instance.my_ec2: Destroying... [id=i-0ff0c743fb1020876]
aws_route_table_association.public_assoc: Destruction complete after 1s
aws_route_table.public_rt: Destroying... [id=rtb-0729b3aalebf9d89a]
aws_route_table.public_rt: Destruction complete after 2s
aws_internet_gateway.igw: Destroying... [id=igw-0cb4b86ea81dd3ab6]
aws_instance.my_ec2: Still destroying... [id=i-0ff0c743fb1020876, 00m10s elapsed]
aws_internet_gateway.igw: Still destroying... [id=igw-0cb4b86ea81dd3ab6, 00m10s elapsed]
aws_instance.my_ec2: Still destroying... [id=i-0ff0c743fb1020876, 00m20s elapsed]
aws_internet_gateway.igw: Still destroying... [id=igw-0cb4b86ea81dd3ab6, 00m20s elapsed]
aws_instance.my_ec2: Still destroying... [id=i-0ff0c743fb1020876, 00m30s elapsed]
aws_internet_gateway.igw: Still destroying... [id=igw-0cb4b86ea81dd3ab6, 00m30s elapsed]
aws_instance.my_ec2: Destruction complete after 33s
aws_subnet.public: Destroying... [id=subnet-09a06b2abf3a27a05]
aws_security_group.ec2_sg: Destroying... [id=sg-0fe0ffa641f94ef3d]
aws_subnet.public: Destruction complete after 1s
aws_internet_gateway.igw: Destruction complete after 31s
aws_security_group.ec2_sg: Destruction complete after 2s
aws_vpc.main: Destroying... [id=vpc-0687bc90634c9cad6]
aws_vpc.main: Destruction complete after 1s
```

2. Create a script to install Apache2

```
-rw-r--r-- 1 root root 14690 Nov 29 10:57 terraform.tfstate
root@ip-172-31-10-194:~/terrscript# cat apache.sh
#!/bin/bash
apt-get update -y
apt-get install -y apache2
systemctl enable apache2
systemctl start apache2

root@ip-172-31-10-194:~/terrscript# pwd
/root/terrscript
root@ip-172-31-10-194:~/terrscript#
```

i-0edb62e079e60f7fb

PublicIPs: 18.60.226.72 PrivateIPs: 172.31.10.194

3. Run this script on a newly created EC2 instance
4. Print the IP address of the instance in a file on the local once deployed

```
        to their respective packages, not to the web server itself.
    </p>
</div>

</div>
</div>
<div class="validator">
</div>
</body>
</html>
root@ip-172-31-10-194:~/terrascript# ls -lrt
total 32
-rw-r--r-- 1 root root 1304 Nov 29 10:53 main.tf
-rw-r--r-- 1 root root     43 Nov 29 10:53 provider.tf
-rw-r--r-- 1 root root   107 Nov 29 10:55 apache.sh
-rwxr-xr-x 1 root root    12 Nov 29 10:57 ec2-ip.txt
-rw-r--r-- 1 root root 14690 Nov 29 10:57 terraform.tfstate
root@ip-172-31-10-194:~/terrascript#
```

i-0edb62e079e60f7fb

PublicIPs: 18.60.226.72 PrivateIPs: 172.31.10.194

The screenshot shows the AWS CloudWatch Instances console. At the top, there's a navigation bar with various links like draw.io, DeepSeek, Google Docs, Walmart vs Tata C..., Home | Microsoft..., Free Resume Tem..., Play with Docker, Play with Kubernetes, Account ID: 9404-8240-9885, and United States (Ohio). Below the navigation bar, the main interface displays 'Instances (1/1) Info'. A search bar at the top left contains the placeholder 'Find Instance by attribute or tag (case-sensitive)'. To the right of the search bar are buttons for 'Connect', 'Instance state', 'Actions', and 'Launch instances'. A dropdown menu shows 'All states'. Below these controls, a table lists the single instance: 'Name' is 'Apache-Server', 'Instance ID' is 'i-0c0baec7b89ceb010', 'Instance state' is 'Running' (indicated by a green circle), 'Instance type' is 't2.micro', 'Status check' is 'Initializing', 'Alarm status' is 'View alarms +', and 'Availability Zone' is 'us-east-2a'. At the bottom of the screenshot, there's a terminal window showing the output of the 'apache --version' command on an Ubuntu 14.04 LTS system, which fails because the 'apache' command is not found.

```
ubuntu@ip-172-31-4-12:~$ apache --version
Command 'apache' not found, did you mean:
  command 'apache2' from deb apache2-bin (2.4.52-1ubuntu4.16)
Try: sudo apt install <deb name>
ubuntu@ip-172-31-4-12:~$ apache2 --version
[Sat Nov 29 10:59:11.031254 2025] [core:warn] [pid 2748] AH00111: Config variable ${APACHE_RUN_DIR} is not defined
apache2: Syntax error on line 80 of /etc/apache2/apache2.conf: DefaultRuntimeDir must be a valid directory, absolute or relative to ServerRoot
```