

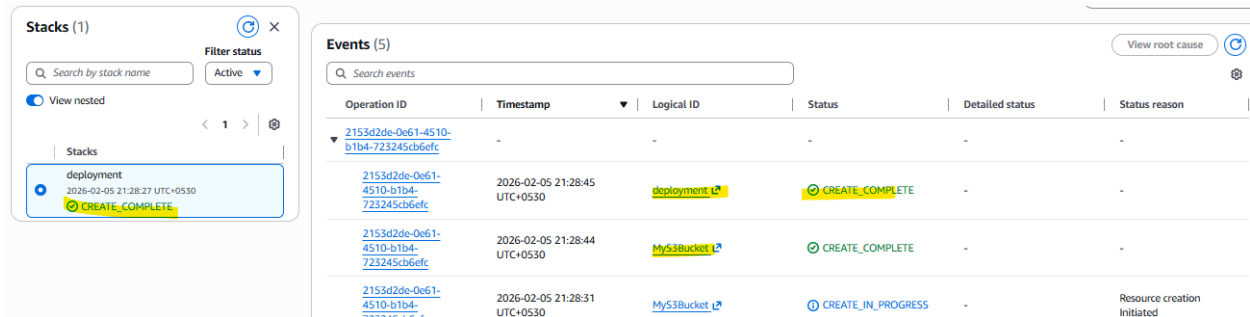
Assignment 1

Problem Statement:

You work for XYZ Corporation. Your team is asked to deploy similar architecture multiple times for testing, development, and production purposes. Implement CloudFormation for the tasks assigned to you below.

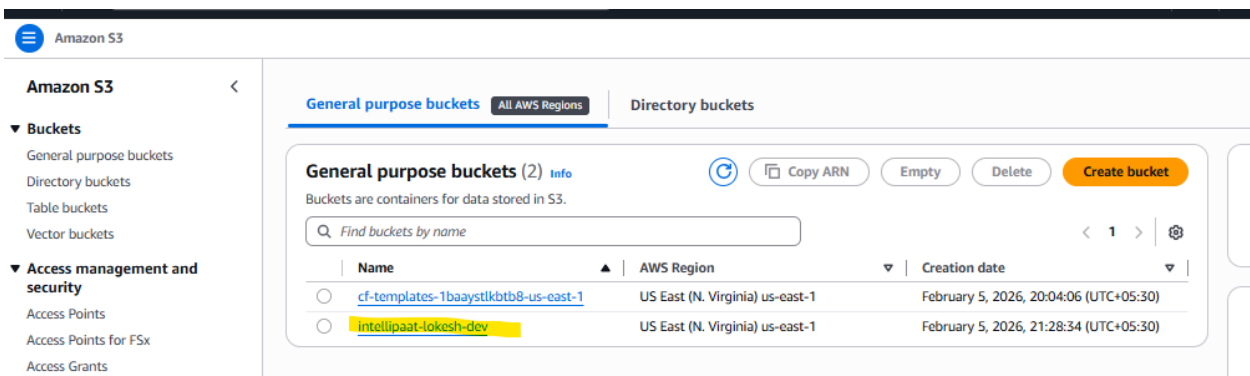
Tasks To Be Performed:

1. Create a template which can create an S3 bucket named “Intellipaat-<yourname >”
2. The template should be able to enable versioning for the bucket created.



The screenshot shows the AWS CloudFormation console. On the left, the 'Stacks' panel shows a stack named 'deployment' with a status of 'CREATE_COMPLETE'. The main panel shows the 'Events' tab for the 'deployment' stack. The events table lists the following events:

Operation ID	Timestamp	Logical ID	Status	Detailed status	Status reason
2153d2de-0e61-4510-b1b4-723245cb6efc	-	-	-	-	-
2153d2de-0e61-4510-b1b4-723245cb6efc	2026-02-05 21:28:45 UTC+0530	deployment	CREATE_COMPLETE	-	-
2153d2de-0e61-4510-b1b4-723245cb6efc	2026-02-05 21:28:44 UTC+0530	MyS3Bucket1	CREATE_COMPLETE	-	-
2153d2de-0e61-4510-b1b4-723245cb6efc	2026-02-05 21:28:31 UTC+0530	MyS3Bucket	CREATE_IN_PROGRESS	-	Resource creation initiated



The screenshot shows the Amazon S3 console. The 'General purpose buckets' tab is selected. The console shows a list of buckets with the following details:

Name	AWS Region	Creation date
cf-templates-1baaystikbtb8-us-east-1	US East (N. Virginia) us-east-1	February 5, 2026, 20:04:06 (UTC+05:30)
intellipaat-lokesh-dev	US East (N. Virginia) us-east-1	February 5, 2026, 21:28:34 (UTC+05:30)

Assignment 2

Problem Statement:

You work for XYZ Corporation. Your team is asked to deploy similar architecture multiple times for testing, development, and production purposes. Implement CloudFormation for the tasks assigned to you below.

Tasks To Be Performed:

1. Create a template with 1 VPC and 1 public subnet.
2. Launch an Amazon Linux EC2 instance in the public subnet and tag the instance as "CFInstance"

The screenshot displays the AWS CloudFormation console for a stack named 'DEV-VPC-EC2'. The stack is in the 'CREATE_COMPLETE' state. The 'Events' tab is selected, showing a list of events. The first event is 'CREATE_COMPLETE' for the 'DEV-VPC-EC2' stack, occurring at 2026-02-05 21:21:50 UTC+0530. The second event is 'CREATE_COMPLETE' for the 'CFInstance' resource, occurring at 2026-02-05 21:21:49 UTC+0530.

Operation ID	Timestamp	Logical ID	Status	Detailed status	Status reason
196ac8c2-727c-4fa2-9d62-965a27a10220	-	-	-	-	-
196ac8c2-727c-4fa2-9d62-965a27a10220	2026-02-05 21:21:50 UTC+0530	DEV-VPC-EC2	CREATE_COMPLETE	-	-
196ac8c2-727c-4fa2-9d62-965a27a10220	2026-02-05 21:21:49 UTC+0530	CFInstance	CREATE_COMPLETE	-	-

Below the events, a table lists the resources created by the stack:

Name	VPC ID	State	Encryption c...	Encryption control ...	Block Public...	IPv4 CIDR	IPv6 CIDR
CF-VPC	vpc-021d11c32d8343cf8	Available	-	-	Off	10.0.0.0/16	-
-	vpc-05a20f627aabc3c46	Available	-	-	Off	172.31.0.0/16	-

At the bottom, the 'Instances' section shows a list of instances. The first instance is 'CFInstance', which is in a 'Running' state. The instance is of type 't3.micro' and is located in the 'us-east-1a' availability zone. The public IP address is '3.231.59.136'.

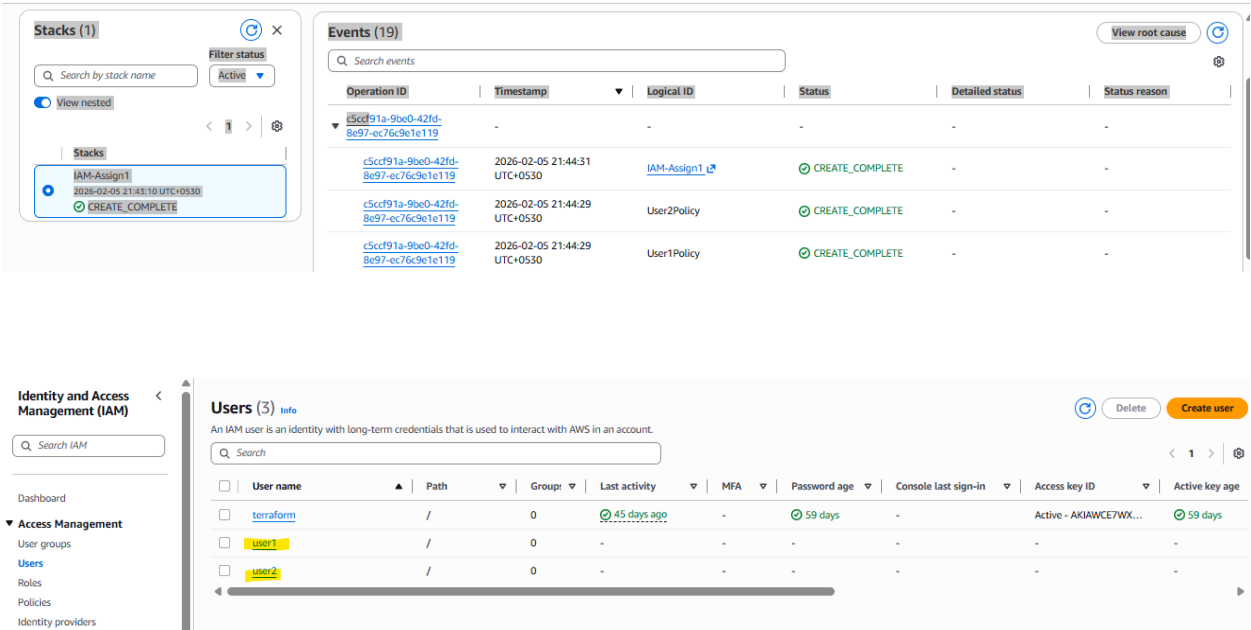
Assignment 3

Problem Statement:

You work for XYZ Corporation. To maintain the security of the AWS account and the resources you have been asked to implement a solution that can help easily recognize and monitor the different users.

Tasks To Be Performed:

- 1. Create a role which only lets user1 and user2 from task 1 to have complete access to VPCs and DynamoDB.
- 2. Login into user1 and shift to the role to test out the feature.



Assignment 4

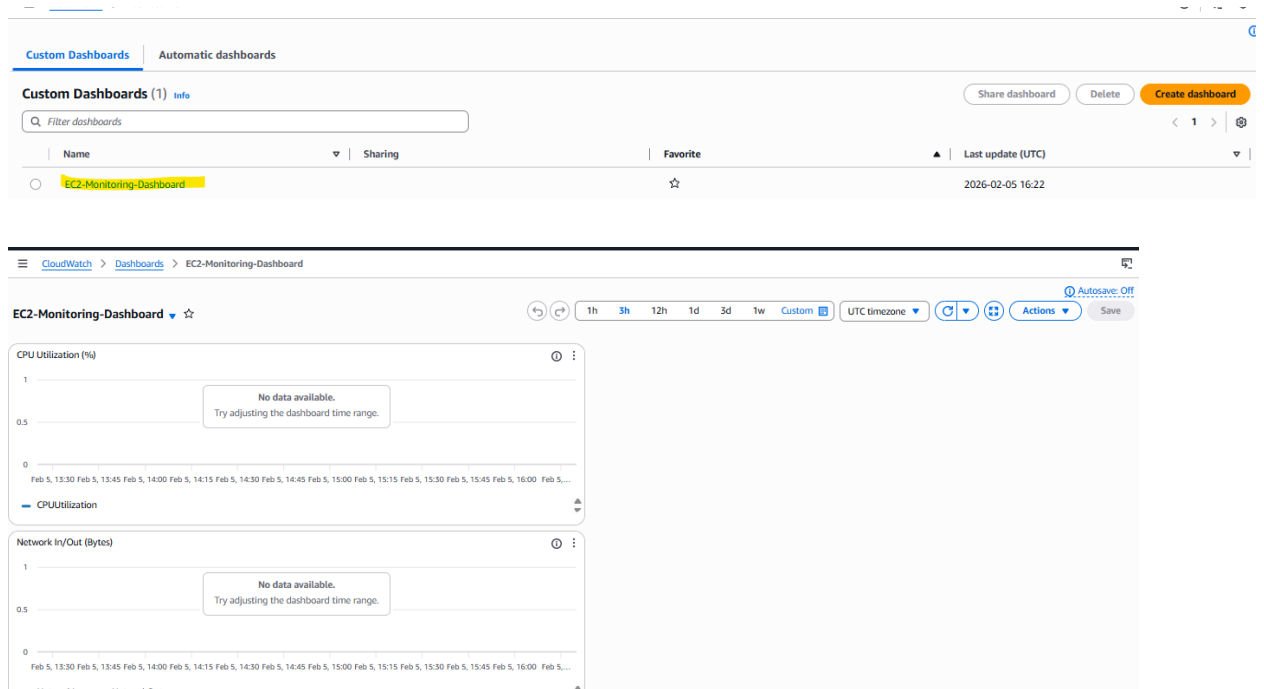
Problem Statement:

You work for XYZ Corporation. To maintain the security of the AWS account and the resources you have been asked to implement a solution that can help easily recognize and monitor the different users.

resources you have been asked to implement a solution that can help easily recognize and monitor the different users. Also, you will be monitoring the machines created by these users for any errors or misconfigurations.

Tasks To Be Performed:

1. Create a dashboard which lets you check the CPU utilization and networking for a particular EC2 instance



Assignment 4

Problem Statement:

You work for XYZ Corporation. To maintain the security of the AWS account and the resources you have been asked to implement a solution that can help easily

recognize and monitor the different users. Also, you will be monitoring the machines created by these users for any errors or misconfigurations.

Tasks To Be Performed:

1. Create a CloudWatch billing alarm which goes off when the estimated charges go above \$500.
2. Create a CloudWatch alarm which goes off to an Alarm state when the CPU utilization of an EC2 instance goes above 65%. Also add an SNS topic so that it notifies the person when the threshold is crossed.

The screenshot displays the AWS CloudFormation console for the stack 'Ec2-price-assign'. The 'Events' tab is selected, showing a list of 10 events. Two events are visible:

Operation ID	Timestamp	Logical ID	Status	Detailed status	Status reason
073dbde2-b297-4832-8e00-2f89d475fc37	-	-	-	-	-
073dbde2-b297-4832-8e00-2f89d475fc37	2026-02-05 22:08:12 UTC+0530	CPUUtilizationAlarm	CREATE_COMPLETE	-	-
073dbde2-b297-4832-8e00-2f89d475fc37	2026-02-05 22:08:12 UTC+0530	BillingAlarm	CREATE_COMPLETE	-	-

Below the screenshot, the 'Overview' section of the AWS CloudWatch console is shown. It includes a legend for 'Alarms by AWS service' and two line graphs for 'Recent alarms'.

Alarms by AWS service

Services	In alarm	Insufficient data	OK
EC2	0	0	1
Billing	0	0	1

Recent alarms

- EC2CPUUtilizationOver65**: A line graph showing CPU utilization over time. The y-axis ranges from 58.5 to 71.5. The x-axis shows dates from Feb 5, 16:30 to Feb 5, 16:34. A red line indicates the utilization level, which is above the 65% threshold.
- BillingAlarmOver500**: A line graph showing estimated charges over time. The y-axis ranges from 450 to 550. The x-axis shows dates from Feb 5, 15:00 to Feb 5, 15:45. A red line indicates the estimated charges, which are above the \$500 threshold.