

Practicals

1.Setting billing alarm

The screenshot shows the AWS Billing and Cost Management console. The left sidebar contains navigation links for Billing and Cost Management, Billing and Payments, Cost Analysis, and Cost Organization. The main content area displays the 'Budgets (1)' page. At the top, there are buttons for 'Download CSV', 'Actions', and 'Create budget'. Below these is a search bar and a dropdown for 'Type - Show all budgets'. A table lists the budgets, with one entry: 'My Monthly Cost Budget' with a status of 'OK', a budget of '\$10.00', and 'Amount used' of '\$0.00'. The 'Current vs. budgeted' column shows a progress bar at 0.00%.

Name	Thresholds	Budget	Amount used	Forecasted...	Current vs. budgeted
My Monthly Cost Budget	OK	\$10.00	\$0.00	-	0.00%

2.Create linux EC2 instance in Mumbai region

The screenshot shows the AWS Management Console with the 'Instances (1)' page selected. The left sidebar shows navigation links for EC2 Dashboard, EC2 Global View, Events, Instances, Images, Elastic Block Store, and Network & Security. The main content area displays a table of instances. One instance is listed: 'linux AWS' with ID 'i-09f25f349cc343bd1', state 'Running', type 't2.micro', and availability zone 'ap-south-1b'. The 'Status check' column shows 'Initializing'. There are buttons for 'Connect', 'Instance state', 'Actions', and 'Launch instances'.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public
linux AWS	i-09f25f349cc343bd1	Running	t2.micro	Initializing	View alarms	ap-south-1b	ec2-3-

3.Setup MFA for root user

The screenshot shows the 'My security credentials' page for the root user in the AWS IAM console. The page is divided into several sections:

- Account details:** Displays the account name 'Prasadshinde', email address 'shindeprasad602@gmail.com', AWS account ID '060023554299', and Canonical user ID '926a5a94b902e0c6521899d4c2667462c5965695fa95b7e239f2881ac2b4fa7d'. There is a button to 'Edit account name, email, and password'.
- Multi-factor authentication (MFA) (1):** Includes a description of MFA and a table of MFA devices. Buttons for 'Remove', 'Resync', and 'Assign MFA device' are present.
- Access keys (0):** Includes a description of access keys and a 'Create access key' button.

Type	Identifier	Certifications	Created on
Virtual	arn:aws:iam::060023554299:mfa/myiphone	Not Applicable	Thu Aug 22 2024

4.Create user ,group and role using GUI

User

The screenshot shows the 'Users' page in the AWS IAM console. It includes a notification about Identity Center and a table of existing users.

Ready to streamline human access to AWS and cloud apps? Dismiss Manage workforce users

Identity Center is enabled. We recommend managing workforce users' access to AWS accounts and cloud applications in Identity Center. [Learn more](#) [Watch how it works](#)

Users (3) Info [Refresh](#) [Delete](#) [Create user](#)

An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.

Search

	User name	Path	Group	Last activity	MFA	Password age	Console last si
<input type="checkbox"/>	ASTINMARTIN	/	0	-	-	-	-
<input type="checkbox"/>	AUDI	/	0	-	-	-	-
<input type="checkbox"/>	BMW	/	0	-	-	11 minutes	-

5.Create user ,group and role using CLI

User

```
MINGW32/c/Users/shind
shind@LAPTOP-D7NIETHJ MINGW32 ~
$ aws configure
AWS Access Key ID [*****UMT4]:
AWS Secret Access Key [*****rGqS]:
Default region name [ap-south-1]:
Default output format [json]:

shind@LAPTOP-D7NIETHJ MINGW32 ~
$ aws iam create-user --user-name Prasadshinde

An error occurred (EntityAlreadyExists) when calling the CreateUser operation: User with name Prasadshinde already exists.

shind@LAPTOP-D7NIETHJ MINGW32 ~
$ aws iam create-user --user-name PS
{
  "User": {
    "Path": "/",
    "UserName": "PS",
    "UserId": "AIDAQ36NOYD53DXLHTYDU",
    "Arn": "arn:aws:iam:060023554299:user/PS",
    "CreateDate": "2024-08-28T12:43:44+00:00"
  }
}
```

Group

```
shind@LAPTOP-D7NIETHJ MINGW32 ~
$ aws iam create-group --group-name eductionom
{
  "Group": {
    "Path": "/",
    "GroupName": "eductionom",
    "GroupId": "AGPAQ36NOYD52F4LDTW45",
    "Arn": "arn:aws:iam:060023554299:group/eductionom",
    "CreateDate": "2024-08-28T12:47:48+00:00"
  }
}
```

Role

```
shind@LAPTOP-D7NIETHJ MINGW32 ~
$ aws iam get-role --role-name fast
{
  "Role": {
    "Path": "/",
    "RoleName": "fast",
    "RoleId": "AROAQ36NOYD5RUYLNJXX4",
    "Arn": "arn:aws:iam::060023554299:role/fast",
    "CreateDate": "2024-08-21T19:39:55+00:00",
    "AssumeRolePolicyDocument": {
      "Version": "2012-10-17",
      "Statement": [
        {
          "Effect": "Allow",
          "Principal": {
            "AWS": "arn:aws:iam::060023554299:root"
          },
          "Action": "sts:AssumeRole",
          "Condition": {
            "Bool": {
              "aws:MultiFactorAuthPresent": "true"
            }
          }
        }
      ]
    },
    "Description": "",
    "MaxSessionDuration": 3600,
    "RoleLastUsed": {}
  }
}
```

6. Attach role and access to instance

```
shind@LAPTOP-D7NIETHJ MINGW32 ~
$ aws iam list-attached-role-policies --role-name fast
{
  "AttachedPolicies": [
    {
      "PolicyName": "AmazonEC2FullAccess",
      "PolicyArn": "arn:aws:iam::aws:policy/AmazonEC2FullAccess"
    },
    {
      "PolicyName": "AdministratorAccess",
      "PolicyArn": "arn:aws:iam::aws:policy/AdministratorAccess"
    }
  ]
}
```

```
shind@LAPTOP-D7NIETHJ MINGW32 ~
$ aws iam create-instance-profile --instance-profile-name ec209
{
  "InstanceProfile": {
    "Path": "/",
    "InstanceProfileName": "ec209",
    "InstanceProfileId": "AIPAQ36NOYD577Y67CYM5",
    "Arn": "arn:aws:iam::060023554299:instance-profile/ec209",
    "CreateDate": "2024-08-28T12:57:54+00:00",
    "Roles": []
  }
}
```