

# AWS IAM Service

## 1-) Create aws account and set billing alarm

The first screenshot shows the AWS IAM console 'Users' page. It displays a table with one user named 'Sprints'. The user's last activity was 15 hours ago, and their password age is 14 hours. The second screenshot shows the AWS CloudWatch 'Alarms' page. It displays a table with one alarm named '0.5 USD Alarm'. The alarm is in an 'Insufficient data' state, with a condition of 'EstimatedCharges >= 0.5 for 1 datapoints within 6 hours'. The alarm actions are enabled, and there is a warning icon.

## 2-)

- Create 2 groups one admin and one for development
- In the admin group it has admin permission, and in the development only access to s3

IAM > User groups > admin

admin

Delete

Summary

Edit

The screenshot shows the 'Permissions policies' page for the 'admin' group. It displays a table with one policy named 'AdministratorAccess'. The policy is of type 'AWS managed - job function' and provides full access to AWS services. The page includes a search bar, a filter button, and a 'Add permissions' button.

The screenshot shows the 'Permissions policies' page for the 'development' group. It displays a table with one policy named 'AmazonS3FullAccess'. The policy is of type 'AWS managed' and provides full access to all buckets via the AWS Management Console. The page includes a search bar, a filter button, and a 'Add permissions' button.

- Create admin-1 user console access and mfa enabled in admin group

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Mohammed Saady

IAM > Users > admin-1

admin-1

Delete

Summary

ARN  
arn:aws:iam::991644510208:user/admin-1

Console access  
Enabled with MFA

Access key 1  
Not enabled

Created  
May 31, 2023, 11:44 (UTC+03:00)

Last console sign-in  
Never

Access key 2  
Not enabled

Permissions

Groups (1)

Tags

Security credentials

Access Advisor

Console sign-in

Manage console access

Console sign-in link  
https://991644510208.signin.aws.amazon.com/console

Console password  
Updated 22 minutes ago (2023-05-31 11:44 GMT+3)

Last console sign-in  
Never

Multi-factor authentication (MFA) (1)

Use MFA to increase the security of your AWS environment. Signing in with MFA requires an authentication code from an MFA device. Each user can have a maximum of 8 MFA devices assigned. [Learn more](#)

Remove

Resync

Assign MFA device

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Multi-factor authentication (MFA) (1)

Use MFA to increase the security of your AWS environment. Signing in with MFA requires an authentication code from an MFA device. Each user can have a maximum of 8 MFA devices assigned. [Learn more](#)

Remove

Resync

Assign MFA device

Device type

Identifier

Created on

Virtual

arn:aws:iam::991644510208:mfa/admin1-user-MFA

Now

Access keys (0)

Use access keys to send programmatic calls to AWS from the AWS CLI, AWS Tools for PowerShell, AWS SDKs, or direct AWS API calls. You can have a maximum of two access keys (active or inactive) at a time. [Learn more](#)

Create access key

No access keys

As a best practice, avoid using long-term credentials like access keys. Instead, use tools which provide short term credentials. [Learn more](#)

Create access key

SSH public keys for AWS CodeCommit (0)

User SSH public keys to authenticate access to AWS CodeCommit repositories. You can have a maximum of five SSH public keys (active or inactive) at a time. [Learn more](#)

Actions

Upload SSH public key

SSH Key ID

Uploaded

Status

No SSH public keys

Upload SSH public key

## admin-1

Delete

## Summary

ARN  
arn:aws:iam::991644510208:user/admin-1Created  
May 31, 2023, 11:44 (UTC+03:00)Console access  
Enabled with MFALast console sign-in  
⌚ NeverAccess key 1  
Not enabledAccess key 2  
Not enabled

Permissions Groups (1) Tags Security credentials Access Advisor

## Permissions policies (2)

Permissions are defined by policies attached to the user directly or through groups.

Search

All types

&lt; 1 &gt; ⚙

<input type="checkbox"/>	Policy name	Type	Attached via
<input type="checkbox"/>	AdministratorAccess	AWS managed - job function	Group admin
<input type="checkbox"/>	IAMUserChangePassword	AWS managed	Directly

## Permissions boundary (not set)

Set a permissions boundary to control the maximum permissions for this user. Use this advanced feature used to delegate permission management to others. [Learn more](#)

- And admin-2-prog with cli access only and list all users and groups using commands not console

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IAM > Users > admin2-prog

admin2-prog

Delete

Summary

ARN  
arn:aws:iam::991644510208:user/admin2-prog

Console access  
Disabled

Access key 1  
AKIA6NYU6NAAJVMZIOFP - Active  
⌚ Never used. Created today.

Created  
May 31, 2023, 11:46 (UTC+03:00)

Last console sign-in  
-

Access key 2  
Not enabled

Permissions Groups (1) Tags (1) Security credentials Access Advisor

Console sign-in

Enable console access

Console sign-in link  
<https://991644510208.signin.aws.amazon.com/console>

Console password  
Not enabled

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NO MFA DEVICES. Assign an MFA device to improve the security of your AWS environment.

Assign MFA device

Access keys (1)

Create access key

Use access keys to send programmatic calls to AWS from the AWS CLI, AWS Tools for PowerShell, AWS SDKs, or direct AWS API calls. You can have a maximum of two access keys (active or inactive) at a time. [Learn more](#)

AKIA6NYU6NAAJVMZIOFP

Description  
Prog-access

Status  
🟢 Active

Last used  
None

Created  
Now

Last used region  
N/A

Last used service  
N/A

Actions ▼

```
}
saady@Linux:~$ aws iam list-groups
{
  "Groups": [
    {
      "Path": "/",
      "GroupName": "admin",
      "GroupId": "AGPA6NYU6NAANVS0JEAD6",
      "Arn": "arn:aws:iam::991644510208:group/admin",
      "CreateDate": "2023-05-31T08:42:51Z"
    },
    {
      "Path": "/",
      "GroupName": "development",
      "GroupId": "AGPA6NYU6NAACIDLTXIBR",
      "Arn": "arn:aws:iam::991644510208:group/development",
      "CreateDate": "2023-05-31T08:46:37Z"
    }
  ]
}
saady@Linux:~$ aws iam list-users
```

```
}
saady@Linux:~$ aws iam list-users
{
  "Users": [
    {
      "Path": "/",
      "UserName": "admin-1",
      "UserId": "AIDA6NYU6NAADVFX0QK4",
      "Arn": "arn:aws:iam::991644510208:user/admin-1",
      "CreateDate": "2023-05-31T08:44:27Z",
      "PasswordLastUsed": "2023-05-31T10:37:11Z"
    },
    {
      "Path": "/",
      "UserName": "admin2-prog",
      "UserId": "AIDA6NYU6NAAFNIHMIMBF",
      "Arn": "arn:aws:iam::991644510208:user/admin2-prog",
      "CreateDate": "2023-05-31T08:46:54Z"
    },
    {
      "Path": "/",
      "UserName": "dev-user",
      "UserId": "AIDA6NYU6NAAFJLOJ72DC",
      "Arn": "arn:aws:iam::991644510208:user/dev-user",
      "CreateDate": "2023-05-31T11:27:17Z"
    },
    {
      "Path": "/",
      "UserName": "Sprints",
      "UserId": "AIDA6NYU6NAACE2RNHYA6",
      "Arn": "arn:aws:iam::991644510208:user/Sprints",
      "CreateDate": "2023-05-30T16:04:53Z",
      "PasswordLastUsed": "2023-05-30T16:10:09Z"
    }
  ]
}
```

- In the development group create user with name dev-user with programmatic and console access then try to access aws using it( take screenshot from accessing ec2 and s3 console)
- Also access cli using dev-user and try to get all users and try to get all users and groups using it

The screenshot shows the AWS IAM console page for a user named 'dev-user'. The breadcrumb navigation is 'IAM > Users > dev-user'. The user's ARN is 'arn:aws:iam::991644510208:user/dev-user'. The console access status is 'Enabled without MFA'. The user was created on 'May 31, 2023, 14:27 (UTC+03:00)'. The last console sign-in was 'Today'. There are two access keys: 'Access key 1' is 'Active' and 'Used today. Created today.'; 'Access key 2' is 'Not enabled'. Below the summary, there are tabs for 'Permissions', 'Groups (1)', 'Tags', 'Security credentials', and 'Access Advisor'. The 'Permissions' tab is selected, showing 'Permissions policies (2)'. The policies listed are 'AmazonS3FullAccess' (AWS managed, attached via 'Group development') and 'IAMUserChangePassword' (AWS managed, attached directly).

The screenshot shows the AWS Management Console 'EC2 Dashboard' for the 'US East (N. Virginia)' region. The left sidebar shows navigation options like 'New EC2 Experience', 'EC2 Dashboard', 'Events', 'Limits', 'Instances', 'Images', and 'Elastic Block Store'. The main content area is divided into several sections: 'Resources' (showing counts for Instances, Elastic IPs, Load balancers, Snapshots, Auto Scaling Groups, Instances, Placement groups, Volumes, Dedicated Hosts, Key pairs, Security groups), 'Launch instance' (with a 'Launch instance' button), 'Service health' (showing 'This service is operating normally'), 'Zones' (listing Zone name and Zone ID), 'Account attributes' (showing 'Supported platforms' with error messages), and 'Explore AWS' (with promotional banners for T4g instances and Spot instances).

**Amazon S3**

Storage

# Amazon S3

Store and retrieve any amount of data from anywhere

Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance.

**Create a bucket**

Every object in S3 is stored in a bucket. To upload files and folders to S3, you'll need to create a bucket where the objects will be stored.

[Create bucket](#)

**Pricing**

With S3, there are no minimum fees. You only pay for what you use. Prices are based on the location of your S3 bucket.

Estimate your monthly bill using the [AWS Simple Monthly Calculator](#)

[View pricing details](#)

**Resources**

[Learn more](#)

**How it works**

Introduction to Amazon S3

[Copy link](#)

```
}
saady@Linux:~$ aws configure
AWS Access Key ID [*****IOFP]: AKIA6NYU6NAAOV5M43NP
AWS Secret Access Key [*****n5zQ]: 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
Default region name [us-east-1]:
Default output format [None]:
saady@Linux:~$ aws iam list-users

An error occurred (AccessDenied) when calling the ListUsers operation: User: arn:aws:iam::991644510208:user/dev-user is not authorized to perform: iam:ListUsers on resource: arn:aws:iam::991644510208:user/ because no identity-based policy allows the iam:ListUsers action
saady@Linux:~$ aws iam list-groups

An error occurred (AccessDenied) when calling the ListGroups operation: User: arn:aws:iam::991644510208:user/dev-user is not authorized to perform: iam:ListGroups on resource: arn:aws:iam::991644510208:group/ because no identity-based policy allows the iam:ListGroups action
saady@Linux:~$
```