



IAM

What is IAM?



Essentially, IAM allows you to manage users and their level of access to the AWS Console. It is important to understand IAM and how it works, both for the exam and for administering a company's AWS account in real life.

What does IAM give you?

- Centralised control of your AWS account
- Shared Access to your AWS account
- Granular Permissions
- Identity Federation (including Active Directory, Facebook, LinkedIn etc)
- Multifactor Authentication
- Provide temporary access for users/devices and services where necessary
- Allows you to set up your own password rotation policy
- Integrates with many different AWS services
- Supports PCI DSS Compliance

Critical Terms:

- Users - End Users (think people)
- Groups - A collection of users under one set of permissions.
- Roles - You create roles and can then assign them to AWS resources
- Policies - A document that defines one (or more permissions)

What have we learnt so far?

- IAM consists of the following;
 - Users
 - Groups (A way to group our users and apply policies to them collectively)
 - Roles
 - Policy Documents.

```
{"Version": "2012-10-17",
"Statement": [
    {"Effect": "Allow",
     "Action": "*",
     "Resource": "*"}
]
```

What have we learnt so far?

- IAM is universal. It does not apply to regions at this time.
- The “root account” is simply the account created when first setup your AWS account. It has complete Admin access.
- New Users have NO permissions when first created.
- New Users are assigned **Access Key ID & Secret Access Keys** when first created.
- These are not the same as a password, and you cannot use the Access key ID & Secret Access Key to Login in to the console. You can use this to access AWS via the APIs and Command Line however.
- You only get to view these once. If you lose them, you have to regenerate them. So save them in a secure location.

What have we learnt so far?

- Always setup Multifactor Authentication on your root account.
- You can create and customise your own password rotation policies.

DEMO



