



Amazon IAM (Identity and Access Management)

MFA (Multi-Factor Authentication)

1. Users have access to your account and can possibly change the configuration or delete resources in your AWS account
2. You want to protect your Root Account
3. MFA = password you know

Main benefit:

If a password is stolen or hacked, the account is not compromised

MFA devices:

Virtual devices: Google Authenticator, Microsoft Authenticator, or Authy

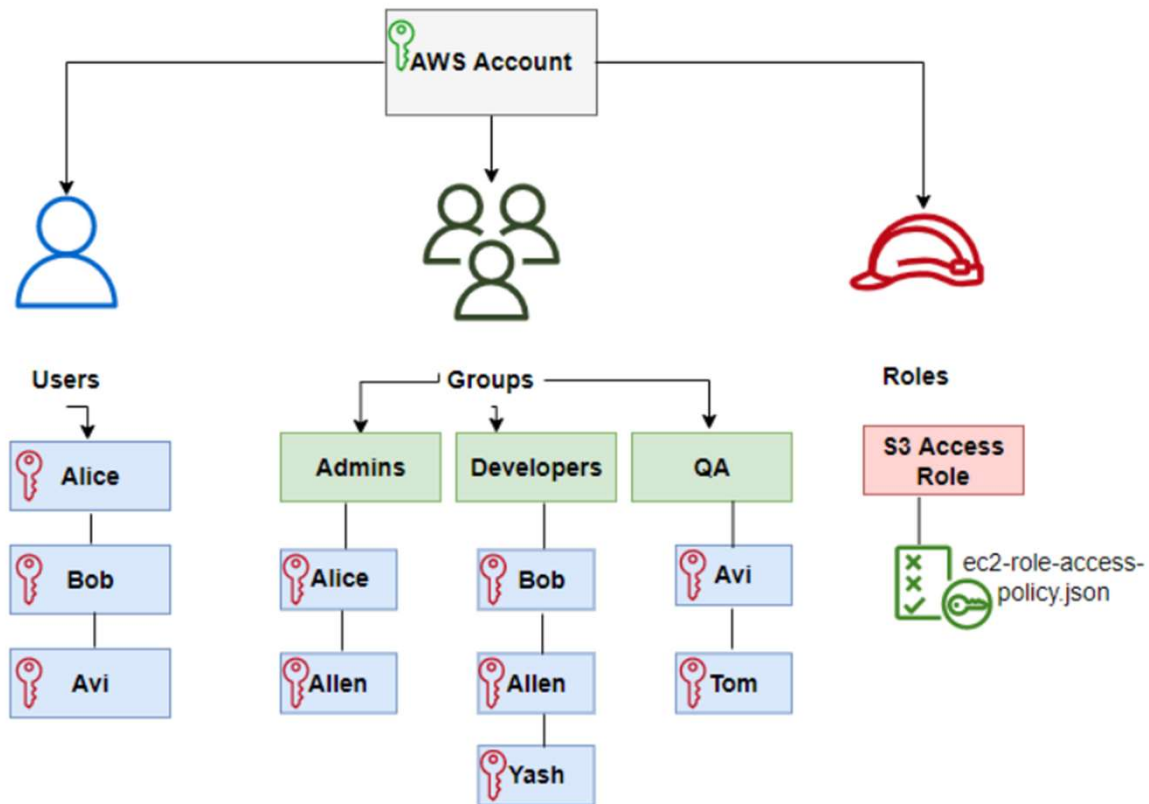



IAM: USERS & GROUPS

IAM: Identity and Access Management, Global service

ROOT account created by default, shouldn't be used or shared

Users are people within our Organization and can be grouped





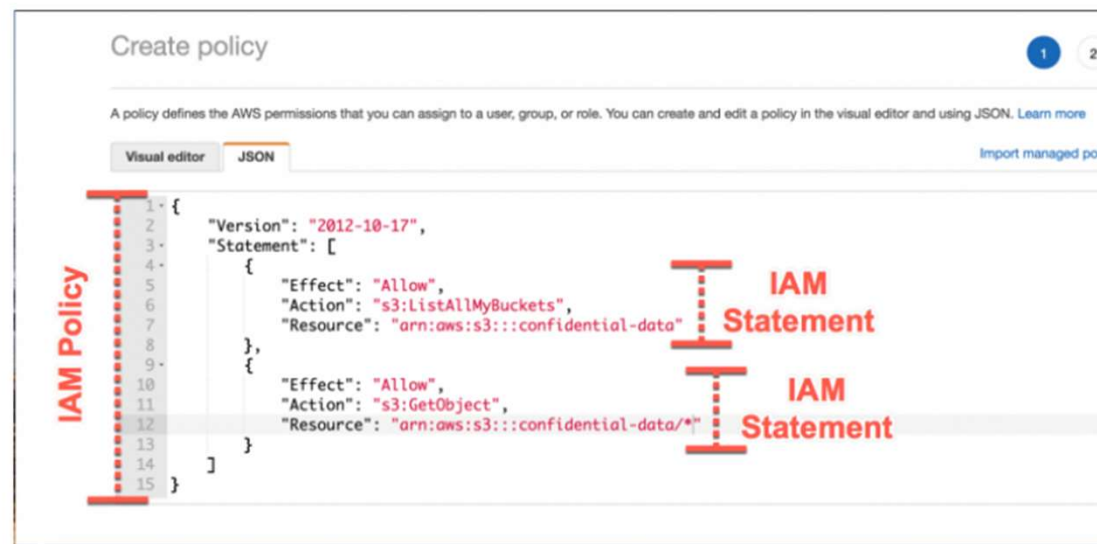
Users: AWS/IAM user is a unique identity with security credentials like a password or access & secret key. The user is associated with permissions to control the use of AWS resources.

Groups: A user group can contain many users. You can grant permissions to the group using access control policies, Assigned permissions apply to all users in that group.

Roles: An IAM role is similar to an IAM user, Roles are used to delegate access to AWS resources and AWS Users temporarily instead of sharing credentials.

Policies: A policy is a JSON document with information about permissions. IAM policies are associated with the AWS users, groups, and roles.

Let's take a look at the example below of an IAM policy being created in the AWS console.





JSON: Stands for JavaScript Object Notation

- JSON is one of the data exchange formats and is widely used
- JSON is a text format used for storing and transporting data
- JSON is self-describing and easy to understand



IAM Policy and Permissions

IAM policy let you define permissions such as:

- Who can access AWS resources.
- Which AWS resources are allowed to access.
- What actions are allowed and denied.
- When AWS resources can be accessed.



IAM Permissions:

1. Users or Groups can be assigned JSON Documents called policies
2. These policies define the permission of the users
(Don't give more permissions than a user needs)

Access key: we can only connect through CLI (Command line client)

Password: We can access with console