IAM (Identity and Access management)

Identity and Access Management[IAM]

- Introduction to Identity and Access
- management (IAM)
- Understanding IAM console
- Creating and managing security group
- Creating and managing users
- Managing the user passwords and
- security Key ID
- Creating and managing roles
- Understanding and managing policy
- Understanding multi factor
- authentication
- User login process

What is IAM?

- IAM stands for Identity and Access Management
- IAM is a web services that enable you to manage users and group permissions in AWS
- It is targeted at organizations with multiple users or systems that use AWS products such as Amazon Elastic Compute Cloud, Amazon Relational Database Service, and the AWS Management Console

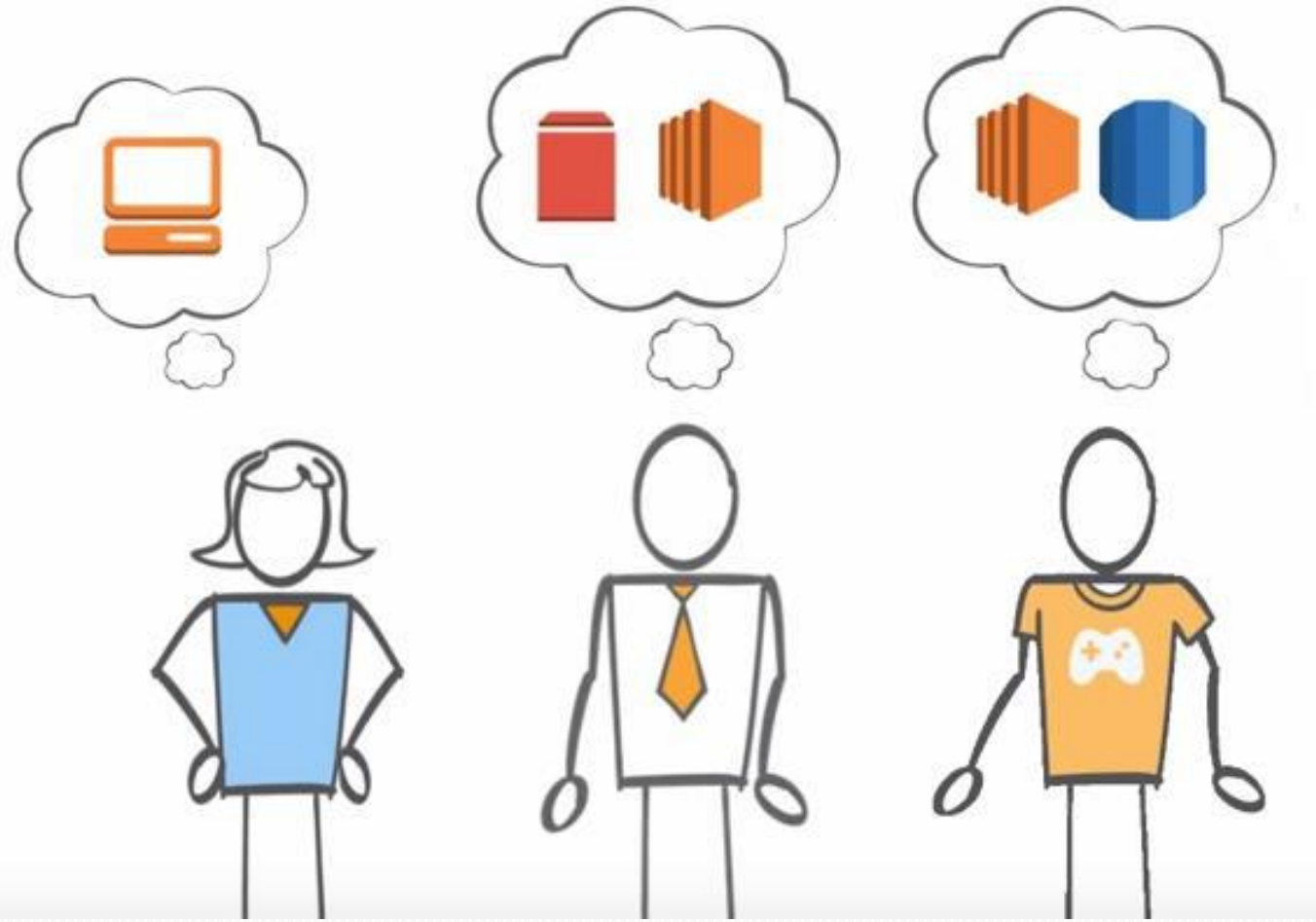
Why we go for IAM?

- To avoid a security and logistical headache
- When you create an AWS account, it has permissions to do anything and everything with all the resources
- IAM Allows you to limit access as needed and gives you the peace of mind that approved people are accessing the right resources in the desired manner

Why we go for IAM?

- IAM will allow us to create multiple users with individual security credentials and permissions, with this IAM, each user is allowed to do only what they need to do

Why we go for IAM?

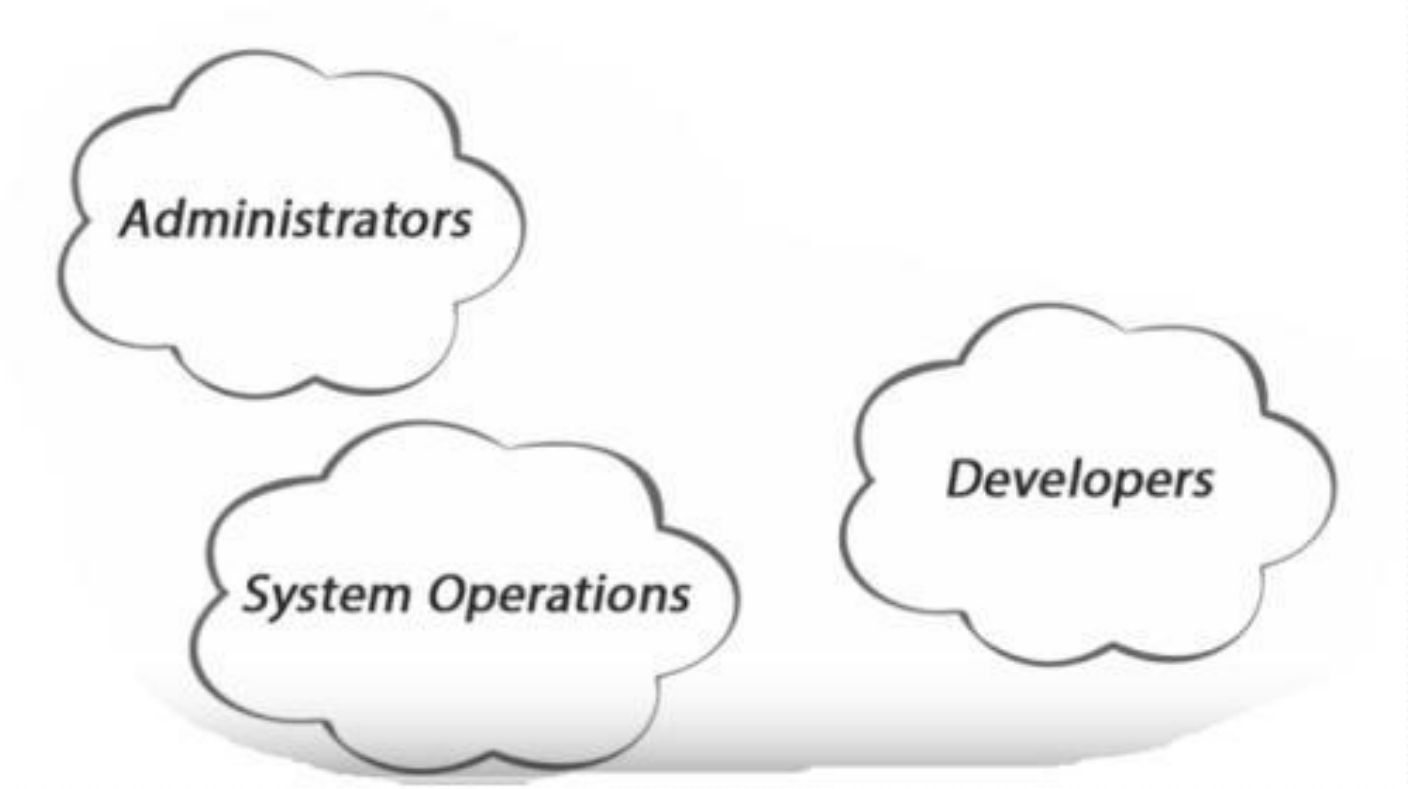


Why we go for IAM?

- Each user in the AWS account must have a unique set of credentials to access the console

What is IAM?

- Different types of users have different set of permissions

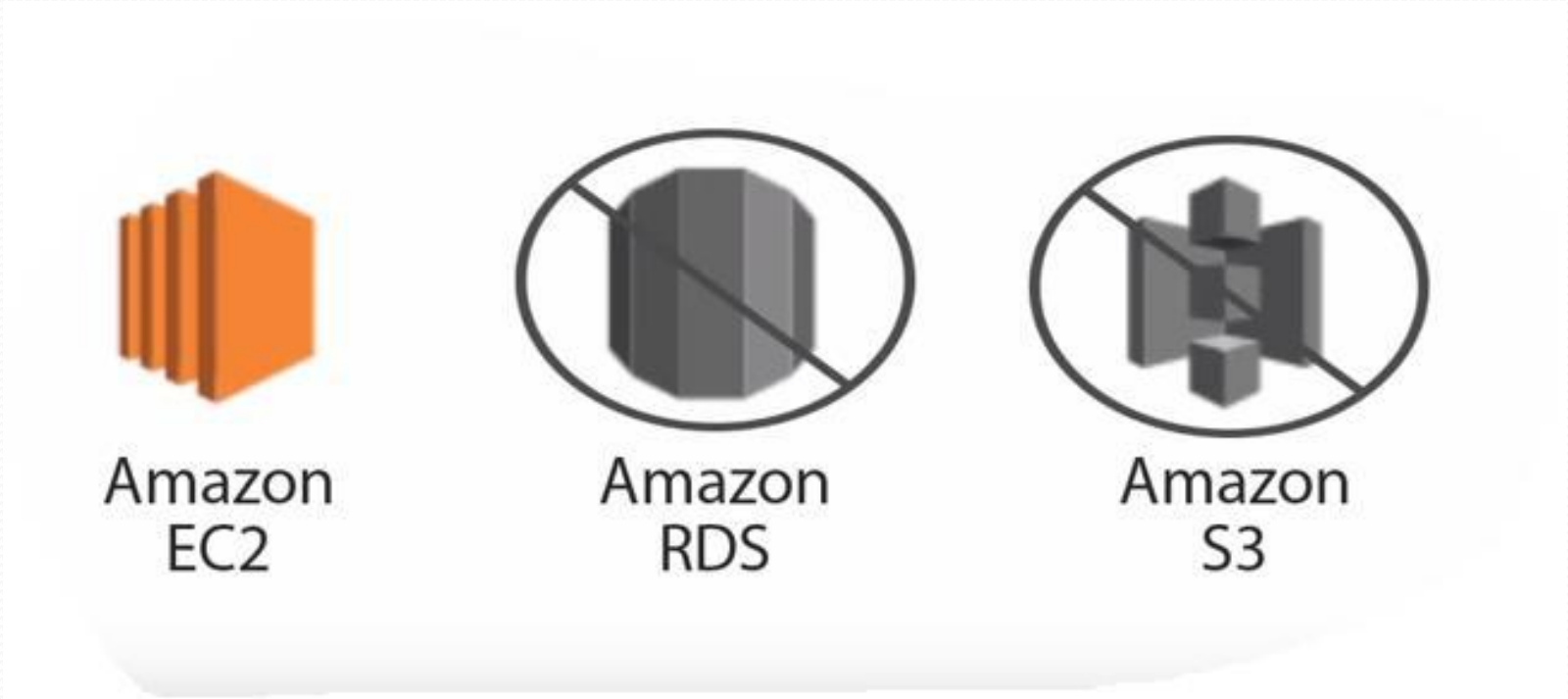


What is IAM?

- Administrators need to access all AWS resources

What is IAM?

- Developers need only access on Amazon Elastic Compute Cloud (EC2)



What is IAM?

- We can use IAM to create a unique user for each employee and define their permissions

What is a Group ?

- A group is a collection of IAM users
- After you set permissions on a group, those permissions are set to all users in the group
  - Even if we create user, we want to use groups to set permissions.
  - We need to manage access for number if groups instead of managing access for every individual user.

Multi Factor Authentication [MFA]

- Multi-Factor Authentication, or MFA.
- MFA provides additional security by requiring users to use a password and an authentication code from an external device
- MFA is especially recommended for the AWS root accounts and account with administrator permissions since they have access to all your AWS resources