Setting Up Your AWS Environment

Kien Bui

DevOps & Platform Engineer

Module Overview

- Avoiding a big bill by using AWS Budgets

- Creating an IAM password policy

- Protecting the root user using multi-factor authentication (MFA)
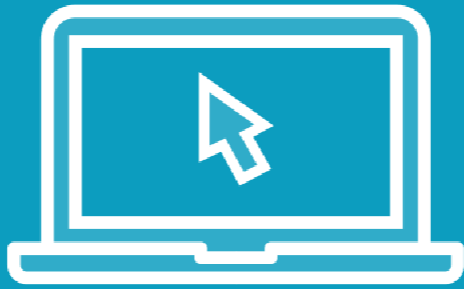
- Creating an administrative user

- Viewing CloudTrail event history

- Configuring the AWS command line interface

- Creating a TLS certificate using Amazon Certificate Manager (ACM)

Avoiding a Big Bill by Using AWS Budgets

Demo

Creating an AWS Budget
- Log in as the root user
- Go to the Billing service console

An AWS Budget won't prevent you from exceeding the budgeted amount.

Creating an IAM Password Policy

AWS Identity Types

Root user principal

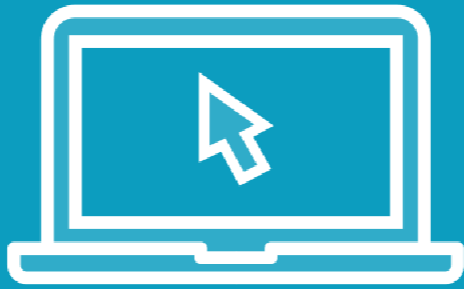Full access to all AWS resources

Only one root user per account

IAM (non-root) principal

Any entity that can perform actions on AWS services and resources

Policies determine what permissions a principal has

Demo

Creating an IAM password policy to set minimum password requirements

Protecting the Root Userusing Multi-factor Authentication (MFA)

Demo

Enabling multi-factor authentication for the root user

- Log in as the root user
- Browse to the IAM service console

Creating an Administrative User

An IAM *principal* has no permissions by default

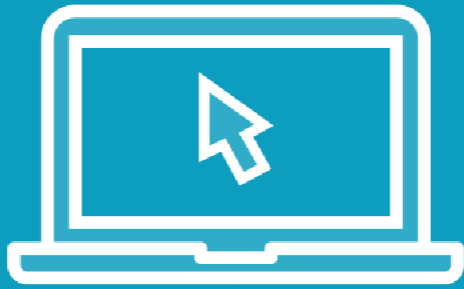*Policies* determine what permissions a principal has

Demo

Creating an administrative user

- Create a group
- Attach the `AdministratorAccess` policy to the group
- Create a new IAM user
- Assign the user to the group

CloudTrail Event History

Demo

Viewing CloudTrail event history

Configuring the AWS Command Line Interface (CLI)

Demo

Configuring the AWS CLI

- Have your access key identifier and secret access key handy

- Open a terminal with the AWS CLI installed

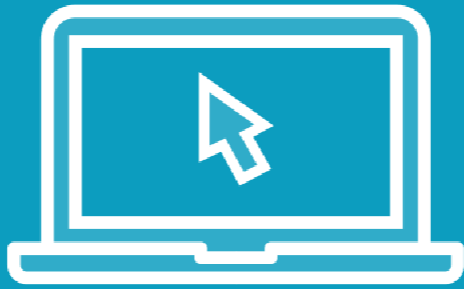# Creating a TLS Certificate using ACM

Amazon Certificate Manager (ACM)

Issues public TLS certificates for use with AWS services

Before ACM issues a TLS certificate, you must verify that you control the DNS records for the domain

Demo

Verify DNS configuration in Route 53

Request a TLS certificate from ACM

Summary

Summary

Avoiding a big bill by using AWS Budgets
- Alerts you when your balance exceeds a certain amount
- Does not prevent you from going over budget

Summary

Creating an IAM password policy

Summary

Protecting the root user using multi-factor authentication

- Root user has complete control over the account
- Instead of root, use an IAM administrative user for administration tasks

Summary

Creating an administrative IAM user
- Assign the AdministratorAccess policy to a group
- Add the user to the group

Summary

Viewing CloudTrail event history
- Stores 90 days of events

Summary

Configuring the AWS CLI

- Changes less than the AWS Management Console

Summary

Creating a TLS certificate using ACM

- Requires DNS or email validation to prove that you control the domain

Coming up Next

Building reliable virtual private cloud (VPC) networks