Cloud-based Data Management

AWS Storage

Ira A. Fulton Schools of Engineering
Arizona State University

Objective

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Explain AWS services

Security

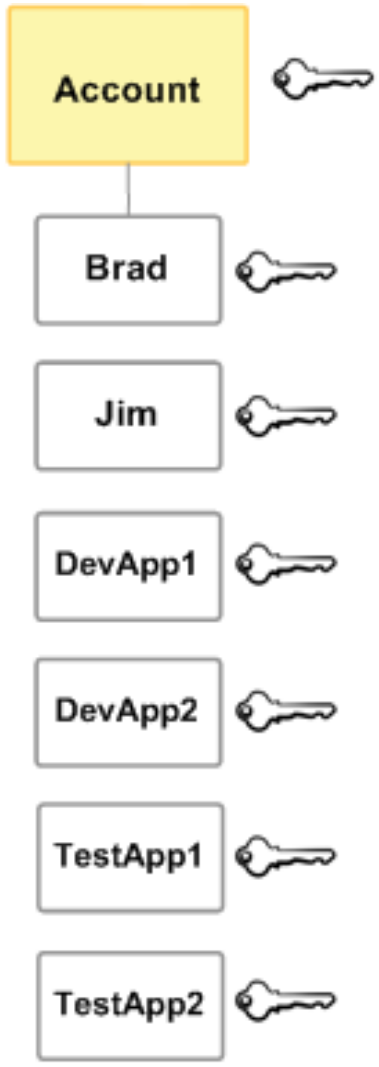
Security credentials are required to access EC2 using command line tools and API

EC2 Key Pairs

- Public key used to encrypt a piece of data (e.g., password)
- Private key used to decrypt the data—keep your private key private and safe!
- Create a key pair using EC2, or upload your own key pair
- Lose your private key, involved process to connect to your instance—check user guide

AWS Identity & Access Management (IAM)

- Use IAM to allow other users, services, and applications to use your EC2 resources
- Do not use your AWS root account for day-to-day interaction with AWS
  - Root account provides unrestricted access to your AWS resources



AWS Identity & Access Management (IAM)

Use IAM to allow other users, services, and applications to use your EC2 resources without sharing your root security credentials

- Create users and groups under your AWS account
- Assign unique security credentials to each user under your AWS account
- Control each user's permissions to perform tasks using AWS resources
- Allow users in another AWS account to share your AWS resources
- Create roles for your AWS account and define users or services that can assume them

Security Group

- A virtual firewall that controls the traffic for instances
- You can add rules to a security group to allow/block traffic to/from its associated instances
- When deciding whether to allow traffic to an instance, EC2 evaluates all rules from all security groups associated with an instance

Security Group