AWS Services Overview Security, Identity and Compliance

AWS Security, Identity and Compliance Overview

- AWS Identity and Access Management
- AWS Key Management Service
- AWS Shield
- AWS WAF
- Amazon Cloud Directory
- AWS Directory Service
- Amazon Inspector
- AWS Organizations
- AWS Certificate Manager
- AWS CloudHSM



Security, Identity, & Compliance

IAM

Resource Access Manager

Cognito

Secrets Manager

GuardDuty

Inspector

Amazon Macie 3

AWS Single Sign-On

Certificate Manager

Key Management Service

CloudHSM

Directory Service

WAF & Shield

Artifact

Security Hub

AWS Identity and Access Management

AWS Identity and Access Management (IAM)

AWS Identity and Access Management (IAM) enables you to securely control access to AWS services and resources for your users

With IAM, you can create and manage AWS users and groups, and use permissions to allow and deny their access to AWS resources



Using IAM you can control WHO can access WHAT, WHEN and HOW

AWS Key Management Service

AWS Key Management Service

- AWS Key Management Service (KMS) is a managed service that makes it easy for you to create and control the encryption keys used to encrypt your data
- AWS KMS is integrated with different AWS services to help you protect data used or stored by these services



Also, KMS is also integrated with CloudTrail, in order to provide logs of what encryption keys are being used

AWS Shield

AWS Shield

- AWS Shield is a managed Distributed Denial of Service (DDoS) protection service that safeguards web applications running on AWS
- A Denial-of-Service (DoS) attack is a malicious attempt to overwhelm an online service and make it unusable ("shut down")



A DDoS attack occurs when multiple systems orchestrate a synchronized DoS attack to a single target

AWS WAF

AWS WAF

- AWS Web Application Firewall (WAF) is a web application firewall that helps protect your web applications from common web exploits or attacks
- You can use AWS WAF to create custom rules that block attack patterns such as SQL injection, cross-site scripting and others



With AWS WAF you can also define which traffic to allow or block to your web application

Amazon Cloud Directory

Amazon Cloud Directory

- Amazon Cloud Directory enables you to build flexible, cloud-native directories for organizing hierarchies of data along multiple dimensions
- Directories store information about users, groups and devices and administrators use them to manage access to information and resources



Amazon Cloud Directory is used for cloud-scale deployments

AWS Directory Service

AWS Directory Service

- You should AWS Directory Service for Microsoft Active Directory (Standard or Enterprise Edition) if you need an actual Microsoft Active Directory in the AWS Cloud
- Some of the features supported: Active Directory-aware workloads or AWS applications and services such as Amazon WorkSpaces and Amazon QuickSight, LDAP support for Linux applications



AWS Directory Services = Microsoft AD

AWS Miscellaneous Services

AWS Miscellaneous Security & IAM Services

Amazon Inspector is an automated security assessment service that helps improve the security and compliance of apps deployed on AWS



AWS Organizations allows you to create groups of AWS accounts for multiple accounts centralized management



AWS Certificate Manager is a service that lets you provision, manage, and deploy (SSL/TLS) certificates for use with AWS services



AWS Miscellaneous Security & IAM Services

AWS CloudHSM is a cloud-based hardware security module (HSM) that enables you to easily generate and use your own encryption keys on the AWS Cloud



You can securely generate, store, and manage the cryptographic keys used for data encryption such that they are accessible only by you

Thank you