

AWS Certified Solutions Architect — Associate (SAA-C01)



Module 15

Other AWS Services & Exam Info

Agenda

- 📦 Other Compute Services – Serverless & Containers
- 📦 Application Services
- 📦 Security & Administration Services
- 📦 Developer Services
- 📦 Enterprise Applications
- 📦 Exam Details
- 📦 Whitepapers
- 📦 Additional Info Links

Other Compute Services

Serverless



AWS Lambda

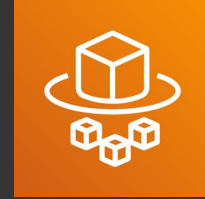
Container Services



Amazon ECS



Amazon EKS



AWS Fargate

Lambda

Run Code in Response to Events

- Runs code in response to triggers such as S3 upload, DynamoDB updates, Kinesis streams, and API Gateway requests
- Automatically scales
- You only need to provide the code; there is no infrastructure to manage
- Pay only for what you use



EC2 Container Service

Run and Manage Docker Containers

- A high performance container management service for running Docker containers on EC2 instances
- Use the built in scheduler, write your own, or use a third-party scheduler
- Integrates with other services like ELB and EBS
- No additional charge
- EC2 Container Registry



Elastic Kubernetes Service

Kubernetes Platform

- A high performance elastic Kubernetes certified platform.
- 100% upstream Kubernetes with key components open source.
- Official Amazon EKS CLI (eksctl)
- Bring your own OS and create AMIs with packer.
- Supports windows mixed (heterogeneous) clusters



AWS Fargate

Fully Managed Serverless Container Platform

- Run containers without managing servers or clusters
- Integrated with Amazon ECS



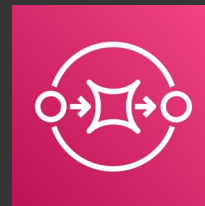
Application Services



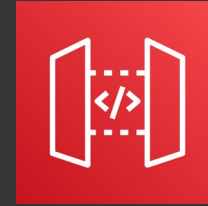
SES



SNS



SQS

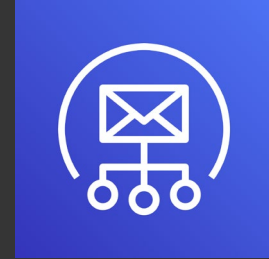


API
Gateway

Simple Email Service (SES)

Email Sending Service

- Bulk and transactional email-sending service
- Eliminates email server management
- Meet rigorous Internet Service Provider (ISP) standards
- Built-in feedback loop on successful and unsuccessful messages



Simple Notification Service (SNS)

Push Notification Service

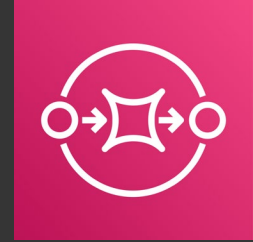
- Set up, operate, and send notifications
- Publish messages from an application and immediately deliver them to subscribers or other applications
- Push messages to mobile devices



Simple Queue Service (SQS)

Message Queue Service

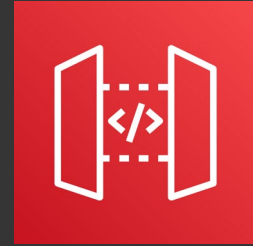
- Managed and scalable message queue
- Building block for distributed systems
- Highly available and durable
- Pay for what you use



API Gateway

Build, Publish and Manage APIs

- Performance at any scale via worldwide edge locations, traffic throttling, and API output caching
- Monitor API activity
- Integrates with Lambda functions
- Run multiple versions of the same API
- Fully Managed



SAM (SERVERLESS APPLICATION MODEL)



Lambda

AWS::Serverless::Function

Handler, Runtime, CodeUri, MemorySize, Timeout, Policies, Environments, Events



API Gateway

AWS::Serverless::Api

StageName:

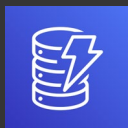
DefinitionUri:

CacheClusterEnable: true

CacheClusterSize:25

Variables:

varName: <Value>



DynamoDB

AWS::Serverless::SimpleTable

PrimaryKey:

Name: id

Type: string

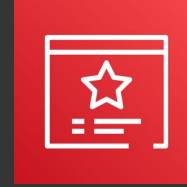
Security & Administration



Trusted Advisor



Service Catalog



Certificate Manager



AWS Config



OpsWorks

1 Resource Provisioning

- AWS CloudFormation
- AWS Service Catalog

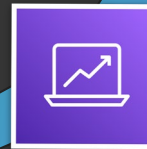
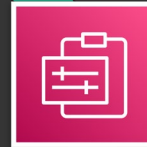
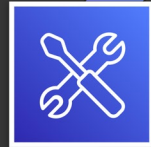
2 Configuration Management

- AWS OpsWorks
- AWS Systems Manager

3 Monitoring & Performance

- Amazon CloudWatch

AWS
Management
Tools



5 Resource Optimization

- AWS Trusted Advisor

4 Governance & Compliance

- AWS CloudTrail
- AWS Config

Trusted Advisor

AWS Cloud Optimization Expert

- Checks your AWS account for cost optimization, performance, fault tolerance, and security
- Basic checks are free, all checks unlocked with business level support



AWS Certificate Manager

Manage SSL certificates for use with AWS Services

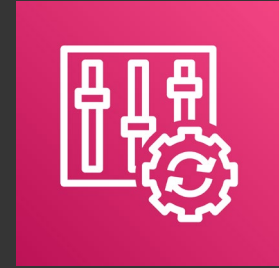
- Provision, manage, and deploy SSL/TLS certificates
- Protect and secure websites
- Obtain & renew certificates quickly
- Use certificates with AWS (ELB and CloudFront)
- Fully managed
- No charge



AWS Config

Resource Configurations and Inventory

- Inventories AWS resources
- Notifications on configuration change
- Keeps history of configuration changes
- Integration with partner solutions



AWS Service Catalog

Find and Launch Products Using a Personalized Portal

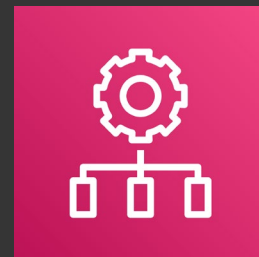
- Create and manage catalogs of IT services that are approved for use on AWS
- Virtual Machine Images, Servers, Software, Databases, Application Architectures
- Manage commonly deployed services, while maintaining compliance and corporate standard requirements



OpsWorks

Automate Operations with Chef

- Automate operational tasks like code deployment, software configurations, package installations, database setups, and server scaling using Chef
- Model the layers of your applications into stacks
- Use Chef recipes and cookbooks
- Supports Linux and Windows
- Granular security control
- Use it in AWS or on-premises



EC2 Systems Manager

A set of capabilities that

- Enable automated configuration
- Support ongoing management of systems at scale
- Work across all of your Windows and Linux workloads
- Run in Amazon EC2 or on-premises



Deploy, Configure & Administer



Run Command

Perform common administrative tasks remotely at scale (shell/powershell)



State Manager

Define and maintain a consistent configuration of OS and applications

Shared Capabilities



Maintenance Window

Schedule disruptive tasks in well-defined window to minimize downtime



Parameter Store

Centralized management of IT assets such as passwords and connection strings

Track and Update



Inventory

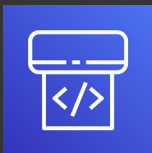


Patch Manager

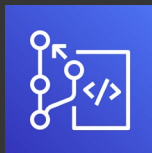


Automation

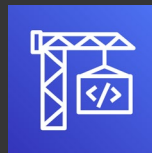
Developer Tools



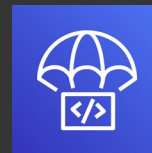
AWS CodePipeline



AWS CodeCommit

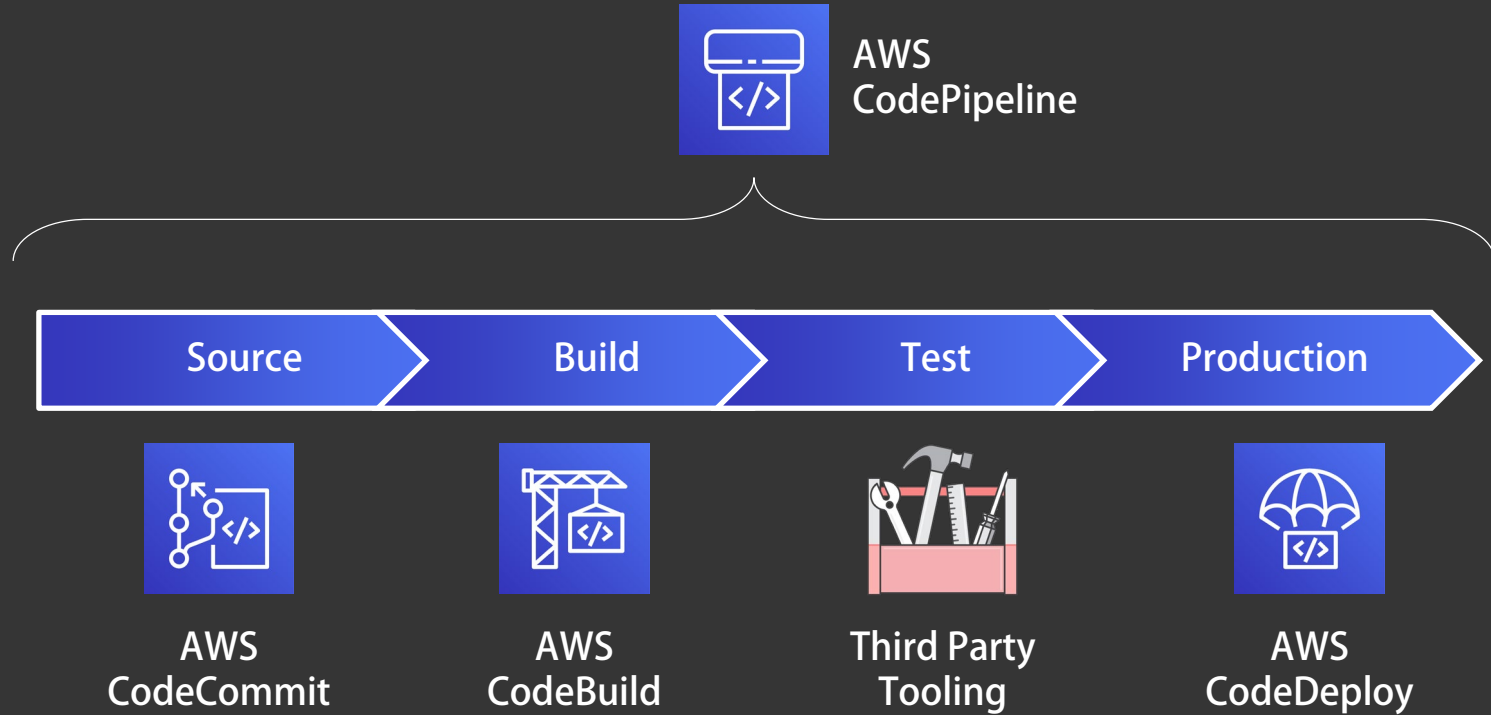


AWS CodeBuild



AWS CodeDeploy

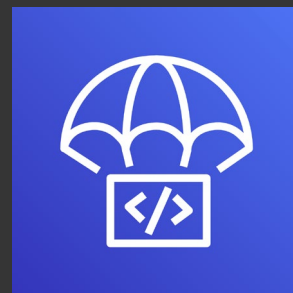
Software Release Steps



CodeDeploy

Automate Code Deployments

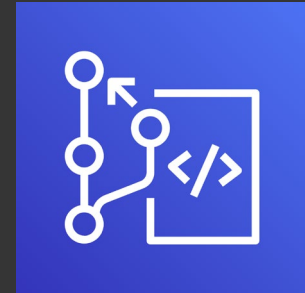
- Automates deployment of software to EC2 instances
- Allows for rolling updates and health checks
- Platform and language agnostic
- Integrates with existing tool chains
- Use it on AWS or on-premises



CodeCommit

Store Code in Private Git Repositories

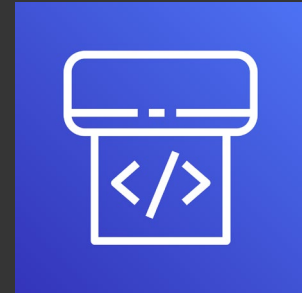
- Eliminates need to scale and operate source control servers
- Automatic file encryption
- Highly scalable, redundant, and durable
- Supports all file types and sizes
- Use existing Git tools



CodePipeline

Release Software using Continuous Delivery

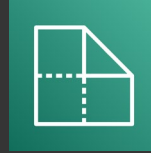
- Automates application deployments and updates for rapid delivery of new features
- Model stages of the software release process
- Improve code quality through automated builds and tests
- Connects to existing tools and systems
- Use pre-built or custom plugins



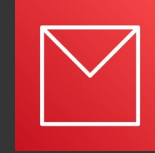
Enterprise Applications



Amazon WorkSpaces



Amazon WorkDocs



Amazon WorkMail

Workspaces

Desktops in the Cloud

- Create and manage virtual desktops for your users
- Integrates with VPC and Directory Service
- Clients for Windows, Mac, Chromebook, iPad, Kindle Fire, and Android



WorkDocs

Secure Enterprise Storage and Sharing Services

- Store and share documents with others
- Review and feedback workflow
- Integrates with your corporate directory
- Integrates with desktops, laptops, tablets, and Workspaces



WorkMail

Secure Email and Calendaring Service

- Managed business email and calendaring service
- Enterprise grade security
- Outlook compatible
- Access from anywhere



 Whitepapers

 Additional Learning Tools

 Exam Details

Thank You!

Q & A