

AWS DEVOPS

Introduction to AWS DEVOPS

- What is DevOps in cloud?
- History of DevOps
- DevOps and software life cycle
- DevOps main objectives
- IAAS overview
- PAAS overview
- SAAS overview
- Continuous testing and Integration
- Continuous Release and deployment
- Continuous Application monitoring

AWS Web Services

Basic of Linux for AWS

- cd , mkdir , ls, jobs, chmod, vim ,vi&cat, gzip and many more

Amazon Elastic Compute Cloud (EC2) (Complete)

- Different instance types
- AMI's
- Volumes
- Snap shots
- EIP's
- Key pairs
- Security groups
- Network Interfaces
- Load balancers
- Auto scaling
- Tags

AWS S3

- What is S3?
- Creation of Buckets &objects
- Adding objects to buckets
- Notifications
- S3 data encryption types
- Hosting a static Website
- Pre-signed URL
- Permissions
- Distributions
- Relation between Cloud front,S3&glacier

VPC

- VPC basics
- Public subnet & Private subnets
- Network Access Control List's
- Difference between Network ACL & Security groups
- Difference between NAT instances & NAT Gateways
- Creation of Route tables

- Creation of Internet gateways(IGW)
- DHCP option sets
- DNS
- Launch Servers with VPC
- VPC peering
- VPN overview & components

IAM

- Creation of user accounts
- Creation of Group
- Basics of AWS permissions
- Creation of Roles
- Difference between Roles & policies
- What is IAM Profile
- Creation of custom Policies for delegation
- Setting up Multi Factor Authentication (MFA) authentication
- User permissions
- Access key & Secret Key

Dynamo DB

- What is no sql technologies
- Dynamo DB capacity
- Create tables & do a simple projects

RDS

- DB Instances
- Creating your database
- RDS Limits
- Setting up automatic backups,snapshots & restores
- Managing Mysql Database server
- Deleting or Rebooting a DB instance
- Working with storage types
- Security: Using IAM to manage Access to Amazon RDS Resources

Redshift

- Difference between other databases like (Dynamo DB & RDS) to Redshift
- How queries are run regardless of data size
- What is parameter groups
- What is workload management

Direct connect

- What is dedicated network connection
- How to establish private connection between AWS & your data center
- Configure virtual interference
- Connect your network to AWS

Route 53

- Configuring Amazon Route 53 as your DNS Service
- Registering a Domain Name and configuring as the DNS Service

- Migrating DNS Service for an existing domain to Amazon Route 53
- How to create Hosted Zone
- Types(Cname, IP address,MX)
- Working with Public Hosted Zones
- Working with Private Hosted Zones
- Change reference to meet Cname
- Creating ,Updating and Deleting health checks

ElastiCache

- ElastiCache Terminology and concepts
- Backup and Restore
- Clusters explanation
- Managing ElastiCache
- Managing Replication Groups
- DNS Names and Underlying IP

Config

- How to provide an inventory of your AWS resources & a history of configuration changes to these resources
- Automatically discovers AWS resources using simple setup
- How to create customize rules

Trusted Advisor

- How to make cost optimization
- Performance
- Security
- Fault Tolerance

Elastic Beanstalk

- Creation of Web-App
- Building a sample application
- Modifying the properties of the deployment

Glacier

- Creating Vaults
- Working with Archives
- Accessing the Glacier vault using tools
- Data retrieval policy operations

SES

- Email Services
- SMTP Services

SQS

- Queue creations
- Retention periods
- Dead letters

SNS

- Topic
- Subscriptions
- Notifications & Applications

Cloud Watch

- Debugging cloud related issues
- Different Metrics
- Monitoring
- How to create Custom metrics

Cloud Formation

- Cloud formation templates
- Complete resources & explanation with sample templates

Cloud Front

- How Cloud front delivers content
- Working with web distributions
- Request and Response behavior
- Serving private content through cloud front

Cloud Trail

- How to track records of your AWS API calls
- Troubleshoot operational and security incidents

Code deploy

- Why Code deploy
- How to apply patch with Code Deploy

Workspaces

Automation of jobs:

- Jenkins

Provisioning tools

- Chef basics
- Salt stack

Monitoring tools

- Check_mk (Nagios)

Network Concepts

- Active directory
- Computer name
- Network commands

Languages

- Python
- PowerShell
- Java
- C#.net
- AwsCli Commands