## **Amazon Web Services**

## **AWS Concepts**

AWS Architecture and Terminology

Compute and Networking Services

Storage and Content Delivery Services

**Database Services** 

**Analytics Services** 

**App Services** 

**Deployment Services** 

Management Services

## **Amazon IAM (Identity And Access Management)**

IAM Essentials

IAM Best Practices For New Accounts

API Keys And Roles

**IAM Policies** 

Log IAM Events With CloudTrail

## **Amazon S3 (Simple Storage Service)**

AWS S3 Essentials

**Getting Started** 

S3 Permissions

S3 Bucket/Object Versioning And LifeCycle Policies

Website Hosting With S3

## **Amazon EC2 (Elastic Compute Cloud)**

EC2 Essentials

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Selecting And Building EC2 Instances

**EBS Volumes And Snapshots** 

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Cloud-init Userdata And Metadata

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CloudWatch And EC2

**EC2 Placement Groups** 

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#### **Amazon RDS (Relational Database Service)**

**RDS** Essentials

Working With RDS

Subnet Groups

RDS Security Groups And Connecting To RDS From EC2

## **Amazon VPC (Virtual Private Cloud) And Networking**

Introduction To VPC And AWS Networking

Building A VPC From Scratch

**VPC Networking** 

**VPC Security** 

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Extending The VPC To On-Premise Networks

**VPC** Peering

## **High Availability And Fault Tolerant Tools With EC2**

Working With Amazon Machine Images (AMI's)

ELB With High Availability Hands On

Applying Auto Scaling And ELB To Create High Availability And Fault Tolerance

#### **AWS Direct Connect**

Understanding AWS Direct Connect

## **Amazon Kinesis**

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**IOT Kinesis Example** 

#### **Amazon Cloudfront**

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Architecting Applications With CloudFront

Performance Considerations With CloudFront

#### Route 53

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## **Amazon SNS (Simple Notification Service)**

SNS Essentials
Amazon SQS (Simple Queue Service)
SQS Essentials
Using SQS To Build Decoupled Application Architectures

### **Amazon SWF (Simple Work Flow Service)**

**SWF** Essentials

### **Amazon EMR (Elastic Map Reduce)**

**EMR Essentials** 

#### **Amazon Elastic Beanstalk**

Elastic Beanstalk Essentials
Getting Started With Elastic Beanstalk
Amazon CloudFormation
CloudFormation Essentials
Building An S3 Bucket With CloudFormation

### **AWS Command Line Interface (AWS CLI)**

About The CLI And Getting Setup AW CLI: Working With EC2 AW CLI: Working With S3

## Designing highly available, cost efficient, fault tolerant, scalable systems Implementation/Deployment

How To Design Cloud Services & Best Practices
Monitoring
Architectural Trade-Off Decisions
Elasticity And Scalability

## **Data Security**

## **Amazon Web Services**

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Security Architecture with AWS

Shared Security Responsibility Model And Attributes

AWS Platform Compliance And Security Services

Incorporating Common Conventional Security Products

**DDoS Mitigation** 

**Encryption solutions** 

**Complex Access Controls** 

Amazon CloudWatch For The Security Architect

CloudHSM

# Recognize critical disaster recovery techniques and their implementation Disaster Recovery Troubleshooting

EC2 Troubleshooting Scenarios

VPC Troubleshooting Scenarios

**ELB Troubleshooting Scenarios** 

Auto Scaling Troubleshooting Scenarios