

# AWS Architecting

## Course Topics

### 1: INTRODUCTION

Introduction to AWS  
Cloud computing service models  
Benefits of moving to the Cloud  
Common problems encountered at AWS

### 2: BASIC PATTERNS

Introducing Vagrant  
Snapshot pattern  
Stamp pattern  
Scale up pattern  
Scale out pattern  
On-demand disk pattern

### 3: PATTERNS FOR HIGH AVAILABILITY

Multi-server pattern  
Multi-data center pattern  
Floating IP pattern  
Deep health check pattern

### 4: PATTERNS FOR PROCESSING STATIC DATA

High availability storage  
Direct storage hosting  
Private data delivery  
Content delivery networks  
Rename distribution pattern

### 5: PATTERNS FOR PROCESSING DYNAMIC DATA

Clone server pattern  
NFS sharing pattern  
State sharing pattern  
URL rewriting pattern  
Cache proxy pattern

### 6: PATTERNS FOR UPLOADING DATA

Write proxy pattern  
Storage index pattern  
Direct object upload pattern

### 7: PATTERNS FOR DATABASES

Database replication pattern  
Read replica pattern  
In-memory cache pattern  
Sharding write pattern

## **8: PATTERNS FOR DATA PROCESSING**

Queuing chain pattern

Priority queue pattern

Job observer pattern

## **9: PATTERNS FOR OPERATION AND MAINTENANCE**

Bootstrap pattern

Cloud dependency injection pattern

Stack deployment pattern

Monitoring integration pattern

Web storage archive pattern

Weighted transition pattern

Hybrid backup pattern

## **10: PATTERNS FOR NETWORKING**

OnDemand NAT pattern

Management network pattern

Functional firewall pattern

Operational firewall pattern

Web application firewall pattern

Multiple load balancer pattern

## **11: THROW-AWAY ENVIRONMENTS**

Infrastructure as code

Temporary development environments

Continuous integration