

Cloud Operations

Overview of Cloud Computing Solutions

Identify the core concepts of cloud computing.

Operations Terminology

Identify the terminology used in cloud computing.

Operations Core Concepts

Identify core concepts used in cloud computing.

Business Trends in Cloud Computing

Describe business trends in cloud computing.

Emerging Trends in Cloud Computing

Describe emerging trends in cloud computing.

Key IT Roles in Cloud Computing

Identify key IT roles in cloud computing.

Identifying Key Components of Cloud Computing Solutions

Cloud Solution Operational Benefits and Challenges

Identify the operational benefits and challenges of cloud computing solutions.

Key Service Models for Operations

Identify what the key service models are.

Overview of Cloud Implementations for Operations

Describe the different cloud implementations.

Cloud Computing Technologies Compared to Traditional Network Models

Describe cloud computing technologies compared to traditional network models.

Operational Benefits of Cloud Computing

Describe the benefits of cloud computing.

Operational Challenges: Integration between Cloud and On-Premises

Identify the operational challenges of integration between cloud and on-premises.

Operational Challenges: Security, Privacy, and Compliance

Identify the operational challenges of security, privacy, and compliance.

Operational Challenges: Managing Provider Contract, Services, and Agreements

Identify the operational challenges of managing provider contract, services, and agreements.

Operational Challenges: Optimizing Performance

Identify the operational challenges of optimizing performance.

Wade through audit logs to find system bottlenecks and opportunities to optimize (keep your COGS low). **Identifying Operational Benefits and Challenges in Cloud Computing Environments**

Requirements for Cloud Service Administration

Identify requirements for cloud service administration

Role of Cloud Administrators

Describe the role of cloud administrators.

IT Administration in Cloud Environments

Course content

Describe IT administration in cloud environments.

Cloud Service Solution Complexity

Describe cloud service solution complexity.

Knowledge of Leading Cloud Service Providers

Identify the leading cloud service providers.

Knowledge of Database Operations

Describe database operations.

Knowledge of Developer Operations

Describe developer operations.

Administration of Developer Operations

Describe the administration of developer operations.

Cloud Administrator Tasks

Identify the tasks commonly performed by cloud administrators.

IT Responsibilities of Cloud Administrators

Identify the IT responsibilities of cloud administrators.

Business Responsibilities of Cloud Administrators

Identify the business responsibilities of cloud administrators.

Costs of Goods Sold (COGS)

Define the costs of goods sold.

Identifying Requirements for Cloud Service Administration

Planning Cloud Service Implementation

Topic A: Determine Hardware, Software, and Network Requirements

Determine hardware, software and network, requirements for cloud service implementations.

Deployment Planning

Define deployment planning.

Hardware Requirements

Identify hardware requirements.

Software Requirements

Identify software requirements.

Migration Requirements

Identify migration requirements.

Ongoing Management and Upgrade Cycle Requirements

Identify ongoing management and upgrade cycle requirements.

Back up and Rollback Requirements

Identify back up and rollback requirements.

Growth Requirements

Identify growth requirements.

Configuration Requirements

Identify configuration requirements.

Geographical Footprint and Network Topology

Course content

Describe geographical footprint and network topology.

Cloud Provider Deployment Tools

Identify different cloud provider deployment tools.

Cloud Provider Pricing

Describe cloud provider pricing.

Guidelines for Determining Hardware, Software, and Network Requirements

Determining Hardware, Software, and Network Requirements

Determining Cloud Provider Deployment Tools to Use

Topic B: Assess Risks of a Cloud Deployment

Assess the risks of a cloud deployment.

Risk Assessment of Cloud Service Providers

Describe a risk assessment of cloud service providers.

Provider Service Level Agreements

Define provider service level agreements.

Cloud Availability

Describe cloud availability.

Mean Time To Failure (MTTF)

Define mean time to failure.

Mean Time to Diagnose (MTTD)

Define mean time to diagnose.

Mean Time to Repair (MTTR)

Define mean time to repair.

Mean Time between Failures (MTBF)

Define mean time between failures.

Guidelines for Assessing Risks of a Cloud Deployment

Assessing Risks of a Cloud Deployment

Topic C: Coordinate with End-Users and Business Stakeholders

Coordinate with end-users and business stakeholders.

End-User Information Requirements

Identify end-user information requirements.

User Roles

Define user roles.

User Data

Define user data.

User Permissions

Define user permissions.

Application Needs

Identify the application needs of end users and business stakeholders.

Quality of Service Needs

Course content

Identify the quality of service needs for end users and business stakeholders.

Coordination with Business Stakeholders

Describe ways to coordinate with business stakeholders.

Incident Management and Issue Tracking

Determine measures for incident management and issue tracking.

Guidelines for Coordinating with End-Users and Business Stakeholders

Coordinating with End-Users and Business Stakeholders

Topic D: Plan Automation and Configuration Management

Plan automation and configuration management.

Automation in Cloud Computing

Describe automation in cloud computing.

Benefits of Automation

Identify the benefits of automation.

Cost Reduction through Automation

Describe cost reduction through automation.

Cloud Provider Automation Examples

Describe different cloud provider automation examples.

Automated Configuration

Define automated configuration.

Automated Configuration Examples

Describe different automated configuration examples.

Remote Management

Describe remote management.

Intelligent Platform Management (IPMI)

Define intelligent platform management.

Guidelines for Planning Automated Configuration Management

Planning Automated Configuration Management

Topic E: Determine Cloud Service Support Resources

Determine the cloud service support resources.

Need for Additional Support

Identify the need for additional support.

Types of Resources

Identify the different types of resources.

Technical Resource: Cloud Broker

Define the cloud broker resource.

Examples of Cloud Brokers

Describe examples of cloud brokers.

Resources: Distributed Management Task Force

Define the distributed management task force resource.

Course content

Resources: Open Data Center Alliance

Define the open data center alliance resource.

Resources: Cloud Standards Customer Council (CSCC)

Define the cloud standards customer council resource.

Resources: Cloud Security Alliance (CSA)

Define the cloud security alliance resource.

Guidelines for Determining Support Resources

Determining Support Resources

Deploying a Cloud Application with Digital Ocean

Topic A: Determine Cloud Application Implementation Requirements

Determine the cloud application implementation requirements.

Cloud Based Applications

Describe cloud based applications.

Business Benefits of Deploying Applications in the Cloud

Identify the business benefits of deploying applications in the cloud.

Platform as a Service (PaaS) Solutions

Describe different platform as a service Solutions.

Provider Examples

Describe different provider examples.

Application Design Considerations

Identify application design considerations.

Common Cloud Application Languages and Frameworks

Identify common cloud application languages and frameworks.

Application Migration to Cloud Considerations

Identify the application migration to cloud considerations.

Administrative Requirements

Define the administrative requirements.

Regional Support

Describe regional support.

Integration Requirements

Identify the integration requirements.

Development Support

Describe development support.

Provider Add Ons

Identify provider add ons.

Guidelines for Determining Cloud Application Implementation Requirements

Determining Cloud Application Implementation Requirements

Topic B: Deploying a Droplet on Digital Ocean

Deploy a droplet on Digital Ocean.

Course content

Digital Ocean

Define Digital Ocean.

Digital Ocean Scaling

Describe Digital Ocean scaling.

Digital Ocean APIs

Describe Digital Ocean APIs.

Digital Ocean Control Panel

Describe Digital Ocean control panel.

Digital Ocean Bistros

Describe Digital Ocean bistros.

Digital Ocean 1-Click Apps

Describe Digital Ocean 1 click apps.

Digital Ocean Networking

Describe Digital Ocean networking.

Droplets

Define droplets.

Other Digital Ocean Features

Identify other Digital Ocean features.

Guidelines for Deploying Applications on Digital Ocean

Deploying a Droplet

Deploying a Cloud Application with Heroku

Topic A: Identify Cloud Application Features of Heroku

Identify the cloud application features of Heroku.

Heroku

Define Heroku.

Ephemeral File System

Describe the ephemeral file system.

Shared State

Describe the Heroku shared state.

Dependency Management

Describe the Heroku dependency management.

Heroku Scaling Options

Identify the Heroku scaling options.

Logging

Describe Heroku logging.

Heroku Dynos

Define Heroku Dynos.

Dyno Management

Describe dyno management.

Heroku Routing

Course content

Describe Heroku routing.

Logplex

Define Logplex.

GitHub Integration

Describe the integration with GitHub.

Marketplace Add-Ons

Identify marketplace add-ons.

Identifying Cloud Application Requirements Supported by Heroku

Topic B: Deploy a Heroku App

Deploy a Heroku app.

App Deployment Process

Describe the app deployment process.

Account Setup

Describe the account setup process.

Heroku Toolbelt

Define the Heroku Toolbelt.

Control Panel

Describe the Heroku control panel.

Application Frameworks

Define the application frameworks.

How to Deploy Applications on Heroku

Deploying an Application on Heroku

Topic C: Scale and Update Applications on Heroku

Scale and update applications on Heroku.

Slugs

Define slugs.

Buildpacks

Define buildpacks.

Slug Deployment

Describe slug deployment.

Application Scaling

Describe application scaling.

Application Release Checking

Describe the application release checking process.

Application Rollback Options

Identify the application rollback options.

Guidelines for Scaling and Updating Applications on Heroku

Scaling and Updating Applications on Heroku

Topic D: Secure Heroku Applications with Git Bash

Course content

Secure Heroku applications with Git Bash.

Cloud Application Security

Define cloud application security.

Application Security

Define application security.

Secure Administration

Describe why you need secure administration.

Secure Shell (SSH) Public and Private Key Encryption

Define secure shell public and private key encryption.

Git Bash

Define Git Bash.

Git Bash Client Installation

Describe Git Bash client installation.

SSH Configuration

Identify the SSH configuration.

How to Secure Heroku Applications with Git Bash

Securing Heroku Applications with Git Bash

Deploying Websites with Microsoft Azure

Topic A: Overview of Microsoft Azure

Identify Microsoft Azure.

Microsoft Azure

Define Microsoft Azure.

Azure Service Models

Identify Azure service models.

Operating System Support

Identify the operating systems are supported by Azure.

Application Development Support

Identify which application development languages are supported by Azure.

Azure Computer and Network Services

Describe Azure computer and network services.

Azure Data Services

Identify Azure data services.

Azure App Services

Identify Azure app services.

Azure Performance Measurement

Describe Azure performance measurement.

App Store

Describe the app store.

Azure Standard Architecture

Identify the Azure standard architecture.

Identify the Microsoft Azure Components Required for a Cloud Solution**Topic B: Deploy Websites in Microsoft Azure**

Deploy websites in Microsoft Azure.

Websites

Describe website in Azure.

Websites in Virtual Machines

Describe websites in virtual machines.

Front-end Code and Application Logic in Azure Websites

Identify front-end code and application logic in azure websites.

Website Deployment Methods

Identify website deployment methods.

Website Modes

Identify website modes.

Website Performance Monitoring

Describe website performance monitoring.

Microsoft Azure Management Portal

Define the Microsoft Azure management portal.

Guidelines for Deploying Websites in Microsoft Azure**Deploying a Website in Microsoft Azure****Topic C: Manage Data and Storage in Microsoft Azure**

Manage data and storage in Microsoft Azure.

Azure Storage

Define Azure storage.

Blobs

Define blobs.

Tables

Define tables.

Queues

Define queues.

Microsoft Azure Databases

Define Microsoft Azure databases.

MS SQL Server

Define SQL Server.

NoSQL Databases

Define NoSQL databases.

Guidelines for Managing Data and Storage in Microsoft Azure**Managing SQL Server in Microsoft Azure****Implementing Azure Cloud Services and Virtual Machines**

Topic A: Implement Azure Cloud Services

Implement Azure cloud services.

Azure Cloud Services as a PaaS

Describe Azure cloud services as a PaaS.

Application Deployment

Describe application deployment process.

Web Role

Define the web role for Azure cloud services.

Worker Role

Define the worker role for Azure cloud services.

Web and Worker Roles and Virtual Machines

Define the web and worker roles and virtual machines.

Requirements to Deploy Cloud Service Website

Identify the requirements to deploy a cloud service website.

Guidelines for Implementing Azure Cloud Services

Implementing Azure Cloud Services

Implementing Mobile Services in Microsoft Azure

Topic B: Implement Azure Virtual Machines

Implement Azure Virtual Machines.

Azure Virtual Machines as IaaS

Describe Azure virtual machines as an IaaS.

Multi-tier Application Support

Describe multi-tier application support.

Azure Virtual Machines Examples

Describe different Azure virtual machines examples.

Hyper-V

Define Hyper-V.

Benefits of Hyper-V in Azure Cloud Services

Identify the benefits of Hyper-V in Azure cloud services.

Azure Virtual Networks

Describe Azure virtual networks.

Azure Services Comparison

Compare Azure services.

Guidelines for Implementing Azure Virtual Machines

Implementing Azure Virtual Machines

Implementing Virtual Networks

Topic C: Manage Microsoft Azure Cloud Services

Manage Microsoft Azure Cloud Services.

Traffic Management

Course content

Describe managing traffic.

Traffic Manager

Define the traffic manager.

Disaster Recovery Management

Describe the process for managing disaster recovery in Azure cloud services.

Failover Management

Describe the process for managing failover in Azure cloud services.

Performance Management

Describe the process for managing performance in Azure cloud services.

Management Certificates

Define management certificates.

Administrator Management

Describe the process for managing administrators in Azure cloud services.

Affinity Group Management

Describe the process for managing affinity groups in Azure cloud services.

Guidelines for Managing Microsoft Azure Cloud Services

Managing Microsoft Azure Cloud Services

Managing Azure Applications with Visual Studio

Topic A: Publish Applications to Azure with Visual Studio

Publish an application to Azure with visual studio.

Visual Studio

Define Visual Studio.

Visual Studio Terminology

Define Visual Studio terminology.

Visual Studio Solution Explorer

Describe the Visual Studio Solution Explorer.

Visual Studio Templates

Define Visual Studio templates.

Developer Operations with Visual Studio

Identify the different developer operations available with Visual Studio.

Azure Profile Settings

Identify different Azure profile settings.

Local Application Testing

Describe local application testing.

Publication Requirements for Azure

Identify the publication requirements for Azure.

Guidelines for Publishing Applications to Azure with Visual Studio

Publishing a Website to Azure with Visual Studio

Publishing a Local App to Azure with Visual Studio

Topic B: Migrate .NET Applications to Azure with Visual Studio

Migrate .NET applications to Azure with Visual Studio.

Application Migration Considerations

Identify application migration considerations.

Azure Requirements for Migration

Identify the Azure requirements for migration.

Local Apps and Cloud Apps

Compare local apps and cloud apps.

Microsoft Azure Cloud Service Project Conversion

Describe the Microsoft Azure cloud service project conversion.

The ServiceConfiguration.Cloud File

Define the ServiceConfiguration.Cloud file.

The ServiceConfiguration.Local File

Define the ServiceConfiguration.Local file.

Service Definition Files

Describe service definition files.

Guidelines for Migrating .NET Applications to Azure with Visual Studio

Migrating .NET Applications to Azure with Visual Studio

Deploying Applications to Opscode Chef

Topic A: Overview of Opscode Chef

Describe Opscode Chef.

Operational Challenges of Managing Multiple Cloud Nodes

Identify the operational challenges of managing multiple cloud nodes.

Chef

Define Chef.

Node

Define node.

Chef Service

Describe the Chef service.

Chef Web Interface

Describe the Chef web interface service.

Apache Solr Search

Define Solr Search.

Apache CouchDB

Define CouchDB.

RabbitMQ

Define RabbitMQ.

Components of Chef Implementations

Describe other components used in a Chef implementation.

Chef Usage Model

Course content

Describe the Chef usage model.

Identifying Scenarios Where Cloud Operations can benefit from Chef

Topic B: Install the Chef Client

Install the Chef client.

Overview of Chef Architecture

Describe the Chef architecture.

Node Types

Identify different nodes types.

Chef Client

Describe the Chef client.

Ohai

Define Ohai.

Workstation

Define a workstation.

Knife

Define Knife.

Chef Repo

Describe the Chef repo.

Server

Define a server.

Guidelines for Installing the Chef Client

Installing the Chef Client

Topic C: Implement Chef Cookbooks

Implement Chef cookbooks.

Cookbooks

Define cookbooks.

Cookbook Scenarios

Describe different cookbook scenarios.

Node Attribute Values

Identify node attribute values.

Resource Definitions

Describe resource definitions.

File Distributions

Describe file distributions.

Libraries

Define libraries.

Templates

Define templates.

Versions

Describe cookbook versions.

Course content

Recipes

Define recipes.

Recipe Metadata

Identify recipe metadata.

Guidelines for Implementing Chef Cookbooks

Implementing Chef Cookbooks

Topic D: Manage Azure Services with Chef

Manage Azure Services with Chef.

Azure Management Scenarios for Chef

Identify different Azure management scenarios for Chef.

Knife Azure

Define Knife Azure.

Installation Requirements

Identify different installation requirements.

Configuration Requirements

Identify different configuration requirements.

Azure Command Trees

Define Azure command trees.

Guidelines for Managing Azure Services with Chef

Managing Azure Services with Chef

Managing Server State with Puppet

Topic A: Determine How Puppet can Streamline Cloud Management

Determine how using Puppet can streamline cloud management.

Server State Management

Describe server state management.

Change Implementation Speed

Describe the benefits to implementation speed in cloud solutions.

Implementation Consistency

Describe the benefits of implementation consistency in cloud solutions.

Puppet

Define Puppet.

Puppet Language

Describe the Puppet language.

Puppet Distributions

Describe Puppet distributions.

Guidelines for Determining How Puppet Streamlines Cloud Management

Determining How Puppet Streamlines Cloud Management

Topic B: Deploy Puppet

Course content

Deploy Puppet.

Puppet Deployments

Describe Puppet deployments.

Agent Nodes

Identify agent nodes.

Puppet Master Server

Identify Puppet master servers.

Console Server

Identify Puppet console servers.

Database Support Server

Identify database support servers.

Puppet Operating Systems Requirements

Identify the Puppet operating systems requirements.

Guidelines for Deploying Puppet

Deploying Puppet

Implementing Rackspace Cloud Servers

Topic A: Overview of OpenStack

Identify OpenStack.

Need for Vendor-Agnostic Cloud Computing Standards

Describe the need for vendor-agnostic cloud computing standards.

OpenStack

Define OpenStack.

OpenStack Principles

Identify the OpenStack principles.

Hypervisor Agnostic

Describe how OpenStack supports a hypervisor-agnostic solution.

OpenStack Compute

Describe OpenStack Compute.

OpenStack Object Storage

Describe OpenStack object storage.

OpenStack Imaging

Describe OpenStack imaging.

Rackspace as an OpenStack Solution

Describe Rackspace as an open solution.

Identify OpenStack Components to Meet Requirements

Topic B: Overview of Rackspace Cloud Services

Identify Rackspace cloud services.

Rackspace Cloud

Describe Rackspace Cloud.

Course content

Rackspace Cloud Service Models

Identify the Rackspace Cloud service models.

Rackspace Compute and Network Components

Identify the Rackspace compute and network components.

Cloud Databases

Describe Rackspace Cloud Databases.

Cloud Sites

Describe Rackspace Cloud Sites.

Cloud Files

Describe Rackspace Cloud Files.

Cloud Backup

Describe Rackspace Cloud Backup.

Cloud Monitoring

Describe Rackspace Cloud Monitoring.

Private Cloud

Describe Rackspace Private Cloud.

Cloud Block Storage

Describe Rackspace Cloud Block Storage.

Example Rackspace Architecture

Describe an example Rackspace architecture.

Identify Rackspace Components Required for a Cloud Solution

Topic C: Deploy a Rackspace Cloud Server

Deploy a Rackspace Cloud Server.

Rackspace Cloud Server Regions

Describe Rackspace Cloud Server regions.

Rackspace Cloud Server OS Support

Describe Rackspace Cloud Server OS support.

Rackspace Cloud Server SDK Support

Describe Rackspace Cloud Server SDK support.

Rackspace Cloud Server Command Line

Describe the Rackspace Cloud Server command line.

Rackspace Cloud Files Deployment Requirements

Identify the Rackspace Cloud Files deployment requirements.

Guidelines for Deploying a Rackspace Cloud Server

Deploying and Configuring a Rackspace Cloud Server

Topic D: Manage Rackspace Cloud Servers with Chef

Manage Rackspace Cloud Servers with Chef.

Knife Rackspace

Define Knife Rackspace.

Gem

Course content

Define Gem.

Gem and OpenStack Interoperability

Describe Gem and OpenStack interoperability.

Installation Requirements

Identify the installations requirements for Rackspace Cloud Servers with Chef.

Configuration Options

Identify the configuration options for Rackspace Cloud Servers with Chef.

Subcommands

Identify the subcommands for Rackspace Cloud Servers with Chef.

Guidelines for Managing Rackspace Cloud Servers with Chef

Managing Rackspace Cloud Servers with Chef

Topic E: Manage Quality of Service (QoS)

Manage quality of service.

Quality of Service

Define quality of service.

QoS Frameworks

Identify QoS frameworks.

QoS Ontologies

Define QoS Ontologies.

QoS Layers

Identify QoS layers.

QoS Implementation at Provider

Describe the QoS implementation at providers.

QoS Implementation at Customer

Describe the QoS implementation at customers.

QoS Implementation at End-User

Describe the QoS implementation at end users.

Guidelines for Managing Quality of Service for Cloud Services

Managing Quality of Service for Cloud Services

Importing and Exporting Data from Cloud Services

Topic A: Determine Requirements for Cloud Data Import and Export

Determine requirements for cloud data import and export.

Role of Data Import/Export in Cloud Services

Describe the role of data import/export in cloud services.

Common Import/Export Scenarios

Describe common import/export scenarios.

Challenges of Data Import/Export in Cloud Service Scenarios

Describe the challenges of data import/export in cloud service scenarios.

Off Public Network Migration Options

Course content

Define off public network migration options.

Data Import/Export Timing Calculations Example

Describe a data import/export timing calculations example.

Provider Import/Export Tools

List some provider import/export tools.

Third Party Import/Export Tools

List some third party import/export tools.

Guidelines for Determining Requirements for Cloud Data Import and Export

Determining Requirements for Cloud Data Import and Export

Topic B: Import Data to and Export Data from a Cloud Network

Import data to and export data from a cloud network.

Amazon Web Services Import and Export Options

List Amazon Web Services import and export options.

Microsoft Azure Import and Export Options

List Microsoft Azure import and export options.

Rackspace Cloud Import and Export Options

List Rackspace import and export options.

Rackspace Bulk Import

Describe Rackspace Bulk Import.

Rackspace Control Panel for Import/Export

Describe using the Rackspace Control Panel for import/export.

Rackspace CDN Import

Describe Rackspace CDN import.

Swift Command-line Tool for Import/Export

Describe the Swift command-line tool for import/export.

Guidelines for Importing and Exporting Data to Cloud Networks

Importing Data to Rackspace Cloud

Managing Security and Compliance in Cloud Solutions

Topic A: Secure Cloud Solutions

Secure cloud solutions.

Cloud Security

Define cloud security.

Impact of Cloud Security Breach

Describe the impact of a cloud security breach.

Types of Threats to Cloud Computing Solutions

Identify the types of threats to cloud computing solutions.

Hypervisor Security

Describe Hypervisor security.

Load Balancer Security

Course content

Describe load balancer security.

OS Security

Describe OS security.

Other Security Concerns

Describe other security concerns.

Security Tools

Describe different security tools.

Guidelines for Securing Cloud Solutions

Securing Cloud Solutions

Topic B: Manage Compliance for Cloud Solutions

Manage compliance for cloud solutions.

Compliance Responsibilities for Providers

Identify the compliance responsibilities for providers.

Compliance Responsibilities for Customers

Identify the compliance responsibilities for customers.

Compliance Responsibilities for Operations Staff

Identify the compliance responsibilities for operations staff.

Compliance Regulations

Identify important compliance regulations.

Compliance Tools

Describe different compliance tools.

Guidelines for Managing Compliance for Cloud Solutions

Managing Compliance for Cloud Solutions

Planning and Executing a Phased Cloud Migration

Topic A: Plan a Phased Migration

Plan a phased migration.

Build for the Cloud or Move to the Cloud?

Compare building for the cloud to moving to the cloud.

Phased Migration

Define phased migration.

Benefits of a Phased Migration

Identify the benefits of a phased migration.

Phase 1: Cloud Assessment

Describe the cloud assessment phase.

Phase 2: Proof of Concept

Describe the proof of concept phase.

Phase 3: Data Migration

Describe the data migration phase.

Phase 4: App Migration

Course content

Describe the app migration phase.

Phase 5: Cloud Feature Implementation

Describe the cloud feature implementation phase.

Phase 6: Optimizing

Describe the optimizing phase.

Guidelines for Planning a Phased Migration

Planning a Phased Migration

Topic B: Execute Phase 1: Cloud Assessment

Assess cloud migration.

Financial Assessment

Describe a financial assessment.

Security and Compliance Assessment

Describe a security and compliance assessment.

Provider Specific Security and Compliance Issues

Identify provider specific security and compliance issues.

Technical and Functional Assessment

Describe a technical and functional assessment.

Dependency Tree

Define the dependency tree.

Classification Chart

Define a classification chart.

Cloud Candidate Identification

Describe cloud candidate identification.

Identify Tools for Reuse

Identify tools that can be reused.

License Product Migration Issues

Identify license product migration issues.

Success Criteria Definition

Describe the success criteria definition.

Roadmap Creation

Describe roadmap creation.

Guidelines for Assessing Cloud Migration

Assessing Cloud Migration

Topic C: Execute Phase 2: Deploy a Proof of Concept on Amazon Web Services

Deploy a proof of concept on Amazon Web Services.

Provider and Platform Familiarization

Describe getting familiar with providers and platforms.

AWS Availability and Management Building Blocks

Identify the AWS availability and management building blocks.

Course content

AWS Cross Cloud Service Features

Identify the AWS cross cloud service features.

AWS Platform Building Blocks

Identify the AWS platform building blocks.

AWS Infrastructure Building Blocks

Identify the AWS infrastructure building blocks.

AWS Network and Compute Components

Identify the AWS network and compute components.

AWS Database Services

Identify the AWS database services.

AWS Storage and Content Delivery

Describe AWS storage and content delivery.

AWS Performance Monitoring

Describe AWS performance monitoring.

Proof of Concept Deployment

Describe the proof of concept deployment.

Guidelines for Deploying a Proof of Concept Application on AWS**Deploying a Proof of Concept Application on AWS****Topic D: Execute Phase 3: Data Migration**

Migrate data to Amazon Web Services.

Storage Options

Describe the storage options.

Database Options

Describe the database options.

File Server Migration

Define file server migration.

Backup Migration

Define backup migration.

MySQL Database Migration

Define MySQL database migration.

Commercial Database Migration

Define commercial database migration.

Large Data Migrations

Describe large data migrations.

Guidelines for Migrating Data to Amazon Web Services**Migrating Data to Amazon Web Services****Topic E: Execute Phase 4: Application Migration**

Migrate applications to the cloud.

Key Application Migration Question: Move in Phases or all at Once?

Determine whether to move in phases or all at once.

Course content

Forklift Migration Strategy

Define the forklift migration strategy.

Hybrid Migration Strategy

Define the hybrid migration strategy.

Amazon Machine Image (AMI)

Define Amazon Machine Image.

AMI Creation and Configuration

Describe AMI creation and configuration.

Guidelines for Migrating Applications to the Cloud**Migrating Applications to the Cloud****Topic F: Execute Phase 5: Implement Cloud Features**

Implement cloud features.

Scalability

Describe scalability of cloud features.

Elasticity

Describe elasticity of cloud features.

High Availability

Describe high availability for cloud features.

Automation

Describe the automation of cloud features.

Security

Describe security for cloud features.

Business Continuity

Describe the business continuity aspects of cloud features.

Guidelines for Implementing Cloud Features**Implementing Cloud Features****Topic G: Execute Phase 6: Optimize Cloud Implementations**

Optimize cloud implementations.

Usage Patterns

Define usage patterns.

Resource Optimization

Describe resource optimization.

Efficiency Improvements

Describe efficiency improvements.

Management and Maintenance

Describe management and maintenance.

Application Re-Engineering

Describe application re-engineering.

Relational Database Decomposition

Describe relational database decomposition.

Course content

Guidelines for Optimizing Cloud Implementations

Optimizing Cloud Implementations