

Apache CloudStack

Duration: 5 days

Module1: CloudStack Concepts and Terminology

- What is Apache CloudStack?
- What can Apache CloudStack do?
- Deployment Architecture Overview
- CloudStack Terminology

Module2: Choosing a Deployment Architecture

- Small-Scale Deployment
- Large-Scale Redundant Setup
- Separate Storage Network
- Multi-Node Management Server
- Multi-Site Deployment
- Choosing a Hypervisor
- Best Practices

Module:3 Installation

- Introduction
- Minimum System Requirements
- Downloading the Release
- Verifying the Downloaded Release
- Prerequisites for building Apache CloudStack
- Extracting source
- Install new MySQL connector
- Building DEB packages
- Building RPMs from Source

Module:4 Configuring CloudStack Installation

- Overview of Provisioning Steps
- Adding Regions (optional)
- Adding a Zone
- Adding a Pod
- Adding a Cluster
- Adding a Host
- Add Primary Storage
- Add Secondary Storage
- Initialize and Test
- Configuration Parameters
- Granular Global Configuration Parameters

Module:5 compute Setup

- Host Hypervisor Installation
- System Requirements for Hypervisor Hosts
- Preparation Checklist for Hypervisor
- Hypervisor Installation Steps
- Installing the CloudStack Agent on a Hypervisor Host
- Physical Network Configuration for Hypervisor
- Storage Preparation for Hypervisor (Optional)

Module:6 Network Setup

- Basic and Advanced Networking
- VLAN Allocation Example
- Hardware Firewall-Generic Firewall Provisions
- Management Server Load Balancing
- Runtime Internal Communications Requirements
- Storage Network Topology Requirements
- External Firewall Topology Requirements
- Advanced Zone Topology Requirements
- Hyper-V Topology Requirements

Module:7 Storage Setup

- Introduction - Primary Storage, Secondary Storage
- Configurations -Small-Scale Setup, Large-Scale Setup
- Storage Architecture -Local Storage, 'Traditional' node-based Shared Storage
- Clustered Shared Storage
- Network Configuration For Storage

Module:8 Service offering and Virtual Machine

- Offerings and their purpose in the cloud
 - Various types of offerings supported by CloudStack
 - How users can use these offerings to request resources from the cloud
 - The virtual machine lifecycle

Module:9 Domains, Accounts, Projects, and Users

- Role-based access mechanisms for managing users in the CloudStack
 - How CloudStack allows us to segregate and group users for efficient usage of resources
 - Various terminologies used in CloudStack such as domains, accounts, projects, and so on
 - The working of domains, accounts, projects, and users