

Oracle VM Server for x86: Administration

This Oracle VM Server for x86: Administration training teaches you how to build the infrastructure for open cloud computing. Learn to deploy pooled server resources to create virtual machines supporting enterprise applications.

Learn To

The Oracle VM Server for x86: Administration course explores building the infrastructure for open cloud computing. Expert Oracle University instructors will show you how to support enterprise applications by deploying pooled server resources to create virtual machines.

Learn To:

- Plan a virtual solution.
- Install the Oracle VM Server for x86 and the Oracle VM Manager software.
- Configure network resources to provide isolation and redundancy.
- Add SAN and NFS to provision storage for the virtual environment.
- Create server pools and repositories to support application workloads.
- Speed up virtual machine deployment with templates and virtual appliances.
- Use virtual machine high availability.
- Use server pool policies to maximize the performance of your server workloads.

Benefits to You:

Using the Oracle VM application-driven architecture is different from using traditional virtualization. Built with the application stack and manageability in mind, Oracle VM offers a complete lifecycle compute stack virtualization. This course delivers the skill to help you consolidate the server foot print, while acquiring the tools to deploy or consolidate application workloads to a virtualized environment or migrate to an open cloud infrastructure.

Learn Ease of Deployment and Management

Built to support all different workloads, with a specific emphasis on ease of deployment and management of Oracle applications, you'll also learn to create server pools to take advantage of your existing storage and networking infrastructure. This will seamlessly manage storage from a central location using Oracle VM Storage Connect. Using features like anti-affinity groups and Dynamic Resource Scheduling policy, you'll implement and manage the inter-connections between the virtual machines running your multi-tier enterprise applications.

Gain Hands-On Experience

Extensive hands-on practices will guide you through each step for building your virtual environment. With the skills acquired during these exercises, you can scale your virtual environment to support the most demanding workloads.

Prerequisites

Required Prerequisites: Ability to administer a Linux environment and implement a virtual infrastructure using any virtualization platform. Familiarity with: Networking principles, Link aggregation and VLAN technologies; Storage concepts: iSCSI, NFS, FC; Thin provisioning.

Audience

- Administrator
- System Integrator
- Systems Administrator

Course Objectives

- Use cloning with templates to create additional virtual entities
- Install the Oracle VM Server for x86 and the Oracle VM Manager
- Exercise high availability, live migration and anti-affinity policy
- Explore and use the Oracle VM Manager UI and CLI
- Discover and manage Oracle VM servers
- Add networks and storage to support the Oracle VM environment
- Create and manage server pools
- Create and populate repositories with virtual resources
- Perform the steps to create and operate virtual machines

Course Topics

Introducing Oracle VM with Oracle VM Server for x86

- What is Server Virtualization
- Advantages and Challenges of Server Virtualization
- Oracle VM within Server Virtualization Landscape
- Components and architecture of Oracle VM
- Features of Oracle VM
- Benefits of Oracle VM

Planning and Installation

- Installation Planning
- Hardware and Software Requirements
- Network and Storage Planning
- Installation Options and Processes
- Postinstallation Tasks
- Upgrading Oracle VM Server for x86 Servers

Managing Servers and Networks

- Discovering Oracle VM Servers
- Managing Oracle VM Servers
- Understanding Network Functions
- Creating Network Bonds, VLANs, VLAN Interfaces
- Creating and Managing Networks

Managing Storage

- Storage Types and Functions
- Storage Connect Framework
- Discovering File Server and SAN Server
- Managing Storage Elements
- Creating and Cloning Physical Disks

Server Pools and Repositories

- Server Pool Functions and Policies
- Distributed Resource Scheduling and Dynamic Power Management
- Server Pool Design
- Creating Server Pools
- Creating and Populating Repositories
- Cloning Virtual Disks

Managing Virtual Machines

- Virtual Machine Components
- PVM and HVM Guests
- Installing Guest Operating Systems
- Speeding Deployment with Templates and Virtual Appliances
- Cloning of Virtual Machines and Templates
- High Availability Feature
- Virtual Machine Console
- Migrating Virtual Machines and using Anti-Affinity Groups