

## **Oracle VM Administration: Oracle VM Server for x86**

**Duration: 3 Days**

### **What you will learn**

This Oracle VM Administration: Oracle VM Server for x86 course explores building the infrastructure for 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 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 assemblies.

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 will help you consolidate the server foot print, while acquiring the tools to deploy or consolidate application workloads to a virtualized environment or migrate to a private cloud.

### **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.

## **Audience**

Architect  
Support Engineer  
System Administrator  
Technical Administrator

## **Related Training**

### *Required Prerequisites*

Ability to administer a Linux environment and implement a virtual infrastructure using any virtualization platform

### *Suggested Prerequisites*

Familiarity with link aggregation and VLAN technologies  
Familiarity with networking principles  
Familiarity with storage concepts: iSCSI, NFS, FC  
Familiarity with thin provisioning

## **Course Objectives**

Create and populate repositories with virtual resources  
Perform the steps to create and operate virtual machines  
Use cloning with templates and assemblies to create additional virtual entities  
Exercise high availability, live migration and anti-affinity policy  
Install the Oracle VM Server for x86 and the Oracle VM Manager  
Become familiar with 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

## **Course Topics**

### **Introducing Oracle VM with Oracle VM Server for x86**

Benefits of Server Virtualization  
Oracle VM within Server Virtualization Landscape  
Components 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  
Post Installation Tasks  
Upgrade of Oracle VM Server for x86

### **Managing Servers and Networks**

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

### **Managing Storage**

Storage Types and Functions  
Storage Connect Framework  
File Server and SAN Server Discovery  
Managing Storage Elements  
Physical Disks Creation and Cloning

### **Server Pools and Repositories**

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

### **Managing Virtual Machines**

Virtual Machine Components  
PVM and HVM Guests  
Installing Guest Operating Systems  
Use of Templates and Assemblies  
Cloning of Virtual Machines and Templates  
High Availability Feature  
Virtual Machine Console  
Migrating Virtual Machines