

Oracle VM Server for x86: Implementation Ed 2

This The Oracle VM Server for x86: Implementation training teaches you how to enhance cloud effectiveness with rapid deployment of cloud resources and applications. You will learn how to administer, troubleshoot and protect Oracle VM resources.

Duration: 3 days – 18 hours

Learn To:

- Administer the Oracle VM environment by using the appropriate management tools.
- Redeploy cloud resources to meet requirements.
- Track and solve issues at each operational layer.
- Protect Oracle VM resources.
- Incorporate key components into your disaster and recovery strategy.

Benefits to You

Maximize Cloud Resources

Server virtualization is the first step to delivering application and cloud services. In your Oracle VM environment, you have the ability to deploy and redeploy standardized and pre-configured software appliances to meet workload objectives and to redistribute physical and virtual resources to maximize resources for your application workload. In this course, you learn the tools and

processes to accelerate your private cloud deployments and to redeploy resources effectively.

Increase Application Availability

Virtual environments introduce challenges for isolating and solving problems. Learn to detect problems at every layer of the Oracle VM environment, how to capture a configuration snapshot of your environment before making changes and as a way to communicate vital information about your environment to Oracle support.

Protect Cloud Resources

You learn to identify the resources that you must protect, and the steps to back up and recover these resources. You explore environment-wide recovery scenarios and gain knowledge that you can use as a blueprint for your disaster recovery strategy.

Related Training

Required Prerequisites

- Ability to administer a Linux environment and implement a virtual infrastructure using any virtualization platform.
- Oracle VM Server for x86: Administration Ed 2

Suggested Prerequisites

- Link aggregation and VLAN technologies
- Networking principles
- Oracle Linux 5 & 6 Advanced Administration
- Oracle Linux 5 & 6 System Administration
- Oracle Linux 5 & 6 System Administration Ed 3
- Oracle Linux 7: Advanced Administration Ed 1
- Oracle Linux 7: System Administration Ed 1
- Oracle Linux 7: System Administration Ed 2

- Storage concepts: iSCSI, NFS, FC
- Thin provisioning

Audience

- Application Developers
- Functional Implementer
- Sales Consultants
- Support Engineer
- System Administrator
- System Analysts
- Technical Administrator
- Web Administrator

Objectives

1. Increase administrative reach with the Oracle VM Web Services API
2. Create virtual machines by importing existing resources and migrating guests from other platforms
3. Perform dynamic resource changes to running virtual machines
4. Automate the configuration of virtual machines when they boot for the first time
5. Redeploy Oracle VM servers, server pools and repositories in response to changing requirements in your Oracle VM environment
6. Use tools and commands to examine the status of Oracle VM components and to identify problems
7. Identify Oracle VM components to protect and establish guidelines for backing up and restoring these components
8. Learn to recover your Oracle VM environment by using disaster scenarios
9. Integrate lessons learned during recovery to your D/R plans
10. Administer your Oracle VM environment by using the Oracle VM Manager UI and the Oracle VM CLI

Topics

1. Oracle VM Manager UI and Oracle VM CLI
 - Review the major components of Oracle VM
 - Discuss the management interfaces to the Oracle VM Manager application
 - Describe the control elements and authentication for the Oracle VM Manager UI
 - Customize the Oracle VM Manager UI session
 - Access the Oracle VM CLI and view the Oracle VM CLI logs
 - Learn how to use the Oracle VM CLI commands and custom command
 - Customize the Oracle VM CLI sesión

2. Oracle VM Web Services
 - Introduce the Oracle VM Web Services and describe the role of the Oracle VM Web Services
 - Describe the REST interaction for the Oracle VM Web Services
 - Learn basic authentication with REST interaction
 - Demonstrate a GET and POST request with REST by using Python examples
 - Discuss REST usage for Oracle VM Web Services
 - Examine the structure of the Oracle VM Web Services SDK file

3. Managing Virtual Machines
 - Discuss Oracle VM virtualization modes and how to convert an HVM guest to PVM mode
 - Learn how to create a virtual machine with installation media and by importing templates, virtual appliances, virtual machines and virtual disks
 - Use the P2V tool to create new templates from legacy hosts
 - Use cloning and migration
 - Discuss Inbound Migration Lock as a way to protect resources of a running virtual machine
 - Make changes to your virtual machines: Add network devices, disk resources and CPU and memory resources

4. Oracle VM Guest Additions

- Describe the Oracle VM Guest Additions feature and lists its benefits
- Install the Oracle VM Guest Additions in a virtual machine
- Use the messaging facility provided by the Oracle VM Guest Additions
- Explain the role of the Oracle VM Template configuration feature
- Learn the role of scripts and targets with Oracle VM Template configuration feature
- Prepare a virtual machine for first-boot configuration and test the configuration

5. Operations

- Discover and rediscover Oracle VM servers and explain the discovery process
- Remove Oracle VM servers from server pools, delete Oracle VM servers and re-install Oracle VM Servers
- Perform operations on server pools: Add or remove Oracle VM servers, cluster operations and fencing
- Discuss repository ownership: Oracle VM Manager ownership and cluster ownership
- Present and un-present repositories to Oracle VM servers, create repository exports, delete repositories, release ownership of a repository and reclaim its ownership
- Perform refresh operations in the Oracle VM environment

6. Troubleshooting

- Use logs, job details and events to identify problems
- Perform health check on Oracle VM Manager and Oracle VM server components
- View iSCSI multipathing information on Oracle VM servers
- Run the VMPinfo3 tool and view the tool report
- Generate core dumps automatically and manually for virtual machines
- Configure serial console access for Oracle Linux guests Virtual Machine Console

7. Backup and Restore – D/R Concepts

- Identify components that need to be backed up and discuss guidelines for backup operations
- Backup and restore the Oracle VM Manager MySQL database
- Recover from the loss of the Oracle VM Manager MySQL database
- Learn the Oracle VM-centric and guest-centric approaches to protecting virtual machine
- Use recovery scenarios to learn how to rebuild your Oracle VM environment
- Learn the importance of cluster IDs and network IDs during recovery operation
- Apply recovery information to D/R design