

Oracle VM Server for SPARC: Installation and Configuration Ed 2

Duration: 3 Days

What you will learn

The Oracle VM Server for SPARC: Installation and Configuration course teaches practical skills for building and managing virtual environments, based on scalable and dynamic resource management using Oracle SPARC server virtualization technology.

Learn To:

Build scalable logical domain based virtual environments.

Assign dedicated and shared resources to domains.

Administer server resources for logical domains running business applications.

Create root and I/O domains to increase performance for business critical applications.

Increase availability and flexibility for virtual environments with live migration.

Benefits To You

Oracle VM Server for SPARC provides efficient, enterprise class virtualization for the Oracle SPARC server platform running Oracle Solaris operating system.

Using the Oracle SPARC hypervisor to create hardware partitioned logical domains, you are able to efficiently build and manage up to 128 hardware independent virtual environments on a single server. By learning to create the various types of logical domains, implementing native and virtualized access to I/O hardware for domains running business critical applications is made easy.

You will be shown how to maximize workload efficiency by effectively administering the platform resources and taking advantage of the massive CPU core and thread scale offered by Oracle SPARC servers.

Audience

Cloud Administrator
Data Center Manager
System Administrator
System Integrator
Systems Architects
Technical Consultant

Related Training

Required Prerequisites

Install and administer an Oracle Solaris OS

Knowledge of virtualization concepts

Perform basic Oracle SPARC server initial setup tasks

Understand basic storage concepts

Suggested Prerequisites

Administer Ethernet networks

Configure basic IP networks

Oracle Solaris 11 System Administration Ed 5

SPARC M-series Administration

UNIX and Linux Essentials

Course Objectives

Configure control and service domains

Create a guest domain

Install Oracle Solaris using an AI Server

Create a root domain

Create an I/O domain using SR-IOV

Assign I/O resources using Direct I/O

Reconfigure server resources for logical domains

Use virtual disks

Use virtual networks

Implement VLAN and Port VLAN based switching

Manage logical domain configurations

Perform live migration operations

Perform non interactive migration operations

Use ZFS backends

Plan an Oracle VM Server for SPARC installation

Course Topics

Introduction to Oracle VM Server for SPARC

- Oracle's Virtualization Strategy
- Oracle VM Server for SPARC Architecture
- Oracle VM Server for SPARC Benefits

Planning and Installing the Oracle VM Server for SPARC Software

- Planning for Oracle VM Server for SPARC
- Working with SPARC T-Series Servers
- CPU and Memory Sizing Guidelines
- Upgrading System Firmware
- Upgrading Oracle VM Server for SPARC Software
- The Idm Command

Configuring the Control and Service Domain

- Typical Basic Configuration
- Virtualized Devices and Virtual Services
- Control Domain Resource Allocation
- Managing Control Domain Configurations

Creating Guest Domains

- Creating a Guest Domain
- Binding and Starting a Guest Domain
- Installing Oracle Solaris in a Guest Domain
- Verifying a Guest Domain Configuration
- Accessing a Guest Domain's Console

Building I/O and Root Domains

- I/O Domain Overview
- Root Domains
- I/O Domain with PCIe SR-IOV Virtual Functions
- I/O Domains using Direct I/O

Performing Logical Domains Administration

- Dynamic Reconfiguration of Logical Domain Resources
- Using Virtual Disks
- Virtual Disk Back End Options
- Provisioning New Domains with ZFS Snapshots and Clones
- Using Virtual Networks
- VLAN Support for Virtual Networks
- Link Aggregation and Jumbo Frames for Virtual Networks

Migrating Logical Domains

- Migration Requirements and Restrictions
- Migration Types
- Migration Phases
- Migration Dry Run
- Live Migration
- Cross-CPU Live Migration
- Cold Migration
- Non-Interactive Migration