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

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