Oracle Exadata Database Machine: Implementation and Administration

Introduction

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- Course Contents
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- Additional Resources
- Introducing the Laboratory Environment

Exadata Database Machine Overview

- Introducing Database Machine
- Introducing Exadata Storage Server
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- Exadata Storage Server Features: Overview
- Exadata Storage Expansion Racks
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- Database Machine Support: Overview

Exadata Database Machine Architecture

- Database Machine Architecture: Overview
- Database Machine Network Architecture
- InfiniBand Network Architecture
- InfiniBand Network Topology
- Interconnecting Multiple Racks
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- Disk Storage Entities and Relationships

Key Capabilities of Exadata Database Machine

- Classic Database I/O and SQL Processing Model
- Exadata Smart Scan Model
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- Exadata Hybrid Columnar Compression
- Exadata Smart Flash Cache
- Exadata Storage Index
- Database File System
- I/O Resource Management

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- Using Oracle Exadata Deployment Assistant
- Choosing the Right Disk Redundancy Setting
- Configuring Oracle Exadata Database Machine
- The Result After Installation and Configuration
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- Testing Storage Server Performance Using CALIBRATE
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- Starting and Stopping Exadata Cell Server Software
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- Enabling Intradatabase Resource Management
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- Smart Scan Requirements
- Monitoring Smart Scan in SQL Execution Plans
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- Consolidation: Overview
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- Recommended Storage Configuration for Consolidation
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- Cluster Configuration Options
- Isolating Management Roles
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- Bulk Data Loading Using Oracle DBFS: Overview
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- Monitoring Technologies and Standards
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- Intelligent Platform Management Interface (IPMI)
- Integrated Lights Out Manager (ILOM)
- Exadata Storage Server Metrics, Thresholds, and Alerts
- Automatic Diagnostic Repository (ADR)
- Enterprise Manager Cloud Control 12c
- Enterprise Manager Database Control

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- Configuring Cloud Control to Monitor Exadata Database Machine
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- InfiniBand Network Monitoring with
- Monitoring the InfiniBand Switches
- Monitoring the InfiniBand Switch Ports
- Monitoring the InfiniBand Ports
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- Monitoring the InfiniBand Fabric:

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- Running Exachk
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- General Recommendations for RMAN
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