

OIT-S11-PM: Oracle Solaris 11 Performance Management

Course Code: OIT-S11-PM

Duration: 5 days

Instructor-led Training (ILT) | Virtual Instructor-led Training (VILT)

OVERVIEW

This Oracle Solaris 11 Performance Management training course introduces you to performance tuning principles. Oracle Solaris 11 Performance Management training course helps you understand monitor utilities and use tuning tools for the Oracle Solaris 11 Operating System.

SKILLS COVERED

- Use the Oracle Solaris 11 OS and third-party tools to analyze performance.
- View and set tunable parameters for the global or a non-global zone.
- Monitor and report on process and thread activity.
- Modify CPU scheduling and virtual memory operations.
- Describe system caches and system buses.
- Tune I/O, the ZFS File System and network subsystems.
- Evaluate system workloads.
- Assess system performance.
- Determine the cause of system performance issues.
- Configure system resource for best performance.
- Optimize software running on UltraSPARC CMT technology.
- Tune the Solaris 11 OS.

WHO SHOULD ATTEND?

- Data Center Manager
- Support Engineer

- System Administrator

PREREQUISITES

- Configure and administer Oracle Solaris 11 networking
- Create and manage Oracle Solaris 11 storage
- Employ advanced systems administration skills in a networked Oracle Solaris 11 OS server environment
- Oracle Solaris 11 Advanced System Administration

MODULES

Module 1: Introducing Performance Management

- Introduction to Performance Management
- Performance Analysis Concepts
- Monitoring tools in Oracle Solaris 11
- Monitoring tools in Oracle Solaris 11

Module 2: kstat Monitoring Tools

- The kstat Monitoring Tools

Module 3: procfs Monitoring Tools

- Introduction to procfs-based tools

Module 4: DTrace

- Introduction to DTrace
- DTrace Architecture
- DTrace Toolkit
- DTrace Virtualization Tool

Module 5: Other Significant Tools

- The swap Utility
- The cpustat Utility

- The mdb Utility
- The Solaris Studio dbx Utility

Module 6: Processes and Threads

- Operating System Theory
- Process Concepts
- Threads and Locking
- Process-Related Tunable Parameters
- CPU Scheduling Classes
- Managing Scheduling Classes

Module 7: System Caches and Buses

- Cache Concepts
- CMT architecture
- CMT architecture
- Assessing System Buses

Module 8: System Memory

- System Memory Concepts
- Virtual Memory 2
- Monitoring Memory utilization

Module 9: ZFS File System

- The ZFS File System
- Tuning the ZFS file system

Module 10: Network Performance Management

- Network Performance Concepts
- Oracle Solaris 11 Networking
- Configuring networks for best performance
- Network Resource management
- TCP
- Network Monitoring

Module 11: Resource Management

- Resource Management
- Projects and Tasks

- Resource Controls
- Resource Pools
- Resource Capping

Module 12: Oracle Solaris Virtualization Performance Management

- Oracle Solaris Zones
- Oracle Solaris Zones Resource Management
- Network Virtualization
- Oracle VM Server for SPARC

Module 13: Applying the Performance Analysis Approach

- Performance Testing and Benchmarks
- Performance Testing Tools

END OF PAGE