Solaris 11 System Administration - Part I

Duration: 5 Days   Course Code: SSA1R11   Delivery Method: Virtual Learning

Overview:

This Solaris 11 System Administration - Part I training course will give delegates practical experience in the administration of an Oracle Solaris 11 system.
Together with the Solaris Introduction course this event will enable the delegate to gain skills which will help them to prepare for the Oracle Certified Associate, *Oracle Solaris 11 System Administrator exam (1Z0-821)*.
Having achieved the above certification plus attending the Solaris Systems Administration Part II course attendees will have gained much of the preparation required for sitting the *Oracle Solaris Advanced Systems Administration exam (1Z0-822)*.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

This Solaris 11 System Administration - Part I course is aimed at IT staff responsible for performing essential system administration procedures in the Oracle Solaris 11 operating environment.

Objectives:

■ Administering Solaris systems involves many standard tasks including; starting and shutting down a system,managing filesystems and performing regular backups. Delegates taking this course will gain the necessary knowledge and skills to perform these tasks.

Prerequisites:

This Solaris 11 System Administration course assumes good knowledge of a Unix operating system in an Enterprise environment to the level covered in the Solaris Introduction course. Alternatively,relevant experience of UNIX or Linux servers is required,preferably within an Enterprise environment. Knowledge of Solaris Shell Programming to the level covered on the Solaris Shell Programming course would also be beneficial.

Follow-on-Courses:

■ Solaris 11 System Administration - Part II (SSA2R11)
■ Solaris Advanced Shell Programming Tools (SASP)
■ Oracle SQL (OSP)
■ Apache Web Server (APH)

Content:

Solaris 11 System Administration - Part I
Training Course   Course Contents - DAY 1

Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

Session 1: BOOT AND SHUTDOWN PROCEDURES

- Boot procedures overview
- Boot phases
- Sparc Openboot
- Modifying Sparc boot procedures
- Intel BIOS and the Grub boot loader
- Modifying Intel boot procedures
- The init process
- System run levels
- Run control scripts
- Shutdown procedures
- Exercise

Session 2: SERVICE MANAGEMENT FACILITY

- Basic features
- The SMF environment
- SMF and booting
- SMF environmental structures
- Service states
- Managing services
- Automatic SMF state notification
- Exercise

Session 3: INSTALLING THE SOLARIS 11

- Installation methods
- Minimum installation requirements
- Installation considerations
- Disk partitioning
- Logical disk names
- Device drivers
- Software packages
- Network configuration
- Performing an interactive installation
- Checking the installed system
   Solaris 11 System Administration - Part I
   Training Course   Course Contents - DAY 2

Session 4: IPS SOFTWARE MANAGEMENT

- Repositories
- Package name format
- Managing packages with the pkg command
- List existing and searching for new packages
- Updating existing and installing new packages
- Checking existing packages
- Managing packages with the GUI tool

Session 5: DISK MANAGEMENT

- Displaying disk information
- Partitions/Slices
- Naming conventions
- Physical device names
- Instance names
- Logical device names
- Block and character devices
- Configuring new disk devices
- Partitioning the disk
- Exercise

Session 6: UFS FILE SYSTEM MANAGEMENT

- Disk based file systems
- Main root sub-directories
- Pseudo file systems
- Components of a file system
- Creating and mounting file systems
- Automounting DVDs and USB Devices
- Checking file systems
- Checking free disk space
- The df command
- The quot command
- The du command
- Freeing disk space
- Freeing up disk space with compression utilities
- Rotating files with logadm
- Exercise   Solaris 11 System Administration - Part I Training Course Course Contents - DAY 3

Session 7: UFS BACKUP AND RESTORE UTILITIES

- Backup policy
- Archive devices
- The mt utility
- The ufsdump utility
- The ufsrestore utility
- ufs Snapshots

Session 8: ZFS FILE SYSTEM MANAGEMENT

- Requirements
- Main features
- ZFS tools
- Managing ZFS Pools with zpool
- Pool storage devices
- Pool configuration features
- Creating and deleting Pools
- Viewing pool status
- Managing file systems with ZFS
- Creating and destroying a file system
- Mounting and unmounting filesystems
- Snapshots and Clones
- Creating,destroying and displaying Snapshots and Clones
- ZFS properties

Session 11: DISK QUOTAS

- UFS Quotas
- Creating the Quotas files
- Adding Quota checks and enabling
- Add the Quota option to the /etc/vfstab File
- Establish Quotas for individual users
- Turning Quotas on and off
- Turning on Quotas for ZFS
- Setting ZFS Quotas for users and groups
- Check spaced used for users and groups
- Exercise

Session 12: THE USER LOGIN ENVIRONMENT

- Shell configuration
- Shell variables
- Command aliases
- Executing commands
- Creating a permanent environment (profiles and rc files)
- Customising the environment
- Exercise   Solaris 11 System Administration - Part I Training Course Course Contents - DAY 5

Session 13: MANAGING PROCESSES

- Introduction to process management
- The ps command
- The prstat and top commands
- The kill command
- The 'p series of commands
- Debugging processes
- Background jobs
- Using the cron processes
- Cron files
- Creating crontab entries
- Amending existing crontab files
- Crontab command options
- The at command
- Exercise

Session 14: NETWORKING ADMINISTRATION

- Network addressing - IPv4
- Network masks and subnets
- Routing
- Location of network information
- SMF network properties
- Network Profiles
- Network Interfaces and Datalinks
- Manual and automatic configuration
- Managing Datalinks
- Managing Interfaces
- Exercise

Session 15: ADMINISTERING ZONES

- Features and benefits
- Configuration settings

- Exercise

- Read-Only native properties
- Settable native properties
- Exercise

Session 9: FILE PERMISSIONS REVIEW

- Basic file permissions
- Changing permissions
- Default permissions
- Extended permissions
- Changing the Owner
- Changing the Group
- Exercise   Solaris 11 System
  Administration - Part I Training Course
  Course Contents - DAY 4

Session 10: USER MANAGEMENT

- User accounts
- Files used in creating a user
- Adding a user
- Changing user details
- Deleting a user
- User group maintenance
- Password administration
- Password command
- Securing logins and passwords
- Local and remote login control
- Login logs
- Message of the day file
- Exercise

- Viewing a zone configuration
- Starting up and shutting down zones
- Logging in and out of a Zone
- Monitoring a zone
- Exercise

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

info@globalknowledge.co.uk

www.globalknowledge.com/en-gb/

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK