Oracle Linux 9 Advanced Administration

Duration: 4 Days   Course Code: OLAA   Delivery Method: Company Event

Overview:

Oracle Linux 9 Advanced Administration Course Overview

This highly practical instructor led Oracle Linux 9 Advanced Administration training course is designed to give delegates practical experience in the advanced concepts and use of Linux Administration. With a strong emphasis on practical hands on training using the command line,this course will teach advanced System Administration techniques to perform administration of Oracle Linux systems.

Although this Oracle Linux 9 Advanced Administration course is based on the Oracle Linux distribution,the delegate should be able to apply the concepts covered on this course to other Linux based distributions including,but not limited to Red Hat (RHEL),Fedora,CentOS and Amazon Linux amongst others.

Similarly,the course is targeted to closely follow the official Oracle Linux curriculum for certification.

Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered.

Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

Target Audience:

Who will the Course Benefit?

This Oracle Linux 9 Advanced Administration course is suitable for Linux System Administrators and DevOps teams to administer,deploy,configure and maintain Oracle Linux and other Red Hat-based Linux distributions.

The course would benefit Administrators who have acquired Unix/Linux System Administration skills to the level covered on the Oracle Linux 9 Administration course.

Objectives:

- Course Objectives

- On completion of this Oracle Linux 9 Advanced Administration course,the delegate will have gained practical experience of the advanced skills required to configure,run and maintain Oracle Linux systems and other Red Hat-based Linux distributions within an enterprise environment.

Prerequisites:

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Experience of administering Oracle Linux in an Enterprise environment to the level covered in the Oracle Linux 9 Administration course.

Follow-on-Courses:

Further Learning

- Linux System Security
- Apache Web Server
- Oracle SQL

Content:

Oracle Linux 9 Advanced Administration Training Course Course Contents - DAY 1

Course Introduction

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

Session 1: ADVANCED NETWORKING

- Host discovery
- Ethernet bonding
- Channel bonding
- Virtual LANs
- Exercise

Session 2: LINUX AUDITING

- Auditing overview
- Security related log files
- The last and lastb commands
- Understanding Audit records
- Generating Audit queries
- Configuring Auditing and defining rules
- Exercise

Session 3: SYSTEMD UNITS

- Systemd unit overview
- Controlling units
- Creating Service,Timer and Mount units
- Exercise

Session 4: CONFIGURING SUDO

- Sudo overview
- Basic examples
- Command line options
- Sudo aliases,tags and groups
- Sudo password options
- Sudo logging and replay
- Exercise   Oracle Linux 9 Advanced Administration Training Course Course Contents - DAY 2

Session 5: MANAGING AND CONFIGURING SELINUX

- SELinux overview
- Viewing and analysing SELinux denials
- Executing SELinux commands
- Configuring temporary and permanent policy changes
- Managing SELinux contexts,ports and Booleans
- Configuring SELinux users
- Relabelling files on boot
- Creating policy modules
- Exercise

Session 6: FILE SHARING WITH NFS AND SAMBA

- NFS overview
- Configuring an NFS server and client
- Configuring AutoFS - The Automounter
- Samba overview
- Configuring a Samba server and client
- Configuring SELinux for Samba
- Exercise

Session 7: CONFIGURING AN FTP SERVER

- FTP services overview
- Configuring Pure-FTPD and ProFTPD
- Configuring a VSFTPD server
- Configuring SELinux for FTP
- Creating a Socket unit
- Exercise

Session 8: RAID DEVICES

- RAID overview
- Creating a RAID device
- Viewing RAID arrays
- Hot swapping failed drives
- Exercise   Oracle Linux 9 Advanced Administration Training Course Course Contents - DAY 3

Session 9: LOGICAL VOLUMES

- LVM overview
- Creating Physical Volumes,Volume Groups and Logical Volumes
- Creating a striped Logical Volume
- Extending a Volume Group
- Resizing filesystems
- Removing Logical Volumes,Volume Groups and Physical Volumes
- Exercise

Session 10: CONFIGURING FIREWALLD

- Firewalld overview
- Basic firewall-cmd commands
- Managing firewalld services,ports and zones
- Creating firewalld zones and services
- Geolocation blocking with IP Sets
- Configuring Rich Rules
- Installing and configuring fail2ban
- Viewing the fail2ban jail and unbanning IP addresses
- Exercise

Session 11: INTRUSION DETECTION

- Intrusion detection overview
- Installing and configuring AIDE
- Detecting filesystem changes
- Creating a chroot jail
- Exercise

Session 13: SYSTEM MONITORING AND PERFORMANCE

- Performance monitoring overview
- Monitoring processes and collecting system information
- Measuring virtual memory
- Measuring IO performance
- Exercise

Session 14: KUBERNETES

- Kubernetes overview
- Installing and configuring Kubernetes
- Creating a Kubernetes cluster
- Pod overview
- Creating a basic Pod
- Pod namespaces and lifecycles

APPENDIX A: DISK ENCRYPTION

- Creating LUKS partitions
- Creating the filesystem
- Adding mappings

APPENDIX B: AUDIT RECORDS

- The Audit record fields

APPENDIX C: THE UDEV DEVICE MANAGER

- The Udev subsystem
- Configuring Udev and creating rules

APPENDIX D: NFTABLES

- NFTables Overview
- Converting IPTables rules to NFTables
- Using NFTables
- Displaying NFTables rule sets
- Creating an NFTables chain

Session 12: PLUGGABLE
AUTHENTICATION MODULES

- PAM overview
- PAM configuration files
- Restricting access to SSH
- Enforcing password complexity
- Controlling access by time
- Controlling user limits
- Exercise   Oracle Linux 9 Advanced
  Administration Training Course Course
  Contents - DAY 4

Further Information:

For More information, or to book your course, please call us on 0800/84.009

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www.globalknowledge.com/en-be/