Ubuntu Server Administration

Duration: 4 Days   Course Code: UBSA   Delivery Method: Virtual Learning

Overview:

Ubuntu Server Administration Course Overview

This instructor led Ubuntu Server Administration training course is designed to teach the key configuration,administration,networking,security,and performance tasks required on an Ubuntu Server.
Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered.

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:

Who will the Course Benefit?

The Ubuntu Server Administration training course is suitable for Ubuntu System Administrators,Programmers and other technical IT staff who need to acquire administration knowledge of the key configuration,administrative,networking,security and performance tasks required on an Ubuntu Linux operating system within the enterprise. An ideal course for anyone who will be working in an environment using Ubuntu Linux Server.

Objectives:

- Course Objectives

- On completion of this course the delegate will have the required technical knowledge to administer Ubuntu Linux Server within the enterprise. They will have gained practical experience of the key configuration,administration,networking,security,and performance aspects of Ubuntu Linux Server.

Prerequisites:

-
This Ubuntu Server Administration course assumes good knowledge of the Linux operating system in an Enterprise environment to the level covered in the Linux Introduction course. Alternatively,relevant experience of Linux or Unix servers is required,preferably within an enterprise environment.

Follow-on-Courses:

Further Learning

- Linux Advanced System Administration (LPI)
- Linux Automation with Ansible
- Linux System Security
- Linux Networking
- Linux Shell Programming
- Apache Web Server
- Oracle SQL

Content:

Ubuntu Server Administration Training Course Course Contents - DAY 1

Course Introduction

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

Session 1: USER ACCOUNT MANAGEMENT

- User Private Group scheme
- Files used in creating a user
- Managing groups
- Password administration
- The Bash Shell environment
- Extended permissions
- Configuring Privilege Delegation via sudo
- Monitoring login activity
- Exercise

Session 2: FILE SYSTEM OPERATIONS

- File system types
- The Linux I/O stack
- MBR vs GPT partition tables
- Partitioning a disk
- Comparison of Linux file systems
- Creating XFS and Btrfs file systems
- Displaying disk usage
- Mounting and unmounting file systems
- Configuring labels and UUIDs
- Exercise

Session 3: RAID

- An overview of RAID levels
- Creating,managing and modifying RAID arrays
- Creating Nested RAID
- Failing and replacing drives
- Exercise   Ubuntu Server Administration Training Course Course Contents - DAY 2

Session 4: LOGICAL VOLUME MANAGEMENT

- Logical Volume Management overview
- Viewing LVM information
- Configuring LVM
- Resizing Logical Volumes
- The role of the Device Mapper
- Exercise

Session 5: ZFS

- ZFS overview
- Configuring,managing and modifying ZFS Pools
- Tuning ZFS
- Viewing ZFS statistics
- ZFS Snapshots and Clones
- Exercise

Session 6: SOFTWARE MANAGEMENT

- The Debian Package Manager
- Managing packages with apt
- Managing software Snaps
- Exercise

Session 7: INTRODUCTION TO THE VIM EDITOR

- Vim overview
- Basic functions
- The language of Vim
- Further Vim functions
- The Vim Environment
- Vim quick reference
- Exercise   Ubuntu Server Administration Training Course Course Contents - DAY 3

Session 8: SYSTEM INITIALISATION

- Managing systemd
- The Startup Script Framework
- Starting and stopping services dynamically
- Creating Systemd services,timers and mount units
- Running transient units
- Changing run levels and shutdown
- Exercise

Session 9: PROCESS MONITORING AND SCHEDULING

- Process monitoring tools
- Scheduling processes with at and cron
- The cron configuration files
- crontab command options
- Scheduling processes with anacron
- Exercise

Session 10: LINUX NETWORKING

- Networking overview
- Network services and port numbers
- Configuring IPv4 and IPv6 addressing
- Resolving hostnames and DNS
- Secure communications via SSH
- Capturing and analysing network packets
- Configuring Network Time
- Exercise

Session 11: LOCALISATION

- Localisation overview
- Locale variables
- Converting character sets and encoding
- Configuring the locale and keymap
- Configuring the system and user time zone
- Exercise   Ubuntu Server Administration Training Course Course Contents - DAY 4

Session 12: CONFIGURING LINUX LOGGING

- Configuring rsyslog
- Configuring remote logging
- Testing using logger
- Managing logs with logrotate
- Basic and advanced journal queries
- Configuring the journal
- Exercise

Session 13: BACKUP AND RESTORE

- Archiving and restoring with tar
- Cloning devices with dd
- Compressing files
- Transferring files with rsync
- A comparison of backup programs
- Exercise

Session 14: VIRTUALISATION AND CONTAINERS

- Configuring KVM virtualisation
- Installing and managing virtual systems
- Understanding Linux containers
- Pulling and running Docker containers
- Exercise

Session 15: UBUNTU SECURITY

- The Uncomplicated Firewall
- Creating and managing UFW applications
- Configuring AppArmor
- Creating and modifying AppArmor profiles
- 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