€TRAINING

Linux Fundamentals

9 - 13 September 2024
Tbilisi (Georgia)

Linux Fundamentals

REF: K2205 DATE: 9 - 13 September 2024 Venue: Tbilisi (Georgia) - Fee: 5830 Euro

Introduction:

This training program provides a comprehensive understanding of the Linux operatingvvsystem. Through this program, individuals will be acequipped to confidently work with Linux environments and pursue further specialization in Linux administration and development.

Program Objectives:

At the end of this program, participants will be able to:

- Understand Linux principles, features, and its historical timeline.

- Gain comprehensive knowledge of the Linux Filesystem, including its structure and organization.

- Develop proficiency in manipulating files, including creation, modification, and deletion.

- Acquire skills to effectively manage software packages, including installation, updating, and removal.

Targeted Audience:

- Beginners who want a solid foundation in Linux/Unix.

- Experienced Linux Professionals who want to enhanced their knowledge of linux/Unix Operating System.

Program Outline:

Unit 1:

Introduction to Linux Basics:

- Understanding the Linux operating system architecture.

- Navigating the Linux file system hierarchy.

- Performing basic file operations, such as creating, copying, and deleting files and directories.

- Getting familiar with essential Linux commands for system interaction.

- Exploring the concept of users, groups, and permissions in Linux.

Unit 2:

Command Line Essentials:

- Mastering the Linux command line interface CLI.

- Learning essential commands for file manipulation, text processing, and system administration tasks.

- Understanding input/output redirection and piping for efficient command chaining.

- Exploring command-line utilities for process management and system monitoring.

- Practicing command-line shortcuts and techniques for increased productivity.

Unit 3:

File System Management:

- Understanding disk partitions, file systems, and mounting in Linux.

- Learning to manage disk space and storage devices effectively.

- Exploring advanced file system operations, such as symbolic links and file attributes.

- Utilizing file system tools for disk maintenance, including checking and repairing file systems.

- Implementing strategies for backup and recovery in Linux environments.

Unit 4:

User and Group Administration:

- Managing user accounts and groups in Linux.

- Understanding user authentication mechanisms and password policies.

- Exploring user environment configuration and shell customization.

- Implementing user access controls through permissions and ownership.

- Troubleshooting common user account issues and security concerns.

Unit 5:

System Security and Networking:

- Understanding Linux security principles and best practices.

- Configuring firewall settings and implementing network security measures.

- Exploring encryption techniques for data protection and secure communication.

- Implementing user authentication mechanisms, such as SSH and PAM.

- Learning network configuration and troubleshooting techniques in Linux environments.