Integer
Knowledge
Practical Insights

Linux – Networking and Security Administration

Course Duration: 4 days (with hands-on practical sessions)

Target Audience
- Professionals who need to understand basic computer network and security technology in the context of a Linux based server
- Individuals who want to focus in practical training with hands-on and descriptions of many utilities.

Pre-requisites
- Individuals should have background in operating systems or familiar with Linux or UNIX command line.

Course Objectives
This course includes practical hands-on lab sessions and will equip individuals with Linux Networking and Security skills.

Course Contents
- Networking Fundamentals
  - Basic Networking Protocol used in Linux
- Configuring Basic Networking
  - Used of Command Line and Graphical utilities to configure network addresses and basic routing
  - Basic Command Line utilities to test networks
- Configuring Client Services
  - Setup name resolution, dial-in network access and remote graphical access using X Window system
  - Concept behind Web browsers
  - Some commonly used products
- Configuring Simple Network Services
  - Setup Linux superserver to handle various incoming network service request
  - Key Administrative Functions
- Configuring File Sharing Services
  - File Sharing such as NFS, Netware's NCP Filing, FTP and SMB protocol used on MS Windows systems
- Configuring Major Network Services
  - DNS
  - Dynamic Packet Routing
  - Email services
  - Web services using Apache Web Server
- Security, Ethics, and Privacy
  - Landscape of network security
  - Relationship to ethics in professional of System Administrator
  - Privacy of personal information as a legal issue and concern
- Making Data Secure
  - Data Encryption technologies
  - Basic concepts and protocols used to secure network data
  - Commonly used Linux encryption tools
- User Security
  - Safeguarding user account information
  - Software tools and security policies designed to aid user security
- File Security
  - Tracking changes in important system files
  - Special utilities and cryptographic techniques
- Network Security Fundamentals
  - User and File security
  - Concepts of Firewalls and using special routing techniques to protect internal networks
- Network Intrusion Detection
  - Attacker's techniques
  - Vulnerability assessment utilities

Training Methodology
- Classroom based lecture and hands-on lab sessions
- Includes detailed explanation and protocols for network security.
- Features extensive learning tools, including review questions, hands-on projects, and case project at the end of each chapter, allowing users to practise the skills as they are learned.
- Course-end Assessment will be conducted on last day of course

Materials
Reference book from Wiley and trainer's notes.

Certificate of Attendance
This will be issued to participants who have attended at least 80% of the entire course.

Certification
Students on completion of this course may take different certifications offered such as RHCE or LPI (Exam 102) at their own cost. Obtaining these certifications depends on individual student's knowledge and experience.

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