

Cert - LPI Level 1 (Total 12 Sessions, 36 Hours)

Fee: HK\$3,240

Course Description:

This course targets on administrator who complete **Linux Fundamental**. Configuration will mainly focus on command line. Furthermore, this course is also designed for students planning to pursue CompTIA-Linux-Plus or LPIC-1 examination.

CompTIA-Linux Plus

CompTIA, the Computing Technology Industry Association, has introduced the Linux+ certification to measure foundation-level Linux operating system proficiency as a reliable indicator of employee success for both professionals and employers.

LPIC-1: Linux Professional Institute Level One

- ✓ Work at the Linux command line
- ✓ Perform easy maintenance tasks: help out users, add users to a larger system, backup & restore, shutdown & reboot
- ✓ Install and configure a workstation (including X) and connect it to a LAN, or a stand-alone PC via modem to the Internet.

Upon Completion of this course, student should be able to:

- ✓ Perform basic administration tasks using Command Line;
- ✓ Use text editing (such as regex, vi, egrep, etc.);
- ✓ Configure simple network services;
- ✓ Install GNU software by compile source code or package system; and
- ✓ Understand knowledge to fulfill Linux+ and LPIC1 examination

LPI Level 1 exam information: Please visit <http://www.lpi.org/en/lpic.html>

Linux+ exam information: Please visit http://www.comptia.org/certification/Linux/general_info.asp

Course Content:

- GNU and Command Unix Command
 - Work on the command line
 - Process text streams using filters
 - Perform basic file management
 - Use streams, pipes, and redirects
 - Create, monitor, and kill processes
 - Modify process execution priorities
 - Perform basic file editing operations using vi
- Kernel Knowledge
 - Manage/Query kernel and kernel modules at runtime
 - Reconfigure, build, and install a custom kernel and kernel modules
- Hardware and Package System
 - Configure Fundamental BIOS Settings
 - Configure Modem and Sound cards
 - Setup SCSI Devices
 - Setup different PC expansion cards
 - Configure Communication Devices
 - Configure USB devices
 - Shell and Shell programming
 - Search text files using regular expressions
 - Customize and use the shell environment
 - Customize or write simple scripts
- Booting
 - Boot the system use Grub
 - Boot the system use Lilo
 - Change runlevels and shutdown or reboot system

- Linux File systems and file sharing services
 - Create partitions and filesystems
 - Maintain the integrity of filesystems
 - Control mounting and unmounting filesystems
 - Managing disk quota
 - Use file permissions to control access to files
 - Manage file ownership
 - Create and change hard and symbolic links
 - Find system files and place files in the correct location
- X11, Printing and Documentation
 - Install & Configure XFree86
 - Setup a display manager
 - Install & Customize a Window Manager Environment
 - Manage printers and print queues
 - Print files
 - Install and configure local and remote printers
 - Use and manage local system documentation
 - Find Linux documentation on the Internet
 - Notify users on system-related issues
- Administrative Tasks
 - Manage users and group accounts and related system files
 - Tune the user environment and system environment variables
 - Configure and use system log files to meet administrative and security needs
 - Automate system administration tasks by scheduling jobs to run in the future
 - Maintain an effective data backup strategy
 - Maintain system time
- Basic Networking
 - Fundamentals of TCP/IP
 - TCP/IP configuration and troubleshooting
 - Configure Linux as a PPP client
- Network Services 1
 - Configure and manage inetd, xinetd, and related services
 - Operate and perform basic configuration of sendmail
 - Operate and perform basic configuration of Apache
 - Setup FTP services
- Network Services 2
 - Properly manage the NFS, smb, and nmb daemons
 - Setup and configure basic DNS services*
 - Set up secure shell (OpenSSH)
 - Setup a simple Firewall (Iptables)
- Troubleshooting
 - Identify and use trouble shooting commands
 - Use network utilities to identify network and connectivity problems

Exam Information:

- LPI Certification Testing Exam information, please visit <http://lpi.org/en/certification.html>
- Comptia Linux+ Testing Exam information, please visit <http://www.comptia.com/certification/linux/default.asp>

Prerequisite:

Have completion of Linux Fundamental or equivalent Linux knowledge or have experience on PC Support