Course Title: OCS-linux-175: Linux Administration I

Length of Course: 5 days

Overview:

This five-day course provides the student with the knowledge to use Linux as a system administrator. This course is also designed to prepare students for the RHCSA™ certification exam (in conjunction with "OCS-linux-075: Linux Essentials").

This course builds on skills learned in "OCS-linux-075: Linux Essentials", providing students with the knowledge to perform system administration tasks on a Linux system.

In addition to helping students prepare for the RHCSA™ (Red Hat® Certified System Administrator) exam, students gain experience that will assist them in handling real world Linux administration tasks.

Students are taught by an instructor who is both RHCSA™ and RHCE™ certified. All students are provided the following:

- Printed and digital copies of our excellent courseware in which exam objective topics are clearly marked.
- Access to courseware updates for up to a year after class.
- On line access to OCS's exam prep guide.
- A classroom-based Operating System on a bootable USB.
- A copy of "Hands-on Guide to the Red Hat® Exams: RHCSA™ and RHCE™ Cert Guide and Lab Manual".

Prerequisites:

Prior to attending this class, students should have the following experience:

- Completion of OCS-linux-075: Linux Essentials or
- Equivalent experience

Course Cost:

$1,900/person

Course Topics:

Unit 01: Installation o Review interactive installation o Configure installation servers o Kickstart installations	**Unit 08: Administering the Filesystem** o Fixing filesystems o Displaying filesystem attributes o Modifying filesystem attributes	**Unit 14: Basic Service Configuration** o FTP o HTTP o SSH & VNC
Unit 02: Software Administration o Connection to a repository o Installing software o Removing software o Creating a repository o rpm & yum	**Unit 09: Logical Volumes (LVM)** o LVM concepts o Volume groups o Physical and logical volumes o Extending logical volumes o Snapshots	**Unit 15: Securing Services** o Implement firewalls o Configuring SELinux
Unit 03: Account Administration o Account database files o Adding, Modifying & removing user & group accounts o Accessing network accounts	**Unit 10: Fundamentals of TCP/IP** o Protocols o IP addressing o Subnetting o Routing o DNS & DHCP	**Unit 16: Log File Administration** o System logging configuration o Log file rotation
Unit 04: The Boot Process o The Boot Sequence o Run levels o Controlling services	**Unit 11: TCP/IP Configuration** o Configuring network settings o Configure DNS clients o Configure DHCP clients o NSS (Name Service Switch)	**Unit 17: The proc Filesystem** o Viewing system information o Configuring kernel parameters
Unit 05: Advanced Permissions o Setuid o Setgid o Stickey bit o Access control lists	**Unit 12: Printer Management** o Configure local and remote CUPS printers o Manage print queues	**Unit 18: Loadable Kernel Modules** o Displaying, loading & unloading modules o Module dependencies
Unit 06: Administering Partitions o Partition structure & fdisk o mkfs & mke2fs o Filesystems Labels	**Unit 13: Virtual Machines** o Conditional statements o Input/output o Signals o Debugging	**Unit 19: Troubleshooting** o Boot issues o Fixing user accounts o Networking errors o Filesystem recovery
Unit 07: Mounting Filesystems o Manually mounting & unmounting filesystems o Mounting automatically at boot o Creating swap filesystems o Sharing & mounting network filesystems		