#### Hands-On

# **Red Hat System Administration I**



#### **Course Description**

Red Hat System Administration I is designed for IT professionals who are new to Linux and require core Red Hat Enterprise Linux skills. Focusing on administration tasks that will be encountered in the workplace, you will be engaged in task-focused activities, lab-based knowledge checks, and facilitative discussions to ensure maximum skill transfer and retention.

You'll use GUI-based tools to build on your existing technical knowledge, and you'll learn key command line concepts that provide a foundation for becoming a full-time Linux system administrator. By the end of this course, you will be able to perform installation, establish network connectivity, manage physical storage, and perform basic security administration.

#### **Students Will Learn**

- Perform installations
- Establish network connectivity
- Manage physical storage
- Perform basic security administration
- Use GUI-based tools
- Key command line concepts
- And more...

#### **Target Audience**

Windows and UNIX programmers who are migrating their programs to Linux
Microsoft Windows system administrators who need to quickly learn core Red Hat Enterprise Linux proficiencies
System administrators, network administrators, and other IT professionals who require proficiency performing core tasks in
Linux

#### **Prerequisites**

None

#### **Course Outline**

- 1. Getting Started with the GNOME Graphical Desktop
  - Get started with GNOME
  - Edit text files with gedit
- 2. Manage Files Graphically with Nautilus
  - Manage files graphically
  - Access remote systems
- 3. Get Help in a Graphical Environment
  - · Access documentation locally
  - · Access documentation online
- 4. Configure Local Services
  - Configure the date and time
  - Configure a printer
- 5. Manage Physical Storage, Part I
  - Basic disk concepts
  - · Manage system disks
- 6. Manage Logical Volumes
  - Logical volume concepts
  - Manage logical volumes
- 7. Monitor System Resources
  - Manage memory
  - Manage CPU utilization
- 8. Manage System Software
  - Manage system software locally
  - Manage system software using Red Hat Network (RHN)
- 9. Get Started with Bash
  - Basic shell concepts
  - Execute simple commands
  - Use basic job control techniques
- 10. Get Help in a Textual Environment
  - Use man and info pages
  - Find documentation in /usr/share/doc
- 11. Establish Network Connectivity
  - Basic network concepts
  - Configure, manage, and test network settings
- 12. Administer Users and Groups
  - Manage users
  - Manage groups
- 13. Manage Files from the Command Line
  - Linux filesystem hierarchy
  - Manage files from the command line
- 14. Secure Linux File Access

- Linux file access mechanisms
- Manage file access from the GUI and the command line
- 15. Administer Remote Systems
  - Share and connect to a desktop
  - Use SSH and rsync
- 16. Configure General Services
  - Manage services
  - · Configure SSH and remote desktops
- 17. Manage Physical Storage, Part II
  - Manage filesystem attributes
  - · Manage swap space
- 18. Install Linux Graphically
  - Install Red Hat Enterprise Linux
  - Configure the system with firstboot
- 19. Manage Virtual Machines
  - Basic virtualization concepts
  - Install and manage virtual machines
- 20. Control the Boot Process
  - Understand runlevels
  - Manage GRUB
- 21. Deploy File Sharing Services
  - Deploy an FTP server
  - Deploy a web server
- 22. Secure Network Services
  - Manage a firewall
  - SELinux concepts
  - Manage SELinux
- 23. Comprehensive Review

#### **Delivery Method**

Instructor-Led with numerous Hands-On labs and exercises.

### **Equipment Requirements**

(This apply's to our hands-on courses only)

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

## **Course Length**

5 Days