

Hands-On

# Red Hat System Administration II

with RHCSA Exam



## Course Description

This Hands-On course is designed for IT professionals working to become full-time Red Hat Enterprise Linux system administrators, this course is a follow up to Red Hat System Administration I (RH124), includes the RHCSA exam, and continues to utilize today's best-of-breed, contemporary teaching methodology. You will be actively engaged in task-focused activities, lab-based knowledge checks, and facilitative discussions to ensure maximum skills transfer and retention.

Building on the foundation of command line skills covered in RH124, you will dive deeper into Red Hat Enterprise Linux, adding to your arsenal of administration skills. By the end of this course, you will be able to administer and troubleshoot file systems and partitioning, logical volume management, access control, and package management. You will take the RHCSA exam on the final day of class.

## Students Will Learn

- **Administer and troubleshoot file systems and partitioning**
- **Administer and troubleshoot logical volume management**
- **Administer and troubleshoot access control**
- **Administer and troubleshoot package management**
- **Prepare for and take the RHCSA exam**

## Target Audience

IT professionals who have attended Red Hat System Administration I (RH124) and want the skills to be full-time Enterprise Linux administrators

## Prerequisites

Red Hat System Administration I (RH124)

## Course Outline

### 1. Automated Installations of Red Hat Enterprise Linux

- Create and manage kickstart configuration files
- Perform installations using kickstart

### 2. Accessing the Command Line

- Access the command line locally and remotely
- Gain administration privileges from the command line

### 3. Intermediate Command Line Tools

- Use hardlinks
- Use archives and compression
- Use vim

### 4. Regular Expressions, Pipelines, and I/O Redirection

- Use regular expressions to search patterns in files and output
- Redirect and pipe output

### 5. Network Configuration and Troubleshooting

- Configure network settings
- Troubleshoot network issues

### 6. Managing Simple Partitions and Filesystems

- Create and format simple partitions
- Create and format swap partitions
- Create and format encrypted partitions

### 7. Managing Flexible Storage with Logical Volumes

- Implement LVM and LVM snapshots

### 8. Access Network File Sharing Services

- NFS
- CIFS
- autofs

### 9. Managing User Accounts

- Manage user accounts including password aging
- Connect to a central LDAP directory service

#### 10. Controlling Access to Files

- Manage group memberships,
- Manage file permissions
- Manage access control lists (ACL)

#### 11. Managing SELinux

- Activate and deactivate SELinux
- Set file contexts
- Manage SELinux booleans
- Analyze SELinux logs

#### 12. Installing and Managing Software

- Manage software and query information with yum
- Configure client-side yum repository files

#### 13. Managing Installed Services

- Managing services
- Verify connectivity to a service

#### 14. Analyzing and Storing Logs

- Managing logs with rsyslog and logrotate

#### 15. Managing Processes

- Identify and terminal processes
- Change the priority of a process
- Use cron and at to schedule processes

#### 16. Tuning and Maintaining the Kernel

- List, load, and remove modules
- Use kernel arguments

#### 17. Troubleshooting

- Understand the boot process
- Resolve boot problems

## **Delivery Method**

Instructor-Led with numerous Hands-On 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