



## Crush the RHCSA (EX200)

- 5-Days
- Lecture and Hands-on Labs
- Includes Exam Prep – “Crush the EX200”

### Course Overview

This EX200 exam preparation course ensures that students are prepared for the Red Hat Certified System Administrator (RHCSA) exam. Red Hat is a popular Linux operating system used by enterprises worldwide to deliver reliable, high-performance computing. This hands-on training allows students to practice all skills and topics covered in the RHCSA exam, providing opportunities to configure, manage, and troubleshoot Red Hat systems confidently. By completing this practice exam, students can ensure they are fully prepared, verifying their understanding and readiness to succeed on the actual RHCSA (EX200) exam. This training enables repeat attempts, allowing you to practice each part individually or simulate the entire exam environment as needed.

Review this course online at <https://www.alta3.com/courses/cs-ex200>

### Who Should Attend



- Aspiring RHCSA Certification Holders
- Linux or Red Hat Users
- Systems Administrators
- Application Developers
- Operations Developers
- IT Leaders and Managers

### What You'll Learn

- Deploy Red Hat Enterprise Linux through scalable installation techniques.
- Navigate and secure files, file systems, and network configurations.
- Implement automation and scripting via the shell.
- Organize and administer storage solutions, including logical volumes and file systems.
- Enhance and regulate security measures and access controls.
- Oversee system boot procedures and service management.
- Operate and manage containerized services on a Red Hat Enterprise Linux environment.

### Outline

Understand and use essential tools

-  Lecture: Bash Shell Mastery
-  Lecture + Lab: Log in and switch users

- 📖 Lecture + Lab: Use grep and regular expressions to analyze text
- 📖 Lecture + Lab: Use regular expressions for advanced grep
- 📖 Lecture + Lab: Text Processing with grep, awk, and sed
- 📖 Lecture + Lab: Vim: Create and edit text files
- 🏆 Challenge: Editing with VIM
- 📖 Lecture + Lab: Locate, read, and use system documentation
- 📖 Lecture + Lab: Create, delete, copy, and move files and directories
- 📖 Lecture + Lab: Finding files and directories
- 📖 Lecture + Lab: Create hard and soft links
- 📖 Lecture + Lab: Advanced Command Line Operations and Redirection
- 🏆 Challenge: I/O Redirection Challenge
- 🗨️ Lecture: File Compression and Archiving
- 📖 Lecture + Lab: Creating and Extracting Archives with tar, gzip, bzip2, and xz
- 📖 Lecture + Lab: Securely Copying Files Between Systems using scp, rsync, and sftp

#### Manage users and groups

- 📖 Lecture + Lab: Create, delete, and modify local user accounts
- 📖 Lecture + Lab: Change passwords and adjust password aging
- 📖 Lecture + Lab: Create/delete/modify groups and configure superuser access

#### Create simple shell scripts

- 📖 Lecture + Lab: Bash Shell Conditional Logic, Loops, Variables and Arguments

#### Operate running systems

- 📖 Lecture + Lab: Boot, reboot, and shut down a system normally
- 📖 Lecture + Lab: Start, stop, and check the status of services
- 🗨️ Lecture: Understanding System Logs
- 📖 Lecture + Lab: Using journalctl to Query the systemd Journal
- 📖 Lecture + Lab: Configuring Log Rotation with logrotate and Preserving Logs
- 🗨️ Lecture: Performance Monitoring and Management
- 📖 Lecture + Lab: Identifying Resource-Intensive Processes with top and ps
- 📖 Lecture + Lab: Adjusting Process Priority using nice, and renice
- 📖 Lecture + Lab: Configuring System Tuning Profiles with tuned
- 🗨️ Lecture: Boot Process Management
- 📖 Lecture + Lab: Booting into Different System Targets (multi-user, graphical, rescue)
- 📖 Lecture + Lab: Interrupting the Boot Process for Recovery






#### Configure local storage

- 📖 Lecture + Lab: List, create, delete partitions on MBR and GPT disks
- 📖 Lecture + Lab: Create, mount, unmount, and use file systems
- 📖 Lecture + Lab: Adding swap and mounting file systems at boot




#### Create and configure file systems

- 🗨️ Lecture: LVM Management
- 📖 Lecture + Lab: Managing Physical Volumes and Volume Groups
- 📖 Lecture + Lab: Creating, Extending, and Removing Logical Volumes
- 📖 Lecture + Lab: Resizing File Systems with resize2fs, and xfs\_growfs
- 🗨️ Lecture: NFS Configuration
- 📖 Lecture + Lab: Setting up an NFS Server and Sharing Directories











## Deploy, configure, and maintain systems

-  Lecture + Lab: Install and update software packages
-  Lecture + Lab: Configure autofs
-  Lecture: Automating and Scheduling Tasks
-  Lecture + Lab: One Time Scheduling with at
-  Lecture + Lab: Recurring Tasks with cron and crontab




## Manage basic networking

-  Lecture + Lab: Access remote systems using SSH
-  Lecture + Lab: Configure key-based authentication for SSH
-  Lecture + Lab: Configure IP addresses and hostnames

## Manage security

-  Lecture + Lab: List, set, and change standard ugo/rwx permissions
-  Lecture + Lab: Manage default file permissions
-  Lecture + Lab: Create and configure set-GID directories for collaboration
-  Lecture + Lab: Use boolean settings to modify SELinux
-  Lecture: SELinux Basics
-  Lecture + Lab: Understanding SELinux Modes
-  Lecture + Lab: Managing SELinux Contexts for Files and Processes
-  Lecture + Lab: Configuring Firewalld Rules using firewall-cmd
-  Lecture + Lab: Securing Services with Custom Firewall Zones
-  Lecture + Lab: SELinux Rules for Network Ports and Services

## Manage containers

-  Lecture + Lab: Installing and Configuring Podman for Container Management
-  Lecture + Lab: Configuring Containers to Run as systemd Services
-  Lecture + Lab: Attaching Persistent Storage to Containers

## Crush the RHCSA Exam!

- Getting Started
- Create Users
- Password Policy
- Switch User
- Sudo Config
- Find Files
- Grep
- sed
- Default File
- File Permissions
- Fix Permissions
- Directory Inheritance
- Create Symlink
- SCP
- at
- Cron & Tar
- Configure NTP
- Logrotate
- Journalctl Export
- Processes
- Renice

- SELinux Enforce
- SELinux Context
- SELinux Boolean
- Network Config
- Add Repository
- Autofs for NFS
- NFS
- Changing Targets
- Tuned
- Create Partition
- Swap Partition
- Volume Group (VG)
- Logical Volume (LV)
- Extend LV
- Reset Root Password
- Firewall Zones
- Service Setup
- Podman- Pull & Tag
- Podman- Volumes
- Podman- Systemd

## Prerequisites

- Strong Linux Proficiency (This course is fast paced) ## Next Courses
  - Ansible 101 Essentials
  - Ansible 202 Linux Server Automation
  - CKAD Kubernetes Bootcamp