Preface

Red Hat System Administration 9.3

Introduction

Red Hat System Administration I (RH124) is designed for IT professionals without previous Linux system administration experience. The course provides students with Linux administration "survival skills" by focusing on core administration tasks.

Red Hat System Administration I also provides a foundation for students who plan to become full-time Linux system administrators by introducing key command-line concepts and enterprise-level tools. These concepts are further developed in the follow-on course, Red Hat System Administration II (RH134).

Course Objectives

Gain sufficient skill to perform core system administration tasks on Red Hat Enterprise Linux.

Build foundational skills that an RHCSA-certified Red Hat Enterprise Linux system administrator needs.

Audience

IT professionals across a broad range of disciplines who need to perform essential Linux administration tasks, including installation, establishing network connectivity, managing physical storage, and basic security administration.

Prerequisites

This course has no formal prerequisites; however, previous system administration experience on other operating systems is beneficial.

Controlling Your Systems

You are assigned remote computers in a Red Hat Online Learning (ROLE) classroom. Self-paced courses are accessed through a web application that is hosted at rol.redhat.com. Log in to this site with your Red Hat Customer Portal user credentials.

Chapter 1

Get Started with Red Hat Enterprise Linux

What Is Linux?

Linux is in widespread use, worldwide. Internet users interact with Linux applications and web server systems daily, by browsing the World Wide Web and using e-commerce sites to buy and sell products.

Linux is in use for much more than the internet. Linux manages point-of-sale systems and the world's stock markets, powers smart TVs and in-flight entertainment systems, and runs most of the top 500 supercomputers in the world.

Linux provides the core technologies that power the cloud revolution and the tools to build the latest generations of container-based microservices applications, software-based storage technologies, and big data solutions.

In the modern data center, Linux and Microsoft Windows are the predominant operating systems. Linux use continues to expand in enterprise, cloud, and device spaces. Due to its widespread adoption, you have many reasons to learn Linux:

A Windows user needs to interoperate with Linux systems and applications.

In application development, Linux commonly hosts the application and its runtime.

In cloud computing, both private and public cloud instances use Linux as the operating system.

Mobile applications and Internet of Things (IoT) devices commonly run on Linux.

When looking for new IT career opportunities, Linux skills are in high demand.

What Is Open Source Software?

Open source software is software with source code that anyone can use, study, modify, and share.

Source code is the set of human-readable instructions that are used to make a program. Code might be in interpretive form, such as a script, or compiled into a binary executable that the computer runs directly. Source code becomes copyrighted when created, and the copyright holder controls the terms under which the software can be copied, adapted, and distributed. Users can use the software according to its software license.