

**Updating Your RHEL 7 Skills to Red Hat Enterprise Linux 8**

**Course Number:** LNX-136
**Duration:** 2 days

**Overview**

This Updating Your RHEL 7 Skills to Red Hat Enterprise Linux 8 training teaches attendees the new, modified, deprecated, and removed features for a smooth transition from RHEL 7 to RHEL 8. This course covers similar topics to Red Hat course 354.

**Prerequisites**

All students must have experience with:

* The Linux core file and system utilities
* RHEL 7 or CentOS 7

**Materials**

All RHEL 8 training attendees receive comprehensive courseware.

**Software Needed on Each Student PC**

Attendees will not need to install any software on their computer for this class. The class will be conducted in a remote environment that Accelebrate will provide; students will only need a local computer with a web browser and a stable Internet connection. Any recent version of Microsoft Edge, Mozilla Firefox, or Google Chrome will be fine.

**Objectives**

* Use and understand RHEL 8 capabilities for daily administrative and application operations
* Install and upgrade to RHEL 8
* Understand the fundamentals of shells, programming languages, and interfaces
* Take advantage of administrative tools, packaging, storage, networking, and security

**Outline**

* Introduction
* Installation and Upgrade
	+ New installation selections
		- Source, software, system purpose, network
	+ Kickstart changes (files and setup)
	+ Upgrading RHEL 8 to newer point releases
	+ Upgrading RHEL 7 to RHEL 8
* Fundamentals
	+ Versions and features
		- Bash
	+ Kernel
		- Version, parameters, memory control, I/O scheduling
	+ Interfaces
		- GNOME
	+ Performance management
		- pidstat
	+ Configuration management
		- Ansible Core
		- RHEL 8
* Administration
	+ Tools
		- Cockpit
		- Red Hat customer portal (WebBased UI)
		- Gnome-control-center
* Software Packaging
	+ Tools
		- Yum
	+ Repositories
		- Legacy (using
		- Streamed (BaseOS, AppStream)
		- Network-served (via Apache)
* User Accounts
	+ User account creation / modification
		- Cockpit, gnome-control-center
		- Credential control via sssd
* Networking
	+ Network profiles (creation and switching)
		- Cockpit
		- Gnome-control-center
	+ User-defined network interface name prefixes
* Services and Daemons
	+ Journaling
		- Via journalctl
		- Via cockpit
* Boot Control
	+ GRUB 2
		- Key file locations
		- (New) boot loader files
	+ Single-user mode
	+ Recovery (boot) mode
	+ Install rescue mode
* Storage
	+ File systems
		- Ext4 (file creation date)
		- Changes to /tmp (tmpfs)
	+ LUKS 2 encryption
	+ Stratis (pool) volume management
	+ VDO volume management
* Security
	+ Core cryptographic components
		- Update-crypto-policies
	+ fips-mode-select
	+ Software firewalls
		- Firewall-cmd
		- Nft
	+ SELinux
		- New booleans
		- Python 3
* Conclusion