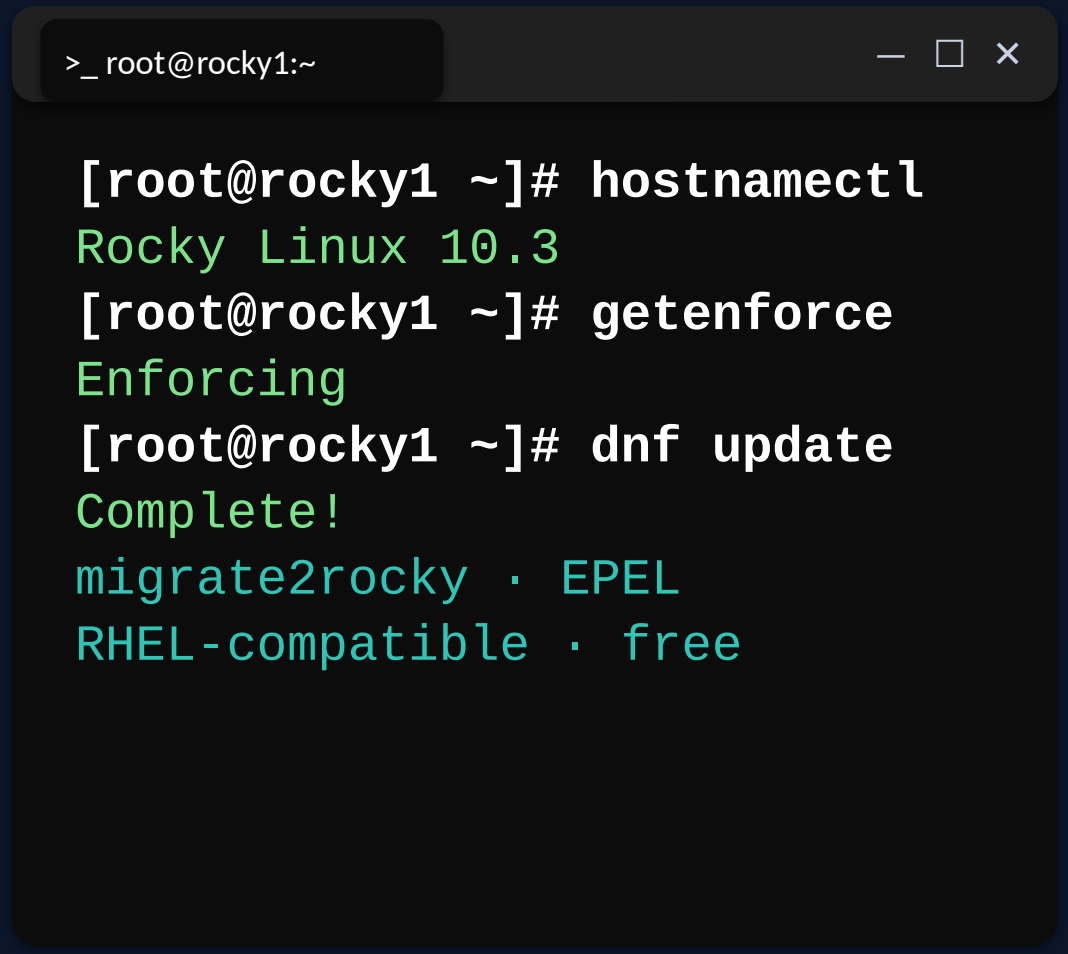


LESSON 5 OF 12

Rocky Linux 9 & 10

Install · Migrate · Differences

Rocky vs RHEL vs AlmaLinux: What Is the Same, What Is Different

Full Course · Rocky Linux 10.3 & 9.9 (Nov 2026)

What You Will Learn in Lesson 5

- What 'bug-for-bug compatible' means
- Identical: kernel, packages, tools, file locations
- Different: branding, repositories, release files
- Missing on Rocky: subscription tools, Lightspeed, Satellite, Leapp
- Rocky vs AlmaLinux: the real differences
- Software and hardware certification
- Telling them apart in scripts

Compatibility Goals

Distribution	Goal	What it means
Rocky Linux	Bug-for-bug compatible	Same packages and versions as RHEL, even the same bugs
AlmaLinux	ABI compatible	Apps run the same; may add fixes, features or older-CPU builds
Oracle Linux	Compatible	Plus Oracle's own Unbreakable Enterprise Kernel option
CentOS Stream	Upstream of RHEL	Next RHEL minor release; changes arrive earlier
Why it matters	Certification and predictability	Software tested on RHEL behaves the same

Identical on Rocky and RHEL

Area	Examples
Kernel	Same version and patches: 6.12 on 10.x, 5.14 on 9.x
Packages	Same names and versions: httpd, openssh, podman, python3, postgresql
Administration	dnf, systemd, firewalld, SELinux policy, NetworkManager, LVM, Stratis
Files and paths	/etc/redhat-release, /etc/os-release layout, el10 in package names
Installer	Anaconda, Kickstart, Cockpit, image builder
Skills	RHCSA and RHCE objectives practice the same on both

Different on Purpose

Area	RHEL	Rocky
Branding	Red Hat logos, names	Rocky logos, wallpapers, names
Release package	redhat-release	rocky-release, rocky-repos, rocky-gpg-keys
Repositories	rhel-10-for-x86_64-baseos-rpms …	baseos, appstream, crb, extras …
Signing keys	Red Hat GPG keys	RESF GPG keys
Vendor field	Red Hat, Inc.	Rocky Enterprise Software Foundation
Extras	—	extras repo, SIGs, RISC-V, Raspberry Pi images

Not Included in Rocky

RHEL feature	Rocky alternative
subscription-manager, rhc	Not needed: repositories are open
Red Hat Lightspeed (Insights)	Monitoring, OpenSCAP, Ansible reports (Lesson 4)
Red Hat Satellite	Foreman + Katello (Lesson 11)
Leapp in-place major upgrades	Not supported for Rocky (Lesson 8)
Red Hat support and kpatch	Community support; commercial support from CIQ and others
RHEL AI tools, MCP server	Use upstream open source tools where available

Rocky vs AlmaLinux

Topic	Rocky Linux	AlmaLinux
Governance	RESF (public benefit corporation)	AlmaLinux OS Foundation (non-profit)
Compatibility	Bug-for-bug with RHEL	ABI compatible; sometimes adds patches
Older x86 CPUs on 10	No (x86-64-v3 only)	Yes, separate x86-64-v2 build
Major upgrades	Not supported	ELevate (Leapp-based) supported
Extras	SIGs, RISC-V	Kitten (preview), extra features, SIGs
Both	Free, 10-year lifecycle, same RHEL skills	Free, 10-year lifecycle, same RHEL skills

Certification

Type	Situation on Rocky
Hardware	RHEL-certified servers work; vendors may support Rocky directly
Software (ISVs)	Many vendors certify Rocky; others support 'RHEL and compatibles'
Cloud	Rocky images in AWS, Azure and Google Cloud marketplaces
Compliance (FIPS etc.)	Same crypto code; formal validation is a separate, commercial matter
People	RHCSA/RHCE are Red Hat exams — practice on Rocky, test on RHEL
Rule	Check your vendor's support statement before production

Telling Them Apart in Scripts

```
#!/bin/bash
. /etc/os-release
echo "ID=$ID  VERSION_ID=$VERSION_ID  ID_LIKE=$ID_LIKE"
case "$ID" in
  rocky)      echo 'Rocky Linux' ;;
  almalinux)  echo 'AlmaLinux' ;;
  rhel)       echo 'Red Hat Enterprise Linux' ;;
  centos)     echo 'CentOS Stream' ;;
esac
[[ " $ID $ID_LIKE " == *" rhel "* ]] && echo 'RHEL family: use dnf'
major=${VERSION_ID%%.*}
(( major >= 10 )) && echo 'EL10: x86-64-v3, no modules'
```

Summary and Homework

- Rocky = bug-for-bug RHEL; AlmaLinux = ABI compatible
- Identical: kernel, packages, tools, paths, skills
- Different: branding, release packages, repo names, keys
- Missing: subscription tools, Lightspeed, Satellite, Leapp, Red Hat support
- Use /etc/os-release (ID, ID_LIKE, VERSION_ID) in scripts
- Homework: compare rpm -qa on rocky1 with a RHEL 10 system; write the os-release script

Thank You! 🙏

Free videos & PDFs: www.MyWebUniversity.com

Slides for this lesson: MyWebUniversity.com/presentations

YouTube: @MyWebUniversity · @MyWebUniversity-Dari

Wahidullah Lutfy — Founder and Director of IT of MyWebUniversity, and CS teacher

Book: The Direct Path to Linux Ubuntu (Amazon · Barnes & Noble)

Learn it, then pass it on.