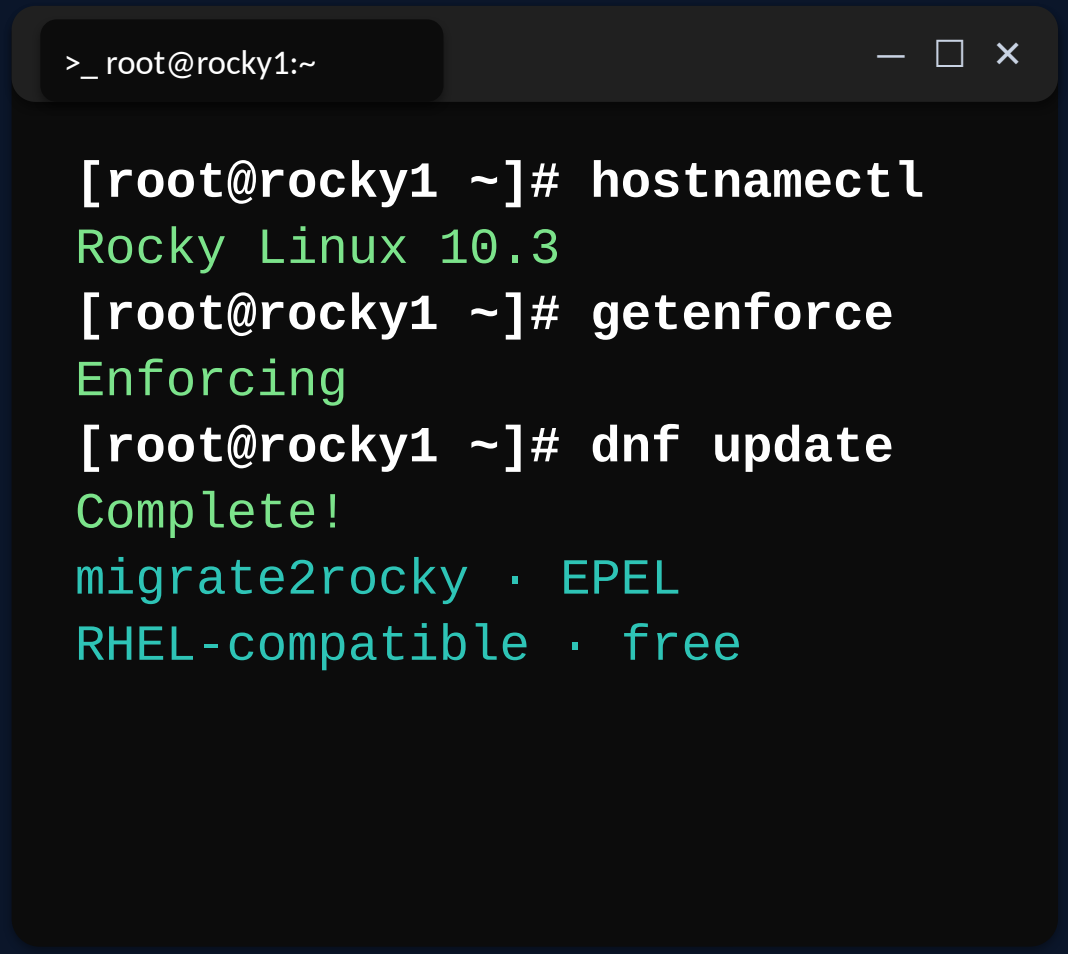


LESSON 3 OF 12

Rocky Linux 9 & 10

Install · Migrate · Differences

Rocky Repositories, CRB, EPEL, Mirrors & SIGs

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

What You Will Learn in Lesson 3

- The Rocky repositories and what each one holds
- Repository files in /etc/yum.repos.d
- Enabling CRB and installing EPEL
- Mirrors: mirrorlist, baseurl and choosing a fast one
- GPG keys: trusting Rocky packages
- Special Interest Groups (SIGs) and their repositories
- Third-party repositories safely

Rocky Repositories

Repo ID	Enabled	Contents
baseos	yes	Core operating system (same as RHEL BaseOS)
appstream	yes	Applications, languages, databases, tools
extras	yes	Rocky extras: epel-release, SIG release packages
crb	no	CodeReady Builder: developer libraries; needed by many EPEL packages
highavailability, resilientstorage	no	Pacemaker clusters, GFS2
rt, nfv, sap, saphana	no	Real-time kernel, telecom, SAP workloads
plus, devel	no	Extra packages; build-only packages (not for production)

Repository Files

```
[student@rocky1 ~]$ ls /etc/yum.repos.d/
rocky-addons.repo  rocky-devel.repo  rocky-extras.repo  rocky.repo
[student@rocky1 ~]$ grep -A8 '^\[baseos\]' /etc/yum.repos.d/rocky.repo
[baseos]
name=Rocky Linux $releasever - BaseOS
mirrorlist=https://mirrors.rockylinux.org/mirrorlist?arch=$basearch&repo=BaseOS-$releasever$rltype
#baseurl=http://dl.rockylinux.org/$contentdir/$releasever/BaseOS/$basearch/os/
gpgcheck=1
enabled=1
countme=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-Rocky-10
[student@rocky1 ~]$ dnf repolist --all
```

Enable CRB and Install EPEL

```
[student@rocky1 ~]$ sudo dnf config-manager --set-enabled crb
[student@rocky1 ~]$ sudo dnf install -y epel-release          # from the extras repo
[student@rocky1 ~]$ dnf repolist
repo id     repo name
appstream   Rocky Linux 10 - AppStream
baseos      Rocky Linux 10 - BaseOS
crb         Rocky Linux 10 - CRB
epel        Extra Packages for Enterprise Linux 10 - x86_64
extras      Rocky Linux 10 - Extras
[student@rocky1 ~]$ sudo dnf install -y htop btop ncdu fail2ban
# Same on Rocky 9: crb + epel-release  (on Rocky 8 the repo is called powertools)
```

Mirrors

Topic	Details
mirrorlist (default)	Rocky picks good mirrors for your location automatically
baseurl	Pin one mirror or your own server (comment out mirrorlist)
fastestmirror=True	In /etc/dnf/dnf.conf: test mirror speed
Mirror status	mirrors.rockylinux.org shows every public mirror
Vault	dl.rockylinux.org/vault: old releases, e.g. 9.6, for reproducibility
Local mirror	reposync to your own server (Lesson 11)

GPG Keys: Trust Your Packages

```
[student@rocky1 ~]$ ls /etc/pki/rpm-gpg/
RPM-GPG-KEY-Rocky-10  RPM-GPG-KEY-Rocky-10-Testing  RPM-GPG-KEY-EPEL-10 ...
[student@rocky1 ~]$ rpm -qa gpg-pubkey* --qf '%{NAME}-%{VERSION} %{SUMMARY}\n'
gpg-pubkey-<key-id> Rocky Enterprise Software Foundation - Release key ...
[student@rocky1 ~]$ rpm -K htop-*.rpm              # check a downloaded package
htop-<version>.el10.x86_64.rpm: digests signatures OK
[student@rocky1 ~]$ rpm -qi bash | grep -E 'Signature|Vendor'
Vendor      : Rocky Enterprise Software Foundation
# Compare key fingerprints with rockylinux.org/keys before trusting
```

Special Interest Groups (SIGs)

SIG	What it provides
Cloud	Cloud and container images, cloud-ready kernels and tools
Kernel	Mainline (newer) kernels for new hardware — test carefully
AltArch	Raspberry Pi, RISC-V and other architectures
Security	Hardening tools and extra security packages
HPC	High-performance computing: schedulers, MPI, tools
How to enable	dnf install rocky-release-<sig> (from extras); see sig.rockylinux.org

Third-Party Repositories Safely

Do	Why
Prefer Rocky, EPEL, then vendor repos	Fewer conflicts, better tested
Use the vendor's official .repo or release RPM	Docker CE, PostgreSQL PGDG, NVIDIA, Microsoft
Keep gpgcheck=1	Proves packages come from the vendor
Limit with includepkgs= or excludepkgs=	Stops a repo replacing system packages
Check with dnf repoquery --repo <id>	See exactly what a repo offers
Remember upgrades	Third-party repos often block major upgrades

Summary and Homework

- baseos, appstream, extras on by default; crb and others on demand
- Repo files in /etc/yum.repos.d; mirrorlist or baseurl
- dnf config-manager --set-enabled crb ; dnf install epel-release
- GPG keys in /etc/pki/rpm-gpg; rpm -K; never disable gpgcheck
- SIGs: rocky-release-<sig> packages from extras
- Homework: enable CRB and EPEL on rocky1 and rocky2; install htop; list every enabled repo

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.