RPM RPM package tool

CONCEPTS

rpm handles single package files and the local database. It does not download or resolve dependencies: use dnf for that.

.rpm file rpm -qp reads it
↓ rpm -U
RPM database rpm -q reads it
↓ rpm -V
Files on disk checked against db

Packages are named name-version-release.arch, e.g. tree-2.2.1-4.fc44.x86_64. Any leading part works as a query: tree or tree-2.2.1.

Add -p to any query to read a .rpm file instead of the installed database.

QUERY INSTALLED

rpm -qa
List all installed packages

rpm -qa '*<pattern>***'**
List packages matching a glob

rpm -q *<pkg>*
Is it installed, and which version

rpm -qi *<pkg>*
Show package details

rpm -ql *<pkg>*
List files of a package

rpm -qf *<path>*
Which package owns a file

rpm -qc *<pkg>*
List its config files

rpm -qa --last
Packages by install time, newest first

DEPENDENCIES

rpm -qR *<pkg>*
What a package requires

rpm -q --provides *<pkg>*
What a package provides

rpm -q --whatprovides *<cap>*
Which package provides a capability

DEPENDENCIES (cont.)

rpm -q --whatrequires *<cap>*
Which installed packages need it

PACKAGE FILES

rpm -qip *<file.rpm>*
Details of a package file

rpm -qlp *<file.rpm>*
List files in a package file

rpm -qRp *<file.rpm>*
Requirements of a package file

rpm -qp --scripts *<file.rpm>*
Scriptlets it would run

rpm2cpio *<file.rpm>* **| cpio -idmv**
Extract files without installing

INSTALL, UPGRADE, REMOVE

sudo rpm -Uvh *<file.rpm>*
Install or upgrade, with progress

sudo rpm -ivh *<file.rpm>*
Install, keep other versions

sudo rpm -e *<pkg>*
Remove a package

Prefer sudo dnf install ./<file.rpm>: it installs the local file and pulls in its dependencies.

VERIFY

rpm -V *<pkg>*
Check files against the database

rpm -Va
Verify every installed package

SIGNATURES AND KEYS

sudo rpmkeys --import *<key.asc>*
Trust a signing key

rpmkeys -K *<file.rpm>*
Check digests and signature

QUERY FORMAT

rpm -q --qf '%{NAME} %{VERSION}\n' *<pkg>*
Print chosen tags