DNF Fedora package manager

CONCEPTS

Unlike apt, dnf refreshes stale metadata itself, so there is no separate update step. upgrade is the one that installs.

Repositories /etc/yum.repos.d
↓ `metadata cache`
Dependency solver one transaction
↓ `confirm, download`
RPM transaction install / remove
↓ `recorded`
History undo / rollback

UPDATE AND UPGRADE

`dnf check-update`
List updates; exit code 100 if any

`sudo dnf upgrade`
Upgrade all packages

`sudo dnf upgrade` *`<pkg>`*
Upgrade one package

`sudo dnf upgrade --security`
Only security advisories

`sudo dnf upgrade --refresh`
Expire metadata first

INSTALL AND REMOVE

`sudo dnf install` *`<pkg>`*
Install a package

`sudo dnf install` *`<pkg1> <pkg2>`*
Install several at once

`sudo dnf install ./`*`<file>`***`.rpm`**
Install a local rpm with deps

`sudo dnf remove` *`<pkg>`*
Remove a package and dependents

`sudo dnf autoremove`
Remove orphaned dependencies

`sudo dnf reinstall` *`<pkg>`*
Reinstall a package

`sudo dnf downgrade` *`<pkg>`*
Go back to a lower version

`sudo dnf install` *`<pkg>-<version>`*
Install an exact version

`sudo dnf install --allowerasing` *`<pkg>`*
Let it remove conflicting packages

INSTALL AND REMOVE (cont.)

`sudo dnf install -y` *`<pkg>`*
Answer yes to prompts

`sudo dnf install --enablerepo=`*`<id>`* *`<pkg>`*
Use a repo for this run

SEARCH AND INSPECT

`dnf search` *`<term>`*
Search names and summaries

`dnf info` *`<pkg>`*
Show package details

`dnf provides` *`<path>`*
Find the package owning a file

`dnf list --installed`
List installed packages

`dnf list --available`
List installable packages

`dnf list --upgrades`
List packages with updates

`dnf repoquery -l` *`<pkg>`*
List files in a package

`dnf repoquery --requires` *`<pkg>`*
Show what a package needs

`dnf repoquery --whatrequires` *`<pkg>`*
Show what depends on it

`dnf repoquery --userinstalled`
Packages you installed yourself

HISTORY AND UNDO

`dnf history`
List recent transactions

`dnf history info` *`<id>`*
Show what a transaction did

`sudo dnf history undo` *`<id>`*
Revert one transaction

`sudo dnf history undo last`
Revert the latest transaction

GROUPS AND MODULES

`sudo dnf group install` *`<group>`*
Install a whole group

REPOS AND CACHE

`dnf repolist`
List enabled repos