zypper openSUSE package manager

START HERE

`sudo` **zypper ref**
Refresh repo metadata

`sudo` **zypper dup**
Distribution upgrade

zypper se *<term>*
Find a package

zypper lr
List repositories

zypper if *<pkg>*
Read package details

`sudo` **zypper in** *<pkg>*
Install a package

`sudo` **zypper rm** *<pkg>*
Uninstall a package

`sudo` **zypper up**
Update installed packages

Repositories /etc/zypp/repos.d → `refresh` → **Solver** libzypp, one transaction → `confirm, download` → **RPM transaction** install / remove / update → `logged` → **History** /var/log/zypp/history

CONCEPTS

Every command has a short alias: in, rm, se, if, up, lu, lr, ar, ref, pch. Global options such as -n and --no-refresh go before the command.

update only moves to newer versions inside the current repos and never changes vendor or removes packages. dup (dist-upgrade) may switch vendor, downgrade or remove: use it on Tumbleweed and for release upgrades.

UPDATE AND UPGRADE

zypper lu
List available updates

`sudo` **zypper up**
Update all installed packages

`sudo` **zypper up** *<pkg>*
Update one package

`sudo` **zypper dup**
Distribution upgrade (full sync)
Tumbleweed: this is the normal update. It may change vendors and remove packages, so read the summary.

`sudo` **zypper dup --from** *<repo>*
Upgrade only from a given repo

UPDATE AND UPGRADE (cont.)

`sudo` **zypper dup --releasever** *<ver>*
Switch release during upgrade
Point the repos at the new release first (check with zypper --releasever <ver> lr -u), then refresh and run dup.

zypper lp
List needed patches

zypper pchk
Exit 100/101 if patches pending
100 means patches are available, 101 means security patches are available.

`sudo` **zypper patch**
Apply all needed patches
On SUSE Linux Enterprise this is the usual update path; Tumbleweed has no patches.

`sudo` **zypper patch --category security**
Only security patches

zypper lp --cve=*<CVE-ID>*
Patches for a CVE

`sudo` **zypper up -D**
Dry run, change nothing

`sudo` **zypper -n up**
No prompts, for scripts

INSTALL AND REMOVE

`sudo` **zypper in** *<pkg>*
Install a package

INSTALL AND REMOVE (cont.)

`sudo` **zypper in** *<pkg1> <pkg2>*
Install several at once

`sudo` **zypper in -y** *<pkg>*
Install without asking

`sudo` **zypper in --no-recommends** *<pkg>*
Skip recommended extras

`sudo` **zypper in -r** *<repo> <pkg>*
Install from one repo

`sudo` **zypper in** *<name>=<ver>*
Install a specific version

`sudo` **zypper in -f** *<pkg>*
Reinstall a package

`sudo` **zypper in** *<file>***.rpm**
Install a local RPM

`sudo` **zypper in -D** *<pkg>*
Dry run the install

`sudo` **zypper in -t pattern** *<name>*
Install a pattern

`sudo` **zypper rm** *<pkg>*
Remove a package

`sudo` **zypper rm -u** *<pkg>*
Remove with unused dependencies

`sudo` **zypper purge-kernels**
Remove old kernels
Keeps the kernels set in multiversion.kernels in /etc/zypp/zypp.conf.

SEARCH AND INSPECT

zypper se *<term>*
Search names and summaries

zypper se -i *<term>*
Search installed only

zypper se -s *<term>*
Show versions and repos

zypper se -x *<name>*
Exact name match

zypper se -d *<term>*
Search descriptions too

zypper se -f *<file>*
Which package lists this file

zypper wp *<file or cap>*
What provides this

zypper if *<pkg>*
Show package details

zypper if --requires *<pkg>*
List its dependencies

zypper pa --orphaned
Packages without a repo

zypper pt
List patterns

REPOSITORIES

zypper lr
List repositories

zypper lr -d
Repos with URI, priority, refresh

`sudo` **zypper ar -f** *<url> <alias>*
Add a repo with autorefresh

REPOSITORIES (cont.)

`sudo` **zypper ar -p** *<n> <url> <alias>*
Add repo with priority
1 is highest, 99 the default; a lower number wins when versions compete.

`sudo` **zypper ar** *<file>***.repo**
Add repos from a .repo file

`sudo` **zypper rr** *<alias>*
Remove a repository

`sudo` **zypper mr -d** *<alias>*
Disable a repository

`sudo` **zypper mr -e** *<alias>*
Enable a repository

`sudo` **zypper mr -p** *<n> <alias>*
Change repo priority

`sudo` **zypper ref**
Refresh all repos

`sudo` **zypper ref -f**
Force a full refresh

`sudo` **zypper --gpg-auto-import-keys ref**
Trust new repo keys

`sudo` **zypper clean -a**
Clear caches

LOCKS AND MAINTENANCE

`sudo` **zypper al** *<pkg>*
Lock a package
Locked packages are not updated, installed or removed. Glob patterns like kernel- work.*

LOCKS AND MAINTENANCE (cont.)

zypper ll
List locks

`sudo` **zypper rl** *<pkg or #>*
Remove a lock

zypper ps -s
Processes using outdated files

zypper needs-rebooting
Exit 102 if reboot advised

RECIPES

Routine update

```
sudo zypper ref
zypper lu
sudo zypper up
# Tumbleweed: use dup instead
zypper ps -s
```

Add a third-party repo

```
sudo zypper ar -f -p 90 <url>
<alias>
sudo zypper --gpg-auto-import-
keys ref
sudo zypper in --from <alias>
<pkg>
```

Hold a package back

```
sudo zypper al <pkg>
zypper ll
sudo zypper up
sudo zypper rl <pkg>
```

Security patches only (SLE, Leap)

```
zypper pchk
sudo zypper patch --category
security
zypper needs-rebooting
```