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
```