1   Update the local package list

Tool	Command	Notes
APT	apt update	
	apt-get update	
Aptitude	aptitude update	

2   Install new software packages

Tool	Command	Notes
APT	apt install *package*	Package is obtained from the package repository
	apt --no-download install *package*	Package is not obtained from the package mirror, but is instead taken from the package cache
	apt-get install *package*	Package is obtained from the package repository
	apt-get --no-download install *package*	Package is not obtained from the package mirror, but is instead taken from the package cache
Aptitude	aptitude install *package*	Package is obtained from the package repository
Dpkg	dpkg -i *filename*	Filename refers to a local package file in .deb format

3   Renew existing software packages

Tool	Command	Notes
APT	apt install *package*	Install an updated version of the same package if this package is already installed. Package is obtained from the package repository.
	apt safe-upgrade *package*	Install a newer version of the package. Package is obtained from the package repository.
	apt-get install *package*	Install an updated version of the same package if this package is already installed. Package is obtained from the package repository.
	apt-get upgrade *package*	Install a newer version of the package. Package is obtained from the package repository.
Aptitude	aptitude safe-upgrade *package*	Install a newer version of the package. Package is obtained from the package repository

4 Reinstall an existing software package

Tool	Command	Notes
APT	`apt reinstall package`	Package is obtained from the package repository
	`apt-get install --reinstall package`	Package is obtained from the package repository
	`apt-get reinstall package`	Package is obtained from the package repository
Aptitude	`aptitude reinstall package`	Package is obtained from the package repository

5 Download software packages, only

Tool	Command	Notes
APT	`apt download package`	The package is obtained from the package repository, saved in the current directory. After that it can be installed using the command `dpkg -i filename`
Aptitude	`aptitude download package`	The package is obtained from the package repository, saved in the current directory. After that it can be installed using the command `dpkg -i filename`

6 Remove software packages, and keep the configuration files

Tool	Command	Notes
APT	`apt remove package`	
	`apt-get remove package`	
Aptitude	`aptitude remove package`	
Dpkg	`dpkg -r package`	
	`dpkg --remove package`	

7 Remove software packages as well as the configuration files

Tool	Command	Notes
APT	`apt purge package`	
	`apt-get purge package`	
	`apt-get --purge remove package`	
Aptitude	`aptitude purge package`	
Dpkg	`dpkg -P package`	
	`dpkg --purge package`	

8 List installed software packages

Tool	Command	Notes
APT	`apt list --installed`	List all installed packages
Apt-cache	`apt-cache search package`	List all available packages for the given package name; search includes package name as well as the package description
	`apt-cache search --names-only package`	List all available packages for the given package name; search includes package names, only
Aptitude	`aptitude search '~i'`	List all installed packages
Dpkg	`dpkg -l`	List all installed packages
	`dpkg --list`	List all installed packages

9 Display information about a single software package

Tool	Command	Notes
APT	`apt list package`	Display package information, and installation status
	`apt show package`	Display detailed package information, and installation status
Aptitude	`aptitude show package`	Display detailed package information, and installation status
Dpkg	`dpkg -l package`	Display installation status
	`dpkg --list package`	Display installation status
	`dpkg -s package`	Display package information
	`dpkg --status package`	Display package information

10 Display package dependencies

Tool	Command	Notes
Apt-cache	`apt-cache depends package`	Display reverse dependencies
	`apt-cache rdepends package`	Display dependencies
Aptitude	`aptitude search '~R' package`	Display dependencies
	`aptitude search '~D' package`	Display reverse dependencies
Apt-rdepends	`apt-rdepends -r package`	Display dependencies
	`apt-rdepends package`	Display reverse dependencies
Dpkg	`dpkg -f filename Depends`	Filename refers to a local .deb file; Display dependencies
	`dpkg-deb -f filename Depends`	Filename refers to a local .deb file; Display dependencies
Grep-status	`grep-status -F Package -s Depends package`	Display dependencies
	`grep-status -P -s Depends package`	Display dependencies

11 List files of a package prior to installation

Tool	Command	Notes
Dpkg	`dpkg -c package`	
	`dpkg --contents package`	
Dpkg-deb	`dpkg-deb -c package`	
	`dpkg-deb --contents package`	

12 List files of an installed package

Tool	Command	Notes
Apt-file	`apt-file -list package`	
	`apt-file -show package`	
Dpkg	`dpkg -L package`	
	`dpkg --listfiles package`	
Dpkg-query	`dpkg-query -L package`	
	`dpkg-query --listfiles package`	

13 List configuration files of a package

Tool	Command	Notes
Dpkg	`dpkg -s package`	
	`dpkg --status package`	
Dpkg-query	`dpkg-query -s package`	
	`dpkg-query --status package`	

14 Identify the package from which a file originates

Tool	Command	Notes
Apt-file	`apt-file find filename`	Search in all available packages
	`apt-file search filename`	Search in all available packages
Dpkg	`dpkg -S filename`	Search in all installed packages
	`dpkg --search filename`	Search in all installed packages
Dpkg-query	`dpkg-query -S filename`	Search in all installed packages
	`dpkg-query --search filename`	Search in all installed packages

15 Display package status

Tool	Command	Notes
Apt-cache	`apt-cache show package`	Search in all available packages
Aptitude	`aptitude show package`	Search in all available packages
Dpkg	`dpkg -s package`	Package has to be installed locally
	`dpkg --status package`	Package has to be installed locally
	`dpkg -I filename`	Filename refers to a local `.deb` file
	`dpkg --info filename`	Filename refers to a local `.deb` file
Dpkg-query	`dpkg-query -s package`	Package has to be installed locally
	`dpkg-query --status package`	Package has to be installed locally

16 Validate package signature

Tool	Command	Notes
Debsums	`debsums package`	Validate all files from the package (except configuration files)
Debsums	`debsums`	Validate all files for all packages (except configuration files)
Dpkg	`dpkg -V package`	Validate all files from the package
	`dpkg --verify package`	Validate all files from the package
Dpkg-sig	`dpkg-sig --verify package`	Validate the GPG signature of the package
Gpg	`gpg --verify package`	Validate the GPG signature of the package

17 Check package for changes

Tool	Command	Notes
Dpkg	`dpkg --verify package`	Check this package, only
	`dpkg --verify`	Check all packages

18 Display available packages

Tool	Command	Notes
APT	`apt list`	List all known, and available packages with its status
	`apt list`	List all known, and available package versions with its status
Apt-cache	`apt-cache pkgnames`	List all known, and available packages

Debian Package Management Cheatsheet

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⊙ https://github.com/hofmannedv/cheatsheets .

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19 Display renewable packages

Tool	Command	Notes
Apt	`apt list --upgradable`	List available packages with a new version
	`apt list --upgradable package`	List new versions for this package
	`apt-get upgrade -u`	List available packages with a new version
	`apt-get upgrade --show-upgraded`	List available packages with a new version
	`apt-get upgrade -u -s`	Simulate upgrading available packages with a new version
	`apt-get upgrade --show-upgraded --simulate`	Simulate upgrading available packages with a new version
Aptitude	`aptitude search '~U'`	List available packages with a new version
	`aptitude search ?upgradable`	List available packages with a new version

20 List software packages that are available as a new version

Tool	Command	Notes
APT	`apt list --upgradable`	List the available packages as well as the new version number
	`apt list --upgradable package`	List the new versions for this package, only
	`apt-get upgrade -u`	List the available packages as well as the new version number
	`apt-get upgrade --show-upgraded`	List the available packages as well as the new version number
	`apt-get upgrade -u -s`	Simulate updating the available packages with the new version
	`apt-get upgrade --show-upgraded --simulate`	Simulate updating the available packages with the new version
Aptitude	`aptitude search '~U'`	List the available packages as well as the version number
	`aptitude search ?upgradable`	List the available packages as well as the version number

21 Update an existing release (distribution upgrade)

Tool	Command	Notes
APT	`apt full-upgrade`	Update all existing packages to the newest available version
	`apt-get dist-upgrade`	Update all existing packages to the newest available version
Aptitude	`aptitude full-upgrade`	Update all existing packages to the newest available version
	`aptitude safe-upgrade`	Update all existing packages to the newest available version except for the unused packages

22 Recommended books and resources

Axel Beckert, Frank Hofmann: Das Debian-Paketmanagement-Buch

Available languages: German
Project website: https://dpmb.org/
Contribute: via GitHub ⌂ https://github.com/dpmb
Debian package: `debian-paketmanagement-buch`

Raphaël Hertzog, Roland Mas: The Debian Administrator's Handbook

Available languages: French, English, German, Russian, Japanese, and other languages
Project website   https://debian-handbook.info/
Contribute: via Salsa   https://salsa.debian.org/hertzog/debian-handbook/
Debian package: `debian-handbook`

Frank Ronneburg: Das Debian GNU/Linux Anwenderhandbuch

Available languages: German
Project website: https://debiananwenderhandbuch.de/
Contribute: via email ✉ fr@debiananwenderhandbuch.de
Debian package: not available

Matthew Danish: The apt-dpkg-reference list

Available languages: English
Project website: not available
Contribute: not known
Debian package: `apt-dpkg-ref` (available until Debian 11 *Bullseye*)