

Red Hat Package Management Cheatsheet

Version 0.3 – © 2023,2024 by Frank Hofmann
✉ info@efho.de. Published under Creative Commons
CC-BY-SA 4.0 International License. Created with 
🔗 <https://github.com/hofmannedv/cheatsheets>.



1 Install new software packages

Tool	Command	Notes
RPM	<code>rpm -i package file</code>	Package file refers to a local <code>.rpm</code> file in the current directory
	<code>rpm --install package file</code>	
	<code>rpm -i --nodeps package file</code>	Package file refers to a local <code>.rpm</code> file in the current directory; ignore package dependencies
	<code>rpm --install --nodeps package file</code>	
YUM	<code>rpm -ihv package file</code>	Package file refers to a local <code>.rpm</code> file in the current directory; installation with verbose output, and process bar
	<code>yum groupinstall package group</code>	Install all packages from a package group from a software repository
	<code>yum install package</code>	Install a package from a software repository
	<code>yum localinstall package</code>	Install a package from a local file, http, or ftp resource
	<code>yum reinstall package</code>	Reinstall the current version of a package from a software repository

2 Renew existing software packages

Tool	Command	Notes
RPM	<code>rpm -F package file</code>	Upgrade an already installed package; based on a local file.
	<code>rpm --freshen package file</code>	
	<code>rpm -U package file</code>	Upgrade an already installed package, or install package if not already installed; based on a local file.
	<code>rpm --upgrade package file</code>	
YUM	<code>yum update</code>	Update all packages with available updates; based on a software repository
	<code>yum update package</code>	Update the specified package, only; based on a software repository
	<code>yum update --security</code>	Apply security-related package updates, only; based on a software repository
	<code>yum update-to package-version</code>	Update the specified package, or all packages up to a specific version; based on a software repository
	<code>yum upgrade</code>	Update all installed packages taking obsoletes into account; based on a software repository
	<code>yum upgrade package</code>	Update the specified package taking obsoletes into account; based on a software repository



3 Reinstall an existing software package

Tool	Command	Notes
RPM	<code>rpm --reinstall <i>package file</i></code>	Package file refers to a local file
YUM	<code>yum reinstall <i>package</i></code>	Package is obtained from the package repository

4 Install a previous version of a software package (downgrade)

Tool	Command	Notes
YUM	<code>yum downgrade <i>package</i></code>	The previous version of the package is installed

5 Download software packages, only

Tool	Command	Notes
YUM	<code>yum install --downloadonly <i>package</i></code>	The package is obtained from the package repository, and stored in the package cache. After that it can be installed using the command <code>rpm -i <i>filename</i></code> .
	<code>yumdownloader <i>package</i></code>	The package is obtained from the package repository, and stored in the current directory. After that it can be installed using the command <code>rpm -i <i>filename</i></code> .
	<code>yumdownloader --resolve <i>package</i></code>	The package, and its dependencies are obtained from the package repository, and are stored in the current directory. After that these packages can be installed using the command <code>rpm -i <i>filename</i></code> .

6 Remove software packages as well as the configuration files

Tool	Command	Notes
RPM	<code>rpm -e <i>package</i></code>	
	<code>rpm --erase <i>package</i></code>	
	<code>rpm -e --nodeps <i>package</i></code>	Remove the package without a dependency check
	<code>rpm --erase --nodeps <i>package</i></code>	
YUM	<code>yum erase <i>package</i></code>	Remove the package (and possibly dependencies)
	<code>yum remove <i>package</i></code>	



7 List installed software packages

Tool	Command	Notes
RPM	<code>rpm -qa</code>	List all installed packages
	<code>rpm --query --all</code>	
	<code>rpm -qa --last</code>	List all installed packages, display the most recent ones first
	<code>rpm --query --all --last</code>	
YUM	<code>yum list installed</code>	List all installed packages
	<code>yum list all</code>	List all installed, and available packages
	<code>yum list <i>package</i></code>	Show installed version for this package

8 Display information about a single software package

Tool	Command	Notes
RPM	<code>rpm -q <i>package</i></code>	Display installation status for the package
	<code>rpm --query <i>package</i></code>	
	<code>rpm -qp <i>package file</i></code>	Display installation status for the local package file
	<code>rpm --query --package <i>package file</i></code>	
	<code>rpm -qi <i>package</i></code>	Display detailed package information
	<code>rpm --query --info <i>package</i></code>	
	<code>rpm -qpi <i>package file</i></code>	Display detailed information for the local package file
	<code>rpm --query --package --info <i>package file</i></code>	
YUM	<code>yum info <i>package</i></code>	Display detailed package information, and installation status

9 Display package dependencies

Tool	Command	Notes
RPM	<code>rpm -qR <i>package</i></code>	Display required packages for an installed package
	<code>rpm --query --requires <i>package</i></code>	
	<code>rpm -qpR <i>package file</i></code>	Display required packages for a package available as a local file
	<code>rpm --query --package --requires <i>package</i></code>	
YUM	<code>yum deplist <i>package</i></code>	Display dependencies for a package
	<code>repoquery --requires <i>package</i></code>	
	<code>yumdownloader --resolve <i>package</i></code>	



10 List files of a package prior to installation

Tool	Command	Notes
RPM	<code>rpm -ql <i>package</i></code>	Show content of local package
	<code>rpm --query --list <i>package</i></code>	
YUM	<code>rpm -qpl <i>package file</i></code>	Show content of local, or remote package
	<code>rpm --query --package --list <i>package file</i></code>	
	<code>repoquery -l <i>package</i></code>	Show content of local, or remote package
	<code>repoquery --list <i>package</i></code>	

11 List files of an installed package

Tool	Command	Notes
RPM	<code>rpm -ql <i>package</i></code>	Show content of local package
	<code>rpm --query --list <i>package</i></code>	
YUM	<code>repoquery -l <i>package</i></code>	Show content of local, or remote package
	<code>repoquery --list <i>package</i></code>	

12 List configuration files of a package

Tool	Command	Notes
RPM	<code>rpm -qc <i>package</i></code>	List all the files from the package that are explicitly flagged as configuration files
	<code>rpm --query --configfiles <i>package</i></code>	

13 List documentation files of a package

Tool	Command	Notes
RPM	<code>rpm -qd <i>package</i></code>	List all the files from the package that are explicitly flagged as documentation files
	<code>rpm --query --docfiles <i>package</i></code>	



14 Identify the package from which a file originates

Tool	Command	Notes
RPM	<code>rpm -qf <i>filename</i></code>	Search for the file in all installed packages. Filename has to be specified with full path
	<code>rpm --query --file <i>filename</i></code>	
YUM	<code>yum provides <i>filename</i></code>	Search for the file in all available packages. Filename has to be specified with full path

15 Display package status

Tool	Command	Notes
RPM	<code>rpm -qi <i>package</i></code>	Search in all available packages
	<code>rpm --query --info <i>package</i></code>	
	<code>rpm -qip <i>package file</i></code>	Search in the locally available package file
	<code>rpm --query --info --package <i>package file</i></code>	
YUM	<code>yum info <i>package</i></code>	Search in all installed packages

16 Validate package signature

Tool	Command	Notes
RPM	<code>rpm -K <i>package</i></code>	Validate the GPG signature of the package
	<code>rpm --checksig <i>package</i></code>	

17 Check package for changes

Tool	Command	Notes
RPM	<code>rpm -Vp <i>package file</i></code>	Check the local package file
	<code>rpm --verify --package <i>package file</i></code>	
	<code>rpm -Va</code>	Check all packages
	<code>rpm --verify --all</code>	
YUM	<code>yum verify <i>package</i></code>	Validate the installed package; requires YUM plugin <i>yum-verify</i>



18 Display available packages

Tool	Command	Notes
YUM	<code>yum list available</code>	List all available packages

19 Display renewable packages

Tool	Command	Notes
YUM	<code>yum check-update</code>	Query repositories for available package updates
	<code>yum updateinfo list available</code>	List available packages with a new version
	<code>yum updateinfo list sec</code>	List available security updates, only
	<code>yum updateinfo list --security</code>	

20 Recommended books and resources

Edward C. Bailey: Maximum RPM

Available languages: English
Project website: <https://ftp.osuosl.org/pub/rpm/max-rpm/>
Contribute: not known

RPM Documentation

Available languages: English
Project website: <https://rpm.org/documentation.html>
Contribute: not known