

Install command - "rpm -ivh package_name"

Upgrade command - "rpm -Uvh package_name"

Where,

'-i' or '--install' - give the command to install a package.

'-U' or '--upgrade' - give the command to upgrade a package.

'-v' or '--verbose' - print verbose information - routine progress messages will be displayed.

'h' or '--hash' - print 50 hash marks when package log is unpacked, used with '-v' or '--verbose' for good display.

```
<p>&nbsp;# rpm -ivh vsftpd-3.0.2-22.el7.x86_64.rpm</p>
```

```
<p>&nbsp;# rpm -Uvh apr-1.4.8-3.el7_4.1.x86_64.rpm</p>
```

Note - These install and upgrade will install new version of package. This is same as the install command but it will remove all other versions after installing new version of the package.

2.How to check dependencies of RPM Package before Installing

Dependencies means what all configuration are required to install a package. for example lets check the dependencies for **mailcap-2.1.41-2.el7.noarch.rpm** package.

The format of the command will be:

```
rpm -qpR mailcap-2.1.41-2.el7.noarch.rpm
```

where,

'-q' - is used to query a package.

'-p' - is used to list what capabilities that package provides.

'R' - is used to list capabilities on which this package depends.

```
<p># rpm -qpR mailcap-2.1.41-2.el7.noarch.rpm</p>
```

3. How to Install a RPM Package Without Dependencies

When you want to install a package but your rpm command shows 'error: failed dependencies' and what is required to install the package, then only you use this command to skip check dependencies and install the package directly.

'**--nodeps**' - this option will not do dependency check before installing or upgrading a package.

you can see the example without skipping dependencies and with skipping dependencies as given below.

```
<p># rpm -ivh httpd-2.4.6-67.el.centos.6.x86_64.rpm</p> <p># rpm -ivh --  
nodeps httpd-2.4.6-67.el.centos.6.x86_64.rpm</p>
```

4. How to display all files of an installed rpm package

To display all the files of an installed rpm package use 'ql' option.

where,

'**q**' - query option.

'**-l**' or '**--list**' - is used to list files in package.

```
<p># rpm -ql httpd</p>
```

5. How to List Recently Installed rpm Packages

To display recently install rpm packages use '-qa' option followed by '--last'.

where,

'-a' or '--all' - is used to query all install packages.

'--last' - is used to list all the install package according to their timestamp i.e- latest package installed will be on top.

```
<p># rpm -qa --last</p>
```

6. How to display the Information of rpm Package Before Installing

Before installing a package if you want to know the information of a package, use the combination of '-qip' options.

where,

'-q' or '--query' - this is a query option.

'-i' or '--info' - is used to display package information like name, version and description.

'-p' or '--package' - is used to query uninstalled package.

```
<p># rpm -qip mailcap-2.1.41-2.el7.noarch.rpm</p>
```

7. How to remove a rpm package

To remove/uninstall any package, use the combination of '-evv' option and give the package you want to remove. for example we can use **anaconda** package. as the original name is **anaconda-21.48.22.121-1.el7.centos.x86_64.rpm**.

where,

'-e' or '--erase' - it is an erase option

'-vv' - used to print debugging information.

```
<p># rpm -evv anaconda</p>
```

8. How to display rpm packages in a format with their size.

With '--queryformat' option you can display package in various format by given header tag name, version, release, size. Enclose header tag within {}. as given below.

```
<p># rpm -qa --queryformat '% {name }-% {version }-% {release }  
{size }\n'
```

9. How to display an rpm signature package

Before installing the package you should make sure its integrity and origin is **ok**. With '--checksig' option you can check the signature of a package. As shown below

```
<p># rpm --checksig mariadb-5.5.56-2.el7.x86_64.rpm</p>
```

10. How to query a file that belongs which rpm Package

To find out a file belongs to which package use '**-qf**' option. where '**-f**' is used to query file owning package.

```
<p># rpm -qf /usr/bin/xxd</p> <p># rpm -qf /usr/bin/gmake</p>
```

11. How to Verify all rpm Packages

rpm followed by '-Va' option is used to verify a package. Verifying will compare the information about the installed package file along with the information taken from the package metadata stored in the rpm database.

```
<p># rpm -Va</p>
```

12. How to Import and view rpm GPG key

GPG keys are used to verify packages of RHEL based operating systems. To verify you must import GPG keys. They are found in **/etc/pki/rpm-gpg**.

rpm --import /etc/pki/rpm-gpg/* - is used to import all gpg keys.

rpm -qa gpg-pubkey* - to view all gpg keys.

```
<p># rpm --import /etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7<br /> #  
rpm --import /etc/pki/rpm-gpg/*<br /> # rpm -qa gpg-pubkey*</p>
```

13. How to check an installed rpm package

To know whether an rpm package is install or not use **rpm -q** command.

```
<p># rpm -q libXaw</p>
```

14. How to list all install rpm packages.

To display all install packages in your system, use **rpm -qa** command.

```
<p># rpm -qa</p>
```

15. How to remove rpm package without dependencies

--nodeps option is used to uninstall the package forcefully without dependencies, but removing package forcefully can affect other working applications.

```
<p>&nbsp;# rpm -ev --nodeps libXaw</p>
```

16. How to get information about installed rpm package

query info(-qi) option is used to display the information about the installed rpm package.

```
<p>&nbsp;# rpm -qi zziplib</p>
```

17. How to query documentation of installed rpm package

To display the list of documentation/manual pages related to installed package use **-qdf(query document file)** option.

```
<p># rpm -qdf /usr/bin/xxd</p>
```

18. What is the use of '--percent' option in rpm command

--percent is used to print the percentages as files are unpacked from the package log. This will make rpm to run easy from other tools.

```
<p>&nbsp;# rpm -i --percent vsftpd-3.0.2--22.el7.x86_64.rpm</p>
```

19. What is the use of '--justdb' option in rpm command

--justdb option is used to erase only the database not the filesystem. This option will not delete all data of install package from the system.

```
<p>&nbsp;#&nbsp;rpm -evh --justdb vsftpd</p>
```

20. What is the use of '--showrc' option in rpm command

--showrc option will display all the values that rpm will be using for all the options that are currently set in **rpmrc** and **macros** configuration files.

```
<p>&nbsp;# rpm --showrc</p>
```

21. How downgrade an rpm package.

--oldpackage - this option will upgrade/replace a newer package with older one.

```
<p>&nbsp;# rpm -Uvh --oldpackage apr-1.4.8-3.el7.x86_64.rpm</p>
```

22. What is the use of '--test' option in rpm command

--test option is not used for installing a package. It performs a normal checkup of a package as it is done during installation. if no output is shown that means the test succeeded i.e on error in the rpm file. if there is any problem it will show in the term of an error. as shown below

```
<p>&nbsp;# rpm -i --test zziplib-0.13.62-5.el7.x86_64.rpm</p> <p># rpm -  
i --test OpenEXR-libs-1.7.1-7.el7.x86_64.rpm</p>
```

23. What is the use of '--excludedocs' option in rpm command

--excludedocs means do not install documentation with the package i.e every package has its own documentation/man pages, so this option prevents the documentation to install with the package. as shown below

```
<p># rpm -i --excludedocs zziplib-0.13.62-5.el7.x86_64.rpm</p> <p>#ls -al /usr/share/man/man1/zzoplib-0</p>
```

24. How To rebuild Corrupted RPM Database.

Sometimes rpm database gets corrupted and other applications stop working properly. so you can rebuild the rpm database with the following commands.

```
<p>&nbsp;# cd /var/lib/rpm</p> <p># rm -rf __db*</p> <p># rpm -vv --rebuilddb&nbsp;</p>
```

25. What is the use of '--whatrequires' option in rpm command

--whatrequires option tell the rpm database that which package requires the specified capability. for example we will check for bash capability, as shown below

```
<p>&nbsp;# rpm -q --whatrequires bash</p>
```

