

NAME

rpmbuild – Build RPM Package(s)

SYNOPSIS**BUILDING PACKAGES:**

rpmbuild {-ba|-bb|-bp|-bc|-bi|-bl|-bs} [rpmbuild-options] *SPECFILE* ...

rpmbuild {-ra|-rb|-rp|-rc|-ri|-rl|-rs} [rpmbuild-options] *SOURCEPACKAGE* ...

rpmbuild {-ta|-tb|-tp|-tc|-ti|-tl|-ts} [rpmbuild-options] *TARBALL* ...

rpmbuild {--rebuild|--recompile} *SOURCEPKG* ...

MISCELLANEOUS:

rpmbuild --showrc

rpmbuild-options

[--buildroot *DIRECTORY*] [--clean] [--nobuild]
 [--rmsource] [--rmspec] [--short-circuit] [--build-in-place]
 [--noprep] [--noclean] [--nocheck]
 [--rpmfcdebug]
 [--target *PLATFORM*]
 [--with *OPTION*] [--without *OPTION*]

DESCRIPTION

rpmbuild is used to build both binary and source software packages. A **package** consists of an archive of files and meta-data used to install and erase the archive files. The meta-data includes helper scripts, file attributes, and descriptive information about the package. **Packages** come in two varieties: binary packages, used to encapsulate software to be installed, and source packages, containing the source code and recipe necessary to produce binary packages.

One of the following basic modes must be selected: **Build Package**, **Build Package from Tarball**, **Recompile Package**, **Show Configuration**.

GENERAL OPTIONS

These options can be used in all the different modes.

-, --help

Print a longer usage message then normal.

--version

Print a single line containing the version number of **rpm** being used.

--quiet Print as little as possible - normally only error messages will be displayed.

-v Print verbose information - normally routine progress messages will be displayed.

-vv Print lots of ugly debugging information.

--rpmfcdebug

Enables to debug dependencies generation.

--rcfile FILELIST

Each of the files in the colon separated *FILELIST* is read sequentially by **rpm** for configuration information. Only the first file in the list must exist, and tildes will be expanded to the value of

\$HOME. The default *FILELIST* is */usr/lib/rpm/rpmrc:/usr/lib/red-hat/rpmrc:/etc/rpmrc:~/rpmrc.*

--pipe *CMD*

Pipes the output of **rpm** to the command *CMD*.

--dbpath *DIRECTORY*

Use the database in *DIRECTORY* rather than the default path */var/lib/rpm*

--root *DIRECTORY*

Use the file system tree rooted at *DIRECTORY* for all operations. Note that this means the database within *DIRECTORY* will be used for dependency checks and any scriptlet(s) (e.g. **%post** if installing, or **%prep** if building, a package) will be run after a chroot(2) to *DIRECTORY*.

-D, --define='MACRO EXPR'

Defines *MACRO* with value *EXPR*.

BUILD OPTIONS

The general form of an rpm build command is

```
rpmbuild -bSTAGE[-rSTAGE|-tSTAGE [ rpmbuild-options
] FILE ...
```

The argument used is **-b** if a spec file is being used to build the package, **-r** if a source package is to be re-build and **-t** if **rpmbuild** should look inside of a (possibly compressed) tar file for the spec file to use. After the first argument, the next character (*STAGE*) specifies the stages of building and packaging to be done and is one of:

- ba** Build binary and source packages (after doing the **%prep**, **%build**, and **%install** stages).
- bb** Build a binary package (after doing the **%prep**, **%build**, and **%install** stages).
- bp** Executes the "**%prep**" stage from the spec file. Normally this involves unpacking the sources and applying any patches.
- bc** Do the "**%build**" stage from the spec file (after doing the **%prep** stage). This generally involves the equivalent of a "make".
- bi** Do the "**%install**" stage from the spec file (after doing the **%prep** and **%build** stages). This generally involves the equivalent of a "make install".
- bl** Do a "list check". The "**%files**" section from the spec file is macro expanded, and checks are made to verify that each file exists.
- bs** Build just the source package.

The following options may also be used:

--buildroot *DIRECTORY*

When building a package, override the BuildRoot tag with directory *DIRECTORY*.

--clean Remove the build tree after the packages are made.

--nobuild

Do not execute any build stages. Useful for testing out spec files.

--noprep

Do not execute **%prep** build stage even if present in spec.

--noclean

Do not execute **%clean** build stage even if present in spec.

--nocheck

Do not execute **%check** build stage even if present in spec.

--nodebuginfo

Do not generate debuginfo packages..

--nodeps

Do not verify build dependencies.

--rmsource

Remove the sources after the build (may also be used standalone, e.g. "**rpmbuild --rmsource foo.spec**").

--rmspec

Remove the spec file after the build (may also be used standalone, eg. "**rpmbuild --rmspec foo.spec**").

--short-circuit

Skip straight to specified stage (i.e., skip all stages leading up to the specified stage). Only valid with **-bc**, **-bi**, and **-bb**. Useful for local testing only. Packages built this way will be marked with an unsatisfiable dependency to prevent their accidental use.

--build-in-place

Build from locally checked out sources. Sets `_builddir` to current working directory. Skips handling of `-n` and `untar` in the `%setup` and the deletion of the `buildSubdir`.

--target PLATFORM

When building the package, interpret *PLATFORM* as **arch-vendor-os** and set the macros `%_target`, `%_target_cpu`, and `%_target_os` accordingly.

--with OPTION

Enable configure *OPTION* for build.

--without OPTION

Disable configure *OPTION* for build.

REBUILD AND RECOMPILE OPTIONS

There are two other ways to invoke building with rpm:

rpmbuild --rebuild|--recompile SOURCEPKG ...

When invoked this way, **rpmbuild** installs the named source package, and does a prep, compile and install. In addition, **--rebuild** builds a new binary package. When the build has completed, the build directory is removed (as in **--clean**) and the the sources and spec file for the package are removed.

These options are noaways superseded by the **-r*** options which allow more more fine control over what stages of the build to run.

SHOWRC

The command

rpmbuild --showrc

shows the values **rpmbuild** will use for all of the options are currently set in *rpmrc* and *macros* configuration file(s).

FILES**rpmrc Configuration**

/usr/lib/rpm/rpmrc

/usr/lib/rpm/redhat/rpmrc

/etc/rpmrc

~/rpmrc

Macro Configuration

/usr/lib/rpm/macros
/usr/lib/rpm/redhat/macros
/etc/rpm/macros
~/.rpmmacros

Temporary

*/var/tmp/rpm**

SEE ALSO

gendiff(1),
popt(3),
rpm(8),
rpm2cpio(8),
rpmkeys(8)
rpmspec(8),
rpmsign(8),

rpmbuild --help - as rpm supports customizing the options via popt aliases it's impossible to guarantee that what's described in the manual matches what's available.

<http://www.rpm.org/> <URL:**<http://www.rpm.org/>**>

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