CREATE YOUR OWN RPM BINARY USING RPMDEVTOOLS

STEP 1: Install rpmdevtools and rpmlint

```
[RCB@localhost ~]$ sudo yum install -y rpmdevtools rpmlint
[sudo] password for RCB:
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
* base: centos.excellmedia.net
* extras: centos.excellmedia.net
* updates: centos.excellmedia.net
base
extras
mysql-connectors-community
mysql-tools-community
mysql57-community
updates
Resolving Dependencies
--> Running transaction check
---> Package rpmdevtools.noarch 0:8.3-8.el7_9 will be installed
--> Processing Dependency: rpm-build >= 4.4.2.3 for package: rpmdevtools-8.3-8.el7_9.noarch
--> Processing Dependency: emacs-filesystem for package: rpmdevtools-8.3-8.el7_9.noarch
 --> Package rpmlint.noarch 0:1.5-4.el7 will be installed
```

STEP 2: RUN RPMDEV-SETUPTREE

```
[RCB@localhost ~]$ rpmdev-setuptree
[RCB@localhost ~]$
```

STEP 3 :CREATE A Welcome.sh file

```
[RCB@localhost ~]$ vi welcome.sh
[RCB@localhost ~]$
```

STEP 4: mkdir welcome-0.0.1

```
[RCB@localhost ~]$ mkdir welcome-0.0.1
[RCB@localhost ~]$
```

STEP 5: mv welcome.sh welcome-0.0.1

```
[RCB@localhost ~]$ mv welcome.sh welcome-0.0.1
[RCB@localhost ~]$
```

STEP 6:

```
[RCB@localhost ~]$ tar --create --file welcome-0.0.1.tar.gz welcome-0.0.1
```

STEP 7:

[RCB@localhost ~]\$ mv welcome-0.0.1.tar.gz ~/rpmbuild/SOURCES/

STEP 8:

[RCB@localhost ~]\$ rpmdev-newspec welcome
Output file "welcome.spec" already exists, exiting.

STEP 9 :mv welcome .spec

[RCB@localhost ~]\$ mv welcome.spec ~/rpmbuild/SPECS/

STEP 10:

[RCB@localhost ~]\$ rpm -qi welcome : welcome Version : 0.0.1 : 1.el7 Release Architecture: noarch Install Date: Wed 14 Jun 2023 10:43:33 AM UTC Group : Unspecified Size : 17 License : GPL
Signature : (none)
Source RPM : welcome-0.0.1-1.el7.src.rpm Build Date : Wed 14 Jun 2023 10:37:58 AM UTC Build Host : localhost Relocations : (not relocatable) Summary : A simple welcome script Description : A demo RPM build [RCB@localhost ~]\$

STEP 11:

```
[RCB@localhost SPECS]$ rpmbuild -ba welcome.spec
Executing(%prep): /bin/sh -e /var/tmp/rpm-tmp.LABOzP
+ umask 022
+ cd /home/RCB/rpmbuild/BUILD
+ cd /home/RCB/rpmbuild/BUILD
+ rm -rf welcome-0.0.1
+ /usr/bin/tar -xf /home/RCB/rpmbuild/SOURCES/welcome-0.0.1.tar.gz
+ cd welcome-0.0.1
+ /usr/bin/chmod -Rf a+rX,u+w,g-w,o-w .
+ exit 0
Executing(%install): /bin/sh -e /var/tmp/rpm-tmp.d3GXOy
+ umask 022
+ cd /home/RCB/rpmbuild/BUILD
+ '[' /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64 '!=' / ']'
+ rm -rf /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
++ dirname /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
+ mkdir -p /home/RCB/rpmbuild/BUILDROOT
+ mkdir /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
+ cd welcome-0.0.1
+ rm -rf /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
+ mkdir -p /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64//usr/bin
 cp welcome.sh /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64//usr/bin
  '[' noarch = noarch ']'
```

STEP 12: Build Source RPM

```
[RCB@localhost ~]$ cd /bin
[RCB@localhost bin]$ rpmbuild -bb ~/rpmbuild/SPECS/welcome.spec
Executing(%prep): /bin/sh -e /var/tmp/rpm-tmp.StJi4a
+ umask 022
+ cd /home/RCB/rpmbuild/BUILD
+ cd /home/RCB/rpmbuild/BUILD
+ rm -rf welcome-0.0.1
+ /usr/bin/tar -xf /home/RCB/rpmbuild/SOURCES/welcome-0.0.1.tar.gz
+ cd welcome-0.0.1
+ /usr/bin/chmod -Rf a+rX,u+w,g-w,o-w .
+ exit 0
Executing(%install): /bin/sh -e /var/tmp/rpm-tmp.gBTbLB
+ umask θ22
+ cd /home/RCB/rpmbuild/BUILD
+ '[' /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64 '!=' / ']'
+ rm -rf /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
++ dirname /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
+ mkdir -p /home/RCB/rpmbuild/BUILDROOT
+ mkdir /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
+ cd welcome-0.0.1
+ rm -rf /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
+ mkdir -p /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64//usr/bin
+ cp welcome.sh /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64//usr/bin
+ '[' noarch = noarch ']'
+ case "${QA_CHECK_RPATHS:-}" in
+ /usr/lib/rpm/check-buildroot
+ /usr/lib/rpm/redhat/brp-compress
+ /usr/lib/rpm/redhat/brp-strip /usr/bin/strip
 /usr/lib/rpm/redhat/brp-strip-comment-note /usr/bin/strip /usr/bin/objdump
```

STEP 13 :Build Binary RPM

```
[RCB@localhost ~]$ cd /bin
[RCB@localhost bin]$ rpmbuild -bb ~/rpmbuild/SPECS/welcome.spec
Executing(%prep): /bin/sh -e /var/tmp/rpm-tmp.StJi4a
+ umask 022
+ cd /home/RCB/rpmbuild/BUILD
+ cd /home/RCB/rpmbuild/BUILD
+ rm -rf welcome-0.0.1
+ /usr/bin/tar -xf /home/RCB/rpmbuild/SOURCES/welcome-0.0.1.tar.gz
+ cd welcome-0.0.1
+ /usr/bin/chmod -Rf a+rX,u+w,g-w,o-w .
Executing(%install): /bin/sh -e /var/tmp/rpm-tmp.gBTbLB
+ umask 022
+ cd /home/RCB/rpmbuild/BUILD
+ '[' /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64 '!=' / ']'
+ rm -rf /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
++ dirname /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
+ mkdir -p /home/RCB/rpmbuild/BUILDROOT
+ mkdir /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
+ cd welcome-0.0.1
+ rm -rf /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64
+ mkdir -p /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64//usr/bin
+ cp welcome.sh /home/RCB/rpmbuild/BUILDROOT/welcome-0.0.1-1.el7.x86_64//usr/bin
+ '[' noarch = noarch ']'
+ case "${QA_CHECK_RPATHS:-}" in
  /usr/lib/rpm/check-buildroot
+ /usr/lib/rpm/redhat/brp-compress
+ /usr/lib/rpm/redhat/brp-strip /usr/bin/strip
+ /usr/lib/rpm/redhat/brp-strip-comment-note /usr/bin/strip /usr/bin/objdump
```

STEP 14: Copy noarch to any location

```
[RCB@localhost ~]$ sudo cp /home/RCB/rpmbuild/RPMS/noarch/welcome-0.0.1-1.el7.noarch.rpm /opt
[RCB@localhost ~]$
```

STEP 15:

```
[RCB@localhost ~]$ sudo rpm -ivh /home/RCB/rpmbuild/RPMS/noarch/welcome-0.0.1-1.el7.noarch.rpm
Preparing... ##################### [100%]
Updating / installing...
1:welcome-0.0.1-1.el7 ###################### [100%]
[RCB@localhost ~]$
```

TO VARIFY INSTALLATION

STEP 1:

```
[RCB@localhost ~]$ rpm -qi welcome
            : welcome
Version
            : 0.0.1
Release
            : 1.el7
Architecture: noarch
Install Date: Wed 14 Jun 2023 10:43:33 AM UTC
            : Unspecified
Group
Size
            : 17
           : GPL
License
Signature
           : (none)
Source RPM : welcome-0.0.1-1.el7.src.rpm
Build Date : Wed 14 Jun 2023 10:37:58 AM UTC
Build Host : localhost
Relocations : (not relocatable)
Summary
           : A simple welcome script
Description :
A demo RPM build
[RCB@localhost ~]$
  ____ 32°C
```

STEP 2:

```
[RCB@localhost ~]$ sudo chmod 777 /usr/bin/welcome.sh
[RCB@localhost ~]$
```