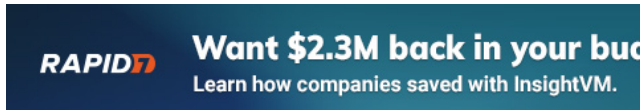


Linux tip, Fedora tip / howto: Compiling checkinstall for Fedora 13/15/17 x86_64, and for RHEL6 x86_64[back to notes and tips index](#)Try my online puzzle page with  [Calcudoku](#), [Killer Sudoku](#) and [online Sudoku](#).**Compiling checkinstall for Fedora 13/15/17 x86_64, and for RHEL6 x86_64**

It's a pity there isn't just a checkinstall RPM in a repository somewhere, getting this to compile and run under Fedora 13 (x86_64) was a pain. Notes for RHEL6 are at the bottom of this page.

First, [get the source](#), which was version 1.6.2 as of this writing.

Then:

```
tar xzvf checkinstall-1.6.2.tar.gz
cd checkinstall-1.6.2
```

If you then run make, as the INSTALL file tells you to do, you run into compilation errors:

```
installwatch.c:2942: error: conflicting types for 'readlink'
/usr/include/unistd.h:828: note: previous declaration of 'readlink' was here
installwatch.c:3080: error: conflicting types for 'scandir'
/usr/include/dirent.h:252: note: previous declaration of 'scandir' was here
installwatch.c:3692: error: conflicting types for 'scandir64'
/usr/include/dirent.h:275: note: previous declaration of 'scandir64' was here
```

To fix these, load the file installwatch/installwatch.c into an editor, and modify these lines:

- at line 101, change:

```
static int (*true_scandir)( const char *,struct dirent **,  
                           int (*)(const struct dirent *),  
                           int (*)(const void *,const void *));
```

to:

```
static int (*true_scandir)( const char *,struct dirent **,  
                           int (*)(const struct dirent *),  
                           int (*)(const struct dirent **,const struct dirent **));
```

(i.e. just change the types in the last line from const void * to const struct dirent **)

- at line 121, change:

```
static int (*true_scandir64)( const char *,struct dirent64 **,  
                             int (*)(const struct dirent64 *),  
                             int (*)(const void *,const void *));
```

to:

```
static int (*true_scandir64)( const char *,struct dirent64 **,  
                             int (*)(const struct dirent64 *),  
                             int (*)(const struct dirent64 **,const struct dirent64 **));
```

(i.e. same change with 64 added)

Facebook® Account Sign Up

Ad Create A Profile Now

Facebook®

Open

- at line 2941, change:

```
#if (GLIBC_MINOR <= 4)
to:
#endif
```

- at line 3080, change:

```
int scandir(    const char *dir, struct dirent ***namelist,
               int (*select)(const struct dirent *),
               int (*compar)(const void *, const void *)) {
```

to:

```
int scandir(    const char *dir, struct dirent ***namelist,
               int (*select)(const struct dirent *),
               int (*compar)(const struct dirent *, const struct dirent **)) {
```

- at line 3692, change:

```
int scandir64( const char *dir, struct dirent64 ***namelist,
               int (*select)(const struct dirent64 *),
               int (*compar)(const void *, const void *)) {
```

to:

```
int scandir64( const char *dir, struct dirent64 ***namelist,
               int (*select)(const struct dirent64 *),
               int (*compar)(const struct dirent64 **, const struct dirent64 **)) {
```

Make sure you have rpm-build and rpmdevtools installed:

```
yum install rpm-build rpmdevtools (as root)
```

Now, in the checkinstall-1.6.2 directory, run:

```
make
```

Next, edit the file checkinstall itself:

- at line 495, change: CHECKINSTALLRC=\${CHECKINSTALLRC:-\${INSTALLDIR}/checkinstallrc}
to:
CHECKINSTALLRC=\${CHECKINSTALLRC:-\${INSTALLDIR}/lib/checkinstall/checkinstallrc}
- at line 2466, change: \$RPMBUILD -bb \${RPM_TARGET_FLAG}\${ARCHITECTURE} "\$SPEC_PATH" &> \${TMP_DIR}/rpmbuild.log
to:
\$RPMBUILD -bb \${RPM_TARGET_FLAG}\${ARCHITECTURE} --buildroot \$BROOTPATH "\$SPEC_PATH" &> \${TMP_DIR}/rpmbuild.log

Now, as root, run:

```
make install
```

You can now create a checkinstall RPM by running it (note the full path):

```
/usr/local/sbin/checkinstall
```



One more error...

As soon as an installation tries to do something with temporary files/directories, checkinstall will fail, for example, when running it for php-5.2.14:

```
Installing PHP CLI binary:      /usr/bin/
chmod: changing permissions of `/usr/bin/#INST@10957#': No such file or directory
```

The fix, apparently, is to run checkinstall with the --fstrans=no parameter, so for example:

```
checkinstall -R -y --fstrans=no
```



And another...

Roman wrote to me the following (21 October 2011):

Another bug, that line occurs in output:

```
cp: cannot stat `//var/tmp/tmp.tcjDbWwz6/newfiles.tmp': No such file or directory
```

This is due to typo in "checkinstall": it using '/\${TMP_DIR}/...' instead '\${TMP_DIR}/...'

I suggest this fix before making rpm/deb package of checkinstall itself:
sed -i '.orig' -e 's/\/\${TMP_DIR}/\${TMP_DIR}/g' checkinstall

Compiling for Red Hat Enterprise Linux 6 (RHEL6), x86_64

Sean Kenn got checkinstall to work under RHEL6, after these modifications (May 30, 2012) (LINE <n> refers to the line number in the checkinstall file):

- just to get rid of the tar message that shows up (tar: Removing leading '/' from member names), add the -P option:
 LINE 471: \$TAR --no-recursion -C "\${root}" -cphf - \$files | \$TAR -f - -xvpPC \
 LINE 474: \$TAR --no-recursion -C "\${root}" -cpf - \$files | \$TAR -f - -xvpPC \
- \$INSTALLDIR variable was wrong (This could probably be fixed in the followlinks function but I just wrote the path out on this line):
 LINE 495: CHECKINSTALLRC=\${CHECKINSTALLRC:-/usr/local/lib/checkinstall/checkinstallrc}
- Removed the '/' in front of \${TMP_DIR} on these lines. Also added --buildroot \$BROOTPATH:
 LINE 2466: \$RPMBUILD -bb \${RPM_TARGET_FLAG}\${ARCHITECTURE} --buildroot
 \$BROOTPATH "\$SPEC_PATH" &> \${TMP_DIR}/rpmbuild.log
- I ended up messing with the \$truefile variable to get tar the needed files:
 LINE 1775: \$TAR --no-recursion -C "\${TRANSLROOT}" -cpPf - "\$truefile" \
 LINE 1778: \$TAR --no-recursion -C "\${TRANSLROOT}" -cphPf - "\$truefile" \
- Remove line 1770 and insert:

```
echo ${file} | grep symlink > /dev/null
if [ $? -ne 0 ] ; then
    truefile=`echo ${file} | sed 's/^\.//' | awk '{print $3}'`
else
    truefile=`echo ${file} | sed 's/^\.//' | awk '{print $4}'`
fi
```

Another fix, for RHEL/CentOS 6.3

An anonymous reader writes:

New rpm version 4.8.0 shows --version in format "RPM-Version 4.8.0" while former versions had e.g. the format "RPM, Version 4.4.2.3". So there is no \$3 for awk and the checkinstall script breaks.

change line 2289 (line number is after applying the patch from Sean Kenn !) from:

```
RPM_VERSION=`rpm --version | awk '{ print $3 }'`
to:
RPM_VERSION=`rpm --version | sed "s/^.* \([0-9]\)\.\/1/"`
```

Facebook® Account Sign Up

Ad See What You've Missed From Friends A

Facebook®

Open

He/she provided a patch: [checkinstall-1.6.2.patch_for_RHEL6-x86_64](#).

Another fix, for Fedora 17, x86_64

A user reported that for Fedora 17, x86_64, a line had to be changed in checkinstall-1.6.2/installwatch/Makefile:

```
line 14, from:
LIBDIR=$(PREFIX)/lib
to
LIBDIR=$(PREFIX)/lib64
```

Another user reported that this fix was also required for Fedora 15, x86_64. The error message he got when running checkinstall:
 ERROR: ld.so: object '/usr/local/lib64/installwatch.so' from LD_PRELOAD cannot be preloaded: ignored.

Another checkinstall issue is described in [this tip](#).

[← back to notes and tips index](#)

Please do not copy the text of this tip (© Patrick Min) to your web site.