

RcppClassic: Deprecated Rcpp API

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This document presents the **RcppClassic** package. This package has been factored out of **Rcpp** (Eddelbuettel and François, 2011, 2013) and only contains code that is considered deprecated.

This package is released for the sole purpose of allowing package authors that are still using the classic **Rcpp** API to keep their package buildable. This document explains the changes needed in a package to use both the current and classic Rcpp APIs.

1 If you must use RcppClassic

A few changes are needed in packages that want to use the classic Rcpp API that is contained in RcppClassic. RcppClassic contains a sample package called RcppClassicExample that can be used as a template.

1.1 The DESCRIPTION file

The client package must declare that it depends on both Rcpp and RcppClassic, in the Depends field and the LinkingTo field, so it must contain this:

```
Depends: RcppClassic, Rcpp
LinkingTo: RcppClassic, Rcpp
```

1.2 Makevars

The Makevars file must be updated so that user libraries for both Rcpp and RcppClassic are used:

```
PKG_LIBS = `${R_HOME}/bin/Rscript -e "Rcpp:::LdFlags()"` \
           `${R_HOME}/bin/Rscript -e "RcppClassic:::LdFlags()"`
```

1.3 Makevars.win

The Makevars.win must also be updated for the same reason:

```
PKG_LIBS = $(shell "${R_HOME}/bin/${R_ARCH_BIN}/Rscript.exe" -e "Rcpp:::LdFlags()")
PKG_LIBS += $(shell "${R_HOME}/bin/${R_ARCH_BIN}/Rscript.exe" -e "RcppClassic:::LdFlags()")
```

1.4 include RcppClassic.h instead of Rcpp.h

Finally, all instances of this line :

```
#include <Rcpp.h>
```

need to be replaced by:

```
#include <RcppClassic.h>
```

2 You should not use RcppClassic

The previous section discusses the set of changes required to update a package so that it uses the classic API from RcppClassic since it has been removed from Rcpp.

We do, however, recommend that package authors stop using the classic API, which is largely superseded by the current Rcpp API, in terms of performance, design, maintainance and ease of use.

References

Dirk Eddelbuettel and Romain François. Rcpp: Seamless R and C++ integration. *Journal of Statistical Software*, 40(8):1–18, 2011. URL <http://www.jstatsoft.org/v40/i08/>.

Dirk Eddelbuettel and Romain François. *Rcpp: Seamless R and C++ Integration*, 2013. URL <http://CRAN.R-Project.org/package=Rcpp>. R package version 0.10.4.