

# Quick R Package

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## Overview

We will create the QuickPackage R package:

1. Create a dummy function to come into the package
2. Create the package structure
3. Update the package content
4. Build/check/install
5. Enjoy!

```
> ## This is the dummy function that will return  
> ## information about our 'QuickPackage'  
> qpf <- function()  
+   packageDescription("QuickPackage")
```

```
> ## This creates the package template  
> package.skeleton("QuickPackage", list = c("qpf"))
```

QuickPackage structure:

```
QuickPackage/  
|-- DESCRIPTION  
|-- man  
|   |-- qpf.Rd  
|   `-- QuickPackage-package.Rd  
|-- NAMESPACE  
|-- R  
|   `-- qfd.R  
`-- Read-and-delete-me
```

- ▶ Read and delete `Read-and-delete-me`
- ▶ Update `DESCRIPTION`
- ▶ Write a proper package documentation file or delete it (this is the only optional documentation) and update the man page for `qpf` (see next slide)

```
\name{qpf}
\alias{qpf}
\title{ A test function }
\description{
  Returns package information.
}
\usage{
qpf()
}
\value{
An object of class packageDescription.
}
\examples{
qpf()
}
```

In a terminal:

1. Build the package with  
R CMD build QuickPackage
2. Check the package with  
R CMD check QuickPackage\_1.0.tar.gz
3. If any, fix errors and warnings and repeat steps 1 and 2.
4. Install the package with  
R CMD INSTALL QuickPackage\_1.0.tar.gz



```
> library("QuickPackage")  
> qpf()
```

Package: QuickPackage

Type: Package

Title: A quick and mini R package

Version: 1.0

Author: Laurent Gatto <lg390@cam.ac.uk>

Maintainer: Laurent Gatto <lg390@cam.ac.uk>

Description: Mini intro on building R packages.

License: GPL-2

Packaged: 2012-07-07 11:10:40 UTC; lgatto

Built: R 2.16.0; ; 2012-07-07 11:10:48 UTC; unix

-- File: /home/lgatto/R/x86\_64-unknown-linux-gnu-library/2.

## References

- ▶ Writing R Extensions, R Development Core Team, (get it with `help.start()`)

> `toLatex(sessionInfo())`

- ▶ R Under development (unstable) (2012-06-21 r59599), x86\_64-unknown-linux-gnu
- ▶ Locale: LC\_CTYPE=en\_GB.UTF-8, LC\_NUMERIC=C, LC\_TIME=en\_GB.UTF-8, LC\_COLLATE=en\_GB.UTF-8, LC\_MONETARY=en\_GB.UTF-8, LC\_MESSAGES=en\_GB.UTF-8, LC\_PAPER=C, LC\_NAME=C, LC\_ADDRESS=C, LC\_TELEPHONE=C, LC\_MEASUREMENT=en\_GB.UTF-8, LC\_IDENTIFICATION=C
- ▶ Base packages: base, datasets, graphics, grDevices, methods, stats, tools, utils
- ▶ Other packages: cacheSweave 0.6-1, codetools 0.2-8, filehash 2.2-1, formatR 0.5, highlight 0.3.2, parser 0.0-15, pgfSweave 1.3.0, QuickPackage 1.0, Rcpp 0.9.12, stashR 0.3-5
- ▶ Loaded via a namespace (and not attached): digest 0.5.2, tikzDevice 0.6.2