

# Package ‘RApiSerialize’

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**Type** Package

**Title** R API Serialization

**Version** 0.1.4

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**Description** Access to the internal R serialization code is provided for use by other packages at the C function level by using the registration of native function mechanism. Client packages simply include a single header file RApiSerializeAPI.h provided by this package. This packages builds on the Rhpc package by Ei-ji Nakama and Junji Nakano which also includes a (partial) copy of the file src/main/serialize.c from R itself. The R Core group is the original author of the serialization code made available by this package.

**URL** <https://github.com/eddelbuettel/rapiserialize>,  
<https://dirk.eddelbuettel.com/code/rapiserialize.html>

**BugReports** <https://github.com/eddelbuettel/rapiserialize/issues>

**License** GPL (>= 2)

**NeedsCompilation** yes

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## Description

This package provides other packages with access to the internal R serialization code. Access is provided at the C function level via the registered function facility

For convenience and testing purposes, two wrapper functions are also provided at the R level.

## Usage

```
serializeToRaw(obj, version=2, xdr=TRUE)
unserializeFromRaw(obj)
```

## Arguments

obj	An R object which is going to (un)serialized by the corresponding function.
version	An integer selection the R serialization format. Default is 2, and values 2 or 3 are currently supported.
xdr	A logical value selection (portable) XDR encoding which is the default. Use FALSE for speed-up suitable for common little-endian system at a loss of portability.

## Details

The C code in this package is taken from R source code, where it provided for use by R only in a way that renders it inaccessible to other packages.

This package aims to fill this gap by providing access to the same functionality, at the cost of making a copy.

To use the serialization and deserialization code provided here, a client package simply adds `LinkingTo: RApiSerialize` in its DESCRIPTION file and includes the header file `RApiSerializeAPI.h`.

## Author(s)

Dirk Eddelbuettel put together this package, based on earlier work by Ei-ji Nakama and Junji Nakano who also included the C code from R for serialization in their **Rhpc** package. R Core wrote the underlying C code for use in R itself.

The package is maintained by Dirk Eddelbuettel.

## See Also

The R source code in `src/main/serialize.c`.

## Examples

```
## calling the R wrapper
serializeToRaw(letters)
```

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