

Package ‘r2c’

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Title R to C compiler

Author Simon Urbanek <Simon.Urbanek@r-project.org>

Maintainer Simon Urbanek <Simon.Urbanek@r-project.org>

Depends R (>= 1.9.0)

Description Simple compiler that compiles (a subset/variation of) the R language into C. Currently it is very experimental and limited, intended for experiments with the language rather than real use.

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URL <http://www.rforge.net/r2c/>

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r2c	<i>R to C compiler</i>
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Description

r2c compiles supplied expression or code into C

Usage

```
r2c(what, code.only = FALSE)
```

Arguments

what	expression or character string (which will be parsed) to compile
code.only	if set to TRUE then the compilation stops with C code.

Details

The current implementation of the compiler is very experimental and ignores some aspects of the language. The goal is to produce as fast code as possible, so it may be cutting some corners. The long-term goal is to fall-back to the interpreter in parts that cannot be compiled (e.g. `eval`) with corresponding warnings that allow you to make your code more efficient.

The compiler uses several optimization techniques to optimize for speed and it inlines all functions where possible.

Again, the current state is pre-alpha, pure experimental to find out how far a native compilation can get. The speedup is really impressive on the simple examples tested so far.

Value

if `code.only` is `TRUE` then the function returns the actual C code as a string. Otherwise a call to the native function is returned. By default the result is a native function (if the R version supports it), otherwise it is an external call.

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*Topic **interface**

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