

Go social coding!  
Make open source more open!

Yihui Xie<sup>1</sup>

Department of Statistics, Iowa State University

June 13, 2012

---

<sup>1</sup>Lightning talk at useR! 2012, Vanderbilt University, Nashville, TN 

## About me

- ▶ love open source
- ▶ author of 8 R packages (animation, knitr, formatR, Rd2roxygen, fun, iBUGS, MSG, R2SWF)
- ▶ love web design
- ▶ appearance equally important as content, so prefer cute interfaces

# Package development

- ▶ first R package (animation) in 2007
  - ▶ no version control in the beginning
  - ▶ R-Forge came out soon, so SVN
- ▶ R-Forge broken randomly
- ▶ SVN interface is ugly
- ▶ SVN vs GIT
- ▶ GitHub: <https://github.com/yihui>



# Browse source code

branch: **master**

Files

Commits

Branches **2**

Tags **6**

Downloads **27**

[knitr](#) / [R](#) / [hooks.R](#)



**yihui** 7 days ago default inline hook will round numbers according to `getOption('digits')`

3 contributors



100644 | 26 lines (23 sloc) | 0.957 kb

Edit this file

Raw

Blame

History

```
1 ## format a single inline object
2 .inline.hook = function(x) {
3   if (is.numeric(x)) x = round(x, getOption('digits'))
4   paste(as.character(x), collapse = ', ')
5 }
6 .out.hook = function(x, options) x
7 .plot.hook = function(x, options) paste(x, collapse = '.')
8
9 .default.hooks = list(
10  source = .out.hook, output = .out.hook, warning = .out.hook,
11  message = .out.hook, error = .out.hook, plot = .plot.hook,
12  inline = .inline.hook, chunk = .out.hook
13 )
14
15 #' Hooks for R code chunks, inline R code and output
16 #'
17 #' A hook is a function of a pre-defined form (arguments) that takes values of
18 #' arguments and returns desired output. The object \code{knitr_hooks} is used to
19 #' access or set hooks in this package.
20 #' @export
21 #' @references Usage: \url{http://yihui.name/knitr/objects}
```

# Diff in commits

isn't it stupid to `diff()` the results of `cumsum()`?!



yihui authored 4 days ago

1 parent [8fe11d149c](#) commit 8:

Showing 1 changed file with 2 additions and 3 deletions.

[R/concordance.R](#)

R/concordance.R

```
... .. @@ -37,9 +37,8 @@ concord_gen = function(infile, outfile) {
37 37     }
38 38
39 39     # generate data structure
40     - linesout = cumsum(steps)
41     - vals = rle(diff(linesout))
42     - vals = c(linesout[1L], as.numeric(rbind(vals$lengths, vals$values)))
40     + vals = rle(steps)
41     + vals = c(steps[1L], as.numeric(rbind(vals$lengths, vals$values)))
43 42     concordance = paste(strwrap(paste(vals, collapse = " "), collapse = "%\n")
44 43
45 44     # build record
```

# GitHub issues

20 open issues 11 closed issues Submitted Updated Comments

Close Label Assignee Milestone

- #269 **partially evaluate chunks** Feature  
by yihui 3 days ago
- #267 **Options for external chunks** Feature  
by imv 4 days ago 3 comments
- #264 **Different color for error and warning messages** Feature  
by muelleki 10 days ago 10 comments
- #252 **knitr support in other editors (Emacs/ESS/Vim/Eclipse...)** Feature  
by yihui 18 days ago 8 comments
- #251 **Rendering of other languages** TODO  
by fonnesbeck 18 days ago 1 comment
- #247 **upload to photobucket.com?** Feature  
by yihui 20 days ago 1 comment
- #246 **adjust the table; image size**  
by cloudy 20 days ago 3 comments
- #239 **knitr and comments** Feature  
by jamiefolson 25 days ago 1 comment

# Discussion under issues



barryrowlingson opened this issue 17 days ago

## cache error

No one is assigned

Milestone: **v0.6**



Another randomly occurring cache error:

```
Error in process_file(text) :  
  Quitting from lines 58-60: Error in exists(str_c(".", hash), envir = globalenv(), mode = "character") :  
  internal error -3 in R_decompress1
```

removing the cache/{chunk}.\* files for the chunk being processed at the time clears it, but invalidates all the cached things dependent on those...

But the error comes back soon...

3 participants



**MatthieuStigler** commented

17 days ago

Maybe a different issue... maybe related...

I am also encountering many problems with the cache when used with Lyx. Basically, whatever change is done, lyx will



# Discussion under code lines

```
R/block.R View file @ c99ae83  
... ... @@ -136,7 +136,7 @@ block_exec = function(params) {  
136 136     if (options$fig.show == 'hold') res = c(res[!figs], res[figs]) # move to the end  
137 137     res = Filter(function(x) {  
138 138         ## filter out plot objects purely for layout (raised by par(), layout())  
139 -     !is.recordedplot(x) || !all(plot_calls(x) %in% c('par', 'layout'))  
+     !is.recordedplot(x) || !all(plot_calls(x) %in% c('par', 'layout', '.External2'))  
140 140     }, res)  
141 141     figs = sapply(res, is.recordedplot)  
142 142     if (sum(figs) > 1) {
```

## 2 notes on commit c99ae83

Show line notes below



**bbocker** commented on c99ae83

5 days ago

It works on r-devel for me. woo-hoo!



**yihui** commented on c99ae83

5 days ago

thanks! fortunately it is not a terribly hard fix :)

# Pull requests

Closed yihui merged 1 commit into yihui:master from rstudio:master

Closed yihui merged 1 commit into yihui:master

Discussion

Commits 1

Diff 1

Discussion

Commits 1

Diff 1



jjallaire opened this pull request 3 months ago

## write concordance using sweave format

No one is assigned

Figured out how to take your data structure and write a sweave-compatible. Both error navigation and syntax work great.

2 participants



jjallaire added some commits

bd7542f write concordance using sweave format



yihui commented

Wow, that is super cool! Thanks a lot!

Showing 1 changed files with 17 additions and 2 deletions.

[R/concordance.R](#)



R/concordance.R

```
... ... @@ -29,6 +29,21 @@ concord_gen = function
29 29     c(rep(1L, o[k] - 1L), i[k] - o[k]
30 30     })
31 31   }
32 32   - file = str_c(file_path_sans_ext(file),
33 33   - writeLines(str_c(cumsum(steps), seq_al
32 +
33 + # generate data structure
34 + linesout <- cumsum(steps)
35 + vals <- rle(diff(linesout))
36 + vals <- c(linesout[1L], as.numeric(rbi
37 + concordance <- paste(strwrap(paste(val
38 + collapse = " %\n"
39 +
40 + # build record
41 + inputFile <- str_c(file_path_sans_ext(
42 + output <- paste("\\Sconcordance{concor
43 + inputFile, ":", "%\n",
44 + sep = "")
```

[Home](#)[Pages](#)[Wiki History](#)[Git Access](#)

## Home

[New Page](#)[Edit Page](#)[Page History](#)

### 1. Installation

To install from CRAN, use

```
install.packages('formatR')
```

To install the development version from GitHub, use

```
install.packages('devtools')
library(devtools)
install_github('formatR', 'yihui')
```


This page is always based on the development version.


### 2. Reformat R code

The `formatR` package was designed to reformat R code to improve readability; the main workhorse is the function `tidy.source()`. Features include:

- long lines of code and comments are reorganized into appropriately shorter ones
- spaces and indent are added where necessary
- comments are preserved in most cases

# Stay tuned

 Pull Request

 Unwatch

169

 Fork

36

News Feed

Your Actions



**yihui** commented on [issue 268](#) on [yihui/knitr](#) 6 hours ago



This is done now. See below for an example:

<https://github.com/yihui/knitr/blob/master/inst/examples/child/knitr-main.Rmd>

[https://github.com/yihui/...](https://github.com/yihui/)



**yihui** created tag **v0.6** at [yihui/knitr](#) 6 hours ago



**yihui** created tag **v0.5** at [yihui/knitr](#) 6 hours ago



**yihui** pushed to master at [yihui/knitr](#) 6 hours ago



[1fa80c5](#) bump version to 0.6; ready for CRAN



[8dd91a5](#) re-roxygenize



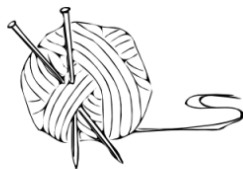
[6935165](#) need to set out.format for `eclipse_theme()` to work

[13 more commits](#) »

[Home](#)[Objects](#)[Options](#)[Hooks](#)[Patterns](#)[Demos](#)

# knitr

Elegant, flexible and fast  
dynamic report generation with R



---

## Overview

---

The **knitr** package was designed to be a transparent engine for dynamic report generation with R, solve some long-standing problems in Sweave, and combine features in other add-on packages into one package (**knitr**  $\approx$  Sweave + cacheSweave + pgfSweave + weaver + animation::saveLatex + R2HTML::RweaveHTML + highlight::HighlightWeaveLatex + 0.2 \* brew + 0.1 \* SweaveListingUtils + more).

# Twitter/Google+/Hashtags/Google Alerts

## Results for #knitr



### Tweets Top / All



**Yihui Xie** @xieyihui

9 Jun

got an @OpenCPU app working: [github.com/yihui/knitr/bl...](https://github.com/yihui/knitr/blob/master/README.md) (knit in the cloud!) #knitr v0.6 is almost ready; testing needed [github.com/yihui/knitr](https://github.com/yihui/knitr)

Expand



**klr** @timelyportfolio

8 Jun

Timely Portfolio: #knitr Performance Report 4 [timelyportfolio.blogspot.com/2012/06/knitr-...](http://timelyportfolio.blogspot.com/2012/06/knitr-...) #rstats and #knitr fun on a friday afternoon

Expand



**Shreyas Karnik** @shreyu86

4 Jun

Awesome! RT: @rstudioapp: New blog post: Announcing RPubs, A New Web Publishing Service for R [is.gd/IU0o42](https://is.gd/IU0o42) #rstats #rstudio #knitr

Expand ← Reply ↻ Retweet ★ Favorite

# Conclusions

- ▶ put everything under the sun (i.e. in the browser)
- ▶ convenient discussions
- ▶ quick feedback (@, # and + can be good friends)