2piQA update

Subject: 2piQA update
From: Paul Gilbert <pgilbert@ncf.ca>
Date: 2017-06-21 12:19 PM
To: John Nash <nashjc@uottawa.ca>

John

I am away the next few days before you leave, so here is an update on my 2piQA project. I hope you might get a chance to talk about it a bit at your UseR session.

Attached are the two most interesting screen shots from my old presentation which I sent you a few weeks ago. QA1.png is the top of the main page. The banner is a drop down to a two letter index into the display of package results on the page below the banner. (Two letters seems good for 10,000 packages. I'm not sure if it will work for 100, 000.) A3 was the first package on CRAN when I did this, and abc the second.

(BTW, one of possible results is an alternate mechanism to cull broken packages from CRAN, so exponential growth in the number of packages might not continue if this project is successful.)

The OSes the tests were run on are listed on the left below the package names. My old system used make and my own "server farm" to run the tests, but OSes would hopefully be Linux flavors, Mac, Windows, ...

SelfTest are the tests stripped out of a package source.

Dropping down >ds jumps to dse which is the package I used for experimenting. That is the second attached screenshot QA-dse1.png. It shows results for tests which might be contributed by people other than the package author. 2ndSnippet has two tests which both pass and 1stSnippetTest has four test, one of which passes. The package author can contribute information that displays failure as orange (recognized bug) or blue (feature request). Otherwise they display as red.

There are other pages that allow users to see individual snippets tests and results on each OS.

The idea is that a snippet would belong to someone other than a package author, likely a serious package user. A large number of snippets suggests that the package is widely used, and the colours give some indication of problems or not.

After my presentation at SSC in 2013 I put the project on hold for three reasons.

The first was that I needed to provided and manage a "server farm" or get volunteers to do that, so I wanted to wait until the continuous build technologies evolved and I had time to experiment with leveraging that. In the last few weeks I think I have figured out how to run the tests with github and Travis, at least for Linux and in theory for OSX, but there are still several rough edges. (I am really a newbie with git and Travis.)

The second was that I need to manage snippet contributions and allow the owner of snippets to edit them. My earlier system would have involved a web site with users and passwords, etc. I had a website framework that would have done that, but understanding and doing it required a fair amount of time and has implications for a long term management effort. My hope is that I might leverage github in some way (submodules?), but I have not figured this out. I think this is the main remaining technical hurdle.

The third is that it will require a long term effort and I am not prepared to do it without having other people involved. My expectation is that day-to-day operations will be automated, I would not proceed otherwise, but there do need to be people prepared and able to do things occasionally. Please try to get some indication of interest at UseR. I don't really see much point in putting in more effort myself if there is no interest from a wider community.

Best,
Paul

QA1.png

2piQA a b c d e f g h i j k l m n o p
q r s t u v w x y z

testing R-3.0.1 . If snippet details indicate an older R then tests with this version have not yet been run.

━━━ tests fail or no tests; ━━━ tests fail, recognized bug; ━━━ tests fail, feature request; ━━━ tests pass; ━━━ no server with resources to test.
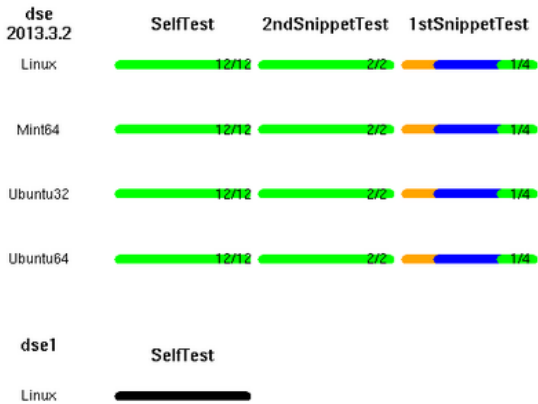
A3

SelfTest

Linux ━━━ 0/0

Mint64 ━━━

Ubuntu32 ━━━

Ubuntu64 ━━━ 0/0

abc

SelfTest

Linux ━━━ 0/0

Mint64 ━━━

QA-dset.png

dse
2013.3.2

SelfTest   2ndSnippetTest   1stSnippetTest

Linux ━━━ 12/12   ━━━ 2/2   ━━━ 1/4

Mint64 ━━━ 12/12   ━━━ 2/2   ━━━ 1/4

Ubuntu32 ━━━ 12/12   ━━━ 2/2   ━━━ 1/4

Ubuntu64 ━━━ 12/12   ━━━ 2/2   ━━━ 1/4

dse1

SelfTest

Linux ━━━

Attachments:

QA1.png	24.5 KB
QA-dse1.png	21.8 KB