

Package ‘params’

August 14, 2015

Type Package

Title Simplify Parameters

Description An interface to simplify organizing parameters used in a package, using external configuration files.

This attempts to provide a cleaner alternative to options().

Version 0.2.4

Date 2015-08-13

Depends whisker

Imports knitr,
utils

Suggests openxlsx

URL <https://github.com/sahilseth/params>

BugReports <https://github.com/sahilseth/params/issues>

License GPL-2

R topics documented:

load_opts	1
opts	3
parse_opts	3
read_sheet	4
write_sheet	4

Index

5

load_opts	<i>Setting/loading and extracting various options into the environment</i>
-----------	--

Description

- set_opts(): set options into a custom envir
- get_opts(): extract options
- load_opts(): Read a tab delimited file using `read_sheet` and load them as options using `set_opts`
- new_opts(): create a options manager to be included in a pacakge
- print.opts(): print pkg options as a pretty table

Usage

```
load_opts(x, check = TRUE, envir = opts, verbose = TRUE, ...)

get_opts(x, envir = opts)

set_opts(..., .dots, envir = opts)

## S3 method for class 'opts'
print(x, ...)

new_opts(envir = new.env())
```

Arguments

x	<ul style="list-style-type: none"> • get_opts: a character vector of names of options to extract. • load_opts: path to a configuration file
check	load_opts(): in case of a configuration file, whether to check if files defined in parameters exists..
envir	environ used to store objects
verbose	load_opts() be chatty ?
...	set_opts(): a named set of variable/value pairs seperated by comma
.dots	set_opts(): A named list, as a alternative to ...

Details

Integrating params in a package:: ## create a options manager: `opts_mypkg = new_opts()`
 The object `opts_mypkg` is a list of a few functions, which set, fetch and load options in a isolated environment. Here are a few examples of how you might really use them:

```
## Set some options: opts_mypkg$set(version = '0.1', name = 'mypkg')
## Fetch ALL options: opts_mypkg$get() OR opts_mypkg$get("version")
```

Loading configuration files, `load_opts()` OR `opts_pkg$load()`:: There are cases when options and params are actually paths to scripts or other apps or folders etc. In such cases it might be useful to quickly check if these paths exists on the system. As such `load_opts()` automatically checks params ending with path|dir|exe (if `check=TRUE`).

Below is a list example options, retrieved via

```
get_opts():
|name      |value      |
|:-----:|:-----|
|default_regex |(.*)      |
|my_conf_path |~/flowr/conf   |
|my_dir     |path/to/a/folder |
|my_path    |~/flowr      |
|my_tool_exe|/usr/bin/ls    |
```

See Also

[read_sheet](#)
[read_sheet](#) [load_opts](#)

Examples

```
## set_opts
opts = set_opts(flow_run_path = "~/mypath")
#OR
opts = set_opts(.dots = list(flow_run_path = "~/mypath"))

print(opts)

## get_opts()
get_opts()
get_opts("flow_run_path")

## create a options manager:
opts_mypkg = new_opts()
opts_mypkg$set(version = '0.1', name = 'mypkg')
opts_mypkg$get()
```

opts	<i>default opts</i>
------	---------------------

Description

default opts

Usage

opts

Format

<environment: 0x7f97b416f780>

parse_opts	<i>parse_opts</i>
------------	-------------------

Description

parse_opts

Usage

parse_opts(lst)

Arguments

lst	a list of configuration options to parse
-----	--

<code>read_sheet</code>	<i>read_sheet</i>
-------------------------	-------------------

Description

Auto detect file type, read it and clean it.

Usage

```
read_sheet(x, id_column, start_row = 1, sheet = 1, ext, header = TRUE,
verbose = FALSE, ...)
```

Arguments

<code>x</code>	path to a file, to be read
<code>id_column</code>	all rows which have this column as blank are skipped. See details.
<code>start_row</code>	supplied to read.xlsx
<code>sheet</code>	supplied to read.xlsx, index or name of the sheet to be read from excel file
<code>ext</code>	determined using file extention. Specifying will override
<code>header</code>	first line is header?
<code>verbose</code>	be chatty?
<code>...</code>	passed onto read.xlsx of openxlsx, read.table of read.csv2 depending on the file type.

Details

If `id_column` is missing, default if first column

<code>write_sheet</code>	<i>A simple wrapper around write.table with some sugar.</i>
--------------------------	---

Description

A simple wrapper around `write.table` with some sugar.

Usage

```
write_sheet(x, file)
```

Arguments

<code>x</code>	a <code>data.frame</code>
<code>file</code>	output file

Index

*Topic **datasets**
 opts, [3](#)

 get_opts (load_opts), [1](#)
 load_opts, [1](#), [2](#)
 new_opts (load_opts), [1](#)
 opts, [3](#)
 params, [2](#)
 params (load_opts), [1](#)
 parse_opts, [3](#)
 print.opts (load_opts), [1](#)

 read_sheet, [1](#), [2](#), [4](#)
 set_opts, [1](#)
 set_opts (load_opts), [1](#)

 write_sheet, [4](#)