

rCharts



<http://rcharts.io>

rCharts is an R package to create, customize and publish interactive javascript visualizations from R using a familiar lattice style plotting interface. It has been created by [Ramnath Vaidyanathan](#). See more here: <http://rcharts.io/>

Below you will find a series of examples of nice charts using **rCharts** and the corresponding javascript library used in each case.

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Introduction

For these examples to work in a website, you need to change the location of the library they look for. By default they are set to use the library included in the R package rCharts, but the webserver usually can't access directly those libraries, since they are out of its reach. To avoid this issue, we can create an alias in the apache configuration for the website.

You need to open the apache configuration file, which might be located at `/etc/apache2/sites-enabled/000-default` (adapt to your case)

Command to open the file for edition in a shell as root

```
nano /etc/apache2/sites-enabled/000-default
```

If you have Apache 2.2 (e.g. in Ubuntu 12.04 servers):

Portion to add to `/etc/apache2/sites-enabled/000-default` or equivalent for your site with Apache 2.2

```
Alias /rcharts_libraries/ "/usr/local/lib/R/site-library/rCharts/libraries/" <Directory "/usr/local/lib/R/site-library/rCharts/libraries/"> Options All AllowOverride All Order allow,deny Allow from all </Directory>
```

If you have Apache 2.4 (e.g. in Ubuntu 12.04 servers):

Portion to add to `/etc/apache2/sites-enabled/000-default` or equivalent for your site with Apache 2.4

```
Alias /rcharts_libraries/ "/usr/local/lib/R/site-library/rCharts/libraries/" <Directory "/usr/local/lib/R/site-library/rCharts/libraries/"> Options All AllowOverride All #Order allow,deny #Allow from all Require all granted </Directory>
```

Then you can save it (-+Ctrl+X+- in nano editor)

The whole configuration file for the site should look like the example below in Apache 2.4 (adapt it to your case):

Example of configuration file for the website

```
<VirtualHost *:80> ServerAdmin webmaster@example.com DocumentRoot /var/www <Directory /> Options FollowSymLinks
AllowOverride None </Directory> <Directory /var/www/> Options Indexes FollowSymLinks MultiViews AllowOverride All #
Order allow,deny Satisfy Any #Order allow,deny #Allow from all Require all granted </Directory> Alias /rcharts_libraries/
"/usr/local/lib/R/site-library/rCharts/libraries/" <Directory "/usr/local/lib/R/site-library/rCharts/libraries/"> Options All
AllowOverride All #Order allow,deny #Allow from all Require all granted </Directory> ScriptAlias /cgi-bin/ /usr/lib/cgi-bin/
<Directory "/usr/lib/cgi-bin"> AllowOverride None Options +ExecCGI -MultiViews +SymLinksIfOwnerMatch #Order
allow,deny #Allow from all Require all granted </Directory> ErrorLog ${APACHE_LOG_DIR}/error.log # Possible values
include: debug, info, notice, warn, error, crit, # alert, emerg. LogLevel warn CustomLog ${APACHE_LOG_DIR}/access.log
combined </VirtualHost>
```

Then restart the webserver (adapt to your case):

Command to restart apache2 in GNU/Linux boxes as root

```
service apache2 restart
```

At this time you can already use the javascript and css files provided in the package rCharts from your R scripts in Tiki, with the base url http://example.com/rcharts_libraries/

Tweaks for Apache 2.4

If you have the webserver Apache 2.4 (likely if you have Ubuntu 13.10 Saucy, for instance), the you need to adjust your vhost:

First: +/- on Options:

Some Options parameters needs the +/- syntax. [Read more here](#). This might be especially important when mixing +/- on some directives (read the previous link to see more).

Change:

```
Options Indexes FollowSymLinks MultiViews
```

to:

```
Options +Indexes +FollowSymLinks +MultiViews
```

1.1.1.1.2. Second: Allow/Deny

Apache now does access control via [mod_authz_host](#)

Change:

```
Order allow,deny Allow from all
```

to:

```
Require all granted
```

Some more info here on [upgrading from Apache 2.2 to 2.4](#).

Examples

- [r_test09_rcharts_512paths](#)
- [r_test09_rcharts_highcharts](#)
- [r_test09_rcharts_leaflet](#)
- [r_test09_rcharts_morris](#)
- [r_test09_rcharts_nvd3](#)
- [r_test09_rcharts_polychart](#)
- [r_test09_rcharts_rickshaw](#)
- [r_test09_rcharts_xcharts](#)

Credits

Most of the implementation in **rCharts** seems to be inspired by [rHighcharts](#) and [rVega](#). The author have reused some code from these packages verbatim, and would like to acknowledge the efforts of its corresponding author [Thomas Reinholdsson](#).

License

rCharts is licensed under the MIT License. However, the Polycharts JavaScript library that is included in this package is not free for commercial use, and is licensed under Creative Commons 3.0 Attribution & Non-commercial. Read more about its license at <http://polychart.com/js/license>.