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**Sample wiki page with R code and chart generated**

```r
require(gvisVis)
M <- gvisMotionChart(Fruits, "Fruit", "Year", options = list(width = 550, height = 450))
print(M,"chart()")
```

---

**Simple syntax highlighted & preview**

*Note: Remember that this is only a preview, and has not yet been saved!*

1. **Text output**

   This code:
   ```r
   (R())1:10(R)
   ```

   Produces:
   ```r
   [1] 1 2 3 4 5 6 7 8 9 10
   ```
Escaping Wiki syntax

```{r}
# hello
```

**Parsing Wiki Syntax**

```{r}
# hello
```

**Simple Interface: list runs/datasets**

![List raw datasets table](image)

- **Sample dataset**: This dataset was created as part of the sample data for r_test.
  - **From user**: admin
  - **Dataset value for axis X**: 1
  - **Minimum value for axis X**: 10
  - **LastModified**: 2013-08-30 17:37

- **We are working on this dataset**: This will soon be changed.
  - **From user**: admin
  - **Dataset value for axis X**: 21
  - **Minimum value for axis X**: 30
  - **LastModified**: 2012-05-11 16:57

- **A really old dataset**: This dataset is outdated.
  - **From user**: admin
  - **Dataset value for axis X**: 100
  - **Minimum value for axis X**: 110
  - **LastModified**: 2012-05-11 16:57
Simple interface: Results for one run/dataset

Results

Values for X:
min: 1
max: 10

Those are the results:

Results from 1*10: 10
No attachment to display in this raw dataset

Graph with xmin 1 & xmax 10 and y=x^2

Simple templates for custom output

Describe the change you made: ☑

Monitor this page: ☑
Flexible databases in Trackers to hold run parameters

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Type</th>
<th>List Title</th>
<th>Search Public</th>
<th>Mandatory</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Summary</td>
<td>Text Field</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>2</td>
<td>Description</td>
<td>Text Area</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>3</td>
<td>From user</td>
<td>User Selector</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>4</td>
<td>Dataset file</td>
<td>Attachment</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
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<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

Save All  Go

Add Field

Optional pop up helpers to edit plugin calls based on GUI

1. Basic input

RR (R syntax also)

Same as PluginR, but allowing the execution of potentially dangerous commands once the admin has validated.

- **echo**
  - **Yes**
  - Show a code block with the R commands to be run before running them (similarly to the echo command)

- **wikisyntax**
  - **Yes**
  - Choose whether the output should be parsed as wiki syntax (Optional). Options: 0 (no parsing, default), 1 (parse)

- **LoadAndSave**
  - **Yes**
  - Load a previous R user session (.RData, if any) for the same wiki page so that R object will be used while you trackers are used (wiki pages with .Rmd), the R session data (.RData) will be shared for the same load/save action.

R Code

```r
if(require(Cairo)){
  install.packages("Cairo", repos="http://ftp.heanet.ie/mirrors/cran.r-project.org")
  x <- seq(1:10)
  y <- x^x
  plot(x,y)
}
```
Nice word clouds from just a few lines of R code

Custom maps with GoogleVis

```r
G5 <- gvisGeoMap(CiudadPopular, locationvar="Ciudad", numvar="Popular", options=list(region="ES", height=350, dataMode="markers", colors=[0xFF8747, 0xFFB51, 0x06000]))

# plot(G5)
print(G5, "chart")
```

Spanish city popularity after UseR!2013 ;-)
Embedded plot.ly charts
Fun with the Lognormal distribution

Embedded plot.ly charts: Heatmaps
Custom output for higher control on figure results (pdf)

```r
10 device.height = convertHeight(sum(g[['heights']]), "in", valueOnly=TRUE)
11 pdf("testr.pdf", height = device.height)
12 grid.draw(g)
13 invisible(dev.off())
```

Mobile display mode when needed

bigger font size and buttons for human fingers in mobile devices

**rCharts**

*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/](http://rcharts.io/)

Below you will find a series of examples of nice charts using *rcharts* [http://rcharts.io](http://rcharts.io) and the corresponding javascript library used in each case.

**Page contents:**

- Introduction
- Examples
- Credits
- License
rCharts Interactive figures: NYT 512 Paths to White House

Obama has 106 ways to win
83% of paths

Romney has 18 ways to win
14% of paths

if Obama wins North Carolina...

If Obama wins North Carolina...

and Wisconsin...

Obama wins.

rCharts: show data on hover & control vars. displayed

Toggle display of variables by clicking on them in legend
rCharts: Easy creation of georeferenced custom maps

```r
code
map3 <- Leaflet$new()
m3$setView(c(51.505, -0.09), zoom = 13)
m3$marker(c(51.5, -0.09), bindPopup = "Hi. I am a popup")
m3$marker(c(51.495, -0.083), bindPopup = "Hi. I am another popup")
map3$add.borderColor("#ff0000")
map3$save("map3.html")
```

---

rCharts: Interactive magnification of figure regions

```r
code
n2 <- nPlot(Sepal.Length ~ Sepal.Width, data = sepal, type = "scatterChart",
group = "Species")
n2$xAxis(axisLabel = "Sepal.Width") # add x axis label
n2$yAxis(axisLabel = "Sepal.Length")
n2$print("nvd3Scatter")
n2$setRegion("Magnify")
```

---

![Map with popups](image1)

![Scatter plot with magnification region](image2)
rCharts: Select time range on X and vars on Y

move slider ends on X axis to filter on new time frame and toggle variables clicking on legend

Clickme: Interactive filtering charts by point names

Show names (500)

Show one

Groups

A (168)
B (165)
C (167)
Clickme: highlight data points with partial filter match

INSIG2
Significance (-log10) 3.62
Fold-change (log2) -0.72
Probe A_33_P3321342
Groups Noise

Groups
- Noise (279)
- Significant (221)

Animation in time-based charts

Violent Crime Rate in Decade 1961-1970

Crime Rate: Low, Medium, High

Map of the United States:
- States color-coded based on crime rate
- Controls for animation speed and loop option
Ecoengine: distribution maps based on database records

Ecoengine: Photo viewer based on remote ecological data

<table>
<thead>
<tr>
<th>Photo</th>
<th>Authors</th>
<th>County</th>
<th>Notes</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bill</td>
<td>Big Sur, Monterey County</td>
<td></td>
<td>2010-11-01</td>
</tr>
<tr>
<td></td>
<td>Stagnaro</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>