

Using the R-GGobi Link

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Abstract

In this document, we describe some of the features of the R-GGobi link. We illustrate some of the common uses and the different functions to both query and modify the state of the GGobi. This serves as a form of a tutorial.

1 Getting Started

The first thing to do is create a ggobi instance. Each instance is associated with a particular dataset. There are two ways to create a ggobi instance. One is via the `ggobi` command (and `ggobi` will use the first available port). The other is via the `ggobiLink` package. The first takes a string, the second takes a matrix in R. The first takes a string, the second takes a matrix in R.

2

3 System Values

The representation of points or observations within a plot is controlled by its glyph. Each observation has its own glyph setting. This controls the type and size of glyph. (In the near future, these may be independently


```
plot4 <- scatterplotDescription("tars1", "tars2")  
plot5 <- scatmatrixDescription("tars1", "tars2", "head")
```

6.2 From Descriptions to Plots

To instantiate the descriptions into visible plots, one uses the `plotLayout`. By default, this creates a new

```
plotLayout(plot1, plotb, plotc, cells= t(gtkCells(3,2)[c(1,4,5),]),  
          display = dpy)
```

6.3 Nested/Container Plots

Session

dataset : : : dataset

display display

plot : plot plot : plot

9.2 getColors

9.3 getSelectedIndices

This needs attention to access the correct variable in the xgobi structure.

9.4 getNumGGobis

Returns the number of ggobi instances within this session. Each ggobi instance has its own data set. Of course, two instances may have the same dataset, but they are independent. We may allow them to be linked

9.11 `getActivePlot.ggobi`

9.12 `setActivePlot.ggobi`

9.18 getGlyphs.ggobi

9.30 `setDisplayOptions.ggobi`

This controls the characteristics of plots that are subsequently created within the specified ggobi instance. These control issues such as

- whether lines are drawn,
- lines are directed or undirected
- missing values are displayed,
- grid lines are drawn on the plot(s),
- axes are shown and/or centered,
- double buffering is used,
- the plot(s) are linked to others.

9.31 `setRowNames.ggobi`

This sets the observation identifiers for the specified rows in the ggobi instance dataset. These are used in identifying points within plots.