NAME

smyrna – interactive graph viewer

SYNOPSIS

smyrna [**–v?**] [*file*]

DESCRIPTION

smyrna is a viewer for graphs in the DOT format. It is especially designed to handle large graphs, and allows flat and topological fisheye views. It is assumed the input graph has position information associated with all nodes. Using the Graphviz convention, a node's position is given by its *pos* attribute consisting of 2 or 3 floating point numbers separated by commas. Nodes are drawn as points and edges as line segments.

If **smyrna** detects that the file contains *xdot* attributes, it will use this information when drawing nodes and edges.

smyrna supports panning and zooming; node and edge selection; setting and retrieving node and edge attributes, especially colors; and node movement. The Smyrna Settings dialogue box available under the Edit pull-down menu gives the user many choices for tailoring the graph view. These include whether or not nodes/edges are drawn; what labels are associated with nodes/edges; node size; transparency settings for nodes/edges; parameters associated with the topological fisheye view.

For the purposes of exploratory data analysis, **smyrna** provides access to the **gvpr** library. This allows the user to arbitrarily query, filter or manipulate a graph. When filtering or manipulating a graph, the user has the option of performing the changes directly on the input graph, or to create a new version with the changes.

OPTIONS

The following options are supported:

–v   Verbose mode.

–?   Print usage information.

By default, *gc* returns the number of nodes and edges.

OPERANDS

The following operand is supported:

file   Name of file containing a graph in DOT format. If no *file* operand is specified, the user can employ the File pull-down menu to select a file to be opened.

EXIT STATUS

The following exit values are returned:

0   Successful completion.

1   If no No appropriate OpenGL-capable visual found, or if the default attributes template graph file or the default attributes widget graph file could not be read.

FILES

smyrna relies on numerous support files. These are usually installed in the "share/graphviz/smyrna" directory below the installation root. The principal files are:

template.dot

A file in DOT format specifying the default **smyrna** settings. In particular, these are used to initialize the settings of the Smyrna Settings dialogue box.

mouse_actions.txt

A text file specifying the mapping of concrete mouse and keyboard events with **smyrna** actions such as panning and selecting.

attr_widgets.dot

A file in DOT format specifying the bindings between GUI widgets and **smyrna** parameters.

ENVIRONMENT VARIABLES

SMYRNA_PATH

allows a user to override the built-in path to the directory containing all of **smyrna**'s files described above.

AUTHOR

Arif Bilgin <arif@research.att.com>
Emden R. Gansner <erg@research.att.com>

SEE ALSO

gvpr(1), libcgraph(3)
"Smyrna Tutorial and Reference Manual"