

NAME

gvmap.sh – pipeline for running gvmap

SYNOPSIS

gvmap.sh [**-vV?**] [*options*] [**-o** *outfile*] [*files*]

DESCRIPTION

gvmap.sh takes as input a graph in DOT format, performs a layout, runs the output through gvmap and renders the output. At some point, it is hoped to integrate all of these tasks into gvmap.

OPTIONS

The following options are supported:

- a** *k* The integer *k* specifies the average number of artificial points added along the bounding box of the labels. Such artificial points are added to avoid a country boundary cutting through the boundary box of the labels. Computing time is proportional to *k*; hence, for large graphs, a small value of *k* is suggested. If *k* = -1, a suitable value of *k* is automatically selected based on the graph size. By default *k* = -1.
- K** *layout* specifies which program should be used for the initial layout. By default, *sfdp* is run. Also by default, the layout is passed the flag *-Goverlap=prism*. This can be overridden using a *-g* flag.
- T** *format* specifies the final output format. This works the same way as the *-T* flag for any Graphviz layout program.
- N** *attr=val* specifies the setting of a default node attribute during the rendering phase. This works the same way as the *-N* flag for any Graphviz layout program.
- G** *attr=val* specifies the setting of a graph attribute during the rendering phase. This works the same way as the *-G* flag for any Graphviz layout program.
- E** *attr=val* specifies the setting of a default edge attribute during the rendering phase. This works the same way as the *-E* flag for any Graphviz layout program.
- n** *attr=val* specifies the setting of a default node attribute during the layout phase. This works the same way as the *-N* flag for any Graphviz layout program.
- g** *attr=val* specifies the setting of a graph attribute during the layout phase. This works the same way as the *-G* flag for any Graphviz layout program.
- e** *attr=val* specifies the setting of a default edge attribute during the layout phase. This works the same way as the *-E* flag for any Graphviz layout program.
- A** *flag* specifies a flag to be passed to gvmap. For example, *gvmap.sh -Ae -As3* causes *gvmap -e -s3* to be run.
- v** Set verbose mode.
- V** Print version information and exit.
- ?** Print usage information and exit.

EXAMPLES

The following invocation creates a map with edges in semi-transparent light gray and nodes laid out using *sfdp*:

```
gvmap.sh -Ae -Ecolor=#55555522 -Tpng foo.gv > foo.png
```

It is equivalent to running the pipeline

```
sfdp -Goverlap=prism foo.gv | gvmap -e | neato -n2 -Ecolor=#55555522 -Tpng > foo.png
```

AUTHOR

Emden R. Gansner <erg@research.att.com>

SEE ALSO

gvmap(1), sfdp(1), neato(1), gvpr(1)

E. R. Gansner, Y. Hu, S. G. Kobourov, "GMap: Visualizing graphs and clusters as maps," Proc. Pacific Vis. 2010, pp. 201-208.