

**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
```

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**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.