

**NAME**

**unflatten** – adjust directed graphs to improve layout aspect ratio

**SYNOPSIS**

**unflatten** [**-f?**] [**-llen**] [**-clen**] [**-o outfile**] [*files*]

**DESCRIPTION**

**unflatten** is a preprocessor to **dot** that is used to improve the aspect ratio of graphs having many leaves or disconnected nodes. The usual layout for such a graph is generally very wide or tall. **unflatten** inserts invisible edges or adjusts the **minlen** on edges to improve layout compaction.

**OPTIONS**

The following options are supported:

- l** *len* The minimum length of leaf edges is staggered between 1 and *len* (a small integer).
- f** Enables the staggering of the **-l** option to fanout nodes whose indegree and outdegree are both 1. This helps with structures such as *a* -> {*w x y z*} -> *b*. This option only works if the **-l** flag is set.
- c** *len* Form disconnected nodes into chains of up to *len* nodes.
- o** *outfile* causes the output to be written to the specified file; by default, output is written to **stdout**.
- ?** Prints the usage and exits.

**OPERANDS**

The following operand is supported:

- files** Names of files containing 1 or more graphs in dot format. If no *files* operand is specified, the standard input will be used.

**AUTHORS**

Stephen C. North <north@research.att.com>

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

**SEE ALSO**

**gc**(1), **dot**(1), **acyclic**(1), **gvpr**(1), **gvcolor**(1), **cocomps**(1), **tred**(1), **libgraph**(3)