

**NAME**

unflatten - adjust directed graphs to improve layout aspect ratio

**SYNOPSIS**

**unflatten** [-f?] [-l*len*] [-c*len*] [-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  $a \rightarrow \{w x y z\} \rightarrow b$ . 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.

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**SEE ALSO**

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