# UNFLATTEN

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### 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  $a \rightarrow \{w \ x \ y \ z\}$  -> 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.

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### SEE ALSO

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