GC

21 March 2001

NAME

gc - count graph components

SYNOPSIS

gc [-necCaDUrsv?] [files]

DESCRIPTION

gc is a graph analogue to wc in that it prints to standard output the number of nodes, edges, connected components or clusters contained in the input files. It also prints a total count for all graphs if more than one graph is given.

OPTIONS

The following options are supported:

- -n Count nodes.
- -e Count edges.
- -c Count connected components.
- **-C** Count clusters. By definition, a cluster is a graph or subgraph whose name begins with "cluster".
- -a Count all. Equivalent to -encC
- -r Recursively analyze subgraphs.
- -s Print no output. Only exit value is important.
- -D Only analyze directed graphs.
- -U Only analyze undirected graphs.

- -v Verbose output.
- -? Print usage information.

By default, gc returns the number of nodes and edges.

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.

EXIT STATUS

The following exit values are returned:

- 0 Successful completion.
- ${\bf 1}$ The ${\bf -U}$ or ${\bf -E}$ option was used, and a graph of the wrong type was encountered.

AUTHOR

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

SEE ALSO

wc(1), acyclic(1), gvpr(1), gvcolor(1), ccomps(1), sccmap(1), tred(1), libgraph(3)