

NAME

`bcg_info` – display information about graphs encoded in the BCG format

SYNOPSIS

bcg_info [*bcg_options*] [**-branching**] [**-deadlock**] [**-format**] [**-hidden**] [**-labels**] [**-nondeterministic** *label_number*] [**-order**] [**-path** *state_number*] [**-profiles**] [**-size**] [**-unreachable**] [**-compact**] [**-verbose**] [**-line**] *filename* [**.bcg**]

DESCRIPTION

This command takes as input the BCG graph *filename.bcg* and displays various information (number of states, number of transitions, number of labels, etc.) about this graph.

A dynamic library corresponding to *filename.bcg* may be generated if necessary.

GENERAL OPTIONS

The following *bcg_options* are currently supported: **-version**, **-create**, **-update**, **-remove**, **-cc**, and **-tmp**. See the **bcg**(LOCAL) manual page for a description of these options.

PARTICULAR OPTIONS

The following options are also supported:

-branching

Display statistics about the branching factor, i.e., the average, minimal, and maximal number of transitions going out of the states.

-deadlock

Display the list of deadlock states. The output of this command can be controlled using the **-compact**, **-verbose**, and **-line** options (see below).

-format

Display the BCG format version number (e.g., 1.0, 1.1) used for *filename.bcg*

-hidden

Display the number of hidden (i.e., ‘tau’) transitions.

-labels

Display the number of labels followed by the list of labels.

-nondeterministic *label_string*

Display the list of states in which there is nondeterminism for label *label_string*, i.e., the states in which there are at least two outgoing transitions labelled by *label_string*. If *label_string* is equal to the special string ‘-’, then nondeterministic states are searched for each label. The output of this command can be controlled using the **-compact**, **-verbose**, and **-line** options (see below).

-order Display information about the order in which transitions are sorted (depending on source states, destination states and label numbers)

-path *state_number*

Display the shortest path from the initial state to the state given by *state_number*. The path is

displayed using the simple SEQ format (see the **seq**(LOCAL) man page for a description of this format).

-profiles

Undocumented option.

-size

Display the number of states and transitions on a single line.

-unreachable

Display the list of states that cannot be reached from the initial state of the graph (this list should be empty if the graph is connected). The output of this command can be controlled using the **-compact**, **-verbose**, and **-line** options (see below).

-compact

Display lists of states in a user-friendly, synthetic form. There are about ten state numbers per line and, whenever possible, a shorthand notation ' $M \dots N$ ' is used to indicate all state numbers in the range between M and N . Default option.

-verbose

Similar to **-compact** option, except that the shorthand notation ' \dots ' is not used. Not a default option.

-line

Display lists of states in a simple form, with only one state number per line. Not a default option.

ENVIRONMENT VARIABLES

See the **bcg**(LOCAL) manual page for a description of the environment variables used by all the BCG application tools.

EXIT STATUS

Exit status is 0 if everything is alright, 1 otherwise.

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OPERANDS

<i>filename</i> . bcg	BCG graph (input)
<i>filename</i> @ 1.o	dynamic library (input or output)

FILES

\$CADP/com/bcg_info	" bcg_info " shell script
\$CADP/bin.'arch'/libbcg_info.a	" bcg_info " static library

See the **bcg**(LOCAL) manual page for a description of the other files.

SEE ALSO

bcg(LOCAL), bcg_read(LOCAL), seq(LOCAL)

Additional information is available from the CADP Web page located at <http://cadp.inria.fr>

Directives for installation are given in files **\$CADP/INSTALLATION_***.

Recent changes and improvements to this software are reported and commented in file **\$CADP/HISTORY**.

BUGS

Please report bugs to Hubert.Garavel@inria.fr