NAME

generator – BCG graph generation using reachability analysis

SYNOPSIS

bcg_open [*bcg_opt*] *spec*[**.bcg**] [*cc_opt*] **generator** [*generator_opt*] *result*[**.bcg**]

or:

exp.open [*exp_opt*] *spec*[**.exp**] [*cc_opt*] **generator** [*generator_opt*] *result*[**.bcg**]

or:

fsp.open [*fsp_opt*] *spec*[**.lts**] [*cc_opt*] **generator** [*generator_opt*] *result*[**.bcg**]

or:

lnt.open [*lnt_opt*] *spec*[**.lnt**] [*cc_opt*] **generator** [*generator_opt*] *result*[**.bcg**]

or:

lotos.open [*lotos_opt*] *spec*[**.lotos**] [*cc_opt*] **generator** [*generator_opt*] *result*[**.bcg**]

or:

seq.open [*seq_opt*] *spec*[**.seq**] [*cc_opt*] **generator** [*generator_opt*] *result*[**.bcg**]

DESCRIPTION

This program performs exhaustive reachability analysis and generates the Labelled Transition System corresponding to the BCG graph *spec***.bcg**, the composition expression *spec***.exp**, the FSP program *spec***.lts**, the LNT program *spec***.lnt**, the LOTOS program *spec***.lotos**, or the sequence file *spec***.seq**.

The resulting Labelled Transition System is encoded in the BCG format and stored into file *result***.bcg**.

Note: In its first form (i.e., when applied to the BCG graph *spec***.bcg**), this program is not very useful, since the graph has already been generated.

OPTIONS

The options *bcg_opt*, if any, are passed to **bcg_lib**(LOCAL).

The options *exp_opt*, if any, are passed to **exp.open**(LOCAL).

The options *fsp_opt*, if any, are passed to **fsp.open**(LOCAL).

The options *lnt_opt*, if any, are passed to **lnt.open**(LOCAL).

The options *lotos_opt*, if any, are passed to **caesar**(LOCAL) and to **caesar.adt**(LOCAL).

The options *seq_opt*, if any, are passed to **seq.open**(LOCAL).

The options *cc_opt*, if any, are passed to the C compiler.

The following options *generator_opt* are currently available:

-monitor

Open a window for monitoring in real-time the generation of *result***.bcg**.

–hide [–total | –partial | –gate] *hiding_filename*

Use the hiding rules defined in *hiding_filename* to hide (on the fly) the labels of the Labelled Transition System being generated. See the **caesar_hide_1**(LOCAL) manual page for a detailed description of the appropriate format for *hiding_filename*.

The **-total**, **-partial**, and **-gate** options specify the "total matching", "partial matching", and "gate matching" semantics, respectively. See the **caesar_hide_1**(LOCAL) manual page for more details about these semantics. Option **-total** is the default.

–rename [–total|–single|–multiple|–gate] *renaming_filename*
Use the renaming rules defined in *renaming_filename* to rename (on the fly) the labels of the Labelled Transition System being generated. See the **caesar_rename_1**(LOCAL) manual page for a detailed description of the appropriate format for *renaming_filename*.

The **-total**, **-single**, **-multiple**, and **-gate** options specify the "total matching", "single partial matching", "multiple partial matching", and "gate matching" semantics, respectively. See the **caesar_rename_1**(LOCAL) manual page for more details about these semantics. Option **-total** is the default.

As for the **bcg_labels**(LOCAL) tool, several hiding and/or renaming options can be present on the command-line, in which case they are processed from left to right.

-uncompress, -compress, -register, -short, -medium, -size
These options control the form under which the BCG graph *result***.bcg** is generated. See the **bcg**(LOCAL) manual page for a description of these options.

-unparse, -parse
These options control label parsing when the BCG graph *result***.bcg** is generated. Default option is **-parse.** See the **bcg_write**(LOCAL) manual page for a description of label parsing.

-tmp This option specifies the directory in which temporary files are to be stored. See the **bcg**(LOCAL) manual page for a description of this option.

EXIT STATUS

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

DIAGNOSTICS

When the source is erroneous, error messages are issued.

AUTHOR

Hubert Garavel (INRIA Rhone-Alpes)

OPERANDS

*spec***.bcg**	BCG graph (input)
*spec***.exp**	network of communicating LTSs (input)
*spec***.lts**	FSP specification (input)
*spec***.lnt**	LNT specification (input)
*spec***.lotos**	LOTOS specification (input)
*spec***.seq**	sequence file (input)

FILES

The source code of this tool is available in file **$CADP/src/open_caesar/generator.c**

See the **caesar_hide_1**(LOCAL), **caesar_rename_1**(LOCAL), **bcg_labels**(LOCAL) manual pages for a description of hiding and renaming conventions.

SEE ALSO

OPEN/CAESAR Reference Manual, **bcg**(LOCAL), **bcg_open**(LOCAL), **caesar**(LOCAL), **caesar.adt**(LOCAL), **exp**(LOCAL), **exp.open**(LOCAL), **fsp.open**(LOCAL), **lnt.open**(LOCAL), **lotos**(LOCAL), **lotos.open**(LOCAL), **seq**(LOCAL), **seq.open**(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 new bugs to Hubert.Garavel@inria.fr