#### **NAME**

bcg\_labels - modify the labels of graphs encoded in the BCG format

#### **SYNOPSIS**

```
bcg_labels [bcg_options] [-parse | -unparse] action1 action2 ... input.bcg [output.bcg]
where each action in the list action1 action2 ... is either a "hiding action", defined as:
action ::= -hide [ -total | -partial | -gate ] hiding_filename
or a "renaming action", defined as:
action ::= -rename [ -total | -single | -multiple | -gate ] renaming_filename
or a "scrambling action", defined as:
action ::= -scramble pattern
```

There can be as many actions as needed (possibly none) on the command line except in the latter case, where the list *action1 action2* ... should contain only one element, meaning that a scrambling action may not be combined with any other action.

#### DESCRIPTION

This command modifies the labels of a BCG graph. It takes as input the BCG graph *input.*bcg and writes the resulting graph to *output.*bcg, replacing *input.*bcg if *output.*bcg is omitted.

This command applies to the labels of *input.*bcg, the hiding, renaming and/or scrambling operations specified by the list of actions given on the command line.

These operations are performed in the same order as the actions occur on the command-line (the leftmost actions being applied first, and the rightmost ones being applied last). For instance, if **bcg\_labels** is called with arguments **-rename** *file1* **-hide** *file2*, renaming will be applied before hiding.

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

#### **GENERAL OPTIONS**

The following *bcg\_options* are currently supported: **-version**, **-create**, **-update**, **-remove**, **-cc**, **-tmp**, **-uncompress**, **-compress**, **-register**, **-short**, **-medium**, and **-size**. See the **bcg**(LOCAL) manual page for a description of these options.

# PARTICULAR OPTIONS

The following options are supported:

```
-hide [-total|-partial|-gate] hiding_filename
```

Use the hiding rules defined in *hiding\_filename* to hide the labels in *input.*bcg. See the cae-sar\_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 the labels in *input.bcg*. 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 **cae-sar\_rename\_1**(LOCAL) manual page for more details about these semantics. Option **-total** is the default.

## -scramble pattern

Rename each label string (except the hidden label "i", which is kept as is) so as to remove any information contained in the string; in essence, scrambling replaces all label strings by unique numbers in the range 1..N, where N is the number of labels.

The *pattern* is a character string to be used as the format argument of the C function printf(). It should contain exactly one occurrence of "%d". The scrambling action renames each label string into *pattern*, the "%d" of which being replaced by the unique integer that identifies the label. The *pattern* should not contain other %-arguments than "%d", such as "%c", "%f", etc. If needed, the "%" character can be specified as "%%".

## -parse | -unparse

Options **-parse** and **-unparse** can be used to control label parsing in *output.***bcg** (see the **bcg\_write**(LOCAL) manual page for a technical discussion about label parsing). By default, or if option **-parse** is present, label parsing is disabled.

#### **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.

## **AUTHORS**

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# **OPERANDS**

input.bcgoutput.bcgBCG graph (input)BCG graph (output)

input @ 1.0dynamic library (input or output)hiding\_filenameset of hiding rules (input)renaming\_filenameset of renaming rules (input)

#### **FILES**

\$CADP/bin.'arch'/bcg\_labels "bcg\_labels" binary program

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

## SEE ALSO

bcg(LOCAL), caesar\_hide\_1(LOCAL), caesar\_rename\_1(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