

NAME

pmcannotate - sources printout with inlined profiling

SYNOPSIS

pmcannotate [-a] [-h] [-k *pathname*] [-l *level*] *pmcout.out* *binaryobj*

DESCRIPTION

The **pmcannotate** utility can produce both C sources or assembly sources of a program with a line-by-line based profiling. The profiling information is retrieved through a `pmcstat(8)` raw output while the program operations are retrieved through the `objdump(1)` tool.

When calling **pmcannotate** the raw output is passed through the *pmcout.out* argument, while the program is passed through the *binaryobj* argument.

As long as **pmcannotate** relies on `objdump(1)` and `pmcstat(8)` to work, it will fail if one of them is not available.

OPTIONS

The following options are available:

- a** Shows the program profiling inlined in the assembly code only. No C information involving C sources is provided.
- h** Prints out information about the usage of the tool.
- l *level***
Changes the lower bound (expressed in percentage) for traced functions that will be printed out in the report. The default value is 0.5%.
- k *kerneldir***
Set the pathname of the kernel directory to argument *kerneldir*. This directory specifies where **pmcannotate** should look for the kernel and its modules. The default is */boot/kernel*.

LIMITATIONS

As long as **pmcannotate** relies on the `objdump(1)` utility to retrieve the C code, the program needs to be compiled with debugging options. Sometimes, in particular with heavy optimization levels, the `objdump(1)` utility embeds the code of inlining functions directly in the callers, making an output difficult to read. The x86 version reports the sampling from `pmcstat` collecting the following instruction in regard of the interrupted one. This means that the samples may be attributed to the line below the one of interest.

SEE ALSO

objdump(1), pmcstat(8)

AUTHORS

Attilio Rao <*attilio@FreeBSD.org*>