PeRIPLO - BuildPeRIPLOFromSources.wiki

Requirements

The current districution has been successfully compiled and tested under Linux. In order to compile PeRIPLO you need: * $gcc/g++ \ge 4.3.2$ * autotools * flex * bison * libtool * The GNU Multiple Precision library (GMP)

Quick Tip for Ubuntu Users

On Ubuntu 8.10+

sudo apt-get install g++

sudo apt-get install libtool

sudo apt-get install bison flex

\$ sudo apt-get update

\$ sudo apt-get install autoconf

Download and Install GMP

Finally you need to download GMP from <u>ftp://ftp.gmplib.org/pub/gmp-5.1.1/gmp-5.1.1/gmp-5.1.1.tar.bz2</u> and put it in the PeRIPLO root.

```
$ tar jxvf gmp-5.1.1.tar.bz2
$ cd gmp-5.1.1
$ ./configure --enable-cxx
$ make
$ make
$ make check
$ sudo make install
```

Pay attention to the flag --enable-cxx in configuration, necessary for producing C++

linkable library.

• Create a directory (e.g. build) that will contain the object files and the executable, and change into it mkdir build

Compile

From the root directory of PeRIPLO:

```
$ libtoolize
```

- \$ autoreconf --install --force
- Generate Makefiles and compile:
- create a directory in home separately name libs. the library path (to be specified in the -- prefix), we suggest to create some directory like ~/home/libs/ and use it.

```
$ ../configure --enable-proof --enable-library --disable-
optimization --enable-fulllabeling --prefix=/home/libs
```

- \$ make
- & sudo make install
- if you're asked to "run \"make distclean\" there first", it means, you should run "make distclean" and then repeat the attempt to configure.

In the end, you should find an executable named periplo in the same directory.

If you do not plan to use PeRIPLO as a standalone tool, but you want to make use of its features via API, you can generate libraries by using: .../configure --enable-library ;make

Assuming you are in the build directory, libraries can be found in src/.libs as libperiplolibrary.

Configuration options

It is possible to generate special executables, by specifying command-line options to configure:

• Debugging version: disables optimizations to allow assertion checking

```
../configure --disable-optimization
```

• Proof-logging version: enables the generation of resolution proofs as DAGs and the computation of Craig interpolants .../configure --enable-proof

Run

The command to run PeRIPLO is

./periplo --config=<config_file_name> <smtlib2_benchmark_name>

If the configuration file does not exist yet, a default one will be created.

Additional information can be found at Tutorial.