# FloPoCo – developer guide for the MS Windows<sup>TM</sup>platform

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#### 4th February 2009

#### 1 Intro

This guide will lead you step by step to set-up the FloPoCo <sup>1</sup> development system for the MS Windows<sup>TM</sup> platform.

### 2 Prerequisites

Operating System – Microsoft Windows XP (32bit) Service Pack 2

Compiler – Microsoft Visual C++ 2008 (Microsoft Visual Studio 9.0.2)

# 3 Requisites

Our current system configuration on which we are able to run FloPoCo (0.9.3) is:

CMake - CMake 2.6 patch 2

SVN – CollabNet Subversion Command-Line Client v1.5.5 (for Windows)

FloPoCo - latest version

# 4 Installing subversion

- 1. go to: http://www.collab.net/downloads/subversion/
- 2. you must create an account if you don't have one already
- 3. download CollabNet Subversion Command-Line Client v1.5.5 (for Windows)
- 4. install the software

<sup>&</sup>lt;sup>1</sup>FloPoCo is available under GPL at http://www.ens-lyon.fr/LIP/Arenaire/Ware/FloPoCo/

### 5 Installing CMake

- 1. go to: http://www.cmake.org/cmake/resources/software.html and download the Win32 installer for cmake (cmake-2.6.2-win32-x86.exe)
- 2. install the software

### **6** Fetching FloPoCo

1. in a windows terminal (command prompt) write:

svn checkout -username developername https://scm.gforge.inria.fr/svn/flopoco

be sure to replace developername with the developer name provided by the project administrator, Florent de Dinechin (Florent.de.Dinechin@ens-lyon.fr).

### 7 Setting up the libraries - MPFR and GMP

- copy the provided header files (gmp.h, gmp-impl.h, gmpxx.h, mpfr.h, pstdint.h) into the include folder of your Visual Studio 9 VC installation.
  - The default path should be: c:\Program Files\Microsoft Visual Studio 9.0\VC\include
- copy the provided libraries (gmp.lib, gmpxx.lib, mpfr.lib) into the **lib** folder of your Visual Studio 9 VC installation.

The default path should be: c:\Program Files\Microsoft Visual Studio 9.0\VC\lib

## 8 Creating the VC++ solution

- open CMake
- under **where is the source code** chose the path all the way to the FloPoCo trunk folder, for example: C:\dev\flopoco\trunk
- under where to build the binaries chose the same path as above
- hit the Configure button and chose Visual Studio 9 2008
- at the next dialog message (Trying to build FloPoCo on Windows, compiler is cl) press ok.
- in the Cache Values listings it should be able to find all except Sollya (the last line)
- the solution (project file) is now available in the trunk folder

# 9 Obtaining a FloPoCo executable

- open the solution .sln file
- in the Solution Explorer right click on flopoco and select Set as StartUp Project

- right click *flopoco* again and go to *Properties*
- select Linker Input
- under Additional Dependencies, remove the last entry gmpxx.lib
- right click *flopoco* Build (it sould give some gmpxx.h warning but no errors)
- the executable is now available in trunk\Release or trunk\Debug , function of what type of output you have selected.
- run the executable using the command line