
Subject: TheIDE precompiled headers: again
Posted by [Shire](#) on Sun, 04 Jan 2015 06:47:19 GMT
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I wrote patch for proper PCH handling three years ago, but have no feedback yet.
Now TheIDE build system has global flag "Allow precompiled headers" per build method.

This is not good way. Let's examine why:

0. you cannot set PCH flag for specific package - it's global. PCH has effect only for frequent builds (1..5 changing packages, not all).
1. PCH is supported only by MSC Builder. GCH is not supported.
2. only <package name>.h header can be precompiled
3. any file in package must include it (see "add check" TODO's in source code)
4. PCH building at begin and not in parallel with other files
5. you cannot set specific defines or compiler options for some .cpp file
6. additional temporary .cpp file is created
7. PCH can be used only with BLITZ

My patch is more flexible:

0. PCH flag can be set per package (at Output mode package grid, near BLITZ checkbox). Now you can check it for current developing packages
1. PCH is supported by MSC (include v7.0) and GCC too (GCH)
2. any single header file can be used as precompiled (mark it by adding PCH compiler option at Package Organizer)
3. inclusion of PCH is made automatically ("-FI" for MSC and "-include" for GCC)
4. PCH builds in parallel with other files. When it built, it can be used
5. files with specific defines or compiler options are compiled without PCH
6. no additional source files is created (header compiles as is)
7. PCH can be used with or without BLITZ

There is only one breaking change: build-time defines `bm*` (`bmYEAR`, `bmMONTH`, `bmDAY`, `bmHOUR`, `bmMINUTE`, `bmSECOND`) are deprecated.

Working with PCH header is also simple:

Marking header by compiler option is just workaround for package format compatibility. In future, marker can be checkbox near "Optimize the file for speed".

Patch published on GitHub, also you can test prebuilt TheIDE binaries for Debian 7 x64 (GCC 4.7.2) or Win32 (MSC10)
