
Subject: Re: Autotool support by Upp
Posted by [mirek](#) on Thu, 22 Mar 2007 16:07:03 GMT
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fallingdutch wrote on Thu, 22 March 2007 04:50 For me it is still a problem how to deal with .icpp files.

Mirek introduced them to be files that always have to be recompiled (mostly files including language stuff or database definitions etc) so there should be a way to compile them *every* time and include the objects into the source.

This is not quite correct.

.icpp files are guaranteed to be included in the final executable.

The problem to solve is that build process tries to minimize the size of executable by not including stuff that is not referenced. First level of this optimization is to link only those objects from library that are referenced. Well, most accurate definition is that in release mode, package are build into .lib (or .a) files first, so that unused .obj (.o) are elimintaed.

So far so good, but quite common trick in U++ is to register modules using global constructors (usually using INITBLOCK macro). E.g. image decoders register themselves so that "LoadAnyFile" can use all possible decoders to load image files. But adding global constructor unfortunately does not make .obj referenced, therefore linker is still free to eliminate it, effectively eliminating the whole image decoder.

We have struggled with this issue for some time and then decided to tweak build process to solve this problem - .icpp files are simply not put into .lib, but are always linked as .obj. This ensures they are never eliminated from the target.

But no, you do not need to recompile them every time. You just need to not put them into library and link .obj directly.

Mirek