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Subject: : AmigaOS4

Topic: : LTO in AmigaOS4 gcc

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Are LTO's supported in AmigaOS4's GCC?

Taken from [here](#)

Quote:

Link-time optimization is a type of program optimization performed by a compiler to a program at link time. Link time optimization is relevant in programming languages that compile programs on a file-by-file basis, and then link those files together (such as C and Fortran), rather than all at once (such as Java's "Just in time" (JIT) compilation[citation needed]).

Once all files have been compiled separately into object files, traditionally, a compiler links (merges) the object files into a single file, the executable. However, in the case of the GCC compiler, for example, with Link Time Optimization (LTO) enabled, GCC is able to dump its internal representation (GIMPLE) to disk, so that all the different compilation units that will go to make up a single executable can be optimized as a single module. This expands the scope of inter-procedural optimizations to encompass the whole program (or, rather, everything that is visible at link time). With link-time optimization, the compiler can apply various forms of interprocedural optimization to the whole program, allowing for deeper analysis, more optimization, and ultimately better program performance.

It's often used in small systems like the original RPi but could probably help performance on AmigaOS4 too(?)

Sorry if this has been answered already