

New mod/ref pass in GCC

Thursday, September 23, 2021 8:15 AM (30 minutes)

We discuss implementation of new inter-procedural mod/ref pass. The pass is collecting information about memory locations modified or read by a given function as well as information useful for points-to analysis (such as information about whether given parameter can escape to global memory or to return value of the function).

First version of mod/ref pass was contributed to GCC 11 and is enabled by default. We also discuss improvements done for GCC 12 and some basic benchmarks.

This is a joint work with David Čepelík.

I agree to abide by the anti-harassment policy

I agree

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