

Both major open-source compilers, GCC and LLVM, have a mature link-time optimization framework usable on most current programs. They are however not free from many performance issues, which prevent them to perform certain analyses and optimizations. We analyze bottlenecks and identify multiple places for improvement, focusing on improving interprocedural points-to analysis. For this purpose, we design a new data structure derived from Bloom filters and use it to significantly improve performance and memory consumption of link-time optimization.