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Synthesized CFI for hand-written assembly in GNU assembler

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We are working on extending the GNU assembler to Synthesize CFI (SCFI) for hand-written assembly. Using a new command line option "-scfi[=all,none]" to the GNU assembler, the users can invoke GAS' SCFI machinery to synthesize CFI for hand-written assembly. Some restrictions on the hand-written assembly do need to apply. The work is in progress and the first target is $x86_64$, with an option like "-scfi=inline" in the roadmap to handle inline assembly later. It will be good to discuss if this is useful for the Linux kernel; And further extensions that may be needed to make this useful for the kernel's use of hand-written and inline assembly.

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