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Addressing Duplicated Symbol Names in kallsyms: Introducing kas_alias for Symbol Differentiation

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Duplicated symbol names in kallsyms pose challenges for tracing and probing operations in the Linux kernel environment, complicating system observability and debugging.
To tackle this issue, kas_alias is introduced, a new tool added to the kernel build process to identify duplicated symbols and add aliases to them, ensuring existing workflows remain unaltered.
kas_alias operates on intermediate build products, specifically the binary objects, to analyze symbol name frequencies.
It then generates aliases for duplicated symbols and integrates them into both the core image and module objects.

In summary, kas_alias offers a practical solution to the challenge of symbol name duplication, enhancing system observability and debugging capabilities without introducing unnecessary complexity.
LKML discussion

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