

branch-protection

This option lets you enable branch authentication instructions on AArch64. This option is ignored for non-AArch64 architectures. It takes some combination of the following values, separated by a `,`.

- `pac-ret` - Enable pointer authentication for non-leaf functions.
- `leaf` - Enable pointer authentication for all functions, including leaf functions.
- `b-key` - Sign return addresses with key B, instead of the default key A.
- `bti` - Enable branch target identification.

`leaf` and `b-key` are only valid if `pac-ret` was previously specified. For example, `-Z branch-protection=bti,pac-ret,leaf` is valid, but `-Z branch-protection=bti,leaf,pac-ret` is not.

Rust's standard library does not ship with BTI or pointer authentication enabled by default. In Cargo projects the standard library can be recompiled with pointer authentication using the nightly [build-std](#) feature.