

fortify hardening still overrides debug builds in many cases #60919

New issue

Open

 nh2 opened on May 4, 2019

Contributor

...

This is in some way a continuation of [#18995 GCC has unwanted flags](#).

Even though that one is marked as solved, I have over the last 2 years encountered many situations where silently `-O2 -D_FORTIFY_SOURCE=2` is added to builds where I have explicitly requested that a debug build be done (which should result in `-O0` / no `-O` flag being passed).

For example, right now on meson-based builds (on Darwin, but I believe on Linux too), if I set

```
mesonBuildType = "debug";
```

it does not have the desired effect unless I also add

```
hardeningDisable = [ "fortify" ];
```

because the fortify hardening adds `-O2 -D_FORTIFY_SOURCE=2` no matter what.

The same happend to me in various C++ builds, and it's always a big drag in development time when you just can't get your `-O0` debug builds working.

Reading the PR description of [#28029](#), it says

```
user supplied -O flags should take precedence over the hardening flags
```

so I suspect that this isn't good enough, because most development builds don't add `-O0` explicitly -- instead they add no `-O` flag at all, so even with the PR `-O2` is still added.

I think we must do *something* about it because it's a total pain.

👍 14

❤️ 7

Assignees

No one assigned

Labels

2.status: stale

Projects

No projects

Milestone

No milestone

Relationships

None yet

Development

No branches or pull requests

Participants



+3

Open in GitHub Copilot app

 nh2 mentioned this on May 4, 2019

[GCC has unwanted flags #18995](#)

 matthewbauer added this to the [19.09](#) milestone on May 27, 2019

 jirkadanek on Jul 24, 2019

Member

...

As a more universal workaround, one might want to use the catch-all

```
hardeningDisable = [ "all" ];
```

for example when the build error is

```
cc1plus: error: -Wformat-security ignored without -Wformat
```

 stale bot on Jun 2, 2020

...

Thank you for your contributions.

This has been automatically marked as stale because it has had no activity for 180 days.

If this is still important to you, we ask that you leave a comment below. Your comment can be as simple as "still important to me". This lets people see that at least one person still cares about this. Someone will have to do this at most twice a year if there is no other activity.

Here are suggestions that might help resolve this more quickly:

1. Search for maintainers and people that previously touched the related code and @ mention them in a comment.
2. Ask on the [NixOS Discourse](#).
3. Ask on the #nixos channel on [irc.freenode.net](#).

  **stale** added **2.status: stale** on Jun 2, 2020

 jiridanek on Jun 2, 2020

Contributor

...

still an issue, but not really important to me

  **stale** removed **2.status: stale** on Jun 2, 2020

 **vs49688** added a commit that references this issue on Oct 14, 2020

nix: disable hardening by default

...

4f77b8b

 **stale** bot on Nov 29, 2020

...

I marked this as stale due to inactivity. → [More info](#)

  **stale** added **2.status: stale** on Nov 29, 2020

 nh2 on Nov 29, 2020

Contributor

Author

...

still important to me

  **stale** removed **2.status: stale** on Nov 29, 2020

  **BusyJay** mentioned this on Feb 16, 2021

 [unable to build on NixOS tikv/grpc-rs#508](#)

  **veprbl** removed this from the [19.09](#) milestone on May 31, 2021

 ghost mentioned this on Jun 16, 2021

 [The `hardeningDisable` environment variable does nothing #101979](#)

13 remaining items

Load more



[Sign up for free](#) to join this conversation on GitHub. Already have an account? [Sign in to comment](#)