

# `--deep` Considered Harmful

This thread has been locked. Questions are automatically locked after two months of inactivity, or sooner if deemed necessary by a moderator.



744

Many of the notarisation problems I see are caused by folks signing their product using the `--deep` option. While that can work in some circumstances, I generally recommend against it. There are two issues with `--deep`:

- It applies the same code signing options to every code item that it signs, something that’s not appropriate in general. For example, you might have an app containing a nested command-line tool, where the app and the tool need different entitlements. The `--deep` option will apply the same entitlements to both, which is a serious mistake.
- It only signs code that it can find, and it only finds code in nested code sites. If you put code in a place where the system is expecting to find data, `--deep` won’t sign it.

The first issue is fundamental to how `--deep` works, and is the main reason you should not use it. The second issue is only a problem if you don’t follow the rules for nesting code and data within a bundle, as documented in the *Nested Code* section of Technote 2206 [macOS Code Signing In Depth](#).

The alternative to `--deep` is to sign each code item separately, from the inside out. If your product has lots of nested code, it’s a good idea to automate this using a script.

**Note** One exception to the prohibition on `--deep` is Automator apps. If you’re signing an Automator app, see [this DevForums post](#).

For more hints and tips on how to correctly sign and package Mac apps, see [Signing a Mac Product For Distribution](#).

Share and Enjoy

—  
Quinn “The Eskimo!”  
Apple Developer Relations, Developer Technical Support, Core OS/Hardware  
`let myEmail = "eskimo" + "1" + "@apple.com"`

Change history:

- 9 Mar 2020 — First version.
- 15 Sep 2020 — Adopted the correct terminology for Automator apps.

GatekeeperDeveloper ID

Asked 11 months ago by eskimo

Reply to this question

This site contains user submitted content, comments and opinions and is for informational purposes only. Apple disclaims any and all liability for the acts, omissions and conduct of any third parties in connection with or related to your use of the site. All postings and use of the content on this site are subject to the [Apple Developer Forums Participation Agreement](#).