

macOS PDF Permission Troubleshooting

Conversation excerpt — two most recent questions and answers
Generated for offline reference

Question 1

I have a friend with a 2021 iMac who recently started being unable to open downloaded PDFs from the SSA and his doctor. The apps (Preview, Word) say he doesn't have permission to open the file, but macOS itself shows that he does (both in the finder and using the terminal). My troubleshooting so far included downloading a test PDF, which opened fine, but I also noted that he's running macOS 14.x (Tahoe) so the age of the OS might be an issue. What do you think I should do to help him next? I am going back to his house tonight and don't have remote access, so I need a short list of things to try.

Answer

Most likely causes are the quarantine extended attribute on those specific downloads (very common with government/medical sites) or a stuck state in Preview itself. Permissions looking fine in Finder/ls is classic for this—the OS-level read bit is fine, but Gatekeeper/XProtect or Preview's sandbox is blocking based on the `com.apple.quarantine` xattr (or related flags). A normal test PDF opening cleanly points away from a general permissions or OS-age problem.

macOS 14.x is Sonoma (Tahoe is the later codename). It's still fine for this; the issue isn't primarily the OS version.

Short list to try tonight (in roughly this order)

1. Force-quit Preview and retry

Apple menu → Force Quit → Preview → Force Quit. Then try opening the PDF again (double-click or File → Open inside Preview). This fixes the "permission" error for a surprising number of people when Preview is hung on a previous file or state.

2. Check and strip the quarantine attribute (highest-probability fix for downloaded SSA/doctor PDFs)

In Terminal:

```
xattr -l /path/to/the.pdf
```

Look for `com.apple.quarantine`. If present:

```
xattr -d com.apple.quarantine /path/to/the.pdf
```

(Or `xattr -c /path/to/the.pdf` to clear most extended attributes.) Then try opening it. You can drag the file into the Terminal window instead of typing the full path.

3. Open with a different app

Right-click the PDF → Open With → Safari (or Chrome, or Adobe Acrobat/Reader if installed). If it opens there, the file itself is fine and the problem is Preview-specific. You can also try File → Open from inside another PDF viewer.

4. Simple file-copy / rename workaround

Copy the PDF to a different folder (e.g., Desktop or Documents) or make a duplicate and rename it. Sometimes this clears the effective quarantine/Launch Services state without Terminal.

5. Quick Preview state reset (if the above don't stick)

Quit Preview completely, then in Finder hold Option and choose Go → Library. Delete (or move aside) anything under `Saved Application State` related to Preview, or the Preview container's saved state folder if it exists. Restart Preview and try again.

6. Restart the Mac

Often clears transient sandbox/Launch Services weirdness that force-quit alone doesn't.

Extra notes while you're there

- Confirm the exact error text and whether it happens only on double-click vs. File → Open inside Preview.
- If these PDFs are fillable forms or have owner/permissions passwords set by the SSA/doctor system, Preview has a

long history of mishandling them (sometimes locking the file further on open/save). Another viewer usually works better.

- Avoid letting Preview “touch” (open/save) the original until you’ve stripped quarantine if possible—some reports show it re-adding flags.

Start with `force-quit` + the `xattr` check; those resolve the majority of identical reports. If nothing works, note the exact `xattr -l` output and whether other apps can open the files—that will narrow it further.

Question 2

what is the `xattr` command?

Answer

`xattr` is a built-in macOS Terminal command that lets you view, add, or remove **extended attributes** on files and folders.

What are extended attributes?

These are extra pieces of metadata that macOS attaches to files beyond the normal permissions, owner, and size you see with `ls -l`.

The most common one that causes the exact “you don’t have permission” error (even when normal permissions look fine) is:

- `com.apple.quarantine` — the “quarantine” flag that macOS adds to almost every file downloaded from the internet (Safari, Chrome, email attachments, etc.). It tells Gatekeeper/XProtect to treat the file with extra suspicion.

Useful `xattr` commands for this situation

- **See all extended attributes on a file**

```
xattr -l /path/to/file.pdf
```

- **Delete only the quarantine flag**

```
xattr -d com.apple.quarantine /path/to/file.pdf
```

- **Clear *all* extended attributes (more aggressive)**

```
xattr -c /path/to/file.pdf
```

- **Do the same for every PDF in a folder**

```
xattr -d com.apple.quarantine *.pdf
```

Tip: Instead of typing the full path, you can type the command and then drag the PDF file from Finder into the Terminal window — it will paste the correct path automatically.

That’s why it was suggested: the SSA and doctor PDFs almost certainly still have the quarantine flag, while the test PDF either never had it or it was already cleared. Removing the flag usually lets Preview and other apps open the file immediately.