Automator:
Keeping Inkjets Clean



This presentation is for anyone who has an inkjet printer. In general, people probably don't print as much as they used to. They tend to keep their documents in digital form. The result is their printers sit idle for long periods.

With a tip of the hat to Glen…



The Problem:

- Nozzles tend to clog
- I forget to clean them

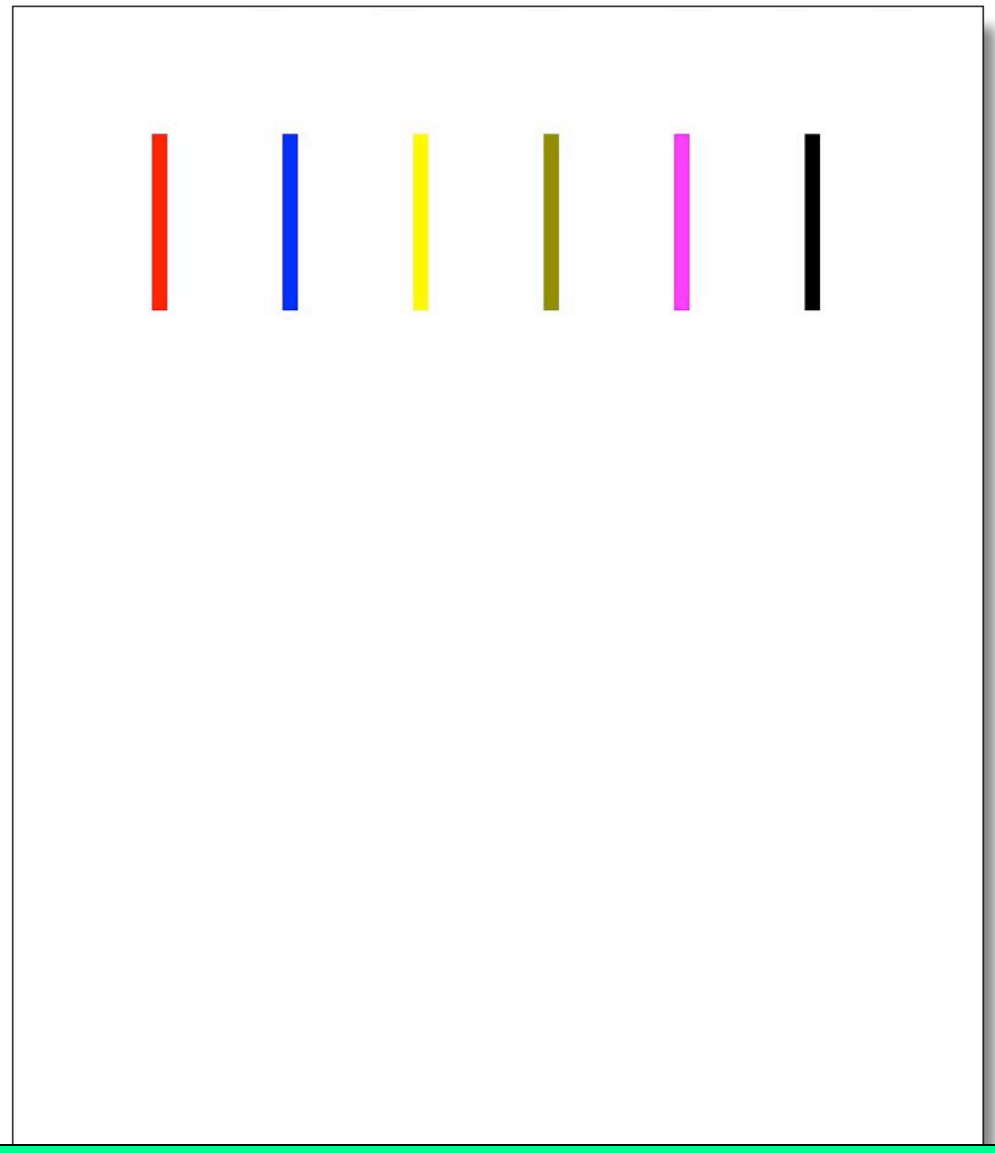
Inkjet printers are great when they work. But the ink is thick and tends to dry out and clog those tiny nozzles on the ink jets. Most printers have a “CLEAN” command either on the printer itself or on your computer. Cleaning forces more ink through the nozzles to clear the clog. But if a nozzle is deeply blocked then not even several cleanings will clear it. This time of year the air gets drier, the nozzles become blocked sooner, and I was getting streaks on my printouts almost every time.

The Solution:

- Create a test page
- Print it every few days

A solution is to create a page with multicolored polygons and print it twice a week. Printing a page sacrifices only a fraction of the ink required by a printer's built-in cleaning cycle, but it accomplishes the same purpose.

Test Colors.pdf



This is what my test page looks like. I named it “Test Colors.” I made the document using the Pages app. The colored rectangles are about ⅛” wide and 1” tall. I used a variety of colors, plus black.

Tip: Save the document on your Mac’s Desktop rather than on iCloud Drive. It can avoid a problem with Permissions, depending on how your Mac is set up.



Automator.app

For a while I set a Reminder to prompt me to print the page manually. That became tedious, and sometimes I would get distracted and forget to print the page even with the Reminder. I needed for a way to perform the chore in the background.

The good news is Macs come with a little-used app called Automator. Using Automator to set up this task was actually very easy.

The not-so-good news is that, because of Apple's security measures, getting Automator to activate the task was a bit complicated. I'll try to keep it short.

Automator steps (simplified):

1. Create a Calendar Alarm.
2. Tell it which document you want printed.
3. Save the Workflow to your Calendar and set a schedule for when you want the document printed.

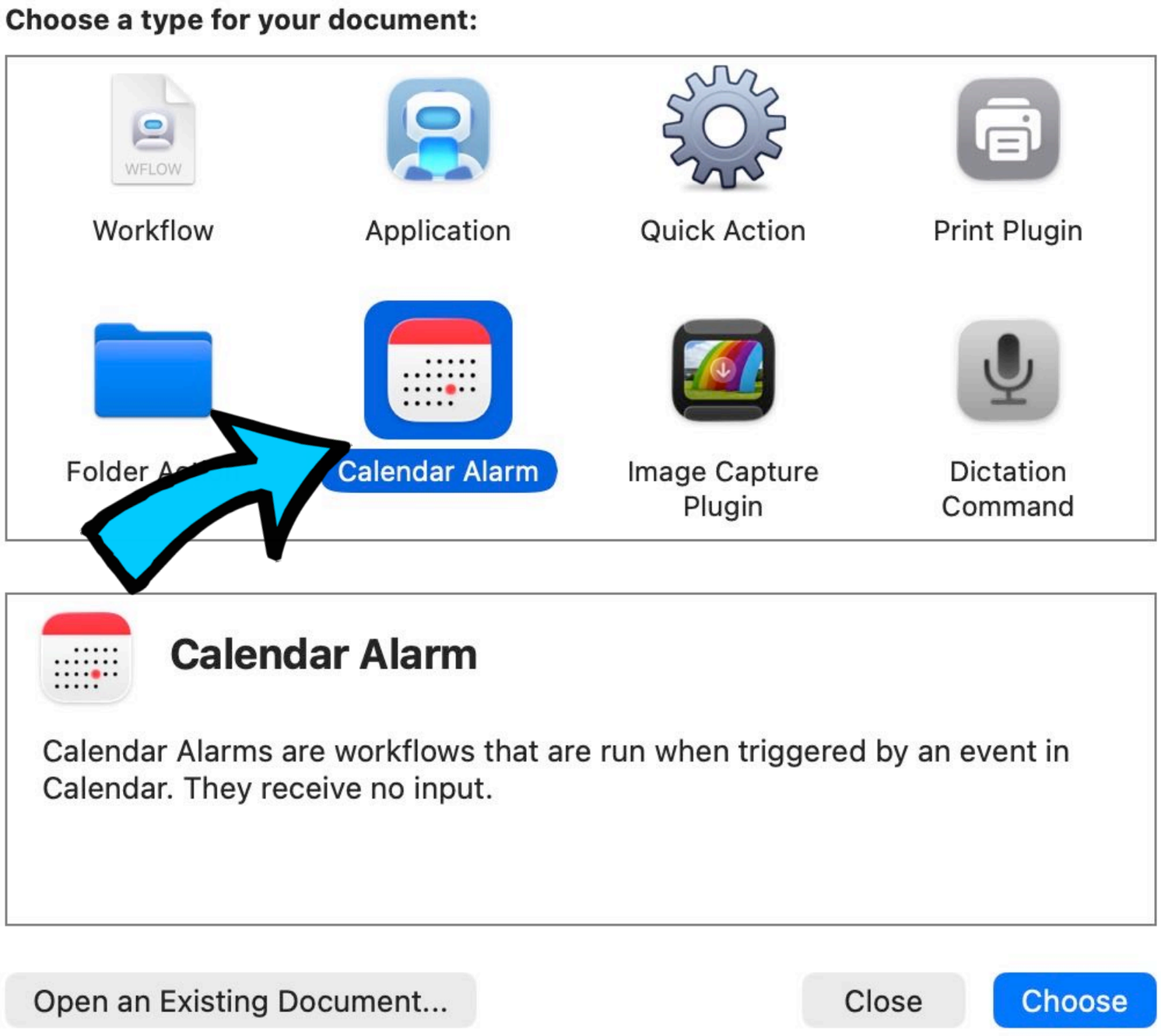
The function of Automator is to create Workflows. A Workflow is a task you make your Mac do without you having to tell it every time. Here is the simplified version of what I'll describe:

1. Create a Calendar Alarm. *[A Calendar Alarm is a specific kind of Workflow that is activated by the Calendar app on your Mac.]*
2. Tell it which document you want printed. *[i.e., Test Colors]*
3. You'll save the Workflow to add an event to Calendar and then set a schedule for when you want the document printed.

Now I'll go over those steps with more detail.

Automator steps:

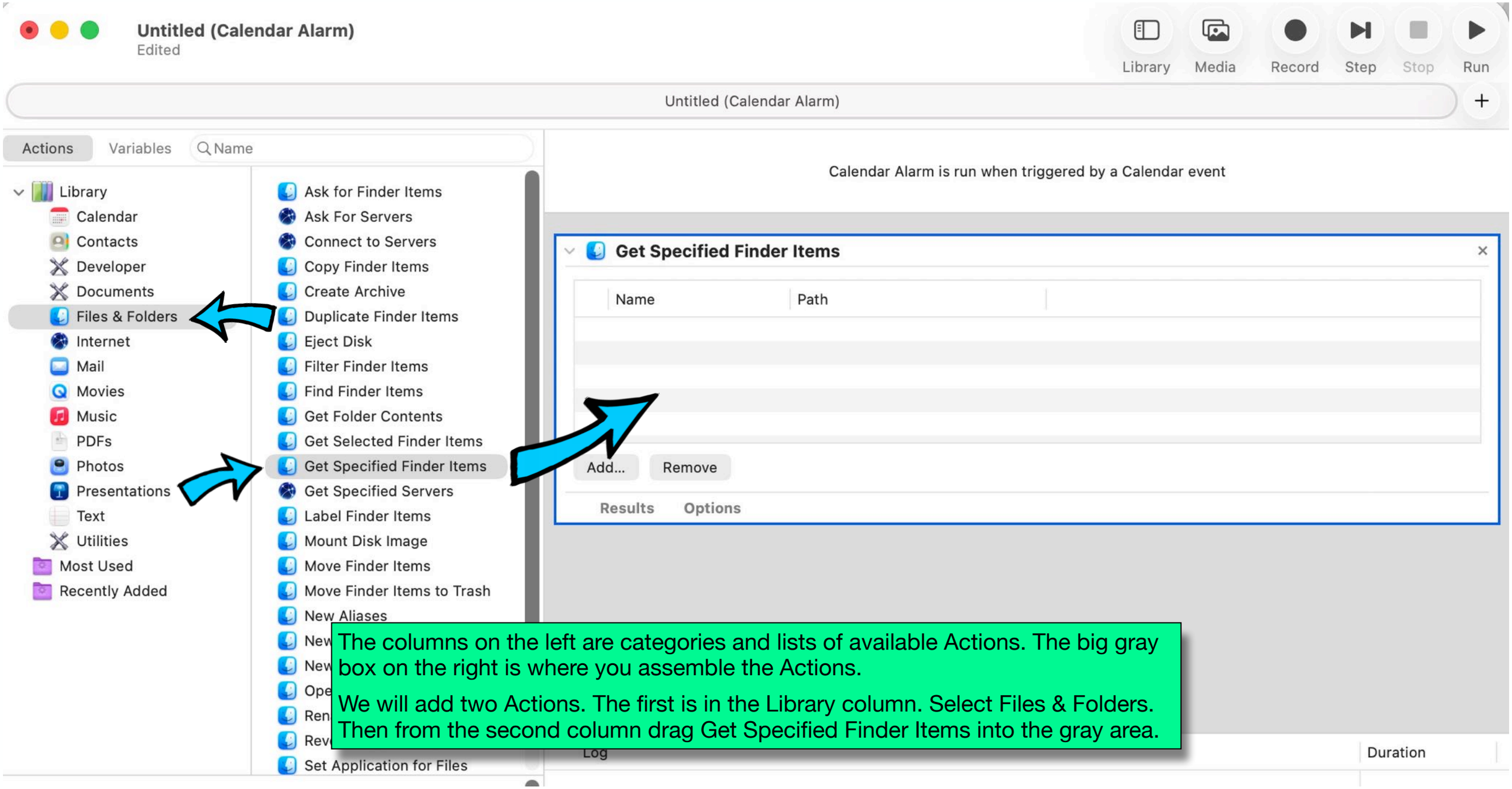
Automator > File > New > Calendar Alarm



Open the Automator app. Under File select New. Click on Calendar Alarm.

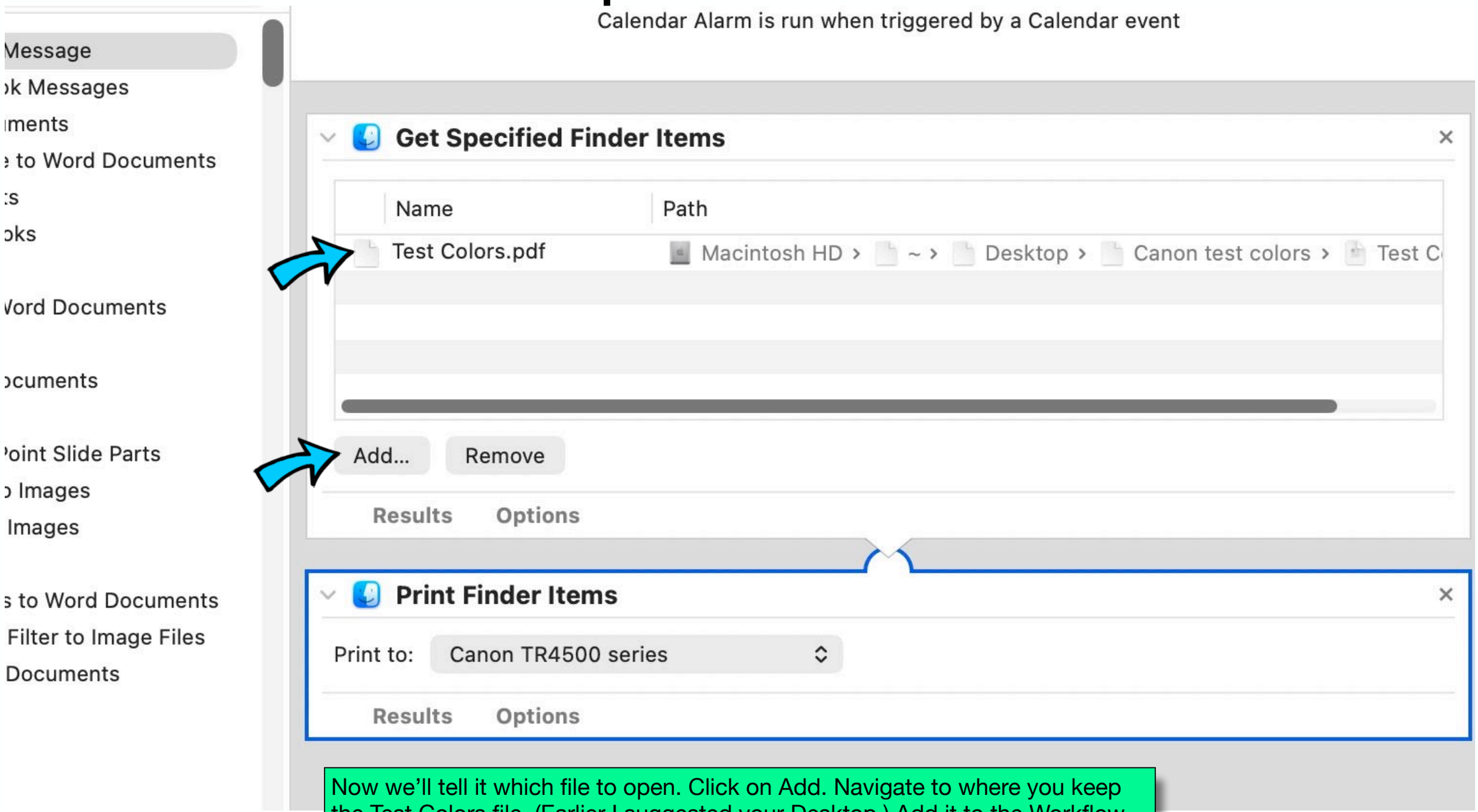
Automator steps:

Action > Files & Folders >
drag Get Specified Finder Items into Workflow



Automator steps:

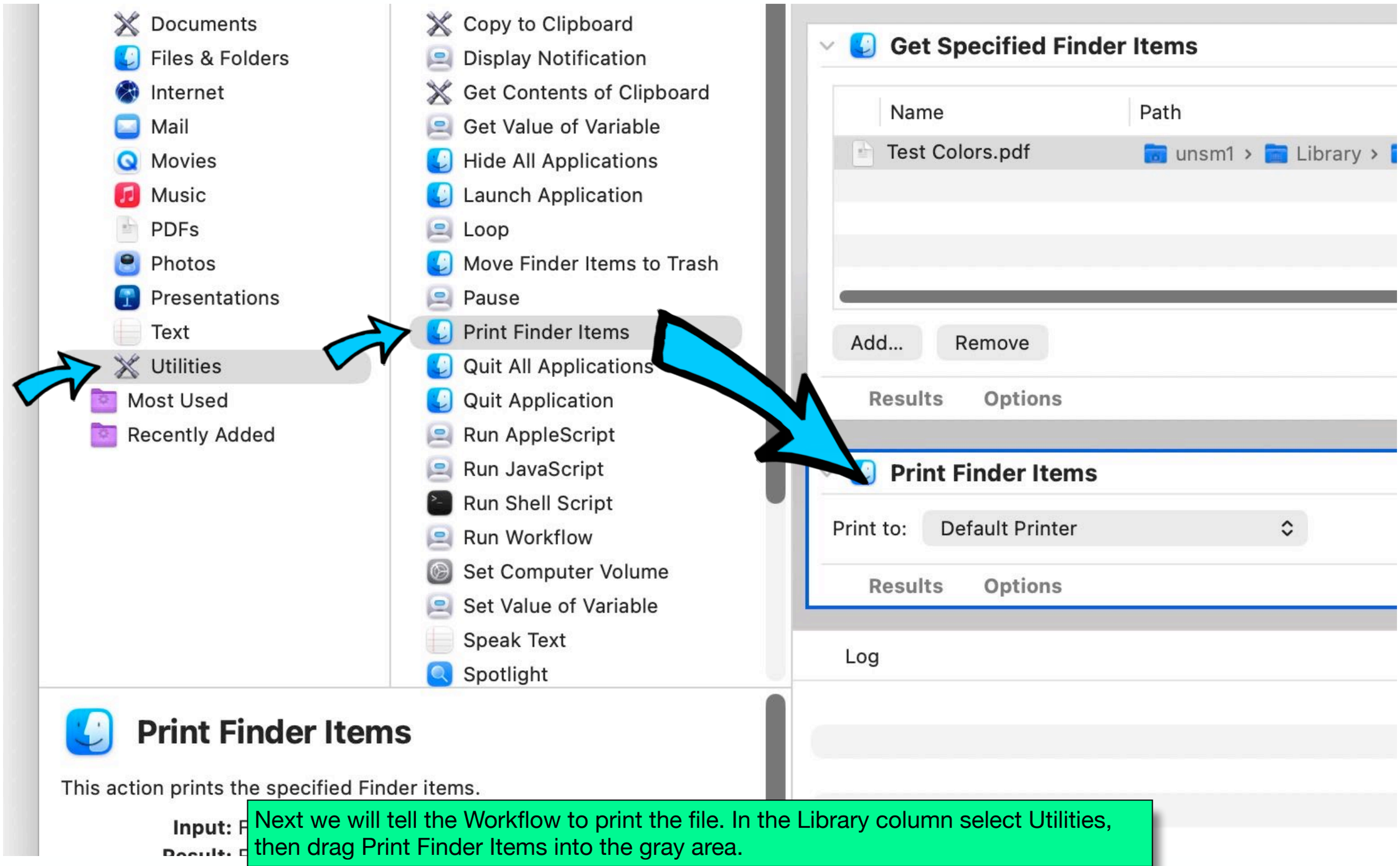
Add .pdf to Workflow



Now we'll tell it which file to open. Click on Add. Navigate to where you keep the Test Colors file. (Earlier I suggested your Desktop.) Add it to the Workflow. The upper arrow points to the link to the file.

Automator steps:

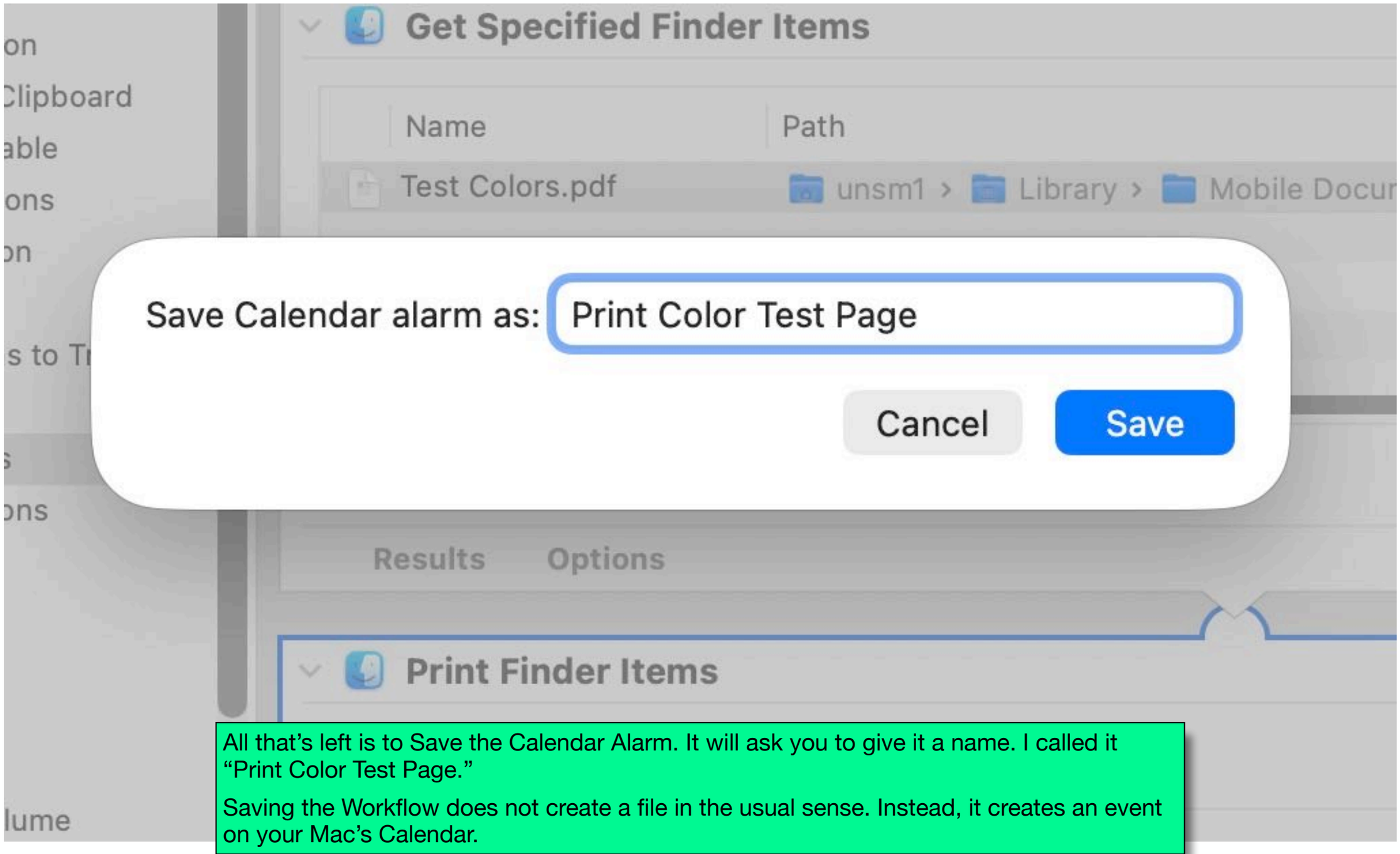
Utilities Library > Print Finder Items



Next we will tell the Workflow to print the file. In the Library column select Utilities, then drag Print Finder Items into the gray area.

Automator steps:

File > Save > (name)

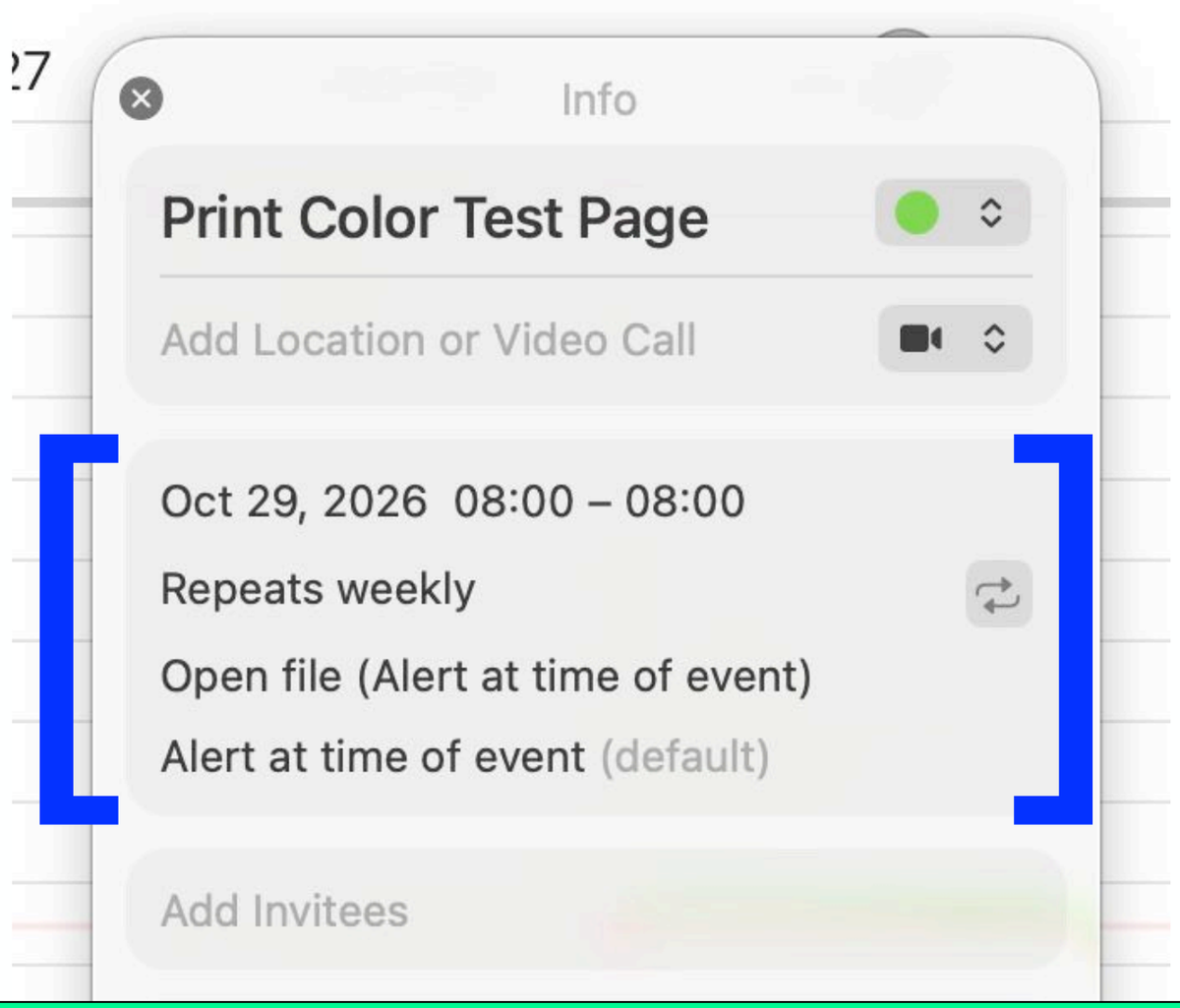


All that's left is to Save the Calendar Alarm. It will ask you to give it a name. I called it "Print Color Test Page."

Saving the Workflow does not create a file in the usual sense. Instead, it creates an event on your Mac's Calendar.

Calendar steps:

Calendar Event (set Date, Time, Repeat, and Alert)



Last, we will set a schedule for printing the document.

Open Calendar and go to the current date where you will find the Event we just created. Double-click on the event we named “Print Color Test Page.”

Notice the lines I highlighted with the blue brackets. I chose to have the Workflow activate at 8AM every Monday, so I set the date to the next Monday and the time to 8AM. I set the Repeat option to weekly, and I opted to have Calendar send me an alert.

I then copied and pasted the event, dragged the copy to Friday.

There’s a catch:

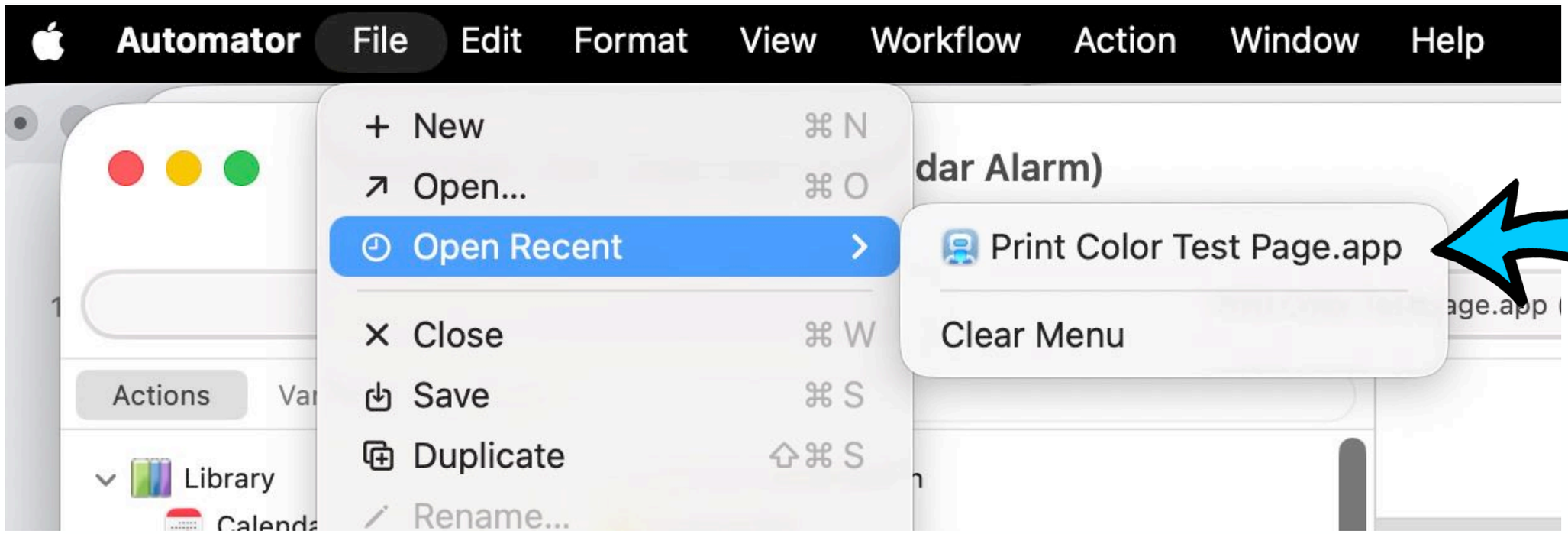
Your Mac must be awake!

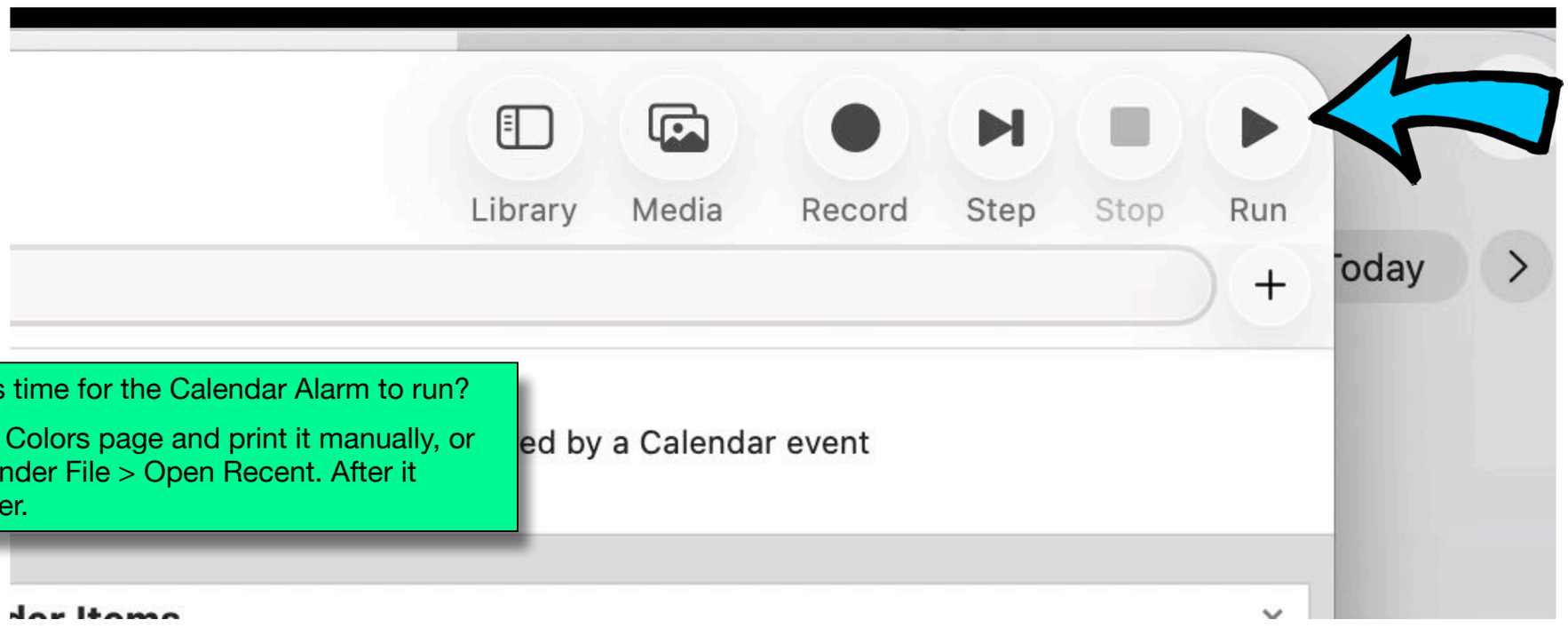


The Workflow is all set to work the way we want, but there is a catch—your Mac must be up and running.

When I first tried Automator I wanted it to print the Test Page during the night. That meant I had to leave my Mac running all night, which is not a good idea. So I changed the time of day to when I knew I would most likely be on my Mac. For me, that’s almost every morning while I’m having breakfast. But if I ever want to change the schedule, I can easily do that in Calendar.

What if . . . ?





So what if you're not on your Mac when it's time for the Calendar Alarm to run?

No problem! You can always open the Test Colors page and print it manually, or you can open the Workflow in Automator under File > Open Recent. After it opens, click on Run in the upper right corner.



One last thing— Don’t forget to keep paper in the feeder. (Duh!)

The only item left to do is obvious—be sure your printer has paper, otherwise it probably won’t even try to print! I don’t like to waste paper, so I just reuse the same sheet.

At the bottom of this slide is the web page where I got most of this information.

So far the Calendar Alarm has worked well. I like knowing I won’t have to replace inkjet cartridges so often simply because the ink dried out.

https://discussions.apple.com/thread/252818883?sortBy=rank