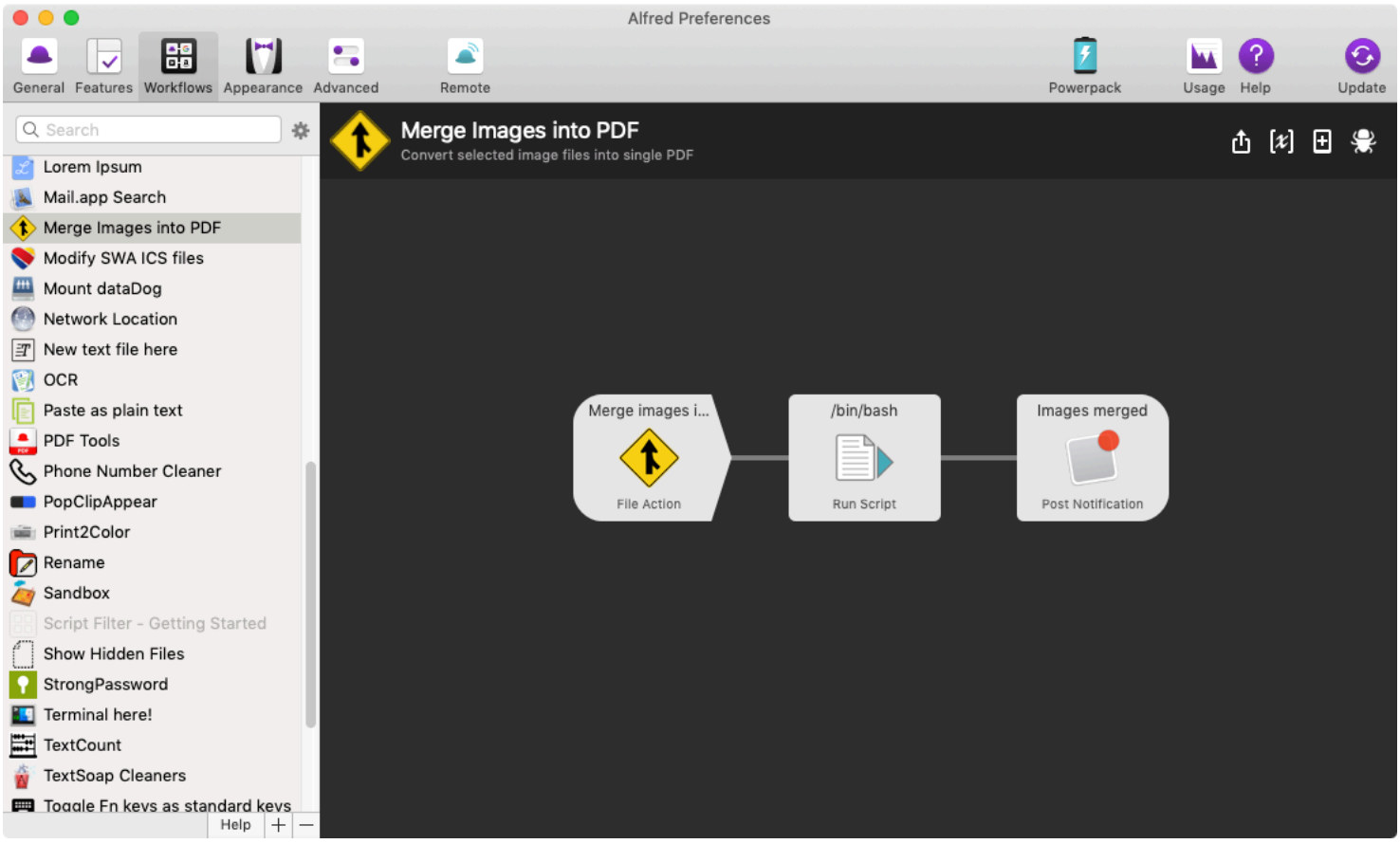
Merge Images into PDF - an ALFRED workflow

I initially created Automator workflows to perform image merging and then launched those via Alfred. All of that function has now been replaced by Python code using Johannes 'josch' Schauer's img2pdf tool.

Overview

The workflow is triggered as a file action. Select a group of image files or a folder containing images.



Library installation

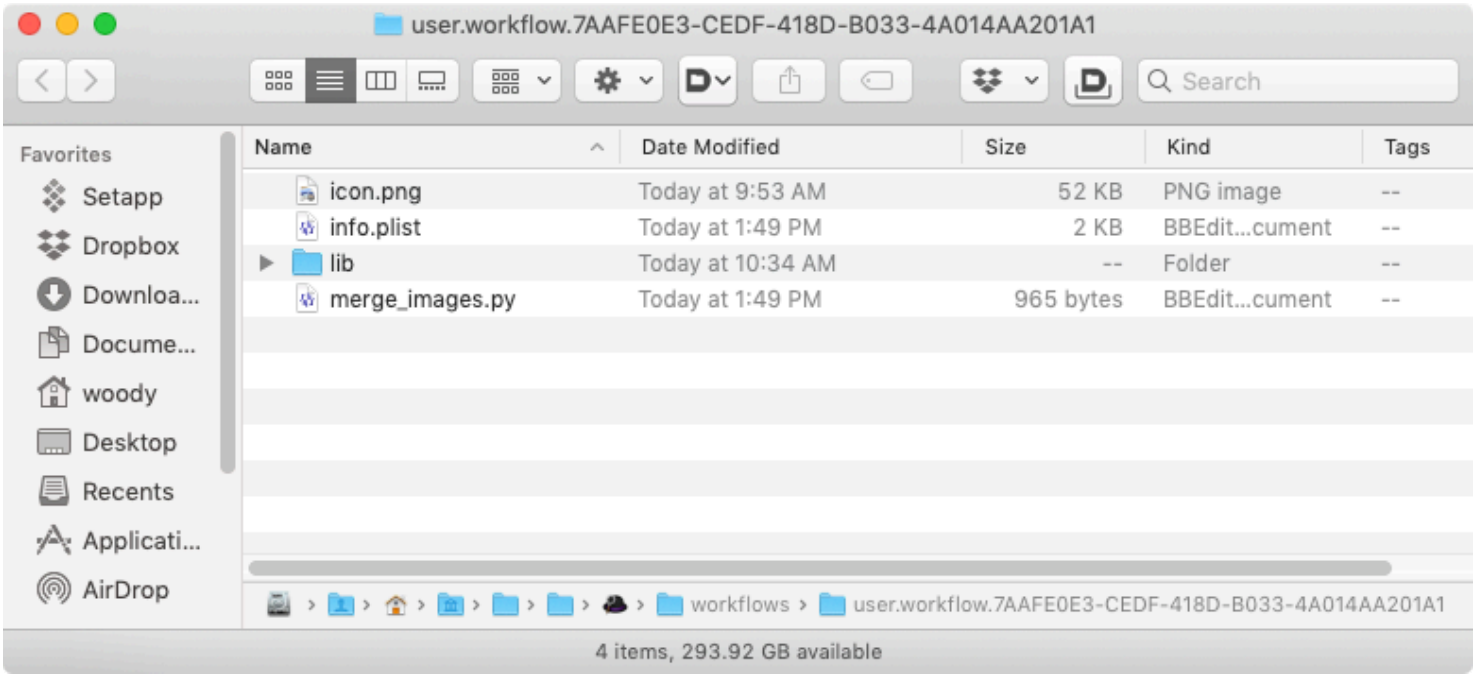
The library must be install in the workflow folder. The user manual is here. I also found this article very relevant.

Open a terminal session in the workflow folder. That is, right-click on the workflow and select **Open in Finder**. Point your terminal session here.

Install img2pdf using **pip**

```
pip install --target=lib img2pdf
```

This will create a lib folder in the workflow folder as shown below:



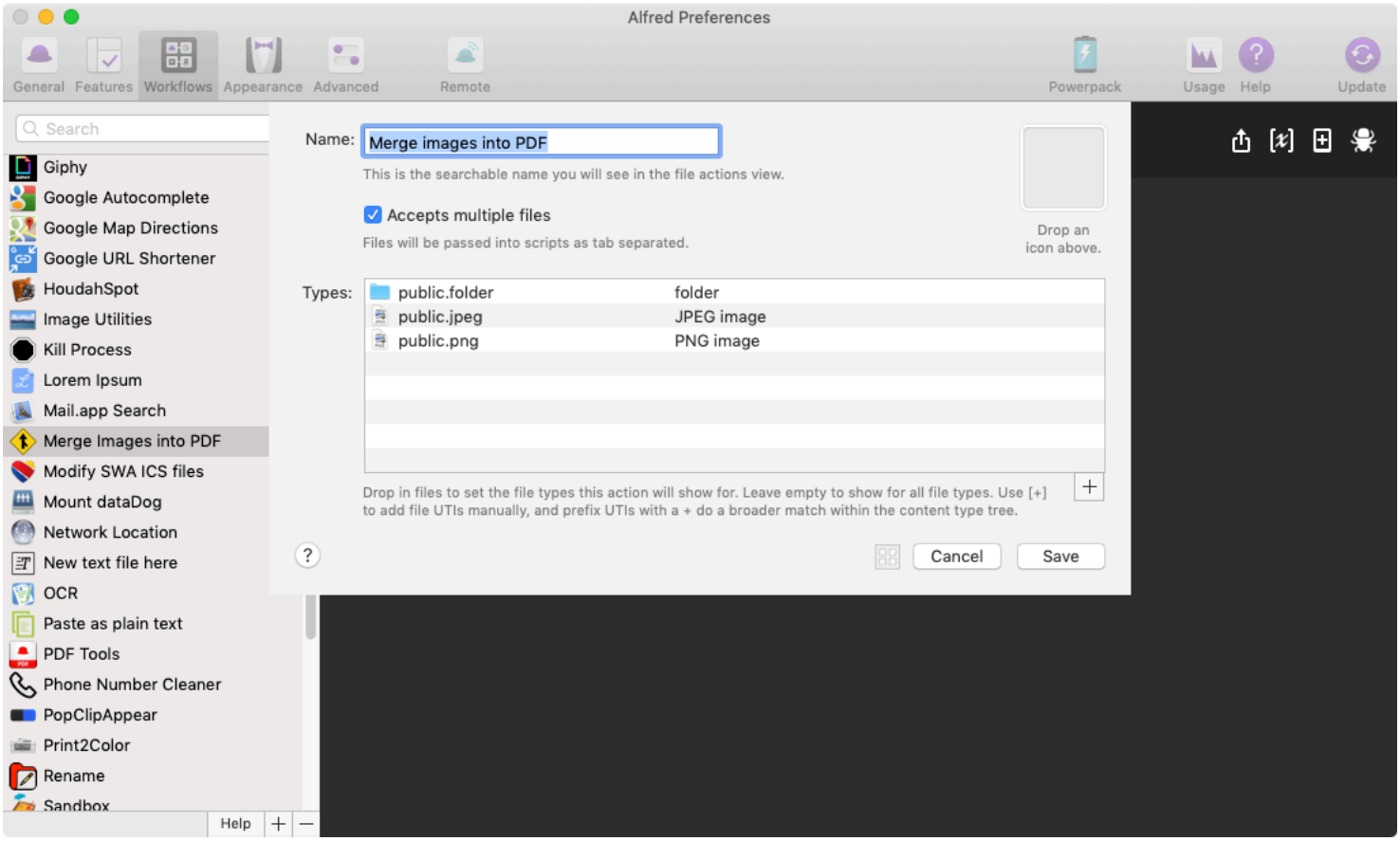
Besides the usual library imports, **img2pdf** and **PIL** both need to be imported from **lib**

```
from lib import img2pdf
from lib import PIL
```

Workflow components

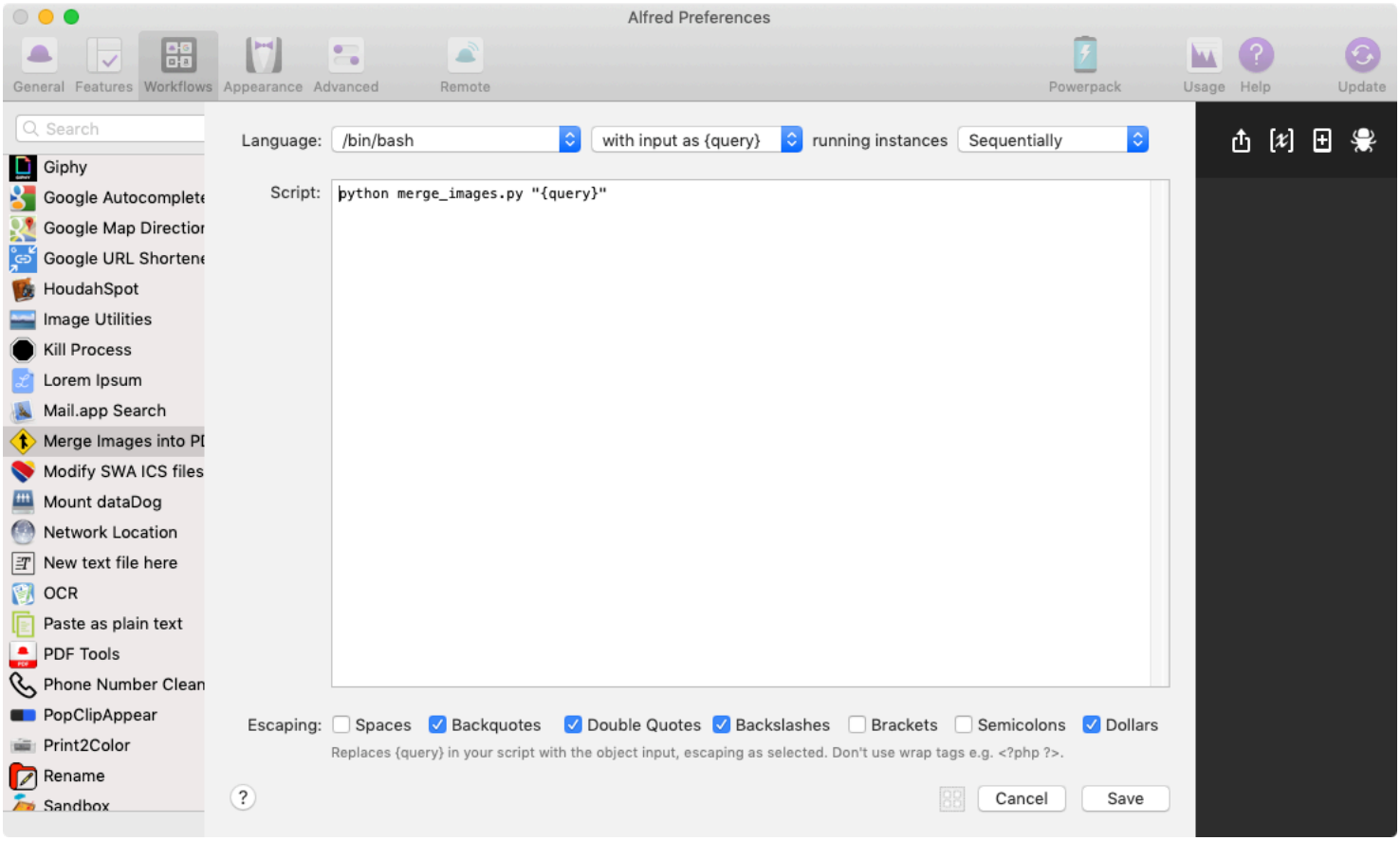
File action

The File Action trigger is configured to accept folders or multiple image files



Run Script

The Run Script action runs the **merge_images.py** code.



Code

The Python code discerns whether the inputs are folder or file. If folder, the contents are filtered by accepted image formats. The resulting files are then converted to a time-stamped PDF.

```
#!/usr/bin/env python

from lib import img2pdf
from lib import PIL
import os
import sys
import re
from time import gmtime, strftime

#
# must install img2pdf into workflow library
# open terminal in workflow folder
# pip install --target=libs img2pdf
#
#  command line version works
#    img2pdf --output out_02.pdf test_3.jpg test_4.jpg test_1.jpeg

input = sys.argv[1].split('\t')

formats = ['.tif', '.tiff', '.png', '.PNG', '.jpg', '.JPG', '.JPEG', '.jpeg']

if os.path.isdir(input[0]): # It is a directory

    fnames = os.listdir(input[0])

    files = [input[0] + '/' + x for x in fnames if os.path.splitext(x)[1] in formats]

elif os.path.isfile(input[0]): # It is a file

    files = input

pdf_bytes = img2pdf.convert(files)

path_prefix = re.match('(\/Users\/\w*)', files[0]).group()

time_str = strftime("%Y%m%d %H%M%S", gmtime())

fname = path_prefix + '/Desktop/' + time_str + '.pdf'

outfile = open(fname,"wb")

outfile.write(pdf_bytes)

sys.stdout.write(str(len(files)) + ' images >> ' + time_str + '.pdf')
```