

# Varis PhotoMedia Tutorials

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## Welcome

This tutorial has been prepared for the photographer who is striving to learn digital imaging. I make an effort to supply current information about digital imaging techniques and general information about computer technology that is pertinent for today's professional photographer. This information is based on my personal experience down in the trenches at the front lines of the digital revolution that is sweeping the photographic industry.

One thing is certain: all of the information contained herein will be obsolete in a fairly short time - how short, I can't say. Be forewarned that things are changing very rapidly and the only way to stay competitive is to keep learning. I devote a good percentage of my time learning new things and I am attempting to share what I learn with you but this information will go out of date so you should be flexible and not take this tutorial to be the ultimate statement on the subject.

I consider the knowledge contained in any of my tutorials to be public domain but the form in which this knowledge is presented is copyrighted as are all the photographic images used as examples. Unless otherwise noted all imagery is copyrighted by Lee Varis and any use of these images without permission is forbidden. You are permitted to use this tutorial for your personal education - you are not permitted to sell or otherwise distribute this material. Please contact me for any other use.

I maintain a web site where I post additional information, examples and tutorials. You are invited to browse various portfolios as well as download free material and purchase additional tutorials at:

<http://www.varis.com>

I hope you find the information contained in this tutorial helpful. Please let me know if you find any errors or omissions - I'm always trying to improve these materials! You may contact me via E-mail at:

[varis@varis.com](mailto:varis@varis.com)

best regards, Lee Varis 2006

# Automator Workflow

## creating a digital photo workflow for the Finder

This tutorial walks you through the creation of a simple copy and rename workflow using Automator, Apple's new OS X Tiger application for building Applescript automation routines. An Automator "workflow" is a sequential collection of Applescript "actions" that simplify or automate a series of steps in a workflow. We will work with a simple digital camera capture workflow:

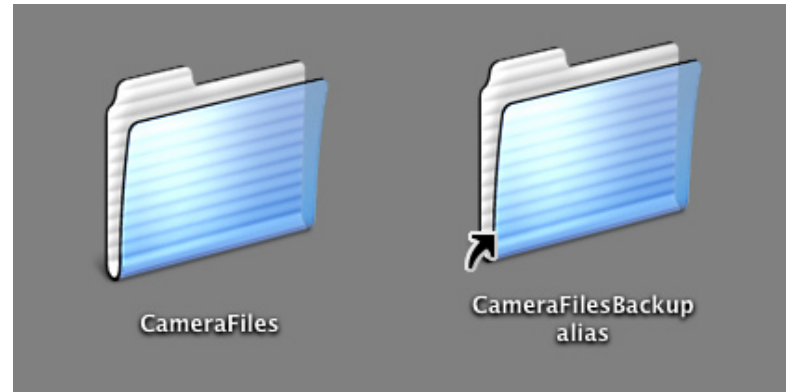
- Download files from memory card
- Rename files
- Copy files to backup

These are the first necessary steps in any digital capture workflow and we can automate this so that everything happens when you drag the files off the card onto an icon on the desktop. The beauty of Automator is that a comprehensive workflow can be built to suit anyone's specific needs and incorporate software that may not have any automation functions built-in. We will build a workflow that is ideally suited to a shooting situation where camera files can be downloaded from the memory cards to a laptop during a shooting session.

# First Steps

Before we do anything else we must create two folders on the desktop. The first folder will be named "CameraFiles" – this will be a permanent folder that will live on the desktop to receive all incoming camera files. If you are using an external hard disk for your camera files you will want to create the folder first at the root level of that external hard drive, make an alias of that folder and then drag the alias to the desktop. This will insure that any files you drag to the folder will be copied to the external hard drive and not simply to a folder on the desktop in your internal startup drive. The alias can be recognized by the small arrow in the lower left of the folder icon. You can strip the "alias" from the name once it is on the desktop.

Whether or not you use an external drive for the first folder you should use a different external drive for the 2nd folder that will be named "CameraFiles-Backup" - use the same alias procedure for creating the folder. We want to be sure that we have two copies of all incoming camera files on two different hard drives as disaster insurance before we re-format the memory card for re-use!



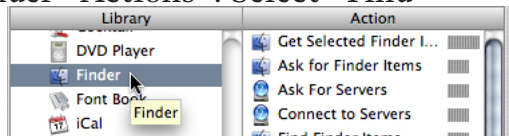
The image above shows the "CameraFiles" folder as it would look created directly on the desktop. The "CameraFilesBackup" shows the alias *arrow* that indicated that it points to an external hard drive. Make sure that you have plenty of space on each disk to receive your incoming camera files.

The folder alias always points to the same folder so, if you change hard drives, you will have to re-create the folder alias to point at the new hard drive. This is a simple but critical step as our Automator *copy* actions will look for these specific folders and nothing will work right if they are not available.

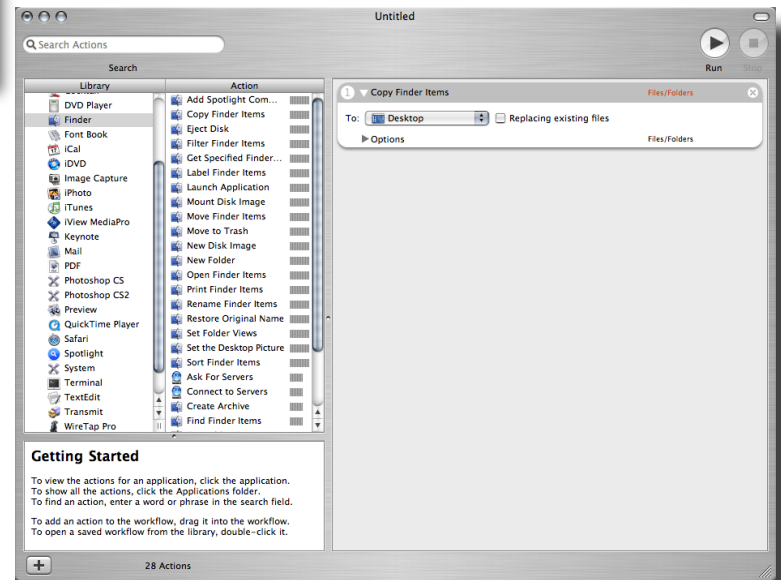
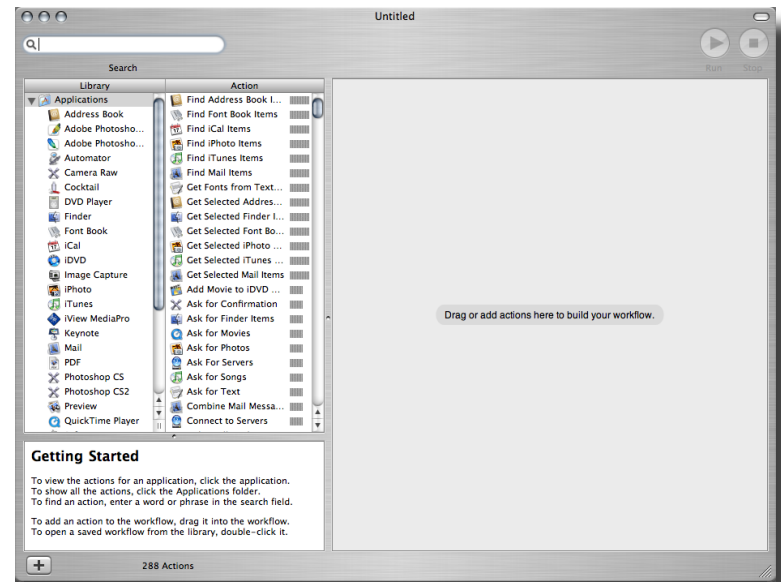
I recommend that you use two external compact Firewire drives for your camera files. These can be had in sizes up to 80 gig - usually more that enough for one days shooting. When shooting is over the drive can be simply transferred to your main desktop computer where you can copy the files for further editing.

# Building the Workflow

Launch Automator and you will be presented with a new “Workflow” window. You build workflows by dragging “Actions” from the “Action” pane into the main grey area in the window. A “Workflow” consists of a series of separate “Actions” that link together in a sequence. The output from one “Action” leads to the input for the next Action. Selecting an application in the “Library” pane will show you all the “Actions” associated with that application. For our “Copy & Rename” action we will use Finder “Actions”. Select “Finder” in the Library Pane and the “Actions” pane changes to show only Finder “Actions”.



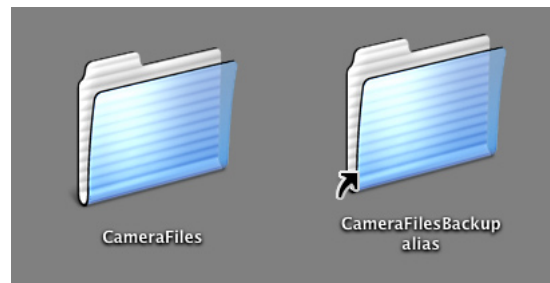
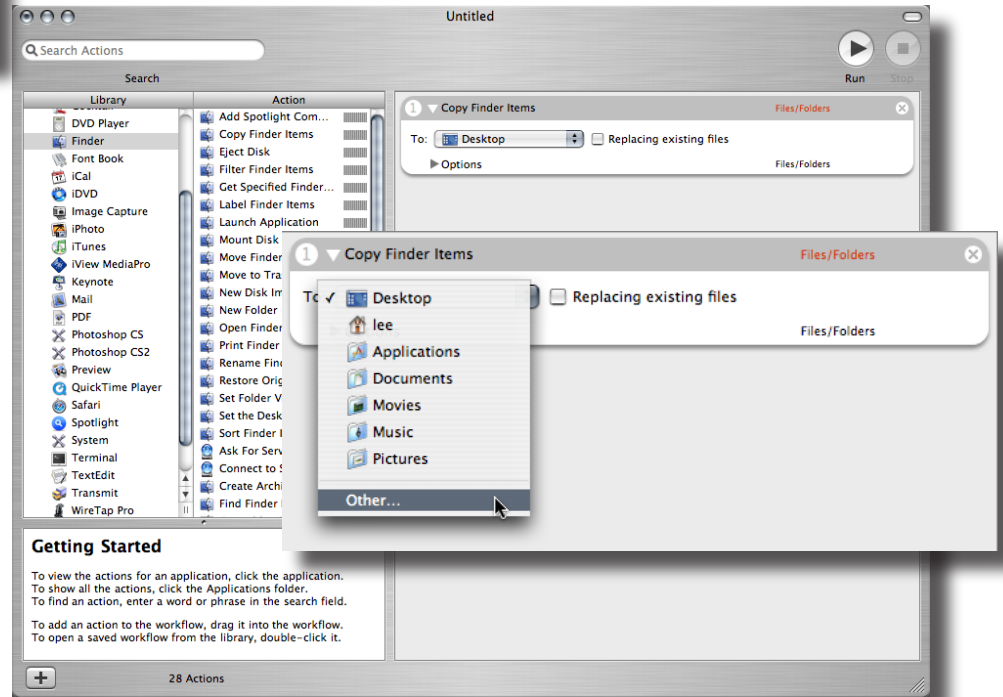
The first task we need to accomplish is to copy RAW files off the camera card so we’ll start by dragging the “Copy Finder Items” action to the main workflow pane. It will become clear later how we connect the camera files to this “Action” and get the workflow started. For now, we are going to create a sequence of steps that we want to perform with the collection of “Actions” in the “Actions” pane.



# Copy To...

We need to tell the Action where to copy the files to... select "Other..." from the "To" drop down menu, locate and select the "CameraFiles" folder you placed on the Desktop. "CameraFiles" now appears as the "To" location for copying files. Leave "Replace existing files" unchecked and we'll ignore the "Options" drop down for now. We've now set up our first critical "Action" and any files we select to operate on will automatically be copied to the "CameraFiles" folder on the desktop. Its important that this folder remain in the same location with the same name otherwise the Action won't run. The "CameraFiles" folder will act as our receiving bin for all files from a shoot and we can keep downloading files from multiple cards as we go.

The next step in our Workflow will be to give these files a more meaningful name than the camera's default...

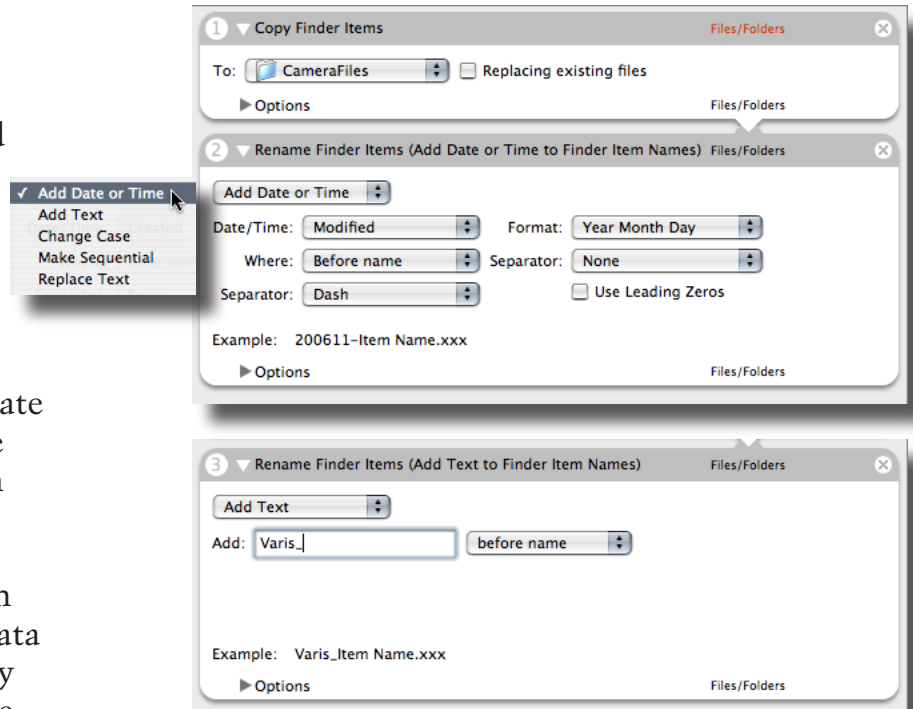


# Rename Finder Items

Locate the “Rename Finder Items” Action in the “Action” pane and drag it into the Workflow pane. You will see the Action link up with the “Copy Finder Items” Action and appear as the 2nd step. The Files that we copied in step 1 now pass to this 2nd Action for further modification.

There are a number of different ways you can rename the files – you can select these from the drop down at the upper left of the Action parameters. We will use “Add Date or Time”. Once “Date or Time” is selected various options are available to specify the type, format, where it will occur in the name, what kind of separator is used in the date and the separator used after the date. Set up the parameters as shown. In the example here I’m using the “Modified” info in the .CR2 file metadata to determine the date – different camera files may require the use of the “Created” date instead. The “Current” date will be the date you are copying the files so if you are not copying the files on the date they were created you won’t have the actual date the images were captured in the name.

I prefer to have other info included in the file name and it took me a long time to figure out that in order to add more elements to the name all you

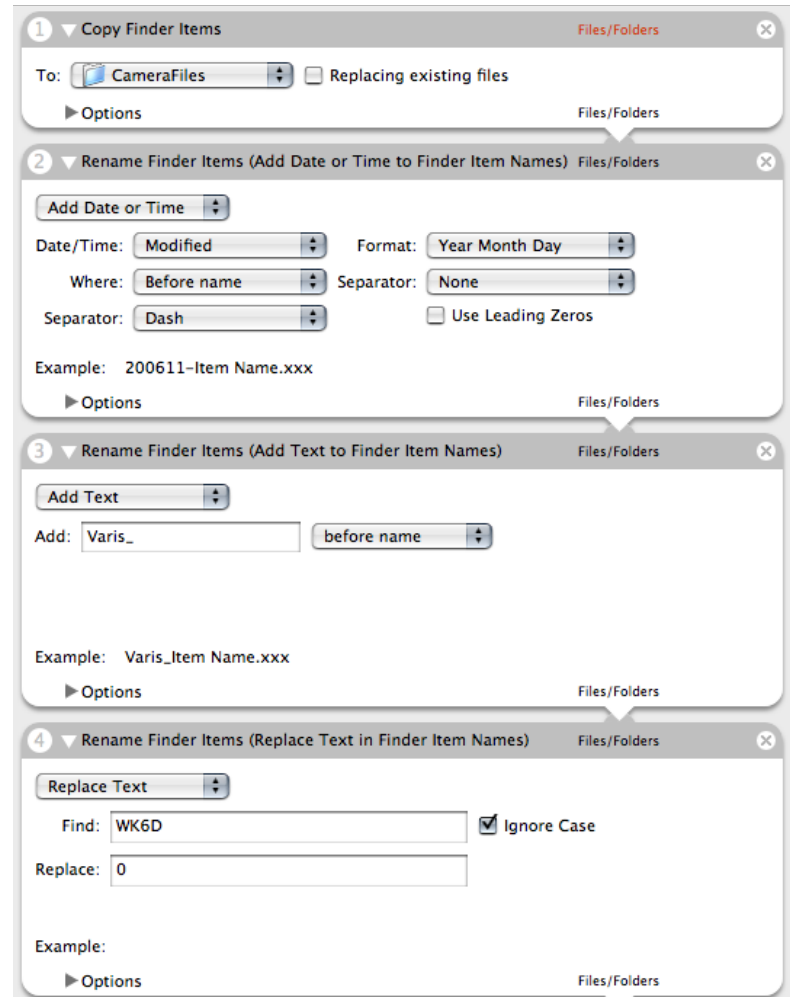


have to do is drag multiple “Rename Finder Items” Actions into the Workflow. This allows you to incorporate additional info, change or replace text and add sequential numbering by selecting from the first drop down at the upper left. You can build fairly complex naming conventions this way.

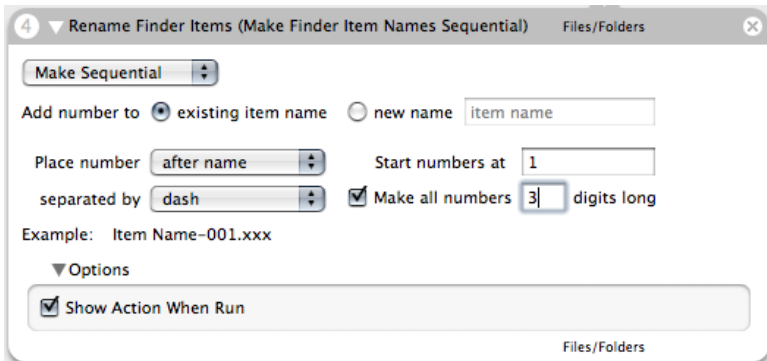
# My CR2 Naming Convention

This example shows how I set up for renaming my Canon 1DS mark II files. I like to have my name on every file followed by the date. This helps organize my archive sequentially by date. The files are named in this camera with a unique identifier number that I want to keep in the name. I like to strip out the superfluous “WK6D” and replace it with a 0 – this way if I ever shoot over 10,000 images in the year I can replace the zero with a “1” by editing the “Replace” field and I’m good to go for the next 10,000 images (the camera will re-set to 0000).

You may find it more appropriate to include a “Make Sequential” step if your camera re-sets every time you put in a new card. You should open the “Options” at the bottom of the Action and check the “Show Action When Run” checkbox. Now when the Action runs it will stop at this step

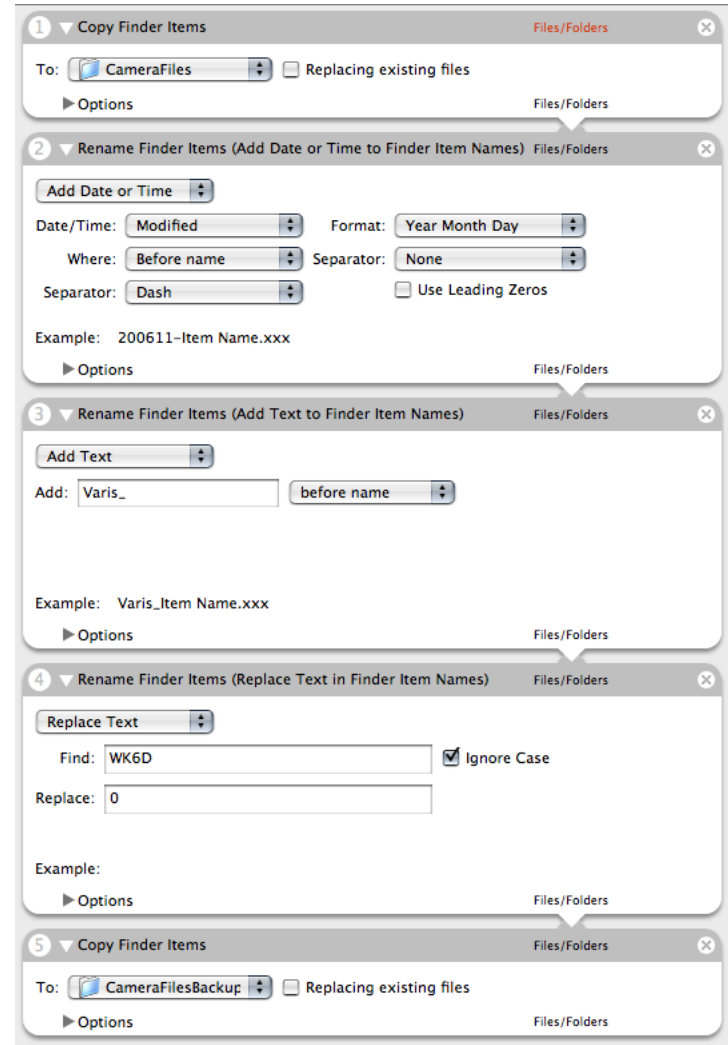
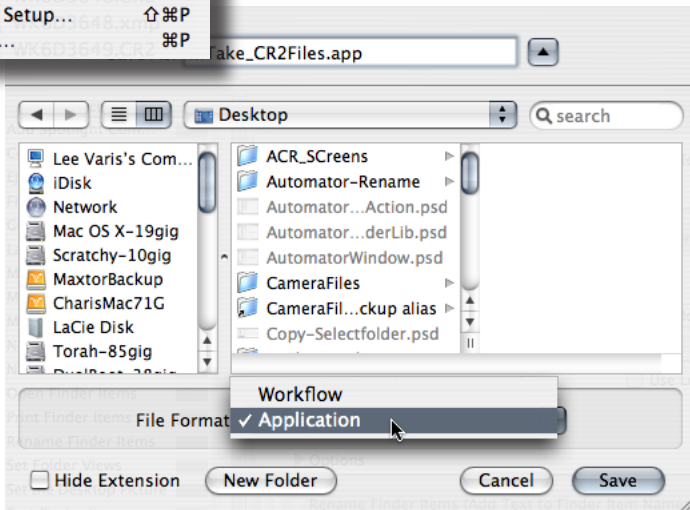
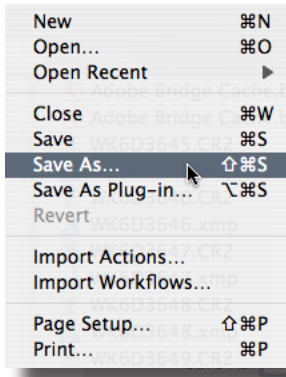


and allow you to adjust the “Start numbers at” field to pickup where the last download left off. The rename steps are cumulative, each action building on the previous one until you’ve achieved the desired effect.



# The Final Workflow

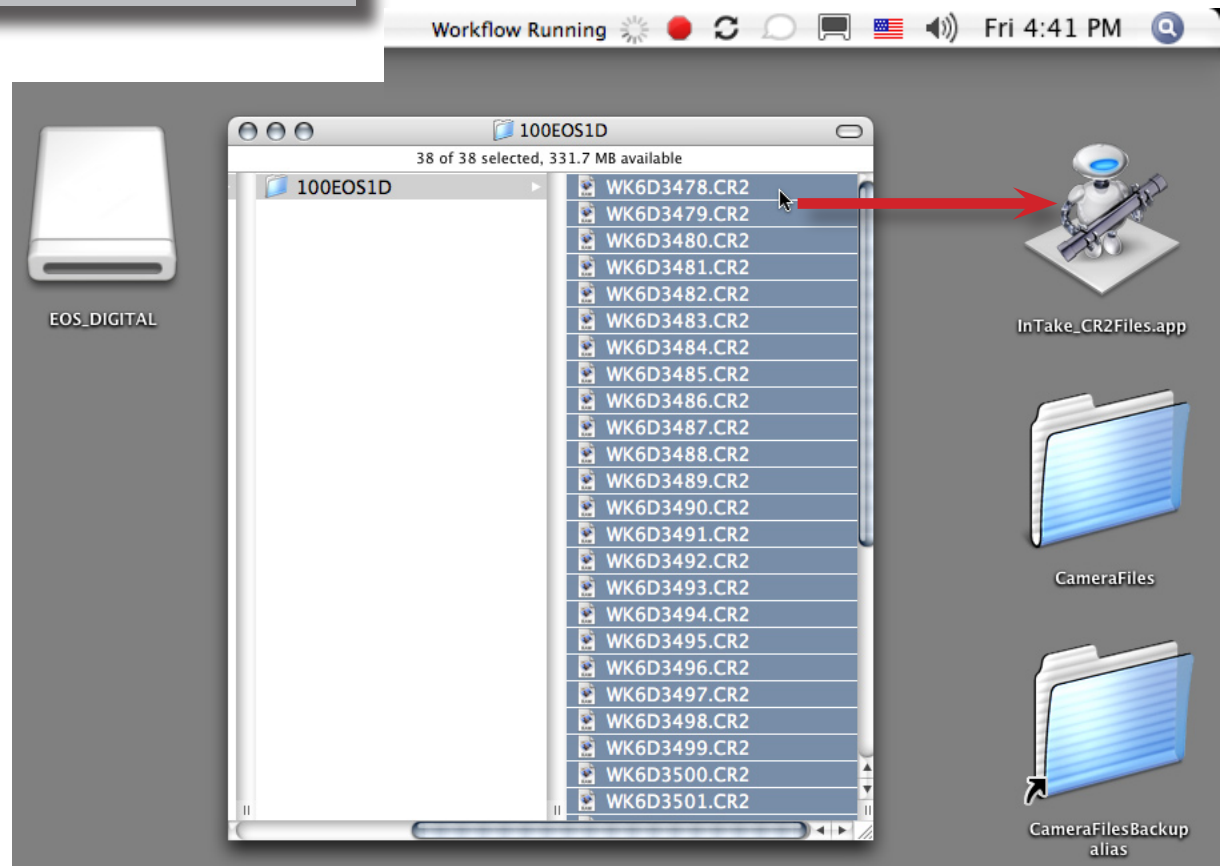
The final step in our Workflow is to copy our renamed files to the 2nd hard drive in the "CameraFilesBackup" folder. Drag in another "Copy Finder Items" Action and set the "To" drop down to your "CameraFilesBackup" folder. That's it... we're now ready to save our workflow. There are a number of different ways to save Workflows and each method has different uses. We will save our Workflow as a stand alone application that we can place on the desktop...



# The Workflow in Action

Save the Workflow application on the Desktop – it appears as a little Robot holding a pipe. In practice, we mount the camera card on the desktop, locate the files within it and drag them onto the Robot icon. The Workflow will immediately launch but you will not see the Automator window! Instead there will only be a small progress announcement in the Finder menu bar where the various actions will flash by next to the OS X whirligig. Automator “Actions” run very fast – all the files you drag onto the Robot will copy into the “CameraFiles” folder, be renamed and duplicated into the “CameraFilesBackup” folder.

Its a good idea to test the Workflow with a few files before you quit Automator to make sure everything runs as expected. If something is broken you can make adjustments and re-save.



You can point Bridge at the “CameraFilesBackup” folder and it will build its thumbnail cache as the files are copied into it. When you’re done with the shoot you can copy the Bridge cache files back to the “CameraFiles” folder before moving everything to your desktop computer for further work.

# Conclusion

There is a lot of potential for complex workflows using Automator. Hopefully this short tutorial will spark your imagination and lead to further experimenting. Automator workflows can incorporate Photoshop Actions as well as a number of other Applescriptable applications like iView Media Pro. Third party Automator Actions are available and can often be downloaded from Apple at:

<http://www.apple.com/macosx/features/automator/>

You could create a workflow that copies your camera files, renames, applies metadata, applies camera raw settings, converts to DNG, makes a backup and moves files into an iView Media Pro catalog - all automatically.

Automator will continue to evolve and additional features as well as "Actions" will be available in the near future. For this reason alone it is worth spending a little time to familiarize yourself with Automator Workflows. Many things that are difficult or impossible to do now will ultimately become easy with future versions.

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## Thank you

I hope you enjoyed this tutorial. The techniques outlined here represent just the tip of the iceberg. Photoshop is a very deep application - a person could spend years studying it and there will always be more to learn. If all this seems a little overwhelming, take a break, do what you feel comfortable doing in Photoshop and return to this tutorial again later on. Often, it takes several weeks for a particular technique to sink in so give it time.

I have other tutorials available online (navigate to the methods section), some are free and some are available for a modest charge. See tutorials and some examples of my work at:

<http://www.varis.com>

There are many learning resources available on the web - here are a few other sites with good information:

<http://www.russellbrown.com>

<http://www.creativepro.com>

<http://luminous-landscape.com/>

<http://www.imaging-resource.com/HOWTO.HTM>

<http://www.photoworkshop.com/>

<http://www.adobe.com/misc/training.html>

<http://studio.adobe.com/expertcenter/photoshop/main.html>

<http://www.ledet.com/margulis/articles.html>

<http://www.steves-digicams.com/>

<http://www.photoshoper.com/>

<http://www.handson.nu/>

<http://photoshopgurus.info/>

These last two links are typical of the majority of Photoshop tutorial sites - they are focused on cool graphics effects not photography. You might want to look over this material anyway - sometimes you can learn a lot about basic functions in Photoshop.

I'm always trying to improve these materials and I'm always open to your feedback. You may contact me via email at:

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best regards, Lee Varis 2006