

Getting raw images into Photoshop

There was a time, not so long ago, when one would simply scan a few photographs, put them in a folder and double-click to open them up in Photoshop. These days most photographers are working with large numbers of images and it is therefore important to be able to import and manage those images efficiently. With Photoshop 7, Adobe introduced the File Browser, which was like an alternative open dialog interface that was built in to the Photoshop program. The File Browser offered a superior way to manage your images, allowing you to preview and manage multiple images at once. The File Browser was then superseded by Bridge, which was supplied as a separate program and included as part of the CS2 Creative Suite.

As image browser programs go, Bridge's main advantage is that you have ready access to Photoshop. You can open up single or multiple images and apply batch operations all directly from within Bridge. If you compare Bridge with other browser programs, it has enough basic functionality to suit most photographers' needs, although it has to be said that Bridge has yet to provide the full functionality that professional photographers have come to rely on in other programs, such as those which are dedicated to the task of managing large numbers of photographs (such as Lightroom or Aperture).

Image ingestion

The first thing we should look at is how to get the images from the camera and on to the computer, such as when shooting with a studio setup like the one shown in Figure 1. This process is usually referred to as 'image ingestion'.

Bridge features a Photo Downloader utility program that makes the downloading process easier to carry out than was the case in earlier versions of Bridge. Over the next few pages I have outlined all the steps that are required when working with the Photo Downloader. It so happens that I mostly use Lightroom to import my photos, so for comparison purposes I have provided a PDF on the book website where I show an example of how to use the Lightroom program to import captured images to the computer ready for Lightroom and Photoshop editing.



Figure 1 Here is a typical studio setup where I have a laptop computer (plus a separate display) stationed close to the actual shooting area, ready to process the captured images from the shoot. With the setup shown here I am able to import images either via a card reader or by shooting tethered.

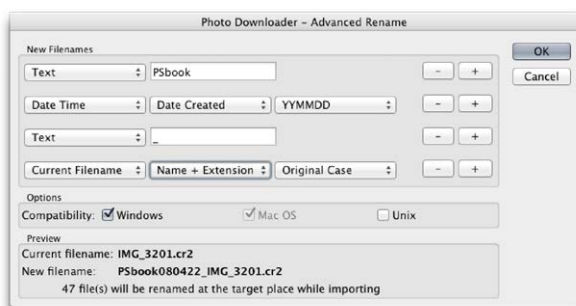
Importing images via Photo Downloader

1



EOS DIGITAL

1 To begin with I inserted a camera card into the computer via a card reader. The card should mount on the desktop, or appear in the My Computer window, as a newly mounted volume.



2 The next thing was to launch Bridge CC and choose File ⇒ Get Photos from Camera... This opened the Photo Downloader dialog shown here, where I could start by selecting where to download the files from (in this instance, the EOS Digital camera card). Next, I chose a location to download the photos to. Here, I selected the Pictures folder. I then selected 'Custom Name' from the Create Subfolder(s) menu (see Figure 2) and typed in a name for the shoot import (this name is appended to the Location setting to complete the file path). I then went on the Rename Files menu, selected the Advanced Rename... option and configured the rename settings as shown above. If the 'Delete Original Files' option is checked, Photo Downloader gives you the option to delete the files from the camera card once they have been successfully downloaded to the computer. I then checked the Save Copies to: option and clicked on the Choose... button to locate a backup folder to save the backup files to.

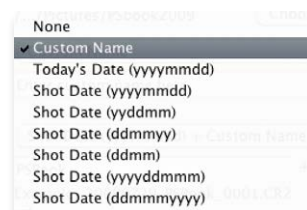
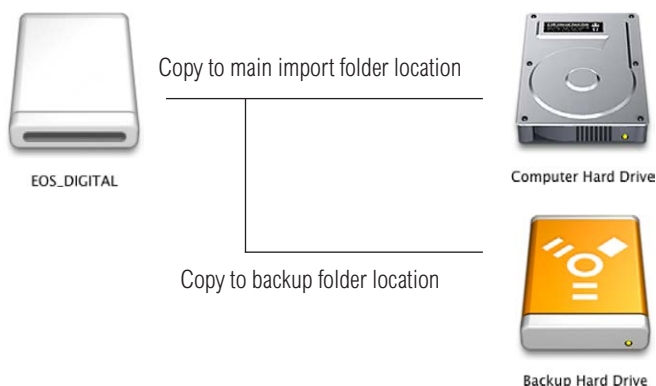


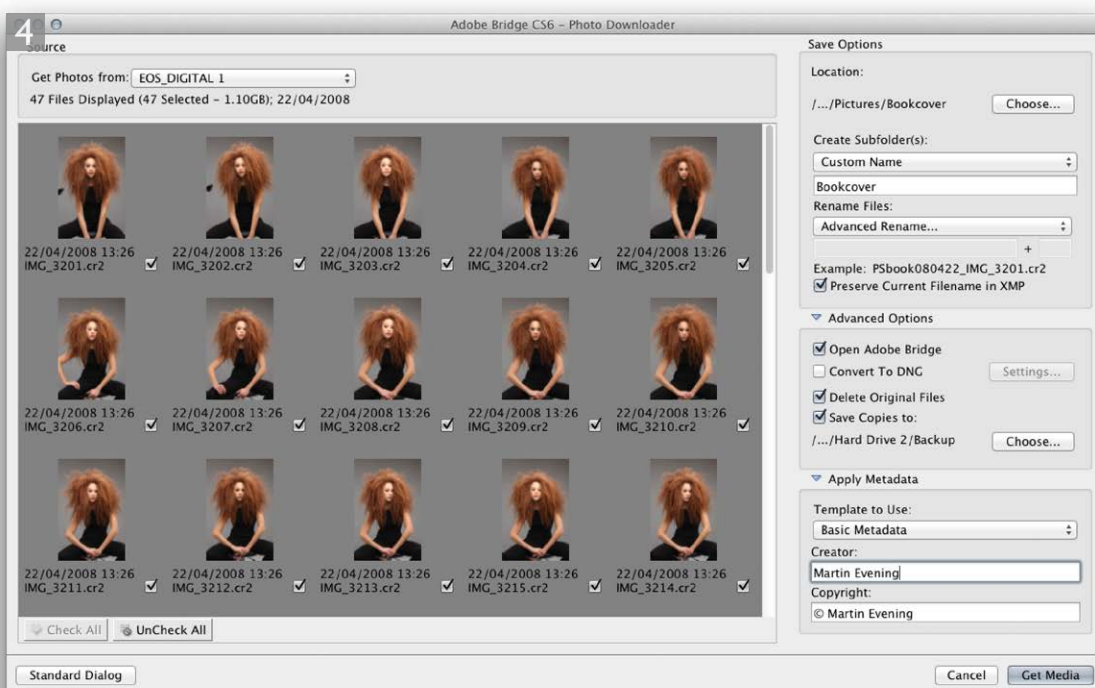
Figure 2 The subfolder naming options.



Backup insurance

For as long as they remain in one location only, your camera files are vulnerable to loss. This is especially true when they only exist on the camera card, which can easily get lost or the data could become corrupted. This is why it is always a good idea to get the camera files off the card and safely stored on a computer hard drive as soon as possible. Not only that, it is also a good idea to make a backup of the camera files as you do so. Note that Bridge will apply the settings setup in the Photo Downloader to the files that are copied to the main folder location. But, the files that are copied to the backup location will be plain clone copies of the original camera files. The backup copy files will not be renamed (as are the main import files). This is a good thing because should you make a mistake during the rename process you will always retain a backup version of the files just as they were named when captured by the camera. Basically, backup files are like an insurance policy against both a drive failure as well as any file renaming mix-ups.

3 Let's review the Photo Downloader settings that have been applied so far. The camera card contained the images I wished to import and the Photo Downloader settings had so far been configured to copy these files to the primary disk location (which in this instance would be the computer hard drive), and at the same time made a backup copy of all the files to a secondary location (in this case, a backup hard drive). With the setup shown here, I was able to use Photo Downloader to make renamed copies of the files to the principal drive/folder location and, if desired, convert the files to DNG as I did so. With this type of configuration I would end up with two copies of each image: one on the main computer and one on the backup drive.



4 I then clicked on the Advanced dialog button in the bottom left corner (circled in Step 2). This revealed an expanded version of the Photo Downloader dialog, which allowed me to see a grid preview of all the images I was about to import from the card. I could now decide which images were to be imported by clicking on the thumbnail checkboxes to select or deselect individual photos. You can also use the Check All and Uncheck All buttons in the bottom left of the dialog to select or deselect all the thumbnails at once.

The Rename Files section allowed me to choose a renaming scheme from the options shown in Figure 3. Which you should choose here will depend on what works best for you. In this example I retained the custom settings that were configured in Step 2. I could see how the renaming would work by inspecting the Example filename below, where, as you can see, the imported files were automatically renumbered beginning from the start number entered here. If you check the Preserve Current Filename in XMP, this gives you the option to use the Batch Rename feature in Bridge to recover the original filename at a later date.

The Advanced Options lets you decide what happens to the imported images after they have been renamed. You will most likely want to check the Open Adobe Bridge option so that Bridge displays the image download folder contents as the images are being imported. In the Apply Metadata section you can also choose a pre-saved metadata template and enter your author name and copyright information. This is then automatically embedded in the metadata of all the files as they are imported.

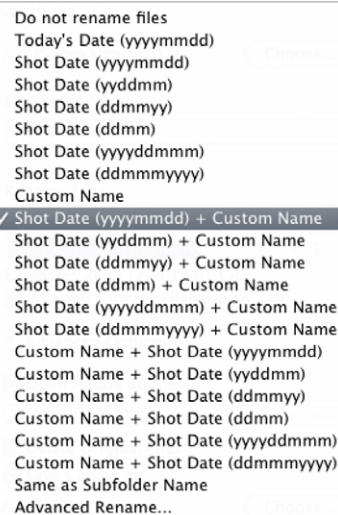
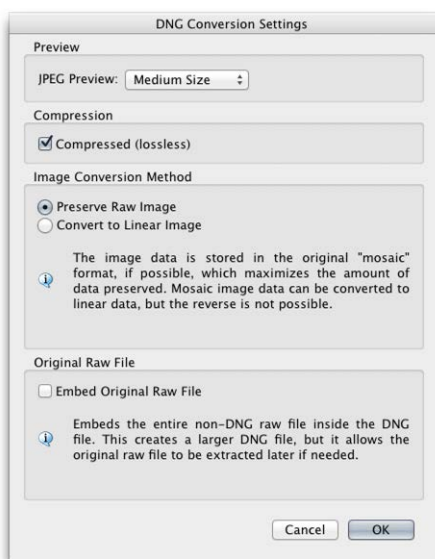


Figure 3 Here are the options for the Rename Files menu in the above dialog.

5

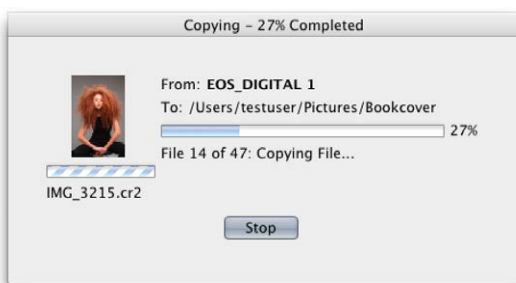


Converting to DNG

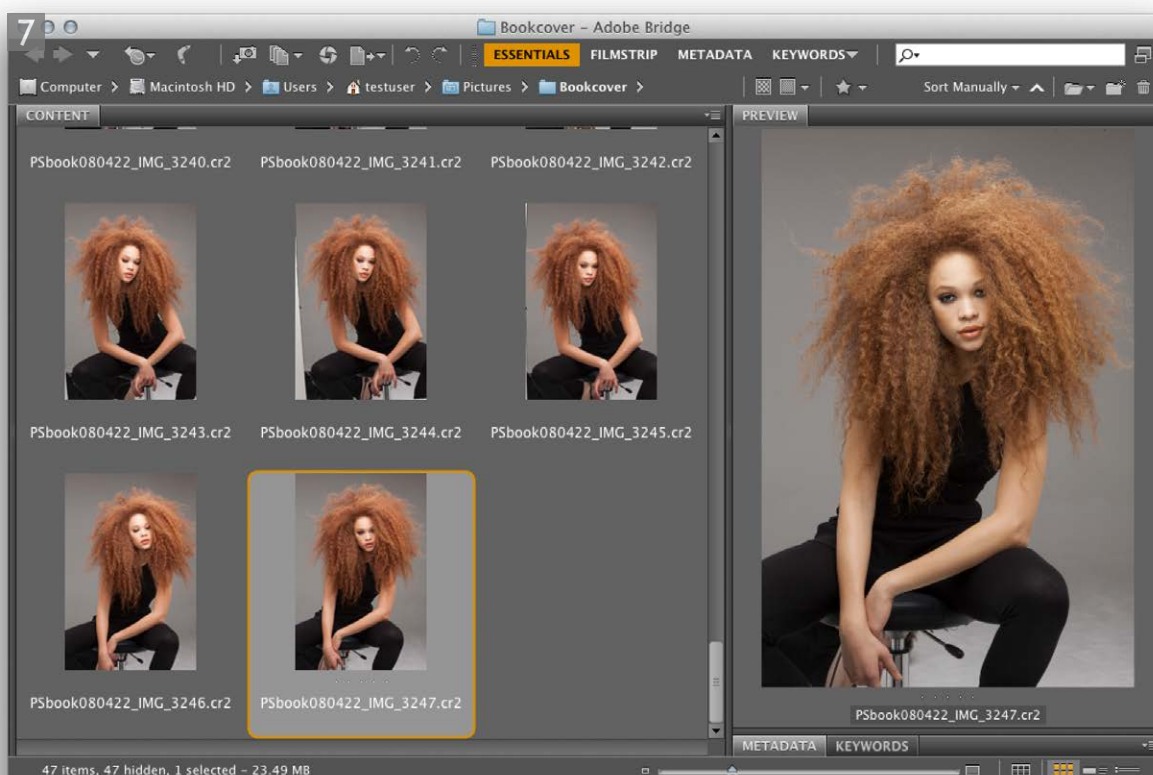
For some people it can be useful to carry out a DNG conversion straight away, but be warned that this will add to the time it takes to import all the photos.

5 If the Convert to DNG option is selected, this can be used to convert raw images to the DNG file format as they are imported. If you click on the Settings... button (next to the Convert to DNG option in Photo Downloader) this opens the DNG Conversion Settings dialog shown here. If you select the Medium Size JPEG Preview option, this will generate a standard size preview for the imported pictures. There is no point in generating a full size preview just yet since you may well be changing the camera raw settings soon anyway, so to get reasonably fast imports it is better to choose 'Medium Size'. Check the Compressed option if you would like smaller file sizes (note this uses lossless compression and does not risk degrading the image quality). In the Image Conversion Method section I suggest you don't choose 'Convert to Linear Image', but choose 'Preserve Raw Image' as this keeps the raw data in the DNG in its original state. Lastly, you can choose to embed the original raw data (along with the DNG data) in the DNG file, but I would advise against this unless you really need to preserve the proprietary raw file data.

6

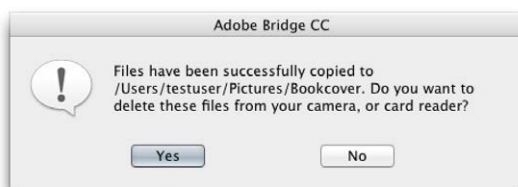


6 After I clicked on the Get Photos button in the Photo Downloader dialog, the images started to download from the card to the disk location specified in the Save Options in Step 4. The above progress dialog showed me how the download process was proceeding.



7 Because the 'Open Adobe Bridge' option had been selected, once all the photos were downloaded, Bridge opened a new window to display the imported photos that were now in the selected download images folder.

8



8 Also, because the 'Delete Original Files' option was selected, the above warning dialog appeared once the downloads to the primary destination folder (and backup folder) were complete. This step conveniently cleared the camera card of all the images that were stored on it and prepared it for reuse in the camera. Be warned that this step bypasses any opportunity to confirm if you really want to delete these files. Once you click 'Yes', the files will be permanently removed from the card. When I put a card back in the camera I usually reformat it anyway before shooting a fresh batch of photos to that card (see sidebar: Deleting camera card files).

Deleting camera card files

It isn't actually necessary to delete the files from the camera card first, because formatting a card in the camera deletes everything that's on the card anyway. Formatting the card is good housekeeping practice as this helps guard against future file corruptions occurring. However, I find that if I am in the midst of a busy shoot it is preferable to get into a routine of deleting the files before you put the card back in the camera. Otherwise I am always left with the nagging doubt: 'Have I downloaded all the files on this card yet? Is it really safe to delete everything on this card?'

Tethered shoot imports

There is no direct support for tethered shooting in Bridge CC, but if Bridge were able to do so, it would have to offer tethered support for many if not all the cameras that Camera Raw already supports. Enabling full tethered shoot functionality is difficult enough to do for one camera let alone several hundred. This is why those software programs that do offer tethered shooting, such as Capture One and Bibble, only do so for a specific range of digital cameras. However, it is possible to shoot in tethered mode with Bridge, but it all depends on the capabilities of your camera and whether it has a suitable connection socket, plus if the supplied camera software allows you to download files directly to the computer. Many cameras (especially digital SLR cameras) will most likely come with some kind of software that allows you to hook your camera up to the computer via a FireWire (IEEE 1394), USB 2, USB 3 or Ethernet cable (Figure 4). If you are able to download files directly to the computer, then Bridge can monitor that folder and this will give you a next best solution to a dedicated software program designed to operate in tethered mode.

The only drawback to shooting tethered is that the camera must be wired up to the computer and you don't have complete freedom to wander around with it. If you have a wireless communication device it may be possible to shoot in a direct import mode to the computer, without the hassle of a cable, but at the time of writing, wireless shooting isn't particularly speedy when shooting raw files with a typical digital SLR.

Over the next few pages I have described a method for shooting in tethered mode with a Canon EOS camera, using the EOS Utility program that ships with most of the Canon cameras. This program lets you download camera files as they are captured, to a designated watched folder. Nikon owners will find that Nikon Capture NX2 includes a Camera Control component that allows you to do the same thing as the Canon software and establishes a watched folder to download the images to. The latest version of Nikon Capture supports all the latest D Series cameras. Alternatively, you might want to consider buying Bibble Pro 5 software from Bibble Labs (bibblelabs.com). Bibble Pro does not cost as much as Nikon Capture. It enables tethered shooting with a wide variety of digital cameras and, again, allows you to establish a watched folder for the downloaded images, which you can monitor using Bridge CC.

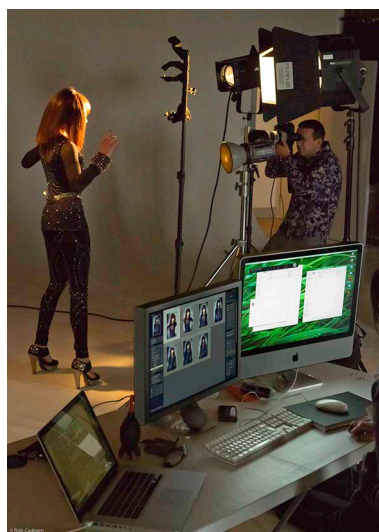


Figure 4 Here is a photograph taken of me at work in the studio, shooting in tethered mode.

Which utility?

One of the problems with the Canon system is the way the utility programs have been named and updated with succeeding generations of cameras. First of all there was EOS Viewer Utility and now EOS Utility, which have both interacted with a program called EOS Capture. On top of this you also have to make sure that you are using the correct version of 'utility' software for your camera. It would help if there were just one program that was updated to work with all Canon cameras.

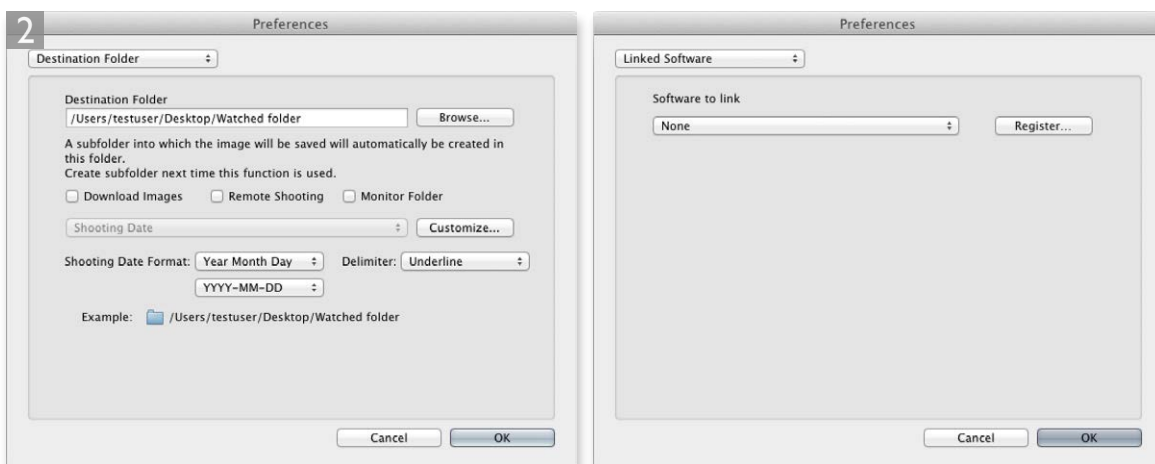
Which transfer protocol?

Nikon and Canon systems both offer FTP and PTP transfer protocols. Make sure you select the right one, as failure to do so can result in an inability to get tethered shooting to work. This information can be found in the camera manufacturer's manual for your camera model.

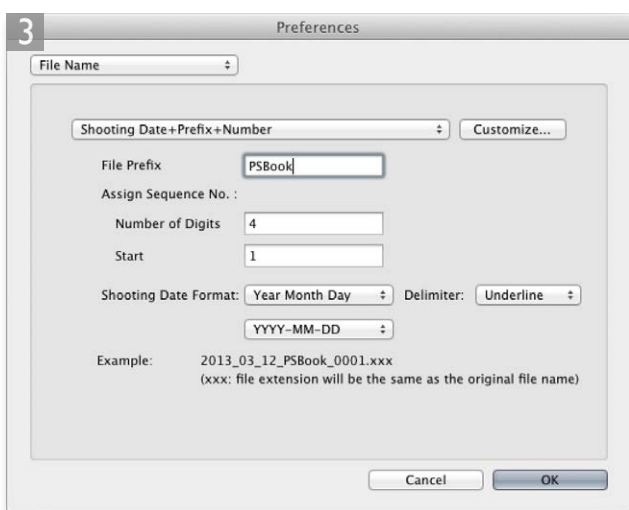
Tethered shooting via Canon EOS Utility



1 To begin with, I made sure the camera was tethered to the computer correctly and was switched on, I then launched EOS Utility and clicked the Preferences button (circled in blue) to open the Preferences dialog shown in Step 2 below.



2 In the Destination Folder section, I clicked on the Browse... button and selected a destination folder that the camera captures were to be downloaded to. This could be an existing folder, or a new folder, such as the 'watched folder' selected here. Meanwhile, in the Linked Software section, I set the 'Software to link' to 'None'.



3 I also needed to establish a file renaming scheme. It is possible to carry out the file renaming in Bridge afterwards, but establishing this beforehand can save time and helps reduce the risk of error if it's applied automatically as the files are captured. In this example, I selected the Shooting Date+Prefix+Number file naming scheme and set the start count number to '1'.

4



4 I then clicked OK to the Settings in Step 3 and clicked on the Camera Settings/Remote shooting option circled in red in Step 1. This opened the Camera control window shown here, where I could configure the camera settings remotely. As soon as this window appeared I was ready to start shooting.

Lightroom conflict

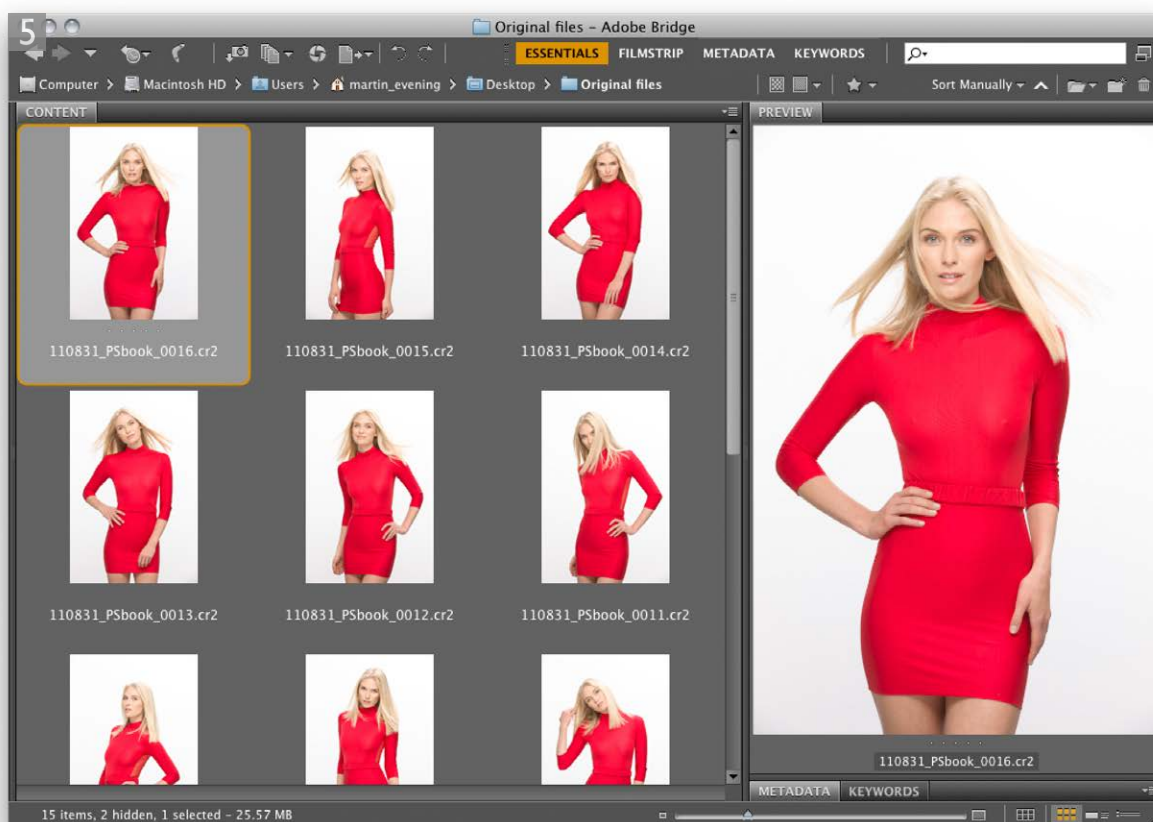
If you are also running Lightroom, the one thing to watch out for here is that the watched folder you select in Step 2 does not conflict with a watched folder that is currently being monitored by the Lightroom program. If this is the case, you will need to disable the auto-import feature in Lightroom first before using it to import photos that can be viewed via Bridge.

Auto renumbering

When you select a numbering option in the File Name section, the numbering will keep on auto-updating until such time as you change the file prefix name. This is useful to know because it means that if you were to lose a camera connection or switch the camera off between shoots, the EOS Utility program knows to continue the file renaming of the import files from the last number used.

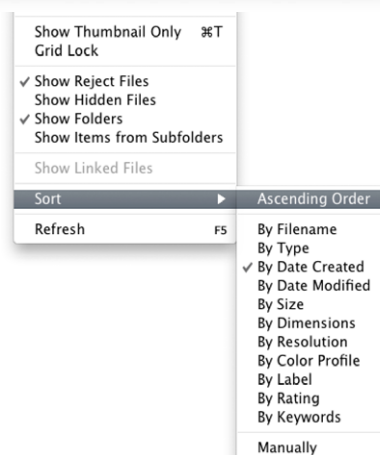
Remote shooting controls

As soon as the Camera control window appears you know that you have succeeded in establishing a tethered connection and are ready to start shooting. This can be done by pressing the shutter on the camera, or alternatively, you can use the EOS Capture utility to capture the photos remotely from the computer by clicking on the large round button (circled in red in Step 4). You can also use this window to adjust the camera settings by selecting any of the status items in the window and use the left/right keyboard arrow keys to navigate between the various mode options and use the up/down keys to increase or decrease the individual settings.



5 As I started shooting, the EOS Utility enabled the import of the camera files directly into the watched folder I had established in Step 1 and renamed them (as configured in Step 2). All I needed to do now was point Bridge at the same watched folder as was configured in the EOS Utility preferences and I would see the pictures appear in Bridge directly. Of course, if you are shooting continuously in the studio or on location with a setup like this, then you will most likely wish to see the newest pictures appear first at the top of the content area in the Bridge window. To do this, I went to the View menu and ensured the Ascending Order item in the Sort menu was deselected (as shown in the screen shot on the left). Having done this, the files would now be sorted in reverse order with the most recent image appearing at the top.

When you have finished shooting in tethered mode, you will either need to move the files from the watched folder and place them elsewhere, or rename the folder. The main thing to be aware of here is that every time you start a new shoot, you will either want to choose a new job folder to download the photos to, or move the files from this folder to a new location and make sure that the watched folder you are linking to has been emptied. Of course, you could always create an Automator workflow action (Mac), or VB script (Windows PC) that allowed you to press a button to do the transfer and clearing of the watched folder.



Importing images via other programs

Figure 5 highlights some of the various methods that can be used for importing images. There is no one program that can do everything perfectly, but of these, I would say Capture One is the only program capable of ticking all the essential boxes (as long as your camera is supported). Ingestamatic and ImageIngestor are great utility programs that can provide a fast and robust import workflow. These are both currently available as demo versions from the link on the right. The newest versions allow you to download from up to 8 cards simultaneously. They can also provide raw file verification, apply default Camera Raw settings and incorporate GPS tagging.

Ever since Adobe Photoshop Lightroom was first released, I have been using it in the studio and on location to import images from cards as well as when shooting in tethered mode. To show you how I do this, I have included a PDF on the book website that demonstrates how I use Lightroom to import new photos into the computer. However, I do still use Bridge a lot for various browsing tasks. For example, I mainly used Bridge to manage all the files used in the production of this book.

Ingestamatic and ImageIngestor

The Ingestamatic™ and ImageIngestor™ utilities have been designed by Marc Rochkind and are aimed at photographers who shoot raw files, and who need to ingest hundreds of images from a typical shoot. You can download demos of both from the following link:

<http://basepath.com/new/index1.php>.

	Direct integration with Bridge	File renaming	Full auto renumbering	Secondary backup of data	Convert to DNG	Import settings saved for concurrent imports	Tethered shooting	Preview and pre-selection of import files
Photo Downloader in Bridge	✓	✓	✓	✓	✓	✓		✓
Tethered shooting via Bridge	✓						✓*	
DNG Converter		✓	✓		✓	✓		
Lightroom Import Photos		✓	✓	✓	✓	✓	✓	✓
ImageIngestor Standard		✓	✓	✓	✓	✓		
Capture One		✓	✓	✓	✓	✓	✓	✓

Figure 5 In this table I have compared the features that are available when using some of the various methods for importing camera images into the computer. As you can see, there is no one perfect solution out there that will let you do everything (although Lightroom and Capture One tick all the important boxes). Lightroom does include the ability to shoot tethered, but does not provide as extensive support or as many options as some of the other methods of tethered shooting.

* In these instances, tethered shooting is only possible if done in conjunction with a camera manufacturer's import software.

Import Images from Device (Mac only)

This isn't a raw capture feature, but while we are on the subject of importing images I do want to draw attention here to 'Import Images from Device' from the File ⇒ Import submenu in Photoshop. This lets you interact with scanner devices and import images from a scanner directly into Photoshop (although you do need to install the appropriate driver and configure the scanner before you can scan images in this way). The impetus for this was the fact that TWAIN 64-bit drivers are pretty scarce, and this feature does at least offer some extra features that TWAIN can't offer, such as support for networked scanners and cropping and rotation of images on import. This does at least give Macintosh users a simple interface control for importing photos from their desktop scanners.

TWAIN origins

On a side note here, the name TWAIN was originally arrived upon as a reference to Rudyard Kipling's 'The Ballad of East and West', in which he writes: '...and never the twain shall meet...'. An alternative explanation is that it's an acronym for 'Technology Without An Interesting Name'.

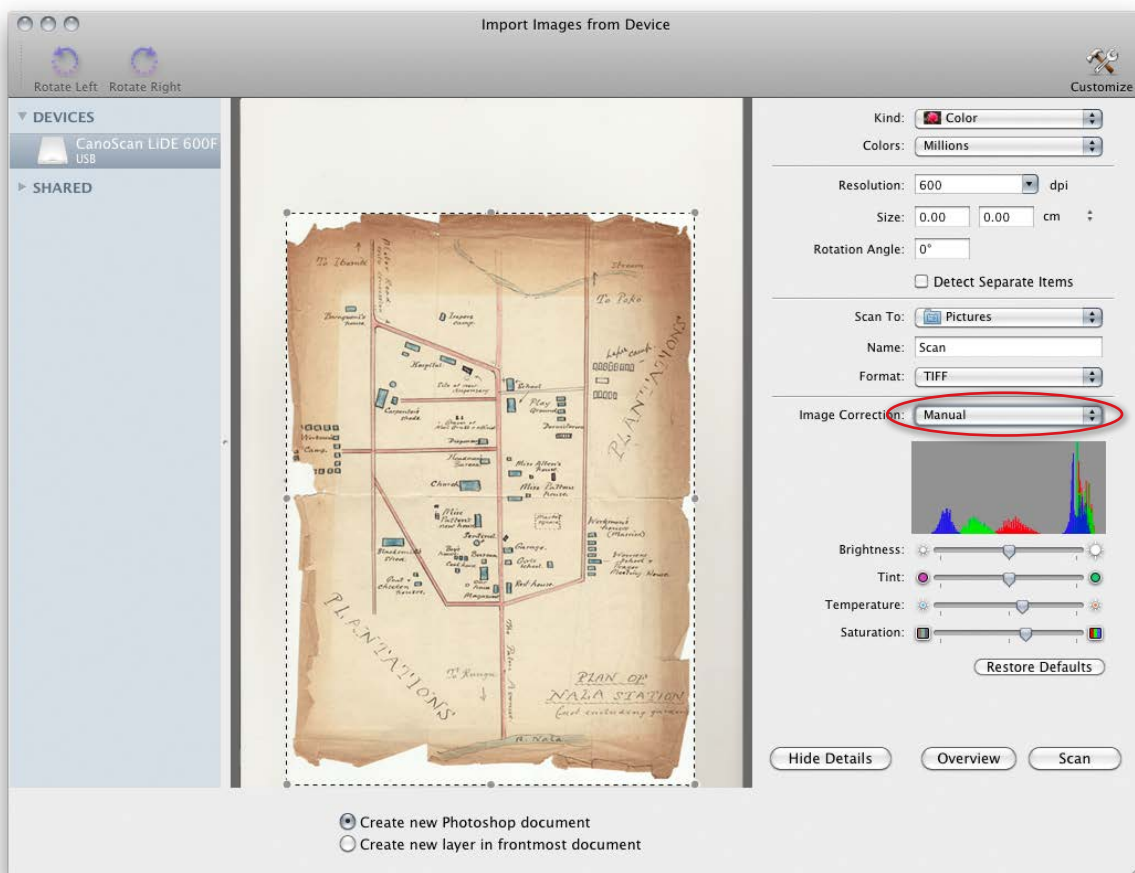


Figure 6 This shows Import Images from Device with a scanner device selected.

When a supported scanner device is selected from the Devices menu, you'll see options like those shown in Figure 6, where I selected the Manual option in the Image Correction menu (circled). This revealed the extra image adjustment controls that were available for this scanner. As you can see, what you have here is fairly basic and advanced users will most likely prefer to stick with dedicated scanner software such as Vuescan or SilverFast. There is though an option to 'Detect Separate items', which works the same way as the Crop and Straighten command from the File ⇒ Automate submenu. At the bottom are two buttons, which allow you to choose whether to import files as new image documents, or to place as a new layer in the frontmost document.

Import Images from Device does more though than just allow you to connect to desktop scanner devices. You can also import files from a connected digital camera, or a card reader. If you have an iSight camera connected to your computer, you can even use it to take photos. In Figure 7 you can see that I had a smart phone connected to the computer and could use Import Photos from Device to import the photos I had stored on it.

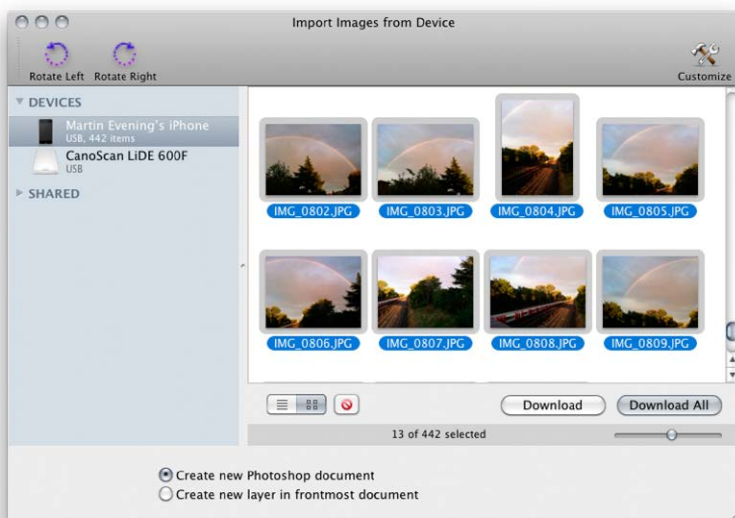


Figure 7 This shows Import Images from Device with a smart phone device selected. Note that the Rotate Right and Rotate Left icons are dimmed when importing images from a scanner but are enabled when importing images from a camera.

Scanning to layers

When you choose 'Create new layer in frontmost document', the scanned image will be placed as a Smart Object layer. If you have 'Detect Separate Items' checked and this means you are going to be making multiple scans, you will need to commit each layer before the following scanned layer can be placed. If not, an alert will appear: 'Cannot create new layer while current layer is active. Double-click layer to deactivate.' Click OK to get rid of the alert message. However, if you do not commit the placed layer in time, you will lose all further scanned images, though copies will be saved to the usual designated scan folder.

Closing the Import Images dialog

The 'Import Images from Device' dialog always remains open after you have made a scan. This is so that it remains on standby for making further scans. You can close it either by clicking on the Close button, or use the **⌘ W** (Mac), **ctrl W** (PC) shortcut.