

# Digital Asset Management Meets Adobe DNG

## DNG Will Benefit Your RAW File Workflow, Now & Later

Photographers who shoot RAW files have had to deal with a lot of frustrations when designing workflows, particularly when designing systems for the long-term storage of their images. Until recently, there's been no way to make sure that the work you do to the file in Photoshop can be seen by any other application.

### A FAILURE TO COMMUNICATE

RAW files are all proprietary files, created by the camera manufacturer, and their exact structure is not disclosed. Other software companies, such as Adobe, or companies that make Digital Asset Management (DAM) software, have to take the file apart and deduce what each part does. Because each company is doing this independently, they all do it slightly differently. This means that work you do to an image in one application may not be seen by another application, or it may be seen today, but not in the next version of the software.

Adobe uses Sidecar files to store changes you make to a RAW file, so they don't accidentally corrupt the file. This helps to avoid unintended corruption, but makes the Adobe-created metadata entirely invisible to other applications. If you want DAM software to use this information, or if you want Spotlight to search for it, you have to re-enter it using some other program.

Likewise, the adjustments you make to RAW files in Adobe Camera Raw are not saved back to the preview file. Photoshop can show you those adjustments in the form of a preview in Bridge, but



any other software looking at the file will see the unadjusted preview the camera originally wrote to the file. This makes it difficult to evaluate images in third-party software, since you can't see what the file will look like when it gets opened.

### THINK DIGITAL JOB JACKET

DNG is an openly documented storage format that Adobe developed to address

these issues. By converting your RAW images to DNG, you make all the work you do on the files—from appearance adjustments to metadata—permanent and available to any DNG-aware software. Finally, your integrated DAM system is fully integrated with Photoshop.

I think of the DNG format as a digital job jacket, rather than as a digital negative. Sure it stores the “negative” in the



form of the RAW image data, but it can also put “paperwork” into this file. The IPTC and XMP file info that lives in a DNG file can hold more data than you’re ever likely to need.

Most importantly, however, the DNG can store a pretty good print. This is a preview that Camera Raw makes from the photograph after you have adjusted the image settings. It’s essentially a JPEG file (sRGB, for those of you keeping score at home) that can be pulled out of the DNG file and quickly converted for proofing purposes such as email, Web galleries, or proof prints. Because Camera Raw enables such good adjustments, this embedded preview will be all I expect to need for 95 percent of my image files.

#### ALL TOGETHER NOW

So what does a DNG workflow look like, and how does it help? For starters, I suggest you bring your images into Photoshop CS2 and apply some metadata—your name and contact info, license info if appropriate, and anything else that applies to all the pictures. Then, rate the images for quality, using the Rating stars. After that, adjust the images in Camera Raw, paying most attention to the highest-rated images.

Once the images have been adjusted, convert them to DNG files. At this point, I archive the files and catalog them with iView MediaPro. I can see the files in iView with my corrections applied, and can add to the metadata that was created in Photoshop.

When I want to make proofs of the files, say, for a Web gallery, I can have iView make it directly from the embedded preview in the DNG file, which is much faster than working from the RAW data. When I need to make master files of selected images, I just open the DNG file in Camera Raw and further refine my settings before bringing the files into Photoshop for final retouching, correction, and output.



#### LONG-TERM ACCESS

All of the DNG benefits described thus far are largely workflow issues. Another important aspect to consider are the long-term access implications of undocumented RAW file formats. Camera manufacturers have already discontinued support for older digital cameras. And changes in manufacturers’ software have wiped out settings for thousands of images painstakingly made.

While DNG is not guaranteed to be around forever, it has a better chance than any particular individual camera format currently available. As more photographers see its benefits, the number of DNG files

in existence will dwarf any other single format.

I would expect this to be true by the end of 2005. Other RAW converters, such as Phase One’s C1 and Pixmantec’s RawShooter Essentials, already support or promise to support DNG, so you’ll have multiple conversion options in the future. ❖

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