# Lightroom Classic CC February 2019 update

This February sees the release of Lightroom Classic CC 8.2. The Lightroom Classic CC release includes a new Enhanced Details processing method, which can be used to generate separate DNG versions from certain types of raw files. This method can, in some instances provide improved detail with fewer artifacts.

## ENHANCED DETAILS

The Enhanced Details raw processing option can be used to achieve the ultimate fine-detail processing from your raw images. It does so though by rendering a new DNG file, rather than updating the original raw image. To create an Enhanced Details DNG go to the Photo menu and choose Enhance Details (or use the Ctrl Att I shortcut). Or, you can right-click to access the context menu and select Enhance Details. When you convert to Enhanced Details this creates a new linear DNG file with the high-quality demosaic baked into the image data. This process essentially creates a demosaiced image (like a TIFF) within a DNG wrapper, but with fewer image artifacts. You can then continue to adjust the DNG image as normal and fine-tune the Detail panel settings to refine the image detail noise and sharpness.

The raw data that is captured by the camera sensor needs to be interpolated or 'demosaiced' by Lightroom before it can be viewed in the program. Each photosite on the sensor captures either a red, green or blue color. Therefore, during the demosaic process Lightroom has to interpolate (i.e. guess) the two other colors for each specific photosite. Now, the current demosaic method in Lightroom has been refined to the point where it works well enough for most images, but there are some instances where extremely fine subject detail could be rendered better. Examples include fine detailed texture and images captured by sensors without a low-pass filter such as the Sony A7R series, Canon 5DS R and Nikon D800E/D810/D850 cameras. These models are more susceptible to moire artifacts when capturing fine detailed patterns.

Essentially, Enhance Details essentially performs a very sophisticated demosaic step to improve the accuracy of the interpolation in these tricky cases. Enhance Details uses a machine learning-based algorithm to produce better demosaicing results than the regular, Camera Raw demosaic algorithm. However, because of this the process is computationally intensive. This is why Enhanced Details is made available in Lightroom as a special render process that generates a separate DNG file, rather than being offered as a new default process version. When you choose to create an Enhanced Details DNG the preview dialog indicates how long it will take to render (see **Figure 1**). With the Enhanced Details Preview dialog open you can click on the photo to select a new area to zoom in to. Enhanced Details DNG files are much bigger in size and take up more disk space. But on the other hand will be faster to read and load compared to editing the originals.

The machine-learning process made use of a great many real-world image examples (I think somewhere in the millions) to train the computer system to learn for itself how to interpolate a given mosaic pattern correctly. It normally takes a lot of experience and going back and forth to work on a problem like this to manually fine-tune the demosaic algorithm. With machine learning, however, this process can be much speeded up and it is therefore ideal for a task such as this,

#### NOTE

Your computer will need to meet the latest system requirements in order to run Lightroom Classic CC, or Lightroom CC, and be able to create an Enhanced Details DNG. However, Enhanced Details DNGs can be read by older versions of Lightroom running on older computer systems.

### NOTE

The Enhance Details process must be applied first, ahead of any Photo Merge processing. Therefore, you cannot create a Photo Merge Panorama or HDR DNG first and then enhance. If you try to do this Lightroom will show an error message.



Figure 1 The Enhance Details preview dialog.

and can achieve what can be regarded as the optimum demosaic processing for many different kinds of sensors.

If you take a look at the close-up views in Figure 2, show using a Fujifilm X-trans sensor, you will notice how the Enhanced Details rendering shows smoother rendering around the edges of the branches and there is more detail in the branches and flower petals. Fujifilm X-Trans users will more likely see a stronger benefit. However, with Bayer type sensors there are also small improvements to areas containing fine-line diagonals or curves, such as hair and fur. Therefore it is more likely files from these cameras can also be improved using the new Enhanced Details processing. With a lot of other images you will be hard pressed to see a significant difference with or without the Enhanced Details processing, which is why it is useful to have the preview dialog to inspect with first before generating a n Enhanced Details DNG. That said, the Enhanced Details processing can be particularly advantageous where you have to crop a photo tightly because you didn't have a long enough focal lens and you want to ensure the pixels you are left with are rendered the best they can be. Overall, you will only want to use Enhanced Details for special case images, where the refined detail raw processing will benefit your hero images. For example, when reviewing images from a series of landscape photographs, I would only bother converting the very best photos using Enhanced Details.



**Figure 2** A comparison between Version 5 processing (left) and Enhanced Details (right). Photo captured using a Fujifilm X-E2 camera

## IMPROVED TETHERING FOR NIKON CAMERAS

Lightroom Classic CC users should now experience greater speed and stability when shooting tethered using Nikon model cameras. You will now see there is a single menu for tethered capturing and Lightroom Classic CC automatically detects which model of camera is connected to your computer.



**The Adobe Photoshop Lightroom Classic CC Book** by Martin Evening 768 pages + Website with videos and free downloads

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