

3. Edit

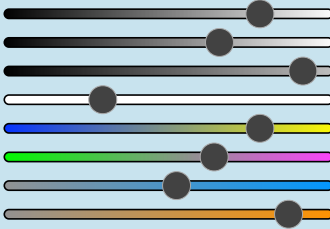
The Edit module is where you post process your photos. The basics of exposure and white balance, specialized filters, layers, masking, and blending options are all in Edit. The styles, looks, and treatments you can give your photos are endless. There are several major modules in Edit:

- **Develop:** Fundamental adjustments such as exposure and temperature that affect a photo globally.
- **Effects:** Specialty filters that style photos with a unique, signature look. Effects can be globally or selectively applied.
- **Portrait:** Tailor-made tools for working on portrait photos. Target adjustments to the eyes, lips, teeth, and skin.
- **Local Adjustments:** Finishing touches applied to selected portions of a photo.
- **Layers:** Advanced processing including exposure blending, compositing, and texture blending.

There is a massive set of features packed into the Edit module – too many to cover in a single chapter. This chapter provides an overview of the general principles of non-destructive editing and the tools and controls common across the modules of Edit. Later chapters dive into each of the sections of Edit in more detail.



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Non-Destructive Edits

Photo RAW tracks the adjustments made and applies them in real time. Your original photo is never modified. An internal database and an optional sidecar file preserve the non-destructive edits for each photo.

Non-Destructive Editing

Photo RAW is a non-destructive editor. It never modifies your original image. As you adjust sliders, you see the updated look of your photo in the Preview area. Behind the scenes, Photo RAW reads the original photo, applies the adjustments in real time, and shows the result.

The adjustments you make to your photo are stored in a database internal to Photo RAW. You do not need to “save” your work as you modify your image. Photo RAW keeps track of the changes for you as you make them. Think of adjustments as instructions to Photo RAW on how to modify your image. The next time you start Photo RAW and select a photo, the original photo is read and the instructions are replayed. The results are shown in the Preview area.

The benefits of non-destructive editing are huge. You can always go back to your original image. You have the freedom to

experiment with different looks, never worrying that a change is permanent. Another benefit is the adjustment instructions are small. You can have multiple versions of the same photo, each with different adjustment instructions (see the Browse chapter).

Only Photo RAW understands the non-destructive edits. Adjustments are not visible when viewing an original image in the Finder/Explorer.

ON1 Sidecar Files

In the previous chapter, we learned metadata for RAW files are stored in XMP sidecar files. There is another sidecar file, the ON1 sidecar, used in Photo RAW. Like the XMP sidecar, it also stores metadata changes you make in Browse. However, the ON1 sidecar does more.


An ON1 sidecar also stores the non-destructive adjustments you make in Edit. By default, ON1 sidecar files are turned off.

I choose to enable them. Check the **Save ON1 sidecar files** option in the Files tab in the Preferences to turn them on.

Why turn on sidecar files? Since sidecar files contain the non-destructive edits, they are a backup to up your editing work. ON1 sidecar files live in the same folder as your photos. When you back up your photos, you can also back up the sidecar, saving the metadata and editing adjustments made in Photo RAW. You don't need to be concerned with backing up Photo RAW's internal database (which you'll do anyway when backing up your main computer).

A potential drawback is the ON1 sidecar file is updated each and every time an adjustment is made to a photo. I personally

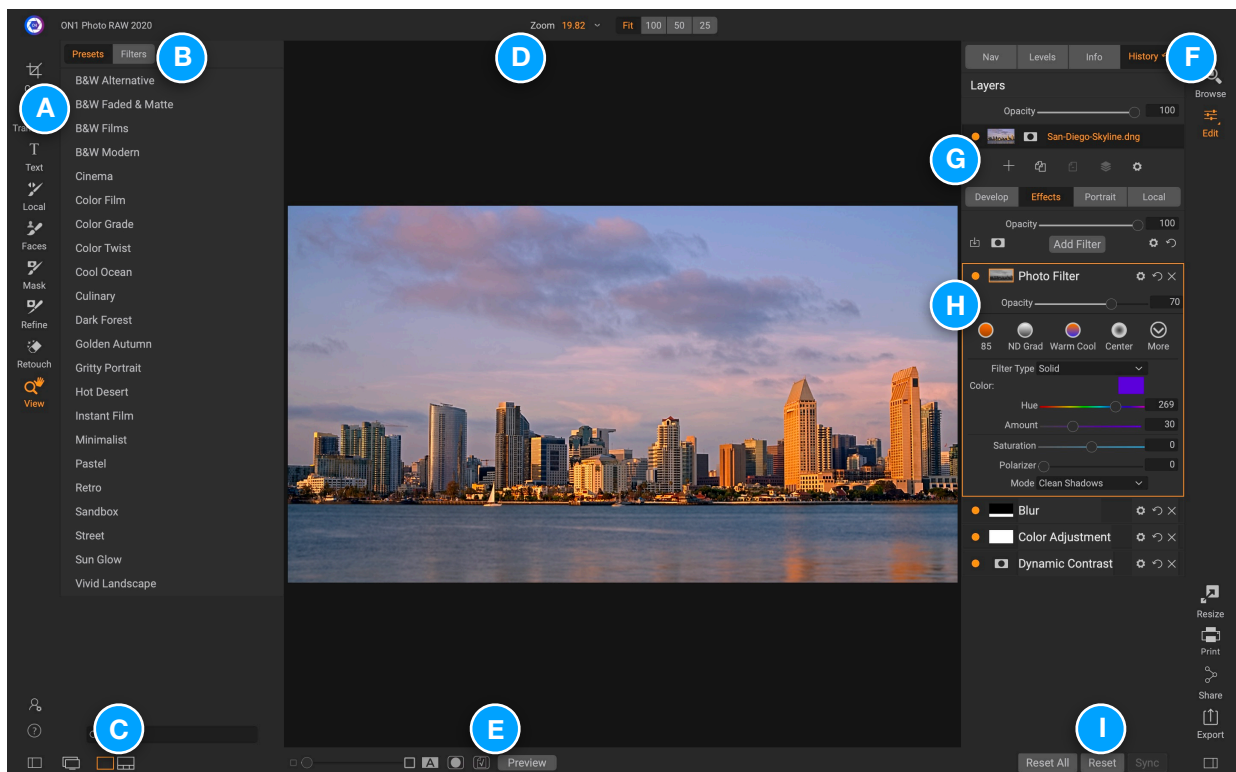
have not noticed any performance impact using sidecar files.

 *Sidecar files are very small, about 2KB, and don't use a noticeable amount of disk space.*

Interface Overview

The major areas of the Edit module are:

- A. **Tool Well:** Editing tools including crop, masking tools, and retouch tools.
- B. **Browser:** Apply stylistic presets or filters to a photo.
- C. **Views & Thumbnails:** Change the photo view and the thumbnail size.



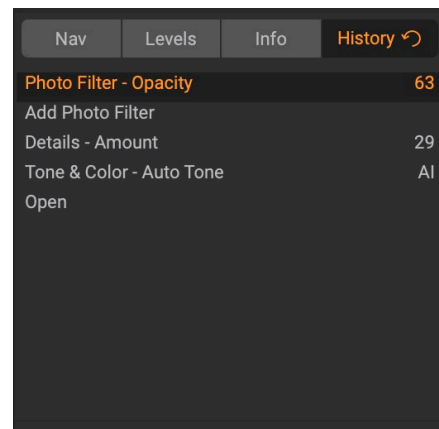
- D. **Tool Options Bar:** Context sensitive area with the controls for the selected tool.
- E. **Preview Options:** Turn off and on the image preview and show or hide masks overlays.
- F. **History:** Review the editing history or jump to a previous point of the edit.
- G. **Layers:** Add, remove, and manage layers in multi-photo composites and blends.
- H. **Settings Area:** Access various editing and styling filters in the Develop, Effects, Portrait, and Local Adjustments tabs.
- I. **Reset/Reset All/Sync:** Clear the settings for the active editing tab (Reset) or all settings (Reset All). Sync synchronizes settings across selected photos in the Filmstrip View.

A few of these options warrant further explanation.

History

As you make edits to a photo, Photo RAW automatically records the adjustments. The **History** tab lists the changes you have made. The most recent change is at the top of the list. To look back at an earlier stage of your editing session, click one of the entries in History. Photo RAW jumps to that point in the edit and the image preview is updated accordingly. Changes above the selected entry – points in time newer than the selected change – are grayed out.

Using the History tab is a convenient way to go back in time. However, you can also rewrite history. Consider the example here. The most recent adjustments involve a Photo Filter. Suppose the *Details - Amount* entry is selected. The Photo Filter adjustments are grayed out and removed from the image preview.



At this point, if a new filter is added or a slider is modified, the Photo Filter is wiped from the history. Just like in the movies, time travel in Photo RAW is not without risks. Changes made in the past affect the future.

Reset And Sync

There is a subtle yet important difference between **Reset** and **Reset All**. **Reset All** clears all adjustments made to the photo, restoring it to its original unedited appearance. The **Reset** button clears the adjustments for the active tab only. For example, if the **Effects** tab is active, **Reset** clears only the filters applied in **Effects**.

Adjustments made in the Develop, Portrait, or Local tabs are unaffected. Each tab also has a Reset icon (circular arrow) at the top of it. The various reset options are also in the **Settings** menu.

Sync applies the changes from one photo to one or more others. Use the Filmstrip View and select multiple photos with Command (Mac) or Control (Windows) clicks. Then, click the **Sync** button and the settings from the super-selected photo are copied to all other selected photos.

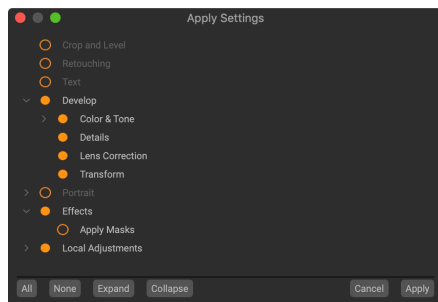


Photo RAW gives you a high degree of control over what settings are synchronized. Use the options in the Apply Settings popup window to choose what settings are copied. Develop options are very granular. You can also choose to include or exclude masks from the Effects, Portrait, and Local Adjustments tabs.

The extra control in setting choice is quite useful. For example, you may wish to copy and paste all the settings, including retouching, for a series of images of the same subject with the same general composition. Alternatively, selecting just the Develop and Effects settings applies a

general look to the target images. This is useful when the photos in a set are notably different. Synchronizing just the Retouching settings is a great way to quickly deal with sensor or dust spots across a set of images.

Editing Tools

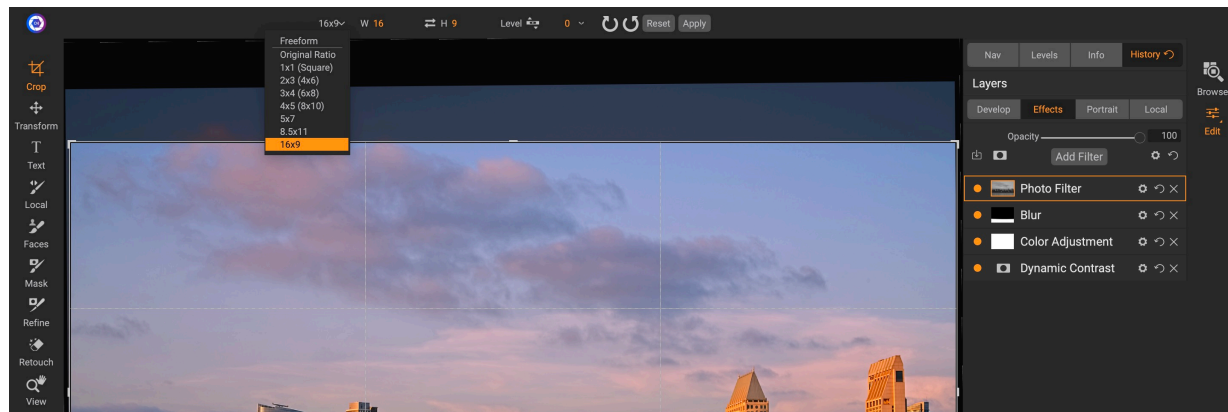
The Tool Well at the far left in the Edit module has all the Photo RAW editing tools. The tools are common across the Develop, Effects, Portrait, and Local Adjustments tabs.

Each tool can be used on any photo or layer in your photo document. If you are not familiar with layered workflow, don't worry. The tools work the same for a single photo or a layered document. Layers is covered in a later chapter.

Crop

The Crop tool... wait for it... crops your photo! A crop affects the entire photo. In a layered workflow, the crop applies to all layers in your document. When the tool is active, control handles appear at the corners and sides of the photo in the Preview area. Click and drag the control points to refine the crop. You can also rotate the photo by clicking and dragging just outside of the crop box, using the **Angle** slider, or the **Rotate** buttons in the Tool Options Bar.

The portions of the photo outside the crop window are darkened slightly. It helps



visualize the area of the photo that will remain after the crop. A tic-tac-toe overlay is also shown as a basic rule-of-thirds compositional guide.

By default, the Crop tool is in **Freeform** mode. To set constraints on the crop, use the popup menu in the Tool Options Bar. **Original Ratio** maintains the in-camera aspect ratio. There are several other common aspect ratios to choose from. You may also set precise dimensions for the crop. The **Swap Dimensions** button (the double arrow between the width and height values) is handy to switch the crop box between landscape and portrait orientations. The Swap Dimensions button is disabled for a Freeform crop.

An excellent option in the Crop tool is the Level feature. The level gives you precise control over a vertical or horizontal alignment, more so than the **Angle** slider which only permits whole integer increments. Click the Level icon, then click and drag across an element in your image that should be straight. For example, the

horizon or the vertical edge of a building. Your photo is automatically leveled to the line you draw.

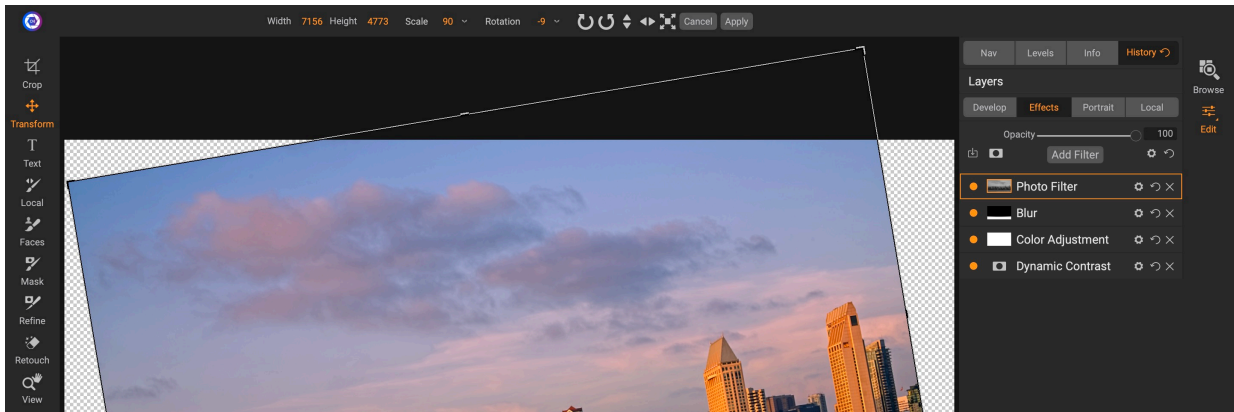
Click **Apply** in the Tool Options Bar to apply a crop. Click **Reset** to clear a crop.

Transform


The Transform tool, also referred to as the move tool, resizes and rotates a photo or layer. When the tool is active, control handles appear on the corners and sides of the layer in the Preview area.

To resize a layer, click and drag on any of the handles. A corner handle adjusts two sides at the same time. Holding the Shift key down while changing the size maintains the aspect ratio. Resize with precision using the **Width** and **Height** controls in the Tool Options Bar. The **Scale** slider grows or shrinks the layer from the center. You can also press and hold the Option (Mac) or Alt (Windows) key while resizing to use the center of the layer as the reference point.

Move the cursor just outside of a control handle to rotate an image. The cursor



changes to a rotate symbol. Click and drag to rotate the layer. You can also use the **Rotation** slider in the Tool Options Bar.

 *I use the Transform tool when blending textures in Layers. I can reuse my favorite textures yet keep the look on my photo unique and fresh.*

For fast rotations, use the icons in the Tool Options Bar. The **Rotate Counterclockwise** and **Rotate Clockwise** icons rotate the layer at 90 degree increments. The **Flip Horizontally** and **Flip Vertically** icons do exactly what you think they do. The flip options are useful for crafting scenes with mirrored reflections.

The **Fill Canvas** button scales the selected layer to match the overall canvas size of your photo document. It's useful for blending textures when the texture is smaller than your photo. Use **Apply** to commit the transform, or **Cancel** it.

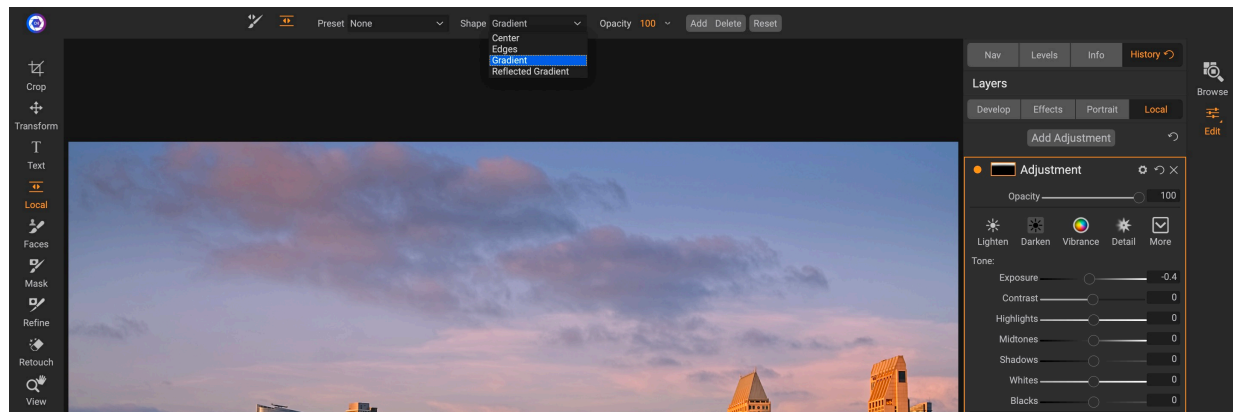
Text

Add text to your photo with the Text tool.

Clicking the Text tool adds a text box to your photo. Type in your text, resize the box, and drag it into position. The font and other attributes are set using the Tool Options Bar.

- **Font and Size:** Choose the font family and size.
- **Color:** Select the color for the text.
- **Background Color:** Select a background color for the text box.
- **Style:** Make the text bold, italic, underlined, or any combination of the three.
- **Justification:** Left, center, or right justify the text.
- **Opacity:** Change the opacity of the text overlay.

Use the **Add** button to apply several text overlays to your photo. The font and attributes of each text box can be set individually. To remove a text box, select it on your photo and click **Delete**.



Local

The Local group contains two masking tools, an Adjustment Brush and an Adjustable Gradient. These tools are associated with the Local tab in the settings area. Clicking Local in the Tool Well automatically switches to the Local tab in the right hand pane.

Local adjustments are designed to be selectively applied to your photo using a mask. This presents a small problem. We haven't talked about masking yet. Briefly, a mask lets you apply an adjustment or effect to a portion of a photo.

Masking is explained in a later chapter. For now, take note of the various controls in the Tool Options Bar. The options are specific to each masking tool. The controls for the Adjustment Brush are:

- **Mode:** Paint In to apply or reveal an adjustment, Paint Out to remove or hide an adjustment.
- **Size:** Set the size of the masking brush.

- **Feather:** Change the feather, or softness at the edges, of the brush.
- **Opacity:** Set the strength for the center of the brush.
- **Perfect Brush:** Toggle on and off edge detection.
- **Options:** Advanced options to fine tune brush control.

The Adjustable Gradient controls are:

- **Preset:** Choose a pre-defined shape for the gradient.
- **Shape:** Set the shape and style of the gradient. There are rectangular and elliptical shapes.
- **Opacity:** Set the strength of the strongest part of the mask.

The feather of a gradient shape is adjusted by moving the dashed lines directly in the Preview area.

Faces

The Faces tool is associated with portrait photography. Selecting this tool also activates the Portrait tab in the settings


area. On the first activation, the photo is scanned for faces and the Portrait tab is updated with the faces found.

A later chapter explains the Portrait Tool in detail. For now, know that the Faces tool works with masks. The mask controls for faces are the same as the Local brush.

Mask

The Mask group has three masking tools, a Masking Brush, a Masking Bug, and the AI Quick Mask. The brush and bug operate the same way as the Local brush and gradient, respectively. The AI Quick Mask is an intelligent masking tool that identifies elements in a photo to quickly make accurate masks.

The tools in the Mask group are traditionally associated with the Effects tab in the right hand pane. However, these tools can be used on any filter, layer, or adjustment that supports masking.

 *Masking is explored in detail in a later chapter.*

Refine

There are three tools that complement the other masking tools. If the edges of a mask need cleanup or softening, these are the tools for the job. The three Refine tools are:

- **Refine Brush:** Commonly used with the AI Quick Mask or a masking brush to clean up the edges of a mask.

- **Chisel Tool:** Fine tuning masks along hard edges by adding or removing a few pixels at a time.
- **Blur Tool:** Smooth and fade mask edges.

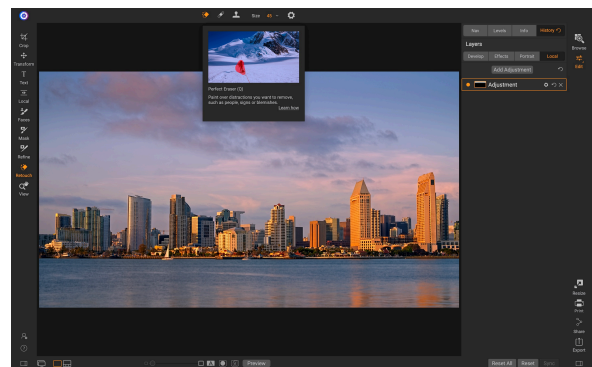
These tools are detailed in the Masking chapter.

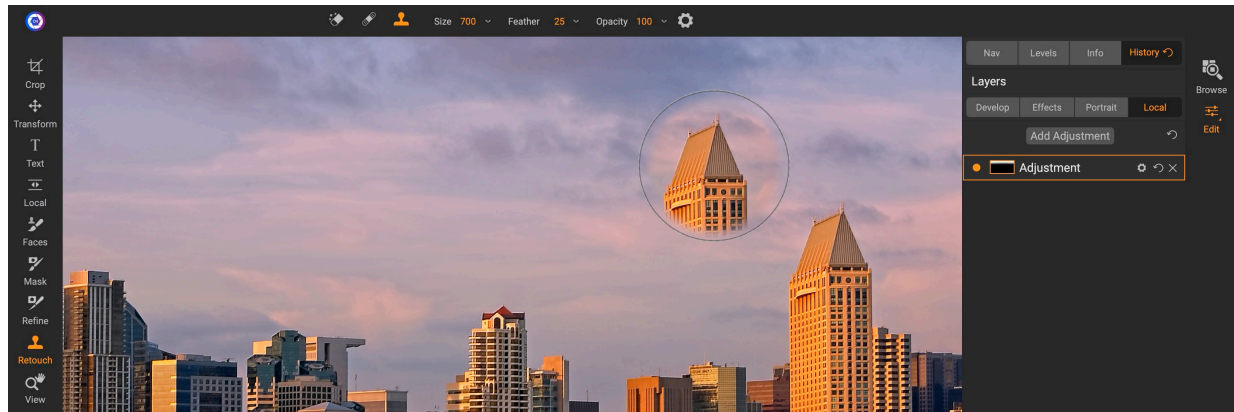


Retouch

The Retouch group is a set of three retouch tools.

- **Perfect Eraser:** A content aware retouching and object removal tool.
- **Retouch Brush:** A spot removal and smoothing tool.
- **Clone Stamp:** A brush to replace one area of your photo with another area of your photo. It is a pixel-for-pixel copy.





All tools have a **Size** control. The Retouch and Clone Stamp tools also include **Feather** and **Opacity** controls.

The Perfect Eraser is well suited for spot removal and eliminating visual distractions like power lines or other small to medium sized objects. The Retouch Brush is great at handling dust spots and skim blemishes. It is also useful as a finishing tool for work done with the Perfect Eraser. The Clone Stamp tool excels when complex or repeating patterns are in a scene.

The Clone Stamp tool copies pixels from one area of your photo to another. You choose the sample area by pressing Option (Mac) or Alt (Windows) and clicking on an area of your photo. Then, you brush that sample into another area. Clone Stamp is best for retouching areas with a lot of texture or detail. When patterns behind an element in your photo need to be maintained, Clone Stamp is the tool to use.

As a rule of thumb, I use the Retouch Brush for simple dust spots. I use the Perfect Eraser for most of my other

retouches. Often I follow an erase stroke with the Retouch Brush to refine the correction. I reach for the Clone Stamp tool when edges and details need to be maintained. Several applications of the tools is not uncommon when removing more complex objects from photos.


Each retouching tool has its strengths and weaknesses. The key to using the retouching tools effectively is knowing what each tool does best. For all but the simplest of retouching jobs, you need to use the tools together.

Retouches are non-destructive, just like all things in Edit. However, retouch brush strokes cannot be individually edited. You can use **Edit > Undo** as you apply them if you make a mistake or do not like the result. I find it best to handle retouches early in processing workflow.

View

Take a closer look at your photo with the Zoom tool. Clicking in the Preview area zooms in at 100%. The zoom biases toward

the area you click on. There are shortcuts in the Tool Options Bar for 50% and 25% zooms. The **Fit** button sizes your photo to display fully in the preview window.

 **Fast Panning in the System tab of Preferences** is on by default. A lower resolution preview is used while panning for better performance.

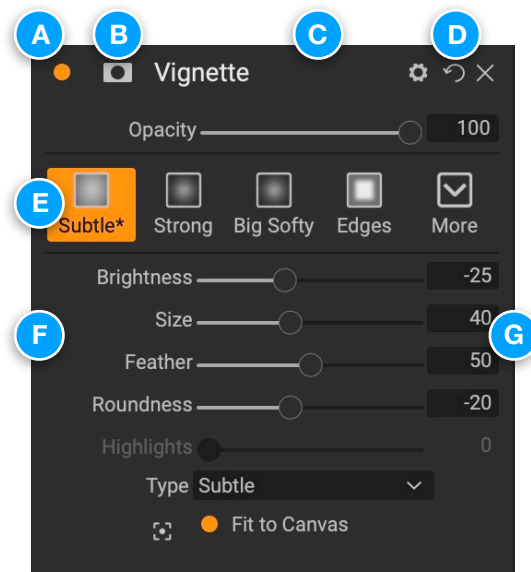
While zoomed in, you can click and drag the photo to pan around the Preview area. The Navigator tab in the upper right is another way to pan around your photo.

Common Settings Controls


The filters and settings in the Develop, Effects, Portrait, and Local tabs have a similar layout and some common controls.

- A. **Button:** Toggle the setting off and on. Use it for before and after previews of a setting.
- B. **Masking Options:** Create or modify a mask for a setting. Most adjustments and filters in Photo RAW can be masked.
- C. **Show/Hide:** Click the name of the setting to expand and collapse its sliders and controls.
- D. **Blending Options/Reset/Remove:** The gear menu opens the blending options for a setting. The circular arrow resets the sliders to their default values. The X clears the effect from your photo and removes the setting panel.

- E. **Styles:** Some settings include pre-defined styles. These are useful to quickly try out a few looks on your photo. Some settings have additional styles in the More menu.
- F. **Sliders/Controls:** The sliders and controls vary based on the setting. Double clicking the name of a slider resets it to its default value.
- G. **Slider Values:** Double click a slider's value to key in a number manually.



Settings in Effects, Portrait, and Local can be renamed by double-clicking a setting's name and keying in text. You can also make your own styles for settings, too. Creating styles is covered in the Presets chapter.

 *Details for every setting, filter, and slider in Photo RAW is covered in this book.*

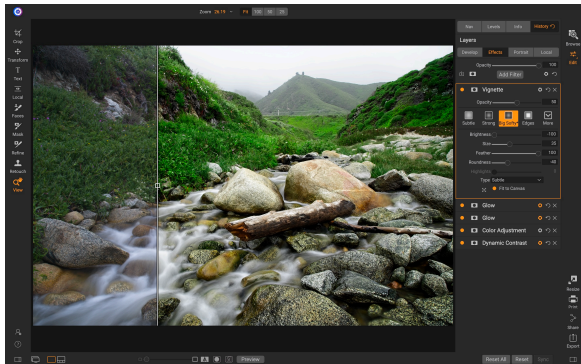
Other Edit Features

There are some other notable features in Edit.

Compare View

The Compare View in Edit compares your original image against your edited image.

View > Compare adds a before/after slider in the Preview area. Move the slider back and forth to see how your image has changed. The backslash \ key is also a quick toggle between your unprocessed and processed image.



Canvas Size

The canvas is the visible workspace. By default, the canvas size is the same as the first image loaded into the Edit module. When layering images of varying sizes, portions of an image may not be visible because it is larger than the canvas. You can adjust canvas with **File > Canvas Size**.

Solo Mode

Use **Window > Solo Mode** to save time scrolling in the right hand panel. Solo Mode expands the active setting panel and automatically collapses all other.



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