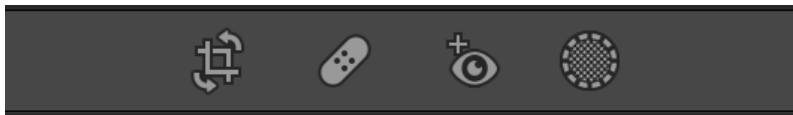


LIGHTROOM TRAINING

Lesson 5 Healing Brushes

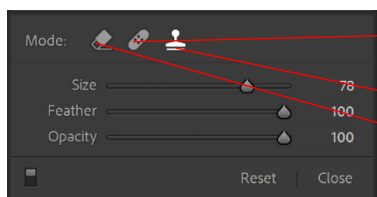
In lesson 2 we briefly covered the healing tools in relation to removing sensor spots (see section d p4 of lesson 2). We will now look at these in more detail and notice some behavioural issues with these tools and how to solve them.



The band-aid icon gives access to the healing panel and tools.

In earlier versions of Lightroom the healing tools comprised the heal tool and the clone tool.

Now Adobe has added a third tool – the content-aware removal tool.



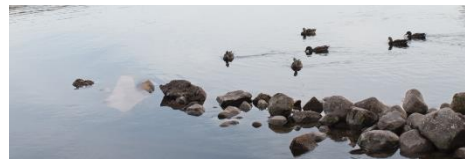
→ **The healing tool** creates a copy of what you sample and then blends the result into the brightness and colour of the surroundings.

→ **The clone tool** creates a copy of the area you sample.

→ **The content-aware removal tool** creates new content based on the surroundings of the retouch area.

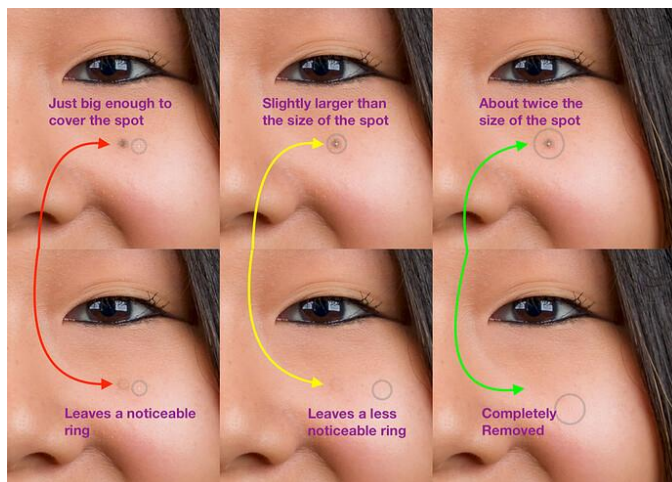
To access these tools either click the band-aid icon or use the shortcut key **q** on the keyboard.

Important Note: The healing tools must be done before using the masking panel. If this is not done then the healing tools may leave a shadow behind of the object you are trying to remove. Small sensor spots are usually removed okay even after masking but it is best to do the sensor spot removal before masking.



Loch Ness 20180831-1014.NEF

The content-aware removal tool unlike the healing brush and the clone tool does not have a feather slider. It does appear though to have a permanent `50% feather. This means that you may need to adjust the brush size to nearly twice that of the spot to completely erase the spot. I am including an image that J Gerard supplied in the kelbyone community on this issue.



“The screenshot shows a freckle on a face that I want to remove. If I size the Content-Aware Remove tool to just cover the spot the centre of the spot is removed but the edges remain. A slightly larger selection (say 25% larger than the spot) the result is better, but a faint circle around the edges remains visible. It is not until the brush is nearly twice the size of the spot that the tool completely erases the spot.”

If the tools do not give a good result there is an option to refresh and the tools will give another option.

When using the content-aware tool, if you don't like the end result after using the tool, you can force it analyse a particular area of the image by holding down the CTRL key on windows (command key on Mac) and click and drag out a rectangle around an area. This limits the source area to the area you have defined by the rectangle.

Julianne Kost is an Adobe evangelist and has a good You Tube video on How to Use Healing Modes in Lightroom Classic.
https://www.youtube.com/watch?v=riKZa0wzn_0

Tips for using the content-aware removal tool

1. If the area is large, then instead of just making the brush larger and one click – paint around the object to be removed leaving some space around it.
2. Be aware of objects near the border of the object to be removed.
3. Breathing room is needed or you will get some strange artifacts.
4. If something doesn't look quite right, use Ctrl (or command) and drag to influence where content-aware selects.
5. H key hides/reveals the selection edges.
6. Content-aware may not be the best tool if there is detail to be retained. You may use content-aware to remove the object and then come back in with the clone tool to replace the detail.

Masking and Local Adjustment Tool Shortcuts

The following notes are based on a video by Julianne Kost

Shift + W opens the mask settings panel (regardless of what module is active).

Common to all masking tools:

- Use the grabber handle to reposition the masking panel in the image area or drag it into the right-hand panel to dock it with the mask settings.
- Hold Shift to toggle the Add and Subtract buttons in the masks panel to Intersect or, use the More Options icon (...) to select the Intersect Mask With command. *Note: Intersect is the same as creating a mask component in Subtract + Invert mode.*
- Press the Delete key to delete the selected mask (or the selected mask component) or, click the More icon (the three dots) and choose "Delete (xxx)" or Delete All Masks.
- Use the Invert check-box in the mask settings panel to invert a mask component or, tap the ' (apostrophe) key.
- After making changes to the adjustment sliders, drag the Amount slider left/right to decrease/increase the relative effect of all adjusted sliders or, Option-drag (Mac) | Alt-drag (Win) left/right on a pin in the image area to increase/decrease the amount.
- "H" toggles the visibility of mask pins and tool overlays.
- "O" toggles the visibility of the selected Mask Overlay (displaying the mask overlay can make it easier to see areas the areas that are included/excluded from the adjustment in order to make refinements to the mask). Shift + O cycles through mask overlay colours (red/green/white/black).
- To temporarily display the mask overlay, hover the cursor on top of the adjustment tool's pin in the image area or over the mask thumbnail in the Masks panel. When a mask contains multiple components (brush + graduated filter for example), hovering the cursor over the individual

component's mask will display the mask for that specific tool while hovering the cursor over the composite mask's thumbnail will display the mask created by combining all of the individual components (tools) within the mask.

- Command + Option -drag (Mac) | Control + Alt -drag (Win) the adjustment pin to duplicate the adjustment.
- To reuse settings applied to local adjustment tools, save them as a preset. At the top of the adjustments (to the right of the word "Effect", click Custom (or the name of the currently selected preset), and choose "Save Current Settings As New Preset" from the drop-down list.
- Click the Colour swatch (the rectangle with an x through it at the bottom of the Mask Settings panel) to choose a colour from the Colour Picker. To select a colour from the image, click in the Colour Picker and, continuing to hold the mouse down, drag the eyedropper over the image area to choose a colour from the photo. Note: applying colour with a local adjustment tool is similar to adding a colour wash (similar to a traditional hand coloured look), not an opaque paint stroke (as that would obscure the photograph). Double click the word "Colour" to reset the colour swatch.
- When increasing the Shadow slider, it might be advantageous to also increase the Noise (reduction) slider to help suppress noise.
- Toggle the visibility of all masks, use the "light-switch" in the upper left of the Masks panel (or at the bottom of the Mask Settings panel).

Using the Brush (K):

- "[" or "]" decreases/increases brush size. Add the Shift key to decrease/increase the feather (edge softness).
- **Flow** sets the speed at which the brush applies the adjustment. Lowering the Flow amount enables a slower build-up of an effect and can reduce the number of individual pins (masks) needed to modify an image as a single mask can apply various amounts of the same adjustment in different areas. Use the numeric keys on the keyboard to change the Flow amount. Tapping one number assigns the percentage of the tapped number (1 = 10%, 2 = 20% etc. and 0 = 100%). Tapping two numbers quickly will give you that exact amount (5 + 4 = 54%).
- **Density** caps the amount of the adjustment that can be applied.
- Hold Option (Mac) | Alt (Win) to toggle between the Brush and the Eraser.
- "/" (forward slash) toggles between Brush A and B.
- Tap the ' (apostrophe) key to invert the brush mask component. When using any of the AI/ML driven masks (Select Subject, Sky, Background, Objects and People), tap the "X" key to invert the selection.
- Shift -drag constrains the Brush to a straight line. Click once, then shift -click to draw a straight line between clicks.
- Tap "A" to toggle the Auto Mask option. Auto Mask detects edges based on contrast and colour to help apply adjustments to a selective area.

Using the Linear Gradient (M):

- Tap the ' (apostrophe) key to reverse the direction of the mask.
- Option-drag (Mac) | Alt-drag (Win) draws the gradient out from the centre (in both directions, from the initial click point).

Using the Radial Gradient (Shift + M):

- Shift -drag constrains the Radial Gradient to a circle. By default, the Radial Filter is scaled from centre. Option -drag (Mac) / Alt -drag (Win) to scale from the "corner".
- Shift -dragging any of the four handles of an existing Radial Gradient will preserve the aspect ratio of the ellipse.
- Command double-click (Mac) / Control double-click (Win) in the image area to expand the Radial Filter to the visible image area.
- Tap the ' (apostrophe) key to invert the radial gradient.
- You can drag a Radial Gradient beyond the image area.

Use the Colour Range Mask (Shift + J) to create a selection based on the colours in an image.

- To select the desired range of colours to adjust:
 - Click to sample a colour.
 - Shift-click to sample up to 5 colours.
 - Shift-drag to sample an area of colours.
- Tap the ' (apostrophe) key to invert the Colour range mask component.
- Drag the Refine slider left/right to decrease/increase the targeted colours.
- Option -drag (Mac) | Alt -drag (Win) the Refine slider to display a high-contrast, greyscale preview of the areas being affected.

Use the Luminance Range Mask (Shift + Q) to create a selection based on the brightness values in an image.

- To select the desired range of values to adjust:
 - Use the eyedropper tool to select a specific value.
 - Use the eyedropper tool to drag-select a range of values.
- Use the Luminance Range interface (in the panel) and drag to resize and/or reposition the rectangle to define the range that is being affected. The area within the rectangle will be fully adjusted. To avoid abrupt transitions between the areas that are adjusted and those that are not,

drag the vertical line (the outer marker) to adjust the smoothness of the fall off (how quickly the selection transitions from the selected tonal range to the unselected range).

- Option -drag (Mac) | Alt -drag (Win) the in the Luminance range options to see the Luminance map in the image area (or enable Show Luminance Map in the panel).
- Tap the ' (apostrophe) key to invert the Luminance range mask component.
- Note: You can use Colour Range masking on images even if the Treatment has been set to Black & White in the Basic Panel.

Use The Depth Range Mask (Shift + Z) to create a selection in an image based on the distance from the camera.

Note: Depth Range is only available only for those photos that have embedded depth map data. As of now, this is limited to HEIC files captured on Apple iPhone using the Portrait mode. If there is no available depth info for an image, the Depth Range option is disabled.

Saving Masks as Presets

- Masks can be included in presets. Masks that include AI masks (Select Subject, Sky, Background, Objects and People) will be recomputed automatically when applied to images. If there are masks in the image prior to adding a preset, the masks will be merged (they will be added, they won't replace existing masks).
- Masks that include AI masks (Select Subject, Sky, Background, Objects and People) cannot be applied during the Import process nor in the Raw Default preferences.

Copy and Pasting Masks

- When you copy and paste a mask to another image, if the destination image has any masks, you will have the option to "Merge" the masks (add the pasted masks to the existing masks) or "Replace" the masks (deleting any existing masks). The "Previous" button always replaces the masks in the destination image. Auto-Sync will always merge masks.
- You can copy and paste the Brush and Radial and Linear Gradients to multiple images, and then drag their corresponding pins to reposition as needed (for example, if the image has changed slightly between exposures).