

# Modify Images








# The Crop Tool

When you select the **Crop** tool, your image is overlaid with a modifiable grid, and outlined with handles at the corners and sides that you can simply grab and drag. You can also rotate the image by dragging along the outside of the grid lines in a clockwise or counterclockwise direction.

Crop Options Bar	Description
Ratio	You can crop by using unconstrained boundaries, preset dimensions, or your own size and resolution values that can be saved as a preset.
Rotate Orientation	You can toggle between portrait and landscape orientation.
Straighten	You can straighten an image by drawing a line along the horizontal or vertical axis.
Overlay Options	You can change the style of the overlay. The default is <b>Rule of Thirds</b> , which divides the image into both horizontal and vertical thirds. You can also choose to display or hide the overlay.
Additional Crop Options	You can display or not display the cropped region. You can automatically center the cropped region. You can overlay the cropped area with a tint.
Delete Cropped Pixels	You can either delete cropped pixels or keep them hidden for later use.
Content-Aware	When you straighten or rotate the image with <b>Content-Aware</b> enabled, Photoshop fills in the gaps based on image content.

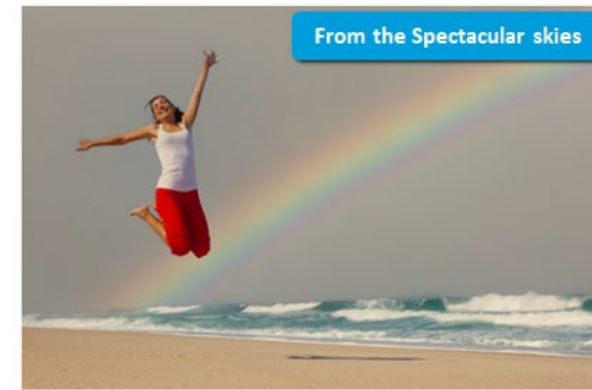
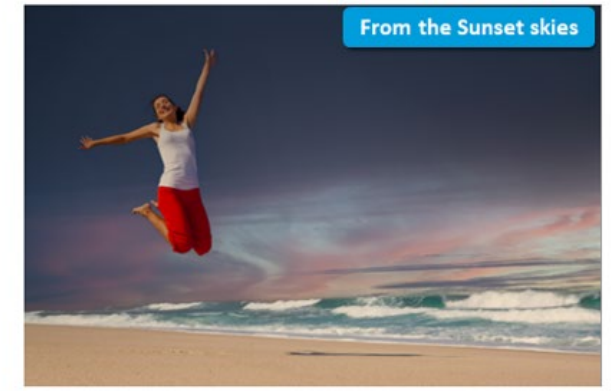


# Healing Tools

Healing Tool	Description
Clone Stamp 	The <b>Clone Stamp</b> tool duplicates an area of an image by painting over another area of the image. It is a useful tool for repairing defects. You can use any brush tip to "paint" with.
Healing Brush 	The <b>Healing Brush</b> tool is used to retain the tone of an area by analyzing a sample of a retouched area and blending original shading, texture, and tone.
Spot Healing Brush 	The <b>Spot Healing Brush</b> tool analyzes the neighboring areas of an image to identify the optimal pixels for healing the selected area. It is a good tool for removing blemishes or small imperfections.
Patch 	The <b>Patch</b> tool is used to select and clone large areas by blending the texture, lighting, and shading of the sampled area to the source pixels. This tool works best for large defects that are in high contrast to the surrounding areas. This can be used in <b>Normal</b> mode or <b>Content-Aware</b> mode. The <b>Content-Aware</b> mode blends content by synthesizing content around the selected element to seamlessly blend it with the surrounding content.
Content-Aware Move	The <b>Content-Aware Move</b> tool is used to select and then move a portion of an image. The area left when the content is moved is filled in with elements from the picture around the area from where the selection was moved. On the <b>Options</b> bar, select the <b>Move</b> mode to place the selected object in a new location or the <b>Extend</b> mode to expand or contract the selected object.
Red Eye 	The <b>Red Eye</b> tool is used to remove the appearance of red eyes that result from the flash or other illumination source on the eye's retina. It is more common in children, or when taking pictures in a darkened area. The best way to prevent red eye is to use the red eye setting on your digital camera, if available as an option.

# Sky Replacement

Photoshop includes a feature that allows you to change the sky and it automatically adjusts the colors to work with the new sky you select. For example, you might have taken the photo on a bright sunny day, but you want to show the image at sunset for an evening party. Or, you might want a more interesting sky with some clouds. After selecting the desired sky, you can further adjust the settings to fine tune how the sky looks in your image. By default, Photoshop comes with **Blue Skies**, **Spectacular**, and **Sunsets** options for **Sky**. You can also download additional skies including **Night Skies** and **Storms**.



# Transform Controls

Transforming refers to the scaling, rotating, skewing, stretching, and warping of an image. You can apply transformations to a selection, an entire layer, multiple layers, or a layer mask. To make a transformation, first select an item to transform and then choose a transformation command. To get to the transformation commands, select **Edit → Transform** and select from the available commands.

Command	Result
Scale	Enlarges or reduces an item relative to its reference point, the fixed point around which transformations are performed. You can scale horizontally, vertically, or both horizontally and vertically.
Rotate	Turns an item around a reference point. By default, this point is at the center of the object; however, you can move it to another location.
Skew	Slants an item vertically and horizontally.
Distort	Stretches an item in all directions.
Perspective	Applies one-point perspective to an item.
Warp	Manipulates the shape of an item.
Rotate 180, Rotate 90 CW, Rotate 90 CCW	Rotates the item by the specified number of degrees, either clockwise or counterclockwise.
Flip	Flips the item vertically or horizontally.

# Keyboard Modifier Combinations

Photoshop has several keyboard modifier combinations that provide more effective usage of the transform controls.

Key	Result
Shift	When using <b>Scale</b> , pressing <b>Shift</b> while dragging a corner handle will scale the selection proportionately. When using <b>Rotate</b> , pressing <b>Shift</b> will constrain the rotation to 15-degree increments.
Alt	Pressing <b>Alt</b> creates a duplicate of the selection having the transformation applied to it. When using <b>Distort</b> , pressing <b>Alt</b> will cause distortion relative to the center point of the bounding border.

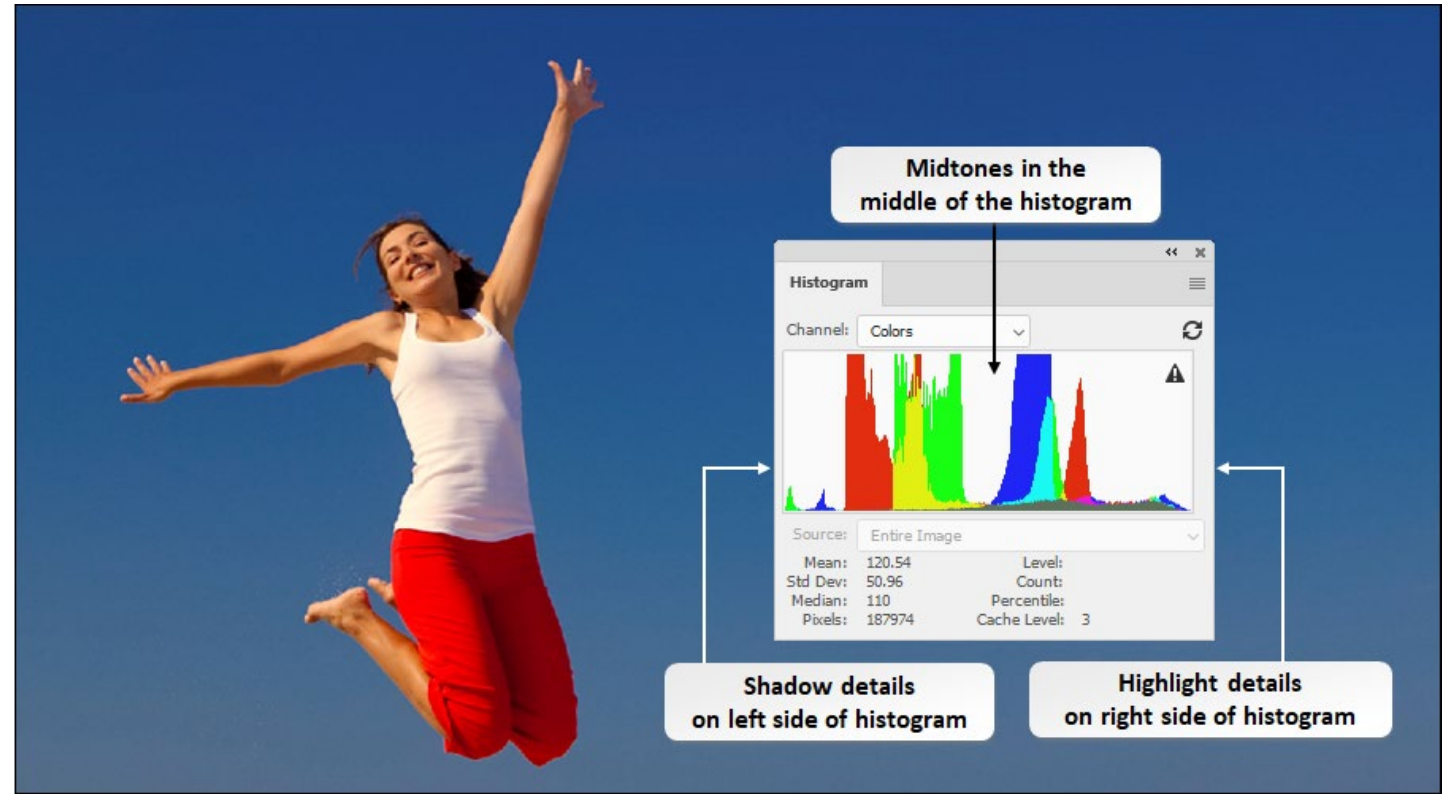
# The Navigator Panel

The **Navigator** panel is a valuable feature that lets you quickly zoom in or out and navigate to select areas of the image. It has a View area that displays a miniature version of the current image. You can set navigation by using the **Zoom Slider** or by clicking either the **Zoom In** or **Zoom Out** buttons. As with all panels, the **Navigator** panel can be undocked and moved around the workspace.

# Histogram

A **histogram** in Photoshop (and other image editing programs) is a graphical representation of the tonal values in an image. It plots pixel attributes such as brightness, exposure, colour depth, tone, and saturation, helping you see the overall tonal range.

In an **RGB histogram**, each channel (red, green, blue) shows the distribution of shadows, midtones, and highlights across a scale from 0 to 255.



An image with a full tonal range will have pixels spread across all areas of the histogram. However, there's no single "ideal" histogram—each image has its own distribution, and the histogram's role is to highlight where adjustments may be needed.

To view it in Photoshop, go to the **Window menu** → **Histogram** to open the Histogram panel. This panel provides a live, detailed view of tonal data, guiding you in making exposure and colour corrections.

# Activity 08. Using the Content-Aware Move Tool

# Activity 09. Using the Sky Replacement Feature

# Repair Images



# Content-Aware Fill Tools

Photoshop's **Content-Aware Fill tool** is designed to remove a selected area and intelligently replace it with surrounding pixels, creating a seamless result. You can access it from the Edit menu or through certain healing brush tools. To refine the fill, Photoshop provides a dedicated **Content-Aware Fill workspace**, where you can interactively choose source pixels, rotate, scale, or mirror them, and preview changes in real time. The workspace also allows you to save the filled result as a new layer, preserving the original image.

The sampling area appears as an overlay mask, which you can adjust using tools from the panel. Within the **Content-Aware Fill panel**, you'll find options for sampling, fill settings, and output. Sampling can be set to Auto, Rectangular, or Custom, giving you control over which pixels are used to generate the fill. In addition to filling gaps, this feature can also be used to remove unwanted objects by blending them away with surrounding pixels.

Complementing this, the **Brush Settings panel** provides predefined brush shapes, sizes, and customization options for tools like the Clone Stamp or Healing Brush. It can be accessed from the Options bar or the Window menu, giving you precise control over brush behavior for editing and retouching. Together, these tools make it easier to achieve polished, natural-looking results in your images.

# Manual Tonal Adjustments

Making tonal adjustments will alter the contrast of an image. To adjust the tonal range of an image, you will use a histogram. You can select **Window → Histogram** or select the **Histogram** panel tab. Once the histogram is open, select the **Expanded View** from the **Histogram** panel menu and then select **Image → Adjustments → Levels**. This will open the **Levels** dialog box. Check the **Preview** check box.

You will see a black triangle to the left, representing shadows; a gray triangle in the middle, representing midtones; and a white triangle to the right, representing highlights. The graph in the **Histogram** panel and the **Levels** dialog box are identical.

In the **Levels** dialog box, the black, gray, and white triangles can be dragged to alter the histogram and the image. This can be done until the image looks good and then the work can be saved.

# Localized Color Correction

No matter how good the camera that took the photograph is, not every image is going to have the perfect color balance. Differences in color casts can happen due to mixed lighting or poor processing. Localized color correction should take place only after global color correction has been done. Selecting an entire object and adjusting its color is not ideal because parts of an object might need more adjustment than others.

Select the area needing adjustment by using the **Marquee** tool. You can use the **Curves Adjustment** option by selecting **Layer → New Adjustment Layer → Curves**. The unselected area of the image will be masked in black. Select the **Brush** tool to adjust the color of the section of the image that you wish to adjust. When the color is adjusted to the right level, accept the adjustment.

# HDR Imaging

When the need to adjust a high-dynamic range (HDR) image arises, you may need to adjust for exposure, toning, or both. To adjust for HDR exposure, select the **Exposure** icon or select the **Exposure** preset in the **Adjustments** panel. Alternatively, you can select **Layer → New Adjustment Layer → Exposure**. In the **Properties** panel, you can set a number of options, including **Exposure**, **Offset**, and **Gamma**.

In order to apply the full range of HDR exposure and contrast to an image, you will need to adjust HDR toning. To do so, open an image in **Grayscale** color mode. This can be an 8-, 32-, or 64-bit image. Then, select **Image → Adjustments → HDR Toning**.

# Activity 10. Making Image Adjustments

# Implement Color Management



# Color Management

Images can be captured on a number of different devices and the output can also be on any number of devices. Each of these devices portrays color differently, which can be challenging when an image must be produced for output on more than one device.

The color management system in Photoshop is made up of a color space that is independent of any device, International Color Consortium (ICC) profiles for each different device used, and a Color Matching Module (CMM) that will ensure the color characteristics of each device are treated properly.

The most important aspect of color management is to monitor calibration and characterization. To calibrate a monitor is to bring it to a standard state and to characterize a monitor is to determine how it will represent or reproduce color. An ICC profile will be created, which will describe the monitor's color handling characteristics.

# Color Setting

Photoshop has default color settings that are not always ideal for your images. When you need to adjust the color settings, you can do this by selecting **Edit → Color Settings**.

The most common setting that needs to be changed in the **Color Settings** dialog box is the **RGB** setting in the **Working Spaces** section. The default is set as sRGB IEC61966-2.1, but the better and more common setting is Adobe RGB (1998). The other main choice is ProPhoto RGB. The other three default settings in **Working Spaces** are generally fine to work with.

In the **Color Management Policies** section of the dialog box, ensure that the RGB, CMYK, and Gray are all set to **Preserve Embedded Profiles**. The **Ask When Opening** and **Ask When Pasting** boxes can be unchecked.

The **Conversion Options** section comes next. In the **Intent** box, select **Relative Colorimetric**.

# Activity 11. Making Adjustments to a Photo