Ps **PHOTOSHOP** ⌄

Use the Liquify filter

Search Adobe Support 🔍

Photoshop User Guide   Image transformations   *Select an article:* ⌄

Liquify filter overview

The Liquify filter lets you push, pull, rotate, reflect, pucker, and bloat any area of an image. The distortions you create can be subtle or drastic, which makes the Liquify command a powerful tool for retouching images as well as creating artistic effects. The Liquify filter can be applied to 8-bits per-channel or 16-bits per-channel images.

Distorting an image using the Liquify filter

Applies to: **Photoshop CC**

Last Published: **August 4, 2017**

Tools, options, and an image preview for the Liquify filter are available in the Liquify dialog box. To display the dialog box, choose Filter > Liquify. Select Advanced Mode to access more options.

Magnify or reduce the preview image

- Select the Zoom tool in the Liquify dialog box, and click or drag in the preview image to zoom in; hold down Alt (Windows) or Option (Mac OS), and click or drag in the preview image to zoom out. Alternatively, you can specify a magnification level in the Zoom text box at the bottom of the dialog box.

Navigate in the preview image

- Select the Hand tool in the Liquify dialog box, and drag

in the preview image. Alternatively, hold down the spacebar with any tool selected, and drag in the preview image.

Liquify filter enhancements (Creative Cloud only)

In the Creative Cloud version of Photoshop, the Liquify filter is significantly faster than previous versions.The Liquify filter now supports Smart Objects, including Smart Object video layers, and is applied as a smart filter.

Another enhancement to the Liquify filter is an added behavior for the Reconstruct tool. If you hold down the alt (Windows) or Option (Mac OS) key while dragging the tool across a warp, the Reconstruct tool smooths a warp rather than scaling back or removing it.

Applying Liquify as a smart filter (Creative Cloud only)

The Liquify filter supports Smart Objects, including Smart Object video layers, and is applied as a smart filter. When applying the Liquify filter to a Smart Object, meshes are now automatically saved into your document. Meshes applied to Smart Objects are compressed and re-editable when reapplying the Liquify filter. Keep in mind that the embedded meshes, even compressed ones, increase the file size.

To apply the Liquify filter as a smart filter:

1   In the Layers panel, select a Smart Object layer.

2   Choose Filter > Liquify.

Face-Aware Liquify

Introduced in Photoshop CC 2015.5 release

The Liquify filter features advanced face-aware functionality that automatically identifies eyes, noses, mouths, and other facial features, making it easy for you to adjust them. Face-Aware Liquify is great for retouching portrait photos, creating caricatures, and doing much more.

You can use Face-Aware Liquify as a smart filter for non-destructive editing. See 🔗 *Apply smart filters in Photoshop* to understand how.

### Prerequisite: Enable the graphics processor

As a prerequisite to using Face-aware Liquify functionality, ensure that the graphics processor is enabled in your Photoshop preferences.

1. Choose **Edit** > **Preferences** > **Performance**.
2. In the Graphics Processor Settings area, select **Use Graphics Processor**.
3. Click Advanced Settings. Ensure that **Use Graphics Processor To Accelerate Computation** is selected.
4. Click **OK**.

These settings are enabled by default when you launch Photoshop for the first time. If you have questions regarding GPU usage in Photoshop, consult 🔗 *this document*.

Adjust facial features using on-screen handles

1. In Photoshop, open an image with one or more faces.
2. Select **Filter** > **Liquify**. Photoshop opens the **Liquify** filter dialog.
3. In the Tools panel, select 👤 (**Face** tool; *keyboard shortcut*: A). The faces in the photo are automatically identified.
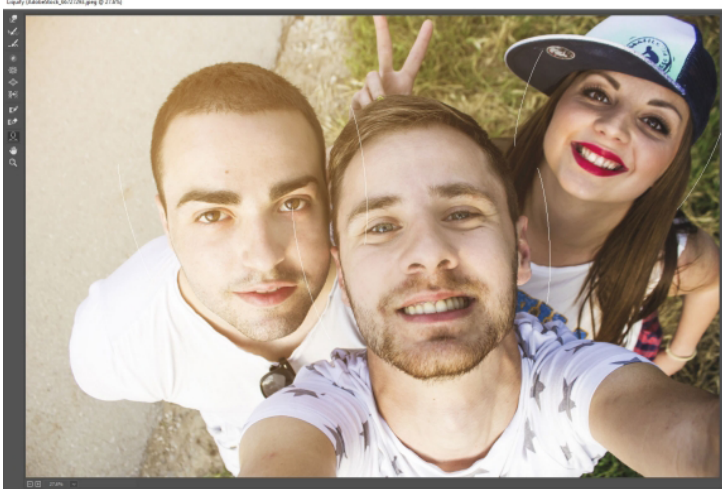
Faces automatically identified

5. When you hover the pointer over the faces, Photoshop displays intuitive on-screen controls around them. Adjust the controls to make adjustments to the faces. For example, you can increase the eye size or decrease the face width.

6. When you're satisfied with the changes, click **OK**.

Adjust facial features using sliding controls

1. In Photoshop, open an image with one or more faces.

2. Select **Filter > Liquify**. Photoshop opens the Liquify filter dialog.

3. In the Tools panel, select 👤 (**Face** tool; *keyboard shortcut:* A).

   The faces in the photo are automatically identified and one of the faces selected. The identified faces are also listed in the **Select Face** pop-up menu in the **Face-Aware Liquify** area of the **Properties** panel. You can select a different face by clicking it on the canvas or selecting it from the pop-up menu.
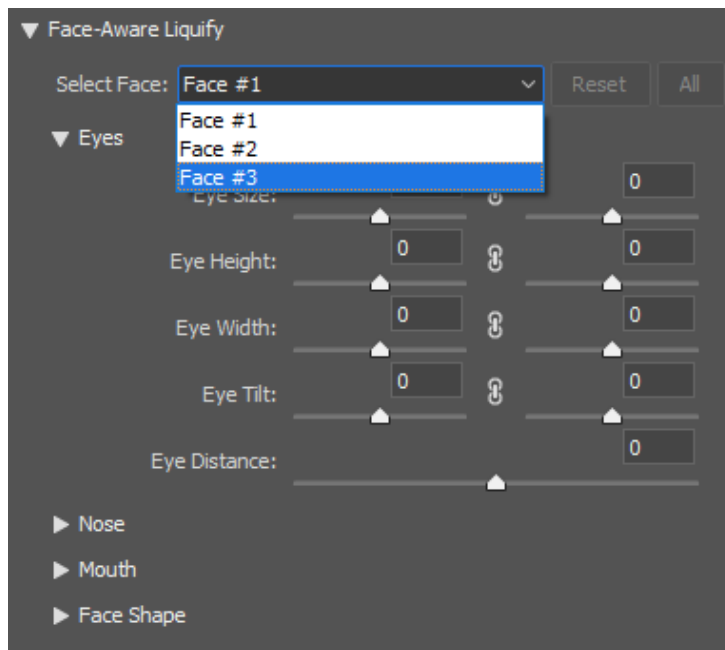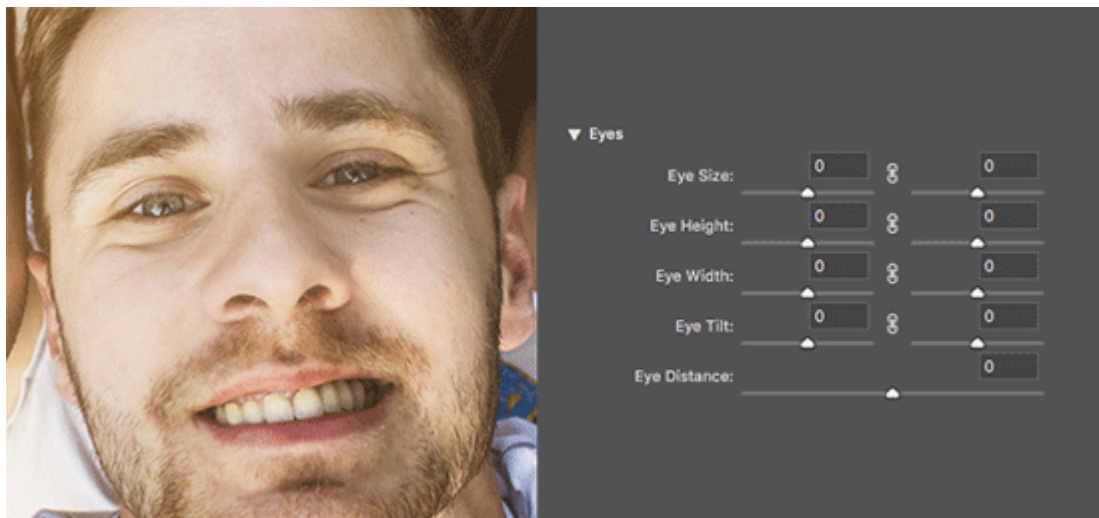
The Select Face field

4. Adjust the sliders in the **Face-Aware Liquify** area to make appropriate changes to the facial features.

⌄ **Eye settings**

Move the slider options for the left and right eyes to apply independent/asymmetrical effects to the eyes.

Click the link icon 🔗 to lock the settings for the left and right eyes together. This option helps apply symmetrical effects to the eyes.
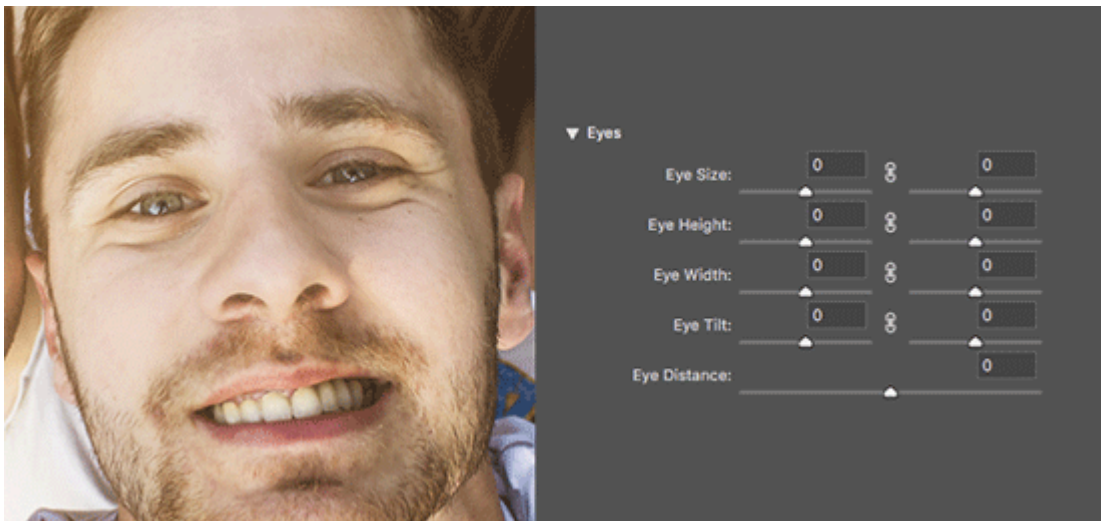
> **Nose settings**

> **Mouth settings**

> **Face Shape settings**

5. When you're satisfied with the changes, click **OK**.

Note:

You can use a combination of on-screen handles and sliding controls for better control over Face-Aware Liquify changes.

Useful considerations

- Face-Aware Liquify functionality works best on facial features facing the camera. For best results, rotate any titled faces before applying the settings.

- Changes to the facial features are applied symmetrically. For example, changes are applied to both the eyes at once instead of just one eye.

- The **Reconstruct** and **Restore All** options don't apply to Face-Aware Liquify changes.

Distortion tools

Several tools in the Liquify dialog box distort the brush area when you hold down the mouse button or drag. The distortion is concentrated at the center of the brush area, and the effect intensifies as you hold down the mouse button or repeatedly drag over an area.

Forward Warp tool   Pushes pixels forward as you drag.

> **Note:**
>
> Shift-click with the Warp tool, the Push Left tool, or the Mirror tool to create the effect of dragging in a straight line from the previous point you clicked.

Reconstruct tool   Reverses the distortion you've already added, as you hold down the mouse button and drag.

Twirl Clockwise tool   Rotates pixels clockwise as you hold down the mouse button or drag. To twirl pixels counterclockwise, hold down Alt (Windows) or Option (Mac OS) as you hold down the mouse button or drag.

Pucker tool   Moves pixels toward the center of the brush area as you hold down the mouse button or drag.

Bloat tool   Moves pixels away from the center of the brush area as you hold down the mouse button or drag.

Push Left tool   Moves pixels to the left when you drag

the tool straight up (pixels move to the right if you drag down). You can also drag clockwise around an object to increase its size, or drag counterclockwise to decrease its size. To push pixels right when you drag straight up (or to move pixels left when you drag down), hold down Alt (Windows) or Option (Mac OS) as you drag.

Distortion tool options

In the tool options area of the dialog box, set the following options:

Brush Size   Sets the width of the brush you'll use to distort the image.

Brush Density   Controls how a brush feathers at the edge. An effect is strongest in the center of the brush and lighter at the edge.

Brush Pressure   Sets the speed at which distortions are made when you drag a tool in the preview image. Using a low brush pressure makes changes occur more slowly, so it's easier to stop them at exactly the right moment.

Brush Rate   Sets the speed at which distortions are applied when you keep a tool (such as the Twirl tool) stationary in the preview image. The higher the setting, the greater the speed at which distortions are applied.

Stylus Pressure   Uses pressure readings from a stylus tablet. (This option is available only when you are working with a stylus tablet.) When selected, the brush pressure for the tools is the stylus pressure multiplied by the Brush Pressure value.

Distort an image

> **Note:**
>
> If a type layer or a shape layer is selected, you must rasterize the layer before proceeding, making the type or shape editable by the Liquify filter. To distort type without rasterizing the type layer, use the Warp options for the Type tool.

1   Select the layer you want to distort. To change only part of the current layer, select that area.

2   Choose Filter > Liquify.

3   Freeze areas of the image that you don't want to alter.

4   Choose any of the liquify tools to distort the preview image. Drag in the preview image to distort the image.

5   After distorting the preview image, you can:

- Use the Reconstruct tool 🖌 or Reconstruct Options to fully or partially reverse the changes.

- Use other tools to change the image in new ways.

6   Do one of the following:

- Click OK to close the Liquify dialog box and apply the changes to the active layer.

- Click Cancel to close the Liquify dialog box without applying changes to the layer.

- Hold down Alt (Windows) or Option (Mac OS) and click Reset to revert all distortions to the preview image and reset all options to their defaults.

> **Note:**
>
> You can use the Edit > Fade command to create additional effects.

Freeze and thaw areas

You can freeze areas that you don't want to modify or thaw frozen areas to make them editable again. You can also invert both frozen and thawed areas.

Freeze areas

By freezing areas of the preview image, you protect those areas from changes. Frozen areas are covered by a mask that you paint using the Freeze Mask tool ☑. You can also use an existing mask, selection, or transparency to freeze areas. You can view the mask in the preview image to help you apply distortions.

Using the Freeze Mask tool   Select the Freeze Mask tool ☑ and drag over the area you want to protect. Shift-click to freeze in a straight line between the current point and the previously clicked point.

Using an existing selection, mask, or transparency channel
If you're applying the Liquify filter to a layer with a selection, layer mask, transparency, or alpha channel, choose Selection, Layer Mask, Transparency, or Quick Mask from any of the five icons' pop-up menu in the Mask Options area of the dialog box. This determines how areas of the preview image are frozen or masked.

Freezing all thawed areas   Click Mask All in the Mask Options area of the dialog box.

Inverting thawed and frozen areas   Click Invert All in the Mask Options area of the dialog box.

Showing or hiding frozen areas   Select or deselect **Show Mask** in the View Options area of the dialog box.

Changing the color of frozen areas   Choose a color from the Mask Color pop-up menu in the View Options area of the dialog box.

Mask options with the Liquify filter

When you have an existing selection, transparency, or mask in an image, that information is retained when the Liquify dialog box opens. You can choose one of the following mask options:

Replace Selection   Shows the selection, mask, or transparency in the original image.

Add To Selection   Shows the mask in the original image, so that you can add to the selection using the Freeze Mask tool. Adds selected pixels in channel to the current frozen area.

Subtract From Selection   Subtracts pixels in channel from the current frozen area.

Intersect With Selection   Uses only pixels that are selected and currently frozen.

Invert Selection   Uses selected pixels to invert the current frozen area.

> **Note:**
>
> If a selection exists, the filter limits the preview and processing to the rectangular area containing that selection. (For rectangular marquee selections, the selected area and preview are identical, so choosing Selection from the mask option menus above has no effect.)

Thaw areas

To thaw frozen areas so they're editable, do any of the
following:

- Select the Thaw Mask tool , and drag over the area.
  Shift-click to thaw in a straight line between the current
  point and the previously clicked point.

- To thaw all frozen areas, click the None button in the
  Mask Options area of the dialog box.

- To invert frozen and thawed areas, click Invert All in the
  Mask Options area of the dialog box.

Work with meshes

Using a mesh helps you see and keep track of distortions.
You can choose the size and color of a mesh, and save the
mesh from one image and apply it to other images.

- To show a mesh, select Show Mesh in the View Options
  area of the dialog box, and choose a mesh size and mesh
  color.

- To only show a mesh, select Show Mesh and then
  deselect Show Image.

- To save a distortion mesh, after distorting the preview
  image, click Save Mesh. Specify a name and location for
  the mesh file, and click Save.

- To apply a saved distortion mesh, click Load Mesh, select
  the mesh file you want to apply, and click Open. If the
  image and distortion mesh aren't the same size, the
  mesh is scaled to fit the image.

- To apply the last saved distortion mesh, click Load Last
  Mesh.

- (Creative Cloud) Meshes are automatically saved in your
  document. Meshes applied to Smart Objects are
  compressed and re-editable.

> **Note:**
>
> (Creative Cloud) Embedded meshes, even compressed ones,
> increase file size.

Work with backdrops

You can choose to show only the active layer in the preview
image, or you can show additional layers in the preview
image as a backdrop. Using the Mode options, you can
position the backdrop in front of or behind the active layer to
keep track of your changes, or to line up a distortion with
another distortion made in a different layer.

> **Note:**
>
> Only the active layer is distorted, even if other layers are
> displayed.

Showing the backdrop   Select Show Backdrop, and then
choose Background from the Use menu and an option from
the Mode menu.

**Showing changes to the target layer without showing
the backdrop**
Select All Layers from the Use menu. Setting the Opacity to 0
shows only the target layer with the full effects of the Liquify
filter. Setting the Opacity to a higher value shows less of the
Liquify filter's effect on the target layer.

**Changing the blending between the target layer and the
backdrop**
Specify a Opacity value.

Determining how the target layer and the backdrop are combined in the image preview
Choose an option from the Mode menu.

Hiding the backdrop　Deselect Show Backdrop in the View Options area of the dialog box.

Reconstruct distortions

After you distort the preview image, you can use a variety of controls and reconstruction modes to reverse changes or redo the changes in new ways. Reconstructions can be applied two ways. You can apply a reconstruction to the entire image, smoothing out the distortion in unfrozen areas, or you can use the reconstruction tool to reconstruct specific areas. If you want to prevent reconstruction of distorted areas, you can use the Freeze Mask tool.
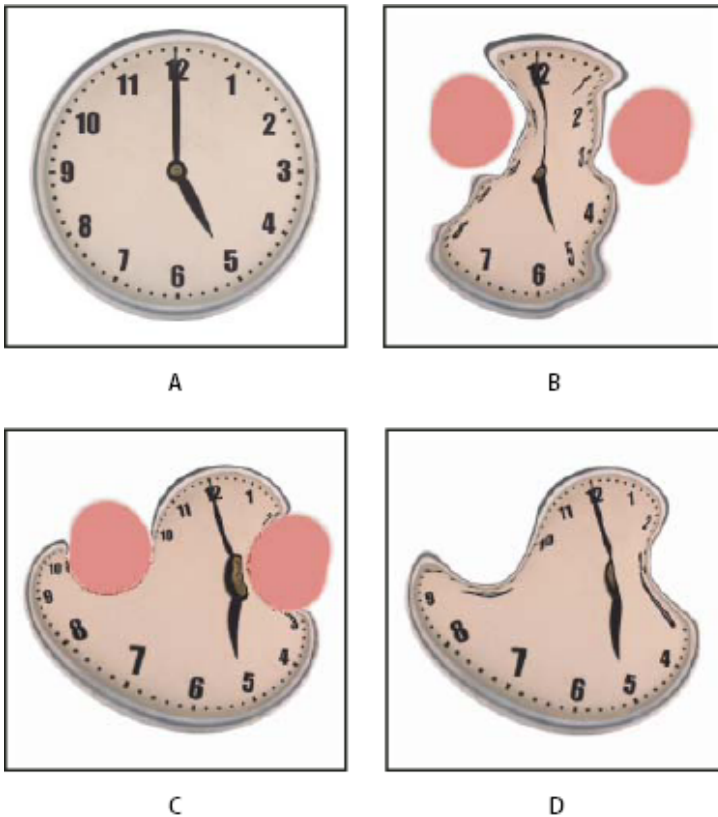
Reconstruction based on distortions in frozen areas.

A. Original image **B.** Distorted with frozen areas **C.** Reconstructed in Rigid mode (using button) **D.** Thawed, edges reconstructed in Smooth mode (using tool)

Reconstruct an entire image

Click Reconstruct in the Reconstruct Options area of the dialog box. Then, in the Revert Reconstruction dialog box, specify an amount and click OK.

Remove all distortions

Click Restore All in the Reconstruct Option area of the dialog box. This removes distortions even in frozen areas.

Reconstruct part of a distorted image

1   Freeze areas you want to keep distorted.

2   Select the Reconstruct tool 🖌 and specify brush
     options in the Tool Options area of the dialog box.

3   Drag over the area you want to reconstruct. Pixels
     move more quickly at the brush center. Shift-click to
     reconstruct in a straight line between the current point
     and the previously clicked point.

More like this

[Blend and fade filter effects](#)

[Filter effects reference](#)

(cc) BY-NC-SA   Twitter™ and Facebook posts are not covered
under the terms of Creative Commons.

[Legal Notices](#) | [Online Privacy Policy](#)

Ps **PHOTOSHOP**

[< See all apps](#)

[Learn & Support](#)

[Get Started](#)

[User Guide](#)

[Tutorials](#)

Ask the Community

Post questions and get answers from experts.

Ask now

Contact Us

Real help from real people.

Start now

Products

Blogs & Community

Support

Adobe

Change region ⌄

Copyright © 2018 Adobe. All rights reserved. / Privacy / Terms of Use / Cookies