How to generate different file formats

Different mediums—print, web, and video—require different file formats. This guide describes how to generate appropriate file formats for these mediums by using Adobe Photoshop.When generating any image in Photoshop, it's important to remember that when you save an image, Photoshop saves the image as it appears onscreen. That is, if you have hidden some layers, they will not appear in the saved image.

The CSS Copy function in Photoshop lets you quickly export CSS code for text and shape styling

You can save your generated file formats to the Adobe Creative Cloud. Your account comes with online storage so that your files are available to you anywhere and on any device or computer

Saving files for the web

For web pages, you will generally want to save photos in JPEG format. JPEG is used more than any other format for photos on web pages. (Other web formats include GIF—usually used for images with limited colors—and PNG—a less often used, but flexible format.)

JPEG is popular because it compresses well—that is, you can make files smaller without sacrificing quality. However, if you compress too much, file quality will suffer; the trick is to find the right balance between image quality and compression.

Photoshop makes this process easier through a command called Save For Web. You can use Save For Web to preview JPEGs with different compression settings before you save them.

Note: When you save a file for the web, it appears at its full pixel size. The document size does not affect how the image appears in a browser. For example, an image whose pixel size is 640 x 480 displays at that size in a browser. The document size affects only how the image prints.

To save a file as a JPEG:

1. Start Photoshop and open an image.

2. Choose File > Save For Web.

   The Save For Web dialog box appears (**Figure 1**).

3. In the Optimized File Format pop-up menu, choose JPEG, if it is not selected. (**Figure 2**).
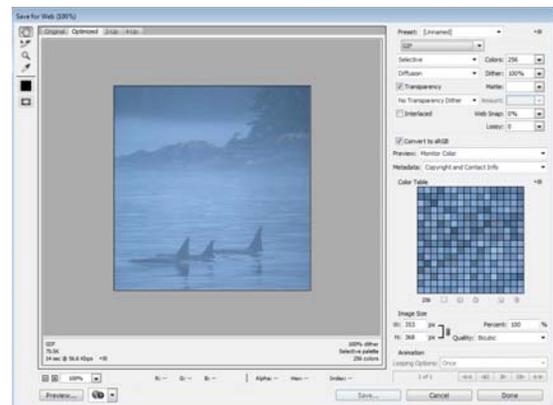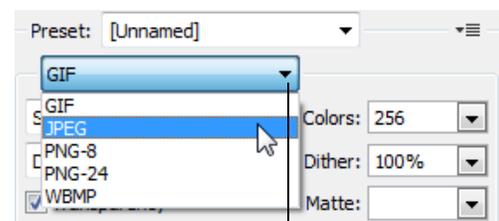

Figure 1 Save For Web dialog box

Optimized File Format menu

Figure 2 Optimized File Format menu

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4. Click the 2-Up tab to display both the original and a preview of the file to be saved (**Figure 3**).

5. Adjust quality by using either the Compression Quality pop-up menu or the Quality slider (**Figure 4**).

As you change settings, observe how the quality of the lower (preview) photo appears compared to the file size. Ideally, you want to find the right balance between preserving compressed image quality against smallest file size.

6. When you are satisfied, click Save.

Clicking Save automatically saves a copy of the image as a JPEG with the settings you indicated. The original image is left unchanged. For working purposes, you may want to incorporate some of the settings into the filename, such as "banner_medium.jpg" for an image saved as a medium-quality JPEG.

After you save, the original file stays open in Photoshop.

Note: If the original image is also a JPEG (many digital cameras use JPEG as a format), you need to save the copy in a different location from the original (or give it a different name) to avoid confusion.
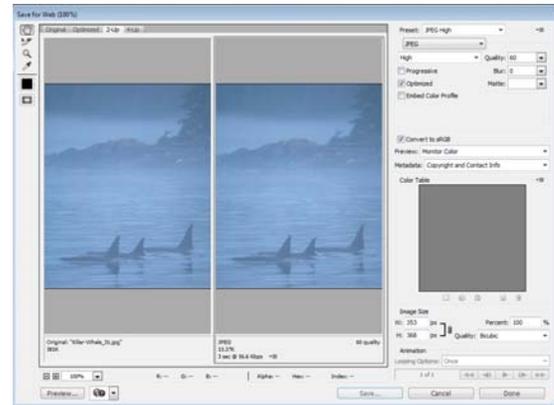
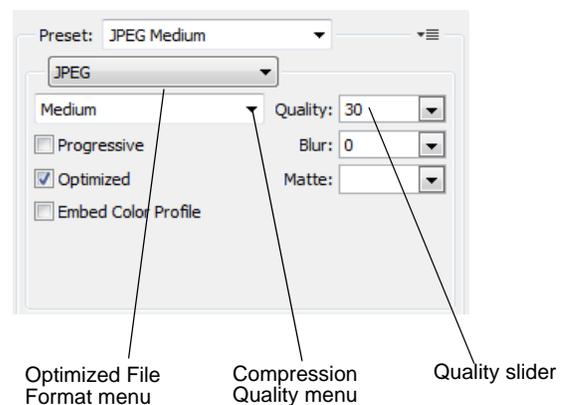**Figure 3** Save For Web dialog box, 2-up mode

Figure 4 Save For Web settings

Generating files for print

Generating files for print use is different from saving images for the web: you use an uncompressed file format and you must be sure the file is at a high enough resolution (preferably 300 ppi) before you save it. It is always good to import the image into Photoshop at the highest possible resolution to give more flexibility in the kinds of images you can generate.

Note: You can print to a printer directly from any computer running Photoshop. The options described here are for sending an image to a printer, to another computer to be printed, or to another application.

Generating files for print involves three steps:

1. Setting the image resolution to 300 ppi.

2. Converting the image to CMYK (if the image is going to an offset print vendor).

3. Generating a print-friendly (compression-free or lossless) format, such as TIFF.

Setting resolution to 300 ppi

Setting a higher resolution is important to maintain flexibility and quality.

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To set resolution to 300 ppi:

1. Open an image in Photoshop.

2. Choose Image > Image Size.

    The Image Size dialog box appears (**Figure 5**).

3. Deselect the Resample Image option if selected.

    When you leave this option unselected, you ensure that you're only changing the image's resolution, not removing or adding pixels.

4. Enter 300 in the Resolution text box (**Figure 5**).

    Make sure pixels/inch is selected as the units for Resolution.

5. Click OK.

    To preview an image at the size it will appear when printed, choose View > Print Size.
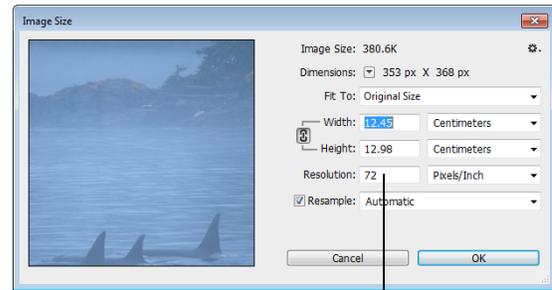
Resolution text box

Figure 5 Image Size dialog box

Converting images to CMYK

Computers use combinations of red, green, and blue (RGB) to display photos. Offset printing presses print full-color photos, using cyan (blue), magenta (red), yellow, and black. This is known as *CMYK* printing. If you are printing to an inkjet printer, you can leave the image in RGB mode, but if you are sending the image to an offset print vendor, you need to convert the image to CMYK.

To view how the image will appear in CMYK, choose View > Proof Setup > Working CMYK. (For some images, you may not observe any difference at all.) This preview is called a *soft proof*.

Note: Soft proofs are approximations. What you see onscreen depends on the quality and settings of your monitor as well as the lighting conditions of your work environment. You may observe different results when you actually print. Nevertheless, soft proofs can be useful.

Photoshop also enables you to preview how the image will appear on a range of different printers, including most Epson models and offset printing. To view these, choose View > Proof Setup > Custom.

To convert an image to CMYK:

1. Save a copy of the image.

2. Choose Image > Mode > CMYK Color.

3. If the image has layers, Photoshop asks whether you wish to flatten. Click Flatten.

    (Because you saved a copy of the file, you can open the saved copy to recover the layers.)

Generating TIFFs

After you convert the image to CMYK and make sure it is at the correct resolution, you can save it in a print-friendly format (a format with no compression, known as a *lossless* format). In this exercise, you will choose the TIFF format.

Note: Although TIFF is the most common lossless image format, you can also use EPS or an Adobe PDF.

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To generate a TIFF:

1. Choose File > Save As.

   The Save As dialog box appears (**Figure 6**).

2. In the Format box, choose TIFF (*.TIF, *.TIFF) (Windows) or TIFF (Mac OS).

3. Click Save.

   The TIFF Options dialog box appears (**Figure 7**).

4. Because the image is going to a printer, you do not need to compress it. Leave Image Compression set to None. Leave Pixel Order set to Interleaved.

   Note: In practice, TIFF files are seldom compressed.

5. Set Byte Order to your operating system (Windows or Mac OS).

6. Because the image is going to a printer, you also don't need to save the layers. Make sure Discard Layers And Save A Copy is selected.

   This option flattens the layers in the image.

7. Click OK.

   Note: If the image has only the Background layer, the option Discard Layers And Save A Copy is not available.
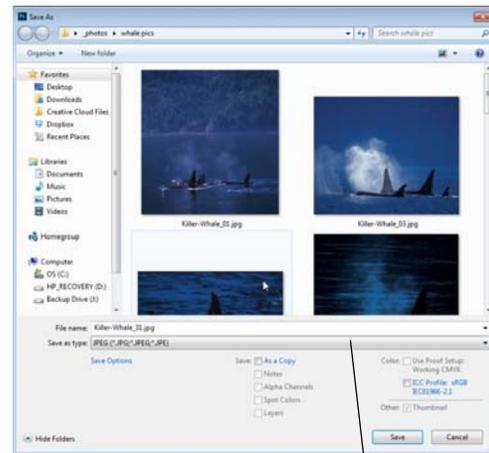
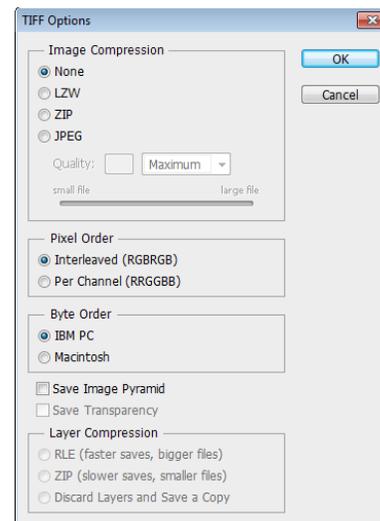Format pop-up menu

Figure 6 Save As dialog box

Figure 7 TIFF Options dialog box

Printing images and saving print dialog settings

There may be occasions where you want to print a copy of your image to a local printer. Photoshop provides many printing options, including the following printing commands:

Print Displays the Print dialog box, where you can preview the print job and select the printer, number of copies, output options, and color management options.

Print One Copy Prints one copy of a file without displaying a dialog box.

Once you have established a preferred combination of format and color management options, you can save the print dialog settings as a preset for use later.

To set Photoshop print options and print:

1. Choose File > Print.

   The Print dialog box appears (**Figure 8**).

2. Do one or more of the following:

   - Use the Printer menu to select a printer.

   - Select the number of copies to print.

   - Set the paper orientation to portrait or landscape.

   - If needed, click the Print Settings button to set page setup options specific to your printer, printer drivers, and operating system, such as paper size and layout.

   - Set Color Management and proofing options

   - Adjust the position and scale of the image in relation to the selected paper size and orientation.

   - Set output options (Printing Marks and Functions)

3. Do one or more of the following:

   - To print the image, click Print.

   - To close the dialog box without changing the options, click Cancel.

   - To preserve the options and close the dialog box, click Done.

   Note: If you get a warning that your image is larger than the printable area of the paper, click Cancel, choose File > Print, and select the Scale To Fit Media option.
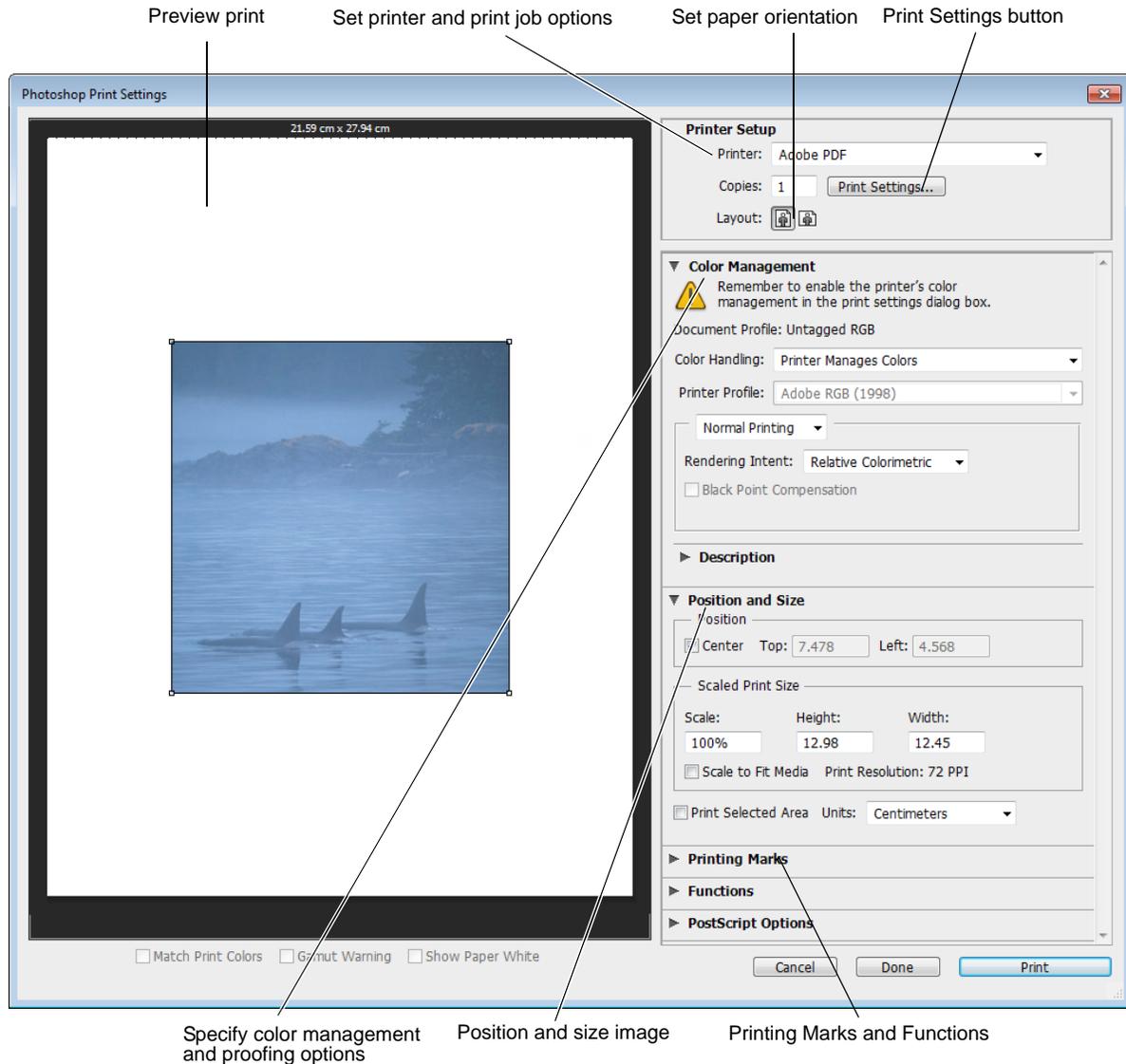
This document requires Adobe Photoshop CC, June 2013. Technical instructions may differ depending on your version.

Preview print   Set printer and print job options   Set paper orientation   Print Settings button

Specify color management   Position and size image   Printing Marks and Functions
and proofing options

Figure 8 Print dialog box

Creating images for video

Photoshop can create images of various aspect ratios so that they appear properly on devices such as video monitors. You can select a specific video option (using the New dialog box) to compensate for scaling when the final image is incorporated into video.

Safe zones

The Film & Video preset also creates a document with non-printing guides that delineate the action-safe and title-safe areas of the image (**Figure 9**). Using the options in the Size menu, you can produce images for specific video systems—NTSC, PAL, or HDTV.

Safe zones are useful when you edit for broadcast and videotape. Most consumer TV sets use a process called *overscan*, which cuts off a portion of the outer edges of the picture, allowing the center of the picture to be enlarged. The amount of overscan is not consistent across TVs. To ensure that everything fits within the area that most TVs display, keep text within the title-safe margins, and all other important elements within the action-safe margins.
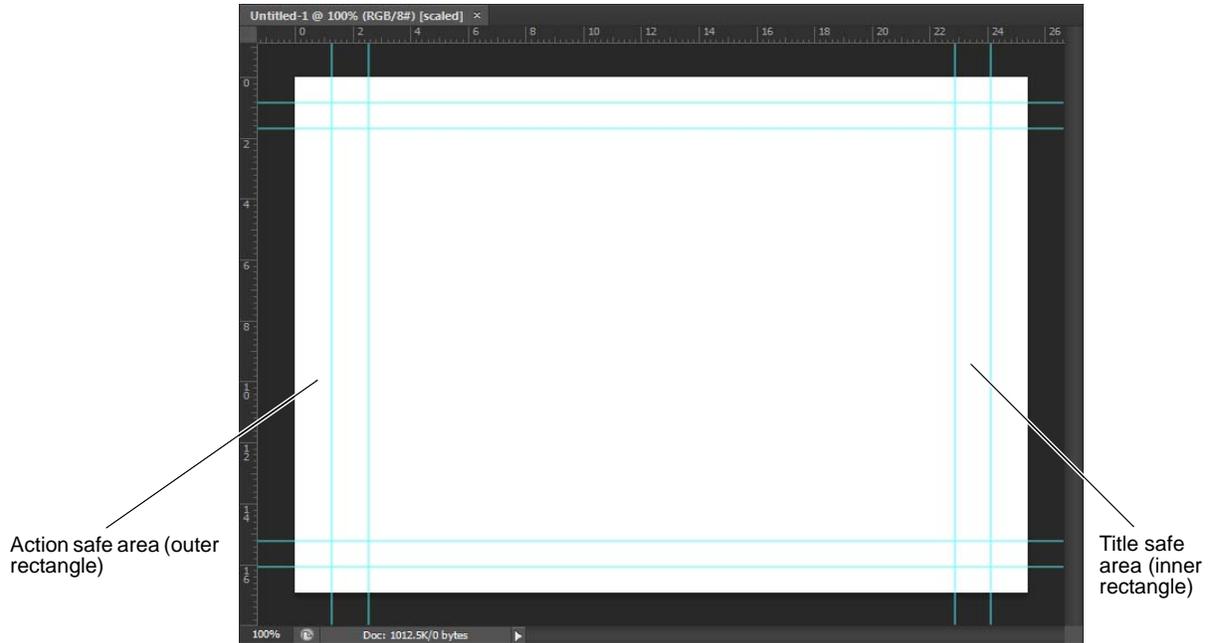
This document requires Adobe Photoshop CC, June 2013. Technical instructions may differ depending on your version.

Figure 9 Video preset file size guides in a new document

To create an image for use in video:

1. Create a new document.

   The New document dialog box appears (**Figure 10**).

2. From the Preset menu in the New dialog box, choose the Film & Video preset.

3. Choose the size that is appropriate for the video system on which the image will be shown.

    In this case, the NTSC DV option is selected (**Figure 11**).

4. Click Advanced to specify a color profile and specific pixel aspect ratio.

   Important: By default, non-square pixel documents open with Pixel Aspect Ratio Correction enabled. This setting scales the image so it appears as it would on the non-square pixel output device (usually a video monitor).

5. Click OK to close the New document dialog box.

6. Click OK to close the message "Pixel aspect ratio correction is for preview purposes only. Turn it off for maximum image quality."

   The new document opens (**Figure 9**).
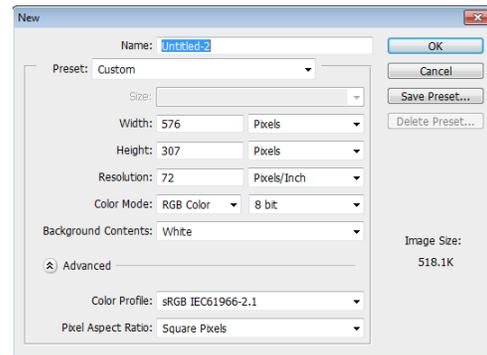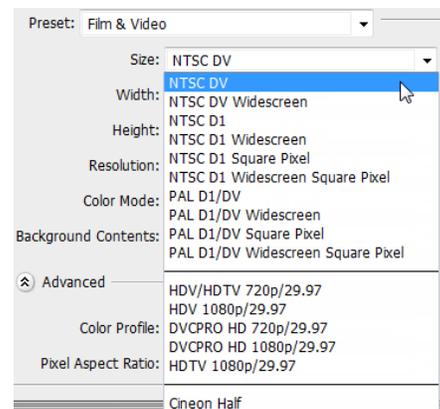

Figure 10 New document dialog box

Figure 11 Film and video size preset options

7. To view the image as it would appear on a computer monitor (square pixel), choose View > Pixel Aspect Ratio Correction.

   For example, in **Figure 12**, a circular image is shown displayed with Pixel Aspect Ratio Correction turned on and then turned off.

   Note: You can simultaneously view an image with the Pixel Aspect Ratio Correction turned on and off. With the non-square pixel image open and Pixel Aspect Ratio Correction enabled, choose Window > Arrange > New Window For [name of document]. With the new window active, choose View > Pixel Aspect Ratio Correction to turn off the correction.

8. If you have a display device, such as a video monitor, connected to your computer, you can preview the document on the device by choosing File > Export > Render Video.

   Note: When creating images for video, you can load a set of video actions (included with Photoshop) that automate certain tasks—such as scaling images to fit video pixel dimensions and setting the pixel aspect ratio.
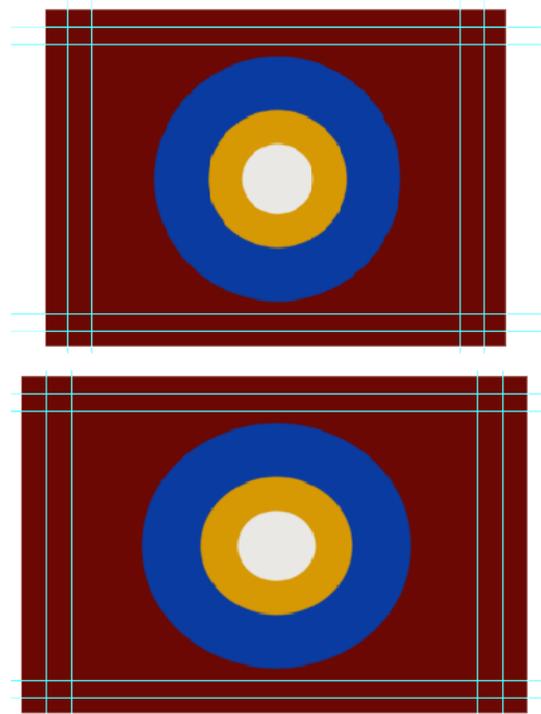

Figure 12 Circle in NTSC DV (720 x 480 pixels) document viewed on computer (square pixel) monitor with Pixel Aspect Ratio Correction turned on (top) and Pixel Aspect Ratio Correction turned off (bottom)

Copy CSS from Photoshop layers

The Copy CSS function in Photoshop generates Cascading Style Sheet (CSS) properties from shape or text layers (**Figure 13**). The CSS is copied to the clipboard and can be pasted into a style sheet of your favorite web development software, such as Adobe Dreamweaver.
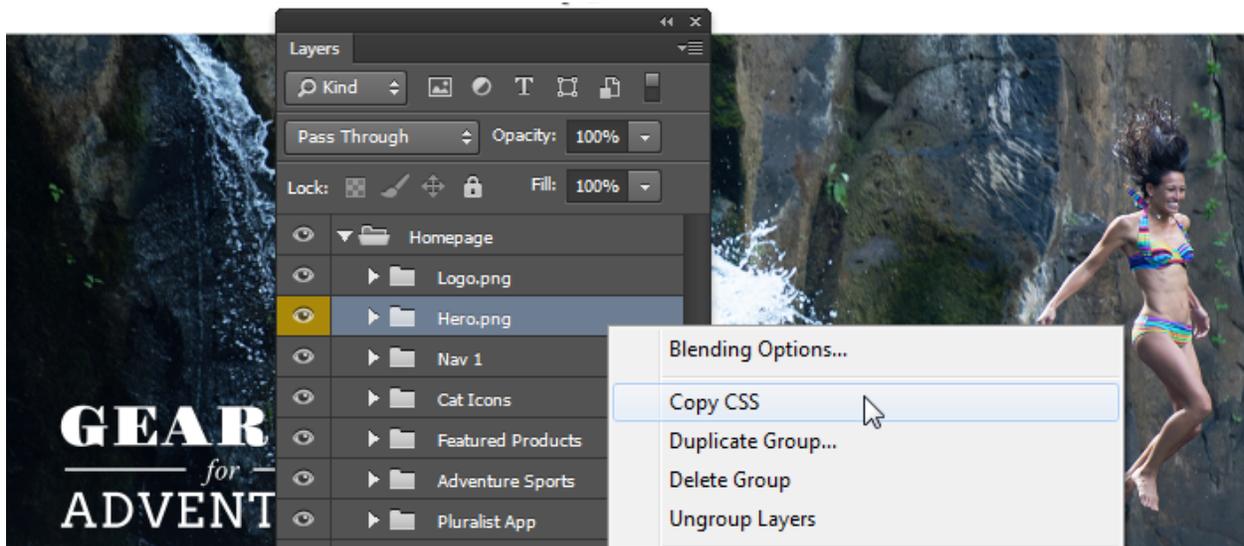

Figure 13 Layers panel and layer context menu

This document requires Adobe Photoshop CC, June 2013. Technical instructions may differ depending on your version.

For shapes the Copy CSS function captures values for the following:

- Size
- Position
- Stroke color

- Fill color (including gradients)
- Drop shadow

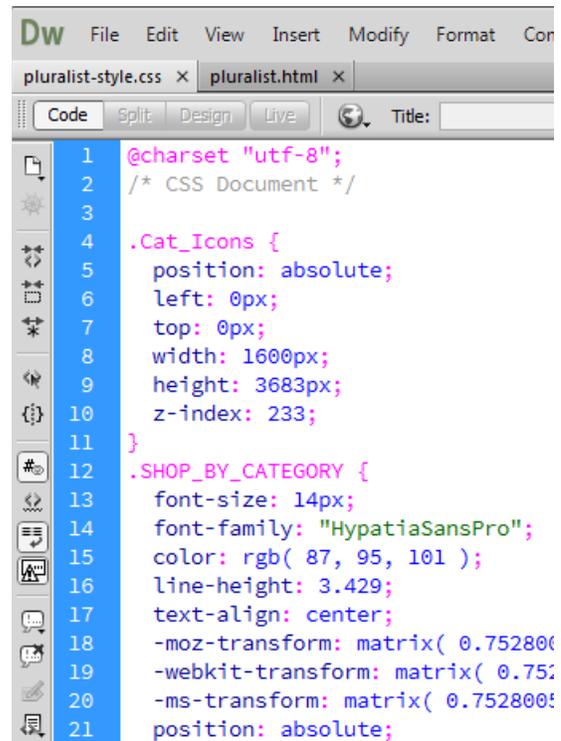For text layers, Copy CSS also captures the following values:

- Font family
- Font size
- Font weight
- Line height
- Underline

- Strikethrough
- Superscript
- Subscript
- Text alignment

Copying CSS from a layer group containing shapes or text creates a class for each layer as well as a Group class. The Group class represents a parent div containing child divs that correspond to the layers in the group. The top/left values for the child divs are in relation to the parent div.

Note: The Copy CSS command does not work with Smart Objects or when selecting multiple shape/text layers that are not grouped.

How to copy CSS from layers:

1. In the Layers panel, do one of the following:

   - Right-click a shape/text layer or layer group and choose Copy CSS from the context menu (**Figure 13**).

   - Select a shape/text layer or layer group and choose Copy CSS from the Layers panel menu.

2. Paste the code into your style sheet document into a CSS editor (**Figure 14**).

Figure 14 Pasted CSS in Dreamweaver

Saving to Creative Cloud

Your Adobe Creative Cloud account comes with online storage so your files are available to you anywhere and on any device or computer (**Figure 15**). You can preview many creative file types directly in a web browser on your computer, tablet, or smartphone. These file types include PSD, AI, INDD, JPG, PDF, GIF, PNG, Photoshop Touch, Ideas, and others.
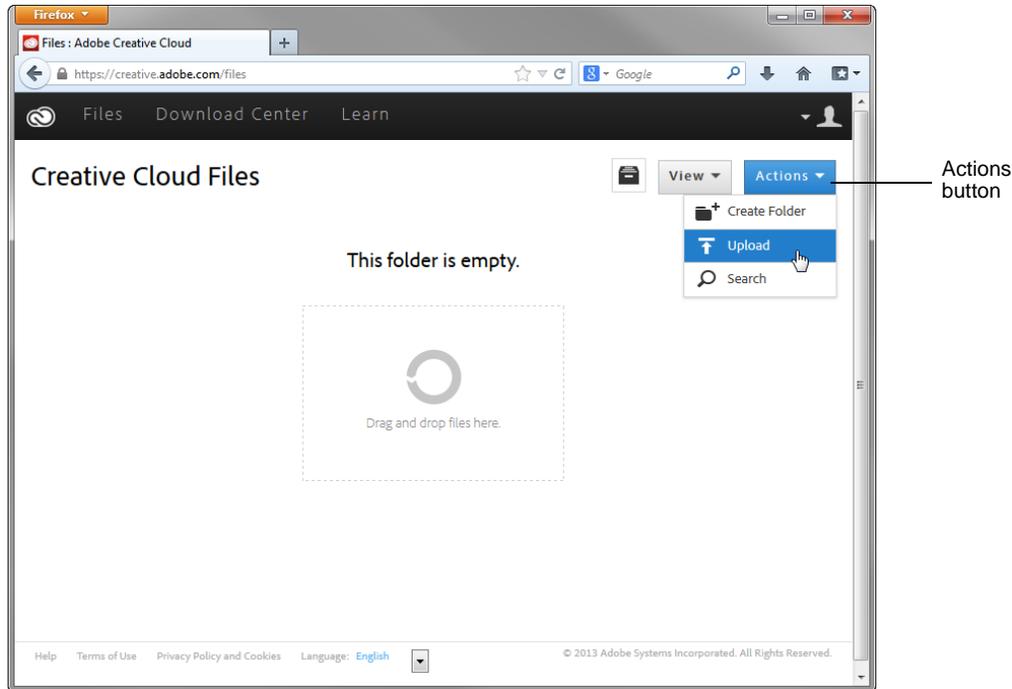

Figure 15 Creative Cloud Files page

How to save to Creative Cloud:

1. Log into your Creative Cloud account.

2. Drag and drop assets from your desktop to the Files page on Creative Cloud (**Figure 16**).

    You can also upload and manage your files on Creative Cloud by using the Actions button on the Creative Cloud Files page (**Figure 15**).
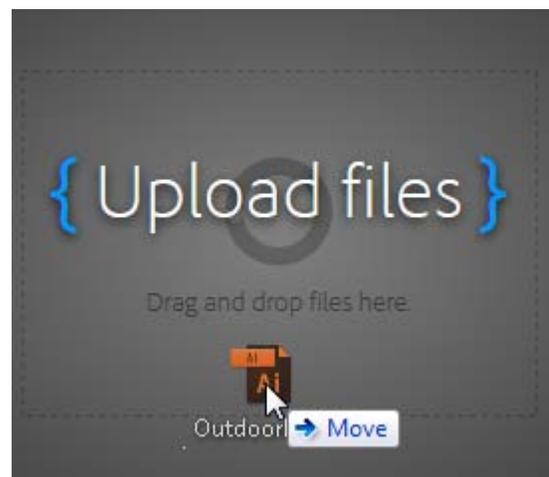

Figure 16 Drag and drop files

This document requires Adobe Photoshop CC, June 2013. Technical instructions may differ depending on your version.

3. To delete files, select the Archive option by clicking the menu triangle in the lower-right corner of the file (**Figure 17**).

4. Click the Archive button to confirm.

    The item is moved to the Archive page (**Figure 18**).

5. To permanently delete files, select the files to delete permanently and click the Permanently Delete option in the Action menu (**Figure 19**).

6. In the confirmation dialog box, click Permanently Delete (**Figure 20**).
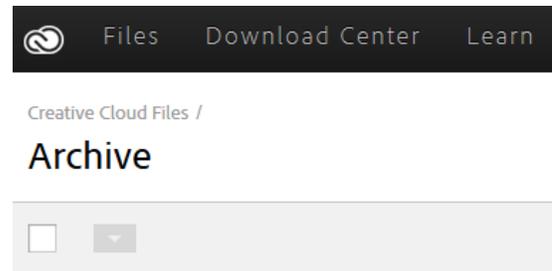

Figure 17 Menu triangle

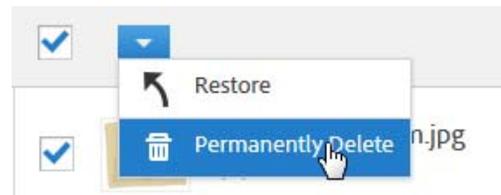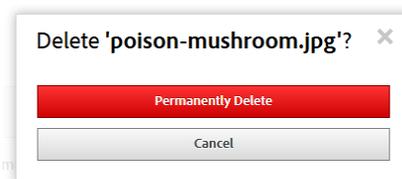**Figure 18** Creative Cloud Archive page

Figure 19 Action menu

Figure 20 Permanently Delete confirmation dialog box

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