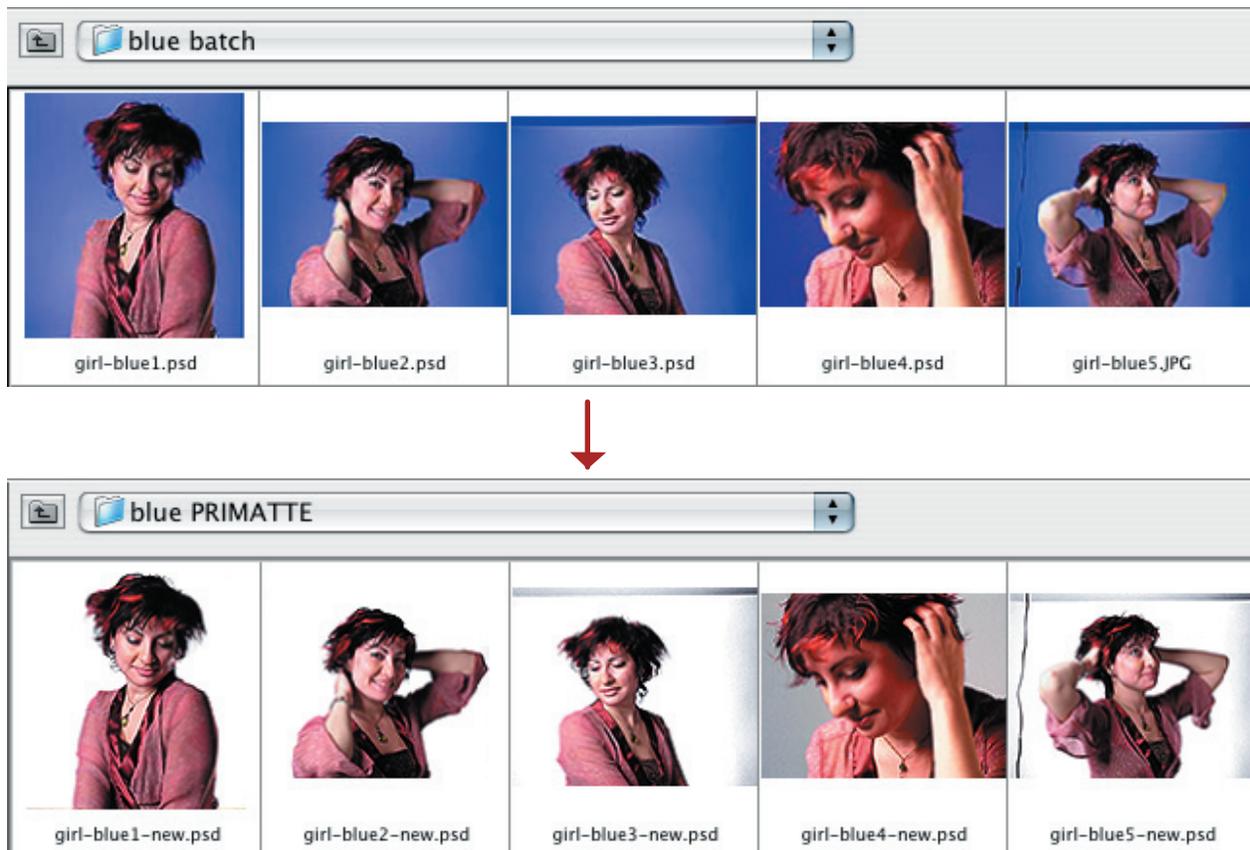


[for primatte chromakey 2.0]
complex masks in minutes

PRIMATTE
chromakey

use primatte in action & batch

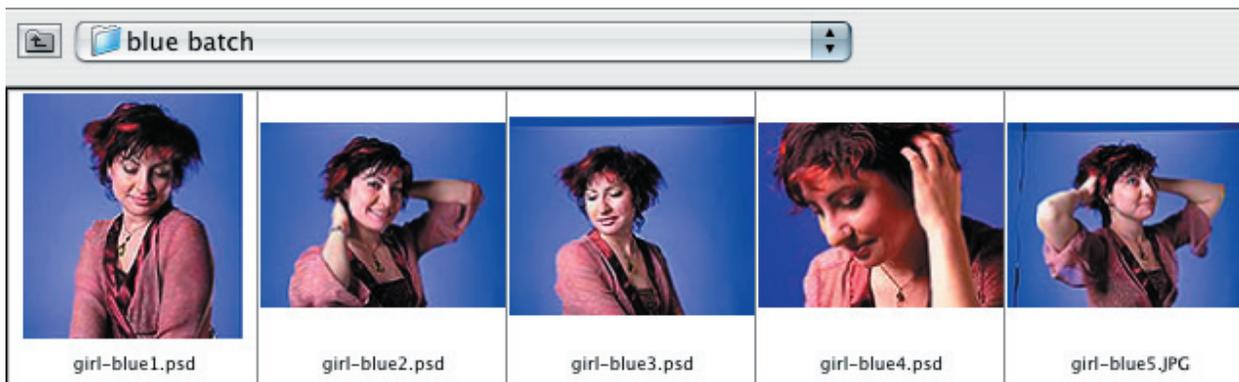
automate your use of primatte 2.0.



[from: Digital Anarchy]
f/x tools for revolutionaries

create an action, then batch process it

Primatte works with the Action and Batch functions in Photoshop. How varied your subject is determines how well an Action/Batch will work on a group of photographs. This kind of processing works best on a series that was taken under similar lighting conditions and contains similar subject matter.



[figure 1] A photo session that Primatte will Action/Batch properly. The same model appears under the same lighting and back screen. We will use this series in our tutorial.



[figure 2] A group of photos that Primatte may not Action/Batch properly. This is because Primatte determines a mask based on color.

These three photographs contain two models with very different color characteristics; for instance, blonde hair vs brunette. These models appear under varied lighting conditions (note the white hotspots in one photo) and in front of different color screens.

about this tutorial

In this tutorial, we will create an Action/Batch process using Primatte. First, we will set up an Action for applying Primatte to a photograph. An Photoshop 'Action' will automate tasks by saving a list of commands and operations that can be replayed.

Next, we'll tie that Action into a Batch process to treat an entire folder of Photoshop files. A Photoshop 'Batch' is a method of automating an Action to run on a group of photos.

create an action/batch with primatte

First, let's create an Action that runs Primatte on a blue or green screen photo. Then we'll tie that Action into a Batch process to treat an entire folder of photos. If you don't already have a group of photos to work with, you can download the ones that we have used for this tutorial at http://www.anarchyunderground.net/tutes/prim_action-images.zip.

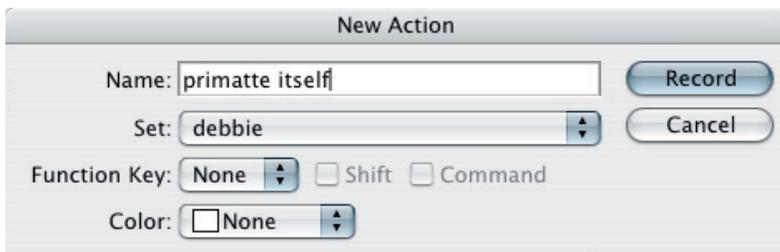


[figure 3] The photo 'girl-blue1.psd' used in this tutorial.

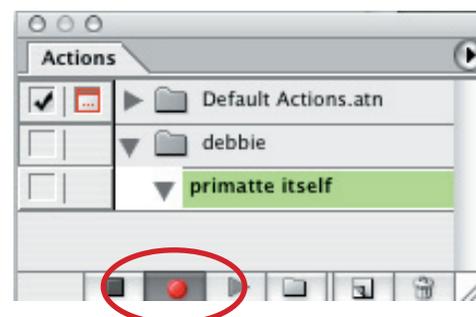
step 01: start recording the action

Open a blue or green screen file that needs to be treated with Primatte. We have opened one of our files called 'girl-blue1.psd'. [figure 3]

Then open your Actions palette in Photoshop (Windows> Actions). Create a new Action and call it 'primatte itself'. [figure 4] When you click 'Record', the Action automatically starts recording itself. [figure 5]



[figure 4] Create a new Action.



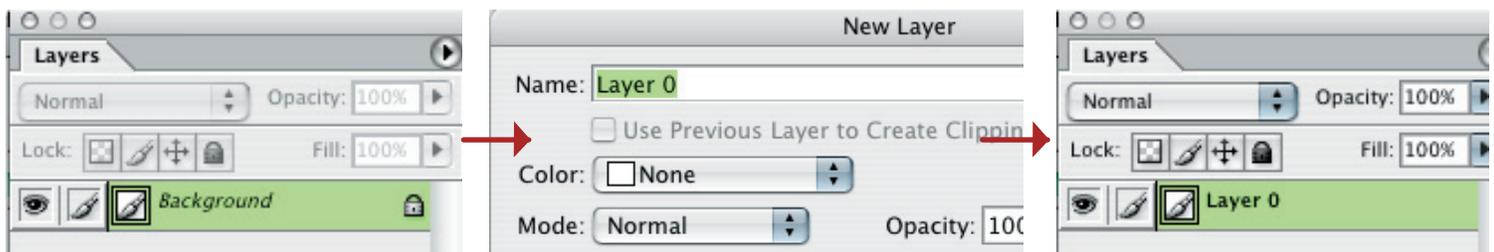
[figure 5] The Action auto-records.

step 02: unlock the default layer

Ok, Photoshop is now recording everything we do, so please don't click around outside of the following instructions.

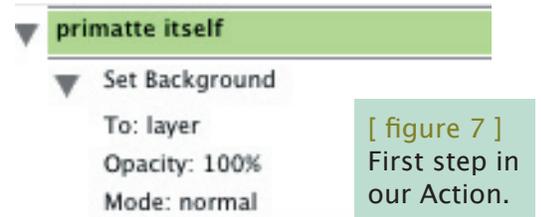
If your Layer palette reads as a single 'Background' layer with a Lock icon, double click the 'Background' layer. Then click 'Ok' to the dialog box. This will rename the layer as 'Layer 0'. [figure 6]

[figure 6] Double-click to unlock the 'Background' layer.



By turning the default 'Background' layer into a regular layer, the Photoshop file will be able to support transparency. This is often the first step to take when working with Primatte.

If you look at your Actions palette, you'll see that one step called 'Set Background' has been added. [figure 7]

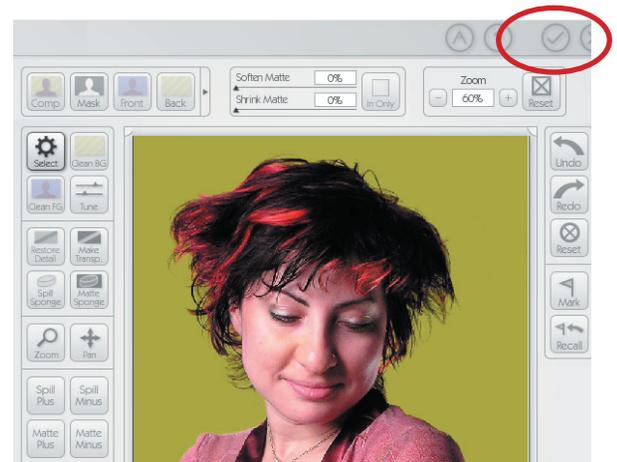


step 03: apply primatte

Now let's open Primatte and set up the mask. Go to Filters> Digital Anarchy> Primatte. The Primatte interface opens.

Set up the mask that works for your photo. When you are finished, click the 'Apply' button (checkmark icon) to run Primatte and return to Photoshop. [figure 8]

NOTE: This tutorial assumes that you already know how to use Primatte to create a mask. If you DON'T know how to set up a Primatte mask, please read/listen to our introductory tutorials! They are on our website at http://www.digitalanarchy.com/primatte/primatte_tutes.html.



[figure 8] Set up and apply Primatte.

step 04: return to photoshop

Back in Photoshop, the mask has been created and your 'Layer 0' subject is now on a transparent layer. You may see a gray checkerboard display around the subject. [figure 9a]

This checkerboard is simply Photoshop's way of visually displaying transparency. You can turn that display on/off by going to Photoshop's Preferences> Transparency & Gamut. On the Mac, this is in the Applications menu. On Windows, this is in the Edit menu. [figure 9b]

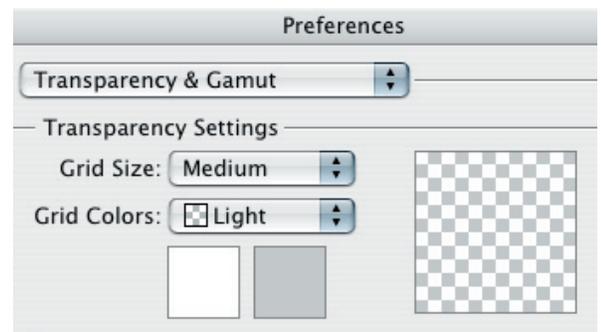
If you look at your Actions palette, you'll see that a new step called 'Primatte' has been added. [figure 10, next page] The values that are listed, like Red, Green and Blue numbers, are specific to your mask settings.

HERE'S A TIP: If you are on Mac OS X and don't immediately see a change in the photograph, you may need to click the 'Eye' icon in your Layers palette off, then back on. This takes care of a simple display glitch that sometimes occurs. If you do this, additional steps called 'Hide current layer' and 'Show current layer' will be added to your Action. Just keep them there; those items won't interfere with what you're doing.



[figure 9a] Our Primatte-treated image.

[figure 9b] Transparency display settings in Photoshop.



step 05: resave photoshop file

The final step of this Action is to resave your Photoshop file. Most likely, you will want to give the file a new name and save into a different folder. This will preserve the original greenscreen photo. Do this with the File> Save As command. [figure 11]

For our file, we added '-new' to the name. The name of the file is now 'girl-blue1-new.psd'. We sved the new file to a different 'blue PRIMATTE' folder instead of the 'blue batch' folder that the file came from.

step 06: stop recording

Now you can stop recording the Action. Click the 'Stop' icon in the Actions palette. [figure 12]

You can now view your final Action. You can also click around freely since this will no longer add to your Action list.

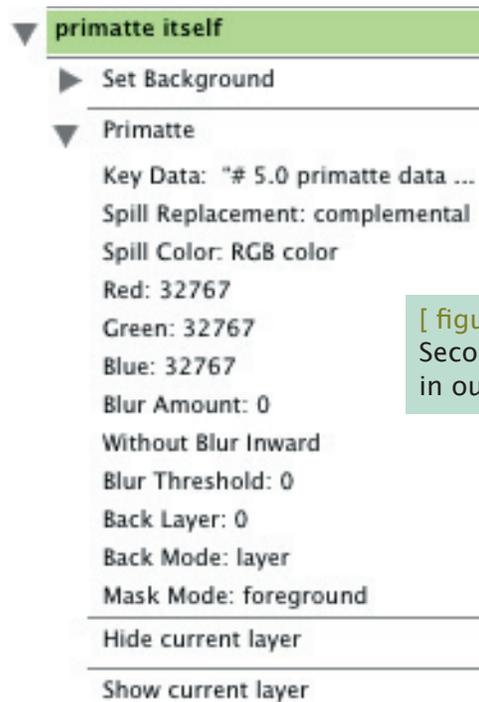
step 07: prep for batch process

Once you have an Action created, you can tie its function into a Batch process. To do this, close any photos that you will want to treat. You will select them instead through the Batch dialog.

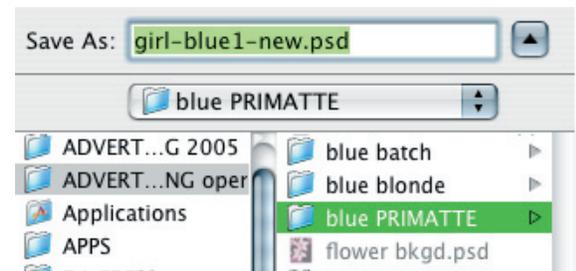
On your hard drive, create a new, empty folder (if you don't already have one from Step 05). Ours is the 'blue PRIMATTE' folder.

The folder that we will treat was shown on the first page of this tutorial. It is the 'blue batch' folder containing five bluescreen images. The images are similar but have some variation. After the Batch runs, we will examine how successfully the photos were treated with Primatte.

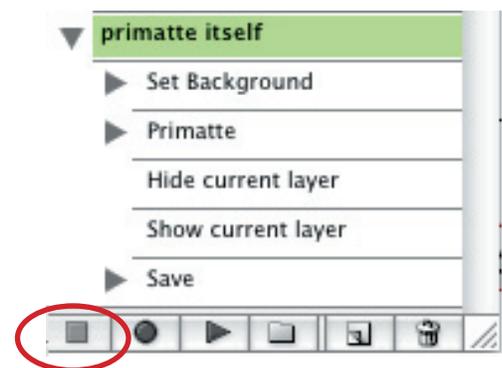
Now go to File> Automate> Batch. This opens the Batch dialog box.



[figure 10]
Second step in our Action.



[figure 11] The Save As dialog. Most likely, you'll want to change the file name and save to a new folder.



[figure 12] Your final Action and the little 'Stop' button that could.

step 08: set up the batch

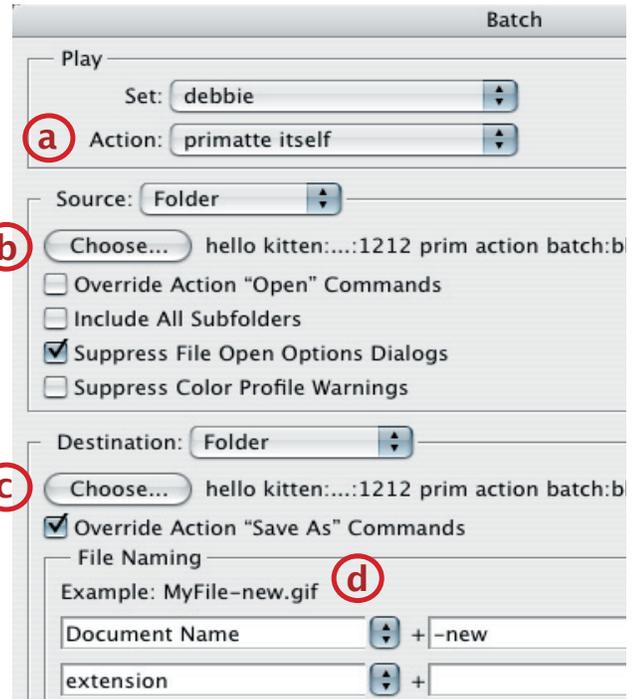
There are only a few things that you need to do inside the Batch dialog box. [figure 13]

- Select the Action to play.
- Choose the 'Source' folder to pull files from.
- Choose the 'Destination' folder to resave them to.
- Choose your 'File Naming' convention. For our files, we are adding in the word '-new' between the file name and the extension.

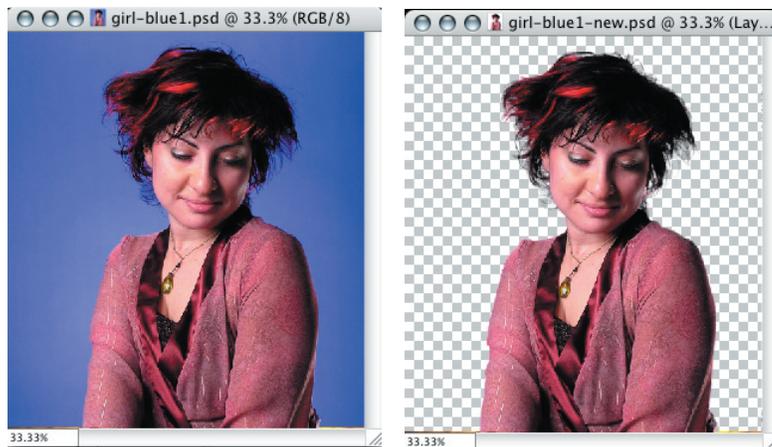
Now run the Batch by clicking 'Ok'. One of the great aspects of Batching is that you can work on your computer outside of Photoshop while it's doing its work.

step 09: look at the files

Let's look at how our files came out. Go to your hard drive and open the treated files and original files to compare.

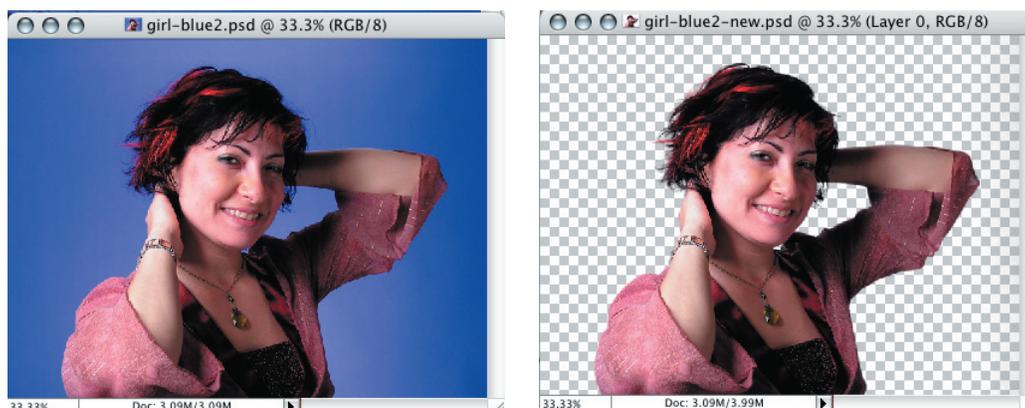


[figure 13] The Batch dialog box.

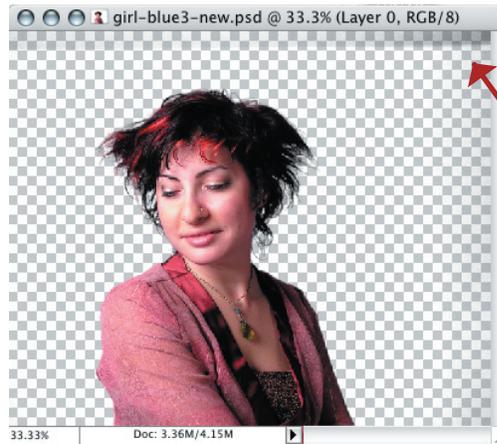


Here is an opinion about how our five photos came out using the Batch.

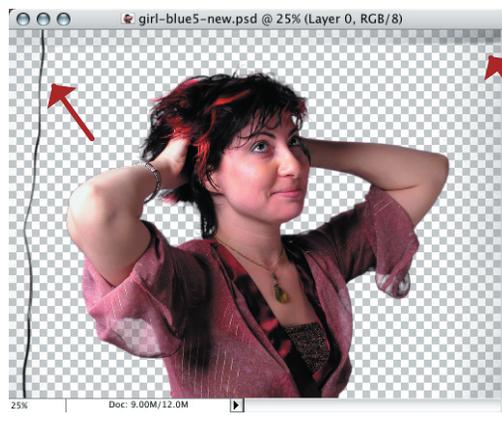
[Image 1] This is the image that our Primatte mask settings were based on and the Action/Batch used. Of course, the mask looks great because we set up Primatte's color parameters to treat this photo.



[Image 2] This photo has exactly the same lighting conditions and color range as Image 1. Notice how even the blue tone of the screen looks. The mask for this image came out terrifically because its color distribution is the same as the image the mask settings were based on.



[Image 3] This photo also has conditions very similar to Image 1. Therefore, the mask came out good. But notice the dark band along the top of the photo. This is a remnant of the screen's scaffhold that showed in the original photo. Its deep blue was too outside of the pre-determined mask settings, so only part of the image was removed.



[Image 4] The blue screen colors are in the range that Primatte has been told to keep. Good mask but same remnant problem as in Image 3. Also, a wire from the studio setup is visible.

The solution to color remanents like the wire and scaffhold is very simple. Before you run Primatte, crop out or delete any image area that will cause a problem. Typically this will be a blocky area that is very easy to isolate. You can also approach this from the opposite end and crop/delete after the photo has been masked. [figure 14]

[figure 14] In Photoshop, you can use the Crop tool (shown at right) or the Delete key to remove elements that weren't erased by Primatte's masking. Remember, Primatte only removes a single color or color range.



[Image 5] The mask did not work very well on this image. The blue was removed but a ghost of its colors is left behind. This is because the blue screen looks considerably darker than in the other photos, which means the mask settings are not appropriate. This photo would need to be retreated by Primatte with different settings.

in conclusion (and another example!)

As you can see, tying Primatte into an Action, and then a Batch, is a very simple process. However, an automated approach to Primatte will not work ideally with every group of photographs. Its success really comes down to how your photographs look.

Auto-processing works best on photos that were taken under similar lighting conditions and contain the same subject matter. That was the case with the five photos we worked with in this tutorial. One model was photographed in a single session under the same lighting setup. If we take the same Action and process it with two unrelated photos, look at what happens:



[Image 6] This photo has the same lighting conditions and model as Image 1, but the back screen is green instead of blue. This throws off the color model created for the Action and Primatte is ineffective in creating a mask. You would need to create a new mask for this photo.

[Image 7] Different model, different back screen. Still blue, though, which means the Action's mask settings have some effect. The results are similar to Image 5 since the blue is removed, but not fully. Still, you would need to create a new mask for this photo.

As with any photography, we always suggest a reality check! Do some preliminary tests before using Primatte in a Batch situation under a deadline.

tech note about actions

There is a final piece of information to point out about our Action. When you record functions that include a dialog box, the settings recorded are the ones in the dialog box at the time of the recording. When you run the Action, it uses those dialog settings.

issue with the dialog icon

Let's say you want to use your Primatte Action to treat multiple files without entering into Batch. In Step 6 of this tutorial we recorded a 'File> Save As' dialog.

The Action will use the file name originally recorded. If you save to the same folder, this will overwrite the file on your hard drive that is currently using that name. This is not very productive!

Luckily, there is a very simple solution. Simply activate the Dialog button next to the 'Save' function in the Action palette. [figure 16]

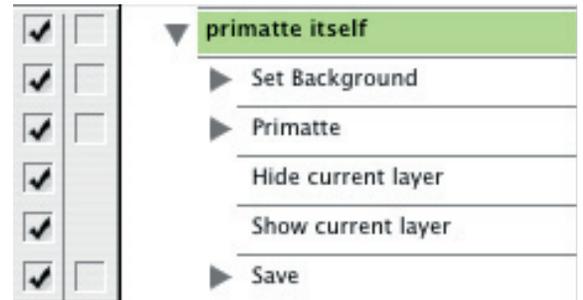
This button serves as a prompt. When your Action runs, the Dialog button tells Photoshop to pause at the Save As dialog and allow you to enter in custom information. In this case, you will type in a new file name. [figure 17]

not an issue for batching

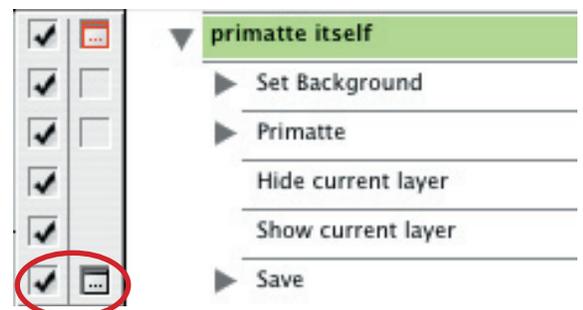
A Batch process does not run into this issue. This is because a Batch is designed to treat groups of images, so it has (re)naming functions built into its dialog box.

You will need to turn off the Dialog icon for your Save function when you run the Primatte Action through a Batch. Otherwise the Batch will pause on each file for a custom name to be entered. Again, not very productive...

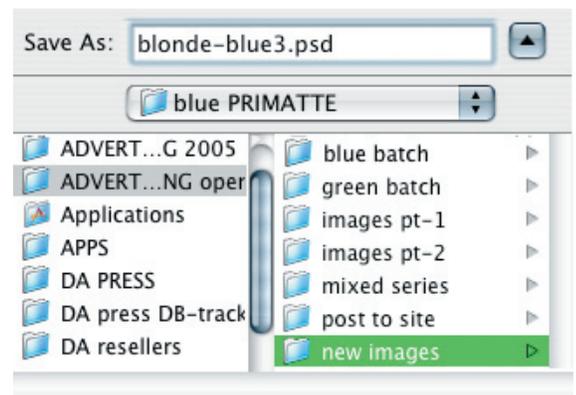
Have questions about this information? Contact us at info@digitalanarchy.com.



[figure 15] The Dialog icon is turned off.



[figure 16] The Dialog icon is turned on.



[figure 17] With the Dialog icon active, the Action will prompt you to enter in a new file name.