- 17 Finally, slightly increase the blur and then drag the In/Out Ratio to the left to blur the matte's edges inward. This will expand the black areas of the matte, removing any lingering white holes.
- 18 Turn off the Highlight view by clicking the Highlight Wand icon.
 You can test to see whether your selection is good just by increasing the Gamma's master wheel slightly to brighten her face.
- 19 In the primary controls, drag the Gamma's master wheel to the right to brighten her face.



Her face becomes brighter but so do large areas outside of her face. Instead of endlessly tweaking the qualifier, you can solve these issues more quickly by combining the qualifier with a window.

Combining Qualifiers and Power Windows

You can refine an area of the image you want to modify even more precisely by using the qualifier and Power Windows together. Often, an image will have several instances of a hue that you are trying to manipulate. Instead of focusing your efforts on cleaning up the selection in the qualifier palette (and likely compromising the quality of the key), sometimes the best option is to use a Power Window to limit which part of the frame the qualifier operates on. For instance, in our shot, the background is too close in color to separate it from her face completely. Instead of fiddling with the qualifier, which would affect the selection, you'll use a window to mask everything except her face.

1 In the central palettes, click the Windows icon.
We'll use a circle window to isolate her face further.



- 2 In the windows palette, click the circle window.
- 3 In the viewer, center the circle over her face, so the top is just below her hat.



4 Use either one of the white side handles to create more of an oval shape that fits her face better.



Use the Soft 1 control in the windows palette to increase the softness to around 5. You can display the area you will modify with the window by enabling the viewer's Highlight mode.

- 6 In the viewer's upper-left corner, click the Highlight button or press Shift-H on the keyboard.
 - The Highlight button shows her face and cuts out any of the background. Make any adjustment to the window placement that is needed to isolate her face as best you can.
- 7 Click the Highlight button or press Shift-H again to disable it.

Combining the qualifier with a window has allowed you to quickly make a clean selection based on the element's hue while just as quickly excluding interfering elements from your selection. Using both tools meant that you didn't have to draw an overly precise Power Window or endlessly tweak the qualifier. Combining the two tools has saved time and resulted in the cleanest key.

Using the Tracker

Now that you have one frame with an isolated face, you need to ensure it remains that way throughout the shot. One way to ensure the window follows her face as it moves is to use Resolve's tracker. The color page features an incredible 3D perspective tracker that not only follows objects but can also determine if that object changes rotation or perspective. As a result, you can track the most challenging objects, so that a window will follow it precisely.

1 In the toolbar, click the Tracker button.



- 2 Make sure the playhead in the tracker panel is at the start of the clip.
 - The tracker can track various aspects of objects within a clip. You can enable and disable the transform types using the checkboxes at the top of the panel. Disabling parameters can sometimes help improve tracking, so long as you needn't track those disabled aspects of the object. For instance, in this clip, her face does not increase or decrease in size, so we can disable that property to remove potential errors.
- 3 At the top of the tracker palette, click the Zoom checkbox to disable that transform.
- 4 Begin tracking by clicking the track Forward button.



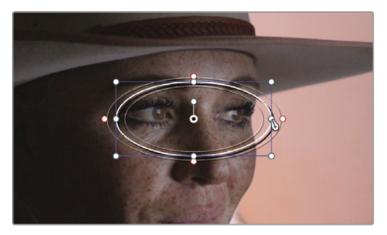


Once the track is completed, click the Onscreen Overlay button in the viewer's lower left and choose Off from the drop-down menu to hide the window outline in the viewer, and then scrub or play through the clip to see the results.

TIP You can press Shift-`(grave accent) to hide the onscreen overlays.

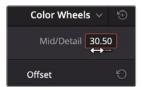
The tracker causes the window to follow her face as she turns. You have one more interview shot of the woman that needs a similar treatment.

- 6 Click the Onscreen Overlay button in the viewer's lower left and choose Power Window from the drop-down menu to show the window outline.
 - Since the eyes are typically the focal point for most shots of people, we can further enhance this shot by simulating an eye light, using a window and tracking.
- 7 Return to the start of the clip.
 - We'll first set up the nodes we will need for a new eye window.
- 8 Right-click over node 02 in the Node Editor and choose Add Node > Add Serial or press Option-S (macOS) or Alt-S (Windows).
- 9 Right-click over node 03 and label the node EYES.
- 10 In the central palettes, click the Windows icon.
 - We'll again use a circle window to focus on her eyes.
- 11 In the windows palette, click the circle window.
- 12 In the viewer, drag the circle over her eyes, so the center is on the bridge of her nose.
- 13 Use the white top, bottom, and side handles to create a smaller, more oval shape covering her eyes.



14 Use the Soft 1 control in the window palette to increase the softness to around 5.

- 15 Select the tracker palette, and make sure you are on the first frame of the clip.
- 16 Click the Zoom checkbox to enable it again and then click the track Forward button. Now we'll use this window to enhance her eyes by increasing the Gamma's master wheel slightly.
- 17 In the primary controls, drag the Gamma's master wheel to the right to add a subtle eye light.
- 18 In the adjustments above the primary controls, increase the Mid/Detail slightly to add what is often referred to as *local contrast* or *clarity* to the eyes.



- 19 Click the Onscreen Overlay button in the viewer's lower left and choose Off from the drop-down menu or press Shift-`to hide the window outline in the viewer.
- 20 Press Command-D (macOS) or Ctrl-D (Windows) to disable the Eyes node, the press the keyboard command again to enable it and compare the adjustment.



Before eye light (left) and after eye light (right).

The tracker is a commonly used tool, most often when tracking windows for secondary color corrections. As simple as it is to use, it is a very advanced palette that can handle many tasks.

Applying Resolve FX in the Color Page

Just like the Cut, Edit, and Fusion pages, the color page includes many high-quality Resolve FX like blurs, glows, film grain, and lens flares. They can be applied to the entire image, or on the color page you can combine them with windows to isolate the effect to one area of the frame. To give this clip low key lighting, we'll create a darker blurred background to the rancher's left.

- 1 In the Node Editor, right-click over node 03 and choose Add Node > Add Serial.
- 2 Right-click over node 04 and label the node DARK SL (the SL is for screen left).



- In the central palettes, click the Windows icon.
 We'll use a circle window to darken the left side of the screen.
- 4 In the windows palette, click the circle window.
- 5 Click the Onscreen Overlay button in the viewer's lower left and choose Window from the drop-down menu or press Shift-`if the window overlay is still hidden from the previous exercise.
- In the viewer, drag the circle over the wall on the right and expand it so the left side of the circle arcs around the woman's face.



- 7 Use the Soft 1 control in the window palette to increase the softness to around 10.
 With the current window setup, any color adjustment we make will affect the picture's right side, inside the window. We want the opposite, so we will need to invert the window.
- 8 In the windows palette, click the Invert button.



With the window inverted, the left side of the screen is now the area that will be changed by any color grading.

9 Use the Gamma's master wheel to darken the midtones and give this picture a low-key lighting appearance.

You can use a Resolve FX with the window to blur the darkened area.

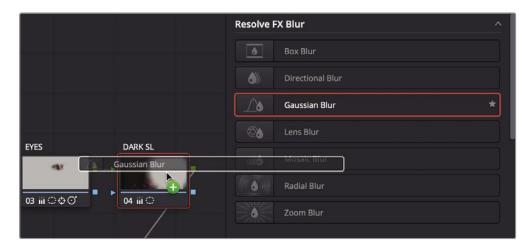
10 Above the Node Editor, click the OpenFX button.



In the OpenFX panel, you'll find all the effects included with DaVinci Resolve and any third-party filter effect plug-ins that you have installed.

TIP Some Resolve FX are only available in DaVinci Resolve Studio. However, you can apply them in the free version with a watermark to test their functionality.

11 In the OpenFX Library, locate the Gaussian Blur effect and drag it onto the DARK SL node.

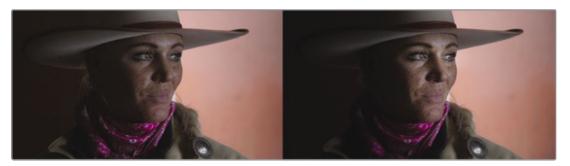


TIP You can apply one Resolve FX per node. To remove a Resolve FX from a node, right-click the node and choose Remove OFX Plug-In.

When the blur is added, it uses the window to define the area where it is applied. You can modify the mosaic in the Settings panel that automatically appears.



12 In the OpenFX Settings panel, lower the horizontal and vertical strength to around 0.25.



Balanced clip (left) and the clip after secondaries (right).

Understanding how to use tools such as the qualifiers, windows, and the tracker palette enables you to perform secondary color grading with substantial control over your image's final look. However, it is only when you combine these tools that their true potential is unlocked.

Lesson Review

- 1 What happens when you click the Highlight button in the upper-left corner of the color page viewer?
- 2 True or false? When isolating a color, the color page qualifier is based on the Hue component.
- 3 In the color page, what does an outside node do?
- True or false? In the color page, you can use a Power Window to select an area based on a spline shape or a luminance value.
- 5 On the color page, where is the mosaic blur effect located?

Answers

- Clicking the Highlight button above the color page viewer displays pixels that are selected by a qualifier or Power Window. These selected areas are displayed with their normal colors and will be affected by any color adjustment. Non-selected areas are displayed as gray pixels and will not be affected by color adjustments.
- 2 False. The default qualifier is based on Hue, Saturation, and Luminance.
- 3 The outside node inherits the alpha channel from the node before it and inverts the selection.
- 4 False. Power Windows select areas based only on spline shapes.
- On the color page, all Resolve FX and third-party effects are located in the OpenFX panel.