Vegas + DVD

Tips, Tricks, and Scripts

Learning and using Vegas 4 and DVD Architect

Doing a Color Pass

By Edward Troxel

One frequently asked question is something of the nature: "How to make a Black and White picture where only one specific color remains?" In this article, this process will be accomplished using the Secondary Color Correction filter.

To work best, the color needs to be fairly contrasting and unique. For example, if you want keep blue flowers in color but the bridesmaid dresses are a similar blue, then both would appear in color unless additional steps were taken. In this case, a Cookie Cutter filter could be used to isolate the area of the flowers to the dresses would not be affected.

To illustrate this concept, this video with a bright red

Original Full Color Image

jacket will be used. In this case, it is the only red in the picture making it a good choice of colors to keep. Because this is video, it would be nice to have the red remain the only color even while the person moves. By creating a mask with the secondary color correction tool the color pass section will automatically follow the jacket.

The first step is to place the video on the timeline. The video must be added three times on three separate tracks. Make sure they are aligned perfectly.

Once positioned, create the mask using the Secondary Color Correction tool on the video on track one. This mask is what will allow the color to show. To pick the proper color, click on the "*Select effect range:*"
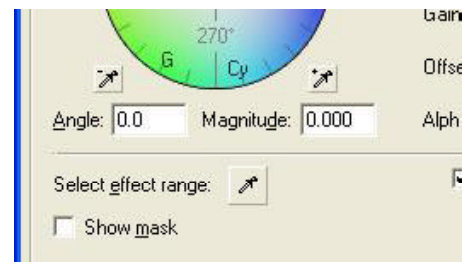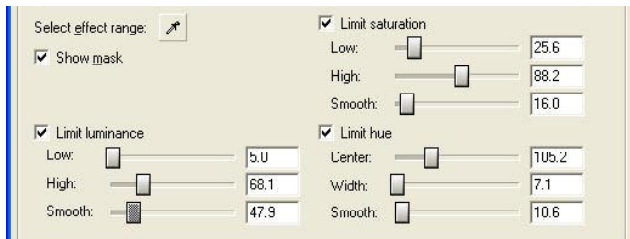

Eyedropper & Mask

eyedropper and then click on the color to be kept - i.e. the red jacket in this case. Also check the box labeled "*Show mask*." Finally, tweak the luminance, saturation, and hue sliders to make the mask as vivid as possible on the jacket yet not allowing other areas of the picture to appear in the mask. The color you are keep-

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Luminance, Saturation & Hue Settings

ing will show as white in the mask. If other areas of the picture start to show white, tweak the settings again to ensure only the desired area remains white. If things get too out of hand, just turn off show mask, select the color again, and turn show


Mask

mask back on. For this example, here is the mask that was created. The red area shows in white which will allow the red to be visible. The black areas will allow the Black and White modified video to be seen.

Now that the mask has been created, define a parent/child relationship between tracks one and two by clicking on the up arrow to the left of track two. Now
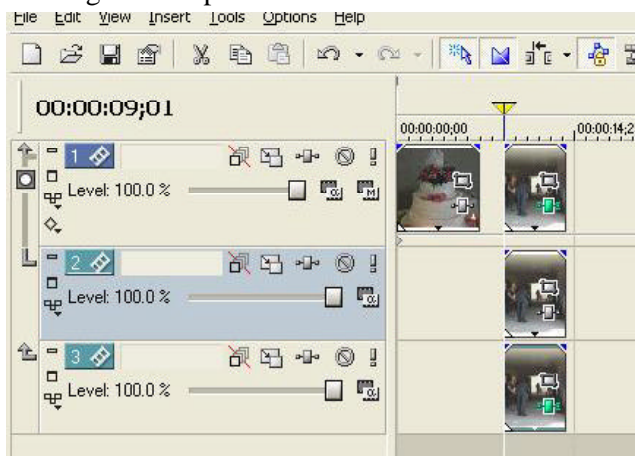

Parent/Child - Three tracks required

the only part of the video on track two that will be visible is the area defined by the mask on track one. However, the picture will appear "normal" because track three has not yet been modified. Add a Black and White effect to the clip on track three and set the blend amount to 1.000 or choose the 100% Black and White preset. Now the clip will be Black and White except for the jacket which will remain red as shown in this picture.
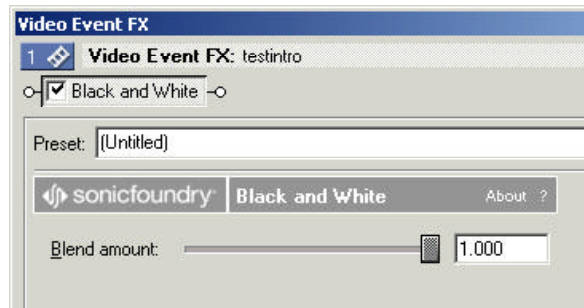
Black & White Settings

As the person moves, the red will continue to follow the jacket as well.

This technique is a fairly simple method for allowing a single unique color remain. By adding multiple pairs of parent/child tracks, you can get multiple colors to pass through over the Black and White image. Just set tracks 1 and 2 to show the first color, tracks 3 and 4 to show the second color, and track 5 to show the Black and White remainder. Remember to use Vegas' powerful compositing tools to achieve your end goals.
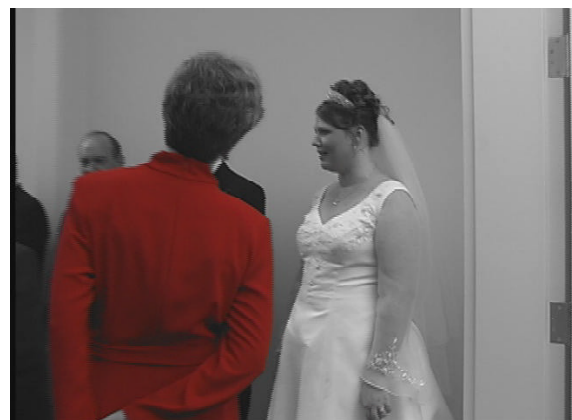
Final Result - Red Over Black & White

Beginner's Corner - Changing Opacity

By Edward Troxel

Opaque: blocking the passage of radiant energy and especially light - neither transparent nor translucent.

Opacity: The quality or state of being opaque.

How does this relate to video? Video clips are, by nature, opaque. Suppose you have two tracks of video on the timeline. When playing the timeline, the top track
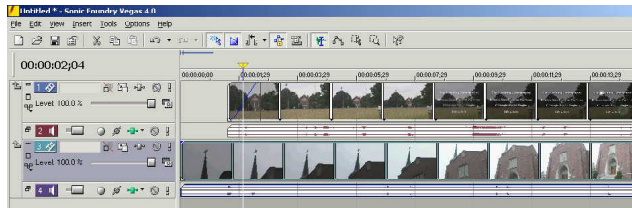

will be shown since it is opaque. In this picture, the video on track 3 will not be seen once the video on track one starts. As soon as the track one video is reached, it would cut to that clip.

If a fade in is desired instead of a cut, opacity levels will allow a clip to go from totally transparent to totally opaque over the length of time we desire. The simplest way to achieve this effect is by moving the mouse to the upper-left or upper right corner. The cursor will turn into a quarter moon shaped icon. When this happens, click and drag toward the middle of the clip. This will create the blue "fade in" line shown in this picture indicating the clip is set to fade from the lower clip to this clip. At the

left, the blue line indicates total transparency. At the right, the clip becomes totally opaque.
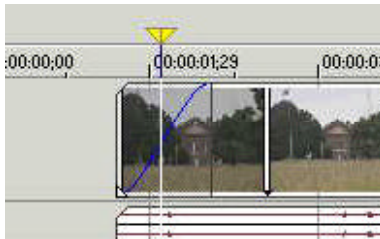
This same technique also allows easy fading to and from black. To fade from black, just make sure there are no video events on tracks below this clip.

By adjusting the opacity level, other interesting effects can be created such
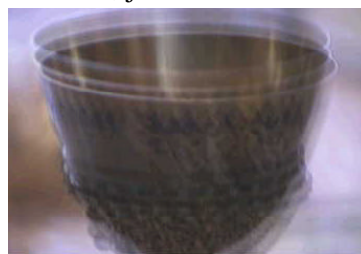
as a Time Phasing/Time Delay effect as shown with this cup. Start by placing the clip on multiple tracks with the clip on each track slightly offset from the other tracks.

Next the opacity of the upper clips must be lowered so that the lower clips can be seen. To lower the opacity, move the mouse to the top of the clip, click, and drag downward. The opacity percentage will be displayed as the mouse is moved. In the above example, the top clip has an opacity of 32% and the middle track has an opacity of 48%.

If you have several clips on one track and they all need a lower opacity, it is easier to adjust the entire track instead of adjusting each clip individually. The Level slider on the track header adjust the opacity for an entire track. Using the settings shown here gives the ex-

act same results as adjusting each clip in the previous example.
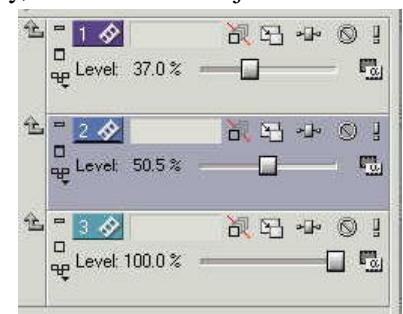
The Level slider can cause some problems if you are not careful. For example, if you click on the track header and then try to move left on the timeline using the left arrow, the opacity level will be adjusted instead of moving to previous frames. This can normally be caught during preview as the framerate will drop dra-
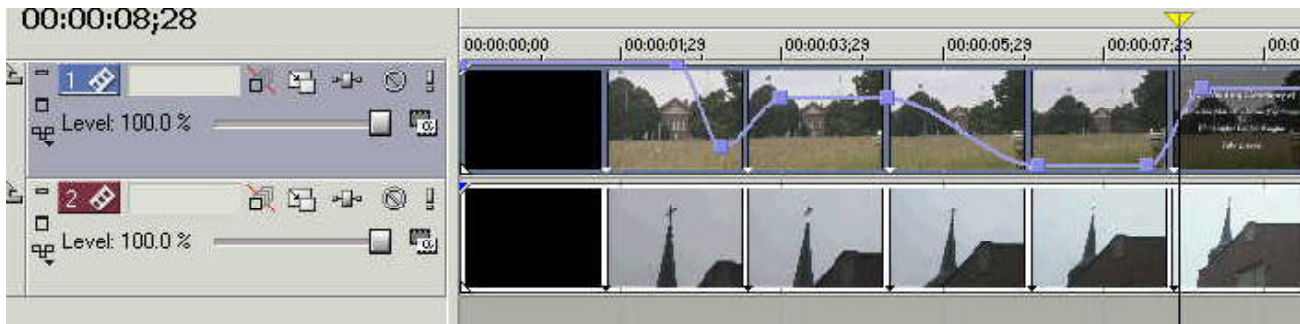
matically even if the rate is at 99.9%. When rendering, this will also cause every frame to be recompressed. If you do a Print Video to DV Tape and a warning appears that over 80% of the project needs to be rendered, there is a good chance that a level slider has been moved below 100%.

In addition to changing the opacity level via fade in/out, clip, and track, it is also possible to vary the amount of opacity throughout the clip. This is done by using a *Composite Envelope*. A composite envelope is a track level envelope similar to a volume envelope. Multiple points can be added allowing opacity changes anywhere on the track.

To insert a composite envelope, right-click the track header and choose ***Insert/Remove Envelopes***. From the sub-menu that opens choose ***Composite Envelope***. The envelope line will be at the top of the track indicating 100%. Double-click the envelope to add additional points and set the appropriate opacity level for any given time.

Modifying the opacity level is a very powerful tool for compositing. Experiment with the various methods presented here to discover new and interesting ways to create different effects.

Add Markers At A Set Interval Via A Script

By Edward Troxel

Adding markers on the timeline is a fairly simple process - position the cursor and press "M" and Enter for a quick marker. What if you need a marker every 12 seconds for the next 5 minutes? It's a little tedious to move forward 12 seconds, press "M" and Enter, then move forward 12 seconds again and repeat the process. Fortunately, scripting will allow the process to be animated.

Why would you want a series of evenly spaced markers? Suppose you are making a DVD and wish to have a chapter point automatically set every 2 minutes. Since markers transfer to DVD Architect as chapter points, this script can quickly set the markers at two

```
var CurrTime : Timecode = IncTime;
var EndTime : Timecode = Vegas.Project.Length;
```

If a different ending time is desired, then "Vegas.Project.Length" should be changed to the appropriate ending time. For example, if the line is changed to Vegas.Cursor, the script would start at the beginning of the timeline and end at the cursor. Similarly the two lines could be changed to the following so they would only affect a selected range:

```
var CurrTime : Timecode = Vegas.SelectionStart;
var EndTime : Timecode = CurrTime + Vegas.SelectionLength;
```

After the affected area has been defined it is necessary to loop through the affected range. As long as the
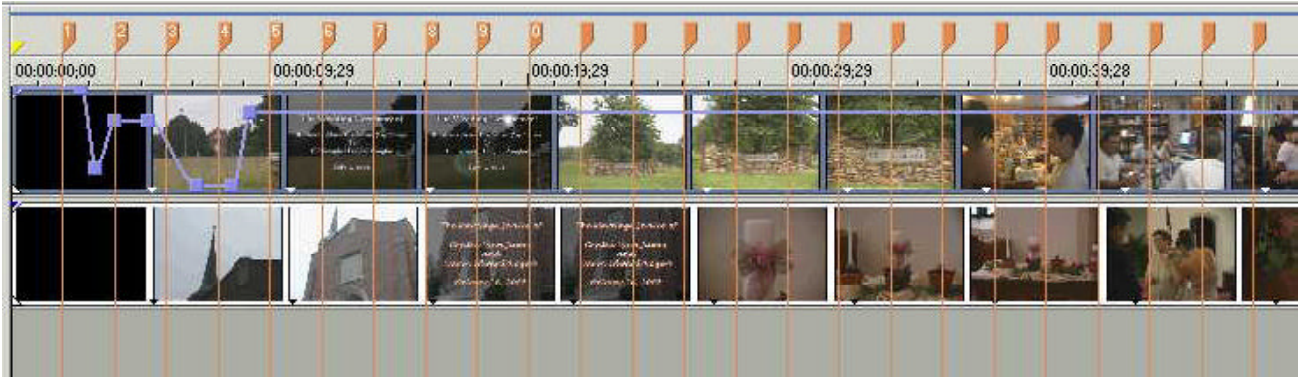
After Markers are Added

minute intervals. Another possibility is preparing for the Slideshow To Markers script by Alexei Boukirev. This script can be used to preset the markers for the proper timeframe or beat as desired.

At the beginning of the script is the interval to be used when placing the markers. The interval as shown here would be five minutes and is using the "hour : minute : second : frames" nomenclature. Other formats could be used as well depending on your ruler setting. For instance, the interval could also be set to Milliseconds or "Time and Beats."

```
var Interval = "00:05:00:00";
```

Also, by default, the entire project will be processed - no matter how long the project. CurrTime defines when the first marker will be placed while EndTime is the time after which no markers will be placed.

current time is less than the ending time, we continue to loop. The current time is incremented each time through the loop.

```
while (CurrTime < EndTime) {
    //Put a marker at the interval point
    CurrTime = CurrTime + IncTime;
}
```

As part of the loop, the marker must be added to the timeline. The following two lines will add a marker at the "current time" on the timeline. The first line creates the marker and the second line adds it to the timeline.

```
myMarker = new Marker(CurrTime);
Vegas.Project.Markers.Add(myMarker);
```

When it is necessary to add several evenly spaced markers, this script will simplify the process and add them with the push of a button.

Complete Add Marker At Interval Script

```
/**
 * This script will add markers at the specified interval
 *
 * Written By: Edward Troxel
 * www.jetdv.com/tts
 * Modified: 09-19-2003
 **/

import System;
import System.IO;
import System.Windows.Forms;
import SonicFoundry.Vegas;

//Change this value to be the desired interval
//Format:  hh:mm:ss:ff (hours:minutes:seconds:frames)
var Interval = "00:05:00:00";


try {
  var myMarker : Marker;
  var IncTime : Timecode = new Timecode(Interval);
  var CurrTime : Timecode = IncTime;
  var EndTime : Timecode = Vegas.Project.Length;

  while (CurrTime < EndTime) {
      //Put a marker at the interval point
      myMarker = new Marker(CurrTime);
     Vegas.Project.Markers.Add(myMarker);
      CurrTime = CurrTime + IncTime;
  }



} catch (e) {
    MessageBox.Show(e);
}
```

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