



Vegas + DVD

Tips, Tricks, and Scripts

Learning and using Vegas and DVD Architect

“Kids in the Picture” Effect

By Edward Troxel

Adding movement to still images, ala the “Ken Burns Effect” has been a common means of adding variety to still images. Taking this a step further, many programs are now using what has been termed the “Kids in the Picture” effect. With this effect, one or more elements of the image moves without relation to the other elements.

To demonstrate how to create this effect in Vegas, we’ll start with a fairly simple image. This image is a man walking through a field. The goal will be to move him independently of the background. While Bezier Masking could be used to isolate the man, I have cho-



sen to use a paint program to generate a few different images.

Starting with this original image, I used the selection tools of the paint program to remove everything from the image except for the man. The entire background area was made transparent and then that image was saved as a PNG. This image will be used to move him over the field.

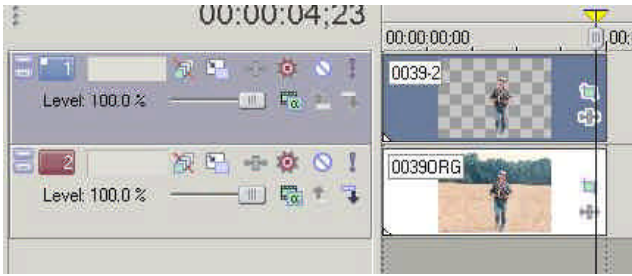


With only these two images, it is now possible to create this effect. Simply add the modified image to track 1 and the original image on track 2. Apply “Match Aspect” to both images and the man in the modified image should be directly over the man in the original image. Now you can carefully add a zoom-in by using Pan/Crop on the image on track 1 and the man will appear to get closer while the background remains stationary.

IN THIS ISSUE

“Kids in the Picture” Effect	1
Beginner’s Corner - Bezier Masks	3
Scripting - Replacing the “S” key	4

Learning and using Vegas and DVD Architect



You will probably quickly notice one problem: No matter how carefully you do the zoom, there is a strong likelihood that some of the man in the original image will appear. While this may be acceptable in some instances, it would be best if this could be eliminated. For example, in this image you will see part of his leg from the background image appearing between the legs in the foreground image.



To eliminate this, you will need the man gone from the background image. Depending on the background, this may be an easy or very difficult proposition. One solution would be to use a totally different image for the background. While that's a viable solution, in this case we'll attempt to erase the man from the background image.

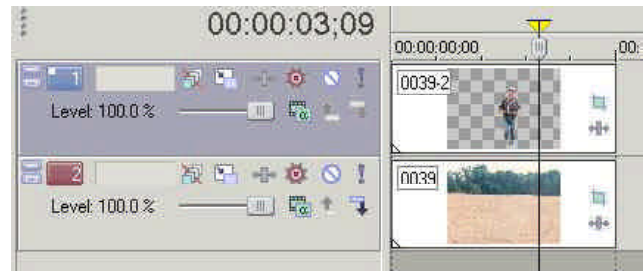
Fortunately, this image lends itself well to recreat-



ing the background behind the man. The “clone” tool can be used to copy similar nearby areas over the part of the image we wish to be removed. In this image the clone tool was used to copy areas to the right over the right half of his body. Similarly, I took areas from the left of his body to eliminate that part as well. After the cloning process has been completed there is no trace that he ever existed in the image.



Now we can recreate the project using the newly modified picture. He can be moved now with no chance of anything unwanted appearing in the background. In fact, we can now move him *across* the field as well. Experiment with this effect and you can create some interesting results.



Contact Information

Send your tips, tricks, article ideas, script ideas, questions, or articles to:

editdv@jetdv.com

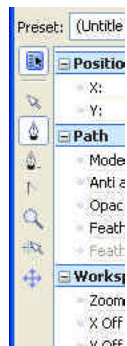
To locate the index of newsletters and look through the archive, browse to: **www.jetdv.com**

Beginner's Corner - Bezier Masks

By Edward Troxel

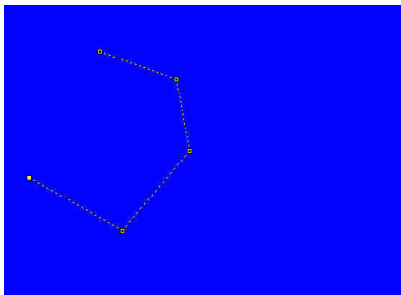
Masking is a frequently used feature when editing video. There are also many ways to create masks as explained in Vol 3, Issue #1 on creating split screens. Vegas 5 added the ability to create odd shaped masks via the use of Bezier Masks.

Bezier Masks is part of the Pan/Crop tool. To access the mask, open Pan/Crop and check the "Mask" checkbox to the left of the timeline. This will activate the Bezier



toolbar up the left side of the Pan/Crop tool. The two main tools we will look at is the "Normal Edit Tool" (the arrow) and the "Anchor Creation Tool" (the one immediately below the arrow that is selected in the image to the left).

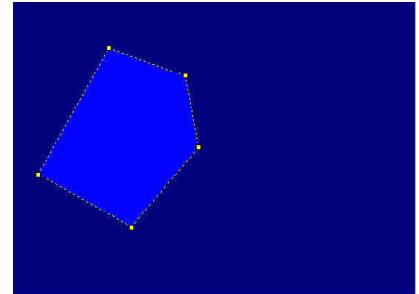
Select the Anchor Creation Tool and start clicking in various places. Here I've added 5 nodes on the screen outlining the area I wish to keep. Moving the mouse back over the original point, the entire path will turn yellow. At that point, clicking will complete the mask outline.



Once the mask has been created, you can return to the Selection Tool to make adjustments as needed. It may be necessary to move the entire mask over time. To do this, place the cursor on the next location on the timeline, move the selection tool over one of the nodes, hold down the ALT key, then click and drag to the new location. This will allow you to move the entire mask.

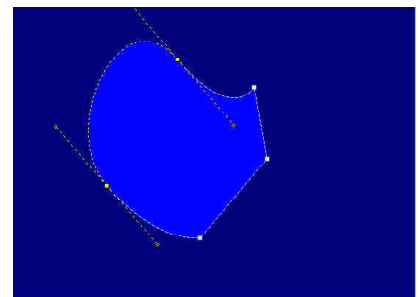
If you do not hold down the ALT key, only that one node will be moved. assuming that all nodes are

not selected. So you can click anywhere outside the mask, click on the mask, and then click and drag any node to move that individual node.

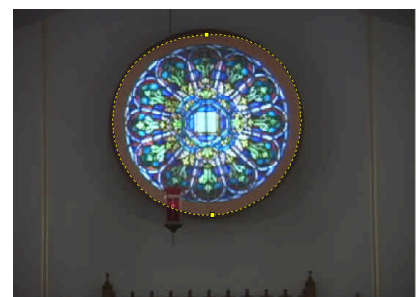


It is also possible to create nodes that represent curves. When you are adding new nodes, simply click and drag and a curve will be created. Even if you didn't make a curve node when it was initially added, a standard node can be converted to a curve node by holding down the CTRL key and clicking on the node.

Another way to create a curve is to click on the line between two nodes. When you drag the line, it will curve and convert the two nodes on each end of that segment into curve nodes.



In this image, a complete circle mask was created around the window using two curved nodes. So use as many or as few nodes as you need but remember you can have a mixture of both types.



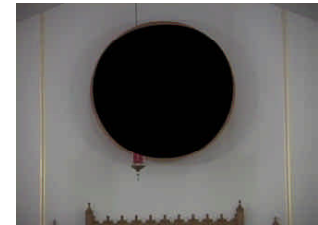
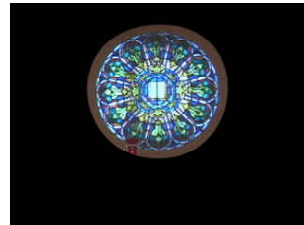
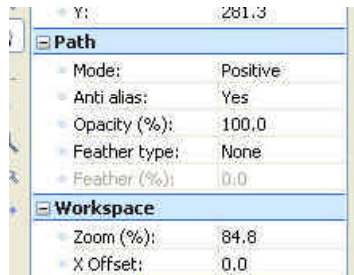
To add additional nodes to the mask, go back to the "Anchor Creation Tool", pick a position on any segment line between nodes, and click. A new node

Learning and using Vegas and DVD Architect

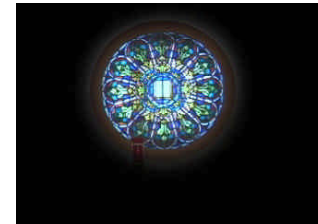
will then be added at that location between the two previous nodes. Similarly nodes can be removed using the “Anchor Deletion Tool” but I’ve found it easier to right-click the node and delete it using the menu options.

To this point, everything inside the mask area will show while everything outside the mask area will disappear. That is fully adjustable as well. In the “Path” section of the properties, there are many settings to modify the mask.

The first setting, Mode, is set to Positive. In this case, everything inside the mask appears. Change that setting to Negative and the area inside the mask will disappear while the area outside the mask is shown. A third option, Disable, will turn off the mask.



The Opacity setting will allow the visible area to partially appear. The Feather settings will control how distinct the line of the mask appear. In the above images, there is no feathering at all. In this image, the options to feather in both directions with an 18% feather was chosen. Feathering directions also include In and Out.



Bezier Masks is a very powerful tool allowing you to create a mask of any shape. The various tools allow a tremendous amount of control over how the final mask will appear.

Scripting - Replacing the “S” key

By Edward Troxel

On the forums, a request was made for a script that would replace the “S” key to split events. Naturally the first question was *Why?* The “S” key seemed to work quite well. Bottom line was a preference to press a button instead of a key. So I set out to find a script that performed this task.

My first thought was to use the Select Events tool in Excalibur which could already split all events at the cursor location. Of course this requires having Excalibur available on the system. While Excalibur 4 will allow it to be done with a single button click, it really isn’t a straight-forward solution to the problem.

It was time to make a dedicated script just for this purpose. This script will split all events at the cursor location. The main routine simply goes through the list of tracks and calls the split routine passing each track individually. The real work is done in the SplitEvents function.

This function will go through every event on the specified track. The location of the event is checked to determine if it is under the cursor. It is under the cursor if the following is true: It starts before the cursor location and it ends after the cursor location.

Once it has been determined that the event is under the cursor, the event will be split at the cursor location. There are now two events on the timeline - one to the left of the cursor and one to the right of the cursor. Unfortunately, this is still not exactly the same as a “S” split as these two events are still grouped together. I decided to simply copy the event to the right of the cursor into a new event and then delete the original event. This will ensure the right event is not grouped with the left event.

When splitting both audio and video, both the audio and video will now be ungrouped from each other as well. This is an unfortunate side effect to the copying.

Learning and using Vegas and DVD Architect

Split Events as Cursor - Replace the "S" key

```
/**                                     http://www.jetdv.com/scripts/SplitEvents.js
 * Split Events at Cursor
 *
 * Written By: Edward Troxel
 * www.jetdv.com
 * Modified: 06-07-2005
 * Copyright 2005 - JET Digital Video
 **/

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

try {
    var trackEnum = new Enumerator(Vegas.Project.Tracks);
    while (!trackEnum.atEnd()) {
        var track : Track = Track(trackEnum.item());
        SplitEvents(track, Vegas.Cursor);
        trackEnum.moveNext();
    }
} catch (e) {
    MessageBox.Show(e);
}

function SplitEvents(track, currMark) {
    var NewStart, NewLength;
    var eventEnum = new Enumerator(track.Events);
    while (!eventEnum.atEnd()) {
        var evnt : TrackEvent = TrackEvent(eventEnum.item());
        if (evnt.Start <= currMark) {
            if ((evnt.Start + evnt.Length) >= currMark) {
                NewStart = new Timecode(evnt.Start.ToMilliseconds());
                NewLength = currMark - NewStart;

                //Split the event
                var SEvnt : TrackEvent;
                SEvnt = evnt.Split(NewLength);
                evnt.Split(NewLength);

                //Copy the event
                var g : double = SEvnt.Start.ToMilliseconds();
                var MyTC : Timecode = new Timecode(g);
                var mynewEvent = SEvnt.Copy(track, MyTC);
                track.Events.Remove(SEvnt);

                return;
            }
        }
        eventEnum.moveNext();
    }
}
```

Learning and using Vegas and DVD Architect

This simply means that you must manually regroup the events as needed.

Now we have a script that will split all events at the cursor location. Unfortunately, the person requesting this script only wanted it to split video events. Fortunately this was also easily accomplished. The main loop goes through all tracks. All we have to do is determine whether or not it is a video track and skip the function if it is an audio track. To do this, I recommended changing:

```
SplitEvents(track, Vegas.Cursor);
```

To:

```
If (track.IsVideo())  
    SplitEvents(track, Vegas.Cursor);
```

This will eliminate the splitting of all audio events. While closer to his desired results, it still wasn't exactly what he wanted. It was still splitting ALL video events under the cursor and not just those that were selected. So another quick change was in order to allow only selected events to be split.

In the SplitEvents function, we are already looking to see where an event begins on the timeline. It is just as easy to determine if it is selected as well. Another slight modification of code will allow that check. Currently, this line will check to see if it starts before the cursor position:

```
if (evnt.Start <= currMark) {
```

The "check if selected" code can be added to this statement as follows:

```
if (evnt.Selected && (evnt.Start <= currMark)) {
```

Applying these two changes allows the script to work on only *Selected Video* events and was exactly the desired results. As you can see, sometimes a little quick modification can completely change how a script will function.

Many times a script may *almost* perform the function you want. Don't be afraid to make minor modifications so that the script can do *exactly* what you desire. The change may be easier than you think.

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