Vegas + DVD
Tips, Tricks, and Scripts

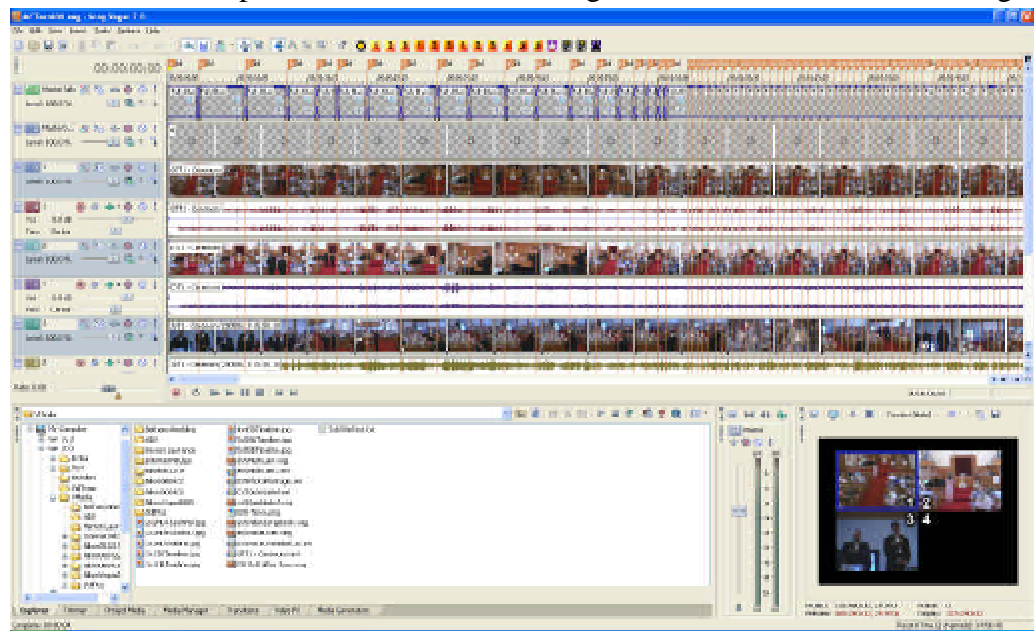## Learning and using Vegas and DVD Architect

Welcome Vegas 7

By Edward Troxel

Right on the heels of IBC comes a new release of Vegas. A large amount of work has gone into improving the HD functionality. Native M2T processing is much faster in Vegas 7. To see how much faster, I ran a small test.

I created a very small HD project in Vegas 6 with an HDV PIP over another HDV clip. Playing back the timeline yielded just under one frame per second on my two year old laptop.

Opening the same project in Vegas 7, my laptop was averaging 22-23 frames per second. Given everything else was exactly the same, that's a significant improvement. With these changes, editing straight M2T files may now be a practical consideration.

Many other HDV improvements were also made. For example, there is now HDV scene detection upon capture and HDV timecode support. Comprehensive XDCAM support, improved Decklink support, and new AJA SDI support further enhance your HD options. With the major speed improvements, new capture options, and new formats supported, HD is much easier to edit. Vegas is still much more than HD, though.

Many people seem to have decided this upgrade is not needed if you don't edit HD - without even looking at the demo. SD users will still see many improvements as well.

Changing the layouts in Vegas 7 is now much easier and, in some cases, no longer hidden. Users coming from other NLE's often complained that the timeline was on top instead of on the bottom (as shown below). While this could be changed in previous versions of Vegas, the procedure was hidden and led to problem such as dragging a clip over the tabbed areas resulted in switching tabs even though that was not
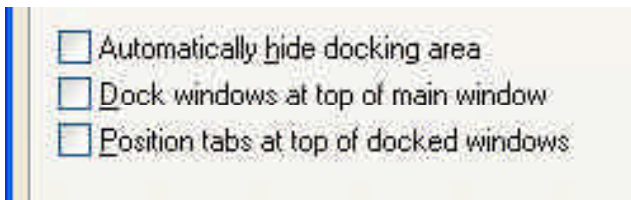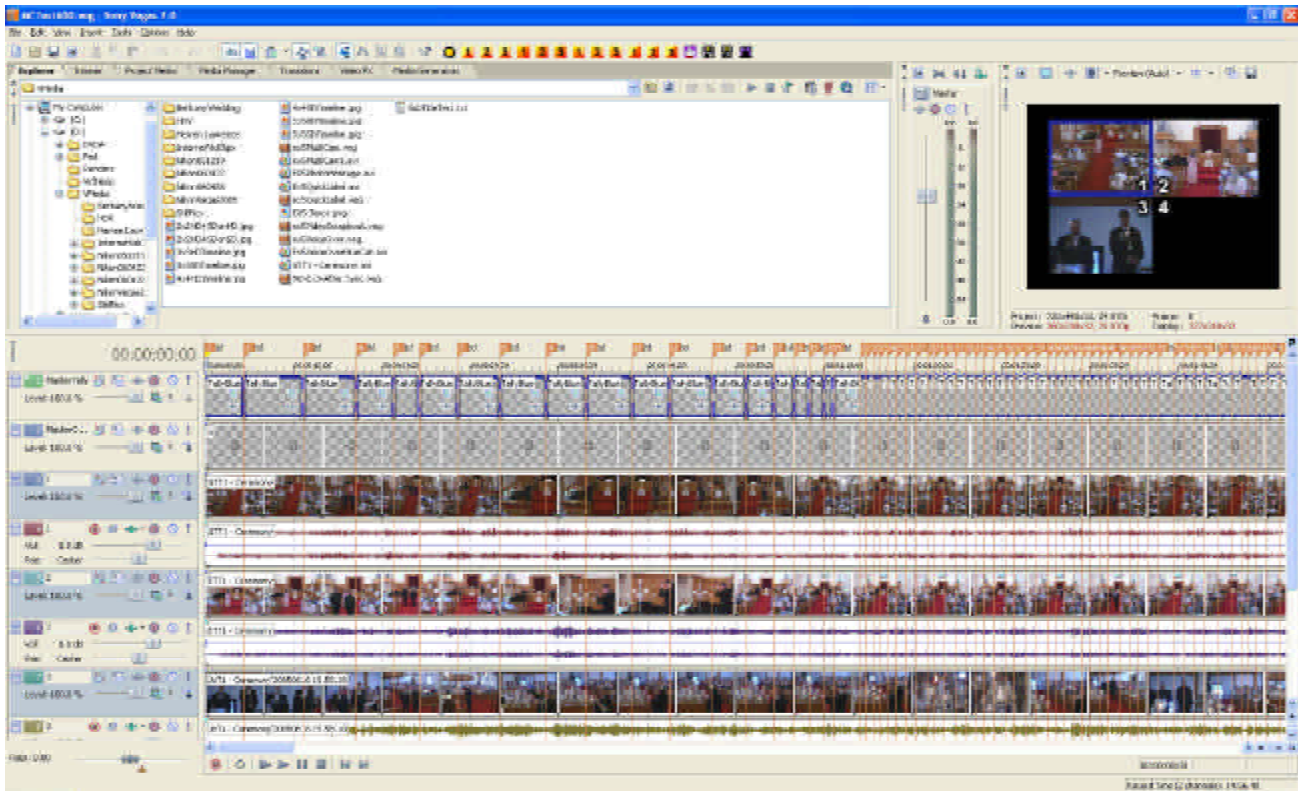

desired. In Vegas 7, simply go to **Options - Preferences** to the **Display** tab to see the new options:
 Dock windows at top of main window will move the timeline to the bottom and the docking area to the top of the display.

Position tabs at top of docked windows will allow the dock tabs to be moved out of the way eliminating the major issue found in the previous workaround.

Saving layouts has been accomplished by pressing CTRL-ALT-# and recalled via ALT-#. This has worked fine but it was sometimes difficult to remember which layout number you wanted if you had several saved. In Vegas 7, you can name the layouts, easily select any particular layout, delete unwanted layouts, and see which layout is assigned to which number. You can also copy your layouts to other computers simply by copying the layout files to the other machine. The new *Organize Layouts* dialog is shown at the top of the next page.

The preview screen now has a new option: **Scale video to fit preview window**. Right-click the preview screen to set this option. When selected, the video will automatically scale to whatever size you've made the preview window. When not checked, the previ-

ous behaviour of Vegas is seen where only certain preview sizes are allowed.

When using external preview, it is also now possible to display the preview on the computer screen at the same time. Go to **Options - Preferences** to the **Preview Device** tab and turn on the *Display frames in video preview window during playback* and both internal and external previews will be updated as the timeline plays.
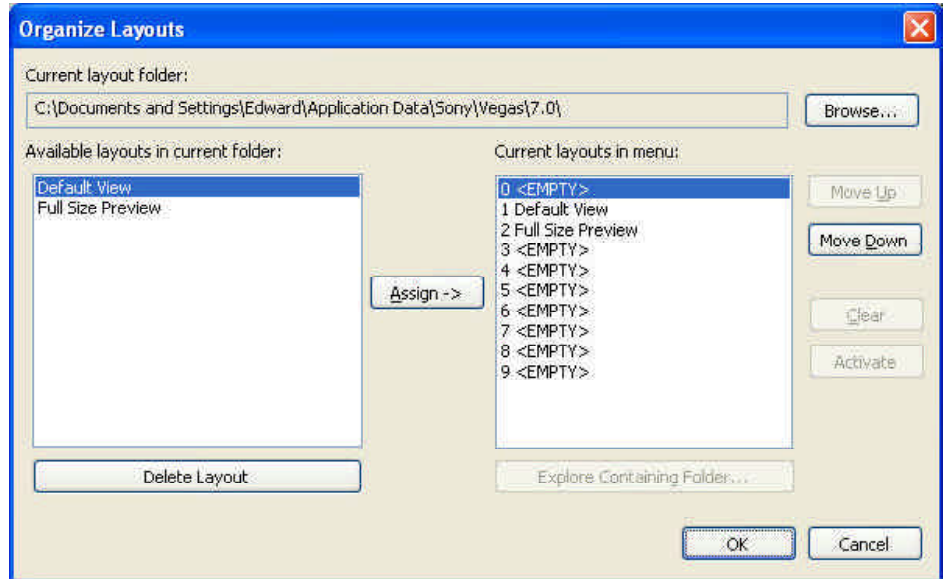
Modifying the keyboard shortcut keys now has a new dialog that is no longer a part of preferences. This new screen makes it easier to see the various options and assign the keys to match your workflow. **Option - Customize Keyboard...** will now open the new dialog.
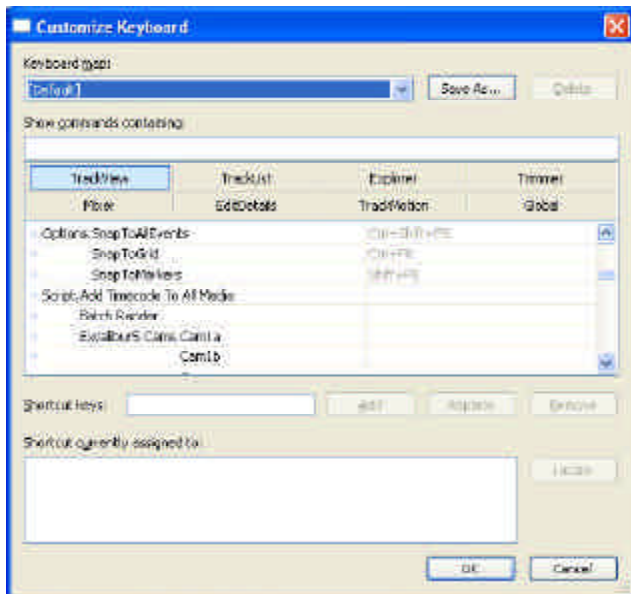
Another tremendous workflow enhancement can be found on the **Editing** tab of **Options - Preferences**. Two new options are now available. **Default**
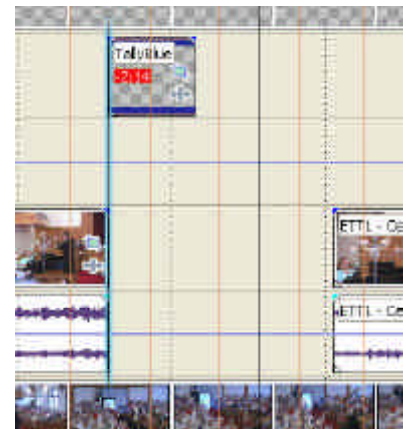
Track Motion smoothness and **Default Pan/Crop smoothness** now let you determine the smoothness setting for all keyframes. Previously the default was
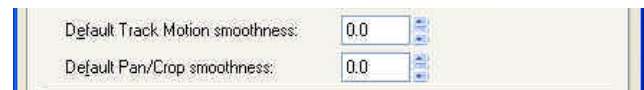
1.000 which resulted in a slight easing in and out of keyframes - even when they were set to linear. Changing the smoothness to 0.000 solved that problem. Now everything can be set that way by default.

A major workflow improvement is the new ability to snap (align) across multiple tracks. New color codings will show exactly where the snapping will occur. In this case, the blue snapping line indicates it will snap to the end of the event two tracks down. Snapping also occurs on the beginning of events, the cursor, and markers as well - each with their own color.

In previous versions, clicking on an event and deleting it meant that one event would be deleted - no matter how many other events were grouped with it. For example, you click on the video and a clip, the video is gone but the audio remains. Now deleting will remove both pieces from the timeline. While I'm sure this will be handy, many times I only want that one event removed so this is one I'll have to watch.

Envelopes can now be quickly modified by hand. Previously you could turn on the automation controls and modify envelopes on the fly while the timeline played. This has now been taken a step farther and you can now literally "draw" the desired envelope settings. Just hold down the *Shift* key and draw the envelope with the mouse. All thinning rules apply so the above image would be automatically thinned upon releasing the Shift key.
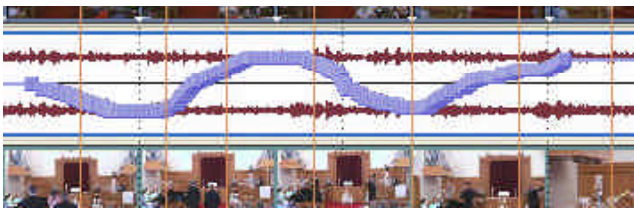
A major change to the MPEG2 rendering engine is that I-frames will now be placed wherever markers are located on the timeline. This will allow you to precisely locate areas where I-frames must be located and will allow chapter points on the DVD to start in the exact location specified instead of up to half a second later. This is a tremendous improvement for anyone making DVDs.

A long standing pet-peeve bug of mine has also finally been fixed. After adding a velocity envelope to and event, if you later split that event then the frame to the left of the split and the frame to
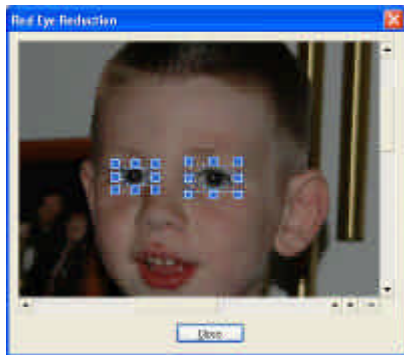
the right of the split were not subsequent frames. In Vegas 7, the frames are now correct after the split.

A new "red-eye reduction" tool is now available for use on still images. While it does remove red eyes, it appears to simply take everything in the specified area and remove all color. I'm sure many people simply use their photo editing program for this task.

For owners of Cinescore, you can now score directly on the timeline. The "plugin" that everyone has been asking 'Why was this installed?' is now useful. Just create a region where you want the music, select the track for the music, and choose **Insert - Generated Music**. This will then let you compose a piece in Cinescore to fill that area of the timeline.

Multi-channel audio can now be captured over SDI. 5.1 audio from unprotected DVDs is also available. Wav, Wav64, AVI, and MXF can all now support multi-channel audio. When capturing DV, 4-channel audio is still not supported so Scenalyzer Live will still be useful for that purpose.

When using the "Copy and Trim" option in the File - Save As option, you will also see some improvements. AVI files will now be copied with both video and audio in a single file without the need for a separate W64 file. Also, trimming now works correctly on events containing a velocity envelope.

For people doing scripting, Vegas 7 should continue to run most scripts - particularly the text based scripts that ran in Vegas 6 - but now uses .NET 2.0. Any scripts compiled as DLL's under .NET 1.1 will need to be checked for compatibility. Many DLLs will continue to run but a few may need to be recompiled under .NET 2.0. For example, Excalibur required a few updates to work properly in Vegas 7 but the sample DLL shown in Vol 4 #3 of the newsletters will run with no changes.

As you can see, many improvements have been made in Vegas 7. Yes there are still many things I would like to see updated. However, even if you don't shoot HD, there are enough updates that all users should find something valuable.

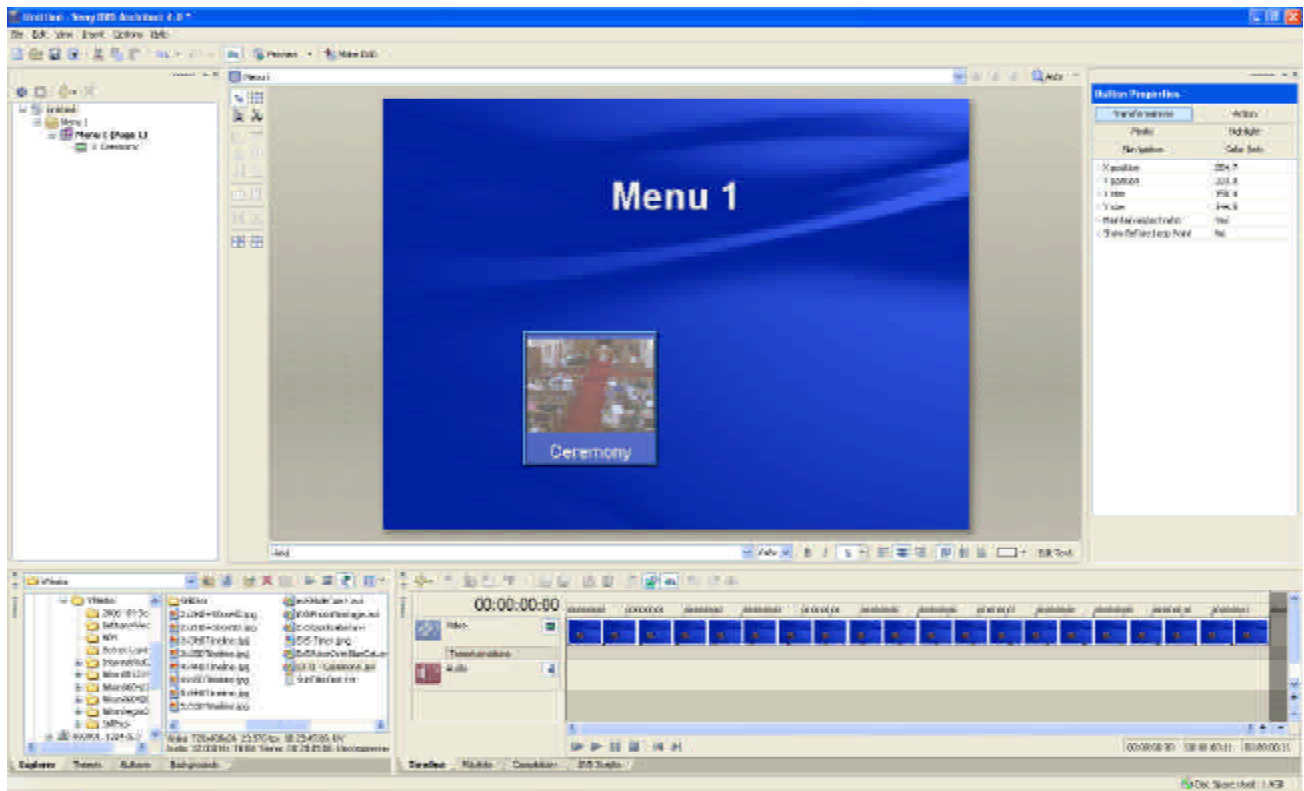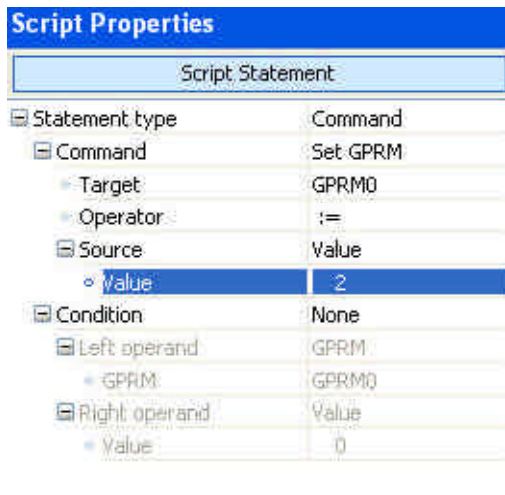# DVD Architect 4

By Edward Troxel

DVD Architect 4 continues to evolve with each new version. With the new I-frame control, scripting options, and many other new features, you now have more control over how the DVD plays.

Scripting in DVD Architect is different than scripting in Vegas. These scripts are not designed to help workflows - instead these scripts allow customizable actions on a DVD. For example, you can now set a DVD to show different video clips based on different conditions. Scripting can also be used to generate random playback. With this feature, you could now create game DVDs that randomly show clips.

Subtitles have been expanded to support graphics. After creating a text object on the subtitle track, you can then add a graphic. Remember the graphic is limited to the 4-color rule that applies to the subtitle.

Two additional marker types are now available. The original scene selection marker has now been joined by navigation markers and button on video (cell) markers. Navigation markers will make chapter markers just like the regular markers but they will not appear in the Scene Selection menus. Cell markers will create a "cell" boundry in the title which can be useful for defining buttons. As with Vegas, all marker locations will

produce I-Frames when rendering to MPEG2.

Chapter markers must occur on an I-Frame in the MPEG2 file. Previously, chapter markers would get you "close" meaning the actual chapter location could be up to 1/2 second off. Now when moving the chapter point, the maker will either snap to the I-Frame or will contain a yellow exclamation point indicating it is not in the proper position.

Photos can now be automatically animated as well. The new **Generate Slideshow Animation** dialog controls the various settings for zooming and panning. This appears to be very similar to how Excalibur performs the same task. Personally, I would still prefer to do this in Vegas
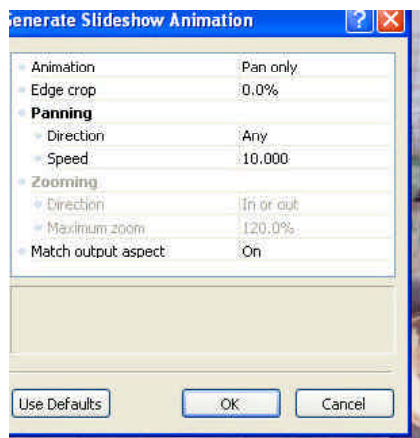
using the more powerful features of Excalibur and Vegas but this will let you quickly develop a "Ken Burns" type slideshow.

The **Crop and Adjust** dialog will give you more
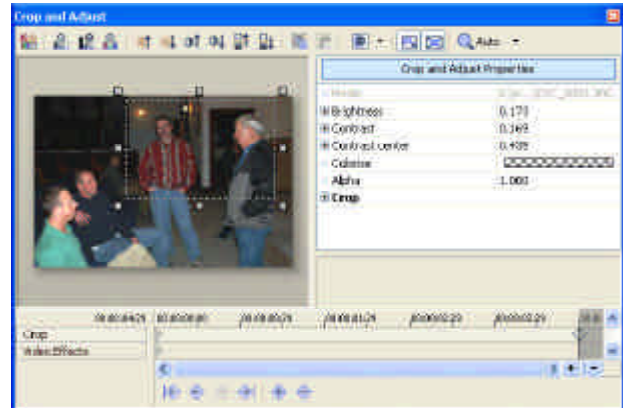
control onver the panning and zooming. On this screen you can set multiple keyframes and the area of the picture to be shown at that time.

Add in the many other new features not mentioned here and DVD Architect 4 gives many more authoring options. If you've never tried DVD Architect before, now is a good time to give it a spin.