

**SONY**<sup>®</sup>

# DVD Architect<sup>™</sup> 2

## **Learn To Use The New Features**

A tutorial approach to mastering the powerful new features that make DVD Architect 2 software more robust and indispensable than ever.

Gary Rebholz and Michael Bryant



## DVD Architect 2: learn to use the new features

<b>Introduction .....</b>	<b>v</b>
<b>I: Enhanced user interface .....</b>	<b>6</b>
The View menu .....	6
The Insert menu .....	7
The Options menu .....	7
Dockable windows .....	8
Floating Docks .....	10
<b>II: Workflow enhancements .....</b>	<b>11</b>
Saving media assets with project.....	11
External monitor preview.....	11
<b>III: The Project Overview window .....</b>	<b>13</b>
Becoming familiar with the Project Overview window .....	13
Exploring the default project layout.....	13
Inserting a new menu page .....	13
Navigating through your project structure .....	14
Inserting a submenu and compilations .....	14
Inserting Media .....	15
Inserting a new menu .....	15
Inserting a scene selection menu.....	16
Specifying the DVD start item .....	16
Inserting introduction media .....	17
Displaying End Actions .....	18
<b>IV: Buttons and Backgrounds .....</b>	<b>18</b>
Working with button styles .....	18
Adding stock backgrounds .....	20
<b>V: The Timeline window .....</b>	<b>21</b>
Becoming familiar with the Timeline window.....	21
Working with a media file .....	22
Setting the in and out points of your video.....	23
Working with DVD chapters .....	24
Adding additional audio tracks.....	25
Working with Subtitles .....	28

<b>VI: The Compilation window .....</b>	<b>34</b>
Creating picture compilations .....	34
Creating music compilations .....	35
<b>VII: The Properties Window .....</b>	<b>36</b>
Finding your way around the Properties window.....	36
Understanding Color Sets .....	36
Setting your Menu Page properties .....	37
Setting General Object properties.....	41
Assigning button properties .....	43
Working with Picture Compilation properties.....	50
Setting your Music Compilation Properties.....	51
Setting your Media Properties .....	51
Setting Subtitle Properties .....	51
<b>VIII: Masks .....</b>	<b>51</b>
Creating custom masks for your button graphics.....	51
Creating custom highlight masks .....	54
<b>IX: Conclusion .....</b>	<b>61</b>

## Introduction

When DVD Architect 1 software was released about a year ago as of the writing of this document, the industry was stunned and impressed with the quality of the software for a first version. But there were a few holes. Just a couple of functions lacking that kept users saying, “I wish that I could...”

Version 2 completely plugs those holes and more. Those who found version 1 lacking in a couple important areas will wholeheartedly welcome major additions to the software like subtitling and additional audio tracks. The addition of user-definable end actions open up a world of sophisticated navigation possibilities, and give you, the author, great control over the viewing experience of the end user.

Other enhancements to the software put a powerful new spin on old functionality. For instance, the Project Overview window makes it easy to quickly construct the rough outline of your project so that you can fill in the details later. It also serves as a great navigational tool that helps you get around your project quickly. The Timeline window gives you a quick way to make adjustments to your media files, menus, and compilations. The Properties window might be considered the Swiss army knife of the program where you can enjoy unprecedented control over your project.

You’ll also enjoy new file format support such as Macromedia Flash (.swf), elementary stream MPEG files, and support for 24p video. DVD Architect 2 software also supports all valid DVD video resolutions: NTSC – 720x480, 704x480, 352x480, 352x240 (24 & 29.97fps) and PAL – 720x576, 704x576, 352x576, 352x288 (25fps).

With all of this, in addition to a new, customizable interface, you’re going to love DVD Architect 2 software. If you thought version 1 was impressive, wait until you learn how to use version 2!

To that end, this document gives you all of the information you need to truly master the new features. We’ll walk you through each new feature with plenty of examples that you can follow right along with for a thorough, hands-on education. We suggest that you open this document and DVD Architect software on your computer at the same time, and switch back and forth as you try the next step in the process. Follow our instructions, and you will learn the ins and outs of all of the new features.

We do want to mention that this document was written under the assumption that you already have a working knowledge of DVD Architect 1 software. We necessarily have to take for granted that we can gloss over some steps that you know from your experience with version 1, or this document would be a book instead of a document! If you don’t have a working knowledge of version 1, you will still be able to use this document. However, you may need to refer to the on-line help files now and then to fill in some of the gaps between your knowledge and our assumption of your knowledge.

So, let’s get started with our discussion of the new features of DVD Architect 2 software. We hope you enjoy this document and find it helpful, and we wish you all the best of luck with your future DVD projects. Thank you for your support for DVD Architect 2 software, and all of the Sony Media Software products!

*Gary Rebholz and Michael Bryant*

*Sony Pictures Digital*

*Media Software Consulting and Training*

## I: Enhanced user interface

It won't take long before you notice that DVD Architect software has received a fairly substantial facelift. It might take a bit of getting used to, but soon you'll find that the intuitive look and feel of DVD Architect 1 software lives on in version 2 with some exciting modifications that make the new version even more powerful than the original. We'll start with a few significant changes that have been made to the menus. From there we'll explore all of the other interface enhancements.



### The View menu

---

The View menu has received a major overhaul. For starters, it now contains a new submenu, the Workspace Overlays submenu. The Workspace Overlays menu brings together several related options that were previously spread across different menus, making for a more logical grouping and easier location of these tools. These options turn on and off helpful guides that do not appear on your final DVD, but give you valuable information during the DVD assembly process. The following list gives a brief description of each of the options available under the Workspace Overlays submenu of the View menu. Note that each of these options was also available in version 1 with the exception of the brand new Show Button Masks option (located at the end of the list.)

- **Show Title Safe Area:** this overlay gives you a guide for placing text safely within the visible area of a television screen. It leaves enough space between your text and the actual visible edge of a television screen so as to make sure your text is easy to read on screen. You should not position text outside of the box defined by this overlay. You can change the size of the Title Safe Area through the Editing tab of the Preferences dialog under the Options menu, but in most cases, you should just leave these settings.
- **Show Action Safe Area:** this overlay defines a slightly larger area than the Title Safe Area overlay. It represents the approximate edge of a standard television screen. You should position your graphics such that no critical information lands outside of the box defined by this overlay. You can change the size of the Action Safe Area through the Editing tab of the Preferences dialog under the Options menu, but again, you should normally leave it as the default.
- **Show Object Order:** object order refers to the layering of objects on your workspace. An object (for instance, a button or a graphic) with a higher object order number obscures any object with a lower object order number if the two objects occupy (or partially occupy) the same physical space. You can change the object order of an object through the Edit menu.
- **Show Grid:** this overly helps you properly align the objects in your workspace. You can adjust the grid settings through the Grid Settings option under the Options menu.
- **Show Button Masks:** this overlay – new to version 2 – helps you when working with invisible buttons. You would add invisible buttons if you've used a graphics program to create custom button artwork, and simply need an invisible button to act as a link on your DVD. Much has been added to version 2 to make this process extremely powerful, so we'll talk more about this later in this document. For now, we'll just point out that you can choose this option to show button masks.

The bottom portion of the View menu contains a number of new options. These options show or hide windows in the interface. We'll talk about each of the windows listed in this section of the View menu later in this document, so we won't spend time on each of them here. Rather, we'll simply point out that the View menu in version 2 works much more like the Vegas software's View menu in that it enables you to hide and show windows that you'll use to construct your DVD projects.



### The Insert menu

---

The Insert menu contains one new option in version 2. Choose **Insert | Empty Button** to add a button to your workspace that does not link to any specific media or contain any thumbnail image. You might choose to do this if you want to design your DVD layout and know you'll need the button, but have not completed the movie to which the button will link. Later in this document we'll discuss techniques for assigning a link to an empty button.



### The Options menu

---

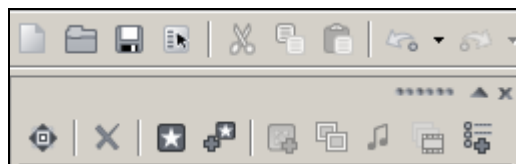
Some options that appeared under the Options menu in version 1 now appear under the View menu. Notice that one new option now exists under this menu. Choose **Options | Preview to External Monitor** to set DVD Architect software to preview your DVD on an external NTSC or PAL monitor through your IEEE 1394 device (just as you do in Vegas software.) Later in this document we devote an entire section to this topic.

Also under the Options menu, the Preferences dialog now contains two new tabs. The first of these, the Video Device tab, relates to external monitor preview. As mentioned, we'll discuss that feature in detail later in this document.

The other tab, the Display tab, provides tools with which you can customize the color of the buttons in the DVD Architect application interface. To see how this works, first let's make sure that your project looks like ours. (We'll assume that if you are using XP you have the desktop theme set to Windows XP and if you are using Windows 2000 it's set to Windows Classic.) Click the **New Project** button to start a new project. Choose **Options | Preferences** to open the Preferences dialog, and then click the **Display** tab. The Icon Color Saturation slider gives you control over the intensity of the color of your buttons. Position the Preferences dialog so that you can see the buttons at the top of the Project Overview window as shown in **Figure 1**. Note the colors of these buttons. Now, drag the **Icon Color Saturation** button all the way to the left (0%) and click the **Apply** button. The color has been removed from the buttons, and the elements that were once in color now appear shades of gray as in **Figure 1**. Next, drag the **Icon Color Saturation** slider all the way to the right (100%) and click the **Apply** button. Notice the more vibrant colors in the buttons now as in **Figure 2**.

**Figure 1**

With the Color Saturation slider all the way to the left, the buttons look grey.





**Figure 2**

With the Color Saturation slider all the way to the right, the buttons have more vibrant colors.



The Icon Color Tint slider yields much more subtle results when you've got Windows configured with its default colors. This slider adds a tint to the DVD Architect application's buttons. Your Windows color scheme determines the tint that this buttons adds. Notice the color of the title bar at the top of the Preferences dialog. By default, this bar is a gradient that starts with light blue at the top, blends to dark blue in the middle, and then blends back to dark blue at the bottom (in Windows 2000, the title bar starts from dark blue on the left end and ends with light blue on the right end.) The Icon Color Tint slider adds a tint made up of the average values of these Title bar colors to the DVD Architect application buttons.

To really notice the effects of this slider, change the colors assigned to window title bars by the operating system. To do this, open the Windows Control Panel, and then double-click the **Display** icon to open the Display Properties window. Click the **Appearance** tab. From the **Color scheme** (in Windows 2000, it's the **Schemes**) drop-down list, choose **Default** (in Windows 2000, choose **Windows Standard**) if it's not already chosen. In Windows XP, click the **Advanced** button.

From the **Item** drop-down list, choose **Active Title Bar**. To the right of the Item drop-down, notice the two color boxes. Click on the first color box, and choose a red color square from the choices that appear. Click the second color box, and choose a yellow color square. In Windows XP, click the **OK** button. If necessary, click the **Apply** button in the Display Properties window to assign this color scheme to your Windows title bars. Now, return to the Display tab of the DVD Architect application's Preferences dialog. Adjust the **Icon Color Tint** slider all the way to the right (100%), click the **Apply** button, and notice that now your buttons contain an entirely new tint. If you don't want to keep these new settings, return to the Appearance tab of the Display Properties window and choose your desired color scheme from the **Color scheme** drop-down (in Windows 2000, from the **Scheme** drop-down list.) Finally, click the **Apply** button to set Windows back to standard colors, and the **OK** button to dismiss the Display Properties window.



### Dockable windows

One quick glance around the DVD Architect screen reveals several new windows. These windows bring powerful new functionality to the application. We'll discuss each of these windows later in the document. For now, we'll talk about how you can customize the window arrangement on your screen to suite your editing and working style.

DVD Architect software now features the same window docking behaviors as Vegas software—including the enhancements in version 5 of the Vegas application. Therefore, you already know the basics of how to use docking windows from your work in earlier versions of Vegas software. In addition, the DVD Architect also features a docking behavior that has previously been specific to Sound Forge software: the ability to dock windows to any edge of the application window as opposed to just the bottom edge as in Vegas software.



All of the windows that appear in the View menu can be opened and closed through that menu. The following list specifies the windows, and gives brief descriptions along with the docking locations at which you'll find them when you first open the application.

- **Explorer:** docked to the lower-left-hand corner of the application window (the same location it occupied in version 1.) Use the Explorer window to navigate to files that you want to add to your project.
- **Themes:** docked to the lower-left-hand corner of the application window beneath the Explorer (the same location it occupied in version 1.) Click its tab to bring it to the front of the docking area. Use the Themes window to apply a default graphical look to your project.
- **Buttons:** *new to version 2.* Docked to the lower-left-hand corner of the application window beneath the Explorer, this window provides quick access to all of the button styles included in version 2. Click its tab to bring it to the front of the docking area. From here you can add buttons to your project, change the style of an existing button, remove the frame from a button, and more.
- **Backgrounds:** *new to version 2.* Docked to the lower-left-hand corner of the application window beneath the Explorer, this window enables you to replace the background images on your menus without applying a new theme to the menu. Click its tab to bring it to the front of the docking area.
- **Compilation:** *new to version 2.* Docked to the upper-right-hand corner of the application window beneath the Properties window. Use this window to add songs to build your music and picture compilations. It becomes active when you navigate into a compilation link.
- **Properties:** *new to version 2.* Docked to the upper-right-hand corner of the application window. One of the most significant additions to version 2, the Properties window acts as somewhat of a command center for your project where you make decisions about everything from graphics to audio to highlight colors to end actions.
- **Timeline:** *new to version 2.* Docked to the lower-right-hand corner of the application window. Another significant addition to the new version, the Timeline has a similar purpose in your DVD Architect software project as the Vegas software's timeline has in that application. Here you add audio and video elements to your menus and links, determine in and out points, and add chapter markers and subtitles.
- **Project Overview:** *new to version 2.* Docked to the upper-left-hand corner of the application window. This window provides a tree structure view of your entire project that helps you understand at a glance exactly how the project is assembled and organized. You can edit the structure of your project directly from this window.

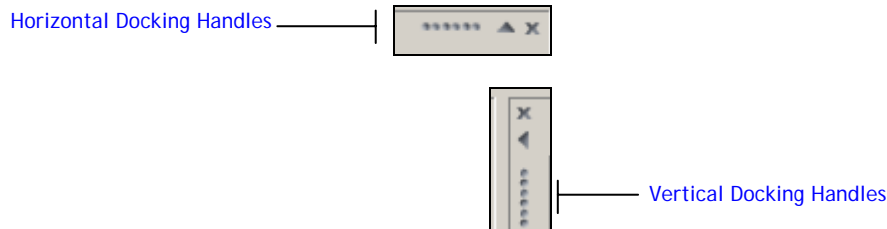
As the list indicates, each of the windows docks to a different area of the application window. However, you can tear these windows from their docking locations and either dock them to a new area, or allow them to float freely anywhere on your computer screen (or another screen in a dual-monitor setup.)

To undock a window from its docked location, click and drag the drag handles. Six horizontal dots at the top-right corner of a window that is docked to either side of the application window, or six vertical dots along the left edge of a window that is docked to either the top or bottom of the application window identify the drag handles for the window as shown in **Figure 3**. When you move the window far enough away from an edge of the application window, a title bar appears above the window. The appearance of the title bar indicates that you can release the mouse button to leave the window floating in that location. When you get close enough to a side

of the application window, the title bar disappears, and you can release the mouse button to dock the window to the new location. If you want to position a window very close to an edge of the application window, but want it to remain floating instead of docked, hold down the **Ctrl** key to override the normal docking behavior.

**Figure 3**

The six horizontal or vertical dots represent the Docking Handles.



### Floating Docks

DVD Architect software now also supports floating docks. This feature breaks the limitation of docking windows only to the sides of the application window. With floating docks, you add two or more windows to a docking group that you can move to any location on your computer monitor or monitors.

As an example, let's create a floating dock that holds the Explorer window and the Properties window. First, tear the Explorer window from its docking location at the bottom of the screen, and position it toward the middle of your computer screen (or, better yet, on a second monitor if you have a dual-monitor setup) so that when you release the mouse button the Explorer window floats freely on the screen. Now, tear the Properties window from its location, and drag it directly on top of the floating Explorer. You'll know you're in the right spot when the Properties window's title bar disappears and docking handles appear. Release the mouse button and the two windows now share a floating dock. Since you docked the Properties window directly on top of the Explorer window, you can no longer see the Explorer. Click the Explorer window's tab at the bottom of the floating dock to bring that window to the front. You can add as many windows to a floating dock as you want.

As with other docking areas, you can add as many sections to a floating dock as you want. You still have the Properties window and the Explorer window docked in a floating dock. Click the Properties window's tab to bring it to the front. Use the docking handles to tear the Properties window away from the floating dock, then drag the window back to the floating dock, but this time, drop it somewhere on the right half of the Explorer. This creates a floating dock again, but this time the two windows occupy their own sections in the floating dock so that they do not obscure one another.

Don't forget that if you want to stack one window on top of another without creating a floating dock, hold down the **Ctrl** key before you release the mouse button to drop the window.

The next time you open DVD Architect software, all windows open exactly as you last arranged them. If you want to quickly return to the default layout, hold **Ctrl+Shift** as you start the application.

## II: Workflow enhancements



### Saving media assets with project

---

You can now save your DVD Architect software project to a new location and automatically copy the media assets you've used in your project to that same location. This functionality makes it very easy to archive your project or to move it to another computer where you intend to work on it further. The feature ensures that you don't accidentally neglect to copy all of the necessary media along with the project file.

To save your project along with all of the media used in the project to a new location, choose **File | Save As**. You're well familiar with the Save As dialog, so we won't walk through all of its features. We do want to point out the Copy Media drop-down list at the bottom of the Save As dialog. The following list shows the three options available under the Copy Media drop-down list, and explains what the options do.

- **Normal:** this option causes the Save As dialog to act just as it did in version 1. Choose this option if you want to save the project file to a new location or with a different name, but do not want to copy the media assets used in the project to the save location.
- **Copy user media with project:** choose this option if you want to copy all of the media files that you use in the project to the save location. You'll likely choose this option when transferring the project to another computer where you intend to continue working on it. If the second computer has all of the files that the DVD Architect installer places on the machine, you have no reason to copy theme elements to that computer.
- **Copy user and theme media with project:** choose this option if you want to copy all of the media files and theme elements that you use in your project to the save location. The most likely use for this is for archiving a project where you want make sure that you archive every piece of media – whether your own or theme elements – that you used in the project.



### External monitor preview

---

External monitor preview support enables you to preview your DVD project on an external NTSC or PAL monitor so that you can see exactly what it will look like once you burn it to a DVD. This provides tremendous advantage because you need no longer guess at what your project will look like to someone viewing it from the burned DVD. You can now accurately preview positioning of menu items, colors, text and so on, thus removing all of the guesswork during the DVD authoring stage.

To preview your project on an external monitor, you'll need to convert the digital signal from your computer into an analog signal that your external monitor can read. If you've ever used the external monitor preview feature in Vegas software, you'll find the procedure for previewing to external monitor in DVD Architect software just as simple to set up and use. In fact, you use an identical setup and procedure in both applications.

First, use an IEEE1394 (i.LINK) cable to connect your computer's IEEE 1394 card to the i.LINK input of your DV camcorder (set your camcorder to VCR or VTR mode), DV video cassette recorder, or DV to analog converter. These devices act as digital to analog converters, which take the digital signal coming from your computer and convert it to an analog signal that your external monitor can read. We'll call them D/A converters in this discussion. (The D/A converter device you use must support pass through – in other words, it must receive a digital video signal

through its digital inputs, convert the signal to analog, and then pass the analog signal out of its analog outputs.)

Next, use an analog cable (such as an S-video or composite cable) to connect the analog outputs of your D/A converter to the NTSC or PAL monitor. Switch the D/A converter and the external monitor on.

This setup sends the video stream from DVD Architect software to the external monitor, but does not send the audio stream. The audio stream routes through your normal audio previewing setup (from your computer sound card to your speakers.)

With the hardware in place as described above, you can use two techniques for previewing to the external monitor. The first technique enables you to view the DVD Architect software workspace on the external monitor. This is useful during the authoring stage of your workflow. Choose **Options | Preview on External Monitor**. This opens the Preferences dialog with the Video Device tab active (assuming this is the first time you've ever chosen this option.) From the **Device** drop-down list, choose the IEEE 1394 card to which you have your D/A converter (and thus the external monitor) connected—most users will need to choose **OHCI Compliant IEEE 1394/DV**, which may be the only device listed. The Details area gives you some information about the device you've connected to the system, and whether DVD Architect software has detected that the device is connected. From the **Format** drop-down, choose from the standard DV or widescreen DV options for either NTSC or PAL. Most users will pick the appropriate version of standard DV.

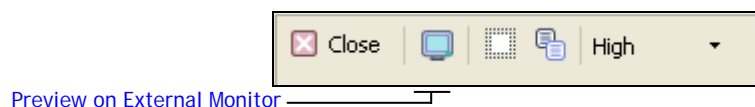
Click the **OK** button to dismiss the Preferences dialog and activate external monitor preview. You can now view the workspace on your external monitor. This enables you to design the graphical layout of your DVD and see exactly what it will look like on a television screen.

One important difference between previewing on an external monitor in Vegas software and DVD Architect software involves audio/video sync. DVD Architect software does not attempt to maintain perfect sync between the video being sent to the external monitor and the audio generated through your sound card. Syncing issues are just not as critical at this stage of the process as they are when editing the video in Vegas, and therefore system resources are not devoted to maintaining sync. The real purpose of external monitor previewing in DVD Architect software is to provide an accurate image of the project layout and graphic design so that you can make any necessary adjustments before spending the time to encode and burn the DVD.

To use the second technique for previewing to an external monitor, which is useful when you want to preview and test your DVD creation, click the **Preview** button in DVD Architect software. This opens the familiar DVD Architect software preview window and virtual remote control device. In the button bar (above the virtual remote control), click the **Preview on External Monitor** button, shown in **Figure 4**.

**Figure 4**

Click the Preview on External Monitor button to send a preview out to an external monitor.



As described above, if you've never assigned a device on the Video Device tab of the Preferences dialog (or if you've reset your preferences to their default values since the last time you used the external monitor preview function), that tab opens automatically when you click the Preview on External Monitor button. If you've already assigned the device, DVD Architect software remembers that device assignment, and you don't have to choose it again. Since you already

assigned the device during our discussion above, your project begins previewing on your monitor immediately. Should you ever need to visit the Video Device tab of the Preferences dialog again, close the DVD Architect Preview window and choose **Options | Preferences** to open the Preferences dialog. Then click the **Video Device** tab.

### III: The Project Overview window

The Project Overview window provides an easy-to-interpret map or outline of your project presented in a familiar tree-view layout. You can use this window to check over the structure of your DVD, add and delete menu items from your project, reorganize menu items, and more. To show or hide the Project Overview window, choose **View | Project Overview**.



#### Becoming familiar with the Project Overview window

---

The Project Overview window shows all of the menus, movie files, links, photo compilation links, and music compilation links that you add to your project. You also have the option of showing or hiding any end actions that you've applied to menus or media items (we'll talk in detail about end actions later in this document.)

The tree structure used in this window follows the same conventions as that used in the Explorer window. As in the tree structure for the Explorer window, you can collapse and expand levels, drag items from one level to another, delete items, and so on. Let's start with a tour of what you see in the Project Overview window when you first start a new DVD project.



#### Exploring the default project layout

---

Every new project has a simple structure already in place. In the Workspace you see the default menu, Menu 1. It uses the default background image (from the default theme), and contains a text box that identifies this as Menu 1. Now look in the Project Overview window. Here you see the simple hierarchical structure of your project. Let's start from the bottom and work our way up the tree. The window shows that Menu 1 (Page 1) lies nested within a folder called Menu 1.

Why are there two items called Menu 1? Remember from using version 1 that you can insert multiple pages into a menu. By default, Menu 1 consists of just one page, but if you need more room for all of the links that you want to put on Menu 1, you could inset a new page to Menu 1. Notice the difference between the icons used for the item Menu 1 (Page1) and the item called simply Menu 1. The folder icon for the Menu 1 item indicates that it holds all of the pages that make up that entire menu group. When you insert another menu page to the Menu 1 folder, the new menu page exists on the same level as Menu 1 (Page 1).



#### Inserting a new menu page

---

You can easily see the relationship between multiple pages of the same menu in the Project Overview window. Let's use the Project Overview window to insert an additional page to Menu 1 now. Right-click the **Menu 1** folder, and choose **Insert | Menu Page** from the pop-up menu. Now look back to the Project Overview window. You now see several new items in the structure outline for your DVD. Most notably, a new icon labeled Menu 1 (Page 2) appears at the same hierarchical level as Menu 1 (Page 1) under the Menu 1 folder.

You also see two links displayed in the Project Overview window once you add the new menu page. These appear because DVD Architect software automatically places navigation buttons on both menu pages so that your user can navigate between the two pages. You can see these navigation buttons in the workspace window (they appear as arrows.) Notice that the tree view

shows these two links one level in from the menu pages upon which they sit, so you can easily see their relationship to the rest of the project.



### Navigating through your project structure

Notice that the Menu 1 (Page 2) label is bold compared to the Menu 1 (Page 1) label. This indicates that the workspace currently shows page 2. Double-click the Menu 1 (Page 1) icon to navigate to page 1. You can also double-click the icon for any media, picture compilation, or music compilation in your project to navigate into that item. When you double-click a link in the Project Overview window, you follow that link. In all of these cases, you can also right-click and choose **Navigate Into** (or, in the case of a link, **Follow Link**) to achieve the same results as a double-click on the item. If you ever find yourself unsure of just where in your project hierarchy you are, take a quick look at the Project Overview window and find the bolded item. That'll let you quickly see exactly where you are in your project.



### Inserting a submenu and compilations

One approach to building your DVD interface is to use the Project Overview window to quickly build the skeletal structure of your DVD. You can quickly insert submenus, both picture and music compilations, and specific media files to your project without ever leaving the Project Overview window. Then you can go to the workspace and adjust the graphic layout of these items and the links to them. This section discusses how to add each of these items (with the exception of adding media, which we'll discuss in the following section) from inside the Project Overview window.

Sometimes you don't want a new menu page like the one we inserted earlier, rather you want a unique submenu attached to a menu. You can easily insert a submenu from the Project Overview window, so let's do so now. Double-click the icon for **Menu 1 (Page 1)** to navigate into that menu page. Now right-click the Menu 1 (Page 1) icon and choose **Insert | Submenu** from the pop-up menu. A new menu folder (Menu 2) and the structure of everything that goes along with it now appears one level in from the level of Menu 1 (Page 1) indicating that Menu 2 is a submenu of Menu 1 (Page 1). Look at the workspace to see that a link has been added to the menu. This link leads to the new submenu.

You probably noticed in the pop-up menu for Menu 1 (Page 1) that you can insert several other items to Menu 1 with the right-click method too. The Project Overview window gives another way to accomplish these tasks: insert buttons. A series of buttons appears at the top of the Project Overview window. With Menu 1 (Page 1) still selected in the tree list, click the **Insert Picture Compilation** button, shown in **Figure 5**. This inserts a picture compilation into your project as indicated by the new item in the tree view (3: Picture Compilation 1) and the link that has been added to the menu in the workspace.

**Figure 5**

Click the Insert Picture Compilation button to create a Picture Compilation object in your project.



Next, click the **Insert Music Compilation** button to insert a music compilation to your project and a link to it on Menu 1 (Page 1). At this point, you've merely created the structure to support the picture and music compilations that you want to create on your DVD. Later we'll discuss how you can use the new Compilation window to populate your compilations.

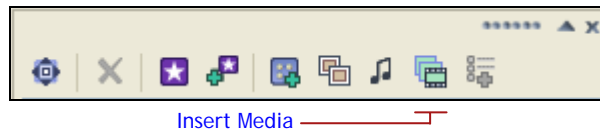


## Inserting Media

There's a little more to inserting media into your project through the Project Overview window than there is to inserting the items we've talked about thus far. When you insert media to your project, you must naturally specify which media you want to add. Double-click the icon for **Menu 1 (Page 2)** to navigate to that menu page. Click the **Insert Media** button **Figure 6**. This opens the Insert Media dialog. This familiar dialog style gives you a way to navigate to the media on your computer drives that you want to insert. For now, navigate to any .avi or .mpg video file on your computer drive(s) and select it in the dialog. Click the **Open** button to insert the selected file into your project. An icon for the media file appears in the tree structure, and a link to the media file appears on the menu in the Workspace.

**Figure 6**

Click the Insert Media button to add audio, video, or still-image files to your project.

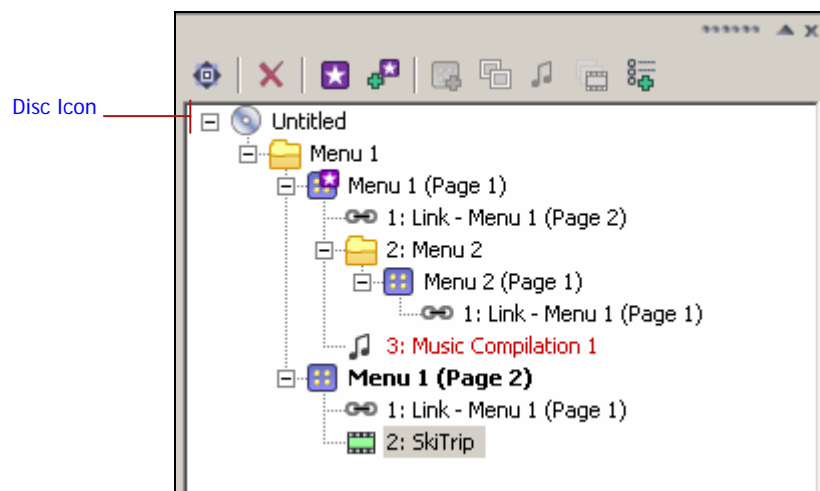


## Inserting a new menu

Earlier, you learned how to add a new page to an existing menu. You can also add an entirely new menu to your project. One level up from the Menu 1 folder—at the very top level of your DVD project tree—you see a disc-shaped icon with the label **Untitled** **Figure 7**. This icon represents your entire project. When you save your project—and thus give it a name—the project name replaces the label **Untitled**. To add another menu to your project, right-click the disc icon and choose **Insert Menu** from the pop-up menu.

**Figure 7**

To add another menu to your project, right-click the disc icon at the top of the Project tree and choose **Insert Menu** from the pop-up menu.



You see that your project now has another menu (Menu 3) at the same hierarchical level as the original menu (Menu 1.)



## Inserting a scene selection menu

If you've added a movie file to your project that contains several chapter markers, it can be beneficial to include a scene selection menu on the DVD so that the viewer can navigate directly to a specific scene. You can still automatically create a scene selection menu using the same techniques you used in version 1, but in version 2 you can also accomplish the task through the Project Overview window.

Double-click the icon for Menu 3 (Page 1). Click the **Insert Media** button. In the Insert Media dialog, navigate and insert a movie file that contains chapter markers (remember, when you render files in Vegas, you can choose to save your Vegas software project markers along with the file, and DVD Architect software then recognizes those markers as chapter markers.) Now, click the icon, in the workspace, for the media file that you just added. Notice that this selects the media file icon, but does not navigate into the media file as a double-click would. You can see by the bolded text that you are still navigated into Menu 3 (Page 1), but by the highlighted text that you have selected the media file to work on.

Now, click the **Insert Scene Selection Menu** button shown in **Figure 8**. In the Insert Scene Selection Menu dialog, specify the number of links per page (typically, this corresponds to the number of chapter markers in your media file.) Click the **OK** button. A new menu entitled Scene Selection (Page 1) has been added to your project. Double-click the icon for the Scene Selection (Page 1) menu to navigate into that menu, and you see that the menu contains the links that DVD Architect software has automatically created for you based on the chapter markers in the media file.

**Figure 8**

Click the Insert Scene Selection Menu button to open the Scene Selection Menu dialog.



Insert Scene Selection

You might want the link to the scene selection menu to be on the same menu as the link to the entire movie--Menu 3 (Page 1). Double-click the Scene Selection folder icon to navigate to that menu. Then, drag the icon for the Scene Selection folder and drop it onto the Menu 3 folder icon. The Scene Selection menu now appears as a submenu of Menu 3.

## Specifying the DVD start item

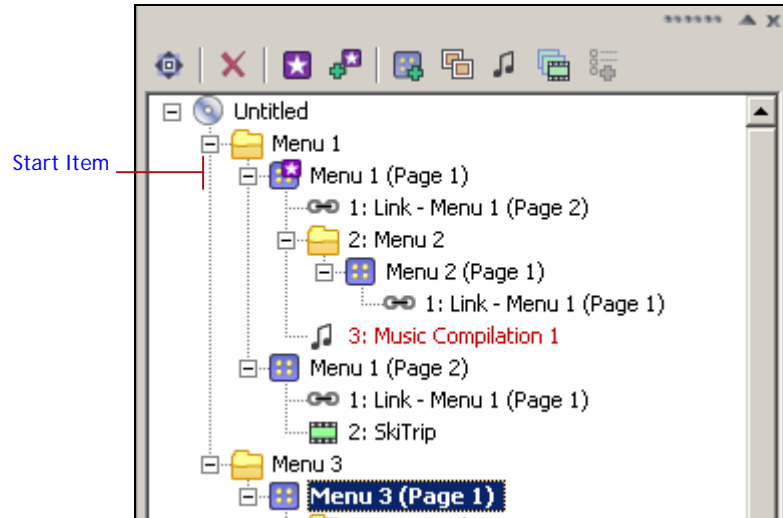
If you've been following along with our discussion, you now have a DVD project that contains two menus. One of those menus contains two menu pages, and one of those menu pages contains a submenu. With one notable exception, the tree structure uses the same icon to identify each of these menu-related objects. That exception relates to the DVD start item.

The DVD start item is simply the object that automatically plays when the user inserts the DVD into a player. When you begin a new project, Menu 1 (Page 1) automatically becomes the DVD start item. Unless you've done something to change the DVD start item, and you've followed our instructions so far, the icon for Menu 1 (Page 1) in the project we've been building contains a white star inside a purple square as shown in **Figure 9**. This indicates that Menu 1 (Page 1) has been designated as the DVD Start item. To check this, click the drop-down arrow next to the **Preview** button in the main toolbar, and choose **Preview Disc** from the drop-down menu. The

Preview window and virtual remote control open, and you can see that Menu 1 (page 1) shows up in the Preview window. Click the **Close** button to close the Preview window.

**Figure 9**

The white star inside the purple square indicates the Start Item—the first item to play on the DVD.



You can designate any menu or media item to be the DVD start item. Let's change the DVD start item of our project now. Double-click on the icon for Menu 3 (Page 1). Now, click the **Set DVD Start** button at the top of the window. The DVD start item designation icon moves from Menu 1 (Page 1) to Menu 3 (Page 1). Now choose **Preview Disc** again, and see that you now see Menu 3 (Page 1) before anything else. Close the Preview window.

Experiment with making various elements in your project the DVD start item. Notice that you can make any menu page, compilation, or media file the DVD start item, but you cannot make a link the DVD start item.



### Inserting introduction media

The Insert Introduction Media button provides a way for you to add media to your project and make that media the DVD start item all in one operation. Click the **Insert Introduction Media** button shown in **Figure 10**. This opens the Insert Media dialog that you saw earlier. Navigate to a media file, and click the **Open** button to insert that file into your project. DVD Architect software inserts the media on the first level of the disc (the same level as Menu 1.) Notice that the media's icon contains the DVD start item indicator.

**Figure 10**

Click the **Insert Introduction Media** button to insert a media file that will automatically play when the DVD is started.



We sometimes refer to a media file inserted with this method as *first play* media because it plays automatically and before anything else happens. This is a great place to put a short copyright notice, your production company's logo, and other objects that aren't really part of the DVD presentation, yet are still important to include on your disc.

## Displaying End Actions

DVD Architect 2 software boasts powerful new end actions that give you a greater level of control over the viewing experience of your DVDs. We'll talk in much more detail about them when we discuss the Properties window later in this document. For now, a brief description will be helpful in understanding their relationship to the Project Overview window. Simply put, end actions enable you to specify the exact action that takes place once a menu or a media file finishes playing. For example, you could set the end action of a menu to wait for a specified period of time, and then (if the viewer hasn't selected any of the menu options) have the DVD automatically pick the menu option you specify in the end action. Or, you could set the end action of a media file so that it returns to a specific menu or runs another media file when it completes.

You can display your project's end actions in the Project Overview window. To show end actions, click the **Toggle Display of End Actions** button, shown in **Figure 11**. End actions now show up in the tree structure. If you've followed our instructions so far, you have a couple of media files in the project you've been building. Those media files contain default end actions, and you see them listed when you toggle end actions display on. To hide end actions in the Project Overview window, click the **Toggle Display of End Actions** button again.

**Figure 11**

Click the Toggle Display of End Actions button to show or hide end actions in the Project Overview window.



## IV: Buttons and Backgrounds

The new Buttons and Backgrounds windows give you more flexibility than ever in designing the look of your DVD. This section discusses these two windows.

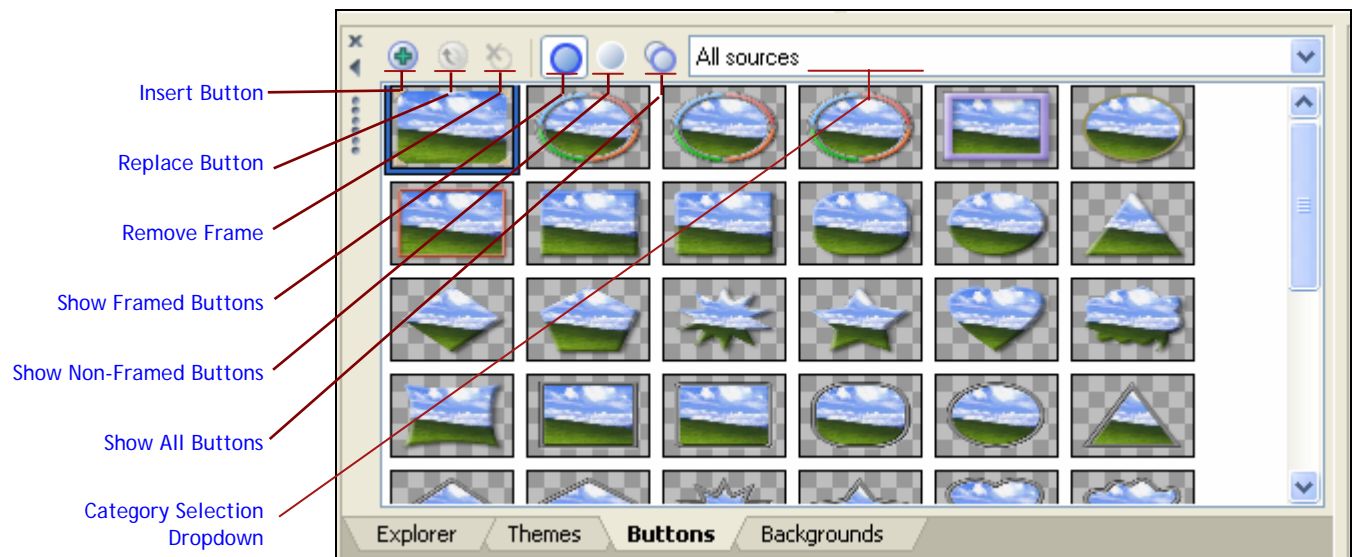
### Working with button styles

The Buttons window contains all of the familiar button types that you used in version 1. The window provides a more powerful way to work with your buttons and their frames. Choose **View | Buttons** to open or close the Buttons window. By default the window sits docked in the lower left-hand corner of the application window beneath the Explorer window. Click the **Buttons** tab to bring the Buttons window to the front.

If you haven't done so already, click the **New Project** button to start a new project. You can use the Buttons window to quickly add empty buttons to the selected menu. For instance, in a new project, you have a one-page menu, Menu 1 (Page 1). In the Buttons window, click on the thumbnail for the button that contains the frame style you want to use on your buttons. Click the **Insert Button** button, shown in **Figure 12** to add a button with the selected frame (and a text box) to your project. Click the **Insert Button** button as many times as you need in order to add the number of buttons you need in your project. You can also drag a button from the Button window directly to the workspace to add it to your project.

**Figure 12**

The tool bar at the top of the Buttons window contains tools for adding, replacing, deleting, and viewing the buttons.



The buttons you add with this method do not contain any thumbnail image, nor do they link to workspace. Once you've added the buttons you want, you can use the Properties window (which we discuss in detail later) to modify those buttons as necessary and make them do what you want them to do. For now, just leave the button blank. We'll work with it a bit more to demonstrate the functions of the Buttons window.

You can change the button style of any button you've already added to your workspace. First, click the button in the workspace to select it (or selected multiple buttons if you want to change several to the same style all at one time.) if it is not already selected. Now, click the button style from the Button window that you want to use instead of the current style. Click the **Replace Button** button. This updates the button style with the selected style. You can also double-click any button style in the Buttons window to change the buttons style of every button selected in the workspace.

If you decide that you don't want any graphic at all on an existing button, select the button in the workspace, and click the **Remove Frame** button. This creates an invisible button. You can lay invisible buttons over custom background artwork if you want to create the graphic element of the buttons in an image-editing program or in Vegas software.

You can limit the button styles that the Button window shows to make it easier to pick a style if you know generally what you're after. There are two ways to do so: you can limit the buttons shown by style (that is, whether the button style has a frame or not) or by theme and collection association.

First, to show just the buttons styles with frames, click the **Show Framed Buttons** button. To show just the buttons styles with no frames, click the **Show Non-Framed Buttons** button. The non-framed buttons generally give you arrow options that you can use for building your DVD navigation interface. To show all button styles (framed and non-framed), click the **Show All Buttons** button.

You can also limit the buttons shown in the Buttons window according to their theme or collection association. To do this, choose an option from the **Location** drop-down list. For example, click the **Location** drop-down list, and choose **Wedding** from the list.

Notice that the three Show buttons effect the button graphics you see when you choose an option from the Location drop-down. For example, with Wedding still chosen in the Location list, click the **Show Framed Buttons** button. You see just three button styles in the window. Next, click the **Show Non-Framed Buttons** button. You now see four different button styles. Finally, click the **Show All Buttons** button, and you see all seven available buttons for that button source. To see every button style available, click the **Show All Buttons** button, and then choose **All Sources** from the Location dropdown list.



### Adding stock backgrounds

---

Recall from version 1 that you can quickly add one of the stock themes included with DVD Architect software (or any of your custom themes) to achieve a unified look for your menus. Of course, you can still do that in version 2 through the Themes window. But now you can use the Backgrounds window to change the background image regardless of the theme you use. Let's see how it works.

Click the **New Project** button to start a new DVD project. DVD Architect software uses the default theme. Choose **Insert | Empty Button** to add a button to the menu. Notice that for the default theme, the button has no graphic. Now choose **Insert | Next Button** and **Insert | Previous Button** to add those buttons to the menu. Note the graphics used for these two buttons.

As with version 1, you can change the theme you use on this menu. Click the tab for the Themes window to bring it forward, and then click and drag the theme **Album** to the workspace. Notice that not only does the background image change, but so also do the graphics used for the three buttons on the page.

Now, look at the thumbnail for the theme Animated 1 in the Themes window. Notice the different button graphics used on that theme. Drag the Animated 1 theme to the workspace, and see that the background and button graphics change again to match the theme. Click the **Undo** button in the main toolbar to go back to the Album theme.

Now, let's change the background without changing the button graphics. Click the **Backgrounds** tab to bring the Backgrounds window to the front. This window shows you the available backgrounds, and you notice immediately that these backgrounds match the backgrounds used in the various themes (including all of your custom themes.) Assuming you have not changed the order by adding your own custom themes, the background graphic that occupies the middle position on the top row is the same graphic used in the Animated 1 theme that you dragged onto the menu just a few minutes ago. Drag that thumbnail to the workspace. This time, notice that although the background changed to the one you dragged to the workspace, the button graphics did not change: they are still those used by the Album theme. Choose **Insert | Empty Button** and notice that the new button still conforms to the active theme (Album) even though the background uses a different graphic.

## V: The Timeline window

You'll find several of the most exciting new features of DVD Architect 2 software in the powerful new Timeline window. Through this window you can work with chapter markers, adjust the in and out points of your media, add multiple audio tracks to your video media, and create multiple subtitle tracks that overlay the video portion of the media when played back on a television. You'll notice that working in the Timeline window feels very much like working in the timeline of a Vegas software project. Differences naturally exist, but you'll feel right at home with the track headers, video thumbnails, audio waveforms, navigation techniques, zoom techniques, and more. In this section, you'll learn how to use the Timeline window to easily and intuitively accomplish sophisticated DVD authoring tasks.



### Becoming familiar with the Timeline window

---

Click the **New Project** button to start a new DVD project. As usual, your project contains one menu, and that menu uses the default theme and its corresponding background. Since you have no other elements in your project, the Timeline window currently shows you the makeup of your menu. Notice that menu contains one video track (which currently holds the default background media), and one empty audio track.

You can use the Timeline window to quickly change the media that you want to use for the menu background and to add an audio track to the menu. First, let's change the image we use for the background of the menu. As in version 1, you can drag a still-image file to the workspace in order to replace a menu background. Now, you can also drag the file to the video track in the Timeline window to achieve the same results. In the Explorer window, navigate to a still-image file and drag it to the video track in the Timeline window.

In the same way, you can quickly add audio to your menu. Use the Explorer window to navigate to an audio file and drag it to the audio track in the Timeline window.

In these cases, using the Timeline window doesn't really offer any advantage to dragging the media files directly to the workspace—it really just provides a different way to work. However, the Timeline window does present the fastest way to change your menu background media when you use a video file instead of a still-image file. Why? Because when you drag a video file directly to the workspace, DVD Architect software adds that file to your project as a separate media file instead of as your menu background.

Try it. Drag a movie file to the workspace. Instead of changing the menu background, this action adds the video file to your project as separate media, and adds a link to the menu that enables the viewer to navigate to the video file. Click the **Undo** button to remove the media file and link from your project.

Now, drag the same video file to the Timeline window. This changes the menu background so that it now uses the video instead of a still image, and if the video contains audio, adds the audio as the menu audio. Notice that you can now drag a different audio file to the timeline window to replace the video's audio with the new file. In the same way, you can drag a still-image file to the timeline to replace the video portion of the video with the still image, thus effectively using the video's audio along with an alternative image.



Using the Timeline window to work with menus provides a good basis for understanding how the window works. But the window reveals its real power when you use it to work with media files that you add not as menus, but as featured aspects of the DVD. Now that you have the basics of the Timeline window well in hand, let's take a detailed look at all of the powerful new features this window contains.



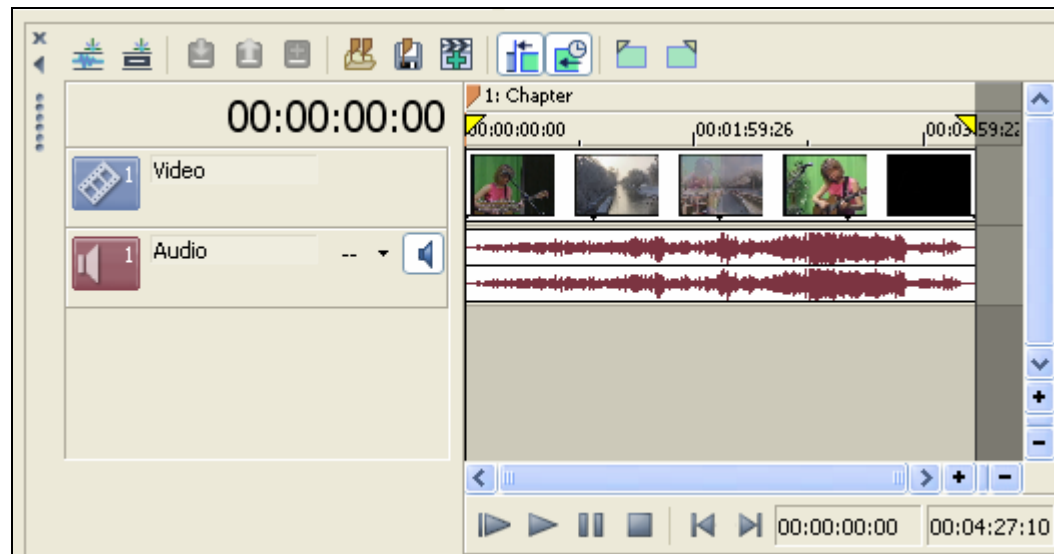
### Working with a media file

You may have noticed during our discussion of the basics of the Timeline window that most of the buttons at the top of the window remained unavailable to you. That's all about to change as you begin adding media files to your project. Drag a video file from the Explorer window onto the workspace. For our discussion, we'll call that file *MediaX*. As you've already seen, this inserts MediaX into your project, and creates a link to it on the menu. Notice that the Timeline window still represents the makeup of the menu.

Right-click the link on the menu for MediaX, and choose **Navigate Into** from the pop-up menu. Notice that the Timeline window now represents MediaX. Notice also that most of the buttons at the top of the Timeline window are now active and ready for you to click as shown in **Figure 13**

**Figure 13**

Once the media is selected, the buttons in the Timeline toolbar become active.



Just as you did a few moments ago when working with the media you used for the menu video and audio, you can easily swap the audio track, the video track, or both tracks for MediaX. For instance, perhaps you used the Vegas application's rendering tools to encode MediaX as an MPG2 file called *MediaX.mpg*. You want to use the video portion of that file on your DVD. But perhaps you've also encoded the audio portion of the MediaX Vegas software file to a 5.1 surround-sound encoded AC3 file called *MediaX.ac3*. You add *MediaX.mpg* to your DVD Architect software project. You can now use the Timeline window to easily replace the audio track of *MediaX.mpg* with the *MediaX.ac3* file.





## Setting the in and out points of your video

One of the most basic adjustments you can make on how your project treats MediaX is to change the in and out points for the file. For instance, MediaX may be 5 minutes long, but you only want to link to the middle three minutes. The Timeline window provides several ways to specify the exact frames at which you want the video to start and end playing, even if those frames are not the physical start and end of the file. In other words, you can set the in and out points of MediaX to show just the portion you want.

When you first add a media file to your project, the in and out points of the file match the very beginning and very end of the file. The yellow triangles in the time ruler (just above the video track) mark the in and out points. Drag the right-most yellow triangle to the left. This creates an earlier out point than the end of the media file. Notice as you move the out point, the time display (above the track headers) indicates the precise location of the new out point. In the same way, drag the left-most triangle to adjust the in point for the media file. You can use all of the same zoom techniques that you know from Vegas software to zoom in on the timeline in order to make finer adjustments to the in and out points.

At times it might be easier to find a specific point in your media file by viewing and listening to it, and then adjusting the in or out point to match the cursor location. The Timeline navigation bar looks very familiar. In fact, it contains the same buttons that you are used to using in the Vegas software timeline. Let's use the transport buttons to help us set a new in point for the MediaX file that we added earlier. With MediaX open in the Timeline window, click the **Play** button. The video begins to preview in the workspace. Watch the video for a moment, and then click the **Pause** button in the Timeline window. The cursor stops on the exact frame on which it was when you clicked the Pause button. To make this frame your new in point, click the **Set In Point** button. Click the **Play** button again, and after a moment, click the **Pause** button again. To make this frame your new out point, click the **Set Out Point** button **Figure 14**. Notice that when you change the in and out points, the Timeline identifies the active area of the file (the area between the in and out points that will actually be seen when the viewer follows this link). The dark shading before the in point and after the out point indicates that these portions of the media file will not be seen or heard.

Figure 14

Click the Set In Point and Set Out Point buttons to establish in and out points for the selected media.



Finally, you can click to place your cursor at a specific point in the Timeline, use your Right and Left arrow keys to scroll through the Timeline to find the desired frame (as in Vegas software, hold down the **Alt** key in combination with the Right and Left arrow keys to limit the cursor movement to one frame at a time), or double-click the time display, enter an exact location, and press the **Enter** key to place your cursor at that location. Once you've repositioned your cursor with one of these methods, you can set your in and out points accordingly as described above. As

in Vegas software, you can quantize your cursor movements to video frames. This means that the software does not let you place your cursor anywhere other than a precise frame edge. Editing your video in the middle of a frame can sometimes cause video glitches, and the quantize feature prevents these glitches. To turn quantize to frames on or off, click the **Quantize to Frames** button.



### Working with DVD chapters

The Timeline window provides tools for setting, adjusting, importing, removing, and saving chapter markers for your video files. These chapter markers can be used to create scene selection menus, provide links to exact points in the video, and so on. Every media file has one chapter marker by default that corresponds to the in point of the file. You can add as many chapter markers as you want. If you added markers in the Vegas application, and saved them when you rendered the file, DVD Architect software recognizes those markers as chapter markers. Chapter markers appear in the Timeline window above the time ruler.

You can move the chapter markers to any spot in the media file that you want—even if the markers were originally placed in Vegas software. To see this, render a video file from Vegas software. Do not embed markers during the render process. Insert the video file (again, let's call it *MediaX*) into a new DVD Architect project, and double-click the MediaX icon in the workspace to navigate into it. MediaX now shows in the Timeline window.

Assuming that you did not imbed markers into MediaX when you rendered it from Vegas software, the Timeline window shows that MediaX has one chapter marker, and as we mentioned, that marker corresponds to the in point of the video. Drag the orange marker flag to another location in the timeline. Notice that you can place it wherever you want, and that when you change the position of Chapter 1, you simultaneously change the in point for MediaX. Likewise, you may have noticed earlier that when you change the in point marker in the timeline, the Chapter 1 marker moves with it.

You can use the Timeline window to insert additional chapter markers to MediaX. Use any of the cursor placement techniques you know from Vegas software to find the exact frame at which you want a new chapter to start. Once you've positioned the cursor, click the **Insert Chapter** button shown in **Figure 15** to drop a chapter marker at the cursor location. A new marker appears in the marker bar, and the software highlights the name of the marker so that you can give it whatever label you want to. For now, type "Scene 2" for the marker name, and press the **Enter** key. You can now drag this marker to a new location if you want to change its location.

**Figure 15**

Click the Insert Chapter button to insert a chapter marker at the current cursor location



Next, point your mouse to a location in the video thumbnails that's between the second chapter point and the out point of the media file. Double-click at that location. This inserts a chapter marker at the double-click location, and again gives you the opportunity to name the chapter. Name it "Scene 3."

Now, set the in point of MediaX to a location in the timeline between the second and third chapter markers. Notice that DVD Architect software now ignores the marker that falls outside of the active area (that is, the old Chapter 2), and rennumbers the Scene 3 marker, which still falls within the active area. The second active marker still retains the name you gave it, *Scene 3*, although the marker now contains the number 2, so you'll need to decide whether or not that name is still appropriate. Set the in point back to the beginning of MediaX. The Scene 2 marker becomes active again, and the marker numbering updates accordingly.

Once you've placed all of the markers you want in the timeline, you can embed those markers permanently into the media file. Let's imbed the three chapter markers we've been working with into MediaX now. Click the **Save Markers** button shown in **Figure 16**.

**Figure 16**

Click the Save Markers button to save markers that you placed in the timeline.



Now that MediaX now contains the embedded markers, you can experiment with the chapters in the timeline with confidence that you can always go back to the embedded markers if you choose to. To see this, insert a few more markers into the timeline. Right-click the chapter you named Scene 2, and choose **Delete Chapter** from the menu. Now, click the **Load Markers** button. This resets the chapter markers back to those that you previously embedded into MediaX.



### Adding additional audio tracks

Often you may want to add an additional audio track to go along with the video portion of your media file. For instance, perhaps you want to include a director's commentary track, or an alternate language track along with the original audio track. You can add up to 8 distinct audio tracks to the Timeline window.

We'll create a project that you can easily follow along with and will give you a great feel for how alternate audio tracks can work. To prepare for creating this project, open up Vegas software, and use the Text media generator to create a 10-second countdown in which the first frame of the movie shows the number 10 on screen, and each second the number decreases by one until you get to the number 1. In preparation for using this file for the discussion of subtitles which follows this section, make all of the even numbers white on a black background, and all of the odd numbers black on a white background.

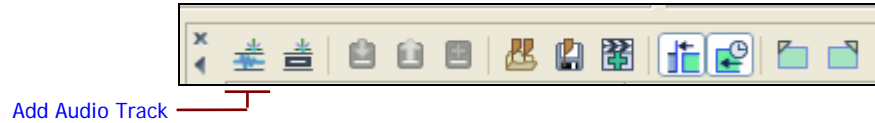
With the video portion of your movie complete, add an audio track, and record yourself counting down from 10 in English along with the changing numbers in the video. When you're done, render the project as an MPEG2 file, and call it English.mpg. Now, go back to your project, and record yourself counting down in Spanish (Diez, nueve, ocho, siete, seis, cinco, cuatro, tres, dos uno. Don't worry about pronunciation—no one will ever hear it but you!) This time, render just this Spanish audio track as Spanish.wav.

### Adding a new audio track

Back in DVD Architect software, start a new project, and insert the file English.mpg to Menu 1 (Page 1). Right-click the icon for English.mpg, and choose **Navigate Into** to open the file in the Timeline window. Click the **Add Audio Track** button shown in **Figure 17**. The Timeline window now shows two audio tracks, one of which doesn't yet contain any audio. Drag the file Spanish.wav from the Explorer window to the blank audio track in the Timeline window.

**Figure 17**

Click the Add Audio Track button to add up to 8 additional audio tracks to the timeline.

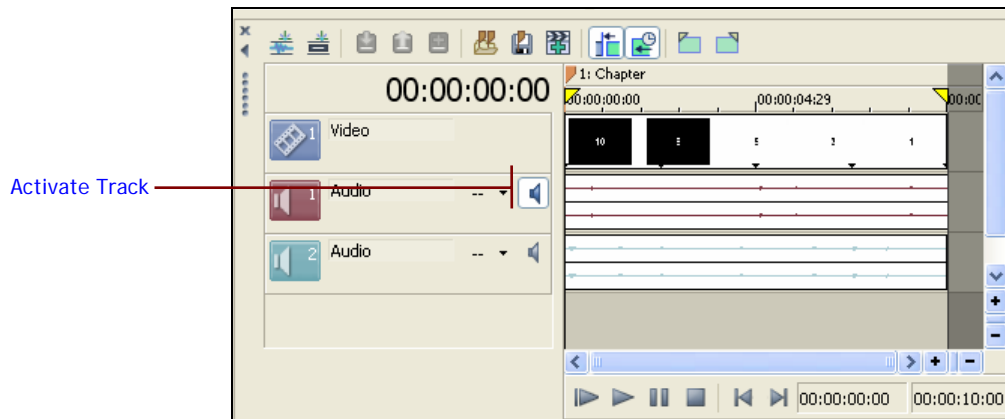


### Activating an audio track

We need to determine which audio track plays by default when the user navigates to this file on the final DVD. Notice the different appearances of the Activate Track buttons on the two audio tracks in **Figure 18**. The highlighted state of the Activate Track button for audio track 1 indicates that track 1 is currently the active track. Click the **Play** button in the Timeline window's navigation bar to preview the media file in the workspace. You hear the original English audio from audio track 1.

**Figure 18**

Click the Activate Track button to select which audio track is currently active



Now, click the **Activate Track** button for audio track 2. (If the file is not still previewing, click the **Play** button again.) You now hear the Spanish audio from audio track 2. The Activate Track button not only determines the track you hear on previewing the file, but also the default track that plays on the final DVD. Click the **Activate Track** button for audio track 1 to make that the active track again.

### Specifying the track language

You can assign a track language to each audio track so that the viewer knows which language a track contains. For audio track 1, click the **Down Arrow** portion of the **Track Language** button

and choose **English** from the drop-down list. This identifies audio track 1 as an English track. Use the same method to identify audio track two as a Spanish track.

If the language you want to use does not appear in the drop-down list, choose **Choose Language** to open the Change Track Language dialog. This dialog contains an extensive list of less common languages. Choose the desired language—for example, choose Arabic—from this list and click the **OK** button. Click the **Down Arrow** on the **Track Language** button, and notice that Arabic now appears on this drop-down list. This illustrates that DVD Architect software updates the list to include a language that you have chosen in the past under the assumption that it makes sense that you might want to assign the same language to other audio tracks in your project.

Now that you've identified your two tracks with languages, click the **Preview** button in the main DVD Architect software toolbar. As the video plays in the Preview window, click the **Audio** button in the lower-left-hand corner of the virtual remote control device shown in **Figure 19**. This opens the Change Audio Track dialog. In this dialog, you see all of your audio tracks listed, and since you left audio track 1 as the active track (if you followed our instructions above), you see that track 1 is selected in the Select Audio Track list. Select track 2 (the Spanish track), and click the **OK** button. You now hear the audio from audio track 2 (your Spanish version.)

**Figure 19**

Click the Audio button on the virtual remote control to select an alternate audio track



Now, click the **Activate Track** button on audio track 2, and click the **Preview** button again. This time the file previews with the audio from audio track 2. You can use the **Audio** button on the virtual remote control device to switch to the other audio track like you did above.

### *Deleting a track*

Should you decide you no longer need one of the audio tracks in your Timeline window, right-click the track header for the track you no longer want, and choose **Delete** from the pop-up menu. You can delete any other track in the timeline in the same way—with two exceptions: The video track, and the last remaining audio track. The Timeline window will always contain the video track and at least one audio track. If you try to delete either of those tracks, you'll only clear what's on them—you won't actually delete the tracks. You'll see from that same menu that you can also cut, copy, and paste audio tracks in the Timeline window.

Don't close your DVD Architect software project. You'll add subtitles to it in the following section.



## Working with Subtitles

The Timeline window contains several tools for creating, arranging, and working with subtitles that can appear on the video screen while your DVD media plays. You can create subtitles right inside the Timeline window, or import them from other sources. Let's start by creating subtitles with the tools in the Timeline window.

### *Adding a subtitle track*

In the project you started in the previous section, you have a video file that contains English narration and an extra track of audio that contains the Spanish translation of that narration. In the Timeline window, click the **Add Subtitle Track** button shown in Figure 20. This adds a new subtitle track to the Timeline window. You can add up to 32 subtitle tracks to each media file in your project. Add another subtitle track now so that you have two subtitle tracks in your project. Use the **Track Language** button as described in our discussion of audio tracks above to designate subtitle track 1 as English, and subtitle track 2 as Spanish.

**Figure 20**

Click the Add Subtitle Track button to add up to 32 subtitle tracks



### *Creating subtitles in the Timeline window*

Now let's create Spanish subtitles to lay over our text when the English version of the audio plays. Click the track header for the subtitle track you designated as Spanish (subtitle track 2 if you've been following our instructions.) This selects subtitle track 2. Place your cursor at the beginning of the file. "10" shows in the video at this point. Click the **Insert Subtitle Text Event** button, shown in **Figure 21**. This inserts a subtitle text event into Subtitle track 2. Notice the text event says simply "Text" when you first add it to the project as you can see in the event as well as the Workspace.

**Figure 21**

Click the Insert Subtitle Text Event to insert a text event at the current cursor position



In the Workspace, right-click the subtitle text box and choose **Edit Text** from the menu. Now type the desired subtitle—"Diez" in this case. You can also change the font, size, attributes (bold, italic) and justification of the text just as you have learned to do in version 1. In a moment, we'll show you how to add an outline to your subtitles, and later when we talk about the Properties window, we'll show you how to change the color of your subtitles.

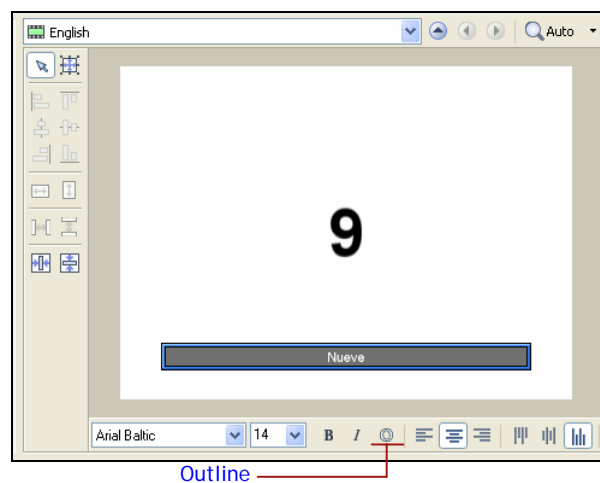
For now leave all of the text attributes as they are. Go back to the Timeline window, and click the **Play From in Point** button. As the movie plays in the Workspace, you notice that your subtitle for the number 10 lasts far too long. You can trim the subtitle event just like you trim events in Vegas software. First click in the timeline near the transition between the numbers 10 and 9. Look at the waveform in the English audio track to help you get close. Hold down the **Alt** key and Press the **Right or Left Arrow** key until you find the exact frame where the number changes from 10 to 9. Now, drag the right edge of the subtitle event to the left until it snaps to the cursor. Play the file again and notice that the subtitle now disappears when it should.

Right-click the subtitle event, and choose **Copy** from the menu. Click the right edge of the event to place the cursor there, then right click at the cursor and choose **Paste** from the menu. You now have a second subtitle event in the right spot for the number nine. In the Workspace, edit the subtitle so that it says, "Nueve."

You might find it difficult to read the subtitle "Nueve" since it is white text against a white background. It'd be easier to read if it were against a black background. With the subtitle event selected, notice that the Outline button is active in the text tools bar. Click the **Outline** button, shown in **Figure 22** to turn the outlining off. Now instead of outlining the text, the outline color fills the text box.

**Figure 22**

Click the Outline button to toggle between outline and colored text box



Continue adding subtitles until you have all of the Spanish subtitles in place. Preview your movie to see how it looks with your new subtitles.

### *Updating subtitle attributes*

Based on what you see when you preview the movie with subtitles, you might decide to change the attributes of your subtitle text. For instance, perhaps you want a large font size and a different font face. Let's change those attributes of the subtitle event Diez to make it easier to read. In the timeline, click the Diez subtitle event. In the Workspace, right-click the word **Diez** and choose **Edit Text** from the menu. Change the font to 26-point **Impact** and turn off the outline.

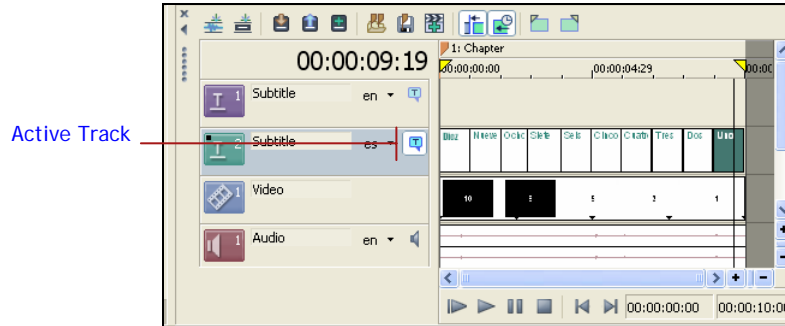
In the Timeline window, click the **Activate Track** button (shown in **Figure 23**) for the Spanish subtitle track, then click the **Play From In Point** button to preview the movie with the Spanish subtitles. You can see the change you made to the Diez subtitle event, but all of the remaining



events still have their original characteristics. It could take a long time to go through your project and make these same changes to every subtitle event individually, but DVD Architect software makes the task quick and simple.

**Figure 23**

Click the Active Track button in the subtitle track header to designate the active subtitle track.

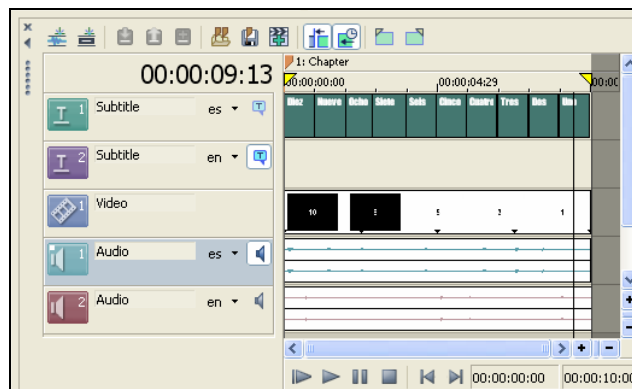


Select all of the Spanish subtitle events in the timeline (including the Diez event.) Right-click on the Diez subtitle event and choose **Apply Formatting to Selected Events** from the menu. This instantly updates all of the selected events so that the formatting of their text matches the formatting of the Diez event. Click the **Play From In Point** button to see that all of the Spanish subtitles have been updated with the same font formatting as the Diez event.

Now let's create English subtitles to go along with the Spanish audio. You might find it helpful if the English subtitle track and the Spanish audio track were adjacent to the video track so you can easily see them all at one glance. Use the same techniques you use in Vegas software to reorder the tracks as you want them. For instance, drag the track header icon for subtitle track 1 and drop it between the video track and subtitle track 2. This moves the English subtitle track to the second subtitle track position. In the same way, move the Spanish audio track so that it sits just below the video track. **Figure 24** shows how this arrangement looks.

**Figure 24**

Drag the track headers to reorder the tracks.



Make sure to activate both the English subtitle track and the Spanish audio track. Click the **Play** button in the Timeline window. You should hear your Spanish countdown, and should not see any subtitles (since you haven't added your English subtitles yet.) Now use the same techniques

we described above to create English subtitles. Format the English subtitles with 60 point, Comic Sans MS text, and no outline.

Now your English subtitles don't have the same font attributes as your Spanish subtitles, but you can easily fix this difference. Click the track header icon of the English track to select it. Hold down the **Ctrl** key, and click the track header for the Spanish subtitle track to add that track to the selection. Right-click the Ten subtitle event in the English subtitle track and choose **Apply Formatting to Selected Tracks** from the menu. This applies the formatting of the Ten subtitle event to all events on both the English and the Spanish subtitle tracks.

Now, click the **Preview** button in the main toolbar to preview your DVD. Use the **Audio** and **Subtitle** buttons at the bottom of the virtual remote control to switch back and forth between English and Spanish audio tracks, and the two different subtitle tracks.

#### *Editing subtitle events with ripple editing*

You can use many of the same editing techniques that you use to edit events in the Vegas software timeline to edit subtitle events in the DVD Architect software Timeline window. For instance, you can drag an event to a new location, or trim an event to make it longer or shorter. Let's say that event Eight in your English subtitle track doesn't last long enough. Point to the right edge of the event. Your cursor changes into the familiar trim icon that you get when you point to an event edge in Vegas software.

Now drag the event edge to the right to make the event last longer. Notice that as you do, events that occur later in the timeline move to make room for the larger event Eight. This ripple editing feature works much the same as it does when you execute a post-edit ripple to the affected tracks in Vegas software.

Click the **Auto Ripple** button (shown in **Figure 25**) to turn ripple edits off. Now trim the right edge of the Eight event to the left to make the event shorter again. Because you turned auto ripple feature off, this leaves a hole in your timeline because the other events do not move along with your edit. Click the **Undo** button to undo the last trim move on event Eight. Click the **Auto Ripple** button to turn that feature back on. Finally, trim the right edge of event Eight to the left again to make it shorter. This time, the other events move to close up the hole since you turned auto ripple back on.

**Figure 25**

Click the **Auto Ripple** button to toggle on and off the auto ripple feature.



#### *Exporting subtitles*

Once you've got your subtitles in place, you can export them to a text file. This makes it easy to create a text document that you can send to a translator if you need alternate language versions of the same subtitles. For instance, let's say we just finished the example we worked through above except that you don't know how to count down from 10 in Spanish. To follow through with this example, click on the first event in the Spanish subtitle track to select it. Now, hold down the **Shift** key and click on the last event. This selects the first and last events, as well as

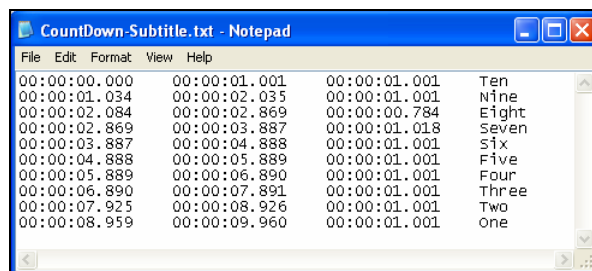
every event between them. Now right-click any of the selected events and choose **Delete** from the menu to delete all of the selected events.

Click on the track header icon for the English subtitle track to select that track. Click the **Export Subtitles** button. Choose your **My Documents** folder as the save location and name the file CountdownSubtitles\_English. From the **Save as type** drop-down list, choose **Sony Vegas Region List**. Click the **Save** button. You've just saved your English subtitles into a text document. Open the new text document in Notepad.

You can see in **Figure 26** that the text document contains four columns. The first column gives you the start time of each subtitle event (each row shows a separate event.) The second column gives you the end time of the event, and the third column gives you the total duration of the event. The fourth column is the one you want your translator to work on—it contains the text of the subtitles. Send a copy of this text file to your translator, and have them change the text in each row of column four to the Spanish translation as shown in **Figure 27**. Have them save the file as a new text file called CountdownSubtitles\_Spanish.

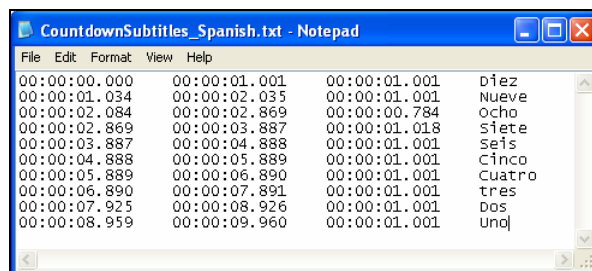
**Figure 26**

Save the file as a Sony Vegas Region List and open it in Notepad



**Figure 27**

Translated version of CountDown-Subtitle.txt document



### *Importing subtitles*

Now that you've received your translated subtitle text back from your translator, you can quickly import it into your DVD project. Click on the Spanish subtitle track to select it. Click the **Import Subtitles** button. Navigate to the file CountdownSubtitles\_Spanish.txt and click **Open**. DVD Architect software instantly imports the translated subtitles into your project. Since the file you imported had all of the in and out information for each subtitle, the subtitle events already match the movie's timing perfectly. Preview the Spanish subtitles to see the results.

As you learned if you've already read through the New Features Series document for Vegas 5 software, you can export subtitles from Vegas software and import them into your DVD project.

Recall that in the Vegas application you created a small video project, and from that project you exported two subtitle documents, which you called English.sub and Spanish.sub. If you followed our instructions, you saved all of these documents to My Documents | Subtitle Example. You also rendered an MPEG2 version of the movie, which you called SubtitleExample.mpg. Let's add that movie to our DVD and import the subtitles that go along with it.

In the Project Overview window, navigate back to Menu 1 (Page 1). In the Explorer window, navigate to **My Documents | Subtitle Example** and drag the file **SubtitleExample.mpg** onto Menu 1. Double-click the **SubtitleExample** link to navigate into it and open it in the Timeline window.

In the Timeline window, click the **Add Subtitle Track** button two times. Use the **Track Language** drop-down list to designate the first subtitle track as English. Designate the second subtitle track as Spanish.

Click the track header icon for the English track and then click the **Import Subtitles** button. Navigate to **My Documents | Subtitle Example** and choose the **English.sub** file. Click **Open** to import that file. Use the same method to import **Spanish.sub** into the Spanish subtitle track.

Now click the **Preview** button in the main toolbar to view the movie. Use the **Subtitle** button in the lower-right-hand corner of the virtual remote control to choose which language you want to see for your subtitles. As you can see, since Vegas software exported not only the subtitle text, but also the in and out information for each subtitle, the timing of the subtitles works perfectly with the video that you rendered from the Vegas application.

As a shortcut for importing subtitles, you can also drag a text file from the Explorer window to a subtitle track in the Timeline window. DVD Architect software imports the subtitles and places them in the proper positions according to the timecode in, timecode out, and subtitle event duration.

#### *Creating viewer controls for subtitles and alternate audio tracks*

Usually when you provide subtitles and alternate audio tracks, you'll want to build into the DVD interface a way for the viewer to choose which language they want to listen to and read as subtitles. You can easily create buttons in DVD Architect software that give your viewers this ability. We'll show you how to do that later in this document when we talk about the Properties window.

## VI: The Compilation window

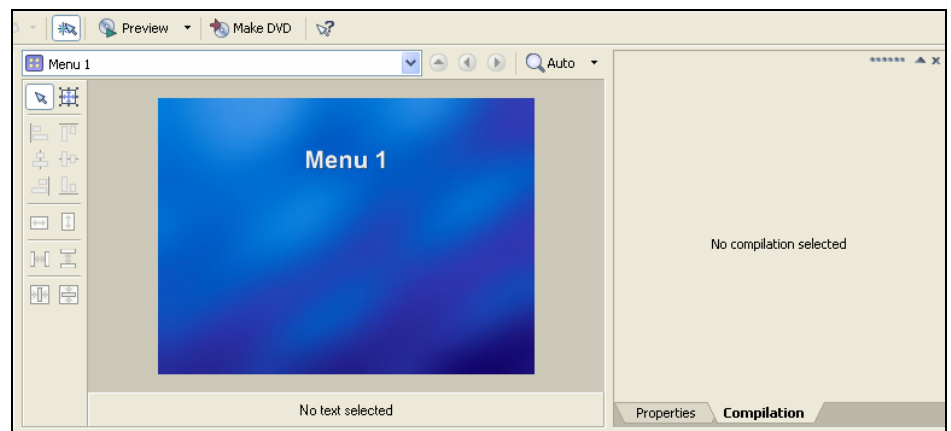
As in version 1, you can create both picture and music compilations with DVD Architect 2 software. The techniques for doing so remain essentially the same. Enhancements in the new version make the process more intuitive and easier. In this section, we'll explore the new Compilation window and learn how to use it in creating your picture and music compilations.

### Creating picture compilations

To create a picture compilation, start a new project and click on the **Compilation** tab as shown in **Figure 28**. If you can't find the Compilation tab, the Compilation window may be closed. Choose **View | Compilation** to open it. At this point, the Compilation window doesn't offer much to look at, does it? Let's change that now.

**Figure 28**

In its default location, you'll find the Compilation window in the upper-right corner of the interface docked under the Properties window.



Choose **Insert | Picture Compilation** to add a picture compilation link (Picture Compilation 1) to your menu. The link does not contain any graphic, so for now, let's give it a button style. With the link button selected, click the **Buttons** tab. In the Buttons window, click on a button thumbnail that has a distinct border, and click the **Replace Button** button.

In the Workspace, right-click the link button and choose **Navigate Into** from the menu. The Compilation window now changes to familiar territory. It looks just like the compilation interface in version 1, and works in essentially the same way too.

To assemble your picture compilation, use the Explorer window to navigate to still images on your computer system. Select one or more pictures, and drag them into the Compilation window. From here on, use the same techniques you used in version 1 to arrange the pictures in the exact order you want, assign specific times to each picture, adjust the orientation of individual pictures, fit the compilation to the duration of the music, and so on.

Notice that version 2 does not automatically add a textbox with the file name in it to each individual slide. You can still add a text box manually if you want to.

Another difference involves adding audio to your compilation. To add audio that plays while your picture compilation plays, drag an audio file from the Explorer window onto the audio track in the Timeline window.

You can also use the Timeline window to add subtitles to your picture compilation.



### Creating music compilations

---

Music compilations represent familiar territory too. As with picture compilations, you know most of what you need to know already from your work in version 1. Let's walk through it quickly and point out any areas of difference.

Assuming that you followed our instructions above for creating a picture compilation, the picture compilation is still loaded into the compilation window. In the Project Overview window, double-click the icon for Menu 1 (Page) to navigate back to that menu. Choose **Insert | Music Compilation** to insert a link to a new music compilation. You may need to drag the link to a new location on the menu so that it doesn't overlap the existing picture compilation. Add a button frame to the link as you did with the picture compilation. (By the way, note that now the picture compilation link button contains a graphic. This is simply the first graphic in your compilation.)

Double-click the music compilation link button to navigate into it. Again, you're on familiar ground, and things work very much like version 1 at this point. Navigate to music files in the Explorer window, and drag the ones you want to include in your music compilation into the Compilation window. You can use the techniques you already know from version 1 to add images to play while each song plays. You can also add video files to your compilation to show the video as the audio plays.

Again, notice that DVD Architect no longer adds the name of the file to the image automatically. You can manually insert a text box and place it anywhere in the workspace that you want.

As with picture compilations, you can use the Timeline window to add subtitles to your music compilation (which is great for printing song lyrics on screen!)

## VII: The Properties Window

The Properties window contains many of the functions that the Properties area did in version 1. But the window also opens up a world of new possibilities in DVD Architect 2 software. Among the most exciting new features the Properties window makes possible are assignable end actions, color sets, and button masks. And there's much more. In this section we'll explore the new Properties window in detail.



### Finding your way around the Properties window

---

The Properties window presents a wide variety of parameter controls that relate to many different objects and functions that you use in creating your DVDs. It uses a hierarchical structure similar to that of the Explorer and Project Overview windows (although presented slightly differently) to organize the parameter controls it contains. To see how it works, let's start with a brand new project. As with every new project, DVD Architect 2 software inserts the first menu for you automatically. At this point, the properties window contains many property-setting controls. However, you'll see throughout the course of this topic that it does not yet contain everything that it potentially can.

What the Properties window contains depends upon what object you select or into which you navigate. In other words, the Properties window's content changes in order to present you with just the controls that relate to the object on which you're currently working. It is extremely important to remember this point so that you don't get confused about what you're viewing in the window. For instance, when you're working on your menu page properties, make sure that you don't have any of your interface buttons selected since selecting buttons opens up additional properties related to the selected button.

Since your project is brand new, it contains only one menu. Thus, the Properties window currently contains two major headings: Menu Page Properties and Color Sets. You can identify major headings like these in a couple of ways. First, the major heading names are presented over a light blue to white gradated tint. Also, notice the indentation structure of the window contents. The major headings are not indented, while subheadings are. Certain subheadings have subheadings of their own which are further indented.

When a heading contains subheadings, click the plus or minus sign in front of it to expand or collapse the subheadings. Try it now. Click the **Minus sign (-)** in front of the headings **Menu Page Properties** and **Color Sets**. This collapses the information in the list down to these major headings. For now, click the **Plus sign (+)** in front of the Color Sets heading to expand it so that we can discuss color sets in the following section.



### Understanding Color Sets

---

Color sets provide a versatile and fully customizable method for choosing the colors of certain objects in your project—namely button highlights and subtitle text outlines and backgrounds. You have four color sets to work with on every menu in your project, and each set contains four colors. DVD Architect 2 software designates each of the four colors in a set for a specific aspect of the object to which you assign the set. The four aspects that make up a color set include:

- Fill color—used for the highlight color on menu buttons and the color of subtitle text.
- Outline/background color—used for the background or outline color of buttons and subtitle text.



- Anti-alias color—helps smooth the edges of menu button highlighting and subtitle text against the outline/background color. Typically you want this to be a blend or average of the fill color and the outline/background color.
- Transparent color—specifies transparent portions of subtitle text events and menu button highlighting. For instance, if you set your transparent color to red, you are essentially telling the software to treat any red areas as if they are transparent.

Each of the four color sets on a menu can be custom or project-wide. You can specify four project-wide color sets, and then use the project-wide color sets for any menu in your project. This is a good way to create consistency across menus. However, you can also choose to use up to four custom color sets on each menu. Custom color sets override the project-wide color sets for just the object to which you apply the set. If you use custom color sets on each menu, then you can make each menu's color sets different from every other menu's color sets.

By default, DVD Architect software assigns each of the four color sets to specific purposes for each new menu you open. Color Set 1 controls the color of button highlights for buttons in their selected state. Color Set 2 controls the color of button highlights for buttons in their activated state. Color Set 3 controls the color of button highlights for buttons in their inactive state. Color Set 4 controls the color of your subtitle text events. We'll explore each of these later. Although what we've just described is the default behavior, you'll see later that you can change it if you want to.

Click the **Minus Sign (-)** for any expanded color set so that you see only the subheadings for the four color sets. To the right of the label of the color set (for example, to the right of the label Color Set 1), a field identifies the color set as either Custom or Project wide. Notice that until you make any changes, Color Sets 1 and 2 use custom settings, while Color Sets 3 and 4 use project-wide color settings. As mentioned, you can change any of the color sets to be either custom or project-wide. Click the label for **Color Set 2**. A drop-down arrow appears at the right side of the current property setting. Click the drop-down arrow, and choose **Project wide** from the drop-down list. You have just specified that Color Set 2 will now use the project-wide settings instead of the custom set.

You can also change the colors of each color set. For instance, let's change the fill color of each of the first three color sets. First, click the **Plus Sign (+)** in front of Color Set 1 to expand it. Then, click the color box next to the fill color label. Now click the drop-down arrow at the right edge of the color bar to access the color chooser. The color chooser is familiar to you from working in both Vegas software and version 1 of DVD Architect software. Specify the color R=0, G=0, B=255, and set the alpha channel (the A field) to 255. Press the **Enter** key to lock these settings in. This specifies a completely opaque dark blue for the fill color of Color set 1. Now set the fill color for Color Set 2 to R=0, G=255, B=0, and A=255 (which creates a completely opaque green.) Finally, set the fill color for Color Set 3 to R=255, G=0, B=0, A=255 (a completely opaque red.)

You could change all of the colors in each color set in the same way. For now, let's leave all of the other colors as they are. We'll move on to a discussion of Menu Page properties, and during the course of that discussion, you'll have the opportunity to see how the changes you made here affect your project.



### Setting your Menu Page properties

---

Each menu in your project contains its own set of properties. These appear in the Properties window under the Menu Page Properties heading. Click the **Minus Sign (-)** next to the Color Sets heading to collapse that heading completely. Click the **Plus Sign (+)** next to the Menu Page Properties heading to expand it. Some of the properties in this window will be familiar to you from your experience in version 1, although they are presented differently here. Other

properties here introduce some of the most exciting new features of version 2 including assignable end actions and masking techniques.

### *Background media*

The first menu page property, Background media, gives you options for how you want to deal with a graphic that you've assigned to be the background of your menu when that graphic's pixel aspect ratio does not match the aspect ratio of the workspace. This property consists of the same three choices that were available in version 1 – Letterbox, Zoom to fit, and Stretch to fit – and those options treat the graphic the same way they did in the earlier version.

Unless you changed it since you started the new project, the Background media property is set to Stretch to fit. Choose **Letterbox** from the Background media drop-down list, and notice that now the background image does not fill the entire Workspace. Change the property setting back to **Stretch to fit**.

By the way, now that you know where to find the drop-down list to change each property's setting, you can save yourself a click. Instead of first clicking on the property label, click at the right edge of the property setting – where you know the drop-down arrow is – to open the drop-down list immediately. This works for all properties.

### *Menu length*

The Menu Length setting has more relevance when you add a video file as your menu background as opposed to a still image. This property also works just as it did in version 1. You still have two choices here: You can let the software calculate the menu length for you based on the length of the video file (the Auto calculate option), or you can specify a menu length (the Specify option), thus overriding the file length.

### *Length*

If you set the Menu Length property to Specify, the Length property becomes editable. You can type a specific length (in Hours:Minutes:Seconds.frames) into the Length property field, or you can click the drop-down arrow. This property introduces a new control. In this case, the drop-down arrow uncovers a slider that you use to specify the length of the menu. Drag the slider right to increase the length and left to decrease it. You'll see this slider control on many other properties as well.

### *Selected button colors*

Here's where what you learned about color sets earlier comes into play. The Selected button colors property determines the color highlight to be used when the viewer navigates to and selects a button on this menu of the DVD interface.

Click the **New Project** button to start a new project. From the Buttons window, drag two framed buttons to the workspace. Click the **Preview** button. Notice that a highlight identifies the currently selected button. Use the virtual remote control device to select the other button and notice that the highlight changes accordingly.

This highlight is determined by the Color set chosen in the Selected button colors property, which by default uses Color Set 1. You can set this property to use any – or none – of the four color sets you've define for this menu page. If you want to change which color set you use for the selected button colors, first make sure that neither of the buttons that you added to your menu is selected (you can click on the menu background image to deselect a selected button), and choose a different color set from the Selected button colors drop-down list in the Properties window.

For now, instead of choosing a different color set, let's modify the one we're already using (Color set 1) to see how you can affect the look of your button highlights. In the Properties window,

expand the Color Sets heading if it's not already expanded, then expand the Color Set 1 subheading. Click the color bar for the fill color to access the color picker. Change the color assigned to the fill color to R=255, G=0, B=0, A=255.

Click the **Preview** button. You can easily see how the highlight has been changed by the new settings you entered for the fill color of Color Set 1. Close the Preview window.

In the Project Overview window, right-click the **Menu 1** folder and choose **Insert | Menu Page** from the menu. Add two buttons to the new menu page – Menu 1 (Page 2), and then preview that menu page. You can see that since this is another page of Menu 1, the highlighting that you set for Menu 1 (Page 1) applies to this page too. You could change the Menu 1 (Page 2) color set settings if you wanted page 2 to be different than page 1 for some reason.

Back in the Project Overview window, right-click the **Menu 1 (Page 1)** icon and choose **Insert | Submenu** from the menu. Add a couple of buttons to the new submenu and preview the submenu. The submenu does not inherit the color settings of its parent menu.

#### *Activated button colors*

The Activated button colors property enables you to specify the color of the highlight used on a button when the user navigates into it. You can think of it as the button's click state color. Again, you can assign any, or none, of the four color sets to handle this. By default, new menus use Color Set 2 for this purpose. You can also modify the individual colors within the color set as you did above with the color set that the Selected button colors property uses.

#### *Inactive button colors*

The Inactive button colors property enables you to specify the color of the highlight used on a button that has not been selected. In other words, this is the highlight used on a button that is "just sitting there" waiting to be selected. By default, this property is set to None (all transparent) so that inactive buttons don't contain any highlighting at all. You can, of course, assign any of the color sets to this property. If you decided to do so, Color Set 3 is the one that is intended for this purpose.

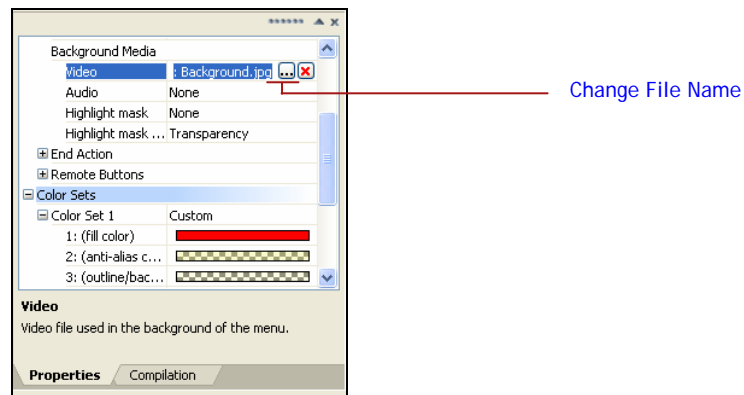
#### *Background Media | Video*

The Background Media property has several subproperties that enable you to control the media that you use to make up the background of the current menu. You know from version 1 as well as from earlier sections of this paper that you can change the file that you use for the background on menu pages. The Video subproperty lists the name of the file currently assigned to the video portion of the menu background. You saw earlier how you can use the Timeline window to change the background image. You can also change the image from inside the Properties window with the Video subproperty.

To change the background video image, click the drop-down arrow for this property, click the **Change Filename** button (shown in **Figure 29**), and search your computer drives for the file you want to use. If you don't want any background image, click the **Clear Filename** button to delete the current background image.

**Figure 29**

Click the **Change Filename** button in the Video field to browse to and select a still or motion file to be used as the background for the currently selected menu.



### *Background Media | Audio*

You also know from version 1 that you can assign background audio to a menu. In version 2, you can do so in the Timeline window, or you can do so here with the Audio subproperty. Again, use the **Change Filename** button so select the audio file you want to use as the audio portion of the background for the current menu, or click the **Clear Filename** to remove the current audio file.

### *Background Media | Highlight mask*

With DVD Architect 2 software, you have powerful new masking techniques that you can use to customize the look and behavior of your interface. Later in this document you'll learn how to create masks, and how to use them in your projects. For now, we'll mention that once you have created a mask, you use the Highlight mask property to apply the mask to your menu. Click the drop-down arrow and click the **Change Filename** button to navigate to the mask file that you want to use for this menu.

### *Background Media | Highlight mask mapping*

Again, you'll learn all about masking later in this document. When you do, you'll learn all about the three mask mapping options available in this property. After you know how to use them and which option you want to use, click the drop-down arrow for the Highlight mask mapping property and choose the desired option from the list.

### *End Action*

The End Action property is one of the most powerful and exciting new features of DVD Architect 2 software. End actions make it possible for you to direct the viewer's viewing experience. You already learned how to use the DVD Start Item to determine what the viewer sees when they first start your DVD. With end actions, you can dictate what they do next as well. The End Action property of the Menu Page properties has three subproperties. The following table discusses each of these.

- **Command** – This property determines what you want the DVD to do when the viewer reaches this menu. Choose **Loop** from the drop-down list to create a menu that restarts from the beginning when it reaches the end, and continues to play in an endless loop until the viewer navigates into one of the links on the menu. You might want to use this option when you use a video for your background media.

Choose **Hold** to create a menu in which the background media plays once and then stops to wait for the viewer to navigate into one of the links on the menu.

Choose **Activate Button** to create a menu that plays the background media once, then waits for a specified amount of time. Once the specified time elapses, the DVD automatically navigates into a specified link. This might be great for something like a self-running kiosk presentation in which you want to give the viewer time to choose a link into which to navigate, but automatically navigate into a predetermined link after a certain amount of inactivity.

- **Timeout**— Use this property to specify the length of time the DVD should wait before it navigates into the predetermined link when you choose the Activate Button option for the Command property as discussed above. Specify the desired timeout time in “Hours:Minutes:Seconds:Frames” format. This property is only relevant to the Activate Button scenario, and is thus not active unless you’ve chosen that option.
- **Button**— Use this property to specify the button into which the DVD should automatically navigate after waiting for the timeout time that you specified in the Timeout property. The options available in the drop-down list for this property depend completely on the makeup of your DVD. The option Broken Button printed in red ink means that you haven’t yet chosen the button into which you want to navigate. All of the buttons you’ve added to your project that lead to other menus and menu pages, compilations, and media in your file appear as options in the drop-down list. This property is only relevant to the Activate Button scenario, and is thus not active unless you’ve chosen that option.

### Remote Buttons

You can use the Remote Buttons property to dictate which buttons on the viewer’s remote control device will be operational when they view your DVD. There may be times when you want to restrict the viewer’s ability to access all of the functionality supplied by his or her remote. For example, you may want to disable the viewer’s ability to use the remote to navigate away from a menu before the background media on the menu has finished playing.

There are many subproperties under the Remote Buttons property. Each of these subproperties represents a button on the typical remote control device. Choose **Yes** for each property to activate the remote button that relates to the property. Choose **No** to disable the button that relates to the property.

Most of the subproperties in this section are self-explanatory. If you aren’t sure exactly what a subproperty in this section controls, the DVD Architect software’s Online Help files provide an excellent description of all of the choices. To access the help files, choose **Help | Contents and Index**. Click the **Contents** tab. Double-click the **Using DVD Architect Software** entry. Double-click the **Menu-Based DVDs** entry. Click the **Editing Menu Page Properties** entry. In the right-hand of the Online Help window, click **Edit Remote control button behavior**, and scroll down to see the complete list.



### Setting General Object properties

The general object properties enable you to view and adjust the size and positioning of the selected object on your workspace. The General Object Properties category appears in the Properties window only when you select an object such as a button, graphic, or text box in the workspace.

Start a new project. As usual, the new project already has a menu—Menu 1 (Page 1)—and that menu contains a text box at the top. In the Properties window, click the **Minus Sign (-)** in front of

both Menu Page properties and Color Sets to collapse those property categories. Notice that those are currently the only two properties categories that appear in the window. Now, click the Menu 1 text box to select it. The General Object Properties category now appears in the Properties window. As with other categories, click the **Plus Sign (+)** and **Minus Sign (-)** to expand and collapse the General Object Properties list.

### *X position*

The X Position property shows you the X coordinate of the center of the bounding box that contains the object – in other words, how far to the right of the left edge of the Workspace the center of the object sits. Drag the text box to the right and notice that when you let go of the mouse button the X Position value increases to reflect the box's new position. Naturally, the X Position value decreases when you reposition the box farther left. You can also enter precise values into the text field for this property, or click the drop-down arrow, and use the slider to choose a new value. Click on the **X Position** value to select it, and type in **360**, then press the **Enter** key to change the X coordinate to 360 pixels from the left edge of the Workspace. This puts the text box back into the center of the Workspace (horizontally speaking.)

### *Y position*

The Y Position property shows you the Y coordinate of the center of the bounding box that contains the object – in other words, how far down from the top edge of the Workspace the center of the object sits. Just as when adjusting the X position, you can drag the box up and down, type a specific value, or use the slider to adjust the Y position. Use the slider now to adjust the Y position to approximately 120. The text box is now centered both left and right (the X position) and up and down (the Y position) inside the Workspace.

### *X size*

The X size property shows you the width of the selected object. You can enter a specific value or use the slider to adjust the X size. Notice that this adjusts the bounding box of the object. For instance, drag the slider to the right and notice that the width of the box changes, but the width of the text within the box remains the same. Only when you make the box too small to hold the object does the object itself actually change size. For instance, drag the slider to the left. The box becomes narrower, but the text itself remains the same size until the box becomes too small to hold the text at its present size. When it does, the text shrinks to fit inside the box.

### *Y size*

The Y size property shows you the height of the selected object. As with the X size, adjustments that you make here only affect the size of the bounding box unless you make the box too small to fit the object that it holds, in which case, the size of the object itself changes too. To increase the height of the box, use a higher Y size value. To decrease it, use a smaller value.

### *Maintain aspect ratio*

In working with the X and Y sizes in our discussion above, you saw that the adjustments you made do not affect the object in the bounding box unless you make the bounding box too small to hold the object at its present size. This behavior stems from the fact that the Maintain aspect ratio property is set to Yes. Set this property to **No**. Now change the X and Y size properties of the text box and notice that now any changes you make adjust the size of not only the box, but also of the object that the box contains. In this way, you can distort the object. For instance, increase the X size only, and you stretch the text right and left. Now increase the Y size only, and you stretch the text up and down.

Click the **Minus Sign (-)** next to the General Object Properties heading to collapse that section.





## Assigning button properties

---

Buttons introduce a number of new properties that appear in the Properties window. Start a new project, and drag a button from the Button window to the Workspace. When you do, the button remains selected in your project. Notice in the Properties window that in addition to the Color Sets, Menu Page, and General Object properties headings, you now have an additional heading: Button Properties. The Button Properties heading contains several subheadings, all of which we discuss in this section.

### *Action | Command*

The properties listed under this subheading control what happens when the viewer navigates into the button. The first option, Link, enables you to create a button that navigates to a specific menu, compilation, or media file.

You can also create buttons that will halt playback of the DVD (choose **Stop**), or resume playback of a stopped DVD (choose **Resume**.)

Let's create a button that links to another menu. In the Project Overview window, right-click the icon for the DVD (the one that looks like a disc) and choose **Insert Menu** from the menu. This adds Menu 2 (Page 1) to your project. Now, double-click the Menu 1 (Page 1) icon to navigate to Menu 1. Click on the button you added earlier to select it. In the Properties window, set the Command property under the Action subheading to **Link**.

### *Action | Destination*

The Destination property specifies where the button leads when the viewer navigates into it. At the moment, it probably says in red ink, "Broken Link" because you haven't yet specified a destination for the button. Notice that the drop-down list for the Destination property contains several options. These are pretty self-explanatory. Choose **Menu 2** from the drop-down list. Note that every menu, menu page, submenu, compilation, and media file in your project appears in this list. This allows you to create a navigation button to any object in your project. Name the button on Menu 1 of your project, "Menu 2."

Click the **Preview** button to test your new navigation button. On Menu 1, navigate into the **Menu 2** button. This takes you to Menu 2 of your project.

Choose **Stop** from the Link property drop-down. Notice that the Destination property is not applicable (N/A) because stop property simply creates a button that stops playback of the DVD.

Choose **Resume** from the Link property drop-down. The Destination property now lists any media files you have in your project. This enables you to specify the movie with which the DVD should resume playback upon navigation into this button.

### *Action | Destination Chapter*

The Destination Chapter property enables you to get very specific with just where you want the button to lead. Use the Project Overview window to navigate to Menu 2. Click the **Insert Media** button, and add a video file to Menu 2. If the media file you added does not contain chapters, navigate into the media file, and use the Timeline window to add a few chapters to the file. Now navigate back to Menu 1. Set the Destination property for the button on Menu 1 so that it points to the video file you just added on Menu 2. From the Destination Chapter drop-down, choose one of the chapters that you added to your media file. Preview the project, and notice how the button on Menu 1 now navigates into the video file at the exact point of the chapter you specified in the Destination Chapter property.

The Destination Chapter property also works when you're linking to compilations.



### *Action | Destination Button*

The Destination Button property gives you control over which button on a menu will be highlighted when you navigate to that menu using the button for which you're setting properties. To see how this works, add another button to the right of the button already on Menu 2, and set its Destination property to Menu 1. Navigate back to Menu 1, and set the Destination property for the button there to navigate to Menu 2.

Notice that by default the Destination Button property for the button on Menu 1 is set to Default. Preview the project, and navigate into the button on Menu 1. It takes you to menu 2, and you see that the first button on the menu (the one nearest the top left of the menu) is highlighted. Close the Preview window.

Now change the Destination Button property for the button on Menu 1 to **2: Link - Menu 1 (Page 1)**. Preview the project, and navigate into the button on Menu 1. Notice that this time the button that you created that links back to Menu 1 is highlighted when you come to Menu 2.

### *Action | Set Audio Stream*

This property enables you to build a button that the viewer can use to choose an alternate audio stream through a button on the DVD interface. Navigate into the media file that you added to your project earlier. In the Timeline window, add an alternate audio track to that media. Designate the original track as one language (perhaps English), and the new audio track as another (perhaps German.) Set the Destination property for the button on Menu 1 to play the media file. Make sure that the original audio track is the activated track, and preview the project. Navigate into the media file, and notice that it plays the original audio track.

Now change the Set Audio Stream property for the button on Menu 1 to the alternate audio track (German in our example.) Preview the project, and navigate into the button on Menu 1. This time the media file plays with the alternate audio track.

### *Action | Set Subtitle Stream*

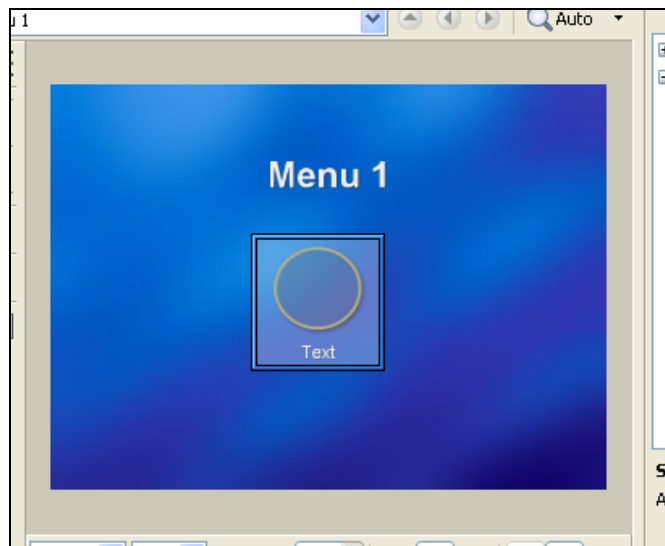
The Set Subtitle Stream property works in exactly the same way as the Set Audio Stream property that we discussed in the previous section. It enables you to build a button that the viewer can use to turn subtitles off (choose the **Off** option) or to choose a specific subtitle stream (choose the number that corresponds to the stream you want the button to activate. This has the effect of turning subtitles on and simultaneously activating the specified stream.)

### *Graphics | Button Style*

Start a new project. In the Buttons window, click the **Show Framed Buttons** button and select **Corporate 2** from the Button Source drop-down. Drag the button from the Button window onto your menu, as shown in **Figure 30**.

**Figure 30**

Drag the Corporate 2 framed button onto the interface.



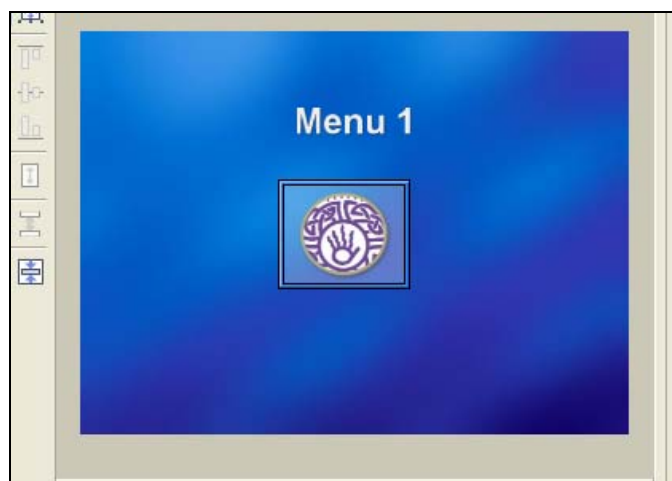
Just as in version 1, buttons can consist of just text, just an image, or both. The Button style property enables you to specify the type of button you want. For the button you just added, click the drop-down arrow for the Button style property, and choose **Image only** from the drop-down list.

#### *Graphics | Thumbnail*

If you choose Text and Image or Image from the Button Style property, you're likely to want the button to contain an image that represents the object to which the button links. Use the Thumbnail property to specify which image to use. Click the drop-down arrow for the Thumbnail property. Click the **Change Filename** button. This brings up the Open Media dialog. Browse to a file that you want to use as the thumbnail image for your button (for now, choose a still-image file.) Notice that the file now appears inside the button as shown in **Figure 31**.

**Figure 31**

The file chosen in the Graphics | Thumbnail field is used as the thumbnail image in the selected button.



Right-click the button and choose **Copy** from the menu. Right-click the button again and choose **Paste** from the menu. You've just created an exact duplicate of the button. Click on the second button to select it and bring its button properties into the Properties window. In the Graphics section, click the drop-down arrow for the Thumbnail property. Click the **Clear Filename** button to remove the thumbnail image from the button.

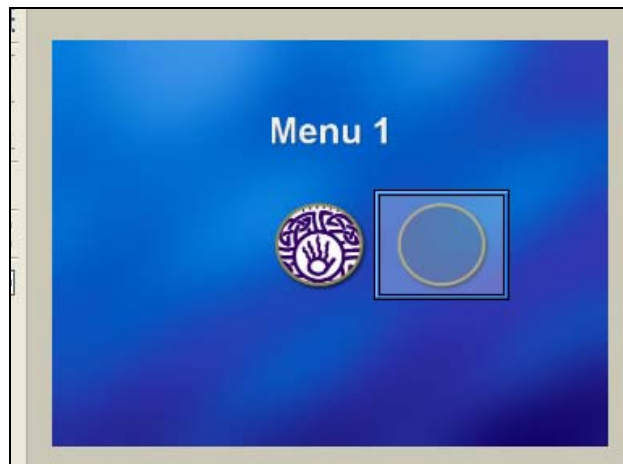
### *Graphics | Thumbnail | Mask*

The default buttons available in the Buttons window have masks that define the shape of the button. The default masks are obviously part of the application as they were in version 1, but in version 2, you can assign your own custom masks to buttons.

For the buttons that you have in your project right now, the mask defines a circular area. You can see in **Figure 32** (and hopefully in the project you are creating as you follow along) that when a button contains no graphic, the mask shows up as a dark shape. When you add a graphic with the Thumbnail property, the mask is not visible, but "cuts" the shape of the graphic.

**Figure 32**

Remove the thumbnail image from the button to see the mask as a dark blue circle.



To see how the mask effects your button, select the button on your menu that contains the graphic you added to it with the Thumbnail property. Notice that the graphic fits perfectly into the circular button. That's because the mask cuts a circular figure, even though (as you can see) the button has a square bounding box (the area that defines the actual button, as opposed to the button graphic.) Now, click the drop-down arrow for the Mask property and click the **Clear Filename** button. **Figure 33** shows that the graphic now appears in its original rectangular form, even though that causes the thumbnail to be seen outside of the circular button frame (we'll talk about button frames shortly.) Click the **Undo** button to take the button back to its masked state.

**Figure 33**

With the button mask removed, you can see the entire file used for the button thumbnail.



#### *Graphics | Thumbnail | Start Time*

When you specify a video file for the Thumbnail, you can set the Start Time property to determine which frame of the video appears in the button. Enter a specific value in the Start Time field, or click the drop-down arrow and use the slider control to find the desired frame.

#### *Graphics | Thumbnail | Style*

When you specify a video file for the Thumbnail, you can choose to have the frame specified in the Start Time property appear as a still image (choose **Still**) or have the thumbnail appear as a full-motion video that starts on the frame specified by the Start Time (choose **Animated**).

#### *Graphics | Frame*

Your buttons can also have frames. Frames give you an opportunity to modify the look of your buttons. For instance, the buttons that we've been working with have a circular frame made up of a gold color and a light shadow. The frame typically has a transparent center so that you can see through it to the thumbnail image you are using.

Use the Frame property to apply a frame to, or remove a frame from, a button. Click on the button in your project that does not contain the graphic thumbnail. Click the drop-down arrow for the Frame property and click the **Clear Frame** button. The button's frame disappears as shown in **Figure 34**. Notice that unlike when you remove the mask, removing the frame does not alter the shape of the graphic that you can see. You can still see the mask outline in your button. Click the **Undo** button to put the frame back.

**Figure 34**

Click the Clear Frame button to remove the frame from the button.



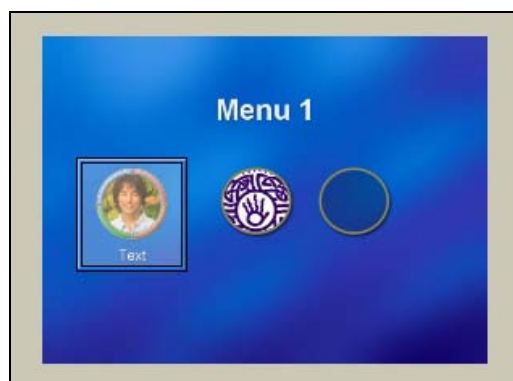
### Graphics | Frame | Mask

As we mentioned, frames typically have a transparent center so that you can see through them to the thumbnail graphic that you've applied to the button. When a button uses a still image for a frame, the image is saved in a file format that supports transparency (typically .png) so that the artist simply builds transparency into the artwork. However, buttons also support file formats that do not support transparency (for instance, .jpg and .gif.) When the image used for the frame does not support transparency, you can use the Mask property to include a mask file that cuts a hole in the frame through which you'll be able to see the thumbnail.

From the Buttons window, choose **Animated 1** from the Source drop-down list. Three buttons appear in the window. Hover your mouse over the middle button and notice that the thumbnail image has an animated frame. Add a new button to your project using this button style. Use the Thumbnail property to add a graphic to the button as in **Figure 35**.

**Figure 35**

Click the Change Filename button in the Graphics | Thumbnail and browse to a file to use as the button thumbnail image.



The button's Frame property shows that the frame uses a .gif file. (In fact, it uses an animated .gif file, although it doesn't have to.) That's what creates the animated frame. Since .gif files don't support transparency, the button requires a frame mask to cut a hole in the center. The Mask

subproperty under the Frame property shows that a frame has been applied to this button. That's what enables you to see the Thumbnail graphic in the button.

To really see what's going on, click the drop-down arrow for the Mask property (under the Frame property) and click the **Clear Filename** button. **Figure 35** shows the result. Since the frame's file format does not support transparency, the color used for the inside (and, for that matter, the outside) of the frame shows through. This demonstrates how the mask cuts the hole in the frame so that you can see the thumbnail.

**Figure 35**

With the Frame Mask deleted the thumbnail image is obscured by the frame.



#### *Graphics | Frame | Start Time*

This property works just the same as the Start Time property under the Thumbnail heading except that it applies only to the file you specify as the frame in the Frame property.

#### *Graphics | Frame | Style*

This property works just the same as the Style property under the Thumbnail heading except that it applies only to the file you specify as the frame in the Frame property.

#### *Highlight | Style*

Use this property to choose the type of highlight you want to use on the button when the viewer navigates to it. You'll recognize all of the highlight styles from version 1, with the exception of the Custom option. The Custom style enables you to specify a graphic or video file that you want to use as a highlight mask. To use a custom highlight, choose **Custom** from the drop-down list, then specify a mask and a mask mapping technique as discussed in the following two sections.

#### *Highlight | Mask*

When you set the Style property to Custom, you then set the Mask property to the file that you want to use as the highlight mask. Click the drop-down arrow and browse to the file you want. Later in this document, we'll show you how to create the artwork you use as your mask and discuss this property in detail.

#### *Highlight | Mask Mapping*

Click the drop-down arrow for the Mask Mapping property and choose the desired option from the list. You'll learn more about masks and mask mapping later in this document.

#### *Navigation*

The Navigation property enables you to control what button on the menu will be selected when the viewer presses a certain navigation button (Left, Right, Up, or Down) on his/her remote

control device. Set this property to **Auto** for each direction if you want the software to determine which button should be chosen (the software makes this determination based on your button layout.)

An example will help you see how you can override this Auto behavior. Start a new project, and add three buttons next to each other in a horizontal row to Menu 1. Add three more menus to your project (you should have a total of four menus.) Back on Menu 1, link the button on the left to Menu 2, the middle button to Menu 3, and the right button to Menu 4. Click the **Preview** button and use the arrow keys on the virtual remote device to highlight the various buttons. By default, the buttons Navigation properties are all set to Auto, and the software makes the navigation decisions for you. Note in specific that when the middle button is highlighted, clicking the Left remote arrow causes the left button to be highlighted. In a moment, you'll override this behavior. Close the Preview window.

In the Workspace, click the middle button. Change its Navigation | Left property to **3: Link - Menu 4 (Page 1)**. Click the **Preview** button and use the arrow keys to highlight the middle button. Now click the **Left** button on the virtual remote. This time the Right button is highlighted because of the setting you chose for the middle button's Navigation | Left property. You can map each of the other arrow keys for this button in the same way.



### Working with Picture Compilation properties

---

To explore Picture Compilation properties, start a new project, and insert a picture compilation at Menu 1. Navigate into the compilation, and add several pictures to the Compilation window. Now go back to the Properties window.

Notice that when you're navigated into a picture compilation, the Properties window has only two main headings: Picture Compilation Properties and Color Sets. We're interested in Picture Compilation Properties now, so click the **Minus (-)** sign next to the Color Sets heading to hide all of its subheadings. If necessary, click the **Plus (+)** sign next to the Picture Compilation Properties heading to expand it.

#### *Track Media*

The Track Media subheading lists all of the audio tracks that you've added to your compilation. Since you haven't yet added any additional audio tracks, the list contains only Audio 1, the default audio track for the compilation. Click the drop-down arrow for the Audio 1 property, and click the **Change Filename** button to browse to and select an audio file that you want to place on audio track one.

In the Timeline window, insert an additional audio track. Notice that back in the Picture Compilation section of the Properties window, you now have two Audio tracks listed under Track Media. You can add an audio file to track two in the same way that you added audio to track one. To clear the audio file from either track, click the drop-down arrow for the track and click the **Clear Filename** button.

#### *End Action*

Use the End Action properties to dictate what happens upon completion of the picture compilation. Choose **Link** from the Command property if you want to take the viewer to a specific menu, media file, or another compilation when they finish viewing this one. Choose **Stop** to make the DVD stop playing after the last slide in the compilation.

All of the other properties in this section work just the same as the button properties of the same names that we have already discussed.



### Remote Buttons

We talked about the Remote Buttons properties earlier during our discussion of Menu Page Properties. The Remote Buttons properties in the Picture Compilation Properties work exactly the same way. They enable you to enable or disable specific buttons on the viewer's remote control device as he or she watches the picture compilation.



#### Setting your Music Compilation Properties

---

The properties in this section fall under two subproperty headings: End Action and Remote Buttons. These properties work identically to the properties of the same name that we just discussed for Picture Compilation Properties.



#### Setting your Media Properties

---

Insert a media file into your project (choose a video file.) Navigate into the media file, and expand the Media Properties heading in the Properties window. The properties in this section are nearly identical to those in the Picture Compilation Properties heading that we discussed earlier. The only difference is that the Track Media heading includes the Video property. This property enables you to change or clear the file that you link to for this media. Click the drop-down arrow and click the **Change Filename** button to choose a new media file, or click the **Clear Filename** button to remove the video file.

Note that DVD Architect software treats the video and audio portions of the media file independently so that you can change one without changing the other.

Besides this difference, the remaining properties are identical to and operate in the same way as do those of the same name that we already talked about in the Picture Compilation Properties discussion earlier.



#### Setting Subtitle Properties

---

In the Timeline window, add a subtitle track to the media file that you inserted into your project in the previous section. Add a few subtitle events to the track. Click on one of the subtitle events in the Timeline window. Notice that the Properties window now lists Subtitle Properties.

There is just one subtitle property: Colors. Use the Colors property to choose which color set you want to use for your subtitles. Click the drop-down arrow for the Colors property, and choose the desired color set from the list. Notice that DVD Architect software normally reserves Color Set 4 for use with subtitles.

## VIII: Masks

During our discussion of the Properties window, the techniques of masking came up several times. In this section we'll discuss masking in detail. You'll learn why and where to use them, as well as how to make your own custom masks. The masking capabilities of DVD Architect 2 software make it possible to completely customize your DVD interface.



#### Creating custom masks for your button graphics

---

Earlier we talked about how some buttons use masks to control the appearance of the button thumbnails and button frames. We mentioned that you can create custom masks that you can use on your buttons. Let's talk about how you create those masks.

The masks that you apply to button thumbnails and frames are relatively simplistic. These masks are made up of shades of black. Typically, they are simply two colors--completely black or completely white—but could also contain shades of gray. When you lay a mask over a graphic

file, only the areas of the mask that are white allow the graphic to be seen. In other words, the white portion of the mask cuts the hole through which you see the graphic beneath.

### *Thumbnail masks*

Let's see it in action. Start a new project, click the **Show Framed Buttons** button in the Button window, and choose **Corporate 2** from the Button Source drop-down list. Add the button to your menu. Click on the button in the Workspace to select it if it's not already selected. In the Properties window, go to the Button Properties for this button. Under the Graphics heading, use the Thumbnail property to apply a thumbnail graphic to the button as shown in **Figure 36**.

**Figure 36**

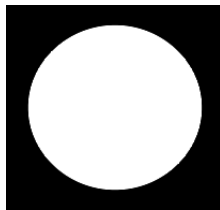
Button with thumbnail graphic applied



Note that this button has a default mask applied to it. **Figure 37** shows the file that this button uses as the mask.

**Figure 37**

This figure shows the button mask that was used for the button in Figure 36.

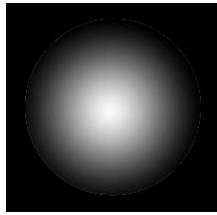


You can see that the mask graphic is simply a black square with a white circle in the middle. It's the white circle that defines the shape of the button thumbnail you see. The black areas treat the thumbnail as if it were transparent.

Use a graphics program to create a file like the one in **Figure 37** except that instead of a white circle, create a circle that uses a radial blend (white in the center to black on the edges) as in **Figure 38**. Save it as RadialBlend.png (if you can't make .png files with your graphics application, choose .jpg or .gif.)

**Figure 38**

Mask using RadialBlend.png



Now apply the RadialBlend.png file to the thumbnail Mask property for the button in your DVD Architect 2 software project. You can see that the button graphic now has feathered edges created by the varying amounts of white in the mask file. See **Figure 39** to see what our button looks like.

**Figure 39**

Button with RadialBlend.png mask applied



Your button masks (and therefore, the visible shapes of your buttons) do not have to be perfect shapes like circles and squares. Experiment with other shapes to see the different kinds of buttons you can create. For example, create a mask in the shape of a car or a tree and apply it to your buttons to see how the buttons look in that shape.

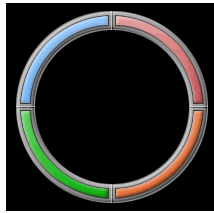
### *Frame masks*

Frame masks work exactly the same way as thumbnail masks—they simply have a different shape. Start a new project. In the Buttons window, choose **Animated 1** from the Button Source drop-down, and add the middle of the three buttons to your Workspace. Add a thumbnail graphic to the button.

Recall that this button uses an animated .gif file for the frame. **Figure 40** shows one frame of this .gif file graphic. Notice that the inside of the frame is black since .gif files do not support transparency. For this reason, the button contains a frame mask to cut a hole in the .gif file so that you can see the thumbnail graphic.

**Figure 40**

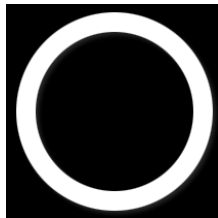
The inside of this frame mask is black since .gif files do not support transparency.



The Frame Mask property tells you the name of the file that this button uses as a mask. **Figure 41** shows what the frame mask file looks like.

**Figure 41**

The white portion of the frame mask will allow the frame graphic to show through.



Again, the white areas of the frame mask allow the frame graphic to show through while the black areas cut the holes in the frame so that you can see through to the button thumbnail. As with the thumbnail mask, you can create frame mask with varying shades of gray as well as frame masks in any shape you want.



### Creating custom highlight masks

---

Earlier in this document, we talked briefly about masks that you use to customize your button highlighting. Let's see how these masks work and how to create them.

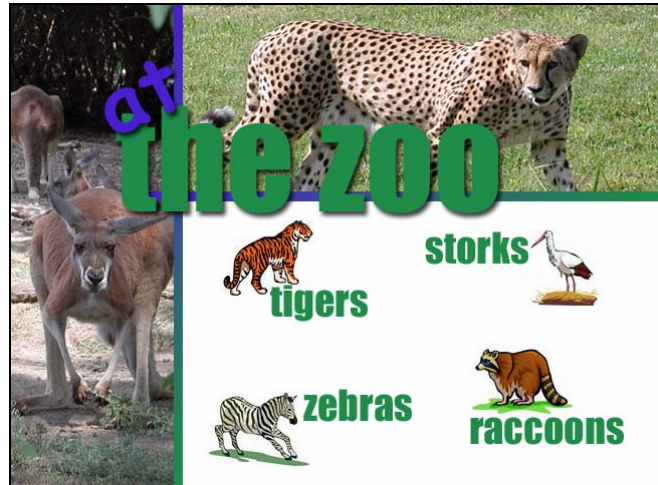
#### *Menu background media highlight masks*

The background media highlight mask property works great for creating custom highlights when you want to create your DVD interface in a graphics application or even in Vegas 5 software.

**Figure 42** shows a menu page graphic that we created in our Graphics program.

Figure 42

Example of a custom menu created in a graphics program.

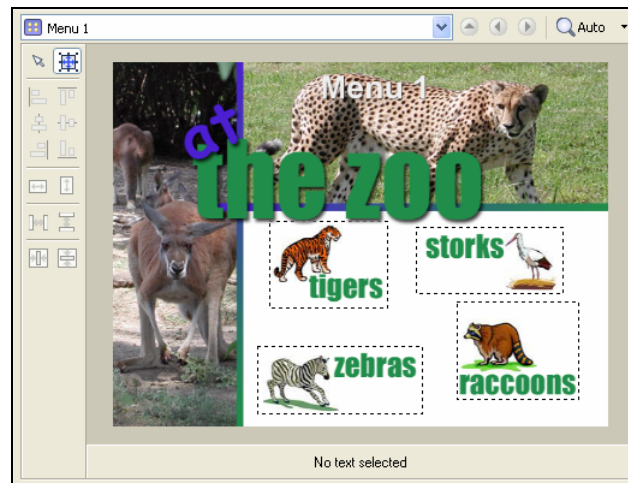


Notice that we've created the button artwork along with the rest of the menu background. Create something similar in your graphics program so you can follow along with the rest of this discussion.

Now, start a new DVD Architect 2 software project. In the Properties window, set the Background Media Video property to use this artwork. Delete the "Menu 1" title. Now, insert four empty buttons (choose **Insert | Empty Button**) into your project. For each button, set the Button property style (under the Graphics section) to **Image only**, and the Style property (under the Highlight section) to **Custom**. Position one button over each of the four animals and their corresponding name labels. Resize the buttons to make sure each button encompasses the entire animal artwork and the name as shown in **Figure 43**.

Figure 43

Place invisible buttons around each of the animal pictures and their names, and resize the buttons to fit both the picture and the name.



Preview the project. Notice that no button is highlighted. Click the various arrows on the virtual remote control device and see that no matter how you navigate, no highlights appear on these

buttons. This is where the Highlight mask property under the Background media heading comes in. First, you need to create the highlight mask artwork. **Figure 44** shows the menu artwork in our graphics program with the addition of our highlight artwork.

**Figure 44**

Menu with addition of highlight artwork.

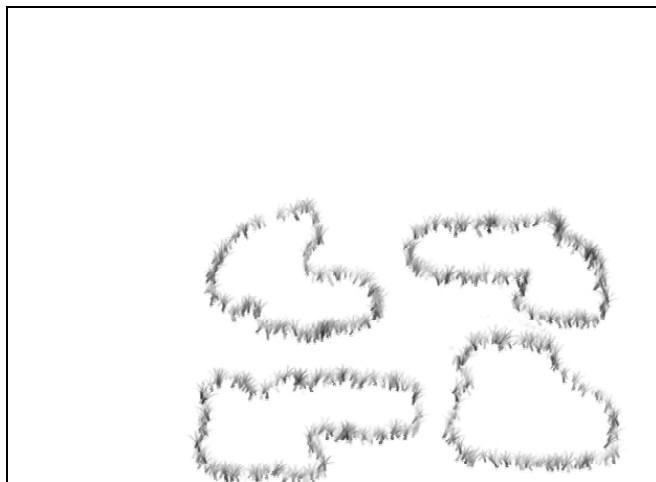


There are a couple of things to notice about the highlight artwork. First, we painted it with one color: Black. However, you'll notice that, although we could have used solid black, we chose instead to use various shades of gray – or in other words, black with different transparency values. There are a couple of important points that you can't notice from the figure. First, we created the highlight artwork on a separate layer in our graphics program. We devote this layer exclusively to the highlight artwork. We do this so that we can isolate the artwork and save it out as a separate file. Second, the layer that holds our highlight artwork has a transparent background. Create similar highlight artwork on a separate transparent layer in your menu art file.

When your highlight art is complete, hide all of the layers except the highlight artwork layer as shown in **Figure 45**. In the figure, everything that shows in white is actually transparent in our file.

**Figure 45**

Save the highlight artwork layer as a separate file.





Save the highlight artwork in a file format that support transparency (we use .png), and name the file *MenuMask* (for example, our file is called *MenuMask.png*.)

Back in DVD Architect 2 software, go to the Menu Page Properties in the Properties window. Under the Background Media section, set the Highlight mask property so that it uses the *MenuMask* file you just created. You're almost ready for the big payoff, but first you have to set the Highlight mask mapping property. Set that property now to **Transparency**.

At this point, you might want to quickly review our discussion of color sets from earlier in this document. We'll focus on Color Set 1 to illustrate how highlight mapping works. Recall that the Selected button colors property is set by default to use Color Set 1. This means that Color Set 1 determines the colors used to highlight the selected button on the DVD interface.

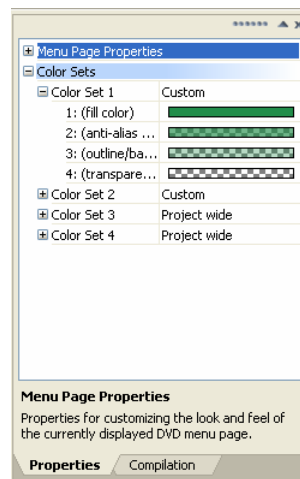
When you set the Highlight mask mapping property to Transparency, DVD Architect assigns the first color in the set to the least transparent portion of the mask, the second color to portions that are a bit more transparent, the third color to portions that are even more transparent, and the fourth color in the set to the most transparent portion of the mask. (If you're interested, the DVD Architect 2 software's on-line help files give you some exact numbers of where these delineations occur. The help files also give explanations on the other two settings for the Highlight mask mapping property and how they assign the four colors from the color set.)

We've changed the colors in Color Set 1 for our project to match the green used in the words "the zoo." To do this on your menu, click the drop-down arrow for Color 1 and then click the **Pick color from screen** button (the eyedropper button), and click one of the letters in the word "zoo." This samples that color, and changes Color 1 to match it. Since Color 1 represents the most opaque portions of the highlight artwork, set its Alpha value to 255 (completely opaque.)

Now sample the same color for both Colors 2 and 3. Set the Alpha value for color 2 to 191, and the Alpha value for color 3 to 84. These settings represent even steps for the transition between fully opaque to fully transparent. They are a good starting point, but you may want to tweak the values a bit to get the exact effect you're after on your artwork. **Figure 46** shows what our Color Set 1 looks like now that we've adjusted the color values.

**Figure 46**

Adjust the color set to match the color of the interface title.



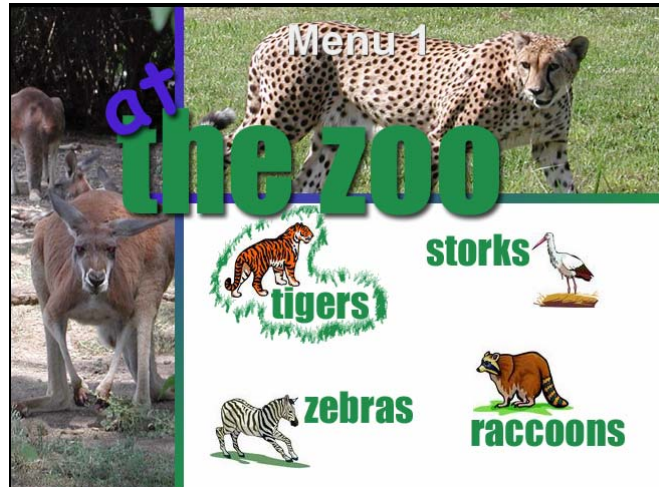
Now you're ready to see the results. Click the **Preview** button. You'll notice that one of your buttons contains a green highlight as shown in **Figure 47**. Why is the highlight green, and why does only one of the highlights show up when we know the mask contains four highlights?



The selected button on the interface interacts with the highlight mask so that only the (nontransparent) areas of the mask that touch the selected button show up. That's why you see only one button highlighted. The green color of the highlights comes from the green settings you specified in Color Set 1.

**Figure 47**

The button highlight makes use of the new Color Set settings



Use the various arrow buttons on the virtual remote control device to navigate to the other buttons and notice how the highlight changes according to which button you select.

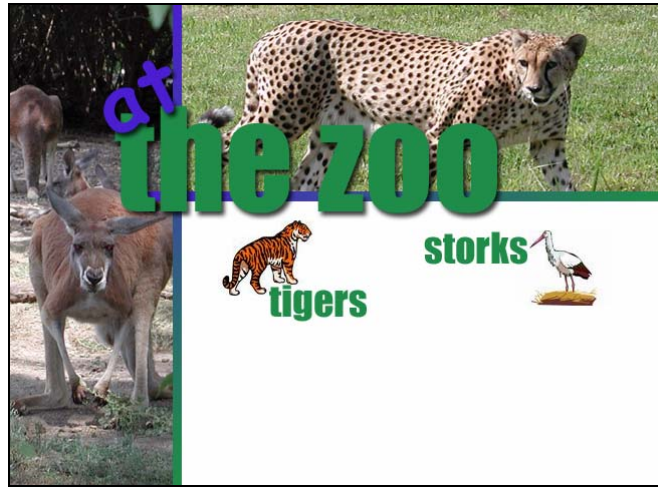
#### *Custom button highlight masks*

The technique we just discussed for creating button highlights using menu background media highlight masks works great for those times when you want to design the layout of your menu completely in a graphics application. Other times however, you may want to have the flexibility of changing the layout of your menu buttons in DVD Architect 2 software without having to return to your graphics application and adjust the artwork there. For these times, you can use custom button highlight masks.

To illustrate how this works, we've modified our menu artwork so that it no longer contains the zebra or the raccoon as shown in **Figure 48**.

Figure 48

The menu art work has been modified so that it no longer contains the zebra or raccoon button artwork.



We've also created separate artwork for both the zebra and the raccoon buttons, including highlight artwork for each. **Figure 49** shows these pieces of art. Create similar artwork of your own to use as you follow along with our example. Call them *ModifiedMenuArt*, *RaccoonArt*, *RaccoonArtMask*, *ZebraArt*, and *ZebraArtMask*.

Figure 49

Save the art work for each button and its mask as a separate file.



Start a new project in DVD Architect 2 software. Add the *ModifiedMenuArt* file to the menu background. Choose **Insert | Empty button** twice and position the buttons in the blank area of the menu. Select both of the buttons simultaneously and choose **Image only** for the Button style property under the Graphics heading in the Button Properties. Also, in the Highlight section, choose **Custom** for the Style property.

Now select just one of the buttons. Under the Graphics heading, set the Thumbnail property to point to the *RaccoonArt* file and the Mask property under the Highlight heading to use the *RaccoonArtMask* file. Similarly, set the other button to use the *ZebraArt* and *ZebraArtMask* files.

So far, the menu looks very much like it did before you started this section of the document. The difference is that now the zebra and raccoon buttons are completely moveable. Drag one of the buttons to a new location and notice that now the artwork comes with it as you drag the button because the artwork is assigned to the DVD Architect 2 software button.

Use the same techniques we discussed earlier to change the colors in Color Set 1 if you want to change the color of the highlights used on these buttons.

## IX: Conclusion

In this document, you've seen that version 2 is an exciting and powerful upgrade to DVD Architect software. Many of the new features make it easier to get your DVD preparation job done, while others bring powerful new functionality to the process. With DVD Architect 2 software and the knowledge that you've gained from this document, you are armed and ready to create nothing less than the highest-quality DVD projects that you can imagine.

We hope this document has helped you get a handle on all of the impressive new features of the software, and we wish you the best of luck on your upcoming DVD authoring projects!