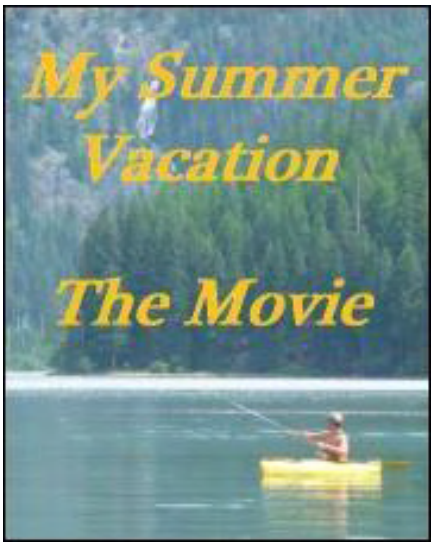
ComputorEdge™ Online — 08/21/09



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Tech Tools for Making Movies

You don't need to be an expert to produce your own films. You may already have the software you need to create your own Hollywood-style movies from digital video or photos.

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Linux users share ideas and ask for help.

One reader needs help finding command-line help sources, while another feels that new users should take advantage of the Linux GUI. Also, a call for Linux software reviews and various tutorials.

Rob, The ComputorTutor Does VB.Net by Rob Spahitz

OOP (Object-Oriented Programming)

Last week, we looked at the files that get created by a VB.Net project, including the executable file that gets built and can be distributed for others to use. This week, we explore the world of OOP (Object-Oriented Programming) and various components available for us to use in a project.

ComputorQuick Reviews by ComputorEdge Staff

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A Netgear router was less expensive than a Cisco/Linksys offering—and worked great!

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EdgeWord: Copying a DVD by Jack Dunning

DVD Copying and Copyright Issues

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Editor's Letters: Tips and Thoughts from Readers by ComputorEdge Staff

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Digital Dave

"Digital Dave answers your tech questions." by *Digital Dave*

A reader's flaky Internet connection has something to do with clearing the DNS cache—or does it?; a reader wants to upgrade USB 1.0 ports to USB 2.0 ports; a reader needs to point iTunes to an external hard drive.

Dear Digital Dave,

My Internet connection seems to "lose its way" frequently, usually when I hit Search or Send. I am always hitting the Refresh button just to get things to go through or be retrieved.

I have attempted to repair my network connection, but when I do, I get a warning that it could not complete the task because it could not clear the DNS cache. I have tried several times to do this manually, even checking the workarounds and settings in the Registry, but the problem never goes away.

Is this a network problem or is this a problem with IE6? (Yes, I know—I should update the browser, but I think I will just get different problems if I do.)

Thanks for your great advice that you have shared throughout the years!

Russ
San Diego

Dear Russ,

There are so many variables in an Internet connection that it's necessary to do any troubleshooting one step at a time. I'm not sure the particular order of the steps is an issue.

First, updating your browser should not cause you a problem, but rather than going to another version of Internet Explorer (although IE6 definitely could be involved in the issue), you might try Firefox or Google's Chrome. They are both free and coexist with any other browser. (A quick Web search will find any of these programs.)

By loading another browser and finding that the problem continues, you will be able to eliminate IE6 as the problem. You don't need to make another browser your default browser, but I find that having a number of Web browsers installed is an excellent way to quickly check out browser problems. If you are not going to get another browser, then you should definitely update your Internet Explorer. (There is no one perfect browser.)

Note: If you run into the DNS warning again, this command will flush the cache when input at the command line: ipconfig /flushdns

It is quite possible that there are problems in your network setup. Specifically, if you have a router in your system, it

could be the culprit. (You don't say how you are connected to the Internet.) I've found that older routers tend to have more network problems, especially if you are using a Wi-Fi (wireless) connection. We tend to set up our routers and never look at them again.

One check I always do when I'm having connection problems is to power down the router. This is usually done by removing the power plug from the router for a few seconds and reconnecting it. The router will reinitialize and reconnect with all the computers on the network. This may correct an intermittent problem.

If it is an older router, it may be worthwhile to update the firmware. (The firmware is the built-in software that runs the router.) If you go to the manufacturer's site, you should be able to determine if you have the latest version of the firmware. (Caution: If you're uploading new firmware to the router, do not disconnect the power. This could render your router unusable.)

Another thing that I've noticed about wireless routers, especially older ones, is that the wireless connection is often flakier than the Ethernet connections directly into the router. Sometimes the wireless connections will stop functioning even when computers on a wired network keep working. Usually cycling the router will reestablish the wireless connection.

If you've had your router for a number of years, you may want to consider replacing it with one of the new, faster routers. However, your problem may be the hardware in your computer, primarily the network card (wired or wireless). When a network card starts to go bad, the symptoms that you are experiencing are not uncommon. The quickest way to check that is to swap out the card with one you know works.

Another possibility is a bad cable. Yes, sometimes fixing the problem is as simple as replacing a cable somewhere between the DSL/cable modem and your computer.

The problem could be in your external Internet connection. If this is the case, there should be some sign on the DSL/cable modem. There is a series of lights on each modem that will be lit when everything is working right. If they seem to be acting strange, then contact your Internet service provider. I once had an intermittent problem caused by a corroded connector out on the street.

It's not likely that your problem is caused by the computer's operating system. (You didn't say which version you were running.) I've never had to mess with the Registry to fix a network problem.

As you can see, there are a number of possible causes of the problem. The best way to resolve it is to eliminate each possibility one at a time.

Digital Dave

Dear Digital Dave,

How do I change the USB 1.0 ports to USB 2.0 ports? I installed a new Western Digital hard drive in my "old" 2002 Dell Dimension 4500S. It had 128MB RAM. I installed two gigs of RAM a couple of years ago. The machine is as fast as my new, custom, fire-breathing computer.

Rod Smith
San Diego, CA

Dear Rod,

It depends upon how the older USB 1.0 ports are installed on your computer. If they come directly from the

motherboard, then it is unlikely that you'll be able to upgrade them directly. You will need to install a PCI card with USB 2.0 ports. If the USB 1.0 ports are already on a PCI card, then you should be able to replace it with a 2.0 card.

The first step is to check out the documentation. There is a multitude of information on the Web, especially the manufacturer's Web site. With a quick search, I found the manual for the Dell Dimension 4500 (*support.dell.com/support/edocs/systems/dim4500/index.htm*). This type of information is usually found in the Support section of the Web site. How you will approach the new upgrade will depend upon your current configuration.

Your computer has four PCI slots. If they are all occupied (and none is devoted to the older USB ports), then you will need to either eliminate some function, such as a modem that you never use, or combine functions on a new card. You can find multifunction PCI cards with a variety of combinations. Get one of those, install it, load any drivers, and you're off and running.

Digital Dave

Dear Digital Dave,

My wife wants to download movies into her iTunes library, but I'm too low on space to let her do it. So I bought a 1TB external hard drive.

Can you please give me instructions on how to move her library from the C drive to this new external hard drive, so that is where iTunes would look whenever she updates her library?

Thanks,

Steven Fine
Denver

Dear Steven,

I don't specifically use iTunes, but many programs that play music and videos work in a similar manner. When set up, the music-playing program merely points to a folder where the files exist. If you move the files to another device, then the player will no longer find the files. There are two pieces to the problem.

First, the files need to be moved to the new location, in this case the new external drive. This is probably as simple as locating the files on the internal drive and dragging the folder to the external drive.

Next, the media-playing program needs to be told where to find the files. I understand that in the case of iTunes, this can be done with Preferences/Advanced/Change to reset the new location. (For more specific information on moving iTunes files, check out these links for the Mac (*support.apple.com/kb/HT1449*) and a Windows PC (*support.apple.com/kb/HT1364*).) Be sure to load iTunes after you've started the external drive, not on startup. Otherwise, if iTunes can't see the external drive, it will shift back to the default location and need the location to be reset.

If you're placing files on a network drive for use by multiple computers, you may run into a number of issues. Most media-playing programs were designed for use by a single computer and will not readily sync with a number of different computers. Situations may arise, such as files added from one computer will not appear for other computers. As network drives become more prevalent, the software for sharing will improve.

Digital Dave

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Movie Making in Windows for the Neophyte--and It's Free!

“Turning 50 seconds of digital video into one and one half minutes of glory.” by Jack Dunning

> With Windows Movie Maker's intuitive interface, even newbies can turn digital video into an exceptional-looking movie.

I've never been fond of videotaping. Although I once owned a video camera while the kids were growing up, I only occasionally used it. I quickly realized that people who continually filmed were seeing the world through the little square viewfinder, missing the experience while it was fresh. Watching a video of an event is never the same as living the real thing.

The other problem with videotaping is, "What do you do with it when you're done?" The vast majority of home video is dead boring. You are left with hours and hours of video tape (or in today's terms, digital files), and the daunting task of doing something with it. Most of the video just sits, waiting for someone to find the right time.

For these reasons, I don't own a digital video camera. (It's a bit ironic that now I'm writing an article on making movies.) What I know about producing movies, I taught myself in a couple of hours. What amazes me was that it didn't take much time—and I enjoyed the end product.

As I mentioned, I don't own a digital video camera. I know that there are some convenient small video devices such as the Flip and the new Kodak Zi6 (I've read some good reviews of the Kodak product), but it's not likely that I will be buying one—although they are certainly more convenient than the old luggable tape video cameras, which dads would glue to their heads while traversing Disneyland.

However, I do own a digital camera. I bought it on sale a couple of years ago. When I put it in its automatic mode, it takes great pictures. I pull it out whenever we see our grandkids. Since it's digital, I'll shoot a multitude of pictures—usually 10 or 20 at a time. I've found that by taking so many, there are usually a few exceptional shots in the bunch. You can't waste film with a digital camera!

On a recent trip, I remembered that the camera manual had mentioned something about shooting videos. I

had put a four-gig card in the camera, so I figured that I could waste some space while testing its video capability. I put it in the video mode, clicked the button and shot about 50 seconds. I played it back on the little monitor. It didn't look too bad. Who knew? I already owned a video camera! Consider this: You may have a digital video capability built into your digital camera. Check it out.

Converting from the MOV Format

When I embarked on this journey (writing this article), I knew that I had a piece of video to use for my testing—the 50 seconds I had shot. Now I needed to do something with it. My first step was to download it to the computer—no problem. I found out I could easily play it with the free image-viewing program Irfanview (*www.irfanview.com*). The camera had saved the clip in the MOV format. (MOV is the Apple format used by QuickTime and, as it turns out, many digital cameras save video in that format.) However, to work with it on a Windows computer, I needed the file in almost any format other than MOV. Irfanview did not have that capability.

I went to the Web and found Media-Convert (*www.media-convert.com*), which converts files directly on the Web—no software to download. The only problem with it is that, since everything is done over the Internet, uploading the file and downloading the result can take quite a while, depending upon the file size. I converted my file to AVI, which is a commonly used format. (There is no need to use a Web site to convert your files. I also found a number of free file-conversion programs on CNET's Download.com. One that looked like it would do the job was Any Video Converter 2.76 (*download.cnet.com/Any-Video-Converter/3000-2194_4-10661456.html?tag=mncol*), although I haven't tried it. Anyone else have any suggestions?)

I opened the Microsoft Start Menu on my Vista computer and typed "movie" into the Start Search field. I discovered Windows Movie Maker in the list. Movie Maker is a video-editing program that's included with every Windows installation since Me. So if you have a Windows computer, then you should have Movie Maker. (Window Movie Maker will not be included with Windows 7; however, you will still be able to download Version 2.6 (*www.microsoft.com/downloads/details.aspx?FamilyID=D6BA5972-328E-4DF7-8F9D-068FC0F80CFC&displaylang=en*) from Microsoft. There is a Movie Maker available in Windows Live Essentials, but it's pretty lame by comparison.) This was my opportunity to make an exciting documentary out of my 50 seconds of video.

Windows Movie Maker

Overall, I would say that Windows Movie Maker is surprisingly intuitive. After loading the program, I clicked, double-clicked, right-clicked and dragged my way to success. It took a few minutes to orient myself, but the interface was easy enough for me to produce an acceptable—if not professional—result.

When first opened, the screen was as shown in Figure 1, without the imported video or music. Importing the video was as simple as clicking the Video link under Import and selecting the appropriate file—in this case the converted AVI file. Once imported, a thumbnail appeared on the screen. When the thumbnail is selected and the Play arrow is clicked, the video will play in the window at the right. If you pause the playback and click the Split button (circled in red), you will get two clips broken apart at that point. This is convenient for breaking the movie up into segments.

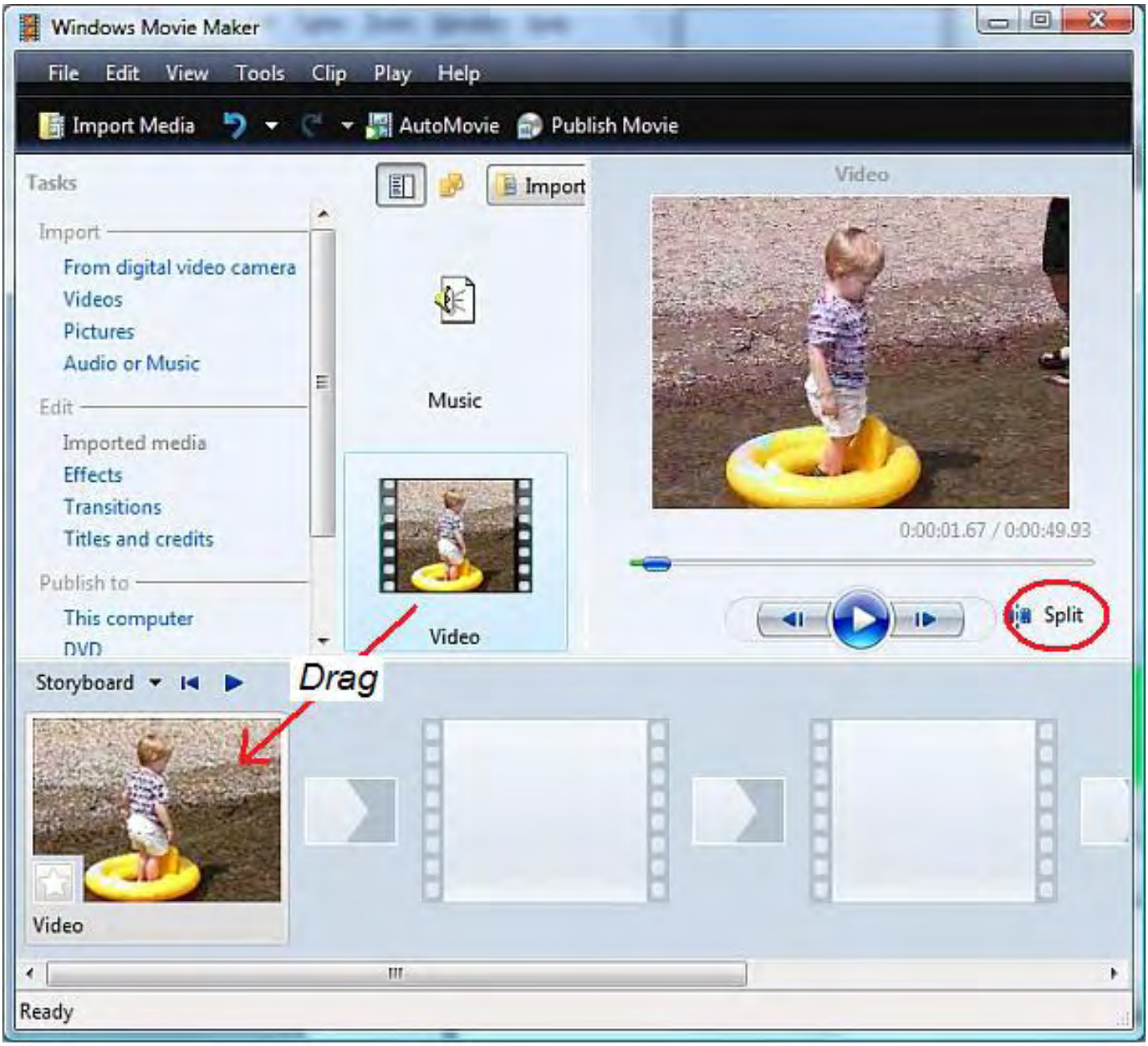

Figure 1 Windows Movie Maker initial screen with video imported and dragged to the storyboard.

Storyboard

There are two primary modes for Movie Maker. The first is Storyboard, which is shown in Figure 1. This mode allows you to place pieces of video or still photos into your story line. (If you don't have any video, you can still make a movie using your photos and/or artwork.) To start your movie, drag the video clip into the first storyboard frame. Then, as you play the video clip, you can pause and split the clip into segments. The next frame will automatically fill with the remainder of the clip.

Transitions

The small boxes in between the frames are for the video transitions. After selecting transitions from the menu on the left, you can drag your choice to one of the small boxes. Then, when the scene changes during playback, that transition will be used (see Figure 2). If you want to add titles or credits, you can select "Titles and credits" from the left-hand menu. This will allow you to insert titles at the beginning of the movie,

between clips, on the clips, after the clips, or attach credits at the end of the movie.

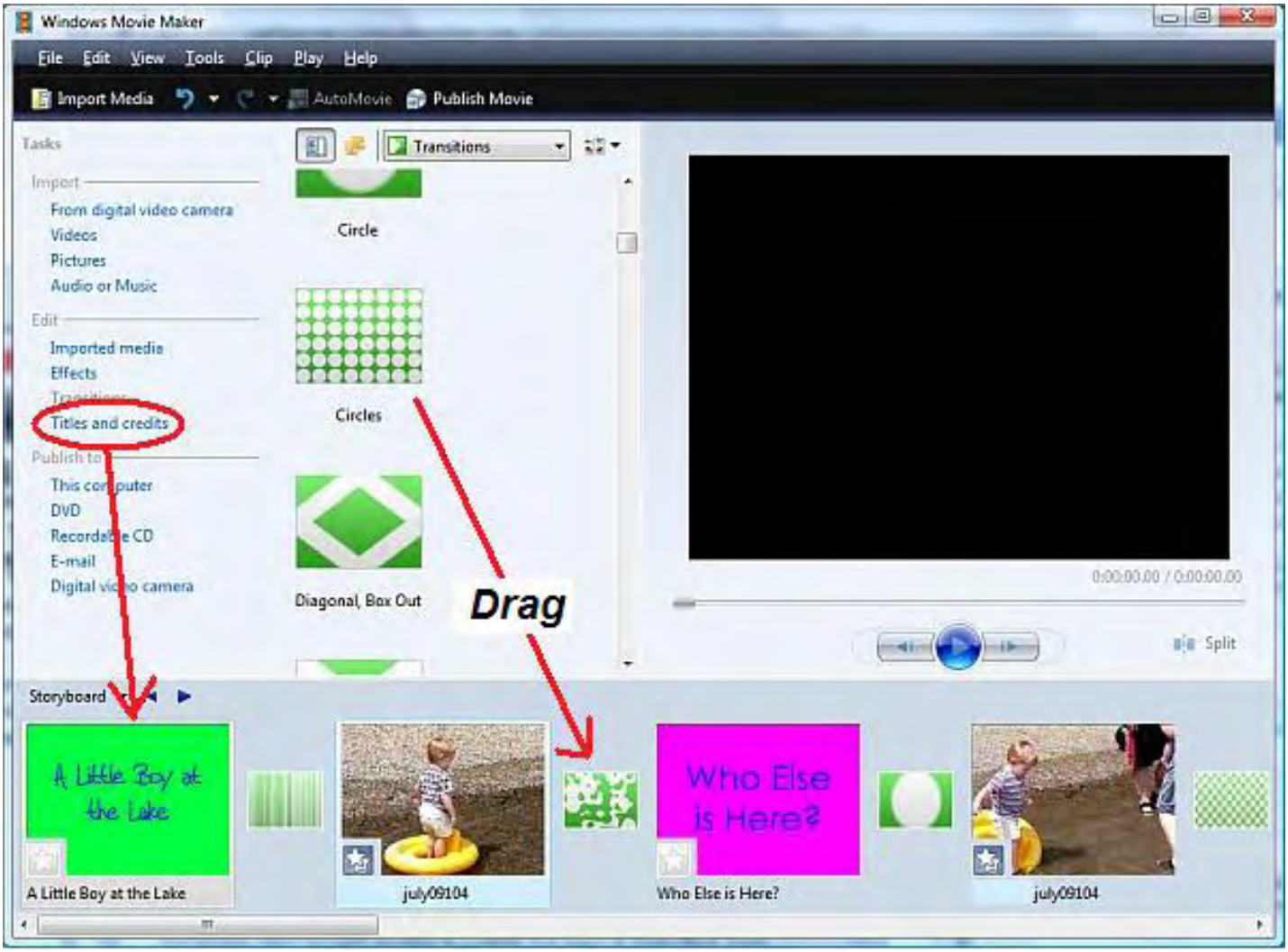

Figure 2. Window Movie Maker in storyboard mode adding transitions and showing title clips.

Each new title frame (before or after a video clip) is treated in the same manner as a video clip. In particular, you can add the same special effects to each clip, whether a title frame or video clip.

Special Effects

Windows Movie Maker includes a set of special effects. There are more than enough for any newbie movie producer. Most are fairly simple, such as fade-in or fade-out. Multiple effects may be added to the same clip by simply dragging and dropping the effect over the clip (see Figure 3). If you want to view all of the effects assigned to a clip, right-click on the frame and select Video Effects. The assigned effects will appear in the right-hand window, while all the possible effects are on the left. You may add (or remove) almost any combination of effects for that clip.

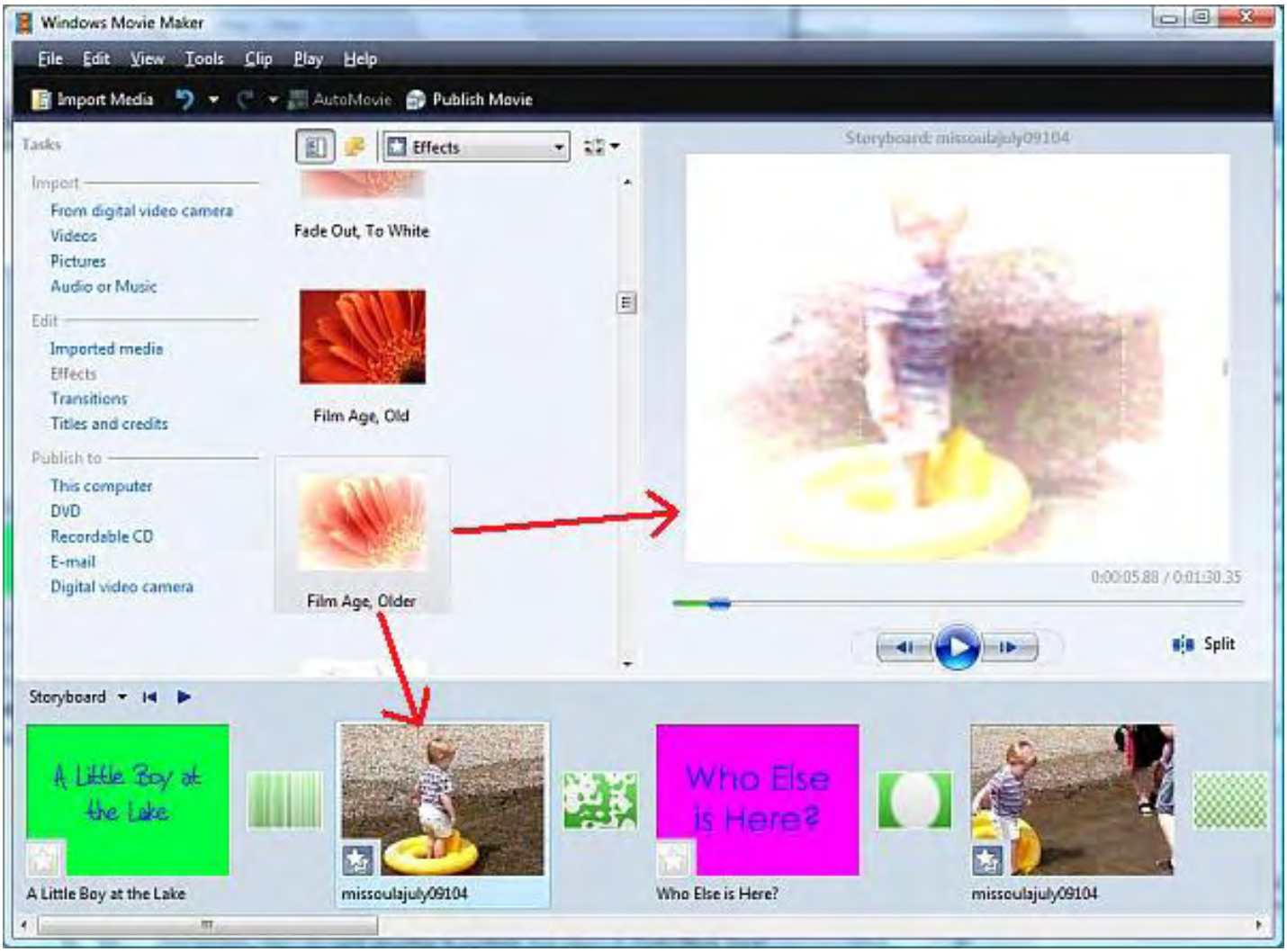

Figure 3. Window Movie Maker in storyboard mode, adding effects and showing the result.

To see the accumulated (or sample) effects, select the frame (or effect). The preview window at the right will display the result when the clip is played (or the effect is selected). This makes it easy to see how your creative editing is working for you.

The Timeline

The second primary editing mode for Windows Movie Maker is Timeline. Timeline is a more detailed editing mode than Storyboard. In many cases, when certain features, such placing titles on a video clip or adding an audio clip, are invoked, the program will automatically default to Timeline from Storyboard. There is a toggle at the top of the Timeline to move to and from the Storyboard mode.

The Timeline mode displays the primary tracks included in the new movie (see Figure 4). The Timeline shows three different tracks at the bottom of the screen: the Video track, which includes any added transitions plus the audio on the original video clip (actually three tracks in one); the Audio/Music track for including background music or narration; and the Title Overlay track for titles included within video clips (see Figure 4).

(If you download Microsoft Movie Maker 2.6 (*www.microsoft.com/downloads/details.aspx?FamilyID=D6BA5972-328E-4DF7-8F9D-068FC0F80CFC&displaylang=en*), you will notice some slight differences in appearance from some of the screen shots included here. With the exception of Figure 1, these

screen shots were made with the version of Movie Maker that was included with the Vista installation. However, for the most part, the two versions work in the same manner.)

Figure 4. Windows Movie Maker in the Timeline mode showing the various editing tracks.

Once you have roughed in the video with the Storyboard (if you use that mode at all), you'll find that you do most of your work in the Timeline mode. You can add a music track (which can be separately edited) while tinkering with the video clips, title, effects and transitions. Selecting with a click, dragging left or right, splitting video or audio, and deleting a section are all very intuitive. To view (and hear) your results at any point, merely drag the playbar (the green vertical line on the Timeline) by clicking-and-holding the little box at the top and dragging it to a new location. The scene will be displayed in the Preview window.

Title Animations

Any of the title sequences, whether in the video track or title track, can be animated. To access the included animations, select any of the title boxes (or, for overlay titles, a title overlay box at the bottom of the Timeline), then double-click. Next, click "Change the title animation." Here you will find a list of the available animations (see Figure 5). As you click on each animation, the preview box at the right will demonstrate. There are enough animations available to satisfy most amateur film editors.

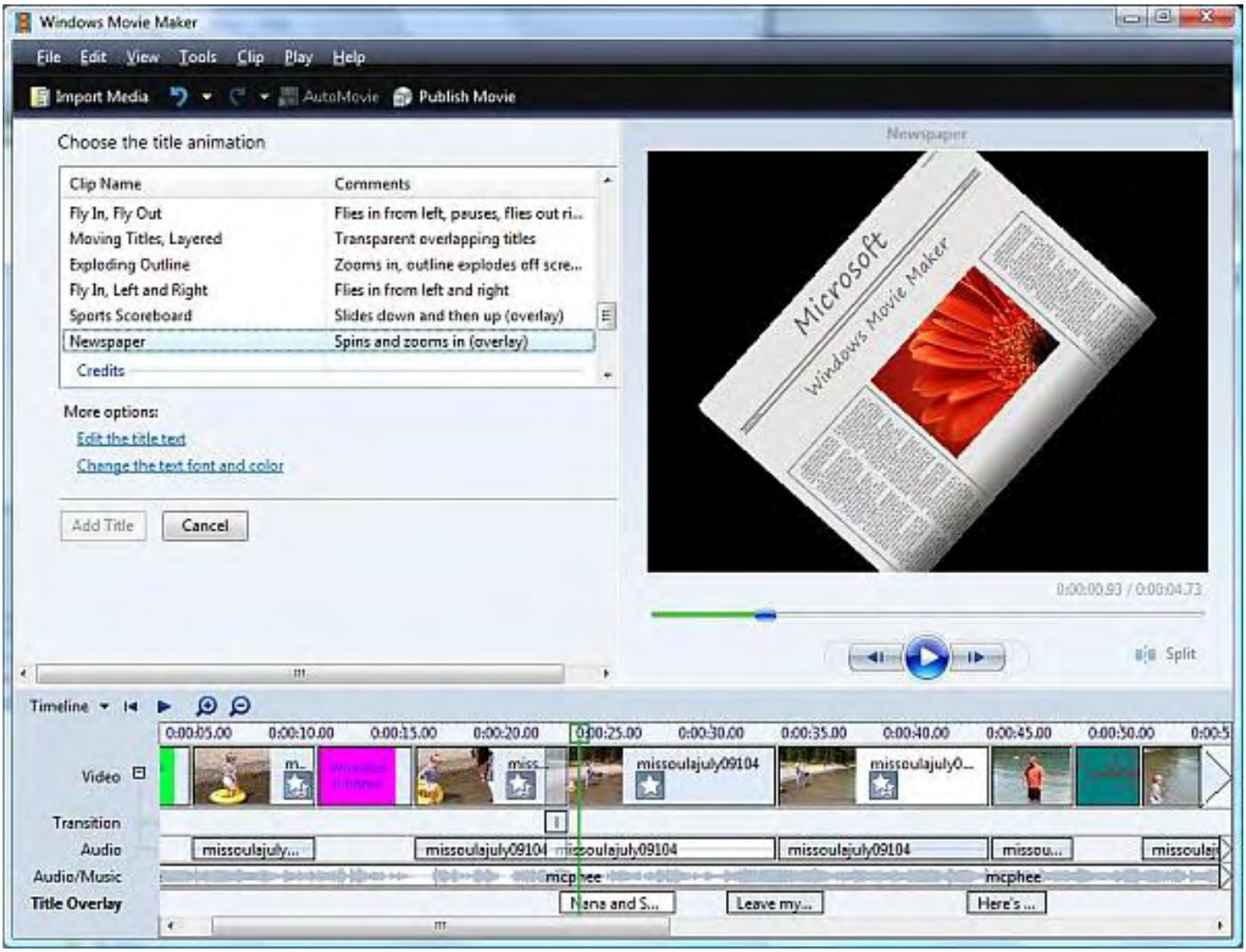

Figure 5. Windows Movie Maker in the Timeline mode showing the title animation options, in this case the spinning newspaper.

Publishing Your Movie

When Windows Movie Maker creates the movie file, it defaults to the WMV (Windows Media Video) format. This will run on Windows computers with no problem, but if you want to create most other formats or burn the video to a DVD, you will need another program. (Movie Maker will create an AVI file.) To create a DVD, Movie Maker prompts that it will close itself, then load Windows DVD Maker. I did note that in Version 2.6, the only options were to save to the computer or to a video device via an IEEE 1394 (FireWire) connection.

The produced WMV file was more than 30 megs for about the 1:30 (m:s) movie. When I used the e-mail option in the Vista version (not available in version 2.6), the file was reduced to less than 10 megs without losing any noticeable quality. However, for larger files there is much more loss and a reduced image size. There are other formats that may be better for distribution, such as Flash for the Web, although anytime you start dealing with video you will have huge files—especially if you add a music track.

This was my first shot at producing a movie from home video. Overall I was pleased with the result, and it was exceptionally easy. I have no doubt that there are many other programs at a reasonable price that will do more than Window Movie Maker, but as a neophyte, Windows Movie Maker had everything I needed.

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Video-Editing Software

“Anyone can make Hollywood-style productions.” by Wally Wang

> While video-editing programs vary, anyone can easily take a video and turn it into a simple Hollywood-style production complete with sound effects, music soundtrack and scrolling titles.

At one time, editing video meant physically cutting an actual filmstrip into pieces and splicing it back together again. Fortunately, digital video lets you edit video directly on your computer so you can do it quickly and reversibly, too. Not only can you make duplicate copies of all or part of a video, but you can easily slice and dice parts of the video just by selecting the portion to cut with the mouse or cursor keys.

Another advantage of digital video is the ease with which you can fix common flaws, such as stabilizing shaky images or adjusting images that appear too bright (or too dim). Although video-editing programs vary in capabilities, anyone can easily take a video and turn it into a simple Hollywood-style production complete with sound effects, music soundtrack and scrolling titles.

Figure 1. iMovie makes it easy to create fancy videos.

The basic steps to video editing involve five basic components. First, you must capture a video and transfer it to your computer. In most cases, this can be as simple as connecting your video camera to your computer through a FireWire or USB cable and copying the video directly off the camera's memory. Some video cameras can store video directly to mini-DVDs, which you can pop into your computer and copy to your hard disk.

After you've captured video, the second step is to edit that video by deleting, adding, or rearranging scenes. Third, you may want to fix any problems with your video, such as increasing/decreasing contrast or brightness. Fourth, you might want to add special effects, such as scrolling titles, audio sound effects, or visual transitions between scenes. This can make an ordinary video appear more professional with Hollywood-style effects.

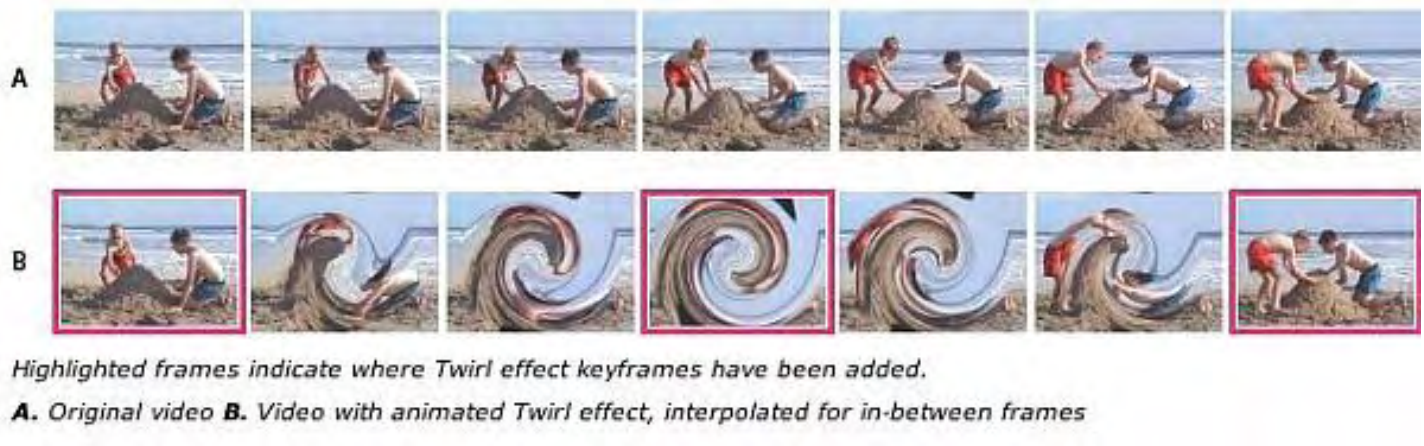

Figure 2. Adobe's Premiere Elements can help you create interesting visual effects.

Fifth and finally, you'll need to save your completed video in a specific file format so you can share it with others through sites such as YouTube. Or you might prefer burning your entire video on a DVD complete with menus, titles and chapters.

While video editing basically works the same in all video-editing programs, the number of features and power of these features can differ wildly. If you're just curious about video editing, start off with the free programs that come with every Windows or Macintosh computer.

For Windows, Microsoft offers Windows Movie Maker, while for the Macintosh, Apple offers iMovie as part of the free iLife suite. Both programs are fine for novices, but you'll run into limitations with both in a hurry. But if you just want to edit video occasionally and want results right away, both programs will get the job done.

If you need more powerful video-editing features, consider Adobe Premiere Elements (*www.adobe.com/products/premiereel*) for Windows or Final Cut Express (*www.apple.com/finalcutexpress*) for the Macintosh. While there are plenty of other Windows video-editing programs for intermediate and advanced users, you might want to consider Premiere Elements simply because it provides an easy upgrade path to Adobe's Premiere Pro, which is used by professional studios.

Premiere Elements offers a subset of Premiere Pro's features, so once you master the commands and user interface of Premiere Elements, moving up to Premiere Pro should be relatively simple. Likewise, on the Macintosh, learning Final Cut Express lets you learn most of the features available in the higher-end Final Cut Studio.

If you regularly work with both Windows and Macs, Adobe's Premiere Pro is unique in offering cross-platform capability. With Premiere Pro, you can be productive no matter which operating system you're forced to use at any given time.

Ultimately, it doesn't matter whether you use Windows or a Macintosh to edit video, since your tools are less important than your own creativity. Just look at today's movies produced by Hollywood and you can see that even millions of dollars worth of special effects can't mask a poorly written script. Armed with your favorite video-editing program and your own imagination, you can at least do better than some of the latest films released by Hollywood.

In the early days, before Wally became an Internationally renowned comedian, computer book writer, and

generally cool guy, Wally Wang used to hang around The Byte Buyer dangling participles with Jack Dunning and go to the gym to pump iron with Dan Gookin.

Wally is responsible for the following books:

- Microsoft Office 2007 for Dummies (*www.amazon.com/gp/product/0470009233?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470009233*)
- Beginning Programming for Dummies (*www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702*)
- Breaking Into Acting for Dummies with Larry Garrison (*www.amazon.com/gp/product/0764554468?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0764554468*)
- Beginning Programming All-in-One Reference for Dummies (*www.amazon.com/gp/product/0470108541?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470108541*)
- Steal This Computer Book 4.0 (*www.amazon.com/gp/product/1593271050?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271050*)
- Visual Basic Express 2005: Now Playing (*www.amazon.com/gp/product/1593270593?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593270593*)
- My New Mac (*www.amazon.com/gp/product/1593271646?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271646*)
- My New iPhone (*www.amazon.com/gp/product/1593271956?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271956*)
- Strategic Entrepreneurism with Jon Fisher and Gerald Fisher (*www.amazon.com/gp/product/1590791894?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894*)

Every Saturday morning from 9:00 am - 10:00 am in San Diego, you can hear Wally with fellow co-hosts Dane Henderson and Candace Lee, on the radio show CyberSports Today (*cybersportstoday.com/*), which covers the video gaming industry on ESPN Radio 800 AM. Wally covers the military history side of the video game industry.

When not performing stand-up comedy or writing computer books, he likes to paper trade stocks with the video game Stock Reflex (*www.plimus.com/jsp/download_trial.jsp?contractId=1722712&referrer=wwang*), using the techniques he learned from a professional Wall Street day trader.

Wally can be reached at *wally@computoredge.com* and at his personal web site (*www.wallacewang.com/*).

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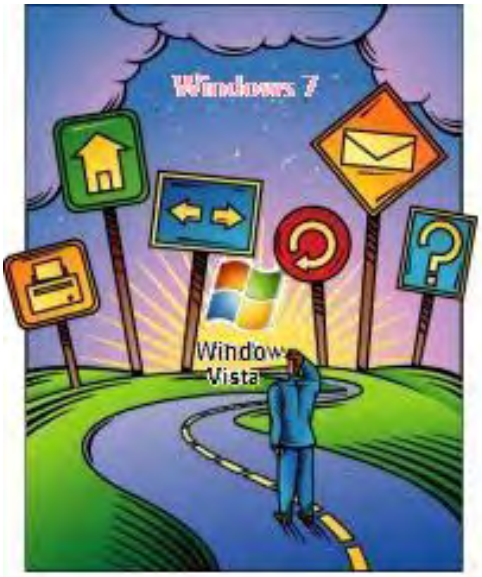

Windows Vista Tips and Tricks

(and some Windows 7)

Windows Tips and Tricks

"Windows DVD Maker" by Jack Dunning

Windows DVD Maker is a simple and intuitive way to distribute your movie or presentation so that it will run in any DVD player.

This week I discovered Windows Movie Maker. It's a great little program for producing movies from bits of home video and/or photos. One of the problems with working on video and audio files is that it doesn't take long for the files to exceed an easily portable size—at least for sending over the Internet. One of the best options for sharing your memories is to put them on a CD or DVD. Usually there is plenty of space for the files, and they are fairly easy to distribute to your family and friends. WMV and AVI files are fine for anyone with a computer, but if you want to send your work to someone with either no computer or a low-level of computer skill, you may want to make a playable DVD.

As I was fooling around with Windows Movie Maker, I noticed Windows DVD Maker (also included in Windows 7). The name seems to tell the story. It is a program for burning DVDs from your movies while adding menus and themes to them. (It is not a program for copying DVDs.) In very much the same manner as Movie Maker, DVD Maker is intuitive and easy to use. It is a simple way to distribute your movie so that it will run in any DVD player. All you need is a DVD burner—which is pretty much standard equipment in most new computers—and a blank recordable DVD disc.

To load Windows DVD Maker in Vista, type "dvd" or "maker" into the Start Search field of the Microsoft Start Menu. DVD Maker will appear in the Programs list. Click to load. The first time you load the program, you will see the introduction screen (see Figure 1). Check the "Don't show this page again" box to avoid this window in future.

Figure 1. Windows DVD Maker opening screen.

When you click Choose Photos and Videos, the screen for importing movies or photos will open (see Figure 2). When you click Add items, you will be able to browse for the files that you want to include. While DVD Maker supports most types of files, it does not support the Apple MOV file format. Any MOV clips will need to be converted to the AVI (or another commonly supported file type). If you add a group of photos they will automatically be combined into a slide show. The up and down arrows at the top can be used to change the order of the items by selecting the items and clicking the appropriate arrow. The DVD will be burned with the videos/photos in the order that they appear on this screen.

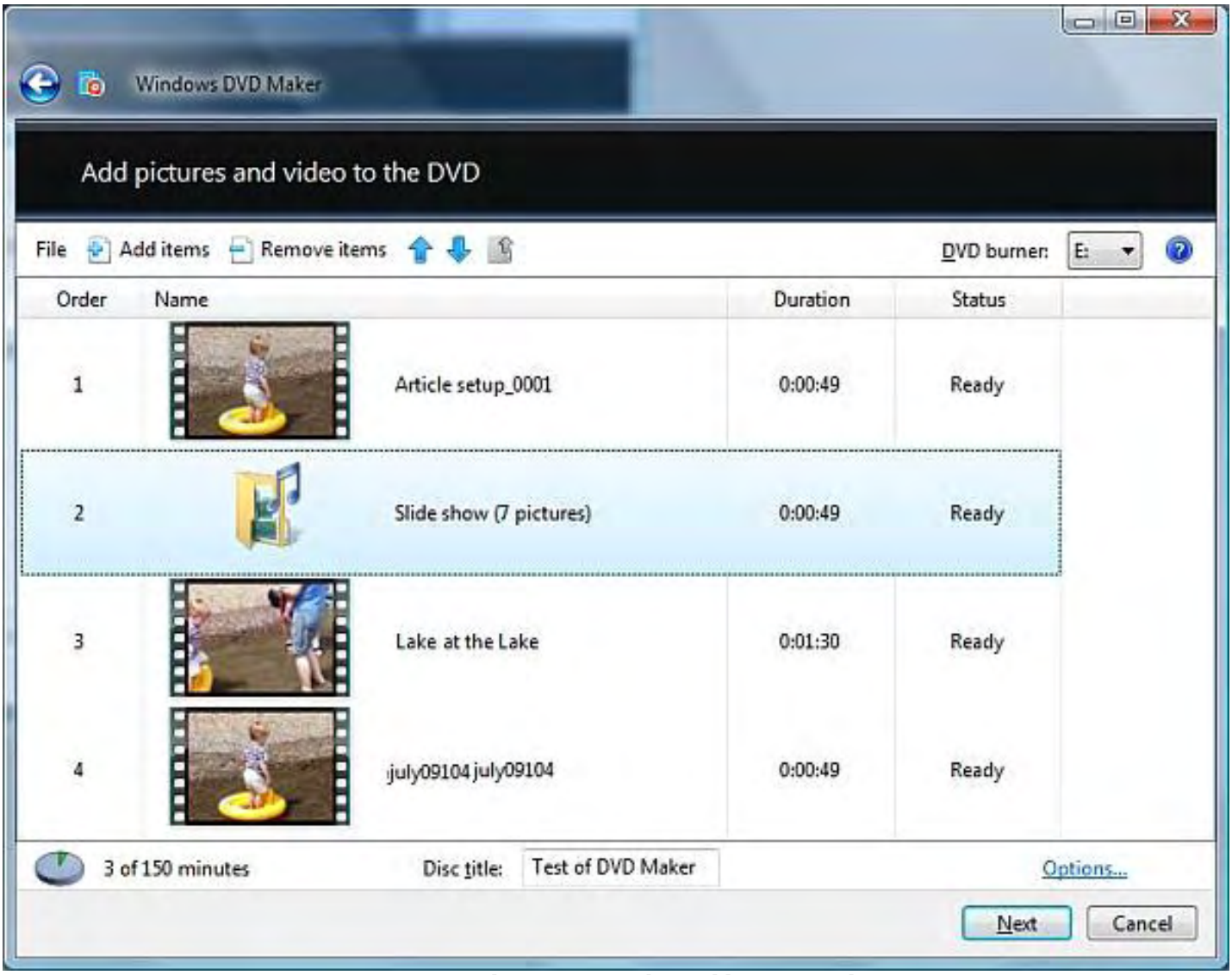

Figure 2. Windows DVD Maker Add items window.

The next screen is for setting up your menu for the DVD (see Figure 3). This is normally displayed when the DVD is first loaded, showing the Play and Scene selection options. (There are options for having the menu load after a video is played.) There are 20 menu styles included, all of which will make your DVD look rather professional. The "Menu text" button allows you to customize the display text for the Play, Scene and Notes buttons on the DVD menu, plus you can add text for the notes. "Customize menu" allows you to add foreground and background video, plus menu audio. You can also change the type of frames used for the scene-selection displays.

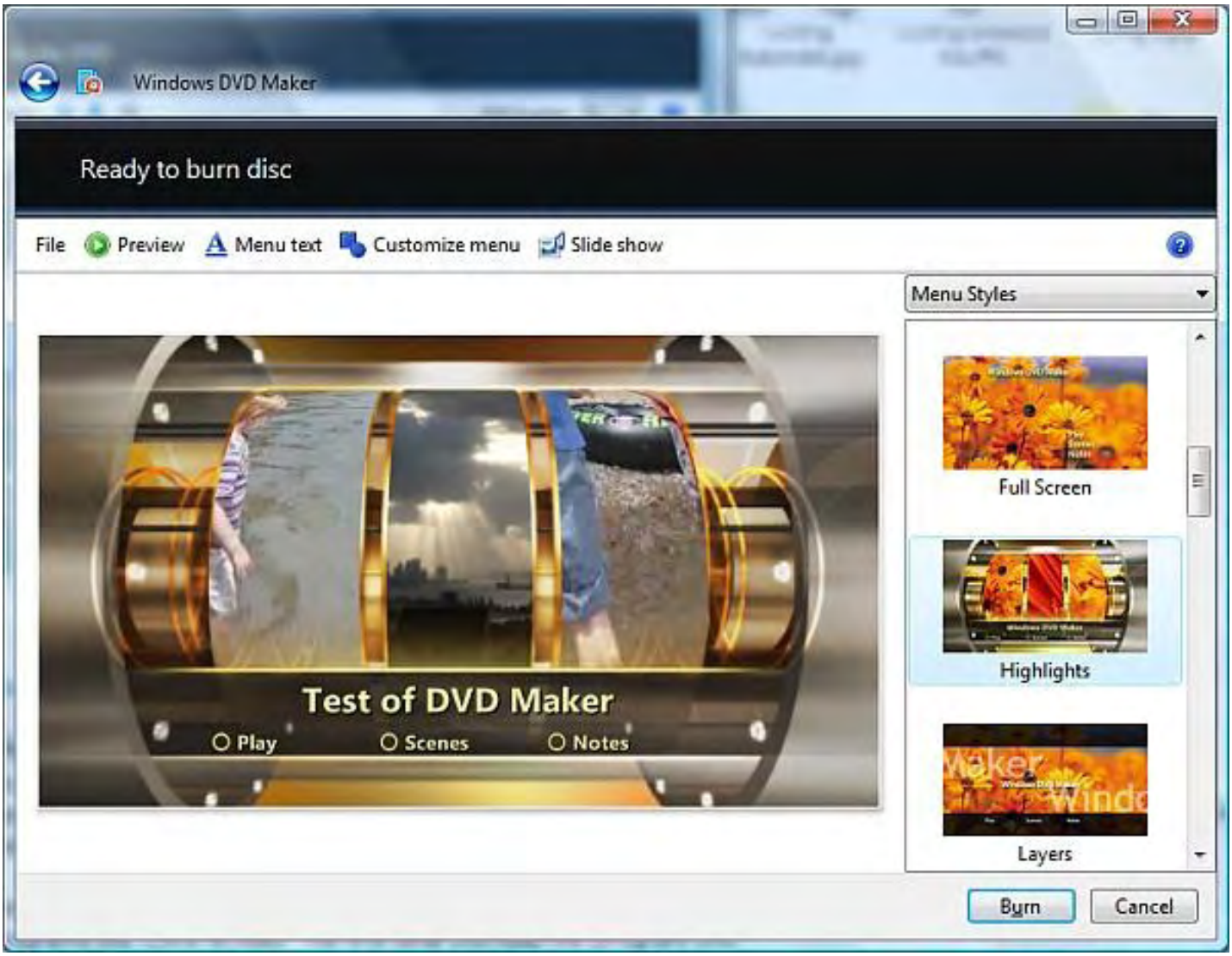

Figure 3. Setting up the menu in Windows DVD Maker.

The "Slide show" button allows you to add music to the slide show (if you included photos). There is a limit of one slide show automatically created in DVD Maker. If you want to intersperse shows in various parts of the DVD, you will need to create a movie of photos with another program, such as Windows Movie Maker, then add it to your list. The capabilities of the slide show feature in DVD Maker are fairly limited. There are some cool features, such as automatic pan and zoom, that make the slide show seem more animated, plus you can choose the type of transition you prefer. If you want to change the order of the photos in the slide show, you need to open it in the initial Add screen (double-click).

When you click Preview, all of your changes are recalculated, a viewing window will open, and the DVD menu is displayed (see Figure 4). In this mode, you can test how the menu will actually work on the DVD and play the scenes prior to burning (creating) the DVD. Once you burn a DVD, there is no changing that copy, although you can always make adjustments to the setup (be sure to save it) and burn another DVD. When everything looks the way you want it, click Burn. Depending upon how much you are putting on the DVD and the speed of your drive, the process can take quite a while to finish. Make sure you have an hour or so during which you won't need to shut down the computer.

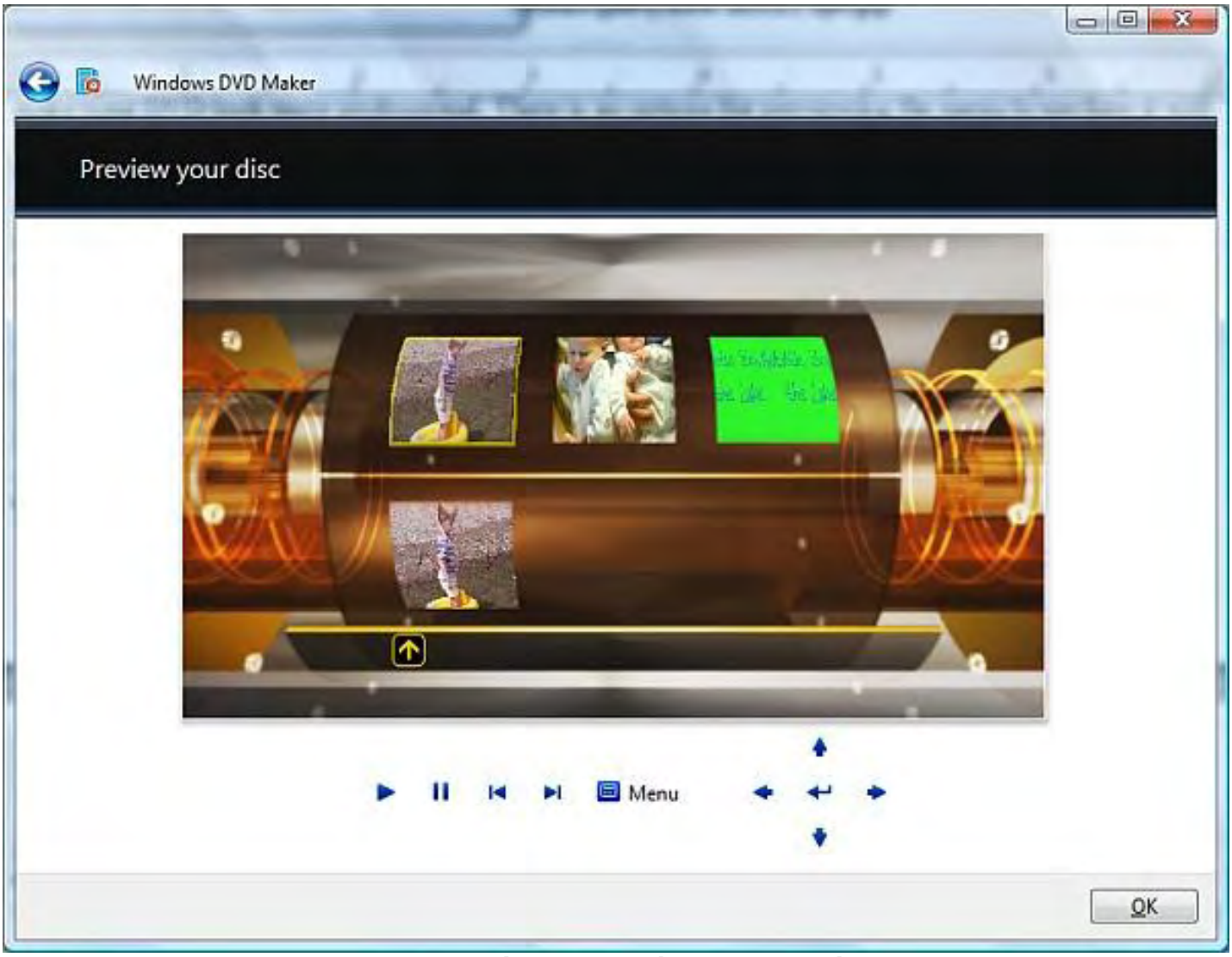

Figure 4. Windows DVD Maker preview window.

There are many applications for Windows DVD Maker besides putting home movies on DVDs. In business, a presentation similar to Power Point with a combination of video, photos and graphics could easily be put on a DVD and mailed to a prospect. All the prospect will need to do is put it in his or her DVD player and let it load. The easiest way to prepare a presentation for burning to a DVD would be to use a program such as Windows Movie Maker. As far as I can tell, Windows DVD Maker will not accept Power Point files.

If you have a DVD burner in your computer and blank discs, then this is a process that is well worth exploring.

Jack is the publisher of *ComputorEdge* Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called *The Byte Buyer*. His Web site is *www.computoredge.com*. He can be reached at *ceeditor@computoredge.com*

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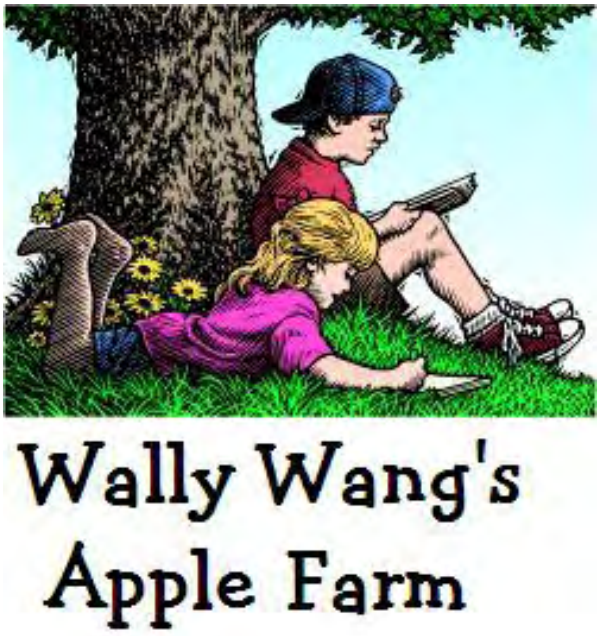

Wally Wang's Apple Farm

“Making Movies with Apple” by Wally Wang

If you want to learn the basics of video editing, iMovie is a gentle introduction to the world of computerized video editing. Also, a look at the latest rumors swirling around Apple, some Macintosh software news, and a tip on using the Quick Look feature to peek inside a file without opening it.

In the old days, editing video on a computer seemed like science fiction. Nowadays, it's so simple that nearly anyone can do it. In fact, the latest iPhone even comes with a simple video-editing feature that lets you trim a video from the beginning or end. (Unfortunately, it won't let you do fancier editing, such as deleting anything in the middle of a video.)

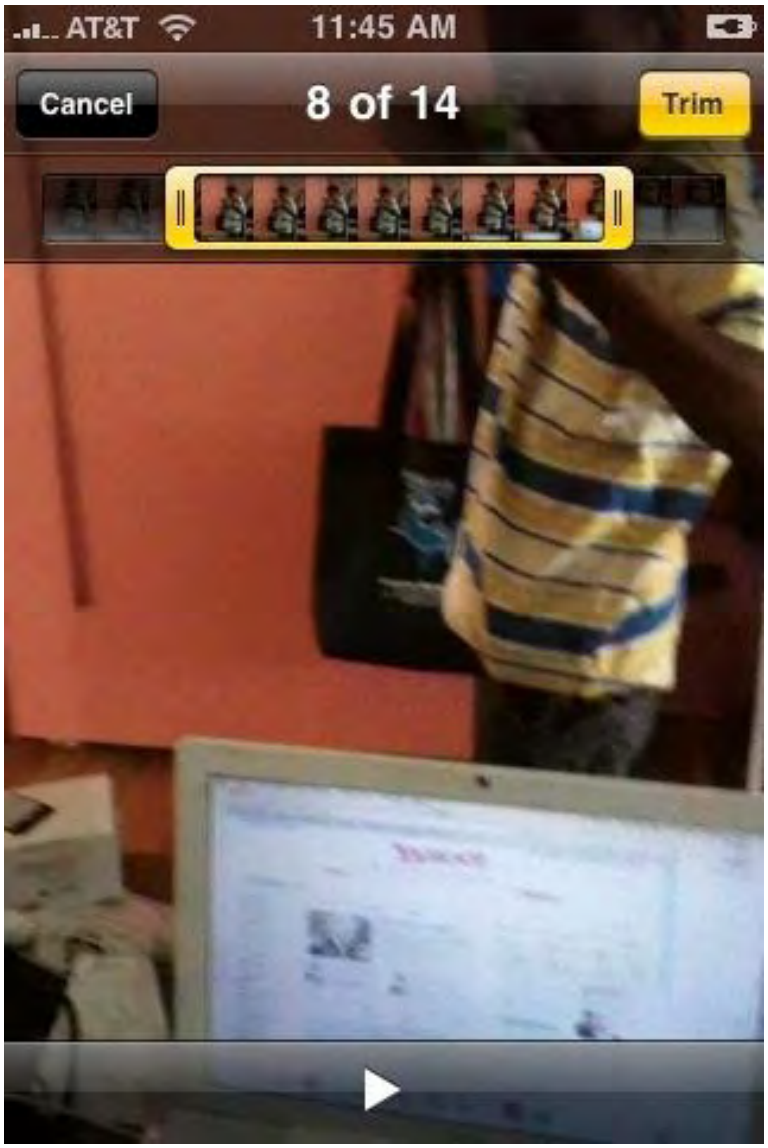

Figure 1. The latest iPhone lets you capture and edit video directly on your phone.

If you want more sophisticated video-editing capabilities, you can use the free iMovie program that comes with every Macintosh. To make video editing simple, the program shows your video and lets you drag the mouse to see it frame by frame. This lets you identify the exact spot where you want to cut or insert a transition or effect.

Figure 2. Dragging the mouse lets you view video frame by frame.

Besides letting you trim video from the beginning, middle or end, iMovie also provides templates that let your video appear inside different frames for a unique appearance.

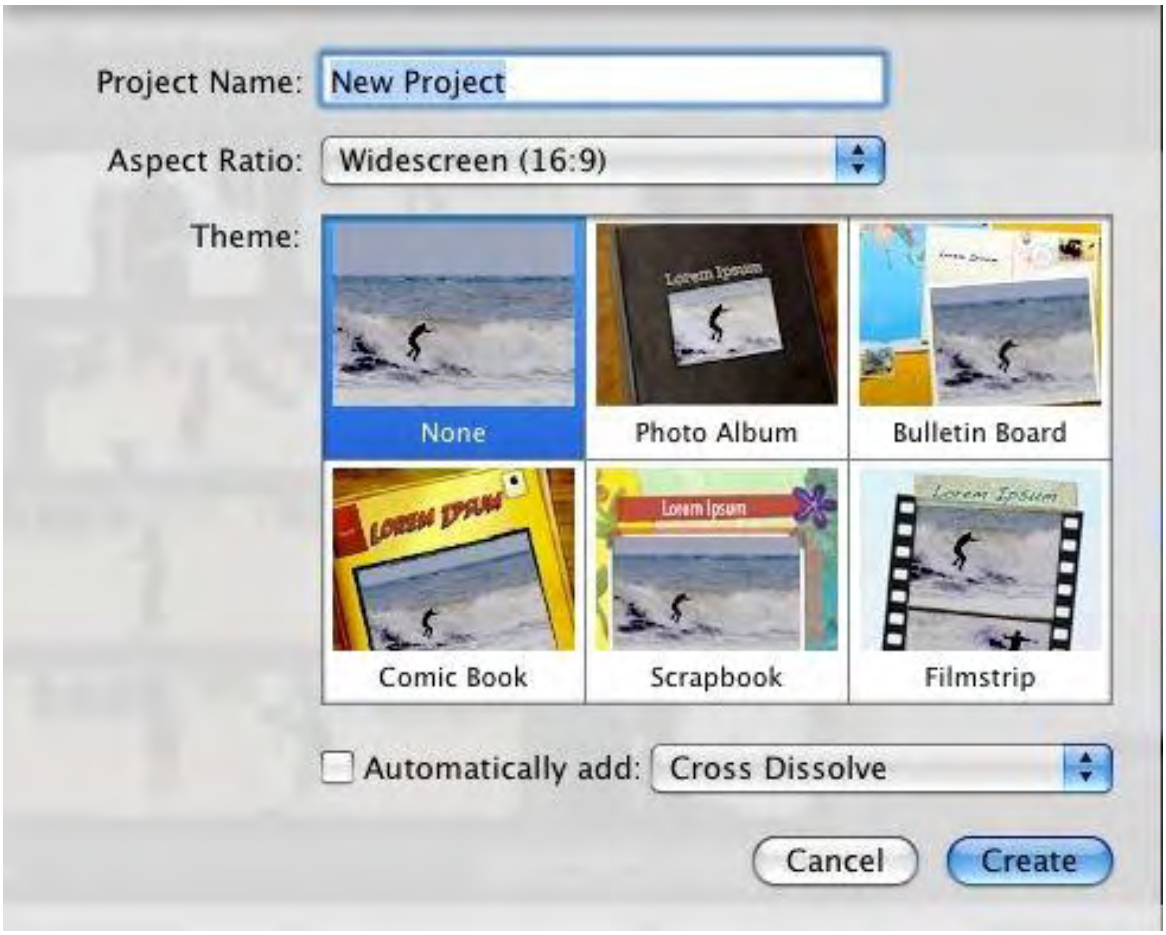

Figure 3. iMovie provides templates for framing your video.

Naturally, you can also create titles with scrolling text effects, as in *Star Wars*. Rather than have abrupt changes between scenes, iMovie lets you create Hollywood-style transitions, such as wipes, fades or dissolves.

Finally, when you're done editing your video, you can burn it to DVD or upload it to YouTube or MobileMe so others can see your creation. With the power of video editing in the hands of everyone, the technical aspects of movie making are within everyone's reach. Now we just need more people to realize that making a good video is more than just using tools, but also relies a lot on creativity on what you shoot and capture in the first place.

There are plenty of higher-end video-editing programs like Premiere Pro or Final Cut, so if you're planning to produce something on a professional scale, you'll probably find iMovie a bit too limited. However, if you're just starting out and want to learn the basics of video editing before tackling more sophisticated features, then iMovie is a gentle introduction to the world of computerized video editing.

Apple Rumors

Here are the latest rumors swirling around Apple. On September 7, Apple will introduce a new lineup of iPods where the iPod touch will include a camera. The likelihood of this rumor coming true is high, since Apple has traditionally held iPod announcements in September, and if it doesn't do something as simple as upgrading at least the iPod touch with a camera, it will have almost nothing else to promote for its aging iPod product line.

The second rumor is that Apple will release Snow Leopard by August 28, although Apple has said only that it will be released sometime in September. If you're thinking about buying a Mac, you might as well wait until Snow Leopard comes out. Otherwise you'll have to pay $9.95 to get it.

Like all new operating systems, take your time upgrading. When Leopard first came out, it was buggy and awful. Only after Apple quickly patched it with Mac OS X 10.5.1 was it finally stable. Apple has no reason to rush Snow Leopard, so expect it by the end of September, since it will still beat Windows 7 to the market.

The third rumor is Apple's tablet device. Some rumors say it will be released this year, while others say it will be released early 2010. If it's going to be released this year, it's already too late for the back-to-school market, so the only reason to release it this year would be to coincide with Windows 7's announcement and steal the spotlight from Microsoft.

If this tablet device doesn't come out by October, then expect it in the first quarter of 2010. Supposedly priced between $700-$900, this tablet will fit in between the iPhone and a laptop. When connected to a Macintosh, this tablet device can double up as an additional screen or as a touch-gesture pad.

Out of all these three rumors, the camera in the iPod touch is almost certain, while Snow Leopard's date is definitely soon enough to hold off buying a new Mac until Apple officially announces Snow Leopard. The big question is, simply, when will Apple release its tablet computer that supposedly doesn't even exist?

Macintosh Software News

Microsoft recently announced that it is dropping Entourage from its Microsoft Office suite and replacing it with Outlook for the Mac. Considering this is what people have been clamoring for since Entourage's release back in 2000, why did it take Microsoft eight years to finally respond?

The conspiracy theory is that Microsoft deliberately held back from Outlook for the Mac to keep Windows users from defecting to the Macintosh. After Apple announced that Snow Leopard would include Microsoft Exchange support, Microsoft announced that Outlook for the Mac would be comparable to Outlook for Windows with full Microsoft Exchange support.

While it's nice that Microsoft has finally decided to make Outlook for the Mac, you have to wonder if Microsoft will ever make Microsoft Office for the Mac equal to Microsoft Office for Windows.

Microsoft is trapped in an odd dilemma. If it makes Microsoft Office for the Mac equal to Office for Windows, that could speed up the number of Windows users who defect to the Macintosh. If it continues to cripple Office for the Mac, the company risks losing its Office dominance on the Macintosh. Although Apple's iWork suite isn't threatening Microsoft Office, it could eventually gain momentum if Microsoft continues delaying features in Office for the Mac.

While Microsoft is juggling the dilemma of trying to push Windows and Office for the Mac at the same time, Adobe has announced that the next version of its Creative Suite will no longer support PowerPC processors. Since most Creative Suite users are high-end power users, Adobe's market has either already upgraded to Intel-based Macs or stuck with their PowerPC Macs running older versions of Creative Suite.

With Adobe dropping PowerPC support and Apple dropping it for Snow Leopard, it's only a matter of time before more software will simply run solely on Intel-based Macs. The last PowerPC Macs were sold in 2005, so anyone still using a PowerPC Mac will eventually need to upgrade their computers. Expect PowerPC Macs to still be useful for another year or two, but after that, it will be time to switch to an Intel-based Mac.

* * *

One of my favorite features of Mac OS X 10.5 Leopard is its Quick Look ability, which lets you peek inside the contents of most types of files without actually opening that file. All you have to do is click on a file and press Command+Y. This opens a window that lets you scroll through the file contents so you can see what's inside the file.

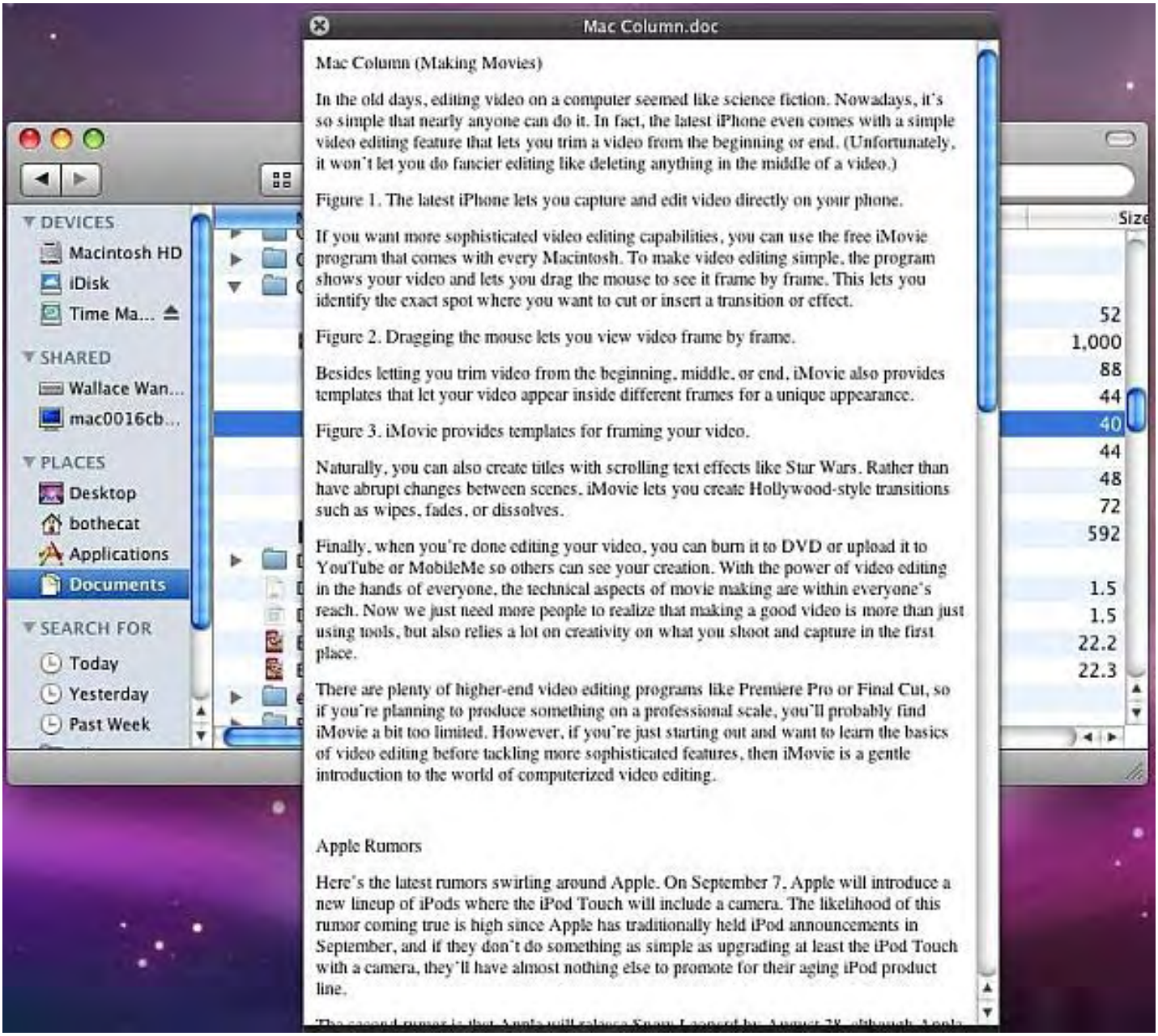

Figure 4. The Quick Look feature lets you peek inside of a file without opening it.

If you press the up/down arrow keys, you can Quick Look inside multiple files one at a time. This can be handy for scanning multiple files until you find the information you want.

In the early days, before Wally became an Internationally renowned comedian, computer book writer, and generally cool guy, Wally Wang used to hang around The Byte Buyer dangling participles with Jack Dunning and go to the gym to pump iron with Dan Gookin.

Wally is responsible for the following books:

- Microsoft Office 2007 for Dummies (*www.amazon.com/gp/product/0470009233?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470009233*)
- Beginning Programming for Dummies (*www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702*)
- Breaking Into Acting for Dummies with Larry Garrison (*www.amazon.com/gp/product/0764554468?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0764554468*)
- Beginning Programming All-in-One Reference for Dummies (*www.amazon.com/gp/product/0470108541?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470108541*)
- Steal This Computer Book 4.0 (*www.amazon.com/gp/product/1593271050?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271050*)
- Visual Basic Express 2005: Now Playing (*www.amazon.com/gp/product/1593270593?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593270593*)
- My New Mac (*www.amazon.com/gp/product/1593271646?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271646*)
- My New iPhone (*www.amazon.com/gp/product/1593271956?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271956*)
- Strategic Entrepreneurism with Jon Fisher and Gerald Fisher (*www.amazon.com/gp/product/1590791894?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894*)

Every Saturday morning from 9:00 am - 10:00 am in San Diego, you can hear Wally with fellow co-hosts Dane Henderson and Candace Lee, on the radio show CyberSports Today (*cybersportstoday.com/*), which covers the video gaming industry on ESPN Radio 800 AM. Wally covers the military history side of the video game industry.

When not performing stand-up comedy or writing computer books, he likes to paper trade stocks with the video game Stock Reflex (*www.plimus.com/jsp/download_trial.jsp?contractId=1722712&referrer=wwang*), using the techniques he learned from a professional Wall Street day trader.

Wally can be reached at *wally@computoredge.com* and at his personal web site (*www.wallacewang.com/*).

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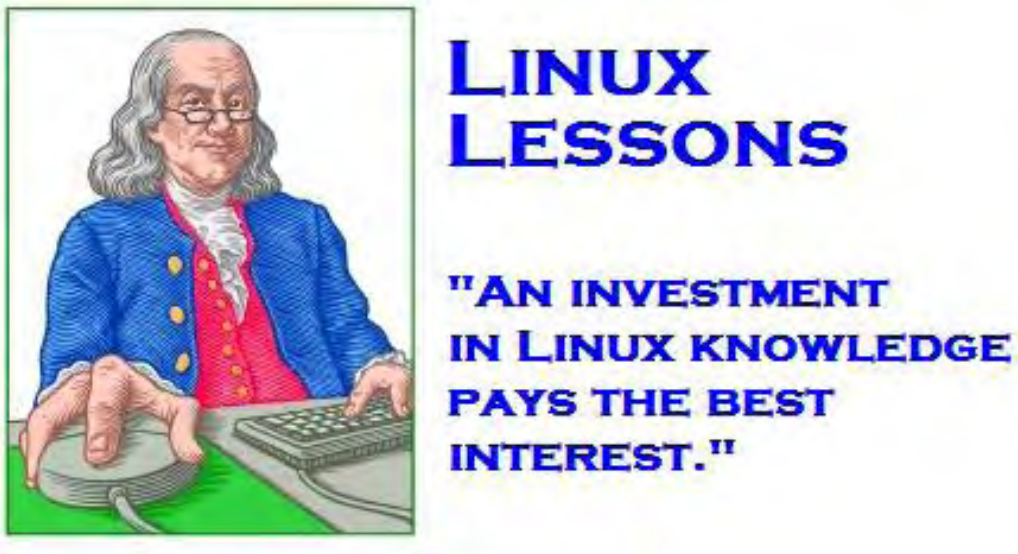

Linux Lessons: Tips and Tricks from Users

"Linux users share ideas and ask for help." by ComputorEdge Staff

One reader needs help finding command-line help sources, while another feels that new users should take advantage of the Linux GUI. Also, a call for Linux software reviews and various tutorials.

Looking for Help Ideas

Recently a friend gave me an Ubuntu CD, which I installed on an old computer sitting around. I am sold!

I've looked on various sites to try to find command-line help and info about Windows emulation, to no avail. I haven't done command-line stuff since Win 3.1 (DOS 6, BASIC—I still have somewhere my Timex-Sinclair pocket computer!) Microsoft Windows seems to have made people lazy or dumbed down. What would you suggest?

Andy M.

Forget Lessons on the Command Line

I'm a longtime *ComputorEdge* fan and an advanced Linux and Unix user for more than 10 years. During that time, I have seen the major Linux distributions mature into useable desktop operating systems. I will probably never use Windows at home again.

The major Linux distributions migrated away from the command-line shell and toward the GUI several years ago. I think *ComputorEdge* would do well to encourage column writers to write more about the Linux GUI, compare the major distributions, talk about the applications that come with the different distributions, discuss how to overcome or avoid installation troubles, how to keep Linux updated and secure using the GUI, and try to avoid columns about command-line utilities like ls and ps and grep and the like.

While advanced users know how to use the shell and all, it is no longer necessary for an everyday user to drop into the command line at all if they use a good workstation distribution like Ubuntu or Mandriva.

Regards,

Craig

Let's See Some Linux Software Reviews

I've been playing around with different Linux desktop distributions (Ubuntu, Mint, OpenSUSE, etc.) for a

while and, while I like some of the tips I get in Linux Lessons, I would love to see something like a software review section. For example, which e-mail client to use—Thunderbird, Evolution, Claws Mail?

I've noticed that the Linux Lessons have been a little lacking lately, and maybe this could be another way to engage your Linux readers. As an avid, longtime CE reader, I think something like that could benefit your readers who are attempting to make the switch to Linux full time.

Thank you,

Jim

Jimmy Would Like Some Tutorials

I was reading the Linux Lessons column and found Jack Hamilton's suggestions to be most excellent! It'd be great to see tutorials on all those subjects.

I would also like to see tutorials on Qt. I use Qt at work and sometimes I would like to know how to do certain things easier.

I would also like to see tutorials on the X server. Specifically, the X Toolkit, Xlib and some stuff on using X remotely.

I use Cygwin/X on my Windows PC to work remotely on Linux machines. It'd be nice see tutorials on Cygwin too!

The reason I use Cygwin and not Linux is because I use a few hardware programming tools that are only available for Windows.

Jimmy

* * *

Give Us Your Linux Tips and/or Questions

*If you have an opinion on these or other Linux topics, then please let us know. Also, if you have another Linux tip that works for you, or a favorite Linux software application, and would like to pass it along (or have a question), please drop us a line at Linux Lessons (*ceeditor@computoredge.com*).*

This is a column for Linux and Unix-like operating system users. The goal is to give Linux users an opportunity to share tips, tricks and ideas with both fellow users and the *ComputorEdge* Linux newbies. Each week in this column, we will highlight the thoughts you submit to us. This is your column. As long as a submission is dealing with the Linux/Unix-like world, we want to share it.

The tips and tricks may be short or long, and can include graphics. If there is a little technique or program that you use on a regular basis, then we want to hear about it. You may also pose questions for other Linux users to answer. E-mail your ideas or questions to Linux Lessons (*ceeditor@computoredge.com*). Be sure to put the words "Linux Lessons" in the subject line so it won't get lost in junk mail. We depend upon you to make this column a success.

Jack Dunning

ComputorEdge

ComputorEdge always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the article/ column. Your comments will be attached to the column and may appear at a later time in the "Editor's Letters" section.

If you want to submit a short "ComputorQuick Review", or yell at us, please e-mail us at *ceeditor@computoredge.com*.

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Rob, The ComputorTutor Does VB.Net

"OOP (Object-Oriented Programming)" by Rob Spahitz

Last week, we looked at the files that get created by a VB.Net project, including the executable file that gets built and can be distributed for others to use. This week, we explore the world of OOP (Object-Oriented Programming) and various components available for us to use in a project.

Last week, we looked at the files that get created by a VB.Net project, including the executable file that gets built and can be distributed for others to use. This week, we explore the world of OOP (Object-Oriented Programming) and various components available for us to use in a project.

CHALLENGE (due 8/28/2009):

Can you figure out what components in VB.Net would let you play a movie? What properties and routines would you apply to get it to run in your own custom application?

SOLUTIONS:

I previously asked how you would get VB to present a way for a user to print something. We'll explore some of that as part of today's exploration.

OOPs: It's No Mistake

In the early days of computers, programmers often wrote the entire application alone. For small projects, that wasn't bad. For more complex things, trying to write a computer program from start to finish is almost impossible. This is similar to trying to write a novel. If you just start writing at the beginning and keep going until you get to the end, you'll probably find a lot of gaps in the middle where things didn't work together exactly as planned. And even trying to go back can get very challenging.

These days, parts of projects are often shared. Sometimes parts are shared between programmers, and other times one developer takes on several tasks at different times and collects them together later. This is similar to a pre-fabricated house, where most of the parts are created first and then they are assembled. Each part can be checked to ensure that it does what it is supposed to do before being put into the final product.

Modern-day programming takes that concept and applies it everywhere in a concept called OOP (Object-Oriented Programming). For example, when you need to get input from a user, how would you do that? Well, you can write your own routine to check if any signals came in from the keyboard and try to interpret them. Then you'll need to show the result to the user to ensure that the user typed the right thing.

Where would you display that information? You could create a box where you can put the text. However, Windows works with all pictures, so you'd have to somehow change the text into pictures of text. And what happens if the user presses the Backspace key or wants to edit part of the text after it was typed? Cursor keys

would be helpful, but then you need to add a marker so the user knows where the next piece of text will go.

Obviously, this task would be quite challenging. Instead, you can take a component that Microsoft already made available and use it: the TextBox. In addition to all of the above features, you also get the opportunity to set your own text font, size and color, borders around your box, and a variety of other things.

To make this concept work, the idea of OOP was developed. It basically allows a programmer to create a mini-program that can be used by other programs. This used to be done through shared variables and subroutines; now they are called Properties and Methods, and the mini-programs are typically called Classes.

Now every time you want a text box, just load up the TextBox class into your project and ask Windows to show it and use it. By assigning different settings, you can get it to show up where and how you want.

One problem: Where will it go? Middle of the screen? Typically, you need a container for the text box, so you load up the Form class to hold the text box. Microsoft created the Form class specifically to hold other pieces and to give you the functionality that you expect in other windows: Title bar, borders, a red X, a common background color, and maybe a few other things.

By using common controls, you can get a look where people feel comfortable. When users see a form, they know that the top will contain information about the application's title or name. When they see a text box, they feel confident that they can type text into it, select text, and maybe use the mouse to paste data with a right-click. What did you have to do to get all this functionality? Simply use a predefined component and update its settings.

VB ToolBox

VB.Net gives you many components (called controls) that are commonly found in various Windows applications. These are grouped and placed into a Toolbox, ready to be added to a container such as a form. When you start a new VB project as a Windows Application (as we've done several times in the last few weeks), you get a form ready to be that container.

To the left of the Form work area, VB.Net has something called Toolbox. When you click on it or hover over it with your mouse, you see some of the tools, as seen in Figure 1 (using VB.Net 2010).

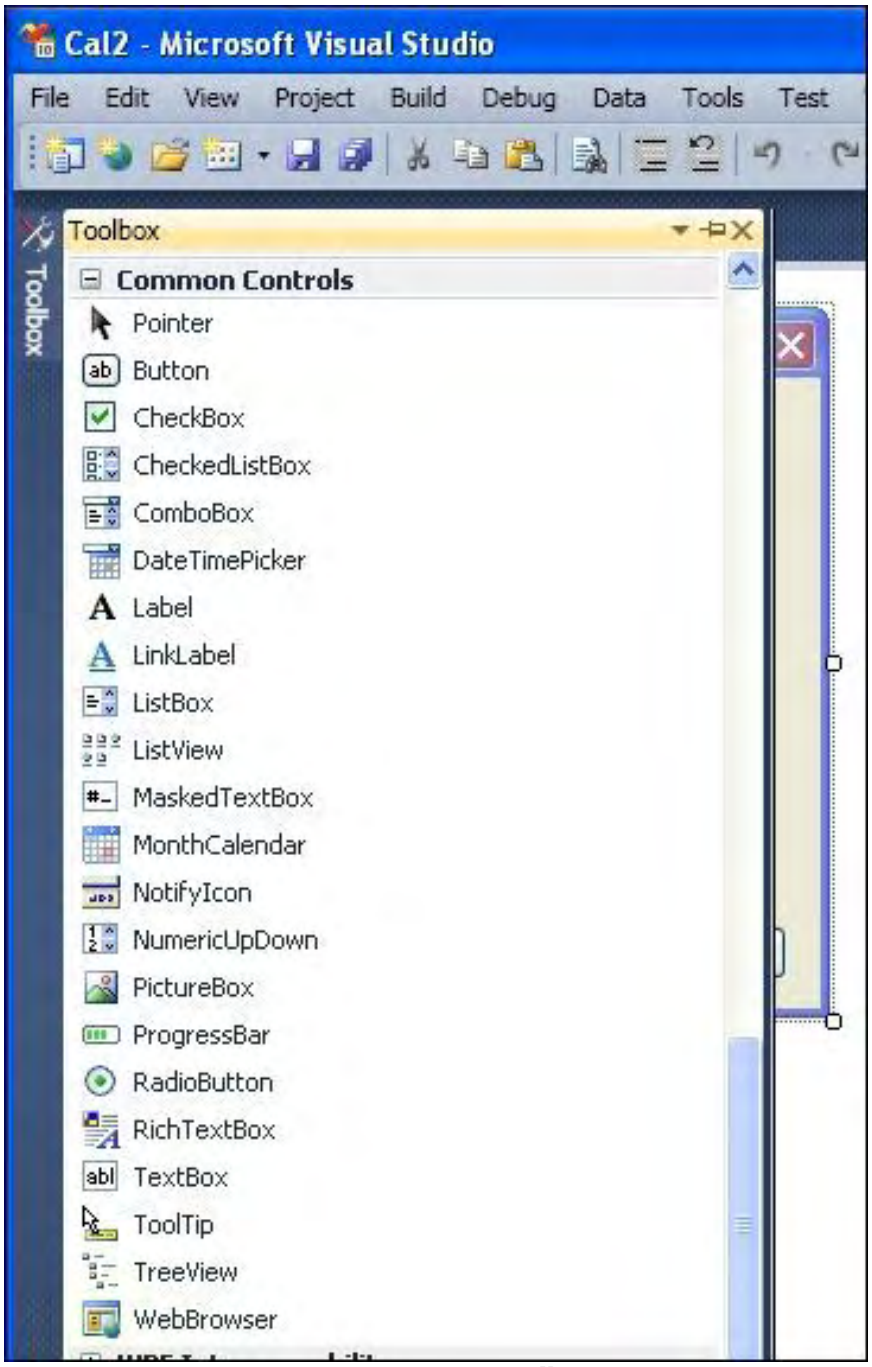

Figure 1. VB.Net Toolbox.

The toolbox has a variety of categories, including Data, Containers, Printing and Common Controls, among others. These categories help you to find the many tools that are available. In previous articles, we used the Button, Checkbox and MonthCalendar. Now let's explore those used most often, which will likely be in the Common Controls category, as seen in the figure above. Then we'll learn more about how to use them.

• Pointer—This is not a control; this merely lets you cancel a control that you may have selected. Picking this returns you to editing mode.
• Button—This is the control that you see in so many parts of Windows, often showing the text "OK" or "Cancel," but buttons can show any text or even pictures.
• Checkbox—Again, this control you see in many applications. Its primary purpose is to let you select or deselect a setting.
• Combobox—A combination control, which contains a textbox and a list. The list is activated by clicking on

a small button with an arrow pointing down. This is often known as a dropdown listbox, although, technically, that's defined as a combobox that requires you to pick something from the list.
• DateTimePicker—This is another combo control, but it combines a MaskedTextBox with a MonthCalendar in the dropdown portion.
• Label—This control is typically used as a placeholder for a message to the user. It is most often used to identify an input field (textbox, checkbox, etc.) or to give a title or basic help information on the form.
• ListBox—This contains a list of values that a user can pick for some program-defined purpose.
• MaskedTextBox—Like a TextBox, the user can enter text; however, the text is limited to some select criteria such as only numbers or formatted text, such as some foreign postal codes.
• MonthCalendar—As we've seen, this control gives you a calendar, and all of the functionality that you'd expect for a typical calendar.
• NumericUpDown—This is another combination control, combining a MaskedTextBox with some buttons that will automatically increment or decrement the numeric value in the text area.
• PictureBox—As the name implies, this control can hold a picture.
• RadioButton—Oddly enough, this is really a variation of a CheckBox. The main difference is that it is round and can only be deselected if another RadioButton in the group gets selected.
• TextBox—As described earlier, this is your traditional generic box for entering text.
• WebBrowser—This control basically turns your form into a custom Web Browser.

As you can see from the items listed above, some are pretty basic (like the Label and PictureBox controls), and some are quite sophisticated (like the DateTimePicker and WebBrowser). In addition to these, there are also controls for adding menus to your form and for allowing the user to select a filename to open or a printer for printing a document.

Control Settings

In order to make controls work effectively, you probably need to change some of the settings.

For example, in last week's article, we added a Button to our form. Its purpose was to close the form. It neither closed the form nor helped a user know what its purpose was. Conversely, the MonthCalendar was pretty much self-evident. It worked without us doing anything special, and a typical user would know how to use it (or at least figure it out without any assistance from you).

When we added the Button, the text on the button was simply Button1. Since this was supposed to be a Close button, you might just search through the toolbox for a CloseButton. You won't find it. So maybe a CancelButton? Nope! Well surely there will be an OKButton? Not that either.

It's not that those aren't good ideas. You could actually create your own and add them to your toolbox if you wanted. The real problem is that the process to create one of those buttons is so easy that it's not worth it to have a custom version just for that purpose. To create a Close button, you basically have to change one setting and add one line of VB code. Cancel would pretty much be the same. An OK button would be essentially the same, except that it might also save some information, which a toolbox item wouldn't know what to do with, so you have to do it either way.

So what you have is three variations of the generic Button class that simply require two customizations. You'd simply change the text on the button and write some code to close the window (possibly saving some information first).

How do you do this? The answer goes back to the way OOP works. OOP is about making self-contained components that can easily interact. The OOP concept usually has three words associated with it:

Encapsulation, Polymorphism and Inheritance. These fancy words basically mean that the component should be: stand-alone and controlled from within; have the ability to present itself in many ways (like checkboxes and radiobuttons), or act in different ways; and allow other components to use its features.

These fancy words work by allowing developers to interact with the control through Properties and Methods. Also, within Windows, Events can be used to process specific methods called Event Procedures.

Properties are basically component (class) variables. A variable is a named piece of memory used to store and give a value as needed. The main difference between a variable inside computer code and a variable is that properties give you the opportunity to validate the information before it's stored, or manipulate it (like format it) before it's given. To do that with a variable, you'd need to write extra code every time you use the variable.

Another thing about properties is that they are available for use by things outside the class. That is, programmers can change class properties which, in turn, will cause the component to use the new setting as it feels is appropriate (like display it in a box or change a color).

Meanwhile, methods are just subroutines available by things outside the class. When you want the class to perform an action, you run one of its methods. For example, a form's Close method will tell the form to shut itself down, while a Show method will tell it to show itself.

Tied in with this, event procedures are designed to allow a class to receive notification when something happens and to run the code inside a predetermined procedure. For example, when a Click event occurs on a button, you can have it run an event procedure named Button_Click, which can then activate the Close method of a form.

Button Component

So let's see how this works with the Button class. When you add an item from the Button class to a form (for example, by dragging it from the Toolbox), you create one instance of that class called an object. That button object needs a name, so it automatically gets a name like Button1. It also needs a size and some other settings, so it gets a height and width, foreground and background color, and some text that shows up on the button in a predetermined font.

Most or all of these settings are available through a separate window in the VB environment called, of all things, the Properties window. This shows up initially in the bottom-right corner of VB and looks similar to Figure 2.

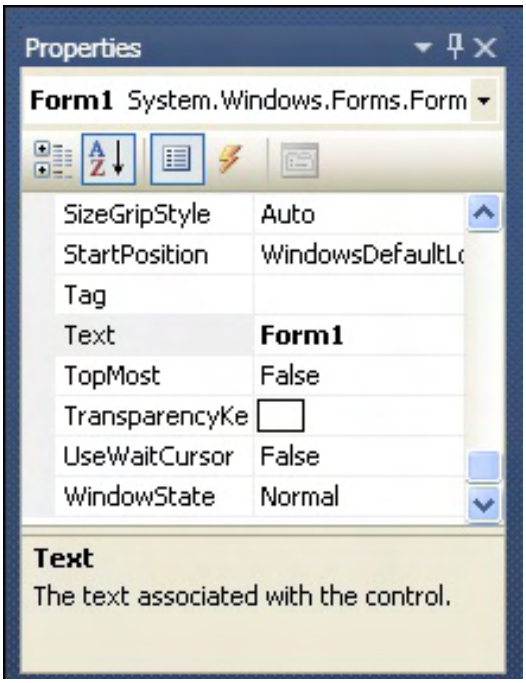

Figure 2. Properties Window.

In this case, we see that I have selected something called Form1 (bolded near the top), which is an object created from the System.Windows.Forms.Form class. This window has its own mini toolbar with a few icons. The first icon lets you see the property listing organized by category (such as appearance). The second icon (selected since it has a box around it) lists the properties alphabetically. After you use a class a few times, you'll probably know what property you want by name, and this will be the preferred choice.

The third icon, also selected, indicated that you are looking at the properties of this object. The fourth icon, the lightning bolt, lets you see some of the predefined methods available for this class. The fifth one, Property Pages, is not available for the selected property; it will show up as needed for accessing additional settings related to a property.

For each control on your form (including the form), you have a set of properties that help that class do its job. Often properties have the same function, so they will have the same name. For example, the Text is used to put a title on a form, text into the display area of a textbox, or to show label text next to a checkbox. Conversely, some properties are unique to a control. For example, forms have an AcceptButton property that allows you to designate one of the buttons on the form as the OK button if a user presses the Enter key.

Printing

As promised, you may want to allow a user to print something. Although there are many solutions, and many things to do to get it just the way you want it, here's one part to help. Go to your toolbox and, in the Printing section, add the PrintDialog to your form. Notice that it does not appear on the form even though you dropped it there. Instead it shows up below your form in an area called the Objects tray.

To get it started, add a new button to a form. Proceed to the button's code area (double-click the button!) and add the following:

```
Dim objDocument As System.Drawing.Printing.PrintDocument
objDocument = New System.Drawing.Printing.PrintDocument()
Me.PrintDialog1.Document = objDocument
```

```
If Me.PrintDialog1.ShowDialog() = Windows.Forms.DialogResult.OK Then
   objDocument.Print()
End If
```

When you run and click the button, the printer dialog box will appear and let you select a document to print. There's a bit more to it than this, which we'll explore in a future column.

Next week we'll explore some of the more commonly used properties of various controls. Meanwhile, keep submitting your solutions to my challenges.

Rob has been in the computer industry for over 25 years and is currently a part-time teacher, offering classes in Excel, Access, Visual Basic, and a variety of other technical tools. He has loved *ComputorEdge* since 1990 and can be contacted at *RSpahitz@Dogopoly.com*.

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ComputorQuick Reviews

News and Reviews from Readers and Staff

ComputorQuick Reviews

"Is it time to get a new 802.11n router?"
by ComputorEdge Staff

A Netgear router was less expensive than a Cisco/Linksys offering—and worked great!

Netgear or Cisco/Linksys Router?

On a recent trip to visit our grandchildren, I was accessing the Internet via an older router that my son owned. He didn't normally use the router since, with only one computer in the house, he could connect directly to his DSL modem. I inserted the old router into the network so that I could work wirelessly. It seemed to work well enough when I was the only one using it, but the second anyone got onto the other computer, there were problems.

I considered trying to upgrade the router's firmware, but it was so old that I opted to look for a new one. At one retail outlet, they were offering two different routers. Both were gigabit and Wi-Fi draft N capable, priced at under $100. The more expensive one was a Cisco/Linksys product, while the other was manufactured by Netgear (and $25 less). I carefully inspected the packaging to see what (other than the name) would make the Cisco/Linksys router worth more. The primary difference between the two was the USB port for a network hard drive on the Netgear router. Although my son probably won't use the USB port, I bought the less expensive Netgear device.

It was easy to install, and all the Internet connection problems went away. Even better, the Wi-Fi speed on my laptop went from 54mbps to 72mbps, even though I don't have 802.11n in my laptop. (If I did have the higher-speed connections, it would probably have been closer to 300 or 400mbps.) Save the $25 and get the Netgear. Who knows? You may want to use that USB port someday.

We Want Your Opinions About Hardware, Software and Web Sites

Over the years, *ComputorEdge* has had great input from our readers. In particular, people have submitted short reviews of equipment, software and Web sites that they really like. In some cases readers have offered tips (such as avoiding flakes on Craigslist). ComputorQuick Reviews is our column dedicated to highlighting those things that you most like and want to recommend to others. The problem is that if this column doesn't appear, it becomes forgotten and less likely to receive input from you.

We have decided to include this feature in every issue as a reminder that this is your magazine—even if we don't have any new reader reviews. If you would like to see the type of reviews that we have run in the past, then check out ComputorQuick Reviews (*webserver.computoredge.com/sitemap.mvc?*

feature=Columns&columnedcode=persrev&column=ComputorQuick%20Reviews) in the *ComputorEdge* Site Map. You will find that they are quite varied. We would like to see more. Consider this column a gentle prod saying that we would like to hear from you.

You can send us an e-mail at ComputorQuick Reviews Submissions (*ceeditor@computoredge.com*).

The purpose of this column is to give our readers an opportunity to express their opinions about products and services that they have found particularly useful. If you have had experience with hardware, software or a Web site that made you say, "This is really great! I want to tell everyone about it," then this is a good place to do it. While we do want to post warnings, we are not interested in slamming the obscure bad products, because there are too many of them. We would like to hear about those things that you would recommend to your best friend. The only caution is to please use proper capitalization (do not use all caps) and complete sentences. If it takes us too long to edit the piece, it may be a long time before it's published on this site.

*Please send your personal reviews to ComputorQuick Reviews Submissions (*ceeditor@computoredge.com*).*

ComputorEdge always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the article/ column. Your comments will be attached to the column and may appear at a later time in the "Editor's Letters" section.

If you want to submit a short "ComputorQuick Review", or yell at us, please e-mail us at *ceeditor@computoredge.com*.

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EdgeWord: Copying a DVD

“DVD Copying and Copyright Issues” by Jack Dunning

Microsoft doesn't provide DVD-copying software with Windows, which ties into a discussion of copyright law and what exactly is "fair use."

If you take the time to edit and produce a home movie and burn it to a DVD, then you may consider making copies of that DVD for your friends and family. It's simple enough. You made the DVD from your original cinematography work. You should be able to make as many copies as you like, giving them to whomever you like. Yet, with a little digging around in Windows, you find that there are no tools for making copies of DVDs. You would think that since Windows includes Microsoft Movie Maker and Microsoft DVD Maker, that there would be a feature for making DVD copies. This is not the case.

While you could make as many copies of your DVDs as you like with DVD Maker, the process is more cumbersome and slower than creating an image of the original DVD, then burning more copies to blank discs. This omission of DVD-copying software from Windows is deliberate—and probably counterproductive. The fault lies in the attitude (and law) that surrounds copyrights.

It is illegal to violate a copyright to either make a profit, or to diminish the profits of the copyright holder. Copying a commercial DVD and selling (or evening giving) it to a friend is illegal, either because you make a profit or you deprive the copyright holder of your friend's business. This does not preclude you from making fair use of the material, but you need to be a little careful about how you use copyrighted material.

For example, if you are producing a home movie, you may want to use a particular song as background music. (There is nothing like a little music to add spice and/or drama to the typical home movie.) Why not? You purchased the music and often include it on that mixed CD that you enjoy while driving. However, what are the problems with including copyrighted material on your new DVD—or posting it on YouTube?

If you add the copyrighted music to a DVD that's only for personal, non-commercial use, then you probably don't have a problem. (I say "probably" because in this day and age anyone can sue you, which, right or wrong, would be a problem.) If you keep the DVD to yourself or only show it to friends, then no one of significance is likely to know.

If you post the movie to the Web, you run a little more risk. That's not to say it wouldn't be perfectly legal to do so, if you can prove fair use—not for profit nor diminishes the copyright holder's opportunity for profit. The problem with the Web is that many more people may see it, attracting much more attention. The music and movie industry are always fighting fair use issues in an attempt to remove any inkling of their material. They don't care if you are within your rights; they will let the courts decide. Who wants that? Everyone is afraid of being sued including big companies such as Microsoft.

These issues tie into why Microsoft doesn't provide DVD-copying software—although it is difficult to tell which side Microsoft is on. Yet, it is a mistake for there to be no such software included with each computer—for everyone involved.

If software for copying DVDs were included with Windows, then the average person would be able to quickly and easily copy their own work. Encoded DVDs with copyrights would be recognized and not copied by the software. For most people, this would not be a problem and that would be the end of it.

However, since people are forced to look for disc-copying software, they have just as good a chance of finding programs that will copy anything and everything—protected or not. The music and movie industry should be thrilled to sponsor a duplication program on every computer that would protect their copyrights. As it is, they think the solution is to make it harder for everybody.

You can't outsmart computer users. Someone will *always* break the code, then make it available to everyone. Some will do it legally, other behind the scenes, but it will be done. There are numerous programs freely available for burning DVDs. Many are paid programs that serve the purpose well. However—and ironically—the free programs are much more likely to provide the code breaking needed to copy commercial DVDs. These programs are much harder to police and spread across the Internet like wildfire.

I have no desire to copy commercial DVDs. Most of them are not good enough for me to waste my time watching them. If Hollywood happens to produce something with some redeeming value, then I can either rent it, buy it if it's re-watchable, or borrow it. It just would have been nice to make copies of the DVD of my dad's eight-millimeter home movies without digging around the Web to find a free program.

Jack is the publisher of *ComputorEdge* Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called *The Byte Buyer*. His Web site is *www.computoredge.com*. He can be reached at *ceeditor@computoredge.com*

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Editor's Letters: Tips and Thoughts from Readers

"Computer and Internet tips, plus comments on the articles and columns." by ComputorEdge Staff

> "What's Important When Picking a Printer," "Broadband and E-Mail," "No Internet Explorer?," "On the Linux Column"

What's Important When Picking a Printer

[The following letters are in regard to Jack Dunning's July 31 article, "What's Important When Picking a Printer."]

I am one who no longer owns a printer. I seldom need to print a document, and when I do, I go to the local library and print from a USB drive to their laser printer. I get charged 10 cents per page. It is a lot cheaper than keeping an inkjet from drying out or having a laser printer sitting idle.

-Mike, Longmont, Colorado

My old reliable, friendly, very high-def Canon printer has stopped printing magenta. I easily removed the print head and soaked it for three days in isopropyl alcohol, but that did not cure the problem. Is there another solvent to try before I spend $50 for a new print head? Is there another ink path beyond the print head that needs cleaning? (I love to take things apart.)

-Burt Green, Aurora, CO

Broadband and E-mail

[This letter is in regard to Digital Dave's July 31 column, where a reader wrote in about being frustrated with his cable e-mail and broadband Internet experiences.]

I think that it is a very bad decision to use the e-mail provided by an Internet provider. The worst part of that is you are tied to their system. If you change providers, you lose your e-mail account(s).

I recommend Gmail and Hotmail; they both work and work well. Plus, you will have no problem if you change providers.

-William Gilbert, Melaque, Mexico

No Internet Explorer?

In [Jack Dunning's July 31 "EdgeWord column, "Google Android, Windows 7 and Apple Computer Industry Musings," I [saw] that Internet Explorer will not be included with the Windows 7 install. I must be missing some fundamental information. Without an included Internet browser, how will people make the initial connection to the Internet?

Thanks for all the great information.

-Tom, Las Vegas

[I should have been clearer. Only in Europe does Windows 7 come without Internet Explorer. I'm sure there is still a way to download. —Jack]

On the Linux Column

[Regarding Jack Dunning's August 7 Edgeword column, where Jack addressed how to proceed with the Linux column:] I think the toughest challenge of the Linux column is knowing who the audience is. For basic to advanced help on Linux, there are already a ton of online resources that Linux users can use. I've thought of writing tips aimed at newcomers to Linux, and maybe that would be the best aim of the column—something short and cool about Linux that others might not be aware of.

Most computer users use some open-source software here and there, but to make the switch to using Linux as your operating system is much more involved. I'd guess that by then most users would have found other sources for their Linux needs. I don't want to see the column go away, though.

-Richard, Longmont, CO

ComputorEdge always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the article/column. Your comments will be attached to the column and may appear at a later time in the "Editor's Letters" section.

If you want to submit a short "ComputorQuick Review", or yell at us, please e-mail us at *ceeditor@computoredge.com*.
