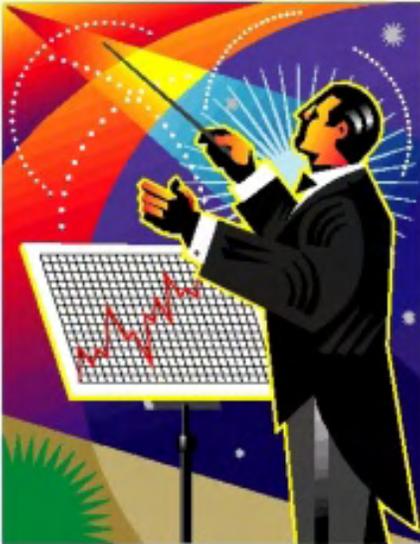


ComputerEdge™ Online — 05/15/09



This issue: Making Charts and Graphs to Impress

Software for making charts and graphs—
one simple, one powerful—both free.

Table of Contents:

[Digital Dave](#) by *Digital Dave*

Digital Dave answers your tech questions.
A reader wonders how to speed up his rural dial-up Internet access; a reader's laptop won't recharge unless the device is powered on. What gives?; Are i7 processors worth the price, and can they handle Photoshop and video processing?

[Quick and Not-So-Dirty Chart Making](#) by Jack Dunning

The free OpenOffice suite may surprise you.
The graphing capabilities of OpenOffice are amazingly intuitive and quick—and it's free!

[pChart: Free Online Chart Program](#) by Michael J. Ross

For dynamically generated charts on the Web.
There are several quite usable online charting programs available that can work in conjunction with whatever program code is running your Web site, but pChart is good—and free.

[Windows Vista \(Windows 7\) Tips and Tricks](#) by Jack Dunning

Start Getting Ready for Windows 7
The Windows community is waiting in anticipation of an operating system that will finally meet expectations. Here's how you can get ready.

[Wally Wang's Apple Farm](#) by Wally Wang

Rival Office Suites
A workaround lets you run Office 2007 on your Macintosh, giving you the power of Office 2007 with the safety and fun of Mac OS X. Also, a look at using Numbers, the spreadsheet that comes with iWork; Snow Leopard is rumored to include Chinese

(Click Banner)

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(Click Banner)

character-recognition technology; and a tip on defining your own shortcut commands.

[Little Linux Lessons: Tips and Tricks from Users](#) by

ComputerEdge Staff

Linux users share ideas and ask for help.

Readers answer a question about the danger of viruses on Linux; a tip on using the file command to determine data type; and a call for opinions and information for the June 12 Linux issue.



(Click Banner)

[Rob, The ComputerTutor Does Visual Basic for Applications](#) by

Rob Spahitz

VBA Debugging

Last week, we explored how to manage errors in Access VBA. This week, we will spend more time looking at that and the tools VBA offers to help ensure that we write more accurate code.



(Click Banner)

[Techno Talk: Digital Photography 101](#) by D'Artagnan Fischer

Photo Manipulation in the 21st Century

With today's technology, you can easily manipulate digital photos in some very clever ways, and you don't have to be an expert to do it!



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[ComputerQuick Reviews: doPDF Versus PrimoPDF](#) by

ComputerEdge Staff

More on PDF programs.

A reader recommends PrimoPDF, a PDF-creation program that includes all fonts in the resultant file.



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[Buddha's Noble Eightfold Path Now on Your iPhone](#) by

ComputerEdge Staff

Follow the Teachings of Buddha

Buddha meets Benjamin Franklin in a unique fusion app that incorporates Franklin's time-honored self-improvement system with Buddha's Noble Eightfold Path—with an iPhone twist.

DEPARTMENTS:

[EdgeWord: Windows 7](#) by Jack Dunning

Will we see an entrepreneurial spark?

If Windows 7 sparks a boom in the computer market, it is good for everyone—not just Microsoft.

[Editor's Letters: Tips and Thoughts from Readers](#) by

ComputerEdge Staff

Computer and Internet tips, plus comments on the articles and columns.

"Adding Network Printers," "Get an iPod Touch," "Ishw and Alternatives," "Protect Those Lenses"



(Click Banner)

[Return to Table of Contents](#)



Digital Dave

“Digital Dave answers your tech questions.” by *Digital Dave*

A reader wonders how to speed up his rural dial-up Internet access; a reader's laptop won't recharge unless the device is powered on. What gives?; Are i7 processors worth the price, and can they handle Photoshop and video processing?

Dear Digital Dave,

I enjoy your column. I live in rural Vermont and am struggling along with dial-up access to the Internet. Cable companies want a bloody fortune to bring it down our road, and the thick forest prevents a dish from being an option.

Do you have any suggestions for speeding up/improving our dial-up access?

*Larry
Newfane, VT*

Dear Larry,

The primary problem with dial-up is that there is only so much water that you can force through a one-inch pipe. To get any more through, you need to squeeze all the bubbles out of the flow. Fortunately, unlike water, most data can be compressed significantly. This is the way that you can speed up a dial-up connection.

If you have only dial-up available in your area, then there are a couple of options. First, you can sign up with a dial-up Internet service provider such as NetZero, TOAST.net or EarthLink. They use data compression to squeeze more data through your phone line and give higher data throughput.

The second approach is to use an Internet accelerator service such as Propel (www.propel.com/) or Proxyconn (www.proxyconn.com) in conjunction with your current dial-up service. These accelerator services use their servers to pre-compress Web pages before they are sent to you. They serve the same purpose as the compression offered by the ISPs mentioned above; however they will work with any dial-up service. There is an additional monthly charge for the accelerator service, effectively doubling the cost of your dial-up. If your current dial-up service offers data compression, then you may see no benefit in adding an acceleration service.

The major problem with data compression is that the more you compress data, the more you will lose quality in graphics. If your primary concern is reading text over the Internet, then you will see two to three times the speed in your Web browsing. You will need to accept lower-quality graphics, plus, if you're downloading compressed (zipped) files, you won't get any speed increase.

I would continue to look for alternatives to dial-up. I'm assuming that you also don't have DSL in your remote location. If you haven't already done so, it's worth checking with your local phone company.

Do you have any kind of cellular coverage in your location? If you can get a decent signal with one of the cellular companies, then you should be able to get cellular broadband—which would be a huge improvement over dial-up. Also, cellular companies are starting to offer signal repeaters that can be installed into homes. Effectively, these are mini-cellular towers that increase the cell signal in your home. They run about \$400-\$500.

Digital Dave

Dear Digital Dave,

I love your column. I've been reading it since The Byte Buyer days. Thanks for your great work.

I have an HP DV6110us laptop. It won't charge the battery unless it's powered on. You read that right—if I shut it down and leave it plugged in overnight, the charge level doesn't change. But if I change the settings so it never hibernates or shuts off, then the battery will charge. It has a new aftermarket battery, and I have two new chargers, one aftermarket and one genuine HP, and they all act the same.

I can't figure out how the battery/charger would even know or care whether the thing is powered on or not, but I swear this is how it behaves.

Any ideas?

Steve Powell

San Diego

Dear Steve,

You're right! The battery/charger doesn't "know or care whether the thing is powered on or not." The problem must be in the charging circuitry of the computer. For some reason, the circuit that checks the battery status and controls the charging is not operating properly when the computer is powered down or hibernating. It could be something as simple as a faulty or corroded connector, or it may require the replacement of a component or board.

The fact that the battery will charge while the computer is on shows that all the primary parts (power supplies and battery) are operating correctly. The normal complaint is that the battery does not charge even while the computer is turned on. If the computer is still under warranty, then you should get it fixed. If it is out of warranty, it may be a problem that you can live with. After all, you can still charge up your battery by leaving the computer on.

Digital Dave

Dear Digital Dave,

I am in the process of building a new computer. I will be using this machine for the office, which does involve typical office functions, but also the use of Photoshop and limited use of video processing.

I have read about the new i7 processors and wonder if they are enough of a next generation of technology to justify the increased price and the cost of the DDR3 memory. What would be a good balance to get the speed to handle Photoshop and the video processing with the office functions?

Bob

Chula Vista

Dear Bob,

Why not go for it? It's a machine for the office—tax deductible. Plus, when doing your video processing, you want all the speed and power that you can get. The only drawback is that it will cost probably twice as much, or more, depending on what else you add, as any other computer. You could wait a year for prices to come down, but by then there will be something else more powerful available.

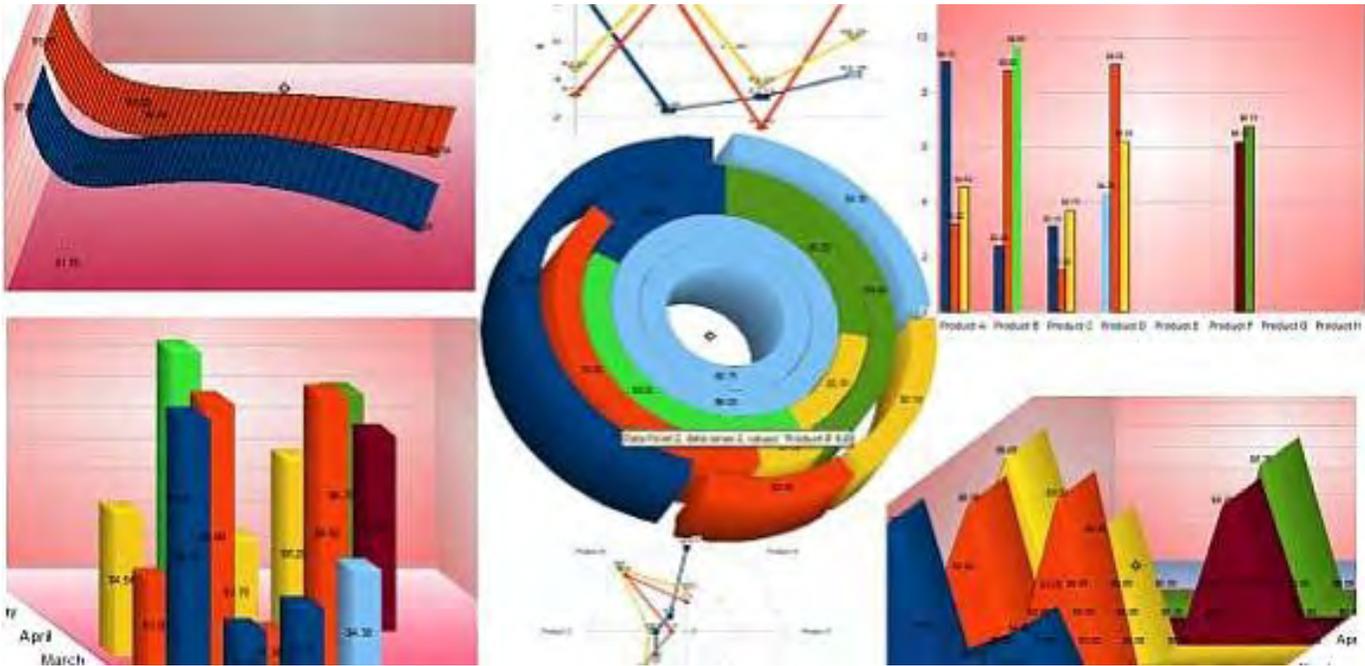
The Intel Core i7 processors are quad-core CPUs built to use the newer DDR3 memory chips. You will be able to take advantage of the 64-bit processing while owning a computer that will be upgradeable for some time to come. The only issue of balance is which i7 processor and how much memory you will put into the computer.

There are a number of different i7 processors, and the amount of DDR3 RAM is variable. Look at your budget and pick the combination that fits best. There is no point in loading up on memory while going with the cheapest CPU. On the other hand, shortchanging memory to get the i7 Extreme would be a mistake. Ultimately, it's the combination that makes you feel most comfortable, fits your budget, and will last you for the next few years.

If you're planning to use Windows, then be sure to use the Business Version or above of Vista. The Home Premium version is limited to 16GB of RAM, while the higher versions will support up to 128GB (192GB in Windows 7). It's better for future upgrades.

Digital Dave

[Return to Table of Contents](#)



Quick and Not-So-Dirty Chart Making

“The free OpenOffice suite may surprise you.” by Jack Dunning

The graphing capabilities of OpenOffice are amazingly intuitive and quick—and it's free!



I don't often need to make charts, but when I do, I like it to be easy. In the past, I've used spreadsheets, such as Excel, for my charts, but I haven't found using spreadsheets to be the most intuitive way to make presentations. In preparation for this topic, I took a closer look at the graphing capabilities in the OpenOffice (www.openoffice.org) suite of programs. I did this first because I use OpenOffice regularly—second, because it's free to everyone.

To my surprise, I found it amazingly intuitive to make charts in three of the OpenOffice programs. OpenOffice Writer (word processor), Impress (presentation software), and Draw (graphics layout program) all use the same type of chart-making techniques, so if you need a quick chart, any of those three will do. If you need charts integrated with a spreadsheet or other more advanced features, OpenOffice Calc is the obvious choice.

However, you will want to be comfortable with using spreadsheet formatting. (I've always found creating charts in spreadsheets a little awkward, mostly because the data is drawn directly from the cells, and an understanding of spreadsheet coding is necessary. I'm sure that there are many powerful charting programs on the market that will draw directly from databases, such as the one mentioned in the Michael Ross article

"pChart: Free Online Chart Program" in this issue of *ComputerEdge*. If you have other recommendations, I would like to pass them on to our readers. For the purposes of this article, I used OpenOffice Writer.

The first step is to open the Insert menu and select Object/Chart. In both Impress and Draw, Chart is selected directly from the Insert drop-down menu. A default chart will be inserted into the document, as shown in Figure 1. The size and shape of the chart can be changed by dragging the little tags on the border of the chart.

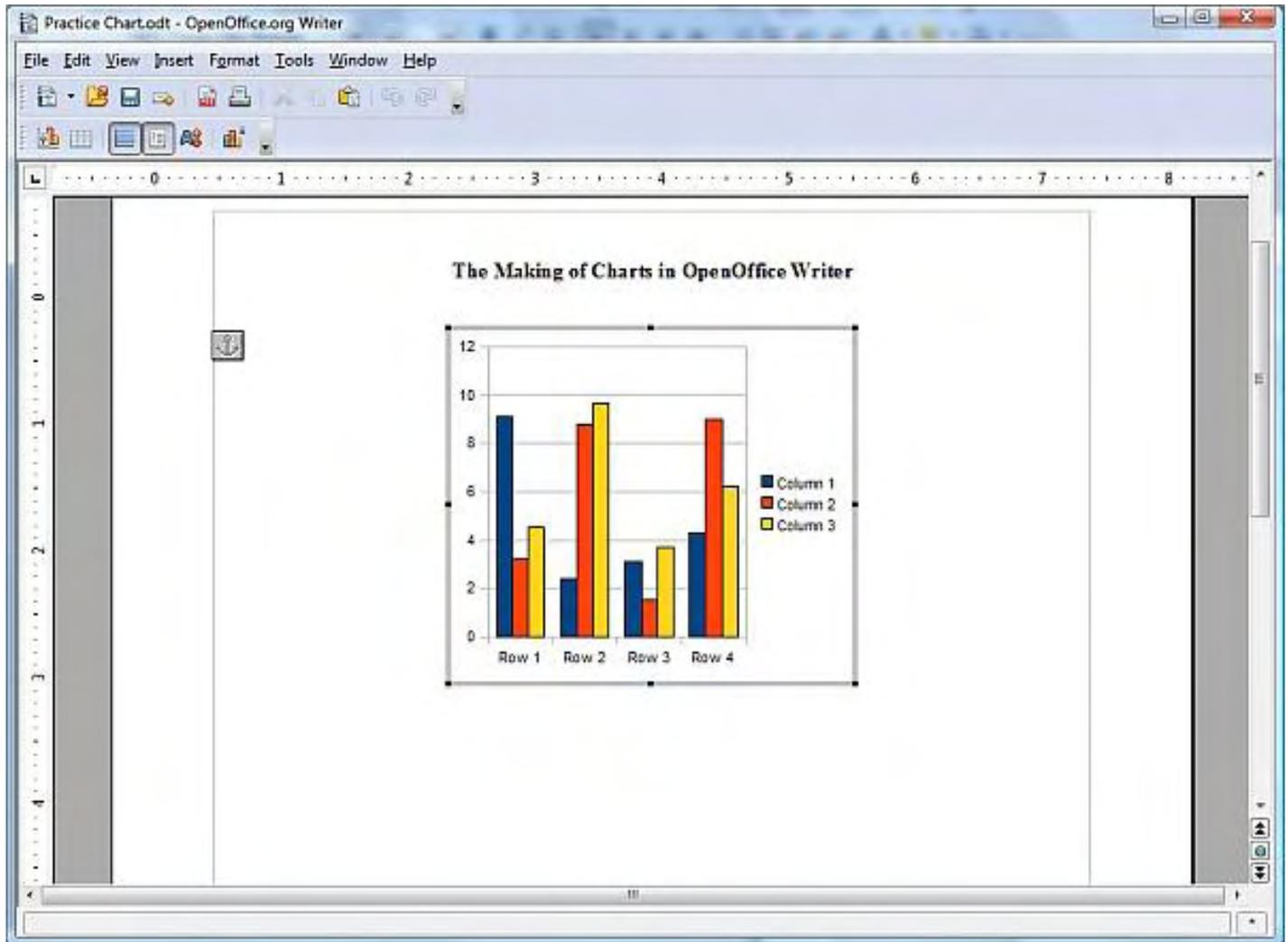


Figure 1. A standard chart inserted into an OpenOffice Writer document.

Once the chart is in place, you open the Edit mode by right-clicking on the chart, then select Edit from the drop-down menu. (Maybe this was intuitive for me because I right-click on everything in every program—almost as a force of habit.) You can also activate the chart Edit mode by selecting Object/Edit from the Edit menu in the taskbar after the chart is selected. When in the edit mode, you will be able to select various pieces of the chart with a click of the mouse. You may have noticed that a small editing toolbar was added to the bottom of the taskbar above. (See upper-left red circle in Figure 2.) The primary ways to format the chart are that toolbar and, of course, by right-clicking on an object in the chart and selecting from the menu, as shown in the second red circle in Figure 2.

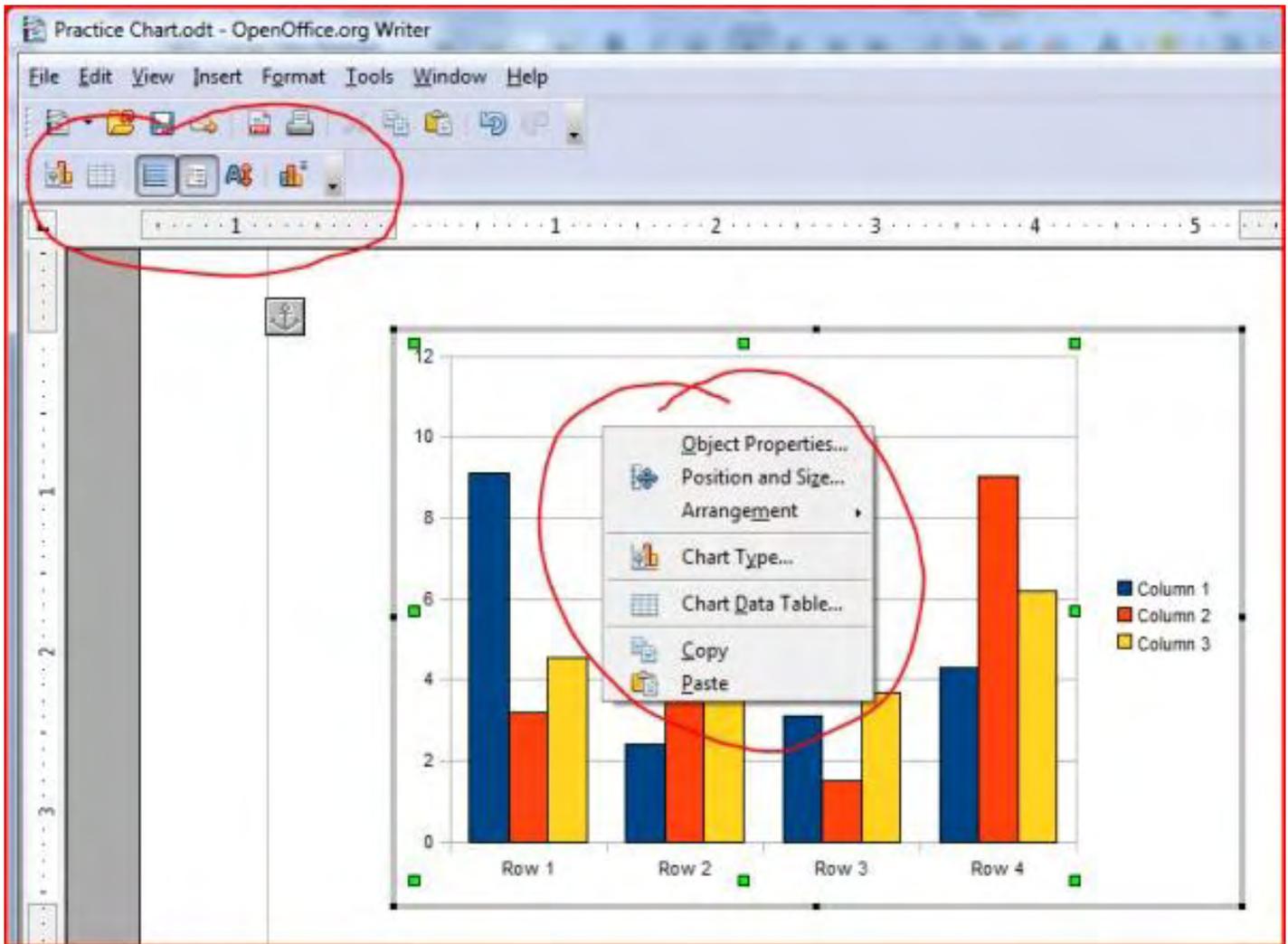


Figure 2. Two ways to access chart tools when in the chart-editing mode.

An important graph decision is selecting the right type of chart to display data for your purposes. When the right type of chart is selected, the presentation can be powerful. The wrong selection will look meaningless. OpenOffice has a number of options and certainly enough for most uses. Open the Chart Type window by selecting Chart Type either from the toolbar or right-click menu (see Figure 3). In this case, a 3-D area chart was picked, as shown in Figure 4.

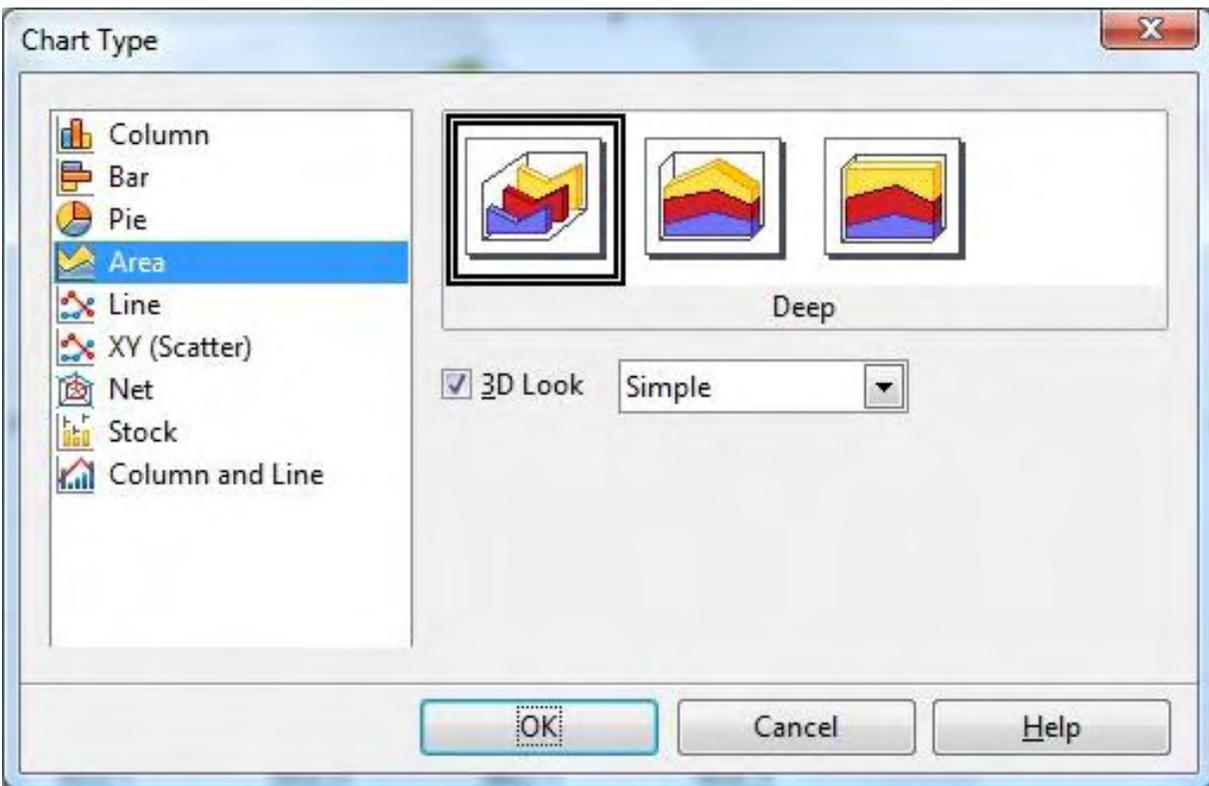


Figure 3. There are a variety of chart types from which to choose.

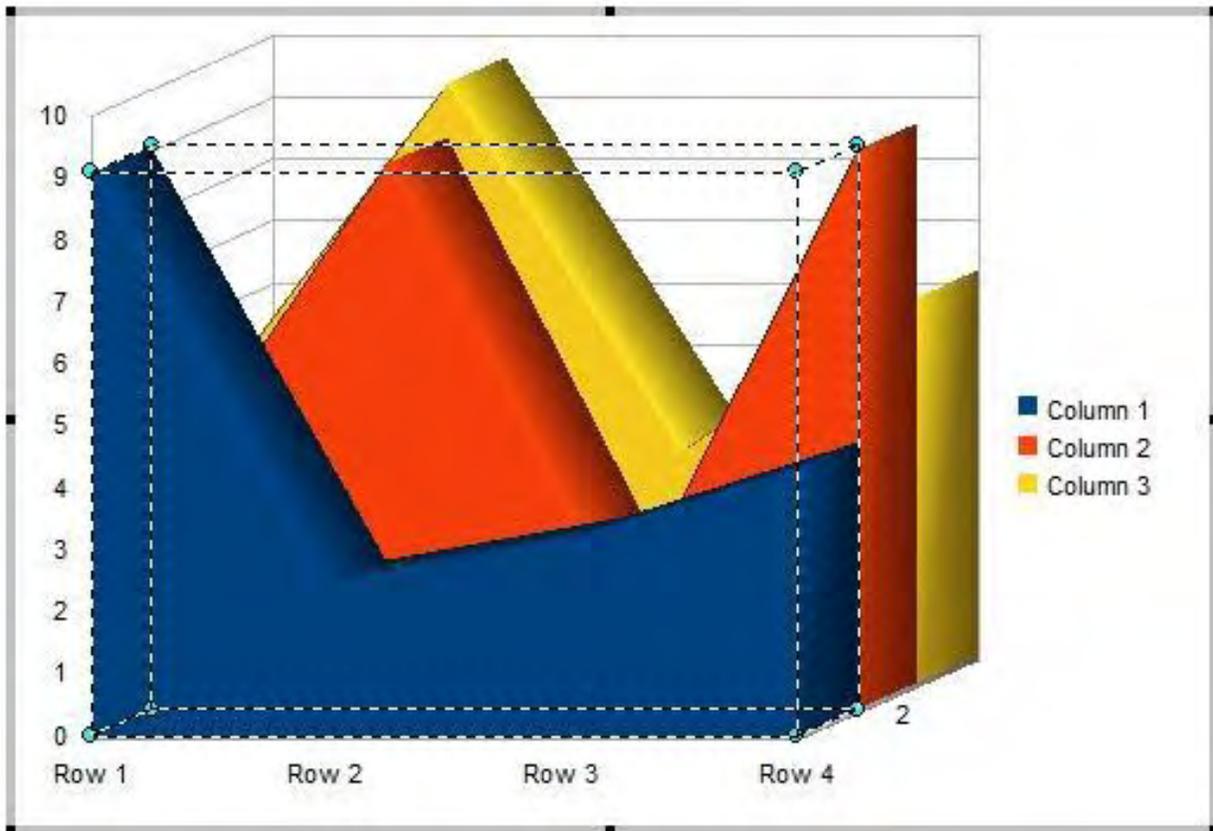


Figure 4. OpenOffice Writer 3-D area chart.

If, as in the case above, the chart type doesn't look quite right for your purposes, you can always change it later, as shown in Figure 7 at the end of this article. To make the chart yours, you need to change and adapt

the data and labels in the chart. That is done by selecting the Chart Data Table from either the toolbar or the right-click menu (see Figure 5). The simplicity of this table is that all of the data and labels for the chart can be changed by simply modifying the words and/or data in the current sample chart. That makes creating your custom chart quick and easy.

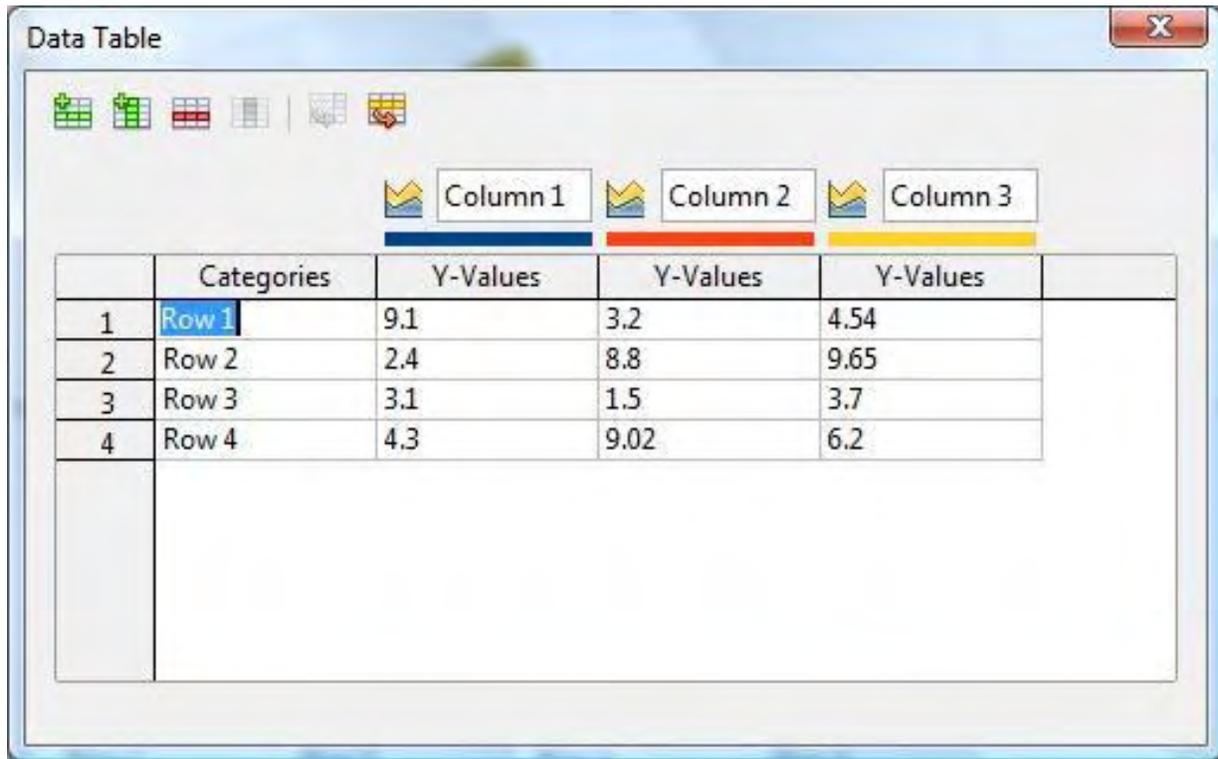


Figure 5. OpenOffice Writer Chart Data Table.

The Chart Data Table does not allow for the importing of data from another source. If you want those more advanced and flexible features, you will need to use the chart-making feature in OpenOffice Calc, which uses data directly from the spreadsheet, much like Excel, or go looking for another program.

It is easy to add more columns and rows to the chart. Mouse over the tools at the top of the Chart Data Table, and each will describe its function for whichever cell you have selected. When you Insert new rows or columns into the table, you will need to add the appropriate labels and data for each, as shown in Figure 6.

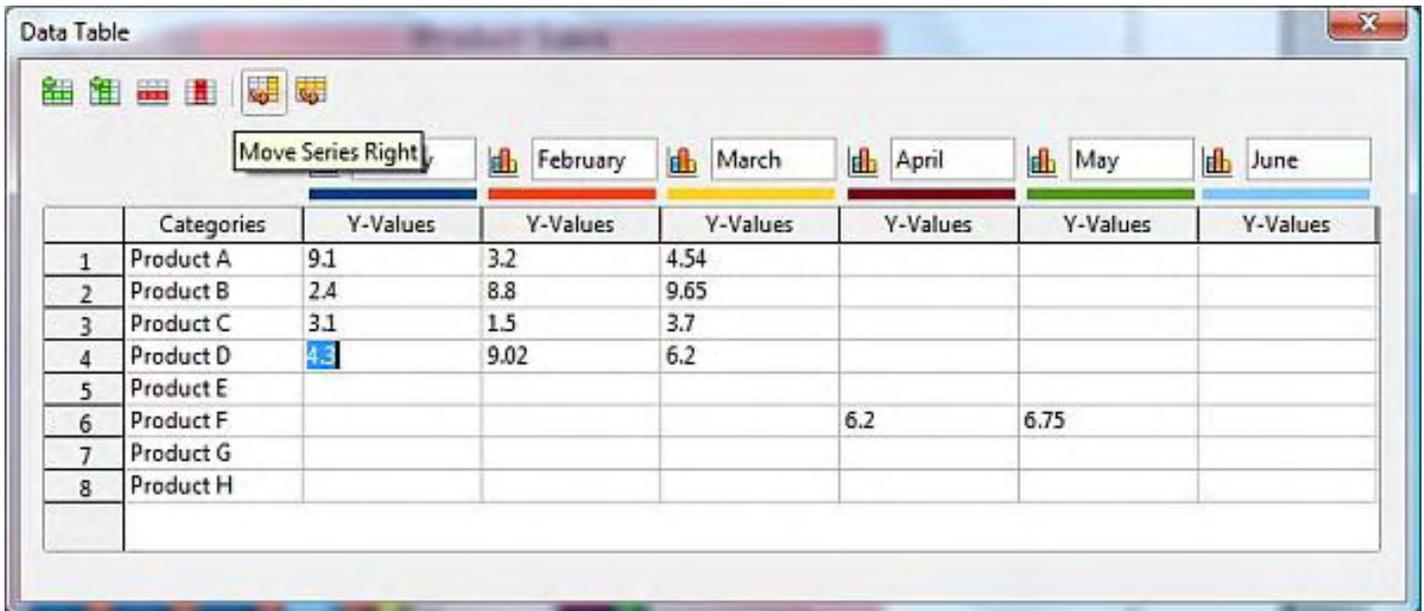


Figure 6. OpenOffice Write Chart Data Table with labels changed, plus rows and columns added.

Once you are in the Edit mode for the chart, the Insert and Format drop-down menus add functions to their menus that allow you to add labels and manipulate other features in the graph. I found that almost all of the functions were easy to use and intuitive. Each item in the chart can be selected and repositioned. While doing this, I stumbled across a 3-D rotational capability in the main graph. The first click of the main graph allows for changing the placement of the graph, but a second click toggles on a rotational drag for changing the 3-D view of the graph. In Figure 7, the outlined 3-D box shows the view being dragged to a new position.

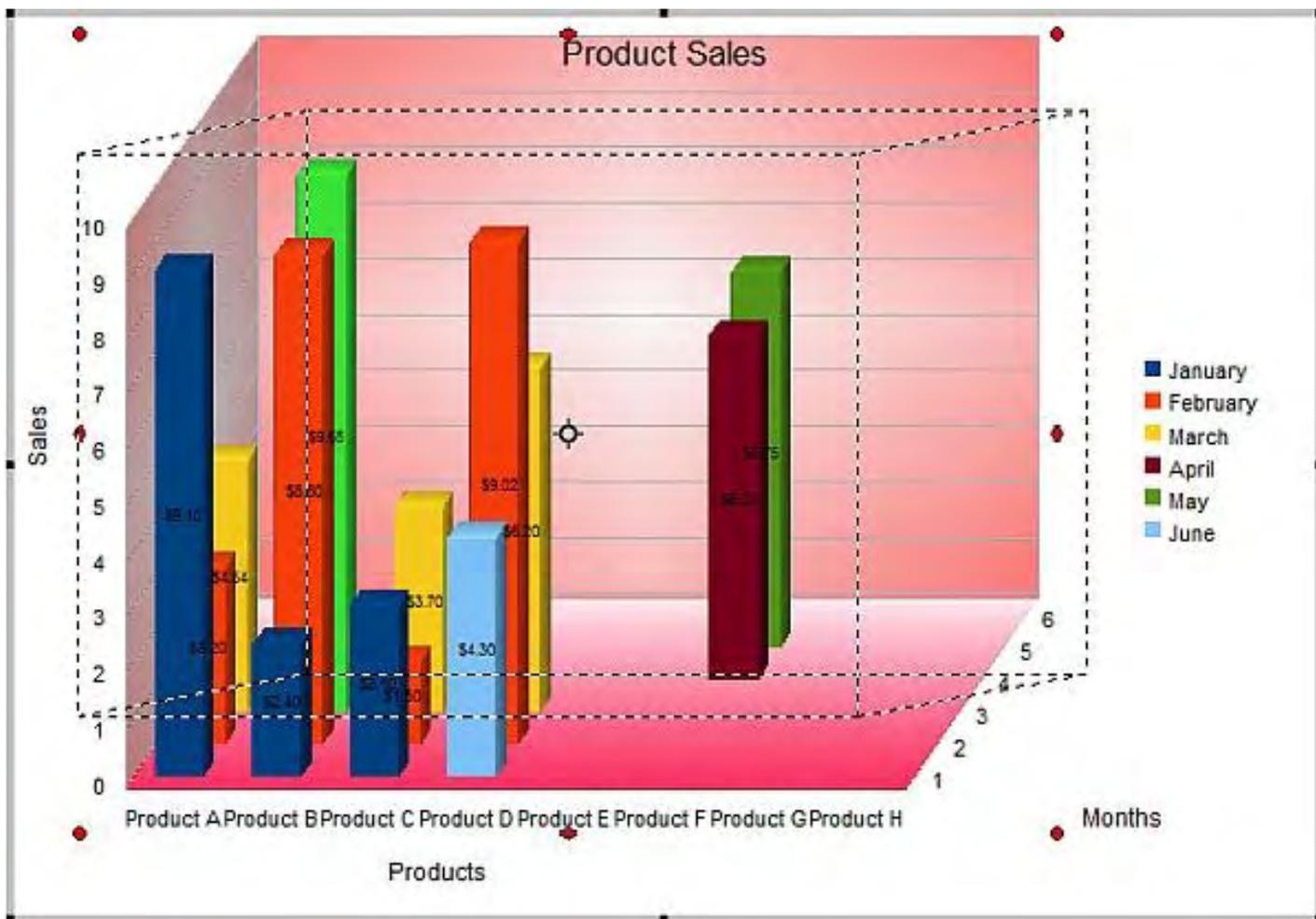


Figure 7. OpenOffice chart with labels added shown while making a 3-D view change.

I was impressed with OpenOffice's chart-making capabilities. They will do the job for 95 percent of chart-making requirements. The major drawback is that you need to enter all the data by hand. However, once you have created the chart (selected, but in Edit mode), it can be copied to any of the three programs (Writer, Impress, or Draw), and it will bring all the data and settings with it. Then it can be tailored for the new document. If all you need is a graphic of the chart for another program, or the Web, it is probably best to take a screen shot of the chart. Trying to copy and paste the entire chart from OpenOffice can cause some funky variations in the other graphics programs.

While the OpenOffice charting features in Writer, Impress and Draw are not the most powerful or flexible, they will be more than enough for most uses. The major advantage is that the learning curve is very short, and OpenOffice is free to download and install. There are plenty of other charting programs on the market, many of them much more sophisticated. If you have favorite programs that you use and would like to recommend, I would like to hear about them. OpenOffice certainly has its limitations, but if you need a quick and not-so-dirty chart for any use, then it may be the quickest way to make one.

Jack is the publisher of *ComputerEdge* 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

[Return to Table of Contents](#)

pChart: Free Online Chart Program

“For dynamically generated charts on the Web.” by Michael J. Ross

There are several quite usable online charting programs available that can work in conjunction with whatever program code is running your Web site, but pChart is good—and free.

When you need to create a colorful chart or graph for personal or professional use, there are countless computer programs for getting the job done—with a wide range of capabilities and prices. For simple charts, your office productivity suite is usually sufficient, because most if not all such programs contain some sort of charting element.

In Microsoft Excel, creating a chart is as simple as entering the data into a worksheet, and then firing up the chart wizard (from the Insert menu, choose Chart). In Google Docs (docs.google.com/), the process (www.youtube.com/watch?v=t9-ysq1640Q) is quite similar, though it is all done on the Web through your browser, rather than on your own computer through a desktop application. OpenOffice.org's tool named Impress is mainly focused on creating presentations—as a direct competitor to Microsoft's PowerPoint—but can also be used for building attractive charts. Sun Microsystems' StarOffice version of Impress is similar in functionality, but is not free.

All of the aforementioned programs are components of much broader office productivity suites, and thus can lack the focus and richer functionality of programs devoted specifically to generating charts and graphs. Perhaps of greater importance, depending upon your needs, all of those programs are fine for manually creating a static chart. But what if you need charts that are generated dynamically, perhaps based on data that a user is entering on your Web site? The demand for such a capability is growing all the time, as desktop programs are rewritten to be run on the Web, and more people are developing personal and commercial Web sites that require—or are greatly enhanced by—the display of data in an attractive graphical format.

In these cases, what is called for is some sort of charting program or library that can work in conjunction with whatever program code is running your Web site. The Web scripting language that is most commonly used nowadays is PHP (php.net/), and consequently the majority of these Web-based charting tools are designed for use with PHP code. Admittedly, nonprogrammers may be put off by the prospect of programming work being needed to implement charts and graphs on their Web sites, but it is not difficult to obtain professional assistance, if needed.

There are several quite usable online charting programs available, and in this article we will focus on one that is completely free.

Start Your Charts

pChart (pchart.sourceforge.net/), hosted as a SourceForge project, is billed as "a PHP class oriented framework designed to create aliased charts." What this effectively means is that it is a library of computer code that can be used with your PHP-powered Web site to create charts, and the code is organized using the principles of object-oriented programming, which can greatly help to keep the code more organized and readable. The product was developed by Jean-Damien Pogolotti (www.sunyday.net/), whose name and personal site suggest that he is French. This is also reflected in some of the site copy and documentation, all of which is in English, but frequently has some misspellings and awkward phrasing. Do not let that deter you from trying the program.

Sourceforge.net | Sunyday.net



a PHP Class to build Charts

Overview | Screenshots | Download | Add-ons | Demonstration | Support | Documentation

pChart - a PHP class to build charts

pChart is a PHP class oriented framework designed to create aliased charts. Most of today's chart libraries have a cost, our project is intended to be free. Data can be retrieved from SQL queries, CSV files, or manually provided. This project is still under development and new features or fix are made every week.

Focus has been put on rendering quality introducing an aliasing algorithm to draw eye candy graphics. Rendering speed has been dramatically enhanced since the first version, we'll still continue optimising the code!

To run pChart on your web server, you'll need to use PHP compiled with the GD library support.



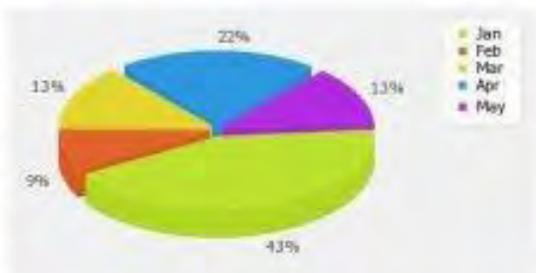
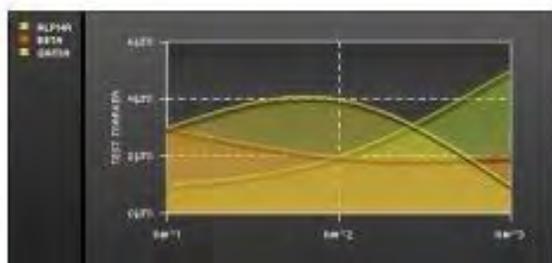
Last updates / new features

09.19.08
Version 1.27c is out! Introducing some fixes on the 1.27 tree. We've also (at least) introduced support for scatter line and plots. Thanks for your support!

08.21.08
Version 1.27b is out! This time we've introduced background customisation, image map creation, transparent text area and much more! It is now possible to create high quality graphics.

08.08.08
Version 1.27 is out! This release is introducing error handling, some fixes and something heavily requested: supporting missing points.

You now have the ability to customize the X and Y axis specifying captions and data type. The automatic scaling algorithm has been enhanced to build human readable scales when possible.

Documentation

The documentation is trying to explain how to use, adapt and bring to production pChart scripts. Examples are covering basic usage or highlighting specific features, we invite you to try by yourself. If you can't find any solution to your issues in this documentation, please use the sourceforge forums.

Before thinking doing graphics you must understand the Data Structure used by the pChart library. You'll find all the informations here. To help you dealing with your data transformation we've made the pData class. The use of this class is up to you, if you feel comfortable dealing with array you can skip it.

See the documentation

Be notified!

Sourceforge is offering a service to monitor when package are updated, this is a great way to be notified everytime a new release of pChart is available. To activate this functionality click on the following link:

Stay informed!

Bug reporting

Please use the reporting interface provided by sourceforge to track down issues and request additional features. We need a single point of reporting to be able to provide a quality oriented service. We're waiting for your feedback to bring this library higher. Reporting bugs is an important way to contribute to this project! Thanks in advance!

Bring me to the support!

Figure 1. pChart home page.

To get started, confirm that the installation of PHP that you are using contains the GD Graphics Library (www.libgd.org/), which is an open-source graphics library that makes it possible for Web applications to create images dynamically. With regard to a PHP installation on a local Web server—in other words, as part of your local Web-development environment—you will have complete control over what libraries are available to your PHP. With regard to a remote Web server—such as a shared hosting account—you will need to check with the support staff of the hosting company to verify that the GD library is installed. Most if not all decent hosting firms will have the library installed and enabled by default.

Next, visit the pChart Web site, and go to the Download section of the site. The latest release, as of this writing, is 1.27, dated August 12, 2008. Click on the "pChart 1.27 - beta" link, which takes you to the pChart page on the SourceForge site.

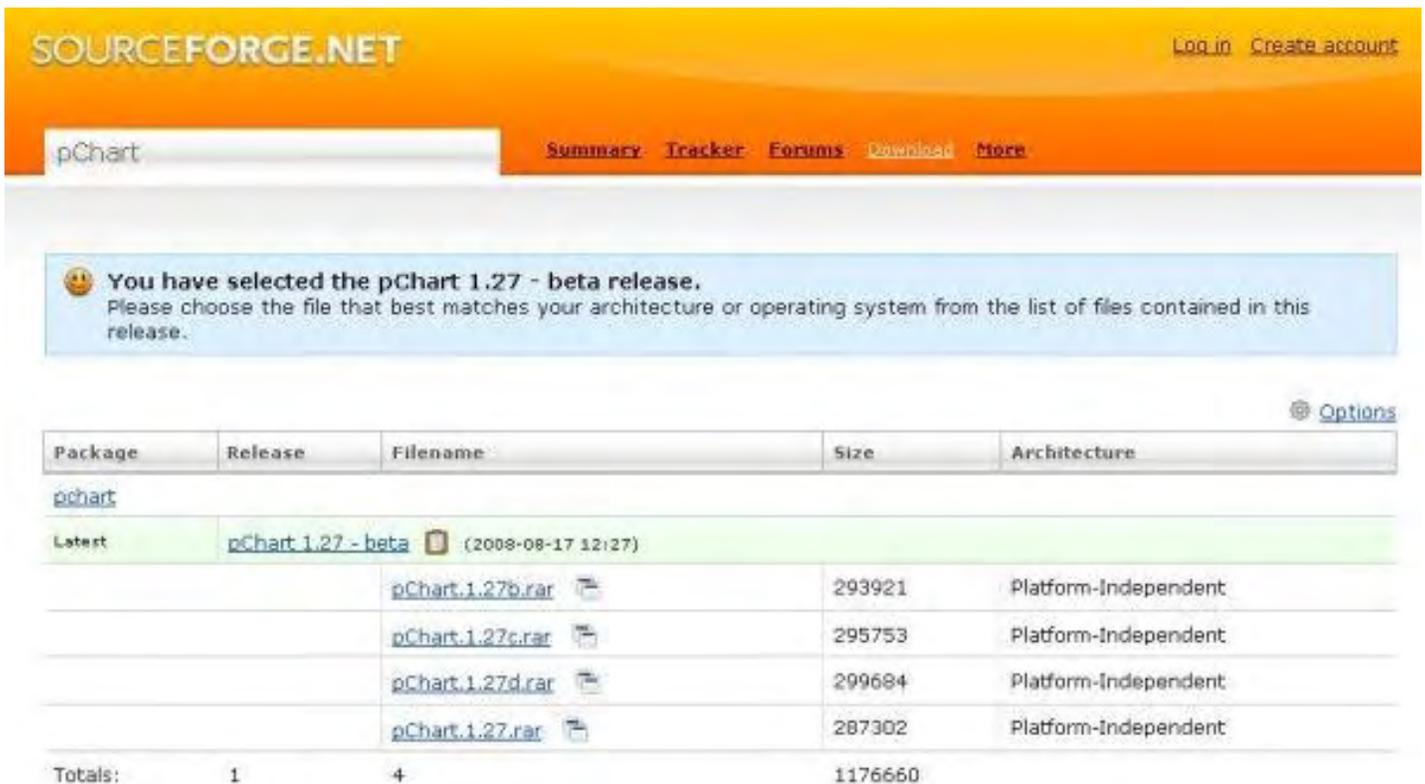


Figure 2. SourceForge pChart page.

The most recent revision is 1.27d, so click on the "pChart.1.27d.rar" link, and save the file to your computer. Some readers may be unfamiliar with the ".rar" file extension. It is used for the RAR file archive format (*en.wikipedia.org/wiki/RAR*), which is the one most commonly seen on Linux and Unix systems, similar to the Zip format on Windows systems.

If your version of Windows does not natively recognize the RAR file format and allow you to open the "pChart.1.27d.rar" file to access its contents, then you could download and install a file-archiving utility that does recognize this format. Frequently recommended free choices are 7-Zip (*www.7-zip.org/*) and IZArc (*www.izarc.org/*).

Install the pChart files and directories where they can be seen by your local Web server. One of those directories is named pChart, and it contains the PHP class files—specifically, pData.class and pChart.class—that you will need to reference within your code in order to generate your charts. Another essential directory is named Fonts, and contains five TrueType fonts needed for inserting text into any charts.

Pie Charts Without the Price Tag

Let's create an example chart, to illustrate the process. In this case, we will make use of some of the sample code included in the installation package, specifically, "Example13: A 2D exploded pie graph." The PHP code is listed below. Each section includes a brief comment, to explain what that section's commands are doing.

```
<?php
// Standard inclusions
include("pChart/pData.class");
include("pChart/pChart.class");
```

```
// Dataset definition
$DataSet = new pData;
$DataSet->AddPoint(array(10,2,3,5,3),"Serie1");
$DataSet->AddPoint(array("Jan","Feb","Mar","Apr","May"),"Serie2");
$DataSet->AddAllSeries();
$DataSet->SetAbsciseLabelSerie("Serie2");
// Initialise the graph
$Test = new pChart(300,200);
$Test->setFontProperties("Fonts/tahoma.ttf",8);
$Test->drawFilledRoundedRectangle(7,7,293,193,5,240,240,240);
$Test->drawRoundedRectangle(5,5,295,195,5,230,230,230);
// Draw the pie chart
$Test->AntialiasQuality = 0;
$Test->setShadowProperties(2,2,200,200,200);
$Test->drawFlatPieGraphWithShadow($DataSet->GetData(),
    $DataSet->GetDataDescription(),120,100,60,PIE_PERCENTAGE,8);
$Test->clearShadow();
$Test->drawPieLegend(230,15,$DataSet->GetData(),
    $DataSet->GetDataDescription(),250,250,250);
$Test->Render("example13.png");
?>
```

In the second section of the code, we see the values for the five months, along with their labels. Those five lines that begin with "\$DataSet" are all that are needed for defining the chart's data. The rest of the code creates a new chart object; sets the font, size and other properties; and finally draws and renders the chart. The term "render" in this case refers to the process of creating a file on disk, named example13.png, containing the image of the pie chart.

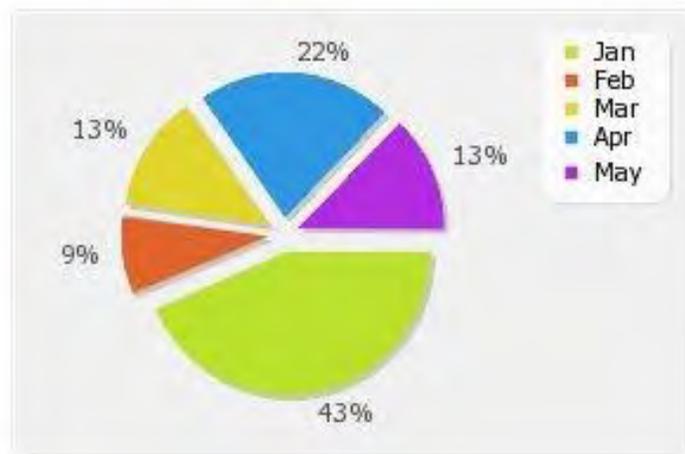


Figure 3. Example pie graph.

Charts Galore

The pie chart illustrated above is just one of many types of charts that can be created using pChart. The Screenshots section of the pChart site displays a collection of thumbnails showing the broad variety of charts that you can make using the program.

Screenshots | Thumbnails



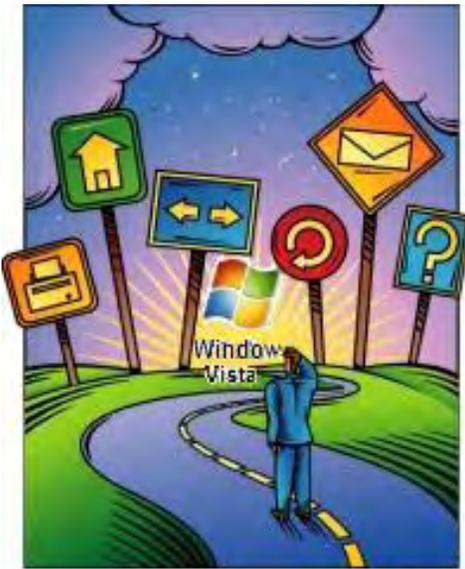
Figure 4. pChart screenshots.

One of the advantages of all of those samples being included in the installation file is that you don't even have to be a PHP programmer in order to generate new charts. Simply take an existing one that most closely matches what you wish to create, tweak the data and properties, and regenerate the chart image. That's all that is necessary to create your desired image file. The next logical step would be to reference that file within your PHP or HTML code, to display the image on a Web page.

As noted earlier, you can find a number of PHP charting programs on the Web. While all of them are affordable, pChart may be a good one to start with, since it entails no financial cost. You may in time find that it has all the capabilities that you are looking for, and you can use it for making all the online charts for your Web site.

Michael J. Ross is a Web developer (www.ross.ws), writer, and freelance editor. He creates Web sites that help entrepreneurs turn their ideas into profitable online businesses.

[Return to Table of Contents](#)



Windows Vista Tips and Tricks

Windows Vista (Windows 7) Tips and Tricks

“Start Getting Ready for Windows 7” by Jack Dunning

The Windows community is waiting in anticipation of an operating system that will finally meet expectations. Here's how you can get ready.

Microsoft has indicated that Windows 7 will be released in 2009, prior to the holiday season—possibly as early as October. Acer is planning to release laptop computers with Windows 7 installed in October. The Windows community is waiting in anticipation of an operating system that will finally meet expectations. People who are now watching their XPs grow old and tired (they avoided Vista) are looking forward to something that may be worth the wait.

For those people who can't wait for Windows 7 to arrive, Microsoft will be offering a free upgrade to Windows 7 from Windows Vista for anyone who buys a Vista computer after July 1, 2009. This is supposed to reduce the impact on the sales of Vista machines between July and the actual Windows 7 release date. I've heard rumors that some computer manufacturers may offer their own Windows 7 upgrade deals between now and July, although I haven't confirmed any of them. (An offer such as that is only likely to happen if the wait until July 1 impacts sales of Vista machines.)

Free Windows 7 Release Candidate Available

If you want to try Windows 7, you don't need to wait until the full release. Microsoft is offering the current Windows 7 Release Candidate (RC) (www.microsoft.com/windows/windows-7/download.aspx) as a free download through July. This is the final test version of Windows 7 before the full release later this year. If you have a machine lying around doing nothing, then you may want to give this a try. The RC version will send info to Microsoft and automatically update with changes. Windows 7 RC will be operational until March 1, 2010. At that time, it will shut down every two hours. It will stop working completely on June 1, 2010. Microsoft figures that a year is plenty of time for you to decide if you want to upgrade.

Windows 7 Upgrade Advisor

If you're wondering if your computer can handle Windows 7, you don't need to install the new operating system to find out. Microsoft has a Windows 7 Upgrade Advisor (www.microsoft.com/windows/windows-7/upgrade-advisor.aspx) that will tell you if there are any known compatibility issues between Windows 7 and your computer. If you're looking to put Windows 7 on one of your present computers, then it's a good idea to download, install and run this free program. I did this for two different Vista machines, but the software will also check out Windows XP computers.

The computer system check is straightforward and requires only that you connect all the usual peripherals prior to starting the process (see Figure 1).



Figure 1. Start of Windows 7 Upgrade Advisor.

Once you click Start Check, the program begins digging into your hardware and software (see Figure 2). (Who knows what it's really doing? There are probably plenty of people who will theorize that Microsoft is collecting information for nefarious purposes—not likely.) This process takes a few minutes, so, rather than going to get cup of coffee, Microsoft offers a link to some hype pages about Windows 7. Just click the "Go online to get to know Windows 7" link. This may be your first look at the software interface.

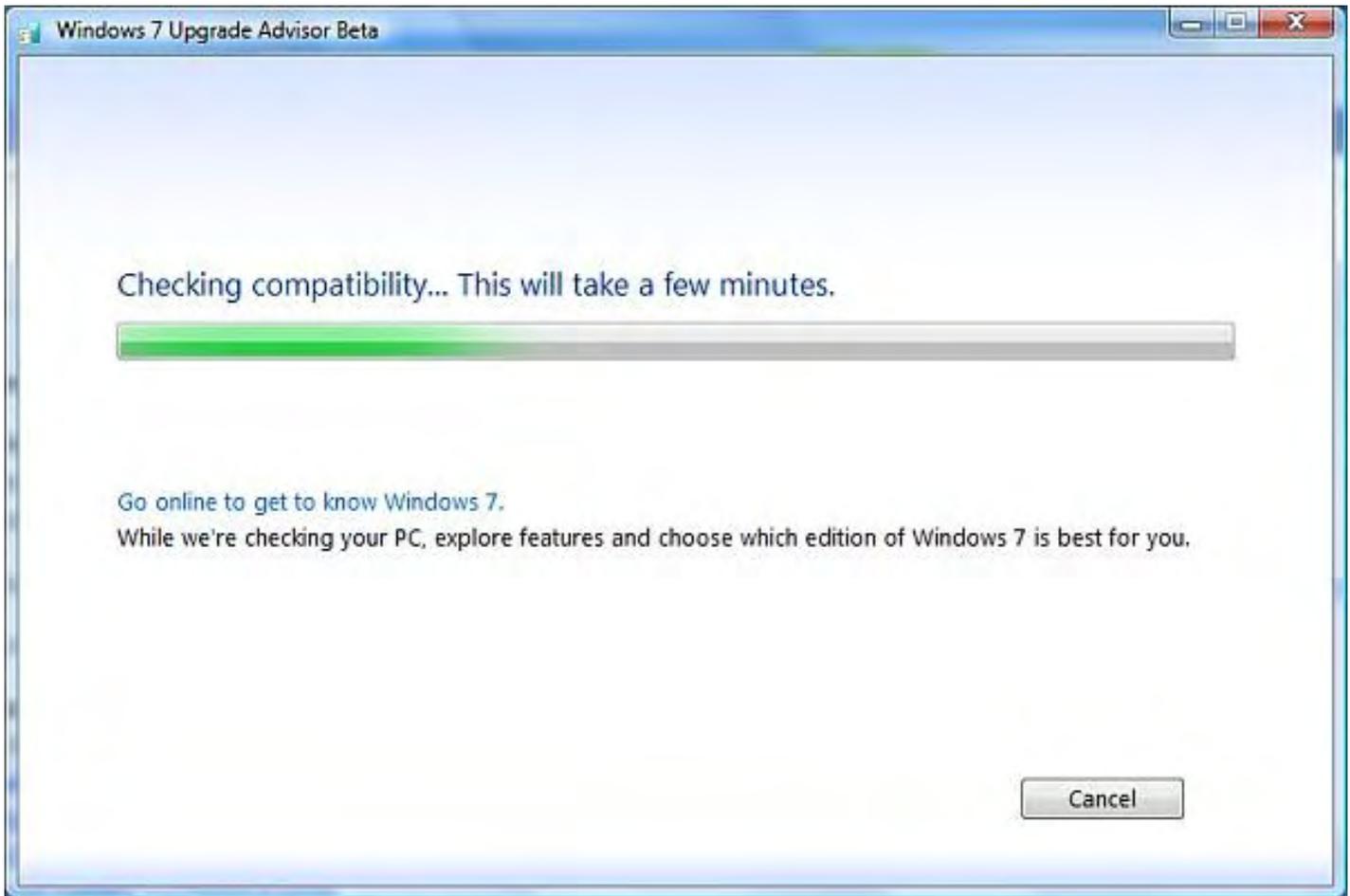


Figure 2. Windows 7 Upgrade Advisor check compatibility window.

Eventually (it was only a few minutes), you will get a report on whether your computer will handle Windows 7 (see Figure 3). Notably, the reports will tell you which versions of Windows 7 will be an upgrade without requiring a clean install. Virtually all reports will list Windows Mail and Parental Controls, since they are no longer included in Windows 7. The Windows Live family of programs is meant to replace programs such as Windows Mail, which came with Vista.

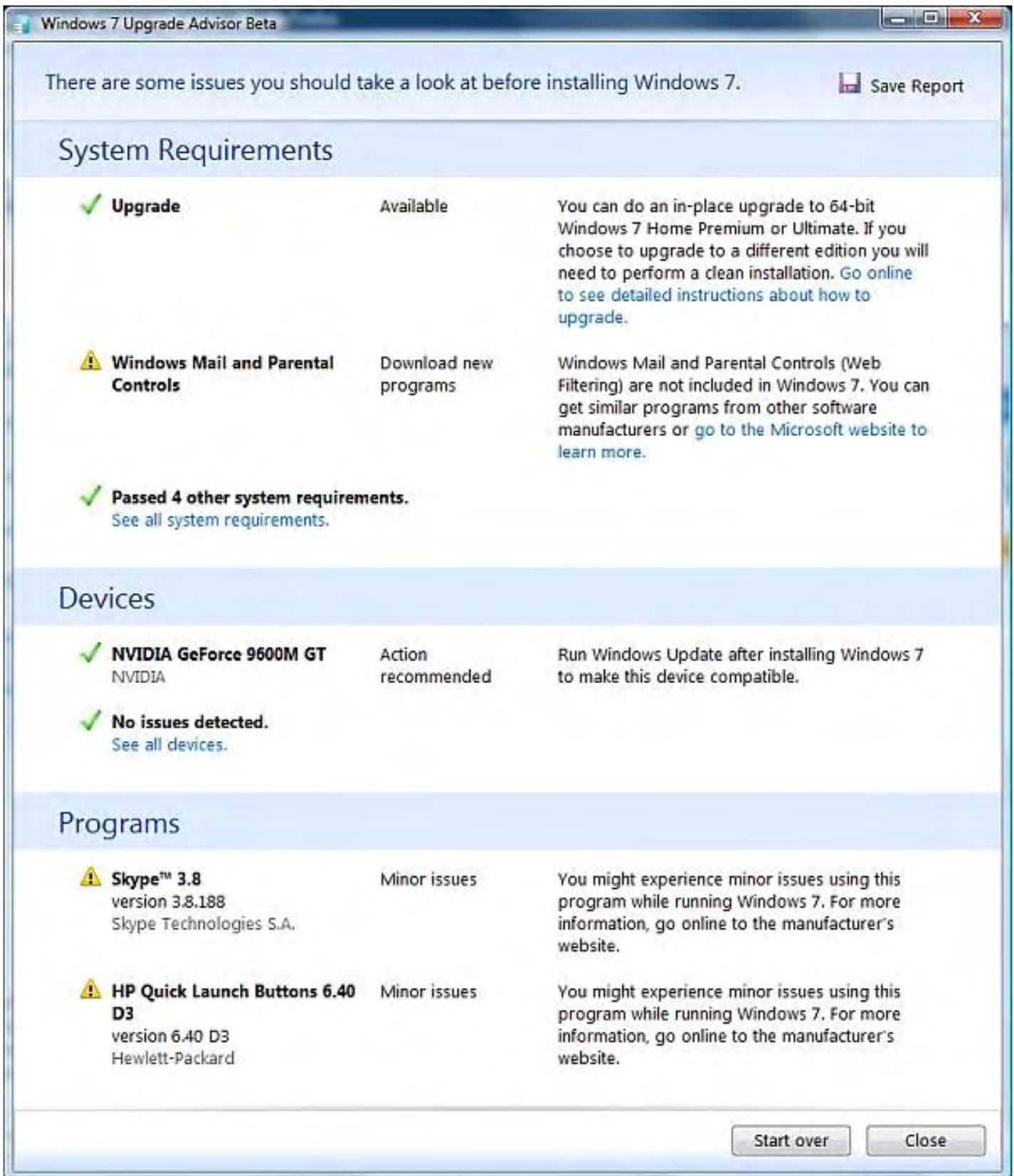


Figure 3. Windows 7 Upgrade Advisor report.

To see the primary system requirements tested by Upgrade Advisor, click "See all system requirements." The list will expand in a new window, as shown in Figure 4. This window shows both the capabilities of your system and the primary requirements for Windows 7.

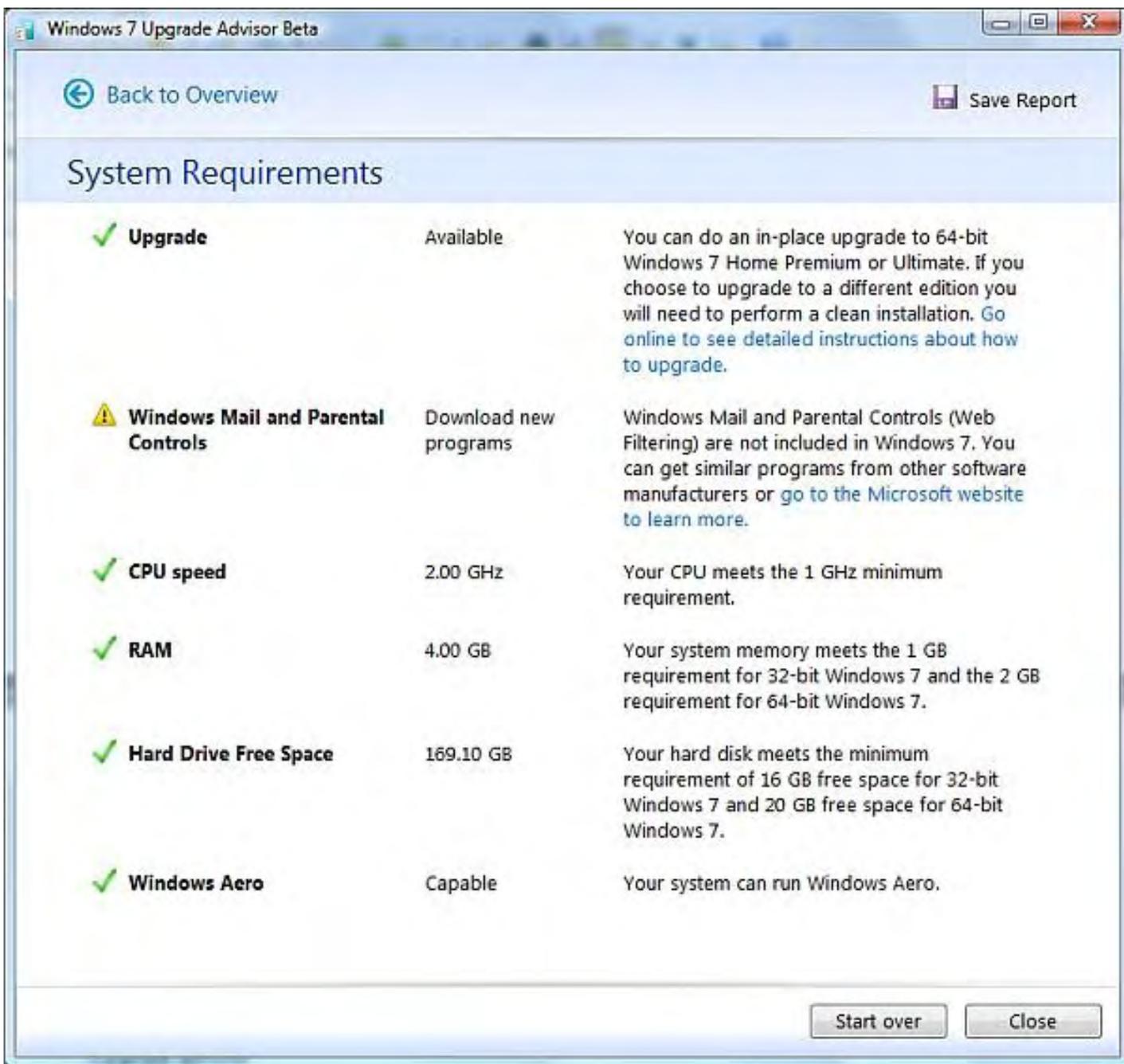


Figure 4. Windows 7 Upgrade Advisor by system requirements.

If you click "See all devices" under Devices, the next window will provide a list of all devices that were checked by the Upgrade Advisor. If nothing else, you will view a list of all the devices that are installed on your computer. At the bottom of the main report, a list of possible software problems will be shown, if any. In most case, you may only need to visit the manufacturer's Web site for an upgrade to the software.

Running Windows 7 Upgrade Advisor should give you a pretty good idea if you're going to have problems with Window 7. At a minimum, it should tell you which versions of the Microsoft operating system will run on your hardware. Before you decide to upgrade any computer to Windows 7, you should definitely run this program. It could save you a lot of headaches.

If you want to be even more positive that your computer will handle Windows 7, then download the free Windows 7 RC version mentioned above. However, I would do this only for a machine that is not your current primary computer for daily use.

[Return to Table of Contents](#)



Wally Wang's Apple Farm

“Rival Office Suites” by Wally Wang

A workaround lets you run Office 2007 on your Macintosh, giving you the power of Office 2007 with the safety and fun of Mac OS X. Also, a look at using Numbers, the spreadsheet that comes with iWork; Snow Leopard is rumored to include Chinese character-recognition technology; and a tip on defining your own shortcut commands.

Wally Wang's Apple Farm

The business world has standardized around the Microsoft Office format. If you send a word processor document, chances are good it's stored in the .doc or .docx file format. With so many people using Microsoft Office, the easy path to maximum compatibility is to use Microsoft Office too.

Microsoft offers Office 2008 for the Mac, which is a decent product, but not quite as feature-complete as Office 2007 for Windows. Specifically, Office 2008 for the Mac lacks the VBA (Visual Basic for Applications) language for creating macros. If you want a native Mac OS X program, you have no choice but to use Office 2008. However, if you want the full-blown Office 2007 experience, here's a clumsy, yet workable solution.

First, grab a copy of Windows XP or Vista. Ideally, get the OEM version, which costs less and comes in a plain envelope, but is identical to the fancy packaged version sold in most computer stores. Many independent computer stores sell OEM versions of Windows since that's the version they buy and use when they custom build a computer.

Next, grab a copy of Parallels (www.parallels.com) or Fusion (www.vmware.com/products/fusion). I've been using both, and initially I liked Fusion better since it ran faster and smoother. However, the latest version of Parallels now seems to run faster and smoother than Fusion. Since these two programs constantly improve and compete against one another, at any given time, Fusion will be better than Parallels and then Parallels will be better than Fusion. Just get one of these programs and load it up on your Mac.

Next, make sure your Macintosh has at least 2GB of RAM. You're going to need at least 1GB to run Mac OS X and Parallels or Fusion, and then you need the other 1GB to run Windows XP or Vista under Parallels or Fusion.

Run Parallels or Fusion, load Windows XP or Vista as a virtual machine, and then load Office 2007 on Windows running on Parallels or Fusion. Now you'll have access to Office 2007 on your Macintosh.

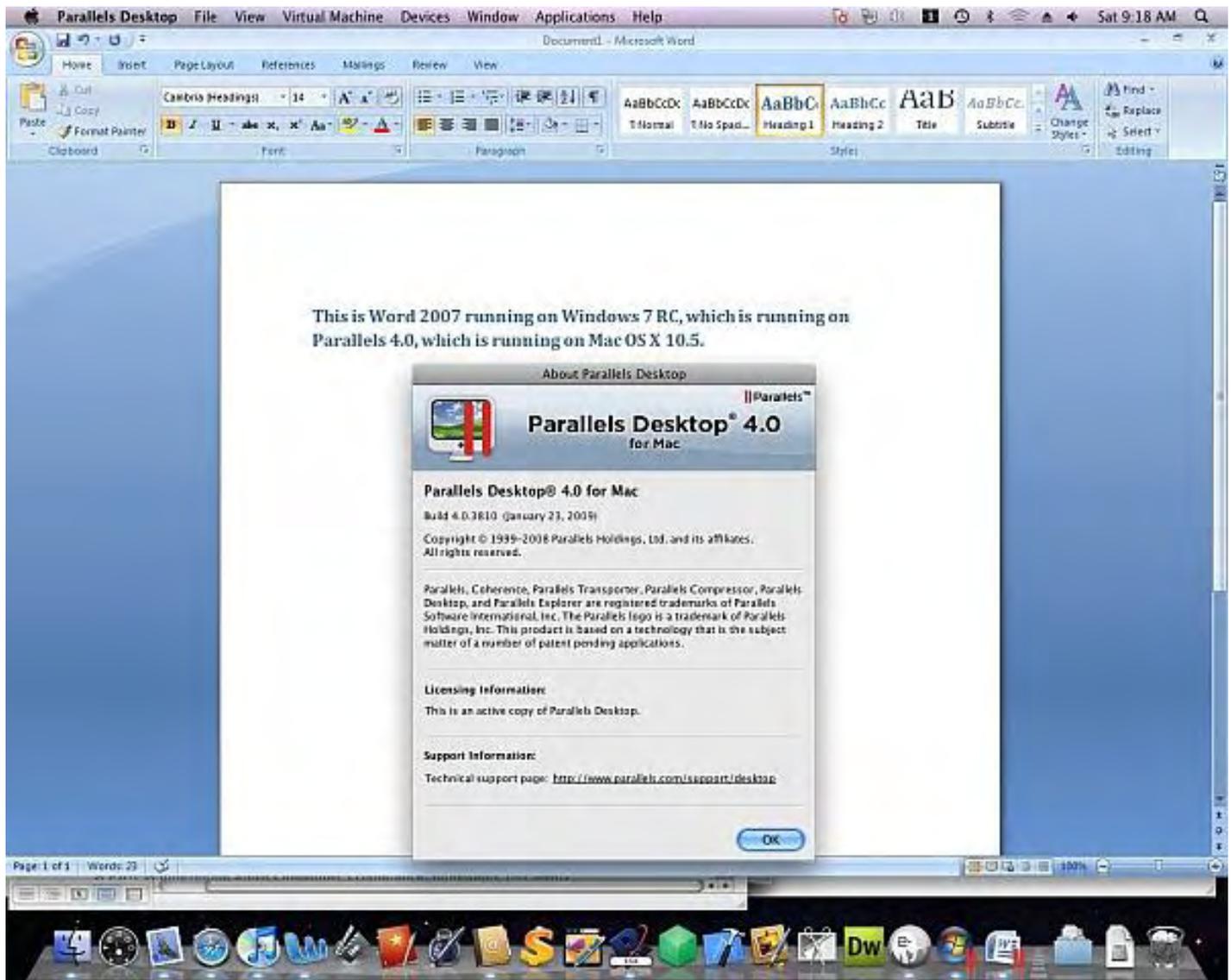


Figure 1. Running Office 2007 and Windows on a Macintosh.

Both Parallels and Fusion offer a unique feature that allows Windows programs to appear as icons on the Dock and in separate windows on your Mac OS X screen. This lets you access your Windows programs as if they were Mac OS X programs. With Office 2007 running on your Macintosh, you'll have the power of Office 2007 with the safety and fun of Mac OS X.

* * *

If you use a spreadsheet, your simple option for creating charts is to use Excel. However, there are other options to consider. First, there's OpenOffice (www.openoffice.org), a completely free and open source office suite. If you like the idea of a free office suite, but find OpenOffice's user interface a bit antiquated, download a copy of Lotus Symphony (symphony.lotus.com/software/lotus/symphony/home.nsf/mac), another free office suite based on OpenOffice, but with a slightly friendlier tabbed user interface.

While both OpenOffice and Lotus Symphony duplicate most of the features of Excel, they don't necessarily offer anything better. If you want a program that works like Excel, it's easier just to use Excel.

That's what makes Numbers, the spreadsheet that comes with iWork, so unique. Where Excel and the spreadsheets in OpenOffice and Lotus Symphony present you with massive rows and columns, Numbers

works on a different principle.

Numbers acts more like a desktop publishing program that lets you place different objects on a blank canvas. Two common types of objects are charts and spreadsheets.

On a single canvas, you can have multiple spreadsheets where each spreadsheet can have different-sized column widths or row heights. Columns and rows only extend as far as you need them, so instead of staring at thousands of rows or columns, you can create smaller spreadsheets and arrange them in different positions on a page.

In Figure 2, you can see how the column widths for Last and First in the top spreadsheet differ from the column width of Description in the middle spreadsheet. This simple ability to display different-sized columns or rows side by side is something impossible to do with most other spreadsheets.

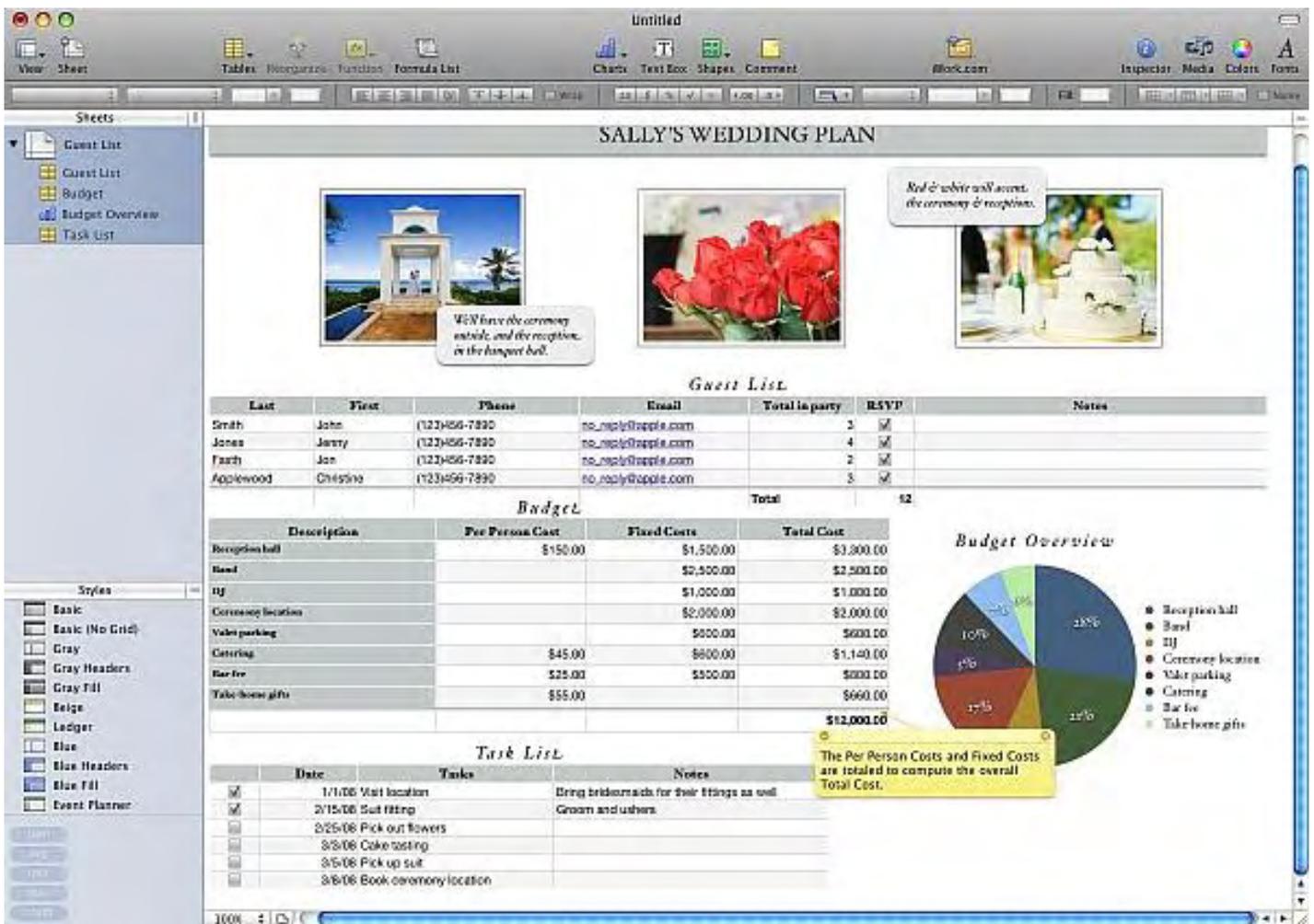


Figure 2. Numbers lets you place spreadsheets as variable size objects.

Although Numbers is part of the \$79 iWork suite, it can be a bargain if you need a spreadsheet focused more on presenting data than raw calculating number-crunching, which Excel still does best. Numbers isn't for everybody, but it can be a great alternative to Excel.

* * *

Chinese Character-Recognition Technology

The latest Mac OS X 10.6 Snow Leopard rumors focus on Chinese character recognition. Basically, the Chinese language is a pictorial one where each symbol represents a simplified drawing of that object.

Unfortunately, typing Chinese characters on a traditional keyboard is impossible. A clumsy solution is to type a Chinese character's phonetic sound and then have the computer display a list of Chinese characters that match that sound.

However, Snow Leopard is rumored to include Chinese character-recognition technology, where you can draw on the multitouch track pad on the latest MacBook, and the operating system can recognize and type that character automatically.

Apple actually bought this Chinese character-recognition technology from a smaller company. Now if Apple perfects this technology, guess which market of a billion people will suddenly open up for Apple products?

Given a choice between using another operating system that makes typing Chinese characters clumsy and difficult, or using a Mac that makes typing Chinese characters as simple as drawing them on your multitouch track pad, guess which computer the Chinese market will want to use?

Every Macintosh comes with built-in shortcut keys for changing the screen brightness or capturing screenshots. If you don't like the default shortcut commands, take a moment to define your own. Just click on the Apple menu and click System Preferences to open the System Preferences dialog.

Next, click the Keyboard & Mouse icon, and then click the Keyboard Shortcuts tab. Now you can see a list of keystrokes assigned to different commands, and you can double-click on any command to define new keystroke shortcuts.

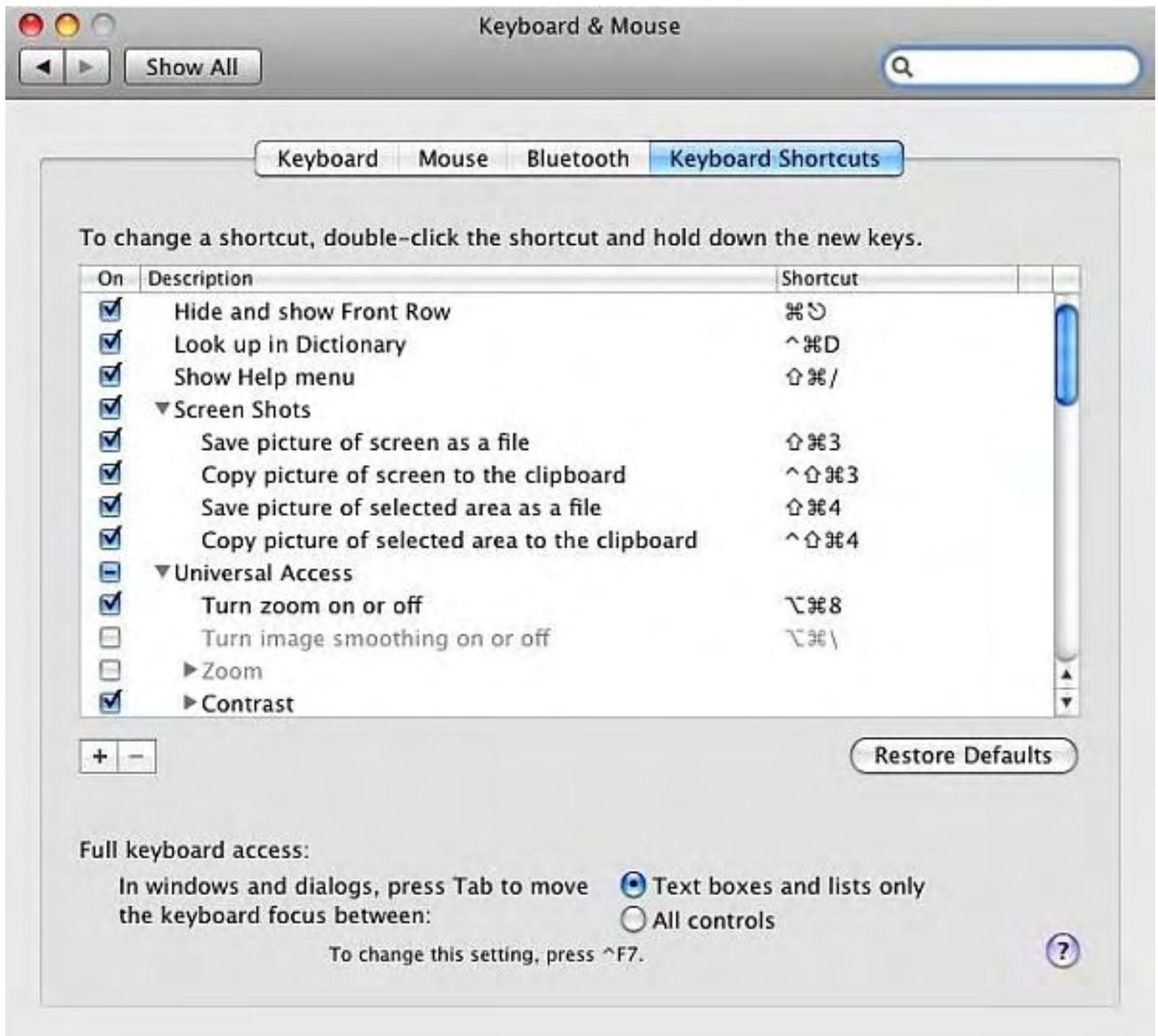


Figure 3. You can define new shortcut keys for different commands.

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)

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-

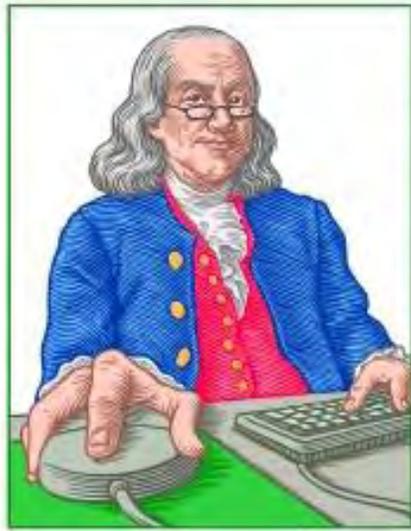
20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894)

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/).

[Return to Table of Contents](#)



LITTLE LINUX LESSONS

**"AN INVESTMENT
IN LINUX KNOWLEDGE
PAYS THE BEST
INTEREST."**

Little Linux
Lessons: Tips and
Tricks from Users
"Linux users share ideas
and ask for help." by
ComputerEdge Staff

Readers answer a question about the danger of viruses on Linux; a tip on using the file command to determine data type; and a call for opinions and information for the June 12 Linux issue.

Viruses on Linux

Last week, Al asked the question:

I recently read a column by a well-known author saying that one never needs to worry about a virus or malware while using Linux on the Internet. Is this true?

Al
Tustin, CA

David and Maximo responded:

Al,

No system is completely safe from viruses or infection. While 90-plus percent of the viruses out there are written for and target Windows systems, Mac and Linux are becoming increasingly more popular targets by viruses, worms and Trojans. About 10 or so years ago, a version of sendmail that was being distributed was infected with a Trojan due to a mirror that was compromised. Anyone who ran an MD5 check on the file would find out that the archive was not right. But many people didn't do that and became infected anyway. And if they installed the program as root, well, the consequences speak for themselves.

David Eddleman

Malware in Linux? I know of nothing that exists in the wild that affects Ubuntu Linux. I don't really care much about obscure problems that happened 10 years ago. The answer to the question of "do I need antivirus for Linux?" is . . . not yet.

Maximo1561
North County

What Kind of File is That?

I often will use the "more" command to look at the hidden workings of files, especially logs:

```
more /var/log/maillog
```

The "more" command will display a full screen at the beginning of the subject file. Pressing the space bar will continue with the next part of the file. This will continue until you read through the entire file.

However, sometimes you do this with a file and all you see is garbage. This is because the file is probably either a compiled executable file, compressed or data file. Before messing with any unknown file, it's a good idea to use the "file" command to determine what type of file it is. For example, the above log would yield:

```
$ file /var/log/maillog
/var/log/maillog: ASCII text
```

This tells us that the content of the file is plain ASCII text. Other possible types are "executable," "data," and "directory." There is much more information that may be available for various file types. Check "man file" for the addition of the available parameters.

State of Linux and Unix-Like Systems

On June 12, *ComputerEdge* will be publishing an issue on the current state of Linux. Is it growing? Where does it fit in computing? How is it currently changing the world of computing? Is it only for nerds? How has Linux affected your life personally, if at all?

Quite frankly, we don't know! We need your help to tell us what's happening. Please send us your thoughts, no matter how short or long, concerning the state of the Linux community. Just e-mail your ideas to Linux Update Issue (ceeditor@computoredge.com). Be sure to put the words "Linux Update Issue" in the subject line. We will organize the ideas and publish them in a feature article on June 12. If you have strong opinions, or know and care about the direction of alternative operating systems, then we want to hear from you.

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 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 *ComputerEdge* 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
ComputerEdge

[Return to Table of Contents](#)



Rob, The Computer Tutor

Rob, The Computer Tutor Does Visual Basic for Applications “VBA Debugging” by Rob Spahitz

Last week, we explored how to manage errors in Access VBA. This week, we will spend more time looking at that and the tools VBA offers to help ensure that we write more accurate code.

Last week, we explored how to manage errors in Access VBA. This week, we will spend more time looking at that and the tools VBA offers to help ensure that we write more accurate code.

If you'd like to pull a previous database, there are some on my server at www.dogopoly.com/ce that let you use some existing tables and data. Today's lesson doesn't need them, but I'll work in a copy of the most recent so that you can find today's stuff there.

Errors

As examined last week, there are a variety of errors that can occur when writing a computer program. These are typically classified as syntax errors (spelling and structure) and logic errors (commands in the wrong order). Syntax errors will typically be caught by Access either before you run (if you ask with VB menu Debug/Compile) or when you run (and the code jumps to a faulty subroutine, at which point VB immediately sends you an error message). Conversely, logic errors are those that simply do the wrong thing in a valid way. Sometimes these things have side effects that cause error messages to appear.

Let's look more at how to better manage VB errors. Last week we added a button to our Export form. Feel free to use that or just create a blank form and add a button (and cancel the button wizard if it starts). Where we ended up was this:

```
Private Sub Command1_Click()  
    On Error Resume Next  
    MsgBox 5 / 0  
End Sub
```

Since division by zero is undefined in mathematics, VB would normally give you an error message to let you know that it can't proceed with that line because of the error. The reason this is not a syntax error is because VB calculations, including division, are simply defined as one number divided by another. Although it could check to see if the second number is zero, that second number could also be defined by a calculation, which will be unknown until the program runs and the line is processed. The value could also change depending on other circumstances, such as user input. For that reason it is not considered a syntax error, but it still has the same problem where it cannot be calculated.

To quickly solve this problem, we threw in the line "On Error Resume Next," which is a valid way to ask VB to bypass errors. This is sort of like having faulty wiring in your car that causes the check engine light to come on, so you unplug the wire to the indicator. Problem solved—until another real problem occurs. To

stop the error trapping (and have VB or Windows notify you of errors), you would then add "On Error GoTo 0." Since I find this method of catching errors so sloppy, I'll leave it at that.

A much better way to manage errors is another variation of that command. The preferred command is "On Error GoTo label." This command tells VB to check for errors, and if it finds anything it can catch, redirect to a new location identified by the label. This becomes sort of like a VB "If" command (If error Then do_something). This command requires a little bit more effort, because you will want to write some code to manage the error, and then tell VB whether to return back to the line with the problem, return to the line after the problem, or return back to some arbitrary new location. Let's try it.

On an Access form, add a new button (cancel the wizard if it appears), and give it the name cmdDiv100 (in the All or Other tab). This button will show you a message that takes the number 100 and divides it by the value supplied by the user. Add a caption like "Div 100," then add an Event Procedure to the On Click event and jump into VB (with the "..." button). Your code should look like this (maybe with some other nearby code):

```
Private Sub cmdDiv100_Click()  
End Sub
```

First, let's add a variable definition to hold the value that we will be dividing by, the divisor: Dim iDivisor As Integer

Next we'll ask VB to get a value for this from the user: iDivisor = InputBox("Enter a divisor", , 1)

This uses a special VB object called InputBox to get a value from the user in a special dialog window.

Finally, we'll show the result of the calculation in a message box: MsgBox 100 / iDivisor

This uses the special VB object called MsgBox to show a message, such as the calculation we are performing.

Putting it all together, you get something like this:

```
Private Sub cmdDiv100_Click()  
    Dim iDivisor As Integer  
  
    iDivisor = InputBox("Enter a divisor", , 1)  
    MsgBox 100 / iDivisor  
End Sub
```

If you go back to Access, run form and click the button, you will get a box like Figure 1 asking for a value.



Figure 1. VB's Input Box.

If you just click the OK button or press the Enter key, you get the standard Windows dialog box seen in Figure 2.



Figure 2. VB's Message Box.

So no error trapping exists and our code works fine. Well, for many cases. The problem comes in when we enter zero in the input box. Instead of a nice message, VB finds a problem that prevents it from proceeding; it interrupts Access, shows the VB window, and presents you with the message seen in Figure 3.

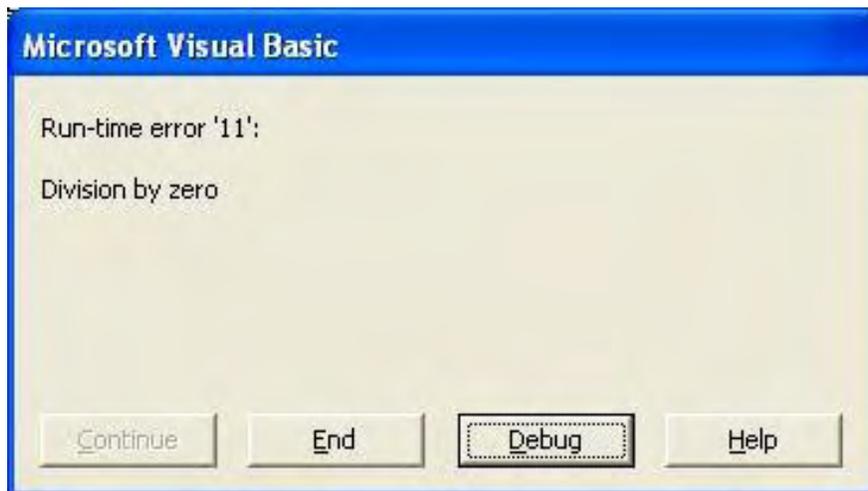


Figure 3. VB Error Message.

This message is what is called an unhandled error. VB didn't know what to do, so it passed the error on to a special error processor, which simply presents a message offering options. Since your code did not handle the error, you get this special interruption. This is very user unfriendly and is not the proper way to work with your VB code. If a user got this, instead of being in Access, the code would leave the user in VB. This is bad for the user and also exposes your VB code for the user to mistakenly (or on purpose) mess up your code. If you tried that, click on the End button. We'll explore the Debug button later.

Obviously, rather than unhandled errors, we want to handle our errors properly. Again, you could add the line "On Error Resume Next" before the division, but if the user did the same sequence, the first time a message box (see Figure 2) appears and the second time nothing appears. The user would have no idea what happened.

Again, a better way is to use another method to trap the error and let you, the programmer, decide what to do. You could decide to do nothing (like what "On Error Resume Next" does), or you could replace the message from Figure 3 with your own custom message. In addition, this gives you the opportunity to do things like write out a log file, to let you know that there were problems to be reviewed, without inconveniencing your user.

Error-Trapping

Let's update the code with this error-trapping. Typically you simply add the code at the beginning of the procedure, although you can add it anywhere prior to where you think an error would occur. Replace your code with this:

```
Private Sub cmdDiv100_Click()  
    On Error GoTo cmdDiv100_Err  
  
    Dim iDivisor As Integer  
  
    iDivisor = InputBox("Enter a divisor", , 1)  
    MsgBox 100 / iDivisor  
  
    Exit Sub  
  
cmdDiv100_Err:  
    Resume Next  
End Sub
```

This may look somewhat familiar to you since it follows a design similar to what the button wizard gives you if you have it do something like open a new form. Let's dissect this.

The line "On Error GoTo cmdDiv100_Err" tells VB to trap errors and, if it intercepts any, jump to a label called cmdDiv100_Err. VB labels are simply things that look like variables or subroutine names, but they start in the first column and end with a colon (:).

The next three lines of codes (with additional blank rows to make it look nicer) are simply what we had before.

The line "Exit Sub" is a simple way to jump out of a subroutine before its normal processing completes. In this case, the line is required. If omitted, processing would continue if there were no errors and you'd have a strange problem that we'll explore later.

Next, "cmdDiv100_Err:" is the label specified in the "On Error GoTo" line at the top of the subroutine. If an error is found, VB jumps here and continues processing.

Finally, "Resume Next" tells VB that you're done processing the error and you want to resume on the line after the error. In this case, that's the "Exit Sub" line.

If you were to step through and watch VB in action from the beginning of the subroutine, you would see it stop on the first line and make an internal note about what to do if an error occurs in this subroutine. Then it would process the "Dim" line (technically, Dim is a pre-run directive so VB processes that before the sub starts, so we'll see at a later time that it skips this line). Next is the line with the InputBox, so VB presents a window and waits for the user to respond, at which point the value from that box is transferred into the variable iDivisor. Next, VB performs the division and asks Windows to show the result in a common dialog box.

As long as the division did not cause any problems, VB moves on to the next line and exits the subroutine. If you did not have the Exit Sub line, processing would continue and VB would go to the "err" label then the "Resume" line. This would actually cause an error to occur because VB is trying to resume to the next line after the error, which never occurred. So it would jump to the error section and, luckily, stop since it resumes on the next line. In other cases, you might also get stuck going back and forth between an error and an error trap.

If the division had a value of zero in iDivisor, VB would have a problem before it tried to show the message box. This would cause it to see if there was any error-trapping defined. With the "On Error Resume Next" that we saw earlier, it would simply skip this line and move on to the next line (the Exit Sub). But we asked it to go to the "err" label, which would then continue on to the "Resume Next," which would now jump to the "Exit Sub" and leave the subroutine. This seems like extra work compared to the "On Error Resume Next" option, but notice how we now have an opportunity to add extra processing. Let's do that.

Before the line that shows "Resume Next," add the following message box to help us when an error occurs:
MsgBox Err.Description

Now if you run and enter a zero in the input box, VB will detect the error and jump down to the error routine and show the message shown in Figure 4.



Figure 4. Trapped Error.

Although this looks like the error in Figure 3, it is under your control rather than VB or Windows. You asked VB to show that message. When the user clicks the OK button, VB continues processing by going to the Resume Next line, which goes back to the line after the error and exits the subroutine.

By handling the error properly, we prevent VB from interrupting the user with a strange message and a strange environment. By using "On Error GoTo" instead of "On Error Resume Next," we have full control over what happens with errors.

Our final code looks like this:

```
Private Sub cmdDiv100_Click()  
    On Error GoTo cmdDiv100_Err  
  
    Dim iDivisor As Integer  
  
    iDivisor = InputBox("Enter a divisor", , 1)  
    MsgBox 100 / iDivisor  
  
    Exit Sub  
  
cmdDiv100_Err:  
    MsgBox Err.Description  
    Resume Next  
End Sub
```

Next week, we'll explore a few more options with this error trapping. See ya then!

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 *ComputerEdge* since 1990 and can be contacted at RSpahitz@Dogopoly.com.

Looking for a great boardgame? Grab a copy from DOGOPOLY.com (dogopoly.com) and have a dog-gone great time.



[Return to Table of Contents](#)



Techno Talk

Techno Talk: Digital Photography 101

“Photo Manipulation in the 21st Century” by
D'Artagnan Fischer

With today's technology, you can easily manipulate digital photos in some very clever ways, and you don't have to be an expert to do it!

Early photography tricks required a lot of patience, chemicals, equipment and some learned expertise. Then, as digital photography began to take over, someone with a lot of computer horsepower could manipulate the photos. However, as evidence that we are in the 21st century, now you can easily manipulate digital photos in some very clever ways, and you don't have to be an expert to do it!

Since digital photos are really a big collection of bits of data, it follows that the data can be manipulated with all sorts of clever programming algorithms. Naturally, some math geniuses have gotten into the digital photography mix, and made it so that the rest of us can have fun without ever having to learn anything complicated! The added beauty is that this can all be done over the Web, so it doesn't matter what type of computer you use—there is no software to load.

PhotoFunia

The PhotoFunia (www.photofunia.com/) site currently boasts about 94 separate image goodies for you to use. They are all displayed in a big table, where all you have to do is click on the one you want. These range from putting your face on Mount Rushmore, to sidewalk chalk paintings, to a picture of the famous Mona Lisa. One of the particularly neat features of PhotoFunia is that some of the fun images have special face recognition built in, so it will put the face that it detects in your picture, right where the face is supposed to go. Not all of them do this, and the ones that do have a special symbol to mark them.

Note: A number of these fun photo sites limit how big your photos can be, and will work only with file sizes that are 2MB or less. So, if the Web site has a hiccup when trying to use your picture, you may need to go back and make it smaller before making a masterpiece.

Honestly, some of these images work phenomenally well with certain type of photos. So, just because one photo doesn't look quite like you envisioned, just try another. You will get a feel for how things work after a few tries. The real bottom line here is to have some fun!

GlassGiant

The GlassGiant (www.glassgiant.com/) site gives an initial impression that it doesn't do all that much with photos, but click on the All Pictures button and you will be presented with a lot more. However, not all of the picture options will allow you to add your own photos. Some allow you to add words to photos, such as making your own Hollywood sign. However, they do have some really clever ones that you can add your own picture to, like being able to add your face to a pancake (a "miracle"), or on a big jumbotron. Another fun one here is an old-looking wanted poster.

Big Huge Labs—Flickr Toys

Big Huge Labs calls the site its "Flickr Toys," (bighugelabs.com/flickr/) and does seem to tie in well with Flickr. However, you certainly don't have to use Flickr to have some fun here! They have one where you can make a motivational poster out of your picture; one where you can do the famous Andy Warhol effect to your picture; and one that is particularly nifty, where you can make a magazine cover out of your picture. This last one lets you change the title, the price, and just about everything on the cover. You can make press badges with your picture, and a whole lot of other fun things. Click on the FX button to do more, like turning your photo into a sketch or painting!

Festisite

Festisite (www.festisite.com/tools/) is a Web site that is full of fun things for parties and such. However, at the link listed here, you can go directly to two picture goodies. One will allow you to put your picture into playing cards, and the other allows you to put your face on various dollar bills—even up to some very large denominations!

Image Chef

The Image Chef (www.imagechef.com/) site does have a lot of fun things to explore, and although it is free, it still requires you to register in order to take full advantage. In fact, it offers a paid membership that will allow you to remove its "watermark" from the things that you create. Still, for only the pain of registering, you can make a movie poster and many other fun options. The fun stuff on this site just requires a little more digging.

Kyolo

The last site on our little photography adventure is Kyolo (www.kyolo.com/). This one doesn't do any real photo manipulation, but it does offer a fun feature of being able to add speech bubbles to your photos. Speech Bubbles are the little white "bubbles" that you might see in comics and such, where the words that someone is speaking are written in the bubble. The concept is really very simple, but it has the potential to be a lot of fun!

* * *

Photo manipulation has finally moved into the 21st century! You don't have to know how to do it, and there is no special software to load on your computer. Most of the work is simple point-and-click, and the program on the other side of the Web site takes care of every bit of the work for you. Given the level of sophistication that these sites reflect, there is no doubt that there are some really nifty goodies coming in the future! Have fun!

D'Artagnan Fischer has been a Technology Manager for a major accounting firm, a senior systems administrator, an Enterprise Consultant, has worked for DHS, the Navy, and even San Diego City Schools. His main interests are computers, technology, and digital photography. He also enjoys writing Science Fiction stories, and dreams of one day having one of his stories made into a movie. He lives with a menagerie of animals, and is in the process of growing a family.

[Return to Table of Contents](#)



ComputerQuick Reviews

**News and
Reviews from
Readers and Staff**

ComputerQuick
Reviews:
doPDF Versus
PrimoPDF
“**More on PDF
programs.**” by
ComputerEdge Staff

A reader
recommends
PrimoPDF, a PDF-
creation program that
includes all fonts in
the resultant file.

Initially, after seeing Michael J. Ross' great article on PDF utilities in the April 17 issue ["PDF-Creation Programs"], I tried doPDF, with which I was quite enamored—at first.

It was a stand-alone PDF-creating utility—fast, produced very small PDF files, etc. However, the biggest drawback for me (I later discovered) was that the resultant PDF file did not contain the font/characters used in the file. For most typical applications, this would be no big deal. However, if any special (non-typical) fonts are used, you are out of luck if the recipient of the file does not have that particular font(s) installed (or available).

Note: You can illustrate this by creating a text-based PDF file using a "weird" font; then, after temporarily removing/disabling the same font from the C:/Windows/Font subdirectory, open the same file in Acrobat Reader. If the font is not included, another font will be displayed.

So, no biggie, you say, just select the option to include fonts. Well, I already tried that, and it worked, except that the resultant PDF file was monstrous, and not just a little either.

Conclusion: I was disappointed to learn this, since I create print-masters using complicated Southeast Asian fonts (Thai and Lao), which not every print shop has available.

Enter PrimoPDF: I recently discovered the printer-based PrimoPDF (download.cnet.com/PrimoPDF/3000-10743_4-10264577.html) (Nitro PDF Software's free version). I installed it, and to my pleasant surprise, I found that it came configured so that font/characters are included in the PDF file, without any extra options selected, and the resultant file is not at all huge. It is a great program. Not only is it *free*, but it is very adaptable, with its easy-to-navigate menu of option selections, which include built-in help messages.

Interestingly, upon reviewing this article's other comment contributors, I discovered that Carl W. (Denver) had already mentioned PrimoPDF, located just above this comment [attached to the bottom of the same article]. Way to go Carl! Sorry I didn't follow your link to PrimoPDF.

Ron Myers
El Cajon, CA

[Return to Table of Contents](#)



Industry News . . .

Buddha's Noble Eightfold Path Now on Your iPhone

**“Follow the Teachings of
Buddha”** by ComputerEdge Staff

Buddha meets Benjamin Franklin in a unique fusion app that incorporates Franklin's time-honored self-improvement system with Buddha's Noble Eightfold Path —with an iPhone twist.

Equilibrium Enterprises has unveiled its latest iPhone application, Noble Paths, a unique fusion app that incorporates Franklin's time-honored self-improvement system of daily tracking to enhance awareness and personal growth with the wisdom of Buddha's Noble Eightfold Path.

Noble Paths applies the same practical, methodical approach that Ben used to train his mind to refine his 13 Virtues through the exclusive focus upon one virtue for one week.

With Noble Paths, the very same technique is successfully applied to incorporate each of the Buddhist Noble Eightfold Path tenets into your life, resulting in a gradual path toward self-improvement as you track your progress daily as you live in accordance with each "Right" Path:

- Right View
- Right Intention
- Right Speech
- Right Action
- Right Livelihood
- Right Effort
- Right Mindfulness
- Right Concentration

Shape Your Destiny

One can only truly learn via experience and new opportunities. It is up to us to recognize these lessons and learn for ourselves. Noble Paths the app is a tool that can willfully assist each of us in our quest for such presence. Noble Paths helps us to recognize that it is ultimately each of these moments that shape our destiny.

This powerful app is a welcome addition for anyone interested in personal development. It is for those who seek to refine their presence and enhance their character. With Noble Paths 1.0, you can enhance your daily experiences through practical and experiential mindfulness when focusing on one of the Noble Paths. (Not sure which Path to focus on? Let the Universe decide for you with the unique "Select Random" feature.)

About Noble Paths

Noble Paths for the iPhone is available now at the App Store (www.apple.com/iphone/appstore) for \$2.99. Coming soon: Noble Paths for Android and Noble Paths for BlackBerry devices.

About Equilibrium Enterprises

Equilibrium Enterprises focuses on delivering applications and publications designed to add a tech twist to age-old precepts for achieving success. For more information, visit www.equilibrium-ent.com.

ComputerEdge 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 "ComputerQuick Review", or yell at us, please e-mail us at ceeditor@computoredge.com.

[Return to Table of Contents](#)

EdgeWord: Windows 7

“Will we see an entrepreneurial spark?” by Jack Dunning



If Windows 7 sparks a boom in the computer market, it is good for everyone—not just Microsoft.

I've been watching computer markets for more than 25 years. In the early '80s, the sales of desktop computers were growing at a rate of 25 percent per year. Since microcomputers—as they were called in those days—were new to the world, there was a vacuum being filled by the new technology. Over the years, as supply caught up with demand, the strength of the market started to depend upon innovation in the technology, rather than selling to new buyers. Processors continually became faster. Memory grew in capacity, as did the hard drives and other storage media. Floppy drives were replaced by CD-ROM drives and USB flash drives. Ribbon-based dot-matrix printers were replaced by laser printers and color inkjets. Each innovation gave people another reason to upgrade or buy new.

One of the major boosts to the computer economy has often been the introduction of a new operating system—as least that's the way it used to be. When Windows Vista was introduced, many in the computer business were hoping that it would infuse life in a rather stagnant computer market. It didn't happen. A combination of the fiasco caused by the not-quite-ready Vista introduction and under-powered hardware of the time caused people to either stick with Windows XP, move to Apple or Linux, or limp along with a newly purchased Vista—at least until there were faster computers and Service Pack 1 for Vista. Windows Vista was hardly a blip in the computer market, except for Apple, which enjoyed a huge boost.

We are now looking at the approaching arrival of Windows 7. (See "Windows Vista (Windows 7) Tips and Tricks" in this issue.) People in the computer business are afraid to get their hopes too high for the new operating system. The slow economy combined with memories of the Vista letdown has many keeping their expectations very low. Yet, there are significant differences between both the current times and the new operating system that bode well for the introduction.

In the past couple of decades, I've watched the computer (and now the Internet) lead the rest of the economy. Computers are always an investment. They increase productivity, educate the population and provide a lubricant to commercial systems. When people start buying new computers, it is an omen of good times ahead. When the computer market slows down, the economy soon does the same. If Windows 7 sparks a boom in the computer market, it is good for everyone—not just Microsoft. The entire economy will enjoy huge benefits from the work of millions of new computers. That's if Windows 7 has that type of impact—but why should it?

First of all, there is pent-up demand in the Windows XP market. A large percentage of computer users stuck with or downgraded from Vista to XP in order to avoid the Vista mess. Vista developed such a bad reputation that there are few people brave enough to defend it as an operating system. (After writing a Vista column for over a year, I've become quite fond of many of the Vista features, but my liking it hasn't changed many minds.) Most people who use Vista regularly will say that it's not so bad. Yet to the die-hard XP users, Vista is a dirty word. That's why it's important that the new introduction has a different name, Windows 7, even though it is an improved version of Vista. Once computers start coming off the line with Windows 7 installed, those who are now using XPs will start stepping up to the sales counter.

Why now? The reviews of Windows 7 have been outrageous. Most of what I've read about Windows 7 is

high praise, even when pointing out the flaws. All the testing has gone so well that Microsoft is actually moving up the release date from 2010 to late 2009 (maybe October). This is unheard of in the software industry, especially for Microsoft. Imagine Microsoft releasing a product that actually works as advertised. I personally know a couple of XP users who are thinking that this will be the year to make the change.

More importantly, 32-bit computing is on the way out. In another couple of years, it will be impossible to find a 32-bit computer. That means the real leap in desktop and laptop computing, 64-bit systems, is already in motion. If you want to do 64-bit computing, then you will need to buy new hardware. Yet, your present computer does everything you need—for now. Why would you want to change?

Not only are 64-bit processors bringing more speed to computers, but they have destroyed the 4GB memory limit of 32-bit systems. This opens computers to many more intensive applications, which will spark the entrepreneurial instincts of the users. In order to take advantage of these systems, 64-bit operating systems are needed. When Vista was first introduced, it was being crammed into 32-bit machines—easy to downgrade to XP. Now, with almost all 64-bit systems, there is no downgrade option—and with Windows 7, it doesn't look like one is needed.

The market is poised for a sweep. (Possibly Apple could have filled the gap, but when you can buy two PCs for the price of a Mac . . .) The quantum-leap 64-bit technology is here, and an acceptable operating system in Window 7 is about to arrive.

Jack is the publisher of *ComputerEdge* 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

[Return to Table of Contents](#)



Editor's Letters: Tips and Thoughts from Readers

“Computer and Internet tips, plus comments on the articles and columns.” by ComputerEdge Staff

"Adding Network Printers," "Get an iPod Touch," "Ishw and Alternatives," "Protect Those Lenses"

Adding Network Printers

[The following letters are in response to Digital Dave's April 17 column, where a reader wrote in about accessing his desktop's printer from a Wi-Fi-connected laptop.]

An alternative for Michael Bock would be to install a wireless print server. The desktop does not need to be on, you don't have to worry about network sharing and settings in Vista, and any computer that connects to the wireless router can access the printer.

-Brian Marshall, San Diego

I agree with Brian Marshall. If the printer is connected to the desktop, the PC would have to be turned on all the time to make the printer accessible over the network. If that's not the case for Michael Bock (in other words, he's not using it as a server, which doesn't seem to be the case), then it's just a waste of electricity to keep it on. And he may not have to invest in a separate print server; the wireless router he already has may have a jack for the printer. He should check that first.

-J.D. Mendez, Tijuana, Mexico

When adding a network printer, you may have to add a rule to the computer's firewall. I have to do this using Roadrunner's CA firewall. Failure to do so will keep the printer from connecting.

-Harold, San Diego, CA

Get an iPod Touch

[Regarding Jack Dunning's May 1 EdgeWord column, where he discussed not wanting an iPhone:] Have you looked into the iPod touch? It appears to be the iPhone without the phone.

-Phillip, Alexandria, VA

What's All the Twitter About?

[This letter is in regard to Jim Trageser's May 1 Hot on the Web column, "Is Twitter the Next ICQ?"]

Great article, and once again shows popularity does not mean revenue. Especially since it's free. Once you go pay, look for about one percent of those users generating revenue. In the end, you have to hope an advertising model can sustain you, but we're entering an era where there is much more ad space than advertisers.

-Dave Moore, San Diego

lshw and Alternatives

[The following letters are in regard to the May 1 Little Linux Lessons column, where a reader offered a tip about the lshw command, which tells you a lot about the particular hardware on the computer in question.]

Be wary of recommending some commands, as not all distributions come with them. Basic, basic commands (like ls, more, chown, etc.) are fine since they're part of the core OS. lshw, for example, does not work on a fresh CentOS box.

-David Eddleman, Vista, CA

Hi David,

You're right that lshw does not come with each distro by default. It can be installed from most package managers or directly made from source code. When gathering unknown hardware information, though, it's a good idea to choose a live CD with lshw.

Then lshw program does not come with every distro. I'm not sure if there's an easy way to know which ones have it ahead of time, but I know that all installs of Ubuntu and Mepis I have done in the past came with it already installed for command-line use. I've never used the GUI for it, but it looks like it's available for just about any Linux distro. You just have to install it with a package manager:

<http://ezix.org/project/wiki/HardwareLiSter>

-Richard, Longmont, CO

Protect Those Lenses

[Regarding D'Artagnan Fischer's May 1 Techno Talk column, "Digital Photography 101: The Care and Feeding of a Digital Camera"]: I always put on a UV filter to cover the lens. Damage a filter and the cost is minimal. Damage the lens and kiss the camera goodbye.

-Bill, Toledo, OH

ComputerEdge 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 "ComputerQuick Review", or yell at us, please e-mail us at ceeditor@computoredge.com.

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