

The Newsbyte

THE TRI-COUNTY COMPUTER CLUB

March 2000

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Editor's Corner

Welcome to the March 2000 edition of *The Newsbyte*! We have two interesting articles for you this month. The first is a review of the Microsoft Visual Studio 6.0 Professional Edition software development suite. The other is a discussion of the different types of printer paper available. We hope that both articles are of use to you.

As expected, the "other Y2K issue", the fact that 2000 is a leap year, did not really cause any major problems. The problem was originally caused by the fact that while years divisible by 100 (like 1900) are not leap years, years that are divisible by 400 (like 2000) are. Some programs, mostly older ones that probably had Y2K issues, had problems handling the extra day.

The next meeting will be another dinner meeting at Dravenstott's Restaurant in Orrville. This meeting will begin at 7:00pm. Dravenstott's full menu, soup and salad bar, desserts, and beverages will be available. Come in and get a full dinner or just something to drink and enjoy our friendly get-together. I look forward to seeing you then.

Brian Powell, Editor

NEXT MEETING

March 14, 2000 – 7:00pm
Dravenstott's Restaurant
410 W. High St., Orrville OH

Dinner Meeting

No Formal Program Scheduled

Question & Answer Session

Computer Users

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Computer Users

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Microsoft Visual Studio 6.0 Professional Edition

by Brian Powell

For this month's edition of *The Newsbyte*, I acquired a copy of Microsoft Visual Studio 6.0 Professional Edition, a software development system, from Microsoft's Mindshare user group program.

This software suite includes the latest version of all of Microsoft's major software development (and compiler) programs. Visual Basic, Visual C++, Visual FoxPro, Visual InterDev, and Visual J++ make up the core of this package, and they are complemented by the MSDN library, the Windows NT 4.0 Option Pack, the Microsoft Data Engine for Visual Studio, SQL Server 7.0 Developer Edition, and the Windows 2000 Developer's Readiness Kit.

When I opened the almost 4-inch thick box, I was confronted by tons of material that Microsoft has provided for the software developer. In order to include everything, Microsoft had to ship ten CD-ROMs! I should mention two of the CD-ROMs contain Visual Studio Service Pack 3 and Windows NT 4.0 Service Pack 4, which should be installed in order to have the best possible development system. In addition to the CD-ROMs, there were booklets and wall posters (showing programming object hierarchies) that contain information useful for software developers.

One of the nice features is that the Visual Studio suite, much like Microsoft Office, features a pretty consistent interface between all of the applications. The exception to this rule is Visual FoxPro, which has an older-looking interface. Once you learn how to use one of the development tools, the interfaces of the others are easy to master. This helps reduce the time to learn a new language because the user is already used to the interface and environment in which they are working.

Visual Basic is a tool designed for rapid application development. The language itself is relatively easy to learn, especially if you are familiar with the Visual Basic for Applications (VBA) scripting in Microsoft Office or VBScript on the Internet. While Visual Basic can be

used to create nearly any type of application needed, it is most frequently used for simpler programs although it has the ability to create more complex and sophisticated applications. A graphical design environment is available for use in Visual Basic.

Visual C++ handles the development of programs in the C++ language, one of today's most popular languages featuring the object-oriented features that many programmers like to use. The Visual C++ compiler gives users the ability to create complex, sophisticated applications in C++, which is used to create many of today's most popular applications including Microsoft Word and Microsoft Excel. Projects in Visual C++ can be designed using a graphical design environment.

Visual FoxPro is primarily used for creating and interacting with databases. It is a very powerful tool, but, unfortunately, it can be somewhat difficult to understand how to use the program. Visual FoxPro doesn't share the same basic design and layout as the other Visual Studio applications, which makes it frustrating to use if you have grown accustomed to the interface of the other components of the suite.

Visual J++ is used to develop applications in Sun Microsystems's Java programming language. Java is an object-oriented programming language that is for the most part derived from C++. While Visual J++ can be used to create standalone applications (such as those created by Visual C++ or other programs), Java is generally used to create applets that are embedded into webpages. Visual J++ has a graphical design environment that can be used when creating projects.

Visual InterDev is a development system used to create Internet (and intranet) based applications. Visual InterDev allows developers to incorporate browser-based techniques, Java applets, and server-side

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components created with the Visual Studio programs. By using this product, very powerful data-based Web-based applications can be created for deployment. Visual InterDev features a WYSIWYG design environment.

One of the features that I particularly like is what Microsoft calls IntelliSense. Essentially, it is a feature that brings up a box with the options that can be used to complete a statement. This feature is particularly useful when doing object-oriented programming, such as in Visual J++, where you may need to select several different layers to get to a certain object (such as video output) that you need to work with.

I was impressed by all of the wizards, or templates, for projects that are included with Visual Studio. These wizards give users the framework and help that allows them to easily complete the more popular tasks that the wizards exist for.

I did some limited testing of the additional items that came with Visual Studio. I liked the inclusion of the Windows 2000 Developer's Readiness Kit, which features information on developing applications that are compatible with Windows 2000.

The only component of the Windows NT 4.0 Option Pack that I was able to test was Personal Web Server (PWS), as I am running Windows 98 and not Windows NT 4.0. PWS is a small, easy-to-use Web server that can be run on Windows 95/98 machines as a test server or as a full blown server. Users with heavy-duty server needs would want Internet Information Server (IIS) 4.0 (included in the Option Pack) for Windows NT 4.0. The Option Pack also includes other software that I was unable to test.

Microsoft bundles SQL Server 7.0 Developer Edition as a part of the Visual Studio package. The SQL Server 7.0 software is designed to allow for interaction with databases. Visual FoxPro includes a wizard that allows for the creation of a SQL Server database that essentially duplicates an existing Visual FoxPro database. The

Microsoft Data Engine (MSDE) for Visual Studio allows for the creation of solutions that will run on Microsoft SQL Server 7.0.

I was impressed by the fairly speedy compile times offered by the programs that comprise the Visual Studio suite. Visual FoxPro takes a little while to initially build a project when first starting, but aside from that I received relatively fast compile times for programs on my Pentium-200. Faster processor speeds definitely help cut down on the time required to compile a program.

Overall, I have been pleased with the performance and ease-of-use of Microsoft Visual Studio 6.0 Professional. Its various easy-to-use "helper" features allow for easy and rapid development of extremely powerful applications. I highly recommend it or one of its components (which are available separately) as the solution for all of your software development needs.

Microsoft Visual Studio 6.0 Professional Ed.

Microsoft Corporation

1 Microsoft Way, Redmond WA 98052

<http://msdn.microsoft.com/vstudio/>

Pricing (Non-Academic License)

Man. Est. Retail: \$1079 full/\$549 upgrade

Online (Provantage.com on 03/09/2000):

\$907.98 full/\$458.58 upgrade + shipping

System Requirements (Core Programs)

- Pentium-class processor
- Windows 95/98, Windows NT 4.0 SP3, or Windows 2000
- 24mb of RAM for Windows 95/98 or 32mb for Windows NT or Windows 2000
- 651mb for typical installation of core components (Visual Basic, Visual C++, Visual J++, Visual InterDev, Visual FoxPro, and MSDN).
- CD-ROM drive
- VGA monitor

Windows 2000 requirements are assumed by author to be the same as Windows NT 4.0's requirements and may actually be different than what is listed above. Other components may require additional system resources.

Printer Paper—What's the Difference?

by Alicia King Padgett , Fresno PC Users Group

You've finally got a great color printer with 600 to 1200 dpi (Dots per Inch) capability for text and graphics and you can't wait to start printing. According to the manufacturer it should be able to print photo quality graphics and crisp text files. However, when you actually print something, it seems the print quality is no better than with your old printer. Eventually, you look with envy at your friend's printouts and sigh "Someday I'll be able to afford a high quality printer like theirs." But wait, maybe the problem isn't the printer... perhaps it's the paper.

Let's take a look at the basics of different printers:

An impact printer uses a mechanical hammering device to produce each character by forcing a metal or plastic form against an inked ribbon to produce an image on paper. The characters may be on a moving bar, a rapidly rotating chain, a rotatable ball, or even a spoked wheel. A dot matrix printer uses a matrix of tiny pins that, when struck, impart a set of dots to form a wide variety of characters. Graphics may be created by using different dot combinations. Bubble-jet printers (or ink-jet printers) squirt heated ink through a matrix of holes to form characters. These small ink droplets are electrostatically sprayed from a nozzle onto the paper. Laser printers form an image of the output on a selenium-coated drum, using laser light according to data from the computer. The image is then transferred to the output from the drum using photocopying techniques. Thermal-wax-transfer printers and dye-sublimation printers use heat to transfer color pigment from a ribbon to a special paper to produce photographic-quality color images.

Inkjet (bubblejet) printers are very affordable for home use. In the store the printouts may look incredible but when you get home, somehow the printer just doesn't seem to have the same print quality. Most of the time the problem is not the printer, it's the paper. Most people try out several different kinds of photocopy, laser printer, or inexpensive inkjet papers. When an inkjet printer sprays onto these papers, the ink is wicked by the fibers causing an effect known as bleeding. Some

inks spread to the sides or the back of the paper making the image less sharp. When the ink bleeds, it isn't all on top of the paper, some has soaked in. This is easy to check by turning the sheet over. If the ink is starting to come through or the front appears lighter, grayed-out, or feathered, as though you were printing with diluted ink, you probably have the wrong paper.

To get good quality printouts with an inkjet printer you need to use coated paper stock. A single coated paper is not enough, as it is formulated to keep the ink from getting into the paper fiber but doesn't have the best ink adhesion or reflectivity. Quality printouts need a second coating on top of the ink barrier coating. The second coating optimizes viewing by reflecting light back to set off the colors. The second coat also provides a base to adhere the ink. To put it more simply you need a primer coat and a finish coat to generate a quality printout.

Two options controlled by most inkjet printers are configuration for the "Media Type" and "Print Quality". "Media Type" controls the amount of ink set down on the media. It DOES NOT control or affect the resolution. "Print Quality" controls the "Resolution" of the images printed.

Now you know what type of paper to use, lets see what some of the other manufacturing terms mean!

Basis Weight—The weight of a ream of paper in the Basic Size for that grade (e.g. 500 sheets of Sub. 20 Bond paper in its basic size, 17x22 in., would weigh 20 lb.)

Bond Paper—Paper manufactured usually for stationery, letterheads or forms. Distinguishable in the more popular grades by a watermark and excellent writing surface.

Brightness—The measurement of a paper's light-reflective qualities that affect contrast and halftone reproduction.

Coated Paper—Paper with a coated surface that gives the paper a smooth finish.

Finish—The special characteristics of a paper's surface, which differ from grade to grade. High, low and textured finishes, for

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example, exhibit varying degrees of smoothness, ink receptivity and printability.

Ink Holdout—The ability of the paper to keep ink on its surface rather than absorb it into the sheet (e.g., paper with good ink holdout would require less ink and exhibit less "feathering" than a highly absorbent paper).

Ink Receptivity—The degree to which a paper resists or accepts ink penetration based on variations in its size and coating.

Laser Paper—Paper suited for optimum performance on heat fused, high-resolution, laser printers used in desktop publishing. (Not recommended for inkjets.)

Ream—500 sheets of paper, regardless of size.

What are some of the specialty papers available for inkjet printers?

HIGH RESOLUTION: Coated 24lb paper provides distinct crisp details and colors for graphics, text and photographic images. This paper has a non-resin coating and provides exceptional results at an economical cost.

ULTRA RESOLUTION: Coated 27lb paper provides a sturdier platform for intense graphics and color applications which would saturate lighter papers. It provides a thicker media while maintaining an economical cost.

PHOTO GLOSSY: Photographic coated paper provides a heavy surface for "true" photo applications. Gives images a glossy photographic appearance. This paper may also be obtained with an extra coating that bonds with the ink to provide a waterproof image.

OPAQUE WHITE GLOSSY FILM: Synthetic film providing a durable media for Photo applications. A thin polyester material provides stability for hostile environments and also provides for exceptional color and detail.

CLEAR TRANSPARENCY FILM: A clear polyester base coated with a specifically formulated quick dry emulsion for optimum performance. Produces bright colorful overlays and presentation foils.

T-SHIRT TRANSFER: An iron on product that utilizes a "cool-release" process to maximize image detail and color transfer. Look for an easy to use product with easy peel

backings and machine washability.

ULTRA-VIOLET T-SHIRT TRANSFER: This product provides a unique transfer. In addition to color transfers, the Ultra-Violet transfer actually changes color when exposed to sunlight! When sunlight is removed the image returns to the natural state.

SILVER REFLECTIVE FILM: A polyester based silver film. The metalized film is excellent for monochrome as well as color graphics

CANVAS: An artist grade canvas that is pre-stretched and gives an elegant look to portraits and artist renderings. Provides excellent color reproduction.

POLY-SILK FABRIC (ADHESIVE BACKED): A woven polyester base that looks, feels and gives the appearance of real silk. An adhesive backing provides for transfer to fabric or textiles.

WATERCOLOR PAPER: An artist grade paper that provides the feel and appearance of watercolor texture. Provides excellent format for reproduction of renderings and other artistic applications.

BACKLIT REVERSE PRINTING FILM: A UV resistant polyester film designed for most light box applications. Produces bright vibrant colors with a superb light diffusion quality. Reverse printing or viewing through the base allows for single sided lamination.

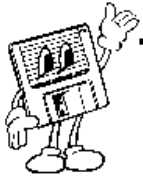
WINDOW DECAL FILM: Polyester based transparent film with self-adhesive backing to allow mounting directly to windows or other substrates.

Some of these specialty papers are difficult to locate and prices vary considerably. For economy, print your images on inexpensive 20-24lb paper until you are satisfied with the composition, then switch to the more expensive media. Try printing the same image on several types of media, you'll be amazed at how different they look.

To acquire various types of specialty papers go to the web sites of paper manufactures and distributors such as Hammermill, Mead, Hewlett-Packard, or Kodak and request sample packets.

Most of all, have fun and experiment with different paper media, you'll be amazed at what your inkjet printer can do for you!

This article is courtesy of APCUG.



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Printer Papers

Microsoft Visual Studio 6.0 Pro Software Review

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Next Meeting

Tuesday, March 14
at 7:00pm

Dravenstott's Rest.
410 W. High St.
Orrville OH 44667

Dinner
Q & A Session