FIRST LOOK

Take cheap sheets on the Web

Effortless Math on the Web. *With Formula One/NET, dubbed "The Internet Spreadsheet," full-featured spreadsheets are just one embedded HTML tag away.*

Netscape is attempting to duplicate the success of the Visual Basic add-on market by promoting its plug-in interface to developers of third-party tools. Well-known VB tool vendor Visual Components Inc. (VCI) recently joined the active Web component fray with a plug-in version of its best-selling Formula One spreadsheet component, called Formula One/NET. The price is right: everyone can download the product from the VCI Web page for free.

At least, the portion of Formula One/NET that allows you to view and fill out spreadsheets is free. An enhanced version, called Formula One/NET Pro, targeted at content developers and capable of creating and modifying sheets through a popup worksheet designer, is priced at a very reasonable $39.

So, how good can a product be if it's available at such a bargain? Because Formula One/NET has most of the features of its more expensive OCX sibling, the answer is: pretty good. You get the ability to read and write Excel worksheet and workbook files (versions 4 through 7), all the calculation and

formatting capabilities you'd expect, extensive 2-D and 3-D charting options, and the ability to include graphics in your worksheet.

Of course the product also offers some Web-specific features. You can link the address of another Web page (Universal Resource Locator or URL) to a button or even derive URLs from a formula. The latter capability means that you can easily hyperlink customers that reach a certain total on your interactive order form to a special discount page, for example.

Due to the nature of plug-ins, though, most really advanced data processing will have to take place at the back end: the Web server. Because plug-ins are just content viewers, the

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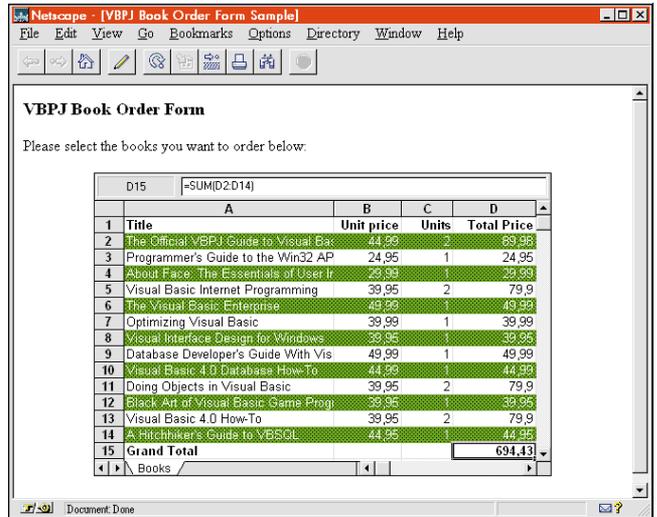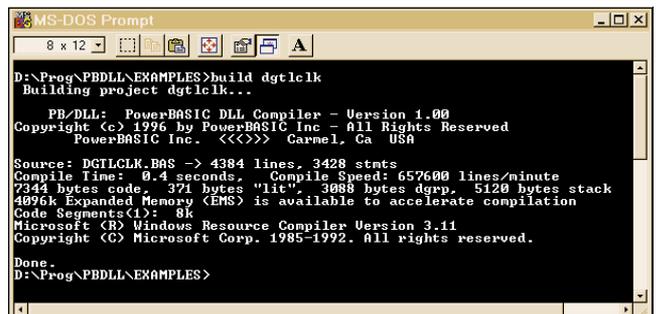

FIRST LOOK

Step up the pace of code-intense routines

PowerBASIC's motto is, "We put the POWER in BASIC!" They're not exaggerating. PB/DLL offers capabilities Microsoft has long been urged to incorporate into Visual Basic. Those who've been using Basic since the DOS days of QuickBasic and PDS will experience a tremendous sense of nostalgia, as memories rush back of just how potent Basic can be. While Microsoft has progressively made Basic "safer" for beginners, PowerBASIC picked up the dropped ball and ran with it.

PB/DLL creates industry-standard DLLs, built entirely with native 32-bit instructions. This first release only exposes a 16-bit interface, but PowerBASIC is nearing completion of a full 32-bit interface, which could be available by the time you read this. Both will ship in the same package. Existing users will have a chance to upgrade for a nominal fee.

PB/DLL is *not* a GUI builder. You can build full-fledged Windows programs with it, but that's not its forté. It's hard to

distinguish the code for such an application from C code; all window management is handled manually. PB/DLL shines in turbocharging Basic routines that bog down under Visual Basic's interpreted pseudocode engine. The general idea is to use Visual Basic for what it does best, such as designing your interface, and to use PB/DLL for its strengths in number crunching.

PB/DLL translates your Basic code to pure assembly language. You also have the option of using inline assembler. PB/DLL supports more data types than Visual Basic, including unsigned integers. Unions offer overlapped variable definitions for the same data. Code and data pointers are fully supported. Low-level functions exist to perform bit and array manipulations, and to access hardware and memory directly.

Surprisingly slim by today's standards, PB/DLL ships on just one floppy. The compiler is a DOS application, and you must use a

Blazing Compilations. *The DOS-based compiler cranks through code at well over 500,000 lines per minute on a Pentium 100.*

Karl E. Peterson is a section leader in the VBPJ *Forum's 32-Bit Bucket and a Microsoft MVP in the MSBASIC Forum. Contact Karl in either CompuServe location at 72302,3707.*

Cheap sheets...

possibilities of manipulating a Formula One/NET sheet at the client machine using Java code or a scripting language are rather limited.

Formula One/NET Pro comes with complete online documentation and runs on Windows 3.1 (provided the Win32s add-on API is installed), Win-dows 95, and Windows NT. You also need Netscape Navigator 2.0 before you install the plug-in.

The only two problems I see with Formula One/NET are its reliance on the Netscape product, which not all your potential users may have installed, and the limited client-side-automated data manipulation features. If these restrictions are too severe for you, you're probably better off waiting for Microsoft, whose solution encompassing VBScript,

Formula One/NET Pro
Visual Components Inc.
15721 College Blvd.
Lenexa, KS 66219
913-599-6500, Fax: 913-599-6597
Internet: http://www.visualcomp.com
Price: $39
Availability: Now
Quick Facts: Extensive spreadsheet component, suitable for use on the Internet. Formula One/NET is freely available to all users; the Pro version, reviewed here, adds design capabilities.

Java, JavaScript, and ActiveX controls (OCXs) is still in the alpha-testing stage at the time of this writing. For ev-eryone else, though, Formula One/NET is such a huge improve-ment over plain HTML that you really ought to check it out today. ✕

Code-intense routines...

text editor such as Notepad to write your code. No effort was expended on a fancy (or really *any*) interface. Performance more than made up for its rawness, though. Fin-ished EXEs and DLLs require no run times, and are extremely tight. A simple DLL pro-

DLL Compiler
PowerBASIC
316 Mid Valley Center
Carmel, CA 93923
408-659-8000, Fax: 408-659-8008
Price: $149
Availability: Now
Quick Facts: Builds native-code 16-bit DLLs with Basic and inline assem-bler, callable from any language.

viding a dozen or so math routines easily compiles to less than 10K. Tests I ran showed PB/DLL was four to 10 times faster than Visual Basic.

Using PB/DLL was like go-ing back in time. With no editor, no syntax checking, and no auto-formatting, getting over the first few humps was tedious. Er-ror messages from the compiler are cryp-tic, and the manual doesn't help at all. You must be on very intimate terms with the way data is passed between Windows pro-grams to get beyond the inevitable and numerous GPFs encountered as you're writ-ing your first DLLs. A crude debugger is provided, though using it is an absolute exercise in frustration.

Overall, disappointments were few. Tech support was solid, and free other than the phone call. If you're doing 16-bit (and com-ing soon, 32-bit) Windows programming with Basic today, and find that Visual Basic simply isn't fast enough for your code-in-tense routines, you absolutely owe it to yourself to add PB/DLL to your arsenal of tools. *"Two thumbs up."* ✕