

Wired For Web Right Now

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ou want the Web and you want it now! Okay, maybe that's your Customer talking, but it is a real request and one that you can satisfy today, right now, with current BASIS tools. You can build your Customer's site today and later add even more power and functionality with BBj™ components and Java applets.

Building a Web site is like a request for an order entry system – there is a problem and a resolution – but the path to get there is up for discussion. Maybe you want a Web site with some creative graphics. Your Internet Service Provider (ISP) can probably provide you with the information you need and how files should be delivered. Maybe you have an application in which you want some real-time reporting available via a Web site. That'll require more work, both within your application and in the way your Web site handles the query. Maybe you want the query to manipulate the data, or you'd like your Customers to be able to modify information in the database. Your Web site will need some application intelligence that can guide the presentation. Or lastly, maybe you require interactive application exposure from your Web site. In that case, you will need to give detailed consideration to your application, site design and data integrity issues.

BASIS offers three methods, built with BBx®, that you can use right now to achieve any of these types of Web sites.

The ODBC Method

The first and most popular method is via the BASIS ODBC Driver®. The ODBC Driver offers great flexibility in that you can choose between dozens of off-the-shelf software packages to create your Web page and take care of the data retrieval. These products range from simple yet powerful programs aimed at beginners, such as Microsoft's FrontPage, to all-in-one Web solutions for larger scale development, such as Allaire's ColdFusion. You can also do it yourself by utilizing CGI (Common Gateway Interface) scripts written in Perl, Python or ASP, or by using Java servlets. Because of the popularity of this configuration, you don't have to reinvent the wheel. Hundreds of pre-written scripts, library modules and application servers are available for free on the Internet. This saves you a lot of time developing, debugging and testing your scripts, and also serves as a great learning exercise by teaching you the basics along with some neat tricks of the trade. These libraries take care of everything from fundamental HTML parsing to cookie authentication and data retrieval. The application servers do all this and more, allowing you to easily build and maintain your customized Web presence from one package. In addition to providing Customers access to your BBx data, you can offer site personalization, news and search portals, group membership and contributions, etc.

The Basic Web Utility

Another alternative is the Basic Web Utility, a free set of programs that ship with PRO/5® and Visual PRO/5®. The Basic Web Utility has two major components, the first of which is a UNIX script or Windows executable that allows your Web Server to launch PRO/5 so that it will be used as the CGI language. The second component is a comprehensive set of libraries to aid you in creating BBx programs that gather input from the end user's Web

browser, retrieve the requested BBx data, format it for HTML output and send it back to the Web server. These utilities give your BBx programs complete access to the CGI environment and also enable you to easily apply the business logic in your existing BBx programs for use in the new Web environment. Because PRO/5 is being used as the CGI language, you have complete control over the data that you return to the browser. You're no longer limited to simple SQL queries – you can use all of PRO/5's built-in verbs and functions, along with any custom functions you've written, to massage the raw data into any format you want.

FOR MORE INFORMATION, VISIT THESE RESOURCES:

BASIS ODBC Driver

<http://www.basis.com/devtools/bbx/odbc/index.html>

Demo of Basic Web Utility

<http://www.basis.com/onlinedemos/cdstore/index.html>

BASIS Online Documentation

<http://www.basis.com/onlinedocs/documentation/index.htm>

Microsoft FrontPage

<http://www.microsoft.com/frontpage>

Allaire ColdFusion

<http://www.allaire.com/products/coldfusion/index.cfm>

The Socket Method

A third option would be to take advantage of PRO/5 and Visual PRO/5's new socket interface to write your own BBx program that provides the Web Server with access to BBx data. In effect, this can be thought of as a combination of the last two methods. A 'listener' BBx program would be resident on the network (not necessarily on the same machine as the Web Server) and would communicate with the Web Server or an interface program on a TCP/IP port. Once a protocol has been worked out, it's possible for the Web Server to send high-level commands to the listener program. This program could then retrieve the appropriate data for the command, manipulate and format it, then send it back to the Web Server. In addition to the benefit of complete customization on your part, this method also has the advantage of the PRO/5 or Visual PRO/5 interpreter being loaded into memory only once and staying resident, effectively decreasing the response time to the client's browser.

And if you want some HTML in a Web site, your ISP should have enough samples and tutorials to get you up and running in no time. If you want to get application data to a Web site, use our ODBC driver and one of the many off-the-shelf products to talk to the driver. And if you are looking to tightly integrate a Web interface into your Web application, you already have the utility programs in the Basic Web Utility and can view a sample on our Web site. Check out the CD Store demo. If you are looking for the ultimate in customization and control, there is powerful potential in socket communication.