

Pinatubo: A More Open Business Basic

By Dan Rask

The Open Business Basic technical seminar at TechCon97, presented by BASIS' senior engineer Mark Sommer, focused on Pinatubo, an upcoming Volcano™ product. The following is a summary of his presentation.

Pinatubo extends the Open Business Basic concept, a cornerstone of the Volcano strategy. What is the difference between the "openness" of BASIS products over the past ten years and the "openness" of Pinatubo and the other Volcano products? In the past, openness meant a commitment from BASIS to support UNIX and Windows hardware platforms so that developers and end users weren't locked into a particular platform. From now on, "openness" describes a component-oriented structure that supports Business Basic programs with interfaces to other tools on many levels.

Critical components of a Business Basic application can now be maintained in a familiar environment, while the entire system can be extended according to performance and functionality requirements. These innovations apply as much to the mainstay character-based applications on UNIX platforms as to graphical Windows applications.

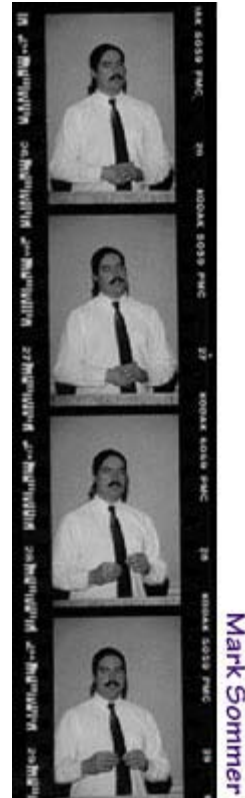
New Runtime Components

Pinatubo puts a modernized Business Basic language to work with a modular runtime interpreter, separated from both the operating system and file system/database. Access to the BBx® file system is provided by a file system component, which can be used by any application. This component structure allows Business Basic applications to be structured to compete in a multi-tier application environment with better access to SQL databases using flexible front-end methods, including terminal, Windows, and HTML interfaces.

The development environment can be either the classic READY> console or the new *Cabazon* integrated development environment (IDE) under development at BASIS.

The Interpreter, Programming, and Debugging

Pinatubo contains a C/C++ interface that allows a C-based application to call Business Basic programs and vice versa. Object variables are another big addition to the interpreter. Code segments can be structured and called in a simpler, more understandable



way. In addition to the external C/C++ interface, programmers are able to program without line numbers. Now, like most contemporary 3GLs, you can format your code in Business Basic according to its structure, which is described in more detail in the article ["The Evolution of BBx"](#). Debugging control improves with the ability to use conditional breakpoints. See ["Cabazon, the IDE for Business Basic Developers"](#) to learn more about advanced debugging capabilities and using ActiveX controls to simplify and accelerate Windows programming.

File System and SQL Engine

In *Pinatubo*, specific file system enhancements include increased file sizes, which grow up to the 64-bit limit of the operating system on applicable platforms. This improved component architecture opens up possibilities for using the file system with greater flexibility in combinations with local, remote, data server, and distributed models. A new license manager simplifies distributing and licensing applications and users. The SQL engine component will continue to move toward SQL core compliance. Extended Fetch and Cursors also significantly improve your ability to use SQL as more than a query interface, to insert and update data, freed of the need to manage tables directly.

Change is Good

In the past, when Business Basic Independent Software Vendors (ISVs) have considered moving their applications to a multi-tier structure, the only option was starting from scratch in another 3GL or 4GL environment. Now, starting with *Pinatubo*, you can innovate in stages, using a multi-tier approach with open support for front-end and database tools. You can keep the core data processing logic in Business Basic where it belongs. Hiring and training programmers will also be easier, because people already working in other 3GLs, or coming out of college, will find the syntax more familiar.

With the competitive software environment and the rapid rate of change in "Internet time," flexibility is critical. Today, the competitive edge for your application might be a Web browser front end and the ability to scale up to a high-end database. Tomorrow it might be Internet terminals, and the day after that, handheld devices. *Pinatubo*, along with *Cabazon*, will give you the ability to mix and match components, and create the customized, high-performance applications you need to stay competitive.