

BASIS Comes Back To Basics With PRO/5® v2.0

By Dan Rask

The current avalanche of Windows NT coverage by the software press has given some developers the impression that interest in UNIX is quickly becoming buried by this newer operating system. Bill Gates and Microsoft back up this impression of Windows NT eminence with alluring sale pitches that promise a long and attractive list of powerful features to potential corporate customers. But amidst the Windows NT marketing promises lies a forgotten fact: for years UNIX has been delivering features Windows NT is just beginning to promise.

Here at BASIS, we have kept our long-standing commitment to the "write once, run everywhere" concept of software development by supporting both the UNIX and Windows NT operating systems. Despite all the recent Windows NT rhetoric from the software press, we know from experience that each operating system has its own strengths and weaknesses. With the release of PRO/5 v2.0, we get back to the UNIX basics and provide a number of improvements-smaller memory footprints, faster string files processing, support for larger file sizes, and lower licensing costs for multisession users-that take advantage of UNIX's inherent strengths. We believe that this combination of new features will impress even the most diehard BBxPROGRESSION/4® user.

Double Your Elbow Room Using 4GB Data Files

As your files mushroom in size, so does the cost of accessing and maintaining them as your administrators are forced to continually split files and endure the headache of generating reports from the archived data. If your customer records and inventory files are outgrowing your file system space, PRO/5 v2.0 can help by offering access to string and multikeyed files up to 4GB in size on systems that support the new Large File Specification (LFS), including HP-UX v10.20 and AIX v4.2 and v4.3.

Unlike cobbled-together solutions that involve segmented files-solutions that hold the potential to create nightmarish data loss situations even if carefully administered-PRO/5's approach to 4GB support is clean, simple, and robust. Converting your existing data files to 4GB-capable files is as easy as opening the file once with a `MODE="4GB"` option. New M-KEYED files are automatically created in 4GB mode on systems that support it, and in case the unthinkable happens, the familiar `_fix` utility handles the new files just fine.

As storage requirements increase and operating systems move toward full 64-bit file system functionality, BASIS products will move

with them. Until then, however, 4GB files will meet the needs of virtually all Business Basic applications.

Reduce Memory Overhead With New SQL And Non-SQL Executables

With the release of version 2.0, PRO/5 is now shipped with SQL and non-SQL versions of the runtime executable. If you need ODBC and SQL, all the power is there in PRO/5 SQL Edition. But if you're one of the thousands of BASIS customers who don't require ODBC and SQL access for their applications, you can significantly reduce the amount of system memory required for each user by running the smaller, more nimble non-SQL version. This "core" version supports other PRO/5 enhancements including large files but requires forty percent less swap space per user than PRO/5 1.0. Meanwhile, PRO/5 SQL Edition users will find the same power as in 1.0 with a separately activated executable that provides more control over application functionality. Independent software vendors can now tier their product offerings more easily to sell SQL as an add-on feature and recoup development and support costs.

| PRO/5 v2.0 | PRO/5 v2.0 SQL Edition |
|--|--|
| <ul style="list-style-type: none">• 4GB File Sizes• Lower multisession licensing requirements• 1-7x faster string file processing• CALLED library support | <ul style="list-style-type: none">• 4GB File Sizes• Lower multisession licensing requirements• 1-7x faster string file processing• CALLED library support |
| | <ul style="list-style-type: none">• BASIS SQL Engine• Supports BASIS and external data sources• Visigenic ODBC libraries (selected platforms) |

Reduce Cost Per User With Improved Multisession Licensing

Installations that depend on multisession terminal emulators have always had to provide a license for each instance of PRO/5. Under PRO/5 v2.0, multiple PRO/5 sessions using the popular FacetTerm product now require only a single license. Licensing is simplified in other situations as well. Setting the BBWINTYPE environment variable now allows PRO/5 to execute another PRO/5 session via SCALL while only using a single foreground user slot, and user shells that support job control can use a single foreground slot when switching between multiple PRO/5 sessions. These changes allow the application developer and reseller to offer end users increased

productivity at a very low cost and maintain the cost-per-user edge that BASIS solutions have always provided.

Speed Up Data Processing With Faster String File Access

M-keyed files are the backbone of the robust BBx file system, but they can't do everything. Many Business Basic applications capitalize on the high performance and low overhead of string files, and some applications don't use anything else. If your application processes string files with terminated reads, PRO/5 v2.0 can provide dramatic speed improvements with no programming changes necessary. Speed increases of three to five times over previous versions are not uncommon-the larger your record size, the more improvement you'll see.

CALL Anywhere To Better Structure Your Code Base

Under PRO/5 v2.0, the CALL verb now adds a capability that can dramatically improve code architecture and maintenance. The new CALL allows calling to specific line numbers or labels in a program, so that public programs can be used as libraries.

As this issue of the *BASIS Advantage* goes to press, PRO/5 v2.0 is entering the final stages of testing. Developers and users will find that the traditional strengths of the UNIX platform, such as multiuser support, low cost per user, and easy portability, are still at the heart of our UNIX products. PRO/5 v2.0 builds upon these strengths with new features-larger BBx program size, new language constructs, and a distinct PRO/5 SQL Edition version for SQL and ODBC-to provide an innovative, solid application development environment for all UNIX-based developers.