The BASIS ODBC Driver Unlocks Your Data

By Andy Forget

How often have you had that "I can't get there from here feeling when trying to view data from a legacy application? Or more frustrating, you can get the data **out** of the legacy application but the presentation provided by your existing software is so marginal that end-users cannot easily grasp the meaning of the data. Your data seems hopelessly locked into a proprietary correctional facility that resists all of your efforts to glean any useful information from it.

To make matters worse, while we struggled to free our data from the gloomy confines of our legacy applications and make it understandable to our customers, we've watched our Windows-based competitors use industry standard graphical tools such as report writers and spread sheets to make their data virtually leap off the page. Those lucky Windows developers get all the breaks! Well, the days of self-pity are over! The BASIS ODBC Driver will change the way you and your customers look at data from this day onward!

THE PROBLEM

Before we get to the details, let's explore the actual problems that have made our lives so difficult. In particular, two problems become evident when analyzing the information short-falls of the modern enterprise:

Dissemination of Data

Even very disciplined enterprises may find that manifold data sources are accessed on a day-by-day basis. For example, General Ledger information may be stored in a legacy system, cost control may be in a spreadsheet, and customer mailing information may be stored in text files. This disparity of information inherently precludes the singular assimilation of enterprise data from a lone application. Simply put, not all of the data we rely upon to form critical business decisions comes from a single source. There has not been a magical tool that has been able to seamlessly combine these sources of data into a single understandable entity.

ENTERPRISE DATA

No Mechanism to Combine Non-homogeneous Enterprise Data!
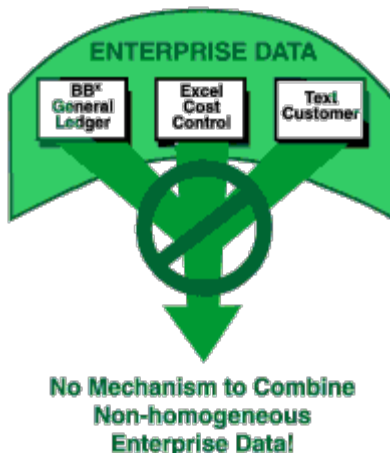
Assimilation of Data

The very best vertical applications provide a wide array of information retrieval mechanisms. But even these fall short when compared to the very specialized capabilities available from such third-party tools as

spreadsheets, report writers, and graphical charting tools. When applied to existing legacy and DBMS data, these tools can provide unparalleled executive data retrieval and assimilation potential. Third-party tools provide the leverage necessary to remain competitive without requiring extensive resource investment in the local development of application features of similar functionality. For example, it is easier to provide off-the-shelf report writing capabilities (such as TAOS/*Views*) to your clients than to write a state-of-the-art report writer yourself!


NO THIRD PARTY TOOLS!

THE SOLUTION

The solution to both problems is to provide a uniform mechanism to access **all** enterprise data. Such a solution would enable a single application to seamlessly access data from disparate data sources. Additionally, this solution allows you to select from a multitude of off-the-shelf, third-party products capable of interacting with **your** data.

The uniform access mechanism we have embraced is the Microsoft Open Database Connectivity (ODBC) specification. ODBC is a specification for an application program interface (API) that enables applications to access multiple foreign databases. Database access is accomplished by sending Structured Query Language (SQL) requests from the application to various database drivers.

ODBC is a standard API, first introduced by Microsoft,that provides a thin layer between applications and heterogeneous database drivers. ODBC establishes a standard for applications to access data and a standard for DBMS vendors to provide access to their proprietary data via a common API.

An ODBC driver that can access BBxdata will allow you to add functionality to your products in an evolutionary, rather than revolutionary manner. An ODBC driver that can access BBxdata will provide the ability to integrate third-party software tools into (and around) existing BBx applications without requiring a substantial investment in re-engineering existing applications.

The BASIS ODBC Driver™ provides ODBC compliant products access to BBx files via the BASIS SQL Engine. For more detail, please see *Seamless External Database Access* in the January 1994 issue of *The BASIS Advantage*.
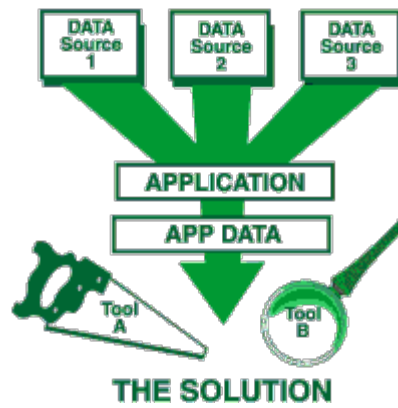
ODBC ARCHITECTURE

The ODBC architecture has four components:

- Application - An application such as a spreadsheet or a report writer that uses the ODBC API to manipulate foreign data.
- Driver Manager - The ODBC layer itself which loads the drivers on behalf of the application.
- Driver - An ODBC-compliant driver supplied by the DBMS vendor or an independent driver provider which manages the actual communication with the underlying data source.
- Data Source - The data the user will access and its associated operating system, DBMS, and client/server capabilities (if any). In TAOS parlance, a Data Source is the data and data dictionary associated with a single TAOS data dictionary.

The application need only deal directly with the ODBC Driver Manager in order to access foreign data. There is no need for ODBC-compliant applications to deal directly with proprietary database interfaces.

Since Visual PRO/5 (please see the article on page 18 for more details) incorporates the ability to access foreign data via its own ODBC capabilities, we have the solution to the dissemination of data problem. Visual PRO/5 is not limited to accessing only BBx data. Using its new SQL verbs or its Flat File Interface you can access any data source that has an ODBC driver available.

The solution to the assimilation of data problem is the BASIS ODBC Driver. The BASIS ODBC Driver opens your data up for the inspection of very specialized graphical tools.
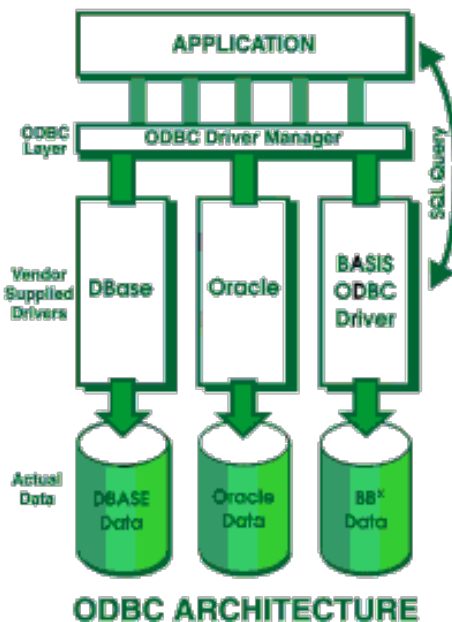
CLIENT/SERVER

You are not limited to producing only Windows applications! The BASIS ODBC Driver comes client/server ready. You can access your existing legacy data that resides on a UNIX server by simply providing the server path in your data definition and setting up a PRO/5 Data Server on the UNIX side.

In this scenario we use the powerful GUI capabilities of Windows to exploit the powerful data storage and integrity of UNIX. You can have your cake and eat it too! Of course if your data resides on the Windows side, you have immediate access to it without the need for a PRO/5 Data Server.

The old solution to this problem was to down-load application data to the Windows system and then laboriously convert the data to an appropriate third-party tool format. This introduced a host of new problems: data conversion, data consistency, network traffic, and integration issues. Leaving your data on the UNIX host and accessing it with the BASIS ODBC Driver eliminates all of these problems and provides up-to-the-minute information to the Windows work station. You'll never have to examine day old data again!

PRO/5 CLIENT/SERVER
Lets You Retain Your Data
on its Original Platform
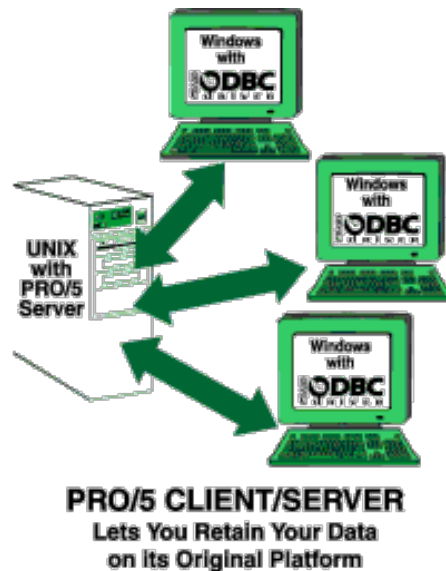
CONCLUSION

Armed with the BASIS ODBC Driver, you open up your existing BBx data to sophisticated information retrieval and exploitation. Before we gave you the ability to access this data using the BASIS ODBC Driver, your data was locked into the dark abyss of application logic, and was only accessible via mechanisms that the application vendor deemed sufficient.

There are **no** limitations to BBx data access with the BASIS ODBC Driver. You can easily access your data with off-the-shelf productivity tools such as report writers, spread sheets, or even other programming languages. This is what open systems is all about: it is **your** data and you should be able to retrieve and manipulate it using the best tool for the job. Now you can!