News

For release: <mark>**January 13, 1988**</mark>

Contact: **Gail Pomerantz**
             Ashton-Tate
             (213) 538-7345

             Mel Webster
             Miller Communications
             (617) 536-0470

THE EVOLUTION OF PC DATABASE MANAGEMENT SYSTEMS

BACKGROUND

Personal computer database management systems (DBMS) have played a central role in the success of the PC revolution since it began ten years ago. The PC DBMS has given end- users a low-cost, easy-to-use data management solution that provides power and control over the user's data and applications.

Ashton-Tate Corporation has led the PC DBMS revolution with dBASE -- the largest selling PC database. With more than five million end-users and tens of thousands of third-party applications written in the dBASE language, it has become an industry standard for PC databases. dBASE has played an important role in enabling personal computers to perform many operational support tasks (such as accounting and inventory tracking) that were previously only available on timeshared minicomputers and mainframes.

dBASE and other PC databases, through their interactive reporting and query capabilities, went beyond traditional operational support type computing and enabled the PC DBMS to be used as a key decision support tool for individuals.

Such decision support capability was not provided adequately by minicomputer and mainframe database systems in a cost-effective manner. The high-performance data storage and retrieval capabilities and limited end-user interactivity have made these timeshared systems more suitable for production oriented operational support applications, rather than for the CPU- and display-intensive applications required for decision support.

(more)

As a result, in larger companies two usages of database management software have evolved, based on the strengths of their respective systems. With the CPU and display power they provided, PC's running dBASE came to be used as an effective decision support and small scale operational support tools, while mini and mainframe databases remained in their traditional role of large-scale operational support.

The Workgroup Emerges

In the mid-1980s, personal computer users started to link up and form what is now commonly described as the PC workgroup. They began requesting that dBASE and other PC applications fulfill the potential of workgroup computing. In addition to PC computing, workgroup users wanted their applications to provide the connectivity and operational support capabilities furnished by their larger, timeshared cousins.

With dBASE III PLUS, Ashton-Tate's entrance into the workgroup computing/LAN environment, many of the hopes and aspirations for workgroup computing were fulfilled. However, limitations in both DOS and DOS-based networks restricted the ability to expand dBASE to meet all workgroup computing needs.

Today, users of PC workgroups are grappling with a set of fundamental desires. Not only do they want to share common data, as they do with dBASE III PLUS, but they also want the enhanced security, integrity and on-line performance that is typical of mainframe DBMS's. And they want these capabilities without sacrificing what they love about dBASE.

dBASE users ask for the best of both worlds: a highly usable decision support-oriented version of dBASE that also provides the operational support power and capabilities to to make workgroup computing a reality.

What is needed is a new technology to complement dBASE. This technology should contain high levels of data integrity, multi-user concurrency control, security and performance features, and should run independently on a network. This type of product is commonly referred to as a database server.

The Client/Server Solution

The client/server model, upon which the Ashton-Tate/Microsoft SQL Server is based, has emerged as the data management architecture that best satisfies these demands. By combining the benefits of dBASE, the PC database standard, with proven technology that delivers an intelligent, back-end database server, the ideal marriage of both computing worlds is achieved.

(more)

The client/server model segments database operations and uses the strengths of each system component. dBASE (the "client") offers power to the user through features such as the highly popular language, comprehensive end user tools such as the report writer, applications generator with easy to use pull-down menus, context-sensitive help and an advanced query system. It is an ideal client product because it not only brings all the dBASE end-users and applications to the client server environment, but also extends the dBASE user's expertise into the workgroup.

These powerful benefits combined with the product's worldwide support network, user groups and independent third-party developers make dBASE the strongest product and the best solution for the client side of the client/server DBMS model.

The back-end ("server"), SQL Server, handles data input/output and transaction processing activities using large and high band-width data storage devices. The server delivers the benefits of traditional on-line systems -- database-level security, transaction processing and production database power, sophisticated data sharing ability and high system availability.

Structured Query Language, or SQL ("sequel"), serves as the interface between the workstation and the server. It is the ideal industry-standard sub-language for data access and manipulation that is standard on multiple computing platforms. SQL is transparent to the user and complements languages, such as dBASE, through which users gain access to data. And as a common communications language across databases, SQL provides connectivity to other servers and larger systems.

The Ashton-Tate/Microsoft SQL Server

SQL Server has been designed as the optimum client/server solution running on local area networks. It is the product of an alliance between three industry-leading companies. SQL Server is based on field-proven relational database technology developed by Sybase, Inc., of Berkeley, California, with technology supplied by Microsoft Corporation and database technology supplied by Ashton-Tate Corporation. The combined effort of the three companies will provide an open platform solution that fulfills the promise of workgroup computing.

At the same time, SQL Server's compatibility with future OS/2 and DOS versions of dBASE will give SQL Server compatibility with thousands of existing dBASE and PC applications.

(more)

The desktop performance dBASE and mainframe transaction processing power of SQL Server have been designed to bring to the workgroup the best attributes of both personal computer and large-system databases.

#   #   #   #

dBASE and Ashton-Tate are registered trademarks and dBASE III PLUS is a trademark of Ashton-Tate Corporation.

Microsoft is a registered trademark of Microsoft Corporation.

SYBASE is a registered trademark of Sybase, Inc.