

# PRODUCT WATCH

*A bevy of tools and releases just in time for fall*

## SQL/DS TOOL SUPPORT AND THIRD-PARTY VENDORS: WHAT'S ON THE HORIZON?

In the beginning, there was SQL/DS. Developed by IBM as an expansion to Sequel (a derivative of its first relational DBMS effort, System R), it served VSE/SP installations, and later, VM/SP. Its reception was lukewarm. SQL/DS was slow out of the gate, perhaps due to the lack of complimentary products. Managing an SQL/DS database requires more set-up than the standard VSAM delete and define. Although the number of SQL/DS licenses has reached 7,500 to 8,000, few shops have given SQL/DS the nod as their "first team" data structure.

So, the marketplace has been at a stand-off: Third-party tool developers wait for the market to mature, while SQL/DS users wait for tools. DB2, which was developed by IBM after SQL/DS for the MVS platform, immediately offered a more lucrative market for tool makers. Third-party vendors have lined up to serve DB2 installations. While development costs for tools are nearly the same for either DBMS, DB2 support tools fetch heftier license fees. It shouldn't require a MBA to conclude that DB2 tools offer higher potential profit margins than SQL/DS tools.

But wait, could that smoke on the horizon be the DBMS Phoenix—SQL/DS? Yes! Sporting turbo-charged performance enhancements and long-awaited features, SQL/DS should be enjoying more playing time this year.

### SUPPORT NEEDS

Talking to SQL/DS users reveals some interesting support requirements. Of today's support tools, Carol Tarne Hurd, manager of In-

formation Technology with Conway-Ward Inc. in Kansas City, Missouri, observed, "Many database maintenance functions are supported, but I'm unaware of any that provide development support."

In other words, we have tools that support functions to existing database objects only. Database development functions such as capacity planning and initial data definition language (DDL) code generation aren't recognized by most vendors. Maintenance functions include data reorganization, DDL generation, performance monitoring, automation of the EXPLAIN command, and so on. These issues have been addressed by several vendors.

Randy Herigon, a DBA with the National Association of Insurance Commissioners, explained: "The improvements to SQL/DS and the operating systems should cure the obsession with performance monitoring. If more effort is focused toward identifying performance problems during development, the emphasis on production performance monitoring may be reduced to curiosity."

Of course, data design and access path reviews can require significant withdrawal from the old time bank. Taking advantage of automated support tools should leave the DBA's account rich with time. Hopefully, this wealth will enable DBAs to afford proactive performance management.

While many of the activities that are involved in database management can be controlled programmatically, functions such as design reviews, database tuning, problem resolution, recovery strategies, and (one of my very favorites) the infa-

mous HDA replacement still require carbon-based logic units—DBAs.

### CURRENT TOOLS

Compared to the DB2 market, it seems that few major tool vendors recognize the potential of SQL/DS. This fact is particularly true of VSE installations, which often feel like the poor cousin of VM with respect to third-party tool support. However, as vendors dig for the mother lode of gold dust (DB2 sites), they ignore the opal waiting just beneath the surface (SQL/DS sites). Perhaps I'm exaggerating—a few jewels have been found and polished. In fact, SQL/DS users report that many of their needs are supported (see Figure 1).

### MAINTENANCE

Virtually all SQL/DS tool support from the major vendors is concentrated in maintenance. With several data reorganizer tools available, REORGs become almost recreational. Several performance monitoring tools are also offered. Additionally, system catalog management tools and table editors are supported. VM Systems Group's novel online documentation is one of the maintenance support tool highlights. It cleverly uses an electronic "bookmark" and hypertext to put help at your fingertips. The company also offers the widest range of support tools among the vendors reviewed.

Other maintenance support highlights include a stealthy DASD monitor from Allen Systems Group as well as a powerful performance monitor from Goal Systems that provides a front row view to the DBMS action with minimal overhead. After years of internal usage, IBM has made its SQL/Master available to its customers. It pro-

## Selected SQL/DS Third-Party Vendors

Allen Systems Group, Naples, Florida, (800) 93-ALLEN

**Silent DBA**—Currently available for VM. VSE version is under development.

Features:

- Automated collection of performance information into SQL/DS tables
- Automated DASD monitoring logical and physical
- Data encyclopedia
- DASD capacity planning
- ACQUIRE DBspace code generation
- CREATE table DDL (new and existing tables)
- DDL migration between SQL/DS systems

CDB Software Inc., Houston, Texas, (800) 627-6561

**SQL/DS Workbench**—Currently available for VM.

Features:

- Catalog management and analysis
- Data migration between SQL/DS systems—including DDL, authorizations, and referential integrity rules
- DDL code generation (from existing objects)
- SQLDBSU code generation
- Utility execution control and job stacking

Goal Systems International Inc., Columbus, Ohio, (800) 829-9000

**Explore**—Currently available for VSE.

Features:

- PC-based graphic charting
- Performance monitoring
- Performance reporting

International Business Machines Inc.; contact your IBM representative

**SQL/Master**—Currently available for VM.

Features:

- Automated database and log archives
- Automated database recovery
- Automated DBspace reorganization
- Automated LOG MODE switching
- Database monitoring
- DBspace reorganization candidate selection
- Start-up parameter administration

Michael Teitelbaum Associates Inc., New York, (212) 799-2200

**SQL MAP**—Currently available for VM.

Features:

- EXPLAIN command support and analysis

VM Systems Group Inc., Vienna, Virginia, (800) 233-6686

**DB/Admin, DB/Center, DB/Editor, DB/Menu, DB/Monitor, DB/Reporter, DB/Reorganizer, DB/REXX**—Currently available for VM.

Features:

- Application generator
- Automated console message response processing
- Automated database and log archives
- Automated data reorganization
- Consolidated console monitor and control for multiple SQL/DS systems
- Dynamically modify start-up parameters
- Performance monitoring
- Report generator
- REXX—SQL/DS interface
- Table editing

vides support for many SQL/DS console operations, including performance monitoring.

## DEVELOPMENT

For those of you who still enter table and index information into spreadsheets to estimate your data page and extent allocations, and then reenter the information to code the DDL, I found only one major vendor providing capacity planning and initial DDL code generation support. Allen Systems Group has recently acquired Silent DBA, which includes a data encyclopedia to collect database object information. Once collected, the tool estimates DBspace data and index page requirements. It also generates the DDL for creating new tables and acquiring DBspaces. By maintaining the data encyclopedia, many other functions can be automated.

Michael Teitelbaum Associates in New York provides a product that streamlines the SQL EXPLAIN feature. It automates the use of the EXPLAIN command for SQL embedded programs.

With the SQL/DS release 3.1, IBM has included RXSQL, which is an interface between SQL/DS and REXX. Previously, RXSQL was offered as a separate license. However, the company discontinued support of past RXSQL releases.

Rescuing those sites stranded from the discontinued support is VM Systems Group. It offers a product that provides an interface between SQL/DS and REXX and supports several versions of REXX and SQL/DS. In addition, VMSG offers an application generator. It won't retire COBOL, but it can be useful for creating simple programs.

While SQL/DS tool support lags a few steps behind that of DB2, I anticipate the pace of product announcements to quicken. Combine tool support with the DBMS and operating system enhancements, and the result could likely be an eruption of SQL/DS applications development. After 10 years, SQL/DS is emerging as the DBMS for the future. Today, SQL/DS tools support may be considered a small tool chest, but expect a treasure chest rich with productivity tools as SQL/DS usage increases.

—R. G. Eaton

**FIGURE 1.** These vendors provide enough functions to make any SQL/DS DBA smile.