Technology backgrounder

Mainframe computing is sometimes incorrectly cast as outmoded, expensive and a thing of the past. The truth is, mainframe computing is still experiencing growth, offers many tangible benefits over a distributed-computing environment and is still the data-center model of choice for large, global enterprises in high-volume transaction businesses. At a time when all businesses are trying to do more with less and to maximize the return on their hardware and software investments, optimization of mainframe infrastructure can offer immediate benefits, especially to those currently strained by increasing transaction volumes and constricting batch-processing windows.

Maximizing the millions of instructions per second (MIPS) processed by a mainframe can save companies millions of dollars annually, a benefit that appeals directly to the executive levels of major corporations like those in the Fortune 500.

Mainframe computing offers large enterprises both a strong business case and tangible functionality benefits. A mainframe data center takes up less physical space and consumes less energy than a distributed-computing environment, provides high availability that satisfies the five-nines reliability concept, has the ability to run both Linux and Java on the same box, allows easy creation and support of SOA applications and has the ability to co-host multiple disparate systems and thereby consolidate servers. Ease of scalability between 26 MIPS and 500,000 MIPS, with virtualization built in as part of the architecture, are other attractive mainframe features. With over 40 years of history in data-processing centers, mainframes offer time-tested backup and disaster recovery procedures, and 90% of the world's largest databases reside on a mainframe for good reason.

DataKinetics has been providing users of IBM System z mainframes with real-time, in-memory application optimization for over 30 years. Proof of its ability to deliver lies in the fact that DataKinetics is a trusted vendor to 20% of the Fortune 50. Its proprietary product, DataKinetics tableBASE, boosts mainframe applications to achieve greater throughput. In high-volume transaction industries like finance, retail, insurance and telecom, where around-the-clock mission-critical applications are processing hundreds of thousands of transactions per second, maximizing MIPS is a well-recognized goal as large global enterprises devote costly internal IT resources to try and increase mainframe performance and capacity. tableBASE is an integral element of the performance of their business critical applications such as credit card processing, insurance quotes and claims processing, financial statement processing, program trading and stock market reconciliation.

The use of tables is a widely accepted methodology to optimize the performance and capacity of mainframe applications. tableBASE facilitates application optimization using in-memory tables, which provide applications with increased capacity to process more transactions in the same period of elapsed time because each individual transaction is processed in a much shorter period of time.

Table Driven Design is an approach to software engineering that is intended to generalize and simplify applications by separating program control variables and parameters (rules) from the program code and placing them in external tables. Table driven design enables increased flexibility and responsiveness to market changes and overall reduced maintenance.

tableBASE, is proven and powerful in-memory software used to enhance online transaction processing environments, batch applications and DB2 stored procedures running on IBM System z mainframes. The software is designed to define, build, maintain and manage in-memory tables. Accessing memory from RAM is about 1,000 times faster than accessing it from disk and, using an advanced API, tableBASE allows for high-performance access to tables in memory. Data access from in-memory tables rather than from disk drastically improves performance and flexibility because it uses the shortest and fastest possible path to data. The increased efficiency gained by using the shortest path to data reduces program execution time from hours to minutes. By placing rules in tables that are external to the application logic, time to implement is reduced from months to hours.

Historically, tableBASE has evolved from an optimal data-access engine into a complete infrastructure for the management of reference data in table-driven applications. With tableBASE, mainframe performance in almost any environment can be improved. Because its customers are engaged in business 24x7, DataKinetics technical support is available around the clock.

The full suite of DataKinetics products includes tableBASE; DataKinetics tableBASE VTS, which enables table sharing across applications; DataKinetics tableBASE Process Manager, which coordinates shared tables, even across logical partitions or LPARs and provides 7/24/365 transaction processing, which requires the ability to switch to the use of new tables seamlessly, allowing old transactions to complete using the old tables while new transactions use the new tables; and, DataKinetics tablesONLINE, an online menu-driven system that provides a consistent user interface for controlled access to tables, table definitions and utilities. This allows users to browse, edit and define tables.

In addition, DataKinetics' team of mainframe optimization experts offers a range of professional services, from optimization audit and services to installation, integration and upgrade services, and from product implementation training to superior technical support.

For more information, please visit www.dkl.com.

European media and analyst contact:
Danny Sullivan, consultant
in*media* Public Relations
Phone: +44 (0) 141 404 6478
Email: dsullivan@inmedia.com
Twitter: @inmedian
LinkedIn: http://www.linkedin.com/pub/danny-sullivan/0/902/802

North American media contact:
Linda Forrest, consultant
in*media* Public Relations
Phone: 613-983-3300
Email: lforrest@inmedia.com
Twitter: @lindaforrest
LinkedIn: http://www.linkedin.com/in/lindaforrest