

SYBASE®

SYBASE® DYNAMIC  
OPERATIONAL DATA STORE

THE  
ENTERPRISE.  
UNWIRED.





## ENHANCING ACCESS TO BUSINESS-CRITICAL INFORMATION

Unprecedented growth in the volume of data, increasing numbers of knowledge workers who need access to the data, combined with the need for real-time access are placing significant strain on operational systems. Fundamentally, these systems were designed to process business transactions—not to address continuous query processing workloads—and the performance of these mission-critical systems is seriously affected.

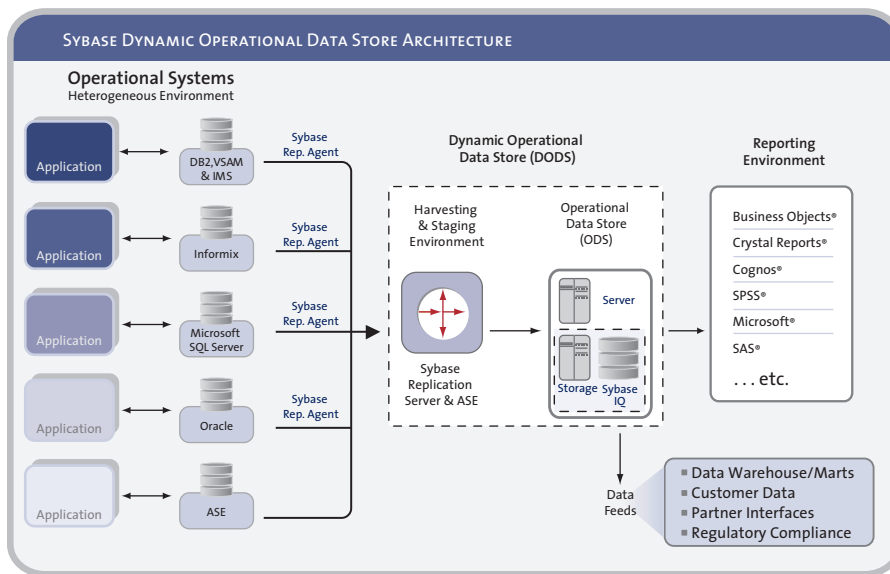
As competition becomes more intense, the need to improve data access and sharpen business analysis becomes more acute. Increasing numbers of users require more access to real-time data with greater analytical flexibility and reporting capabilities. Across a number of industries, the drive for more agile business practices demands precise business insight and analysis—examples include fraud detection systems for finance-related companies; billing, provisioning and sales systems for telecommunications providers; and claims systems for insurance and healthcare companies.

- **The data explosion.** The amount of data that organizations must manage is growing exponentially. Analysts are placing the rate of growth as high as 125% as companies collect, store, and analyze more data about customers, financials, products, and operations. The information can be difficult to access because it is stored on legacy systems, in large data warehouses, or in operational silos of data such as billing, ordering, manufacturing, distribution, and other functions.
- **Growing business demands.** Today's agile enterprises give rise to a growing number of users who need better access to data in order to improve customer-facing applications and service levels and to create operational efficiencies—all of which increase the workload on operational systems not optimized for reporting and analysis.
- **Rising costs of data management.** The cost of managing these growing volumes of data is rising steeply, increasing the substantial investment organizations must make in maintenance, storage, people, and processes associated with the data. Compounding the problem is legislation—such as Basel II, Sarbanes-Oxley and the Patriot Act—that requires companies to provide ongoing access to and perform more analysis on greater volumes of data that must be maintained over longer periods of time.
- **Risk aversion to business transformation.** To accommodate these growing pressures requires new information technology strategies. Yet companies are understandably wary of making significant changes to the legacy systems that manage huge amounts of critical data, even though these systems often prove to be an obstacle to implementing transformational practices such as self-service analytics or real-time decision-making.

### INTRODUCING SYBASE DYNAMIC OPERATIONAL DATA STORE

Sybase's DODS solution provides quick relief for companies who need to preserve the performance of their legacy systems, yet safely serve the increased demands for self-service, real-time business analytics. The Sybase DODS solution allows users to access critical operational data without generating reports from the OLTP system, yet affords complete confidence that the data is synchronized with the new business transactions that are occurring each second.

The Sybase DODS solution uses powerful replication technology that harvests data non-intrusively from the operational system in near real time. The replicated data is stored within a Sybase IQ archive database that is optimized for decision support and can provide query performance up to 100 times faster than traditional databases, and requires 60 to 80 percent less storage space than traditional RDBMS solutions.



THE SYBASE DODS HARVESTS DATA FROM ANY OPERATIONAL SYSTEM, REPLICATES IT INTO THE OPERATIONAL DATA STORE, AND PROVIDES RAPID ACCESS TO THE DATA VIA POWERFUL, FAMILIAR REPORTING TOOLS.

## A BREAKTHROUGH COMBINATION OF PERFORMANCE, FLEXIBILITY, AND COST

The Sybase DODS solution enables you to do what until now has been an impossible balancing act—preserve the performance of your operational system and meet increased demands for self-service, real-time business analytics—while also reducing data management costs.

The DODS solution relies on two proven Sybase technologies—Sybase Replication Server and Sybase IQ—that work in concert to improve your business analysis capabilities by enhancing access to real-time data without impacting your business-critical operational systems.

- **Enhance the performance of both operational and analytical systems** – Sybase Replication Server replicates high-volume transactional (OLTP) data in near real-time into an Operational Data Store (ODS)—providing the “dynamic” aspect of the solution. Sybase Replication Server replicates the data stored in database transaction logs, which capture the data structure and data value changes, without touching the operational system or impacting its performance. Sybase Replication Server can be configured to refresh the ODS every few minutes, every hour, or once a day. Database-agnostic, and providing high-speed harvesting of near real-time data, Sybase Replication Server preserves operational performance while efficiently staging data for analysis. The result is a low-risk method for moving operational data off overloaded mainframes, into a real-time decision-making environment optimized for this purpose.
- **Improve access to real-time data** – As the underlying database, Sybase IQ provides powerful query performance up to 100 times faster than traditional RDBMS systems, while requiring 60 to 80 percent less storage space than traditional RDBMS solutions. Users access data via familiar reporting tools. The ODS created by Sybase IQ does not interfere with operational systems, provides up to 60 percent data compression, is optimized for fast read-access, and is database- and analytics-agnostic, employing standards-based SQL access to data.

“IN MANY WAYS, THE SYBASE SOLUTION HAS CHANGED THE CULTURE OF FINANCIAL AND PERSONNEL REPORTING IN THE STATE.”

BRENT SANDERSON, FINANCIAL SYSTEMS  
IT MANAGER, STATE OF UTAH

## SYBASE REPLICATION SERVER ADVANTAGES

- **Heterogeneous** – Enables a unified data store for business analytics by harvesting data from heterogeneous sources.
- **High Availability across Geographies** – Locates data where it is needed, making distributed business units less susceptible to central computer or network downtime, and enabling truly decentralized business operations.
- **Near Real-Time** – Ensures that changes made to one application can be reflected in other applications in near real time for up-to-the-moment data consistency.
- **Extremely High Data Throughput** – Able to manage data volumes of several hundred gigabytes an hour in near real time, populating data stores with large volumes of data changes every minute.

## SYBASE IQ ADVANTAGES

- **Faster** – Architected for reporting, not transactions, with patented indexing technology that empowers ad hoc query performance up to 100 times faster than a traditional RDBMS.
- **Less Expensive** – Uses sophisticated compression algorithms that reduce the volume of data to be stored by 30 to 60 percent.
- **Easier** – Easier to maintain than traditional databases and does not require time- and resource-intensive tuning to obtain excellent performance.
- **More Scalable** – Offers near-linear user and data scalability to support thousands of users and terabytes of data.

## THE SYBASE VALUE PROPOSITION

The Sybase DODS solution offers a unique value proposition that neither mainframes nor competing real-time business analysis solutions can match.

### INVESTMENT PROTECTION: THE LOW-RISK ALTERNATIVE

Migrating legacy applications off mainframes is a complex, risky endeavor that can take years. The Sybase DODS solution lets you incrementally move key operational data to lower cost, high-speed platforms while protecting legacy systems. With support for clustering on all UNIX, Linux and Wintel platforms, Sybase allows migrations to start small, painlessly, and risk free—yet grow to massively scalable systems. Business-critical operations can continue to run on the mainframe in a much leaner fashion and users can continue to use existing reporting tools.

### BUSINESS TRANSFORMATION: THE MOST FLEXIBLE SOLUTION

You no longer need be limited by the capabilities of your mainframe. By offloading mission-critical data from the mainframe, Sybase DODS allows you to take advantage of a flexible, risk-free means of improving data access for large user populations while ensuring your legacy systems remain focused on business operations. You can thus move from rigid, IT-centric reporting to the flexible, self-service business analytics that will transform your business.

### RAPID ROI: REALIZING RAPID, SUBSTANTIAL RETURNS

Sybase IQ has sophisticated compression algorithms that reduce the volume of data to be stored by 60 to 80 percent in comparison to traditional RDBMS solutions. This reduces the physical storage requirements and attendant staffing costs. Independently audited tests have confirmed that to store 48 terabytes of raw input data, Sybase IQ required 22 terabytes of physical storage. In addition, Sybase IQ is easier to maintain than traditional databases and does not require time- and resource-intensive tuning to obtain excellent performance. Business benefits beyond cost savings include better insight and analysis of information, which can help an organization prevent fraud, mitigate risk, pinpoint new revenue opportunities and more.

## SYBASE DODS—MAXIMIZING THE VALUE OF YOUR INFORMATION ASSETS

With a Dynamic Operational Data Store from Sybase, the value of your data is no longer capped by the limitations of your legacy OLTP systems. Sybase's DODS solution is the rapid, risk-free way to make your mission-critical operational data accessible to growing numbers of knowledge workers, providing more flexible reporting and superior business analysis. It protects your mainframe investment and lets you avoid upgrade costs in the millions while reducing TCO, delivering unparalleled scalability, and giving your organization the agility it needs to respond rapidly to a changing competitive environment.

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