



# Smarter Analytics Comes of Age with Sybase IQ 15

The Sybase IQ 15 column-based analytics server is the smart approach to power the analytics you need to deliver and win.

PRODUCT BROCHURE



Sybase IQ 15 delivers dramatically  
**FASTER, MORE ACCURATE ANSWERS**  
to all your users from all your information...  
**ON YOUR TERMS.**



“WE ARE HAPPY WE MADE THE DECISION OF MIGRATING TO SYBASE IQ. OUR INDUSTRY REQUIRES ANALYSIS ON LARGE DATA VOLUMES WITHIN A CONSTRAINED TIME. THE DATA GROWS IN LEAPS AND BOUNDS AND YOU CAN’T CONTINUE ASKING FOR MORE SPACE. SYBASE IQ HAS HELPED OUR BUSINESS KEEP COSTS UNDER CONTROL ALONG WITH AUTOMATING THE DELIVERY OF THE INFORMATION.”

SANJAY SRIVASTAVA  
GENERAL MANAGER-IT  
SPICE TELECOM

**LOOKING FOR ANSWERS: THE FIRST FOUR DECADES**

For more than 40 years, businesses have been using information technology to automate front office and back office operational systems.

Throughout that time, businesses have made tremendous gains in productivity, but the technology has consistently failed to meet the needs of decision-makers throughout the enterprise. Meanwhile, the volume and complexity of transactional data has grown exponentially.

In today’s environment, operational excellence is not enough to propel your business forward.

Winners (and losers) are now determined by the quality of the decisions and predictions enabled by getting the answers you need.



“WHEN WE STARTED, IT TOOK US SIX TO EIGHT WEEKS TO LOAD ONE YEAR’S WORTH OF TAX RETURNS. IT TAKES FOUR HOURS TODAY.”

JEFF BUTLER  
DIRECTOR OF RESEARCH DATABASES  
INTERNAL REVENUE SERVICE

“WHAT A TECHNOLOGY CAN DO FOR THE COMPANY’S CUSTOMER IS THE ULTIMATE BOTTOM LINE. SYBASE IQ HAS CLEARLY HAD A SIGNIFICANT, POSITIVE IMPACT. IT HAS TURNED OUT TO BE A WIN-WIN FOR US AND OUR CUSTOMERS.”

JOHN HAGEN  
SENIOR SYSTEMS ANALYST AND PROJECT MANAGER  
AMERICAN AIRLINES

### SMARTER ANALYTICS IN THE AGE OF NO EXCUSES

When it comes to getting the answers you need, environments designed for operational (not analytical) excellence consistently provide the same disappointing results. You can get some of the answers you need. Or you can get answers to some of the people who need them. Or you can compromise on the timeliness or completeness of the answers you get.

Something has to change. Today’s business leaders realize that business can only deliver and win if it enables decision-makers throughout the enterprise to make better decisions.

Faster, more accurate answers are the path to success in today’s market.

Decision-makers need to analyze results, predict outcomes, and keep the business competitive. In an age of no excuses, Sybase IQ has emerged as the smart approach for businesses who need to analyze, compete, and deliver.



### THE SYBASE IQ ADVANTAGE

- Data Compression: proven technology with thousands of installations
- Query speed 10X -100X faster than traditional row-based databases
- No lock-in with specific hardware, runs on standard hardware that supports Linux
- Supports ANSI standard SQL
- Ability to add nodes with no need to re-organize the data
- Ability to scale by adding CPUs or nodes
- High Availability

### IN A NUTSHELL

- For businesses looking for more accurate and cost-effective analytics solutions that deliver winning business results by attracting new customers, growing revenues, and predicting outcomes and risks in a volatile and competitive world climate, **Sybase IQ** is the world’s leading column-based analytics server, delivering the smartest approach to enable enterprises to turn raw data into actionable information through analytics—to increase revenue, customers and margins.
- Sybase IQ is the only analytics server that delivers dramatically faster, more accurate analytics and reporting—to all your users, from all your information, on your terms. Sybase IQ’s column-based core architecture and innovative features provide flexibility and scalability in multiple dimensions, enabling unsurpassed query performance for the most complex analytics tasks, for the rapidly expanding BI user base, on the largest datasets—all within an environment that is both affordable, eco-friendly and manageable at the implementation stage and throughout the information lifecycle.
- As evidenced by award-winning results: more than 1,500 customers with more than 3,000 projects worldwide, top industry analyst support, media and pundits, blogs, and benchmark results.





**“WE SPECIFICALLY CHOSE SYBASE IQ TO SERVE AS THE PLATFORM FOR OUR AUDIENCE DATA WAREHOUSE BECAUSE IT IS OPTIMIZED FOR ANALYTICS ACROSS VERY LARGE VOLUMES OF DATA. WE USE THE RIGHT TECHNOLOGY FOR THE SPECIFIC TASK AT HAND. FOR OUR AUDIENCE DATA WAREHOUSE, SYBASE IQ IS THE RIGHT TECHNOLOGY.”**

**KIM ROSS  
CIO  
NIELSEN MEDIA RESEARCH**

**SYBASE IQ 15: THE BEST JUST GOT BETTER**

Already the world’s leading column-based analytics server, Sybase IQ 15 pushes analytic performance to new heights, no matter what business problem your analytics environment is designed to address.

**FOR DATA AGGREGATORS**

If your organization’s mission in life is to bring together vast amounts of industry or society-wide data, from all available sources, and offer that data and analytics services to clients, then you know that winning new customers requires aggressive expansion of product and service offerings while maintaining or enhancing service levels to existing customers. Above all you are looking for:

**Speed**

There has never been a greater need for speed. Staying competitive requires providing your customers even faster, more accurate answers than ever before, whether that be for KPIs and standard reports, ad hoc queries or deep data mining. You want the performance of a column-based solution, but you demand reliability. And you’re ready to take performance to the next level, squeezing even more performance out of existing computing resources by running queries in parallel.

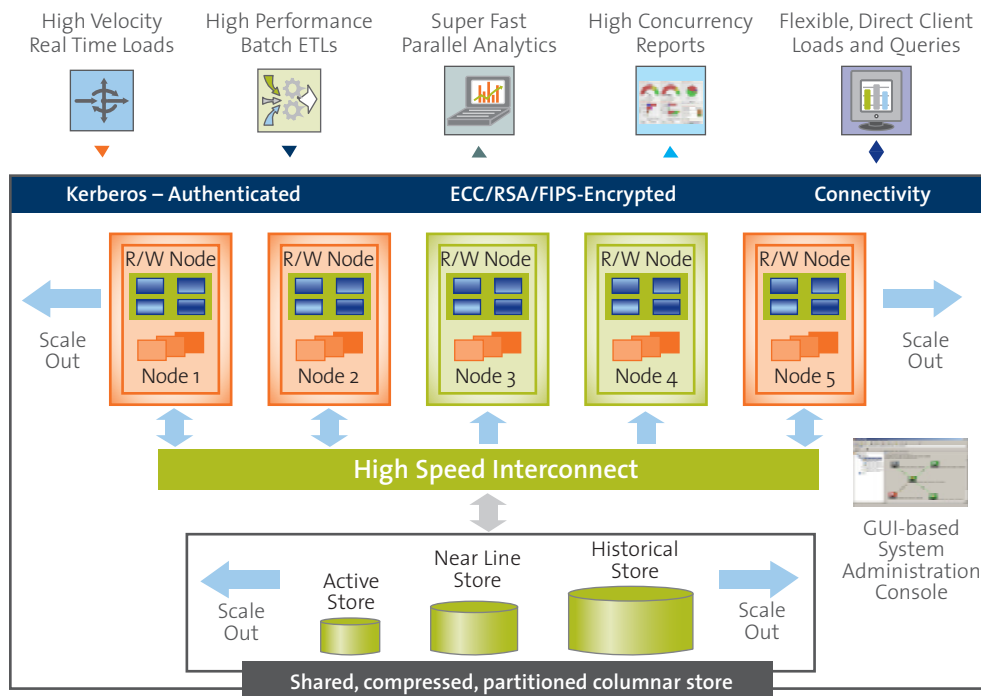
**‘ON YOUR TERMS’ MEANS SAVING MONEY—AND THE PLANET**

Sybase IQ’s patented data compression and indexing do more than provide your business the highest levels of analytic performance; they can also bring you substantial savings in computing and storage resources, staff hours for maintenance, and utilities and other facility costs. In an independent benchmark run in cooperation with our partner Sun Microsystems, Sybase IQ served as the database engine for the world’s largest data warehouse. A petabyte of raw transactional data was loaded into Sybase IQ, where thanks to our patented data compression, the footprint of the data was reduced by a factor of 85% to less than 160 terabytes of actual disk storage. This compression provided a substantial reduction in the number of disk drives needed for storage, translating directly into at least a 90% reduction in CO2 emission over the lifetime of the data warehouse.



## Flexibility

Growing your customer base and increasing your mindshare with existing customers requires making sure that fast and accurate answers are available to all your users; managing rowing datasets requires adding storage capacity; adding new service offerings requires increasing computing power. Meanwhile, your best customers demand faster answers over ever-more information. But these changes don't always occur at the same time or in a uniform way. Most solutions require adding capacity along multiple dimensions at the same time (compute power and disk resources)—resulting in significant expense and overhead. You need a solution that will enable you to grow and optimize your environment on your terms, in step with your growing business. With such a solution, you can increase storage, the number of users, or computing power flexibly and independently.



Sybase IQ 15 delivers analytics speed and power without compromising security, economy, or manageability. Patented data compression and indexing technology provide the highest levels of performance while making efficient use of available resources. The power of Sybase IQ 15 derives from flexible scalability in multiple dimensions: the freedom to enhance the compute power, storage capacity, or number of users independently and as needed. That's smarter analytics.

**“THE RESULTS SHOW THAT SYBASE IQ IS EXTREMELY CAPABLE OF MANAGING DATA WAREHOUSES CONTAINING MULTIPLE TERABYTES OF DATA, WHICH SIGNIFICANTLY BENEFITS ITS CUSTOMERS BY SAVING TIME AND MONEY.”**

RICHARD WINTER  
PRESIDENT  
WINTER CORPORATION



**“WITHOUT THE POWER AND SPEED OF SYBASE IQ WE WOULD HAVE HAD TO CHANGE OUR BUSINESS PROCESSES AND OUR APPLICATION ARCHITECTURE IN ORDER TO CLOSE OUR ACCOUNTS AND ISSUE ANALYSES TO OUR TRADERS BEFORE THE MARKETS OPENED.”**

PIERRE-ALEXANDRE PAUTRAT  
IT DEPARTMENT MANAGER  
IXIS BANK

#### **FOR ADVANCED ANALYTICS**

The conventional wisdom is that there are no easy answers, not when the analysis your business requires leverages so many different aspects of your data at once. And especially not when the answers always have the same deadline: right now. Further, your business requires your crystal ball to deliver answers to tomorrow's growth now. To meet your business's growing analytical, data mining, and predictive needs, you're looking for a solution that will turn the conventional wisdom on its head with:

##### **Information Availability**

If you need answers now, you have precious little time to spare while waiting for data to find its way into your environment. You want a solution that will enable you to leverage computing power to load data in parallel and to load data directly from virtually any source—having your information ready and available for analysis. The answers you need come from all your company's data, whether that data arrived 10 seconds or 10 years ago. You demand a solution that will let you predict the future needs of your company quickly and accurately—from all your relevant data that is ready and available all the time.

##### **Power**

Speed is great, but sometimes it's not enough. The difference between a good answer and the right answer, the one that enables your business to deliver and win, probably lies in how completely you are able to frame the question. A column-based architecture is an important step in the right direction, along with unique indexing and data compression technology designed specifically for analytics. Add to that advanced multi-column indexing techniques and a flexible grid architecture, you're looking at a solution designed to bring you the right answers, right now, to help you make the right decisions for your business' future.

**“WE HAVE BEEN WATCHING AND WAITING FOR DATABASE IMPLEMENTERS TO CATCH UP WITH SYBASE IQ AND ITS UNIQUE TABLE AND INDEX STRUCTURE, WHICH DELIVER IMPRESSIVE PERFORMANCE FOR COMPLEX QUERIES AGAINST LARGE DATA WAREHOUSES. JUDGING FROM SALES OVER THE PAST COUPLE OF YEARS, IT SEEMS THAT THE MARKET FINALLY ‘GETS IT’.”**

CARL OLOFSON  
RESEARCH VICE PRESIDENT  
IDC

## FOR COMPREHENSIVE REPORTING

When it comes to delivering mission-critical reporting and essential KPIs to your knowledge workers to support the decisions that drive your business, you need answers about your business right now—not tomorrow, not next Monday and not 30 days from now. You want your reporting environment to be an Intelligence Machine that is as affordable as it is secure and easy to manage.

### Economy

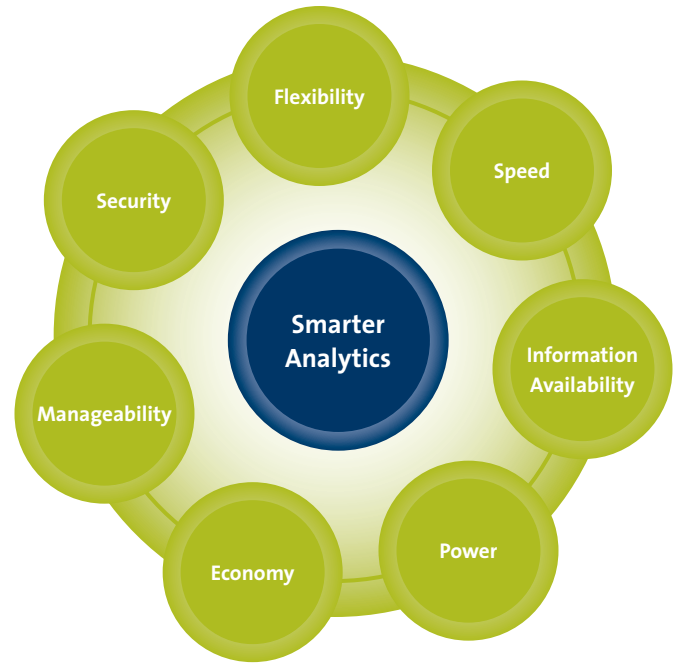
With the sheer volume of your data growing, along with your need to analyze that data—both through planned reports, KPIs and queries as they're needed—your reporting environment may have already expanded beyond available resources, and you are using lots of people resources to keep it running. To maintain the affordability of that environment, you demand data compression, data partitioning, easy administration and an open approach to hardware and operating systems—enabling you to make the most efficient use of existing resources while delivering the answers you need.

### Manageability

You need an environment that is easy and intuitive to manage, including a simple but powerful GUI console, schema neutral architecture, and integrated design and deployment capability.

### Security

You need to keep your data safe from potential abuse or misuse with a complete set of security capabilities to keep your environment on track.



**“WITH SYBASE IQ’S SPEEDY ANALYSIS OF THE SALES RECORDS AMOUNTING TO 1.7 BILLION TRANSACTION DATA, WE ARE PROVIDED WITH DETAILED SALES REPORTS SO THAT WE CAN COME UP WITH MARKETING STRATEGIES THAT BETTER MEET THE DEMANDS OF LOTTERY FANS.”**

MIN-TZ  
DIRECTOR OF IT DEPARTMENT  
LOTTERY TECHNOLOGY SERVICES CORPORATION



## SYBASE IQ 15 BUSINESS BENEFITS AND PRODUCT FEATURES

### Flexibility

- Independent compute power and storage capacity scalability
- On-the-fly schema changes without query blockage or downtime
- No need for materialized views
- Supports pre-computed join indexes for pre-aggregates
- Handles structured and unstructured data
- Certified to work with industry-leading visualization and data integration tools

### Speed

- Multiple bit-mapped index types
- Cost-based query optimizer
- Column-based architecture
- Subquery performance improvements
- Multi-column index usage
- Increased in-memory compressed query processing
- Tokenization enhanced for even faster queries

### Information Availability

- Enhanced large table loads
- Direct loads from clients
- Multi-node loading
- Patented Data Compression
- High availability/disaster recovery

### Power

- High performance from any schema
- SQL logic deployable through 3GL, stored procedures, or cursors
- One-touch multiplex grid configuration
- Configurable tablespaces
- Query parallelism per node

### Security

- Password authentication/encryption for data-in-flight
- Database and column encryption for data-at-rest
- FIPS on UNIX
- Kerberos
- User settable passwords
- IPV6

### Economy

- Supports all standard connectivity protocols
- Supports all standard hardware platforms and operating systems
- Supports all standard disk technologies
- Range partitioning

### Manageability

- Index advisor utility guides index selection for optimal performance
- XML and GUI-based query plan generator for diagnostics
- Versatile GUI-based administrative console for server management
- Improved resource/utilities management
- Configurable tablespaces

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