

SYBASE®

Sybase® Analytic Appliance  
————— on IBM® Power™ Systems

What you don't know will cost you.

PRODUCT BROCHURE



[www.sybase.com](http://www.sybase.com)



Includes technology from:



“THE SYBASE ANALYTIC APPLIANCE DELIVERS THE COMPREHENSIVE AND PRE-CONFIGURED SOLUTION THAT WE HAVE BEEN LOOKING FOR TO BOTH MANAGE AND ANALYZE OUR GROWING VOLUME OF DATA. WE BELIEVE IT TO BE VERY COST EFFECTIVE, BOTH IN TERMS OF INITIAL INVESTMENT AND ONGOING MAINTENANCE, AND VALUE THE FACT THAT IT COMBINES MARKET LEADING SOLUTIONS FROM INDUSTRY LEADERS TO ENSURE SCALABILITY AND CONTINUED INVESTMENT RETURN FOR THE FUTURE.”

—BHASKAR BALLAPRAGADA,  
CTO AdOn network

### WHAT YOU DON'T KNOW WILL COST YOU.

Lesson learned from the worldwide banking crisis: what you need to know about your business may be lost in a sea of data. Rising trading volumes, complex assets and inaccurate assessments of risk by multiple financial partners all contributed to a global meltdown. **Does your business rely on up-to-the-minute, accurate data? Can you get the insights you need quickly?** Traditional databases and data warehouses were simply not designed with complex analytics in mind, forcing companies to spend too much money and time just to keep up with demand. Time and money you don't have.

Sybase Analytic Appliance helps you quickly identify risks, making it possible to understand what you don't know. Empowering you to ask difficult questions because you now have visibility into the silos of data that provide real-time insights about your business.

### FAST, EASY, AFFORDABLE

The Sybase Analytic Appliance is configured and tuned right out of the box to provide extreme analytics for business analysis, especially in conjunction with today's overburdened data warehouse systems. The appliance combines category-leading technologies including Sybase IQ, Sybase PowerDesigner®, IBM® Power™ Systems, IBM® System Storage™ and MicroStrategy®.

The Sybase Analytic Appliance is pre-configured for three categories of workload and data capacity. Delivered ready to perform, the Series 100 scales up to 80 concurrent users and 12TB of user data capacity. The Series 200 scales to 120 concurrent users and 24TB of user data capacity. The Series 300 can scale up to 1000's of concurrent users and terabytes of data. The Sybase Analytic Appliance gives you all the performance and scalability benefits of a custom-built data warehouse, but is fast, easy and affordable.

## 1 FAST

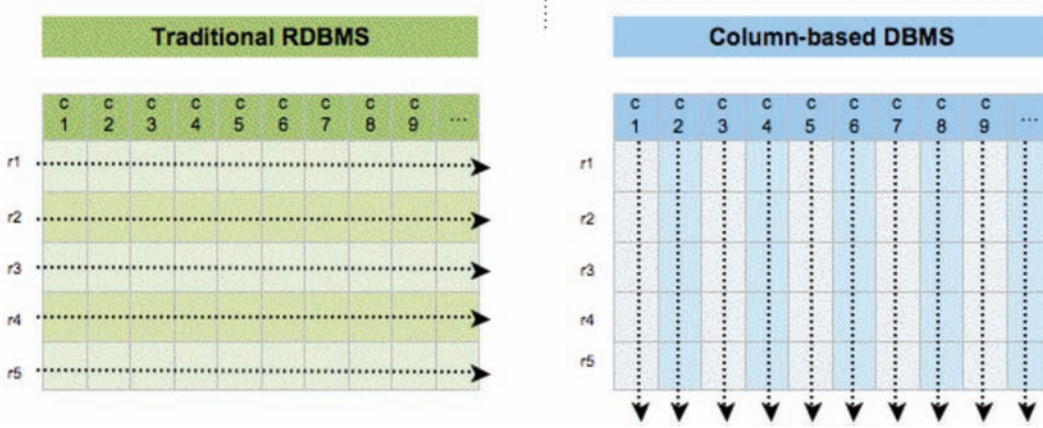
Sluggish performance or technical limitations on the kind of analysis your users and applications can perform hinders access to the insight needed to effectively guide your business. Fast-moving companies can't afford to waste time, budget, or staff in architecting custom-built data warehousing or reporting solutions. To hone your competitive edge in today's information-driven business environment, you need to put the power of extreme analytics into the hands of business users for informed, timely decision making.

The appliance uses the proven performance of the Sybase IQ analytics engine. Established at thousands of customer installations around the world, Sybase IQ delivers revolutionary analytics performance as the category-leading, column-based database. Built using the IBM Power Systems POWER6™ processor the appliance is optimized for deep-dive analytical analysis and ad-hoc queries.

### Query Performance 100x Faster

Sybase IQ combines faster query response times and faster data loads with reduced overhead, reduced storage costs and lower maintenance requirements. Designed from the start for analytics, Sybase IQ offers a unique approach compared to traditional database systems. Some analytic-type performance improvements can be gained in transactional systems through tuning and optimization techniques, technology upgrades, or additional hardware. But these methods are costly and come with their own limits. Queries can still take hours or days to return actionable information.

The Sybase IQ analytics server combines a column-based data structure with patented indexing and a scalable grid. The more pressurized the requirements—hundreds or thousands of concurrent users, complex ad hoc queries, very high data volumes and a high rate of change—the brighter Sybase IQ's strengths shine. Sybase IQ also provides a reduction in disk and CPU requirements compared to traditional row-based database management systems, which have to be retrofitted to support data warehousing and analytics.



“MANAGERS WHO ARE USED TO QUERIES TAKING 24 HOURS OR MORE TO RUN WILL FIND IT DIFFICULT TO BELIEVE THAT THESE QUERIES NOW CAN BE RUN IN A MATTER OF MINUTES USING SYBASE IQ. IT MANAGERS SHOULD BE READY TO FALL OFF THEIR CHAIRS.”

—BLOOR RESEARCH ANALYST REPORT ON SYBASE IQ BY PHILIP HOWARD

Sybase IQ software offers a surprisingly easy and affordable alternative for ensuring enterprises get the best from their data every day.

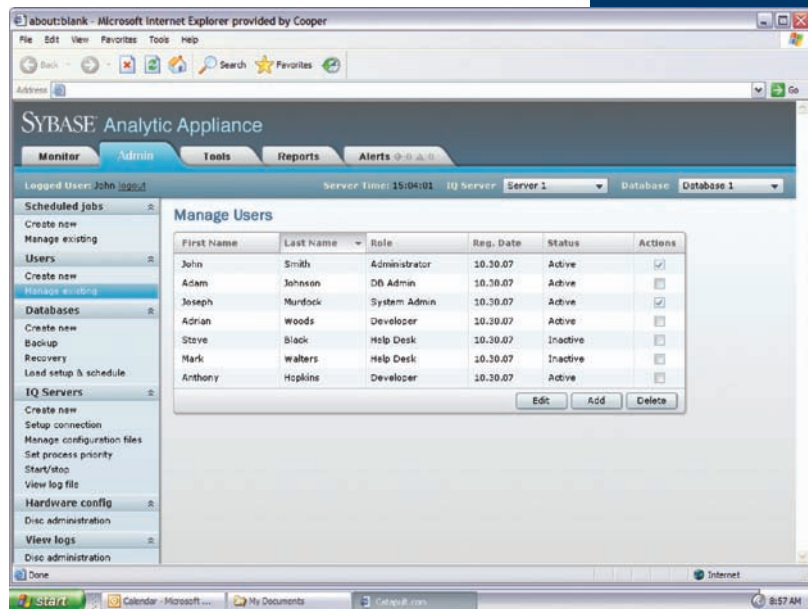
The appliance features industry leading IBM POWER6™ processors, the AIX operating system and IBM Storage Systems™ with SAS drives, all pre-installed into a power-efficient appliance. IBM POWER6 processors are designed to provide outstanding performance, availability, scalability and dynamic resource allocation.

**2 EASY**

Delivered ready to perform, the appliance is a fully integrated system that includes everything you need. It features a console for administration, monitoring and scheduling through a single operational view. This integrated system management console monitors and controls the system, performs routine events, such as orderly start up and shut down, and protects the system from disruptive failures through the use of alerts. It invokes Data Modeling and Reporting functionality included in the appliance.

Your users will see much faster reports and queries after only a few simple steps:

- Network connect and power up
- Create users and permissions with the appliance console
- Reverse-engineer your database schemas from source systems using Sybase PowerDesigner
- Load your data
- Built your reports with MicroStrategy
- Start doing analysis



Sybase Analytic Appliance Console



The amount of data that organizations must manage is growing rapidly, with IDC forecasting a CAGR of almost 60% through 2011.

Source: IDC, World Disk Storage Systems 2007 – 2011 Forecast: Mature, but Still Growing and Changing, May 2007

“The results show that Sybase IQ is extremely capable of managing data warehouses containing multiple Terabytes of data, which in the end, significantly benefits its customers by saving them time and money.”

—Richard Winter, President, Winter Corporation

In a recent independent benchmark on a world's record of one petabyte of raw data, Sybase IQ compressed data 85 percent resulting in a “green” data environment with 90 percent less CO<sub>2</sub> emissions over the data warehouse's lifetime.

### 3 AFFORDABLE

At an affordable cost, the appliance gives you the best price/performance available today. The software, processors, memory, and storage are all pre-installed and tested, and the column-based design frees your DBA's from the need to tune the system to achieve excellent performance.

Amazingly efficient data storage is a by-product of the elegant design. The appliance typically utilizes only 70% of the actual size of the input data to store fully indexed data. With data growing over 60% a year for some organizations, this represents an enormous cost savings.

#### Protection Against Hardware Failures

The appliance uses RAID (data striping with distributed parity) to achieve greater levels of performance and reliability by dividing and replicating data among multiple disk drives. RAID combines three or more disks in a way that protects data against the loss of any one disk. Additionally, hot spare disks are provided with the appliance in the event of a drive failure.

AIX provides processor failover in the event of a core failure. Failover is the capability to switch over query processing automatically to other core in case of a failure. In flight transactions from the failed core are rolledback and reinitiated on another core.

#### Complete Service and Support

The Sybase Analytic Appliance offers you a full array of mission-critical support advantages, including:

- A single vendor for all your support needs; there's no need for third-party coordination
- Experienced service representatives dedicated to analytic appliance support
- Secure, remote administration options available

#### Includes Everything you Need for Extreme Analytics

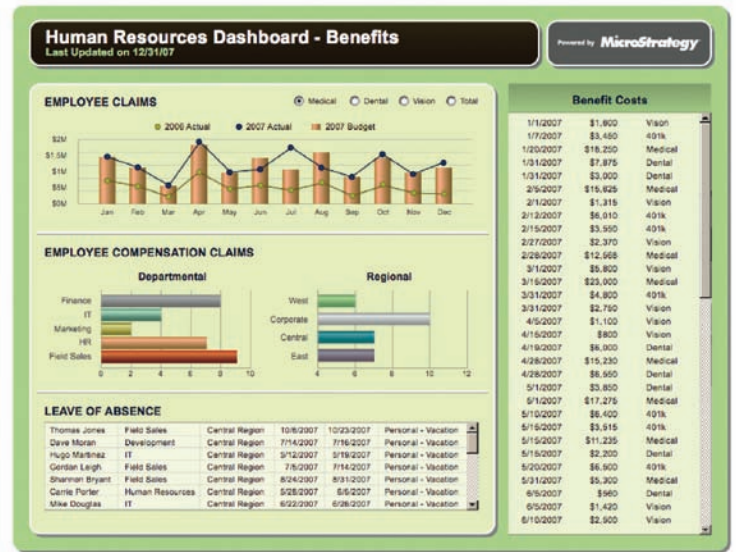
Sybase has partnered with IBM and MicroStrategy to deliver 10x to 100x faster performance than traditional data warehouse systems. The Appliance combines best-of-breed technology, including Analytics and Data Modeling running on IBM Power Systems, ensuring customers have everything they need to be up and running in weeks.

#### Built-in Analysis, Dashboard and Reporting

The Analytic Appliance allows users to maximize data assets through business intelligence technology delivered by MicroStrategy. Users can analyze data in multiple ways:

1. **Enterprise Reporting** – Broadly deployed pixel-perfect report formats for operational reporting and scorecards/dashboards targeted at information consumers and executives.
2. **Cube Analysis** – OLAP slice-and-dice analysis of limited data sets, targeted at managers and others who need a safe and simple environment for basic data exploration within a limited range of data.

3. **Ad Hoc Query and Analysis** – Full investigative query into all data, as well as automated slice-and-dice OLAP analysis of the entire database—down to the transaction level of detail if necessary. Targeted at information explorers and power users.
4. **Statistical Analysis and Data Mining** – Full mathematical, financial, and statistical treatment of data for purposes of correlation analysis, trend analysis, financial analysis and projections. Targeted at the professional information analysts.
5. **Alerting and Report Delivery** – Proactive report delivery and alerting to very large populations based on schedules or event triggers in the database. Targeted at very large user populations of information consumers, both internal and external to the enterprise.



### All-in-one Data Modeling and Design

Included in the Appliance, is the leading enterprise modeling and design solution. Sybase PowerDesigner addresses the needs of the most discriminating Data Modelers and DBAs. It offers requirements management and full data analysis and comprehensive multi-level design techniques with round-trip engineering and detailed design capabilities to support over 60 different data sources.

Inherent to PowerDesigner is the ability to automatically support the special indexes in the appliance including Join Indexes, all column index types (LF, HG, HNG, CP, DATE, DTTM, TIME and WD), global temporary tables, unique values on columns, Java, and Web Services.

PowerDesigner provides a wizard to automatically generate schemas and column index types. For real-time loading, PowerDesigner adds the capability of building the staging environment using simple wizards, as well as the complete round-trip engineering.

### GROWTH WITH INVESTMENT PROTECTION

The appliance design allows for growth while protecting your investment. Built specifically for user data capacity and workload, the appliance comes in pre-configured units for your specific needs. Custom configurations are available.

Series 100	Series 200	Series 300
Scales up to 80 concurrent users and 12TB	Scales up to 120 concurrent users and 24TB	Scales up to 100's of concurrent users and 48TB
4 IBM® POWER6™ processor cores	Up to 8 IBM POWER6 processor cores	Up to 16 IBM POWER6 processor cores
IBM Total Storage	IBM Total Storage	IBM Total Storage
<i>Software:</i> AIX, Sybase IQ EE, Sybase PowerDesigner, Appliance Console, MicroStrategy	<i>Software:</i> AIX, Sybase IQ EE, Sybase PowerDesigner, Appliance Console, MicroStrategy	<i>Software:</i> AIX, Sybase IQ EE, Sybase PowerDesigner, Appliance Console, MicroStrategy
<i>Options:</i> • High availability • Industry data models • Real-time loader	<i>Options:</i> • High availability • Industry data models • Real-time loader	<i>Options:</i> • High availability • Industry data models • Real-time loader
<i>Certified with:</i> • 3rd party BI tools: Cognos®, Business Objects®, iDashboard, QlikView • ETL: IBM WebSphere® DataStage® Informatica®	<i>Certified with:</i> • 3rd party BI tools: Cognos®, Business Objects®, iDashboard, QlikView • ETL: IBM WebSphere® DataStage® Informatica®	<i>Certified with:</i> • 3rd party BI tools: Cognos®, Business Objects®, iDashboard, QlikView • ETL: IBM WebSphere® DataStage® Informatica®

### THE ADVANTAGE

The Sybase Analytic Appliance is simply revolutionizing the data warehouse appliance market. Customers using the appliance can boost revenues, increase customer satisfaction, lower customer expenses, giving them a clear competitive advantage.

**Now that's extreme analytics power, right out of the box.**



## THE SYBASE ANALYTIC APPLIANCE SERIES 100

### Series 100 Specifications

The solution includes:

- Sybase IQ EE for up to 4 processor cores
- Sybase PowerDesigner
- MicroStrategy for 10 users
- Administration Console
- AIX Operating System, PowerVM™
- Integrated Cabinet
  - 64-bit scalability
  - IBM POWER6 processors
  - Up to 12 TB customer data capacity
  - Redundant Dual Controller
  - Redundant Power
  - Up to 64 GB of memory, 16 GB is default configuration
  - RAID for protection

**Connectivity** – ODBC, JDBC, Open Client

**Schema Generation** – Oracle 11g and below, Microsoft SQL Server, IBM DB2, Sybase ASE, Teradata

**SQL Processing** – Stored Procedures, Functions, Views, ANSI 99 SQL, Transact SQL, JAVA

The Sybase Analytic Appliance Series 100 comes with the tools and utilities you need for extreme analytics including:

- **Powerful Analytics Server:** Sybase IQ is the industry's leading column-based analytics server, used at thousands of customer installations worldwide.
- **Fast Data-Loading for Timelier Analysis:** New data to be rapidly loaded and ensuring that analyses and queries use the best data.
- **Data Modeling Tool:** The appliance offers fast time-to-value by reading the source data warehouse schemas and automatically generating the target appliance schema.
- **Top Business Intelligence Tool:** A 10-user license of MicroStrategy Integrated Platform for Reporting, Analysis is included.
- **Integrated Fast Backup and Restore:** Sybase Analytic Appliance provides integrated high-speed backup and restore for system reliability.
- **Unified Appliance Console:** The integrated console is installed on a dedicated workstation, and can be used as a browser-based application. Includes DBA and system management tools and provides easy-to-use tools for permissions, monitoring, diagnostics, trouble-shooting and other administrative functions.

### Support Services

- Global support
- Experienced data warehousing service personnel
- One-year remote and on-site hardware support, operating system problem resolution
- High quality one-source support and single point of delivery
- Remote administration available

### Certified on Sybase IQ

- BI Tools: Business Objects, Cognos, iDashboards, QlikView
- ETL: Informatica, IBM DataStage

### Options

- High Availability
- Real-time Loading
- Industry Data Models
- Large Object Management



## THE SYBASE ANALYTIC APPLIANCE SERIES 200

### *Analytic Appliance for Large Scale Analytics*

#### Series 200 Specifications

The solution includes:

- Sybase IQ EE for up to 8 processor cores
- Sybase PowerDesigner
- MicroStrategy for 10 users
- Administration Console
- AIX Operating System, PowerVM™
- Integrated Cabinet
  - 64-bit scalability
  - Up to 8 IBM POWER6 processors
  - Up to 24 TB customer data capacity
  - Redundant Dual Controller
  - Redundant Power
  - Up to 112 GB of memory, 24 GB is default configuration for Series 200-4, 32 GB for Series 200-6
  - RAID for protection

**Connectivity** – ODBC, JDBC, Open Client

**Schema Generation** – Oracle 11g and below, Microsoft SQL Server, IBM DB2, Sybase ASE, Teradata

**SQL** – Stored Procedures, Functions, Views, ANSI 99 SQL, Transact SQL, JAVA

The Sybase Analytic Appliance Series 200 comes with the tools and utilities you need for extreme analytics including:

- **Powerful Analytics Server:** Sybase IQ is the industry's leading column-based analytics server, used at thousands of customer installations worldwide.
- **Fast Data-Loading for Timelier Analysis:** Data can be rapidly loaded and ensures that analyses and queries use the best data.
- **Data Modeling Tool:** The appliance offers fast time-to-value by reading the source data warehouse schemas and automatically generating the target appliance schema.
- **Top Business Intelligence Tool:** A 10-user license of MicroStrategy Integrated Platform for Reporting, Analysis and monitoring is included.
- **Integrated Fast Backup and Restore:** Sybase Analytic Appliance provides integrated high-speed backup and restore for system reliability.
- **Unified Appliance Console:** The integrated console is installed on a dedicated workstation, and can be used as a browser-based appliance. Includes DBA and system management tools

and provides easy-to-use GUIs for permissions, monitoring, diagnostics, trouble-shooting and other administrative functions.

#### Support Services

- Global support
- Experienced data warehousing service personnel
- One-year remote and on-site hardware support, operating system problem resolution
- High quality one-source support and single point of delivery
- Remote administration available

#### Certified on Sybase IQ

- BI Tools: Business Objects, Cognos, iDashboards, QlikView
- ETL: Informatica, IBM DataStage

#### Options

- High Availability
- Real-time Loading
- Industry Data Models
- Large Object Management

## THE SYBASE ANALYTIC APPLIANCE SERIES 300

### *Analytic Appliance for Massive Scale Analytics*

#### Series 300 Specifications

The solution includes:

- Sybase IQ EE for up to 16 processor cores
- Sybase PowerDesigner
- MicroStrategy for 10 users
- Administration Console
- AIX Operating System, PowerVM™
- Integrated Cabinet
  - 64-bit scalability
  - Up to 16 IBM POWER6 processors
  - Up to a petabyte of customer data capacity
  - Redundant Dual Controllers
  - Redundant Power
  - Up to 768 GB of memory, 64 GB is default configuration
  - RAID for protection

**Connectivity** – ODBC, JDBC, Open Client

**Schema Generation** – Oracle 11g and below, Microsoft SQL Server, IBM DB2, Sybase ASE, Teradata

**SQL** – Stored Procedures, Functions, Views, ANSI 99 SQL, Transact SQL, JAVA

The Sybase Analytic Appliance Series 300 comes with the tools and utilities you need for extreme analytics including:

- **Powerful Analytics Server:**  
Sybase IQ is the industry's leading column-based analytics server, used at thousands of customer installations worldwide.
- **Fast Data-Loading for Timelier Analysis:** Data can be rapidly loaded and ensures that analyses and queries use the best data.
- **Data Modeling Tool:** The appliance offers fast time-to-value by reading the source data warehouse schemas and automatically generating the target appliance schema.
- **Top Business Intelligence Tool:**  
A 10-user license of MicroStrategy Integrated Platform for Reporting, Analysis and monitoring is included.
- **Integrated Fast Backup and Restore:** Sybase Analytic Appliance provides integrated high-speed backup and restore for system reliability.
- **Unified Appliance Console:**  
The integrated console is installed on a dedicated

workstation, and can be used as a browser-based appliance. Includes DBA and system management tools and provides easy-to-use GUIs for permissions, monitoring, diagnostics, trouble-shooting and other administrative functions.

#### Support Services

- Global support
- Experienced data warehousing service personnel
- One-year remote and on-site hardware support, operating system problem resolution
- High quality one-source support and single point of delivery
- Remote administration available

#### Certified on Sybase IQ

- BI Tools: Business Objects, Cognos, iDashboards, QlikView
- ETL: Informatica, IBM DataStage

#### Options

- High Availability
- Real-time Loading
- Industry Data Models
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