

Streaming Analytics for Real-time Business Intelligence

The real-time business paradigm

Technology and the Internet have changed our expectations of the world around us. On-line banking, e-commerce and search engines are commonplace. However, the potential of the real-time paradigm opens up new horizons that extend far beyond on-line transactions and information on demand.

For today's businesses, the real-time model means responding immediately to new information as it arrives. Examples include hedge fund trading, real-time product pricing, targeted Internet advertising, fraud detection and real-time promotions.

Analyzing market conditions in real-time, and reacting automatically at the right time, poses a number of challenges:

- Generating business intelligence directly from vast volumes of real-time data
- Process agility, reacting in time, requires the integration of business intelligence in real-time across the enterprise.

Improving business agility, coupled with rapidly increasing data volume, have driven performance advances in business intelligence, albeit, at a price. Even so, true agility and low business latency have proved elusive. Delivering more information faster

from historical data does not address the real-time need. Also, mapping data from disparate sources is complex and integration costs have been prohibitively high.

SQLstream provides real-time business intelligence and integration

SQLstream generates your business answers as soon as the input data become available, delivering business intelligence continuously and in real-time to applications, services and users throughout your organization. We call it Query the Future®. Our intuitive approach to streaming analytics uses continuous queries to analyze and transform flowing data:

Continuous queries analyze and transform streams of dynamic data in real-time

Integrate business intelligence across different applications **in real-time**

Automate responses and corrective actions

Scalable platform capable of processing vast volumes of real-time data

Flexible definition of analytics and transformations, essential as requirements evolve rapidly

SQLstream is **complementary** to existing business intelligence and data warehousing solutions. The real-time paradigm is fulfilled before data are stored.

Real-time businesses

Industry is seeking to harness the power of the real-time business model but is restricted by the limitations of the traditional approach to business intelligence based on historical, static data.

SQLstream's unique architecture enables real-time business intelligence to be introduced seamlessly and in parallel with existing solutions. Applications include:

- Real-time analysis with historical comparisons of sensor, intelligent transportation and geospatial data
- Behavioral analysis of Internet shoppers, targeting content and delivering advertisements in real-time
- Fraud management, identifying fraudulent activity at the point of transaction
- Social networking, providing dynamic context driven content across communities
- Real-time pricing and promotions based on stock level, rate of sales, and consumer spending behavior

The SQLstream advantage

SQLstream is designed for the low latency, high volume, rapid integration needs of today's real-time businesses. SQLstream processes transactions continuously, providing streaming analytics, generating answers immediately the input data become available. Complex, time-sensitive transformations and analytics are simple to configure, and execute continuously across multiple input data sources.

SQLstream processes dynamic, flowing data using SQL queries, analogous to RDBMSs that process static, stored data with single-shot queries. Integration cost and complexity are

At a glance

Streaming Analytics for Real-time Business Intelligence

Business problem

- Business models not aligned to the real-time world
- Existing solutions unable to support low latency applications
- Vast volumes of real-time data to process
- Poor integration limiting business agility

Solution

- Smarter integration of real-time business intelligence across the organization
- Automated business processes
- Standard SQL for intuitive streaming data analysis, filtering and aggregation

SQLstream benefits

- Automated business decisions based on timely information
- Dynamic, agile business processes
- Enables the real-time enterprise

reduced dramatically, while the intuitive power of SQL enables you to implement your business ideas much faster.

Obviously scalability and future-proofing are important considerations for a business critical system. SQLstream is simple to configure using existing IT skills, and provides future-proof scalability through its distributed architecture.

Enabling the real-time enterprise

Experience shows that the vision of producing and distributing real-time business intelligence in real-time to any application, system or user requires a different approach. A new paradigm is evident and a new architecture required. Query The Future[®] is designed to fulfill this paradigm, enabling the vision of the real-time time enterprise.