

TIBCO Live Datamart

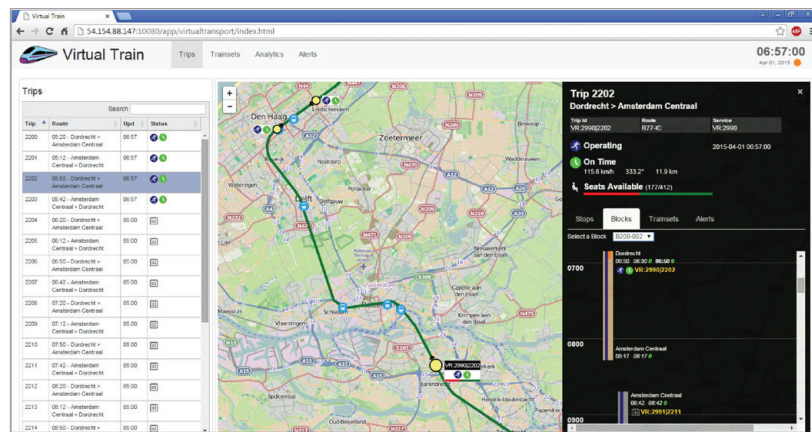
BENEFITS

- Serve your real-time application needs with a purpose-built live data mart that continuously pushes the right data to the right clients.
- Detect problems when they happen by setting alerts and automated actions to resolve issues before they become problems.
- Meet enterprise needs immediately by analyzing tens of millions of events a day at sub-second latencies.
- Take action in real time using alerts and event processing actions, or allow your users to take control via APIs and actions available in TIBCO LiveView Web and LiveView Desktop clients.

AT A GLANCE

TIBCO® Live Datamart is the industry’s first ultra fast continuous query processing engine made for live operational intelligence. It supports real-time data from anywhere, consumes live streaming data, and can connect to historical data in monolithic and edge systems by using either included data adapters or by leveraging the TIBCO integration platform. With its real-time computations against high-speed streaming data and continuous pushing of results to live queries, TIBCO Live Datamart offers users faster time to actionable insight and automated action.

Drawing on the power of the TIBCO StreamBase® streaming analytics engine, the TIBCO Live Datamart platform consists of TIBCO LiveView™ Server, TIBCO LiveView™ Web and TIBCO LiveView™ Desktop clients, and built-in connectivity to over 150 data sources, alerting channels, and databases. TIBCO Live Datamart also supports integration using APIs for development of custom clients in JavaScript, Java, and Microsoft .NET, plus an available add-in for Microsoft Excel.



TIBCO Live Datamart providing an operational command and control center in a virtual train application.

HOW TIBCO LIVE DATAMART WORKS

TIBCO LIVEVIEW SERVER

The TIBCO LiveView Server manages data connectivity, storage, continuous queries, alerts, client connectivity, user authentication, and security.

At the heart of the server is the continuous query engine that processes high-speed streaming data, creates fully materialized live data tables, manages ad-hoc queries from clients (such as TIBCO LiveView Web or TIBCO LiveView Desktop), and continuously pushes live results as conditions change in real time. TIBCO Live Datamart also provides aggregation and normalization for historical and streaming data, enabled by pre-built connectivity to over 150 connectivity options.

TIBCO LiveView Server enables automated real-time alerts and notifications via desktop notifications, email, SMS, chat, and any other connection supported by the underlying StreamBase platform.

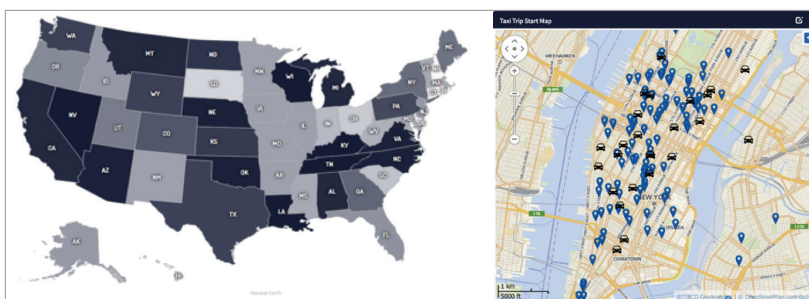
You can further extend TIBCO Live Datamart using TIBCO StreamBase Studio™ to enrich streams with event analytics.

TIBCO LIVEVIEW WEB

TIBCO LiveView Web is a code-free, HTML, and WebSockets-powered application empowering operational users to create a rich display of cards that visualize data from queries and create actions against TIBCO Live Datamart. Users of TIBCO LiveView Web or TIBCO LiveView Desktop can access operational intelligence from any browser. Additionally, enterprises may extend or customize their users' experience by adding plug-ins to TIBCO LiveView Web, or by building custom interfaces using Java, .NET, or JavaScript. TIBCO LiveView Web delivers:

- Faster time to value because all you need is your browser
- Business user self-service streaming analytics
- Extensibility for enterprise customization

Card configuration starts with a query builder or LiveQL query and displays results using visualizations such as tabular grids, line, bar, or pie charts, and region or geographical maps. Parameters, chart links, tooltips, actions, and formatting options allow you to fine-tune card behavior. The latest version of TIBCO LiveView Web includes TIBCO® GeoAnalytics mapping, allowing you to display geographical data markers on a map updating in real time. You can monitor packages, trains, and vehicles with tooltips that display detail on top of real-world imagery.



TIBCO LiveView Web map visualization.

TIBCO LIVEVIEW DESKTOP

TIBCO LiveView Desktop is a pre-built thick-client providing interaction with live, continuously updating data and queries on tables contained in the TIBCO LiveView Server. This offers users additional flexibility and complete control over its window configuration, formatting, and layout. Users can define ad-hoc queries; select, configure, and view charts; and control desktop notifications and alerts.

ALERTS AND NOTIFICATIONS

Alerts are continuously processed and delivered to mobile devices, email, or to a user's desktop—any delivery channel supported by TIBCO LiveView Server.

Connectivity and APIs

Real-time streaming data is ingested into the TIBCO Live Datamart platform from over 150 data sources and sinks such as market data providers, databases, and messaging buses. The TIBCO Live Datamart API allows developers to build custom user interfaces, or HTML5 front ends to the TIBCO LiveView Server.

USE CASES

TIBCO Live Datamart can be used to provide real-time analytics for streaming data in any industry. Example use cases include:

- Manufacturing: High-tech yield optimization
- Logistics: Real-time track and trace
- Retail: Continuous live sales operations for peak sales times (Black Friday, Cyber Monday), sentiment analysis and alerting
- Energy: Oil and gas drilling and pumping, predictive analytics
- Capital Markets: Trade flow monitoring and surveillance, FX liquidity analysis, risk management, P&L management
- Cross-industry: IT infrastructure monitoring

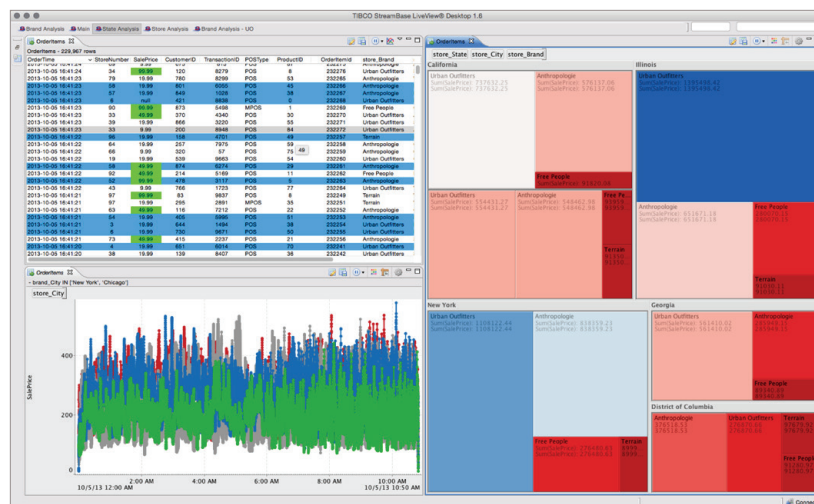
CASE STUDY

TIBCO Live Datamart provides a real-time window into sales and operations at major online and brick-and-mortar retailers. Executives, analysts, and employees use the platform to gain live insight into sales across multiple brands, stores, and regions of the world.

Through TIBCO Live Datamart, this range of users accesses a holistic, real-time view of retail and online sales, inventories, and events via an interactive dashboard. Through this interface, they establish ad-hoc continuous queries, slice-and-dice the information into contextual charts and graphs, and establish alerts when metrics are outside of dynamically defined thresholds.

These capabilities lead to proactive decision-making to improve sales, manage inventory, and maximize efficiency. Additional use-cases identify trends indicating fraudulent activity and inventory control, enabling stores to prevent significant loss in capital. TIBCO Live Datamart easily handles high volume sales at global retailers for events such as Black Friday and Cyber Monday, allowing analysts to position for the holiday season.

The CIO of a major retailer asserts, “Every retailer needs this platform. Instead of waiting until the end of the day to review sales and make changes to our processes, we can dynamically adjust our sales and marketing strategies based on what is occurring right now.”



Real-time results support fast insights into how to adjust your strategies.

ATTRIBUTES AND CAPABILITIES

REAL-TIME ANALYTICS FOR STREAMING DATA

TIBCO Live Datamart provides a real-time view into your business operations. Real-time analytics and continuous updates are pushed to users in milliseconds, enabling analysis and action while it still matters. Traditional business intelligence is designed to analyze historical information; TIBCO Live Datamart is optimized to analyze what's happening now.

AUGMENT INTELLIGENCE

Your business has an unprecedented amount of data. But so few people have access to it, which prevents them from using it to make impactful decisions. But with TIBCO, everyone in the organization has the ability to act on context by gaining the relevant vantage point for their part of the business:

- **Data Visualization.** From intuitive and gorgeous visualizations to big data and predictive analytics, TIBCO Spotfire® instantly provides users with answers, the ability to share them with peers, and the knowledge to understand what should be done.
- **Reporting and Dashboards.** Many of your users need immediate access to analytics at the exact place and time when a decision needs to be made, for example, within key applications. TIBCO JasperSoft® allows developers to bring the power of analytics to any application.
- **Streaming Analytics.** StreamBase combines the real-time connectivity of your business with the insights found in analytics to identify and act on business moments (short-lived opportunities).

MANAGEMENT BY ANTICIPATION

Alerts and notifications of key business events are delivered to end users immediately as they occur, enabling users to focus their efforts on affecting the best business outcomes while opportunities are still in play.

Built for Big Streaming Data: High Performance, Scalability, and Low Latency

TIBCO Live Datamart is designed for the most demanding enterprise environments—tens of millions of events a day per server, federated deployment, and thousands of continuous, streaming queries—all delivered with just milliseconds of latency.

Drop-in Installation, Self Service Analytics

Using over 150 pre-built connectivity options, integration with live data is quick and easy. Once installed, users are given self-service access to live data and can compose their own ad-hoc queries, create alert rules, and interact with the data through highly configurable tables, graphs, drill downs, and aggregate views of continuously updating information.

PLATFORM, STANDARDS, AND SECURITY

TIBCO LIVE DATAMART

- Continuous query processing
- User authentication and administration
- Server federation
- Logging management
- High availability
- Manageability
- Optimized for multi-core, distributed deployment

TIBCO LIVEVIEW DESKTOP

- Ad-hoc query builder
- Live graphs, charts, tables
- Notifications, conditional formatting
- Window layout, organization, design control

TIBCO LIVEVIEW WEB

- Plug-ins available for custom applications and for building custom interfaces
- Extensibility for customization using plug-ins and coding, including for TIBCO GeoAnalytics mapping

PROGRAMMING APIs AND ANALYTICS

- TIBCO StreamBase Studio
- Java API
- .NET API
- Restful web services APIs

PLATFORM SUPPORT (TIBCO LIVEVIEW SERVER)

- Red Hat Enterprise Linux AS 5, 6, 7
- SuSE Enterprise Linux Server 11
- Solaris 11 on Intel x86_64
- Windows Server 2012, 2008, with R2 variants

PLATFORM SUPPORT (TIBCO LIVEVIEW DESKTOP)

- 64-bit or 32-bit Windows 7, 8.1
- Mac OS X 10.7 and later
- 64-bit Linux

WEB BROWSER SUPPORT (TIBCO LIVEVIEW WEB)

- Google Chrome
- Apple Safari
- Mozilla Firefox
- Limited support for Safari on iPad Air 2

CONNECTIVITY

Samples of each connectivity option are provided with StreamBase.

GENERAL MESSAGING

TCP/IP, Solace Systems, TIBCO messaging products, Informatica Ultra Messaging, and others

HISTORICAL DATA

JDBC, HP Vertica Analytical Database, Thomson Reuters Velocity Analytics, MySQL, and others

STATIC DATA

CSV files

BIG DATA INTEGRATION

Apache® HBase®, Apache Hadoop® (including Apache® Parquet and Apache Avro™ file formats), Flume, Apache® Kafka

CAPITAL MARKETS DATA

Thomson Reuters Enterprise Platform for Real-Time, CME, Bloomberg, BM&FBOVESPA, Wombat, Hotspot

CAPITAL MARKETS EXECUTION

QF/J, StreamBase FIX, CME, Bloomberg

CAPITAL MARKETS ASSET CLASS SPECIFIC

Hotspot, Currenex, GAIN GTX, Deutsche Bank autobahnFX

USER INTERFACE

Eclipse RCP, Datawatch Desktop, .NET

PROGRAMMING LANGUAGES (STREAMBASE)

Java, C++, .NET, Python

ANALYTICS PACKAGES

TIBCO® Enterprise Runtime for R (TERR), MATLAB, QuantLib, and others



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