

New Analytics for Federal Agency Digital Operations

Today's public or private sector digital operations requires agility to assess the current situation and adjust immediately. This agility assumes you have operational data that's up-to-the-minute, analyzed, and presented so you (your people and systems) can intelligently act on it.

Agencies in Defense, Intelligence, and Energy are exploring near real-time analysis of data generated by multiple sources, and doing it with a new and original product approach.

Traditional business intelligence gathers all possibly relevant data, aggregates it in a big data lake or Hadoop instance, and runs algorithms against it. TIBCO turns this costly, inefficient, and marginally effective methodology on its head.

Full Value from Real-time and Contextual

The TIBCO analytics approach starts with the right data, regardless of the source. It takes streaming data from IoT devices, real-time logs, and digital transactions, and applies in-line analysis including live visualizations, filtering, and automated actions.

Real-time analysis accelerates time-to-decision and provides the agility any agency or organization needs to capitalize on the value of digital services. Further, TIBCO Spotfire software can analyze data in memory, leaving records safely in storage.

As the real-time analysis proceeds, it becomes part of a saved history. You can join data in new real-time sessions with historical data and other analytical methods for continuously richer context and meaning.

Spotfire Analytics brings self-service to your analytics teams, with no costly development or frustrating wait times. Domains across the federal enterprise—transportation operations, supply chain & logistics, procurement, health & medical, base & facility management, human resources, IT—can all quickly begin using new analytical capabilities to improve performance.

In short, TIBCO gives analysts the tools they need to build stories from the data that inform and give clear, informed guidance.

Proven Flexibility and Innovation

With more than 30 years of leadership in analytics and real-time data, TIBCO Analytics is the only BI platform in the industry designed from the ground up for fully digital operations.

Recently, TIBCO Spotfire software again leapfrogged the analytics industry, introducing a unified, highly available, scalable, cloud-deployable analytics platform. It supports the full analytic lifecycle of discovery, ad-hoc analysis, and interactive reporting for management dashboards. It's versatile enough for domain-specific applications, event-driven real-time analysis, and powerful predictive analytics.

Here are a few out-of-the-box Spotfire capabilities:

- Graphical, interactive visualization: Through artificial intelligence, quickly and easily pinpoint new findings in data visualizations, enabling entire teams to improve decision-making with one-click predictive analytics. In the background TIBCO handles smart data discovery, wrangling, and assembly.
- Simultaneous access to diverse data sources: For immediate connectivity to diverse databases, streaming sources, and even big data, TIBCO provides virtualized data that presents as a logical data warehouse of combined, though still distributed, data sources. The benefit? Only one virtual location for consistent, secure data access managed according to your agency's data governance rules. This capability goes a long way to eliminate confusion and complexity and boosts productivity for everyone, including for incoming data officers and scientists.
- Flexible architecture to manage large data volumes: When necessary, TIBCO's data virtualization layer and flexible computing architecture let you handle multiple terabytes of data. The platform supports both "bring engine to the data" and "bring data to the engine" architectures. That is, it supports integration of analytics applications with data sources in distributed computing frameworks, or integration of external statistical engines that fetch data directly from any data source. Besides the convenience and time-saving flexibility, you gain control over costly data flows to and from clouds.

- Advanced and predictive analytics: TIBCO Analytics supports a wide range of both proprietary and open source algorithms. It also features AutoML, intuitive drag-and-drop workflows, and embedded Jupyter Notebooks for creating and sharing reusable modules across the range of users, from citizen data scientists to agency experts.
- Real-time event streaming: Spotfire software features more than 80 pre-built connectivity options to connect to real-time streaming sources using MQTT, OSI PI, WiTS, capital market data providers, and message buses like JMS, Kafka, and TIBCO Messaging software. Along with historical data, access event streams for interactive, visual analysis.

Data analytics for better constituent service, agency operations, and policy development and budgeting: That's what the next wave of federal IT modernization needs, and TIBCO Analytics will get you there.

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