Data virtualization
Transform your data strategy with Spotfire

In a world where data continues to be a competitive advantage, businesses must harness the ever-expanding volumes of distributed data across on-premises, big data platforms, IoT networks, and cloud environments to lead the market. Traditional data integration methods are no longer sufficient due to their high costs, rigid structures, and long development cycles.

Data virtualization solves this challenge by creating a unified layer that provides seamless access to all your data, regardless of source, format, or location. It transforms how organizations approach analytics, decision-making, and operational efficiency.

Core capabilities of data virtualization

Modeling and transformation

Develop agile data models and transformations through user-friendly graphical environments or code-based options for advanced users. Build and manage virtualized views with ease.

Self-service data discovery

Enable business users to search, categorize, and consume curated datasets through an intuitive self-service directory, accelerating decision-making while reducing IT workloads.

Performance optimization

Use cost- and rules-based optimization algorithms to deliver high-performance query execution while maintaining data accuracy and relevance.

Comprehensive security and governance

Safeguard your data with robust authentication, authorization, encryption, and fine-grained access controls. Built-in governance ensures traceability, compliance, and uniform policies across all data sources enterprise-wide.

Advanced analytics and data profiling

Go beyond basic data profiling with tools to uncover hidden relationships and insights across distributed sources. Generate detailed entity-relationship diagrams and data models to meet evolving business needs.

Scalable deployment options

Deploy on-premises, in private or public clouds, or via containerized environments like Kubernetes and Docker for maximum flexibility and scalability.

Highly extensible

If a data source is not covered by the 300+ adapters available out of the box, you can easily extend the adapter library via JDBC, ODBC, ADO.NET, REST, and SOAP APIs.

Key benefits of data virtualization

- **Economical:** Seamlessly integrate distributed data at a fraction of the cost and time of traditional methods, enabling rapid adaptation to changing business requirements.
- **Immediate:** Access up-to-the-minute data using advanced performance optimization and robust security measures.
- **Business-friendly:** Simplify complex IT data structures into intuitive, business-ready datasets that users can easily discover and share via a self-service directory.
- **Wide reach:** Connect and virtualize data from traditional enterprise systems, big data platforms, IoT sources, and cloud environments for use across analytics, BI tools, and transactional applications.
- **Enterprise-grade:** Scale seamlessly to support multiple departments, projects, and thousands of users, ensuring reliability and performance for your organization.

How data virtualization solves business challenges

Spotfire and data virtualization together provide a comprehensive approach to modern data challenges.

Seamlessly bridge hybrid environments

As organizations transition to the cloud, many are left with critical data stored in legacy on-premises systems. Data virtualization capabilities in Spotfire act as a logical data layer, connecting these disparate environments without disrupting operations.

Flexible data integration for analytics

With Spotfire, you can access, combine, and provision data from multiple sources for seamless analysis. Whether connecting real-time sensor data with historical records or combining multiple cloud datasets, Spotfire ensures you get the full picture.

Accelerate time-to-insight

Data virtualization simplifies and accelerates the preparation and delivery of business-ready datasets to Spotfire. This means faster answers to your questions and more agility in adapting to evolving business needs.

Empower business users

Self-service capabilities in Spotfire give business users direct access to curated datasets, eliminating bottlenecks and enabling faster decision-making across teams.

Leverage advanced analytics

With interactive Spotfire visualizations, predictive modeling, and AI-driven insights, you can turn your virtualized data into actionable strategies.

Use cases across industries

Manufacturing

Combine IoT data from machinery with production logs to optimize operations and reduce downtime.

Logistics

Integrate shipment tracking, inventory levels, and route optimization data to streamline supply chain efficiency.

Finance

Analyze real-time financial data alongside historical trends to manage risk, improve compliance, and optimize investment decisions.

Healthcare

Access and analyze patient data from multiple systems to enhance care delivery and operational efficiency.

Accelerate outcomes with data virtualization

Data virtualization empowers organizations to:

- Simplify access to distributed data sources, reduce costs, and improve operational agility

- Deliver real-time insights and predictive analytics for better decision-making

- Enhance compliance and security while maintaining high performance

- Enable business users to make data-driven decisions through self-service discovery

Embrace data virtualization to turn today's complex data challenges into tomorrow's competitive advantages. It's time to move beyond traditional integration methods and achieve breakthrough speed, cost-effectiveness, and scalability in your data strategy.

Harness the power of your data with Spotfire

No matter where your data resides or how complex your ecosystem is, Spotfire provides the tools to unlock its full potential. By combining data virtualization with advanced analytics, Spotfire enables you to connect, integrate, and analyze data seamlessly, delivering actionable insights that drive business outcomes.

Transform your approach to data integration and analytics, unlock the power of data virtualization and analytics today, and let Spotfire be your guide to solving your toughest data challenges—start your journey with Spotfire today.

Ready to get smarter with Spotfire? Talk to an expert today at spotfire.com/contact-us.

Spotfire™

Spotfire® is a visual data science platform that makes smart people smarter by combining interactive visualizations and advanced analytics to solve complex, industry-specific business problems.