Intelligent Data Lake Management

Deliver Accurate and Consistent Big Data Insights You Can Trust

Organizations rely on insights derived from data to drive greater profitability, uncover opportunities, detect issues and problems, accelerate product and service innovation, and deliver exceptional customer experiences. Organizations are looking to harness new data processing technologies such as Apache Hadoop to derive previously unattainable—if not inconceivable—insights. The emergence of the data lake concept, both on-premises and in the cloud, now gives organizations the luxury of pooling all data so it is accessible for users at any time, for any type of analysis. As organizations increasingly rely on data to power digital transformation, the clamor for faster access to more trusted data is growing.

Challenge

Providing fast access to critical data is fraught with challenges. And as organizations harvest data on-premises and in the cloud, fast, flexible, and systematic approaches to data management are essential to ensure repeatable and consistent value.

Because of its ever-growing volume and variety, big data is difficult to find, prepare, master, govern, and protect. The more complex the data, the bigger the risk that it is incomplete, inconsistent, inaccurate, insecure, and incompliant with internal controls and external regulations. Without systematic approaches to data management, organizations run the risk of compromising the speed in which they deliver the data as well as the quality of the data itself. And ultimately, due to the very real risk of data security breaches, the credibility of your organization is at stake.

Solution

Data lakes are merely means to an end. To achieve the end goal of delivering accurate and consistent business insights again and again, you need the aid of machine intelligence and data-driven management. With unique algorithms delivered by the AI/machine-learning-powered CLAIRE™ engine, data management is now aided with intelligent parsing, discovery, catalog, and preparation of data. Combined with the speed and flexibility of a metadata-based approach to data management, Informatica enables you to quickly and systematically transform raw big data into fit-for-purpose data sets for a variety of consumers without risk.

“Informatica helps Tinkoff deliver on business expectations no matter how fast data volumes grow, how complex the data model is, and whichever data sources need to be integrated. By harnessing big data across the bank, Tinkoff is now uniquely positioned to target, acquire, and retain more customers.”

— Sergey Sotnichenko, Head of Data Warehousing, Tinkoff Bank
Traditional solutions require either expensive, manual, time-consuming processes or the integration of fragmented point solutions.

**Key Benefits**

**Cloud-Ready from Day One**
Informatica’s data lake management products are certified to run not only on all the most popular on-premises Hadoop distributions but also for cloud deployment. Thanks to out-of-the-box connectivity to cloud databases, cloud data stores, and cloud applications, you can truly turn any data into trusted data assets anywhere.

**Faster, Easier Integration of More Data Sources**
Informatica enables data management professionals to maximize the value of their investments in Hadoop by integrating more data. Informatica’s library of hundreds of prebuilt connectors, simplified stream processing on top of open source and proprietary streaming engines, as well as out-of-the-box connectivity to cloud databases, cloud data stores, and cloud applications enables you to integrate nearly any data anywhere. Support for Tableau data extracts and a hub-based publish/subscribe architecture also lets you repeatably deliver more data faster, to more data targets.

**Collaborative Data Quality, Mastering, and Governance with Self-Service and Machine Learning**
The IT organization can ensure compliance with internal controls and external regulations while empowering the business to participate in data quality and data governance. Informatica’s machine-learning-based data catalog enables you to find new data and discover data relationships automatically. Informatica’s graph-based real-time matching and linking of big data accelerates and perfects how you master data and discover data relationships across all business-critical data.

Informatica’s multipersona interfaces and rule builder empower effective collaboration among business users such as data analysts and data stewards. Big data is quickly converted into high-quality trusted insights. Informatica’s self-service data preparation capability enables business analysts to combine and prepare data sets that can be used to create data visualizations and insights. Intelligent recommendations, crowdsourced data asset tagging, and data lineage visibility accelerate this process so the right people have the right access to the right data at the right time.
**About Informatica**

Digital transformation changes expectations: better service, faster delivery, with less cost. Businesses must transform to stay relevant and data holds the answers.

As the world’s leader in Enterprise Cloud Data Management, we’re prepared to help you intelligently lead—in any sector, category or niche. Informatica provides you with the foresight to become more agile, realize new growth opportunities or create new inventions. With 100% focus on everything data, we offer the versatility needed to succeed.

We invite you to explore all that Informatica has to offer—and unleash the power of data to drive your next intelligent disruption.

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**More Data Without More Risk**

Informatica’s risk-centric approach to protecting big data automatically classifies sensitive data and proactively detects threats of unauthorized data access or proliferation. Based on assessments, data can be noninvasively protected for secure access to contextual information.

With Informatica’s market-leading platform, proven methodology, and strong partner ecosystem, you can quickly and effectively turn more of the big data you need into business value without more risk.

Establish data lake management as part of your information management strategy today to deliver superior data-driven customer experiences.

For more information, visit [Informatica’s Big Data product page](https://www.informatica.com/big-data).