Intelligent Data Lake

Find, Prepare, and Govern Data for Analysis in a Uniquely Collaborative Way That Enables Businesses to Make Decisions Even Faster

Data has undoubtedly become the fuel for competitive advantage in the 21st century. Organizations are looking to harness new data processing platforms such as Apache Hadoop to derive previously unattainable—if not inconceivable—insights. The emergence of Apache Hadoop and the data lake concept now gives organizations the luxury of pooling all data so that it is accessible for users at any time for any type of analysis.

Organizations are collecting customer and market data for its potential to improve experiences and drive business growth. Financial institutions are saving and monitoring transactional data and other related signals in order to enrich fraud detection techniques, keep up with changing global regulations, and boost consumer trust in the security of their services. Healthcare organizations are preserving electronic medical record data and claims data in order to drive more personalized healthcare. The opportunity to harness data has never been greater with big data technologies.

The challenge

The sheer volume of data being ingested into Hadoop systems is overwhelming IT. Business analysts eagerly await quality data from Hadoop. Meanwhile, IT is burdened with manual, time-intensive processes to curate raw data into fit-for-purpose data assets. Big data cannot deliver on its promise if it brings progress to a grinding halt because of complex technologies and additional resources required to extract value.

Without scalable, repeatable, and intelligent mechanisms for curating data, all the opportunity that data lakes promise risks stagnation. The capability to turn big data into valuable business insights with the right data delivered at the right time is, ultimately, what will separate organizational forerunners from laggards.

The solution

Data lakes on their own are merely means to an end. To achieve the end goal of delivering business insights, you need machine intelligence driven by universal metadata services. Universal metadata services catalog the metadata attached to data, both inside and outside Hadoop, as well as capture user-provided tags about the business context of the data.

Business insights flow from an otherwise inert data lake through the added value derived from the cataloging of both the quality and the state of the data inside the data lake as well as the collaborative self-service data preparation capabilities applied to that data. Thus, the Intelligent Data Lake enables raw big data to be systematically transformed into fit-for-purpose data sets for a variety of data consumers. With such an implementation, organizations can quickly and repeatably turn big data into trusted information assets that deliver sustainable business value.

Solution Benefits

Informatica Big Data Management provides the gold standard in data management solutions

- Find any data and relationships that matter
- Quickly prepare and share the data you need
- Get more trusted insights from more data without more risk
Key Features

Find any data
Business analysts yearn for an efficient way to manage the ever-growing “volume, variety, and velocity” typically associated with big data. Informatica Intelligent Data Lake uncovers existing customer data through an automated machine-learning-based discovery process. This discovery process transforms correlated data assets into smart recommendations of new data assets that may be of interest to the analyst. Data assets can also be searched thanks to the metadata cataloguing process, which lets business analysts easily find and access nearly any data in their organization.

Discover data relationships that matter
Business analysts are often limited to data locked up in data silos and are often unaware of regulatory regimes and compliance frameworks increasingly protecting consumer privacy and addressing security concerns. Informatica Intelligent Data Lake effectively breaks down those silos, while maintaining the data’s lineage and tracking its usage.

Quickly prepare and share the data you need
As business cycles continue to shrink, speed is one of the few competitive advantages that organizations can rely on in the race to add business value. The longer business analysts wait to get the data, the more they stand to lose. Informatica Intelligent Data Lake lets you quickly prepare and share data instrumental in delivering competitive analytics.

Informatica’s self-service data preparation provides a familiar and easy-to-use Excel-like interface for business analysts, allowing them to quickly blend data into the insights they need. Collaboration among data analysts also plays an important role. Crowdsourced data asset tagging and sharing empowers business analysts by letting them collaborate in the data curation process. It also adds value by leveraging the wisdom of crowds and increases operational efficiency, enabling more of the right people to get to more of the right data at the right time.

Operationalize data preparation into re-usable workflows
Regardless of automation and self-service tools, analysts often have to repeat the same data preparation activities with new sets of data. This simply squanders any gains from ongoing scale and re-usability. Informatica Intelligent Data Lake lets you record data preparation steps and then quickly play back steps inside automated processes. This transforms data preparation from a manual process into a re-usable, sustainable, and operationalized machine.

Thanks to Informatica’s market-leading platform, proven methodology, and strong partner ecosystem, you can find, prepare, and govern more big data in a collaborative way. Establish Intelligent Data Lake as part of your information management strategy today to quickly and repeatably turn more big data into business value without more risk.