Data Science Platform for Manufacturing

The emergence of IoT has driven demand to access and analyze far greater amounts of data, at far greater speeds and far more efficiently than ever before. Real-time analytics and AI enable predictive maintenance by allowing companies to constantly detect which equipment is beneficial, how it should be maintained and how malfunctions are to be avoided. Continuous visibility and control result in smarter decisions for energy reduction, supply chain traceability, efficient use of resources and optimal quality control.

While the benefits of Industry 4.0 are crystal clear and frequently mentioned, most companies struggle with the implementation of intelligent systems. Common data warehouse solutions are slow and complex; public clouds are a locked-in, expensive resource; machine learning models are hard to deploy and manage; and tying multiple security models together in a hybrid cloud is fraught with difficulty.

iguazio's Data Science Platform powers IIoT applications at the edge, on-premises and in the cloud for real-time actionable insights. It leverages the latest AI tools as well as a variety of data services, eliminating data pipeline complexities to make the IIoT vision attainable, affordable and secure.

MULTIPLE APIS AND PROTOCOLS

Iguazio delivers an end-to-end Data Science Platform to power continuous analytics and event-driven applications. Customers ingest, enrich and analyze data – all in one simple, fast and secure platform. The Iguazio platform supports simultaneous high-performance access through multiple industry standard and Amazon compatible APIs for streams, tables, objects and files. Customers also run Spark, Hadoop and other popular analytics frameworks.

TIME SERIES DATABASE APIS

Iguazio provides an extremely fast and scalable time series database solution. The platform correlates time series data with multiple variables in real-time, combined with AI algorithms, for interactive dashboards with intelligent predictions and automated actions.

Time series visualization with Grafana

AI AND SERVERLESS

Iguazio enables agile development of machine learning models as well as deployment of operational production pipelines. This facilitates detection of patterns in historical data sets to learn about machinery, predict outcomes and make correlations with real-time fresh data. In addition to its core data services, the platform comes with built-in essential machine learning and serverless tools such as Spark, R, TensorFlow, Zeppelin notebooks and nuclio to get analytics and machine learning processes up and going.

SECURITY

Industrial devices can be located in sensitive environments, controlling vital systems or sending private data. The Iguazio data engine classifies data transactions and provides fine-grained policies to control access, service levels, multitenancy and data lifecycles. Organizations enable data sharing and governance across apps and business units without compromising security, reliability and performance.

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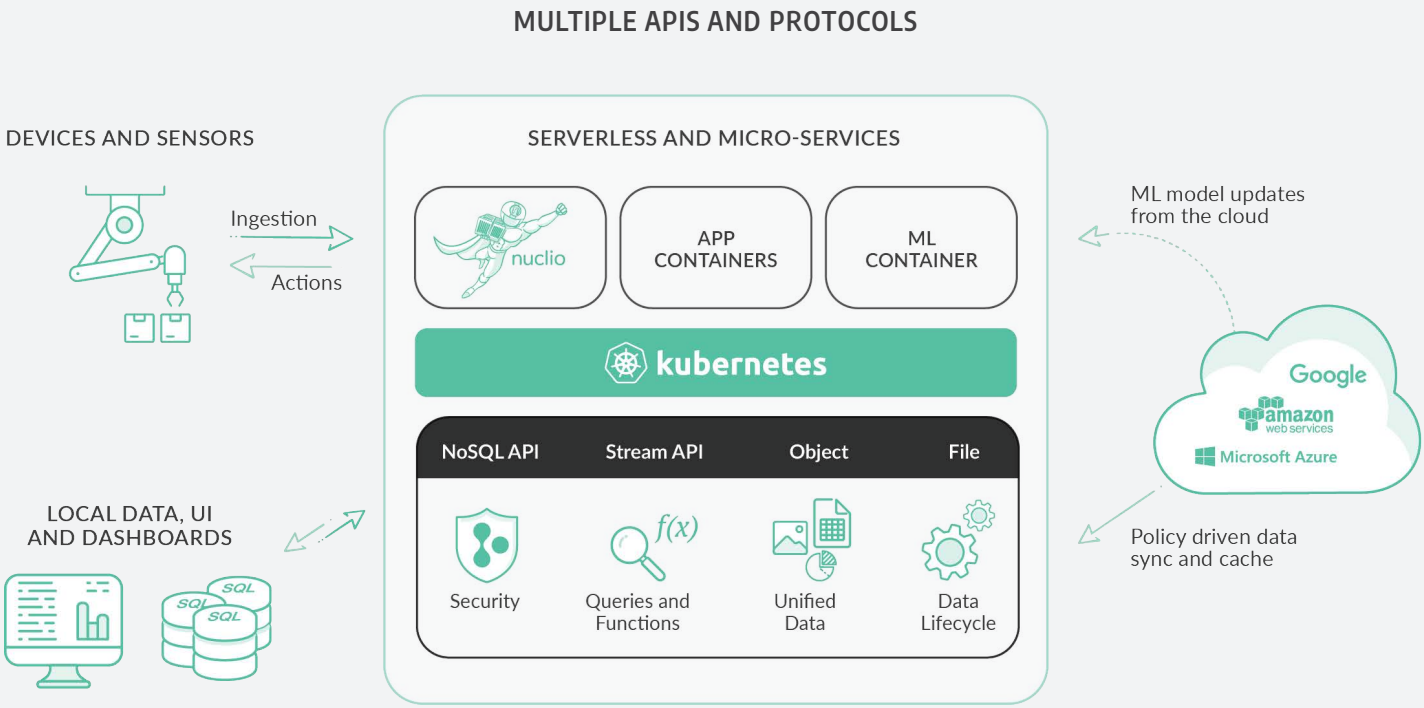

RESPONSIVENESS AND RELIABILITY AT THE EDGE

Edge analytics and processing perform data collection and analysis at the edge of the network, on an industrial component which gathers data from several machines within a factory. The Iguazio Data Science Platform was designed specifically for unprecedented volumes of data and can be deployed on-premises and at the edge across multiple locations to analyze data closer to its sources and boost response time. It provides low latency connectivity to public clouds, enabling a fast and secure hybrid solution. Iguazio's customers process millions of real-time events per second, combined with historical data in a small footprint and low cost.

ABOUT IGUAZIO

The Iguazio Data Science Platform enables you to develop, deploy and manage AI applications at scale, transforming AI projects into real-world business outcomes. With Iguazio, you can build and run AI applications in real-time, deploy them anywhere (multi-cloud, on-prem, edge), and bring to life your most ambitious data-driven strategies.

Iguazio was recognized by CNBC UPSTART 100, CRN BIG DATA 100 2019, Gartner Cool Vendor

FIND OUT MORE ON www.iguazio.com