

Make Big Data work for you

Tailored data lake design and implementation

Whether you need a data lake for advanced analytics (structured, semi structured or unstructured data), business intelligence, self-service BI, batch or in-stream machine learning, we design and model data lakes to suit current and future business needs. With tailored data analyzes, data lake can provide you speed and reliability that is needed to advance and grow your business with new valuable insight.

Stream processing

Take advantage of in-stream pre-processing and processing to shape the data for your analytical needs in form of structured data for organized storage or for fast real time downstream **machine learning, scoring** and **visualization**.

Stream visualization

Visualize data instantly and directly from the data pipeline. Create **rich, interactive**, HTML5 (or compatible with older browsers) web graphs. Discover **insights** from your data as soon as they arrive.

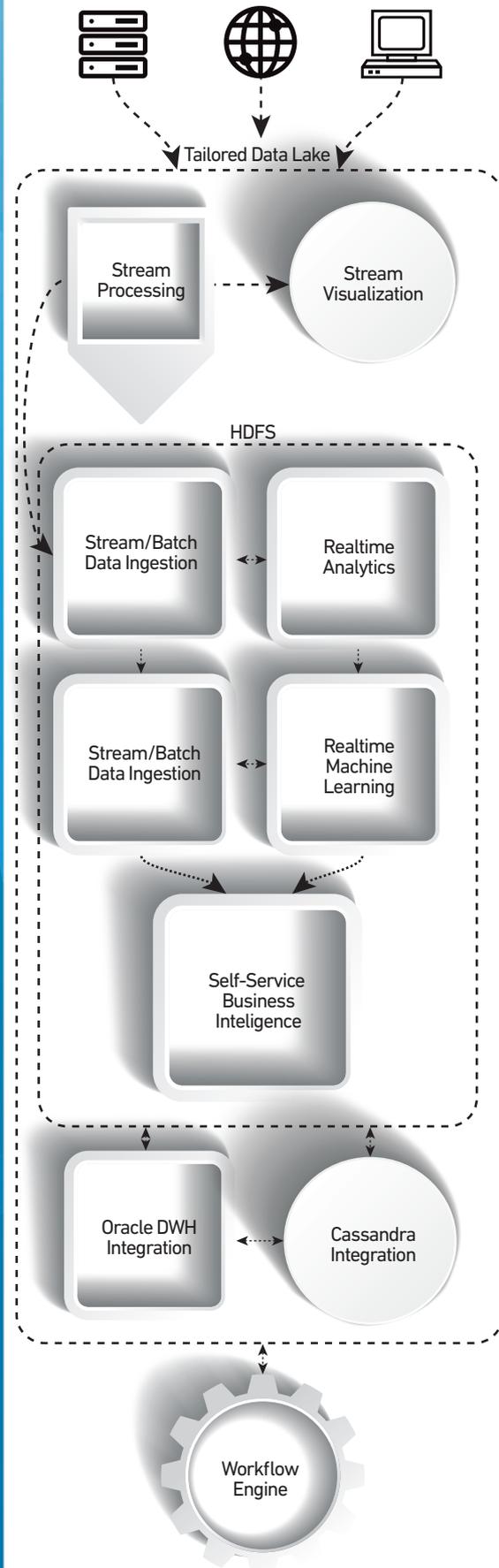
Stream/batch data ingestion

Whether it is batch data ingestion (e.g. overnight) or stream data ingestion (storage pipeline) we design and implement your Data Lake to be fast and scalable, for your current as well as future needs in **archiving**, further **processing**, **deep data analysis**, **machine learning** or **BI**.

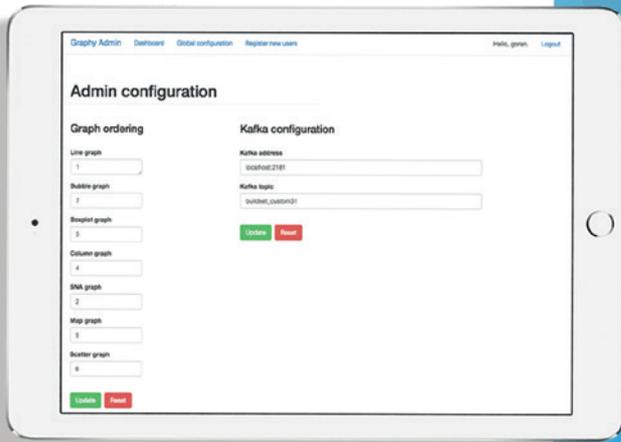
Big Data integration

Integrate your data from various databases/storages into a single storage (HDFS), **impose structure** with different engines (e.g. Hive or Impala) and use it as a source for other tools such as **R** and **Spark**. We organize **data masking** and role-based access to information and transparently **encrypt** data on HDFS level – for Data At-Rest and Data In-Transit.

Big Data driven process automation



Multicom Big Data driven process automation is a collection of solutions and services needed to efficiently run Big Data and ML systems and processes. It is a set of solutions for managing your data from ingestion, analysis and finally and most importantly a suitable action. Based on knowledge gained from your data, you can manage and trigger complex actions through our framework via third party systems and processes.



Massively Scalable real time analytics

We provide fast and scalable means of analyzing **huge data sets** to help organizations make informed business decisions. Big data analytics provides advanced analytics, which involves complex applications with elements such as predictive models, statistical algorithms and what-if analyses powered by high-performance analytics systems. You can uncover hidden patterns, unknown correlations, market trends, customer preferences and other useful information that can help organizations make **more-informed business decisions**.

Parallel real time machine learning

Machine learning predictive intelligence has the potential to change everything in our day to day experiences, from education to entertainment, from travel to healthcare, from business to leisure and everything in between. We perform **real-time machine learning and scoring for fraud analytics, churn, cross-selling, upselling, fault detection and prediction and anomaly detection**.

Streamlined application prototyping

Easy to use and streamlined web application prototyping environments through which your team can easily build **interactive web applications** with only a few lines of code. **Shiny** with **Hadoop** applications are **automatically "live"** in the same way that spreadsheets are live. Outputs change **instantly** as users modify inputs, without requiring a reload of the browser. Your teams can **share insight** and start **collaborating** in a matter of minutes.

Fast Self-service BI

Data lake **approachable** for self-service BI and a **breeze** where business users can go from data acquisition to self-service rich interactive business intelligence dashboards in no longer than **5 minutes**.

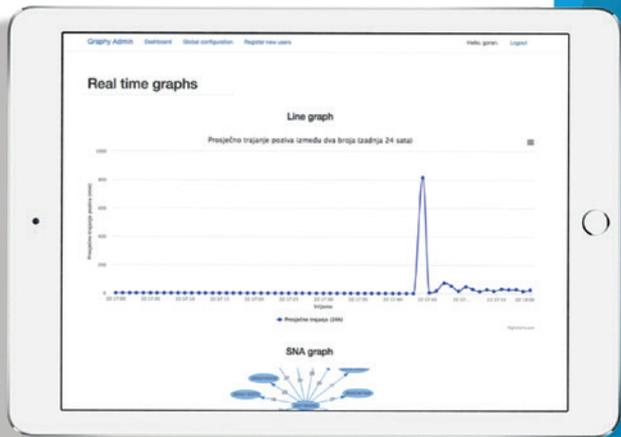
No middlemen have to come between business and their business intelligence solutions. IT must empower business units by delegating BI, not encumber.

Oracle DWH integration

Our in-house solutions allow fast export data from HDFS data lake to an OLAP database with a standard Data Warehouse structure. With a complete **Business Intelligence** system on top, you can create fully customizable reports and visualizations based on your **Data Warehouse**.

Cassandra integration for fast scalable data access

We deploy Apache Cassandra as a database of choice for a symbiotic coexistence with HADOOP. Cassandra provides needed performance with **online Web and mobile applications**, whereas Hadoop targets the processing of colder data in data lakes, warehouses, etc. This allows us to effectively support the **different analytic pace** needed to satisfy customer requirements and run the business.



In order to streamline and optimize the process of Big Data project implementation we use our own proven components and applications:

- **mCash** – cashflow cost prediction and optimization
- **mChurn** – automated Spark and R framework for churn prediction
- **mFraudDetect** – auto adaptive predictive model builder, evaluator and scoring engine and visualization tool for supervised and unsupervised ML fraud detection
- **mSPconnect** – batch synchronization tool for HIVE, ORACLE and CASSANDRA