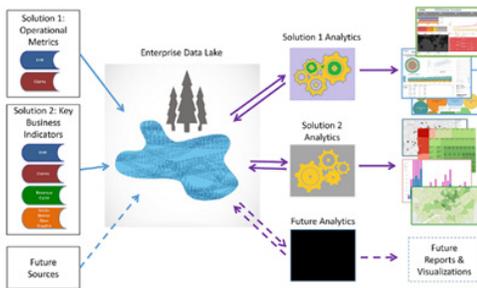## The Enterprise Data Lake

Introducing a new breed of Big Data solutions centralizing around an Enterprise Data Lake.

Is it Time for a Data Lake?

With Elysium Analytics the time is now! Starting a Data Lake implementation from scratch can be a time-consuming endeavor fraught with risk.

Elysium has assembled a Big Data reference architecture platform that handles most common business scenarios so now is the time that your organization can have a Big Data implementation with extremely fast implementation time and rapid time-to-value.
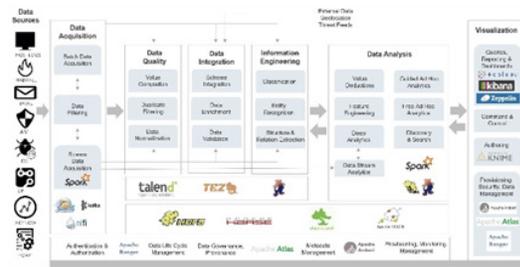
What about my Enterprise Data Warehouse?

Your enterprise data warehouse is here to stay, a Data Lake is not a replacement for your Data Warehouse. Data Lakes and Data Warehouses work together, providing the best storage format as appropriate for various types of data. With both in place new analytics can be created that leverage both solutions in a synergistic way.

Benefits

- Make Better Business Decisions
  – Be Data Driven
- Dramatically Lower Implementation Costs
- Increase Customer Satisfaction
- Thwart Insider Threats Before They Hit
- Make Compliance Easy
- Improve Profit Margins

Elysium's Reference Architecture

Through our experience implementing data lakes we have sifted through hundreds of open-source Big Data products to assemble a reference architecture that is pre-integrated, pre-tested, and engineered completely end-to-end for immediate time-to-value in new implementations.

To accommodate a variety of customer needs we have included multiple storage formats to include both structured and unstructured data, leveraging tools such as HortonWorks Data Platform and Elastic Search.

Included Accelerator Tools

Some of the key components of our reference architecture that help accelerate implementations include Kylo, Knime, and Nifi.

Kylo is an open-source data management platform that enables point-and-click ingestion of new sources, automating schema creation in the long-term repository. Nifi provides a point-and-click interface to model details of the ingestion path, enabling automated data cleansing and data enrichment for virtually any business scenario. Nifi also handles hundreds of network protocols for moving data from external sources into your data lake solution.

Real-time Analysis

Elysium's reference architecture includes all the glue needed to tie the parts together. We use Spark and HortonWorks Data Flow as tools to enable in-memory processing at large scale so you can get to your business answers in near real-time.
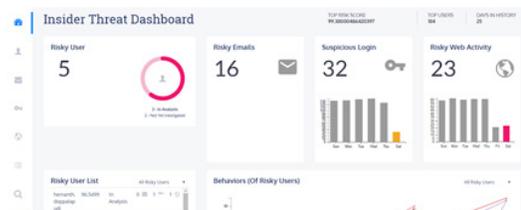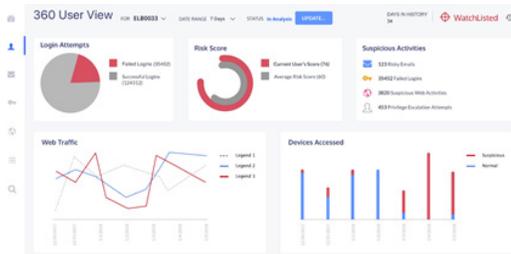
Advanced Analytics

For truly advanced analytics Elysium's reference architecture includes Knime, SparkML, Python, and R. Knime is another open source tool that provides a visually interactive way for data scientists to create arbitrarily complex analytics. Knime provides an easy method of re-using libraries of logic created by Elysium or other data scientists.

Visualization

For the best in data visualization Elysium has extensive experience creating rich reports and dashboards in Tableau, the gold standard in visualization tools. For customers who prefer sticking with open source end to end the reference architecture is also tested with Zeppelin which is a completely web-based open source BI tool.

Open Source, Open System

Elysium reference architecture is built end-to-end on open source products with zero license fees. In addition, all analytics created by Elysium are available for customers to inspect, expand or enhance.

Not every component is required for every implementation. If your business scenario does not require both structured and unstructured data storage, you don't need to implement both. Already have an enterprise standard BI tool? Already have Cloudera? No problem, Elysium can accommodate virtually any existing infrastructure you might have.

How Elysium Can Help You

Elysium is a full-service, turnkey solution provider. We excel at implementing projects from start to finish, beginning with strategy, design, development, implementation and support. However we also have many customers leveraging specific discreet services such as:

- Big Data Strategy
- Data Science
- Data Engineering
- Data Migration
- Data Warehousing
- Master Data Management
- Data Governance
- System Support and Management

Support and Management

As a full-service solution provider we excel at ongoing support and maintenance. We will be your single point of contact for supporting the entire solution stack. We also provide upgrade services and migrations for changing technologies in this fast-paced technology market.