Fraud fighting and financial crime: a smart solution to the “buy” vs “make” dilemma.

Traditional “turnkey” fraud and financial crime solutions are rigid. The Siren Platform™ enables 10x faster project delivery times, empowering financial crime fighting operators to conduct swift and more flexible investigations.

To get true 360 degree views across transactions, customers, suspicious activity reports, watch lists and more in a modern large enterprise; data needs to be visualized from sources as diverse as machine and web logs, master data records, API calls, publicly available sources amongst dozens of others.

Commercial risk and fraud solutions are primarily designed to rely on rules-based algorithms to prevent and detect fraud, require all the data to be in both a relational database format and to be available in the same back end database instance. This hinders the investigative process by adding undue system rigidity and missing out on the opportunity posed by non-structured and big data sources.

> *We can achieve a 50% reduction in false positives for the first time, an industry standard yet to be surpassed, as well as reducing manual case reviews by 40%.”*
>
> **- Andrew Davies** / Pay360 by Capita

In a world of complex interactions, where data is seldom organized and structured in an approachable way in a single environment; data intelligence that enables detection and mitigation of financial crime lies in harnessing the power of both structured and unstructured data.

SIREN

The temptation of building your own risk and fraud capabilities to custom fit your data scenario is strong but so are the risks when starting from pure open-source: **true link analysis, semantic capabilities and unstructured data handling** are complex tasks which require large investments.

The Siren Platform™ addresses these underlying issues by being built on top of the well-known big data open source Elasticsearch platform. It provides all the tooling needed to deliver risk and fraud fighting prowess enabling intuitive, flexible and real-time cross data source investigations and alerting.

> *The industry is moving towards non-rules based techniques to prevent and detect fraud which generate less false positives with higher accuracy, are more adaptable and resilient to emerging and evolving risks, and are better at spotting the "unknown unknowns". Siren is at the forefront of the next generation solution ecosystem as compared to currently available commercial solutions."*
>
> - **Frank Badalamenti** / PForensics, Financial Crimes Unit at PwC

Build and scale your integrated fraud & financial crime solution for:

ANTI-MONEY LAUNDERING	FRAUD & AUTHENTICATION MANAGEMENT	FINANCIAL MARKETS COMPLIANCE

The Siren Platform™: Elasticsearch big semi structured data meets relational and virtualization capabilities.

The Siren platform is built on top of the open-source ELK stack, extending it with core functionalities which are critical for fraud and financial crime investigations. Intended for investigative use cases where data virtualization (analysis of data with no ETL), big data joins across indexes (joining the dots across tables) and true knowledge graph / link analysis functionalities, both at API and at interface level, are required.

Feature List:

Siren Federate™: The back end

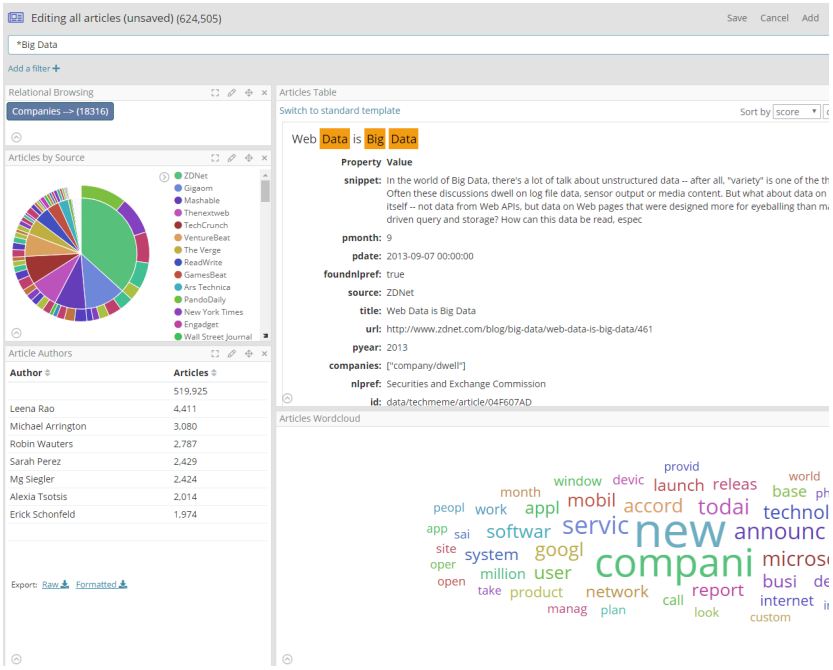
- Cross back end investigations where data resides: Elasticsearch, JDBC data sources or REST API all connected via data source virtualization (no ETL).
- Relational data model tying the data together, visually configured.
- Efficient push down of big data analytics query to native back ends.
- Cross log investigation at scale: Elasticsearch extended with in cluster distributed join capabilities.

Industry unique investigative dashboards

- Relationally connected dashboards: Fueled by the Siren Data Model™, investigators can move relationally from a set of results to the set of entities connected to these at big data scale.
- Drillable 360 degree views: Individual dashboard can show relationally connected data from multiple data sources.
- Alerting: High availability alerting, easily activated from the dashboards.

Content search, discovery and API integrations

- Advanced full text search and ranking across all sources: Connectors to most RDBMS and graph DBs.
- Information discovery: Real-time textual clustering and drill down on common concepts, similarity document search.
- At REST API integration, automatic or user driven: Use online services for investigations on social networks, online content and cybersecurity.

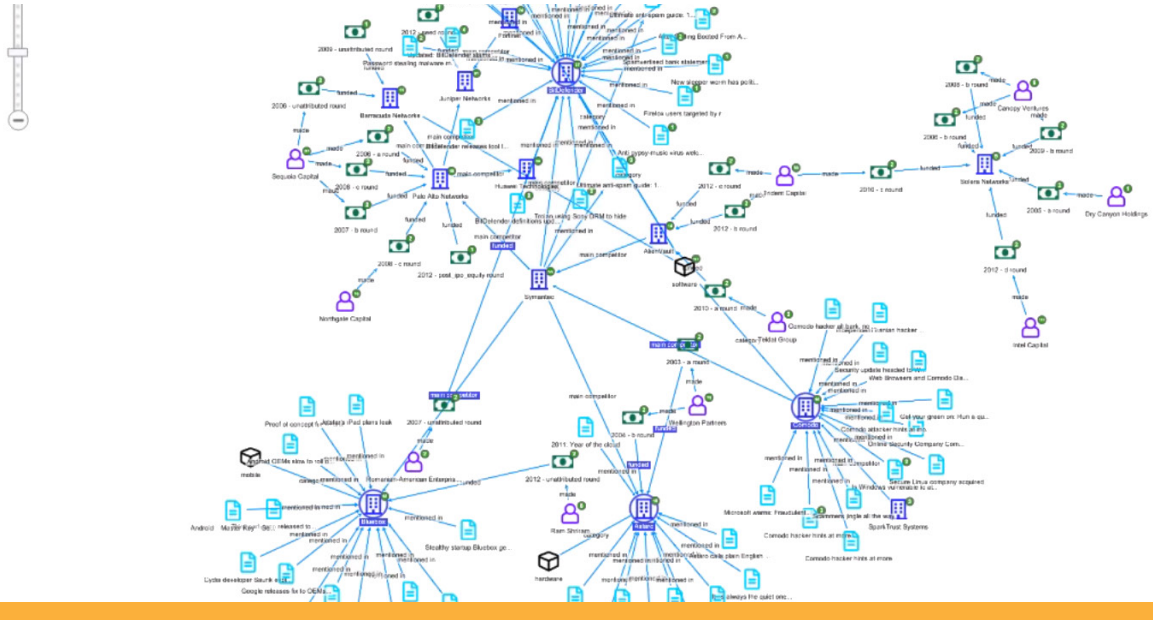


Enterprise level security and developer friendly

- Outstanding security: encryption in motion and at rest, table, column and field based security. Compliance and auditing capabilities.
- Compatible with your existing deployments of the ELK stack: Reuse many of the Elasticsearch/Kibana competences you might have in house or easily find on the market.
- Extensible architecture: Open-source at its core, plugin extensible, licenced to allow for modifications and customizations.

Built in knowledge graph/link analysis

- Embedded link analysis: Analyst controllable expansion, graph/map interaction, temporal time line and graph evolution.
- Graph database queries, suspicious graph pattern search and alerts, shortest paths.
- Clustering and aggregates within the graph: Obtain clarity with big data aggregates on the graph (node clustering into aggregate links), instantaneously via native pushdown to back end systems.
- Outstanding visualizations: Powered by best in class in browser link analysis technology and use case configurable.



Learn More

For more about Siren's *investigative intelligence* capabilities for financial institutions
siren.io/financial-services

Ready to kick-start your *investigative intelligence* project? Let's Talk

About Siren

Siren provides the leading *investigative intelligence* platform to some of the world's largest and most complex organizations to derive business value adding insights from their data.

Made by team of enormously passionate data discovery and advanced search experts, scientists and engineers; the Siren Platform provides a unique combination of search, business intelligence, big data, link analysis and knowledge representation which advances the way organizations address some of the world's most important data driven problems.

e: info@siren.io
w: www.siren.io