

Centrifuge Analytics Datasheet

Centrifuge Analytics is a big data discovery technology that provides the scalability and flexibility to connect, and visualize information without complex data transformation, or costly services. It combines sophisticated data connectivity, link-analysis, spatial awareness, and interactive visualizations to dramatically simplify overall data understanding and problem solving.

Problem-solving, not data processing

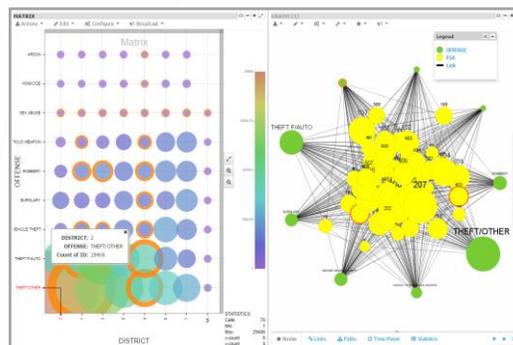
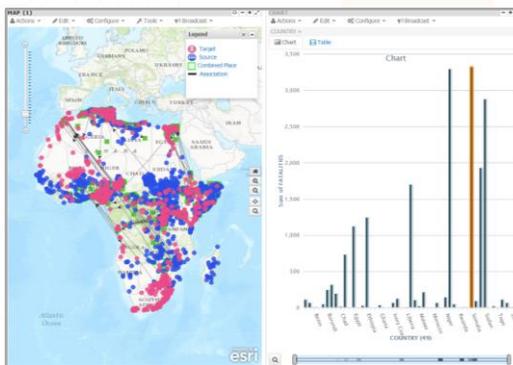
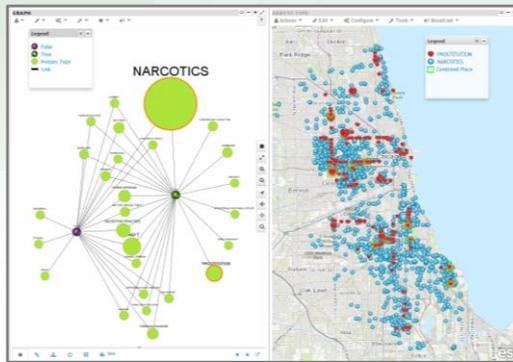
Centrifuge eliminates the need to pre-stage or aggregate data prior to analysis. It automatically reaches into many diverse data sources using sophisticated algorithms to maximize performance, and lets the analyst focus on the meaning of the data rather than the processing behind it. The analyst is always just a single refresh click away from working with the most current information allowing them to make the most informed decisions possible.

Advanced Interactive Visualizations

Centrifuge supports a full spectrum of advanced visualizations from traditional charts to fully integrated link-analysis graphs. All visualizations provide a rich interactive user experience that is accessible from any browser environment. Beyond individual visuals, Centrifuge allows users to broadcast selected areas of interest from one visualization and have the results reflected in the other visualizations. This provides the ability to create powerful dashboards consisting of interconnected views from different visual perspectives while simplifying understanding.

Sophisticated Link-Analysis

Link-analysis at its core exposes useful information from connected data structures like network graphs. Centrifuge uses this characteristic along with its unique link-analysis algorithms to dynamically qualify the embedded data structures and present them in a visually compelling interactive graph representation. Centrifuge's unique high-performance server-side rendering architecture allows users to visually explore their data from dense network clusters down to individual connections. The ability to automatically bundle common elements, discover possible paths between nodes or highlight repeating pattern structures, puts unprecedented power in the hands of an analyst to quickly see details not possible with traditional analytics tools.



Solutions

- Cyber Security
- Financial Analysis
- Human Intelligence
- Health & Pharma
- Insider Threat
- Fraud Detection
- National Security
- Retail/Supply Chain

Visualizations

- Relationship Graphs
- Heat Maps
- Charts (Bar, Pie, Line, Area, Bubble)
- Timeline Views
- Geospatial Maps
- Table Views

Key Features

- Graph relationships
- Graph paths
- Graph patterns
- Broadcast selection
- Bundling/Grouping
- Spinoffs selection
- Pan, zoom and drill
- Dynamic value sizing
- Dynamic visual typing
- Modeling rules
- Custom queries
- Filtering/Sorting
- Embeddability
- Icon management
- Data transformation & Integration

Centrifuge Analytics

Scalable & Flexible Architecture

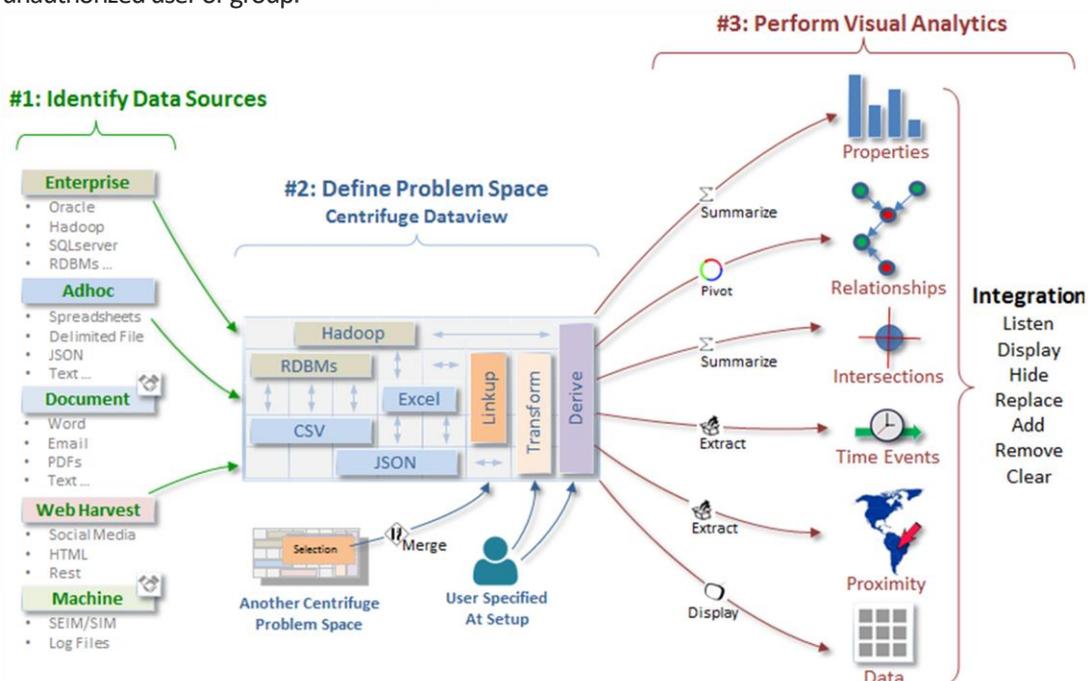
The Centrifuge architecture allows for lightweight deployments for simple implementations while incrementally scaling to support more use-cases, concurrent users, and data volumes. It's small enough to be installed on a single laptop, or across multiple CPUs for an enterprise solution. Centrifuge comes with built-in support for relational databases, flat files, and Hadoop Distributed File System (HDFS) providing connectivity to most industry data sources. Additional access to third party connectors further expands the scope of analysis to a wide range of new data sources such as: entity extraction tools for cyber security network logs, system logs, as well as, natural language processing for email and other text based content. Centrifuge also provides a pluggable data connector environment for access to proprietary data stores.

100% Browser-Based: The Centrifuge architecture is 100% Browser-based resulting in an effortless deployment model while delivering full access from any secure browser. The browser implementation leverages the rich user interactivity capabilities of HTML5 and nicely positions Centrifuge for mobile users.

Large Data Problems: The architecture has been built with large link-analysis problem processing at its core and continues to expand the data problem size with every release. Considering large datasets from the outset minimizes the need to perform detailed data transformations, allowing the analyst to focus on actual analytics and not data processing.

Reusable Models: Centrifuge leverages a model-based approach throughout the solution so that a specific problem can be defined once and reused multiple times. This maximizes the experience of your data scientists and spreads the knowledge across your entire analyst community. With Centrifuge, all your analysts will be your best analysts.

Powerful Security: Built for some of the most sophisticated customers, Centrifuge provides flexible controls needed to fully protect the hidden and potentially sensitive value within your data. Organizations can have total confidence that none of their proprietary data will be shared with any unauthorized user or group.



Data Sources

- Traditional RDBMs (Oracle, Postgres, and others)
- Flat Files (Excel, CSV, TXT, XML, JSON and others)
- HDFS (Hadoop Distributed File Systems)
- MS Access
- JDBC Compliant Sources
- Custom Connectors

System Requirements

Client — Web Browser

- Internet Explorer
- Chrome
- Firefox

Server

- Windows
- Linux

Sample Configuration

- 16 Core CPU
- 64GB RAM/2TB Disk