

# Centrifuge Analytics

## Datasheet

Centrifuge Analytics is a big data discovery technology that provides the scalability and flexibility to connect, visualize and collaborate without complex data integration, costly services or a data science degree. It combines sophisticated data connectivity, link-analysis, interactive visualizations and collaboration features to dramatically simplify data understanding on a big data level.

### ***Problem-solving, not data processing***

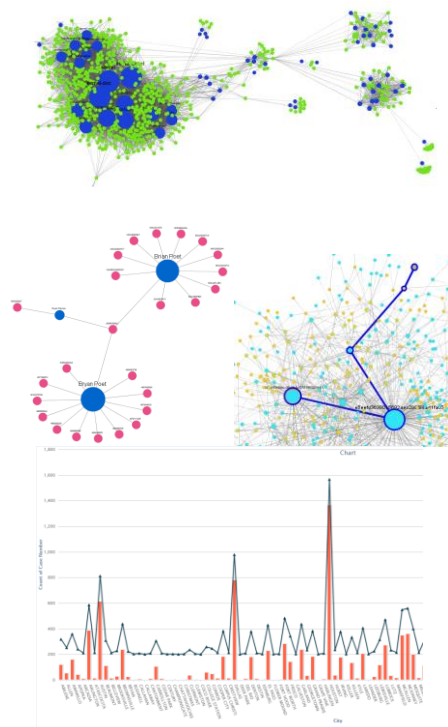
Centrifuge eliminates the need to pre-stage or aggregate data prior to analysis. It automatically reaches into many diverse data sources using sophisticated algorithms to maximize performance, and lets the user focus on the meaning of the data rather than the processing behind it. Augmenting any analysis with new data or building upon previously developed data models is simply a selection process. 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 enables intelligent interactions between visualizations, allowing users to drilldown into areas of interest within a visual and have the results reflected in other views. This provides the ability to create powerful dashboards consisting of interconnected views from a different perspective while simplifying understanding and taking visual data discovery to a whole new level.

### ***Sophisticated Link-Analysis***

Link-analysis at its core deals with mining useful information from connected data structures like network graphs. Centrifuge uses this intrinsic characteristic along with its unique link-analysis algorithms to qualify the imbedded data structures and present them in a compelling interactive graph representation. Leveraging a scalable high-performance server-side rendering architecture allows users to seamlessly explore their data from dense clusters of millions of nodes down to individual connections. The ability to automatically bundle common elements as one or discover all possible paths between two entities, puts unprecedented power in the hands of an analyst to see what the data is saying. These plus many more link-analysis capabilities allow Centrifuge analytics to find that needle in the haystack that is not possible with traditional analytics tools.



### Solutions

- Cyber Security
- Financial Analysis
- Human Intelligence
- Health & Pharma
- Insider Threat
- Fraud Detection
- National Security
- Oil and Gas

### Visualizations

- Relationship Graphs
- Heat Maps
- Charts (Bar, Pie, Line, Area, Bubble)
- Time Player Animation
- Dashboard Views
- GeoSpatial

### Key Features

- Graph cross-referencing
- Graph pathing
- Broadcast Selection
- Bundling graph nodes
- Spinoffs Selection
- Pan, zoom and drill
- Dynamic value sizing
- Dynamic transparencies
- Modeling rules
- Custom queries
- Filtering/Sorting
- Embeddability

# Centrifuge Analytics

## Scalable & Flexible Architecture

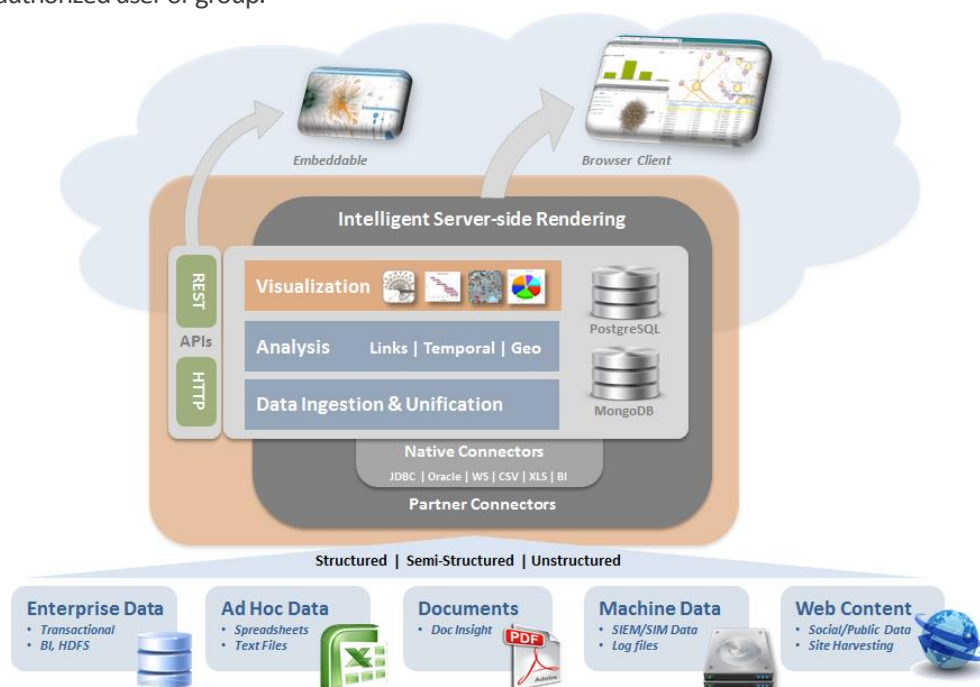
The Centrifuge architecture allows for lightweight deployment for simpler implementations while incrementally scaling to support more use-cases, concurrent users or data volumes. It's small enough to be installed on a laptop in minutes, and can scale to multiple CPUs, large teams of users and terabytes of data. The embedded Centrifuge structured and unstructured databases are entirely self-managed requiring no user administration. Built-in support for Hadoop Distributed File System (HDFS) and third party integrated connectors expands the scope of analysis to include a wide range of data such as: cyber security, system logs, natural language processing email and text based content, social media sources as well as web content overall. Pluggable and extendable data connectors allow connectivity to proprietary data stores ensuring access to most any data that will provide an analytical perspective previously not possible.

**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 Analytics 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 very large data sets from the outset minimizes the need to perform detailed data transformation, 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.

**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 (Access, Oracle, Postgres and others)
- Flat Files (excel, csv, xml, Json and others)
- HDFS (Hadoop Distributed File System)
- JDBC- Compliant Sources
- LDAP (Lightweight Directory Access Protocol)

## System Requirements

### Client:

- Windows Browsers (Explorer, Chrome, Firefox)

### Server:

- Windows
- Linux

### Small Configuration

- Single dual-core CPU
- 8GB RAM/250GB Disk

### Large Configuration

- 4-CPU Quad-Core
- 32GB RAM/2TB Disk

**centrifuge**

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