



The Kinetica Advantage

Performance

- Ingest streaming data—billions of records per minute—and get “up to the moment” analytics
- Realize 100x performance improvement on queries compared to CPU-based in-memory solutions
- Holds 100s of TB of data in-memory for extremely low-latency analytics

Simplicity

- No typical tuning or indexing required; ask and answer any question in real time
- Connect with common BI tools like Tableau, Kibana and Caravel
- A converged, unified suite; not multiple disparate components

Predictably Scalable

- Easily scale up or out
- Data written to Kinetica is automatically routed to parallel connections across the cluster
- OLAP queries are executed using fully distributed GPU-accelerated processing across the cluster

Easy APIs and Integration

- Open source integration components include Apache NiFi, Spark and Spark Streaming, Storm, Kafka and Hadoop
- Kinetica’s APIs are fully supported in REST, Java, Python, C++, Javascript and Node.js
- ODBC and JDBC drivers integrate with industry-standard BI and SQL tools

Complete Native Visualization and Geospatial Capabilities

- Real-time geoprocessing
- A fully GPU-accelerated distributed rendering pipeline
- Visualize billions of points in seconds

Get Access to Geospatial and 350+ Other Data Sources

Safe Software is the maker of FME, the leading spatial data transformation technology that enables users to extract, transform, load, integrate, validate, and share data without coding. FME provides integration with 350+ formats, including GIS, CAD, database, 3D, raster, XML and cloud. Since 1993, FME has helped thousands of customers worldwide leverage their data so it can be used exactly where, when, and how it’s needed. The FME connector for Kinetica allows users to read and write data from Kinetica into and out of FME workspaces. It enables users to ingest, analyze, visualize and publish data between hundreds of business applications, web services, databases and file formats, including geospatial data for real-time location-based analytics.

FME 2017 can read and write data to Kinetica, including geometry data, allowing that data to be transformed and manipulated in FME workflows. FME provides integrated access to more than 350 data formats such as KML, GeoJSON, and OGC WKT (well-known text), as well as the data transformation functions of FME. With the Kinetica Writer for FME, customers can use the rendering power of Kinetica to display point and polygon data. Depending on the data, points can even be displayed as heatmaps, symbologies, or tracks. Data can also be integrated into Kinetica for machine learning, deep learning, OLAP and advanced location-based analytics.

Utility Use Case Example

The FME Kinetica connector enables one utility provider to operate Kinetica as an agile analytics layer where third party data such from sources such as Esri ArcGIS can be used to monitor, manage, and predict infrastructure health. The utility can combine multiple data feeds, including location data for their field deployed assets, into a single centralized data store for analysis.

Integration Resources

FME-Kinetica Connector

The FME Reader and Writer for Kinetica is located here. The runtimeFiles directory includes all files required by FME to read from and write to a Kinetica database.

The runtimeFiles includes:

- kinetica.dll file, to be placed into the FME\plugins directory
- kinetica.db file, to be placed in the FME\formatsinfo directory
- kinetica.fmf file, to be placed in the FME\metafile directory

Kinetica Reader/Writer

The Kinetica reader and writer plug-in enables FME to read attribute data from Kinetica and write attribute data Kinetica. In Kinetica, general geometric data can be stored as WKT in a standard string field and geometric points can be stored as a pair of float fields. While there are no specific geometric field types, Kinetica can render WKT and longitude/latitude points as WMS maps and have functions which operate on them.

Kinetica Quick Facts

Format Type Identifier	Kinetica
Reader/Writer	Both
Licensing Level	FME Professional Edition & up
Typical File Extensions	N/A
Generic Color Support	N/A
Schema Required	Yes
Transaction Support	No
Geometry Type Attribute	WKT

For additional information on Kinetica Reader/Writer parameters and user attributes, go to www.kinetica.com/docs/connectors/fme_kinetica_format.html

Availability The FME Connector for Kinetica is available now. To download the Kinetica FME Connector and for documentation, go to www.kinetica.com/partner/fme

For more information on Kinetica and GPU-accelerated databases, visit kinetica.com