



Partner Brief

Customer Success



The US Postal Service relies on Kinetica to ingest, analyze, and visualize large and complex streaming data for real-time route optimization and on-time mail delivery.



RS Energy Group uses
Kinetica to process real-time
pipeline, well, and spatial
data to pinpoint the most
viable oil fields and remotely
monitor drilling
performance.



Lippo Group, with businesses across retail, telco, finance, and healthcare, uses Kinetica to manage these myriad data sources with millisecond latency, gaining a 360-degree view of their customers across industries, and delivering real-time personalization.

Overview

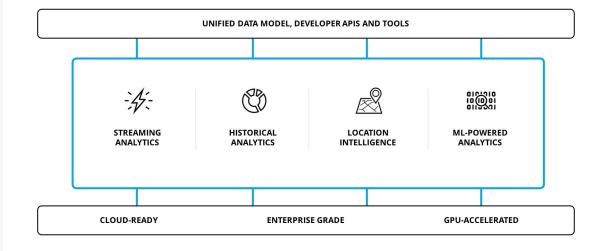
In the Extreme Data Economy, your business needs to analyze and react to data in real time: a process called active analytics. It requires continuous analysis of streaming and historical data, location analysis, and predictive analytics using Al and machine learning.

The Kinetica Active Analytics Platform brings together all key elements of active analytics in a unified platform: historical data analytics, streaming data analytics, location intelligence, and artificial intelligence. The platform is cloud-ready, and dramatically simplifies the typical architecture for smart applications, with unmatched performance. At its core is a distributed, inmemory GPU-accelerated database that utilizes the full processing power of CPUs and GPUs to analyze massive, complex datasets with millisecond response times.

Organizations across many industries including telecommunications, financial services, automotive, retail, logistics, and government use the Kinetica platform to build active analytical applications driven by data. Kinetica enables organizations to leverage data as a strategic asset and gain a competitive edge, moving from passive dashboards to smart analytical applications that continuously deliver insight.

Born from an innovation effort to meet the complex data needs of the US Army, Kinetica is backed by leading venture capital firms Canvas Ventures, Greatpoint Ventures, Meritech Capital, and Citi Ventures. The company operates globally and has experienced rapid growth since beginning commercial operations in 2014.

The Kinetica Active Analytics Platform



The Kinetica Advantage

Kinetica is built on five pillars of success

Unparalleled Speed

Dramatically accelerate analysis with advanced parallel computing

- In-memory GPU architecture with advanced GPU abstraction technology
- SQL queries to process and analyze billions of rows
- Simpler data preparation through distributed ingestion and extraction without the need to index

Streaming Data Analysis

Ingest and process data at the same time to get instant results

- Run SQL queries on streaming and geospatial data
- Continuously collect, analyze, and integrate streaming data with historical data
- All-in-one solution to ingest, compute, visualize, and egress data

Visual Foresight

Instantly translate temporal, geospatial, and streaming data into visuals that reveal patterns and opportunities

- In-memory, distributed image processing and rendering
- · Interactive visual discovery
- Support for graph analytics
- · Integrated visual dashboard

Streamlined Machine Learning

Train models faster and predict more accurately with integrated machine learning workflows

- Seamlessly integrate pre-existing code with highly scalable solution
- Simultaneously process & manage BI and AI workloads
- Integrate workflows with open source machine learning libraries

Best-in-Class Innovation Ecosystem

Kinetica partners with leaders in every category to deliver continuous cutting-edge innovation

- Innovate with leaders in GPUs, hardware, cloud, machine learning, and visualization
- Integrate into most data infrastructures
- Deploy on industry-standard hardware and scale linearly

Dell EMC OEM Solutions and Kinetica seamlessly work together to power business in motion for the Extreme Data Economy

Dell EMC provides technology that transforms with you so you can transform your business. The Dell EMC PowerEdge R740 platform can easily be configured as a reliable, general-purpose server for real-time, business-critical applications, with scale-out storage, automated management and high-availability features, such as:

- Redundant power supply units (PSUs)
- · Hot-plug and swappable PSUs, HDDs and fans
- Dual SD card option for failsafe hypervisors

Kinetica is certified to run on Dell EMC PowerEdge servers, giving you exceptional performance and versatility for dynamic workloads as you quickly go from raw data to actionable insights and competitive advantages. Featuring greater expandability, more storage, and enhanced compute density, the R740 can handle nearly any workload configuration and can run intensive, mission-critical applications for both large and small enterprise environments. As an example of lightning-fast actionable insights, Dell EMC and Kinetica can work together to analyze 3.8 billion records of text and tweets from social media, filtered by location, in real time. This capability is ideal for many real-time use cases such as retail inventory manage-ment and logistics.

Recommended Hardware

The PowerEdge R740 platforms boasts a two-socket 2U rack server with impressive processor performance, a large memory footprint, extensive I/O options and a choice of dense, high-performance storage or low-cost, high-capacity storage.



	GOLD CONFIGURATION	SILVER CONFIGURATION	BRONZE CONFIGURATION
Storage	Kinetica storage: 4 times RAM usable RAID 10 OS (8x raw storage), 2 – >512 GB striped OS drives		
RAM	up to 3.0TB DDR4 2666MT/s	1TB DDR4 up to 2666MT/s	512GB DDR4 up to 2666MT/s
CPUs	2-Intel® Xeon® Gold 6154 3.0G,18C/36T,10.4GT/s,z25M Cache,Turbo,HT (200W) DDR4-2666	Intel® Xeon® Gold 6126 2.6G,12C/24T,10.4GT/s, 19.25M Cache,Turbo,HT (125W) DDR4-2666	Intel® Xeon® Gold 6126 2.6G,12C/24T,10.4GT/s, 19.25M Cache,Turbo,HT (125W) DDR4-2666
CPU/GPU Link	PCI Express		
GPUs	2 NVIDIA P/V100s	2 NVIDIA P/V100s	2 NVIDIA P/V100s



For more information on the Kinetica Active Analytics Platform visit kinetica.com