



# kinetica

## NEXT GEN IoT DATABASE

# First Fully Vectorized Database on Azure

Vectorized processing has helped to spark an AI boom while becoming a key part of modern supercomputers. The world's largest companies and governments have adopted vectorized databases for their unmatched performance benefits. However, access to vectorization has long been limited to organizations with significant resources and an ability to make substantial time investments. Vectorization required complex and lengthy deployments of exotic hardware, as well as scarce talent to support and maintain systems. Now, the availability of Kinetica as-a-service on Azure is bringing vectorization to the mainstream.

## Industry First

In recent years, vectorized chips have become commodity offerings in the cloud, but without rearchitecting their products, traditional database vendors can only incorporate partial vectorization for some specific operations. Kinetica is the first database available on any public cloud designed natively for vectorization across GPUs and CPUs. Analytical functions in Kinetica were written from scratch to leverage the full performance and scale of vectorization.

### Challenge

Vectorization carries huge performance benefits, but implementing it requires a high risk tolerance and substantial time investments, limiting access to innovator's with disproportionate resources.

### Solution

Kinetica on Azure delivers the first fully vectorized database as-a-service on any public cloud, combining native vectorization with ease of use, accelerated time to value, and consumption-based pricing.

### Results

Organizations of all sizes can leverage full vectorization for the first time, allowing anyone access to analytics at a performance and scale once reserved to a select few.

**"Kinetica's fully vectorized database on Microsoft Azure Marketplace significantly outperforms traditional cloud databases."**

-Jeremy Rader, GM, Intel

## Why Kinetica on Azure

Kinetica as-a-service on Azure delivers Kinetica with maximum ease of use, accelerated time to value, and flexible pricing, including by consumption.

Ease of use is paramount in the fully managed service by Kinetica, which is provisioned into the customer's Azure network, granting full control over resources and direct billing to the customer's Azure accounts. It's integrated into existing Azure monitoring, providing customers with a single pane of glass and allowing teams familiar with Azure to use all their standard tools. It comes with a modernized UI, designed for ease of use for developers, and a new SQL worksheets experience to share and collaborate with other users.

The offering accelerates time to value throughout provisioning, data ingestion, and analytics. Getting set up only requires a few clicks: just choose between CPU-only and GPU, and pick a T-shirt sizing, and everything else is optimized under the hood. Leading ingestion mechanisms

have been brought natively into the product, including Kafka and Azure Blob Storage. Analytics are a seamless experience, with a standardized SQL interface across geospatial, graph, ML, OLAP, and UDF capabilities.

The consumption-based pricing option lowers a customer's risk by not requiring a commitment. Just spin up an environment when you need it, pay only for the compute you use against the data, and turn it off when your developers are asleep.

## Extreme to Mainstream

Kinetica's vectorized database was originally developed for the U.S. intelligence community, and has supported the most complex IoT use cases in the world, including for the U.S. military, four top global telcos, a top retailer, and more. The availability of Kinetica on Azure allows companies of all sizes to leverage vectorization as-a-service for the first time, allowing anyone to use capabilities once reserved for the world's largest organizations.



**"Historically our sectors were very manually driven — phone calls to pass data, etc. Today we fuse all that data together, and we're seeing the picture much more real-time and much more in an automatic type of digital environment."**

— General Glen VanHerck, Commander, NORAD & USNORTHCOM