NVIDIA AND MAPD, THE EXTREME ANALYTICS PLATFORM
THE GPU-ACCELERATED SQL ENGINE AND VISUALIZATION SYSTEM

This is a golden age of computing. There have never been more or better opportunities to explore and train massive datasets for tomorrow's machine learning models. But beneath this incredible opportunity lies a big-data analytics challenge: Data is growing faster than the mainstream analytics tools built on CPU architectures can handle. For even the most sophisticated organizations with teams of data scientists, insight from this data lies just out of reach.

INTEGRATED SOLUTION

MapD, powered by NVIDIA GPUs, is an SQL engine and visualization system that delivers a new approach to analytics. This new approach cancels the curiosity tax, provides full visibility down to the most granular level, and puts an end to sampling error. By harnessing the parallel processing power of GPUs, MapD's open-source SQL engine returns answers 100X faster than CPU-based platforms, and its visualization system shows all the data points, individually or summarized. The MapD Core SQL engine, running on NVIDIA® DGX™ Systems, provides unparalleled speed even with multi-billion-row datasets. And MapD's immersive visualization reveals insights from datasets once considered too large or complex to handle at the speed of business.

INDUSTRY CHALLENGES

- The curiosity tax: Each question takes hours or days to answer, so analysts run "safer" queries.
- Partial visibility: Weak visualization hampers ad-hoc exploration and blocks unexpected discoveries.
- Sampling errors: Deadlines force analysts to downsample, reducing the quality of their results.

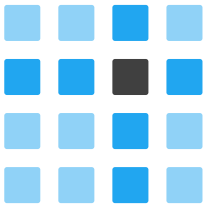
Together, NVIDIA and MapD Deliver

UNPARALLELED SPEED FOR BIG-DATA ANALYTICS

Instantaneously explore multi-billion-row datasets on the world's fastest database.

Independent benchmarks on a 1.2 billion-row dataset found MapD to be anywhere from 75X to 3,500X faster than the fastest CPU databases.

CONSTANT INNOVATION FROM THE OPEN-SOURCE COMMUNITY



Incorporate GPU-powered analytics into long-term data center or cloud roadmaps and reap the benefits of future open-source innovation.

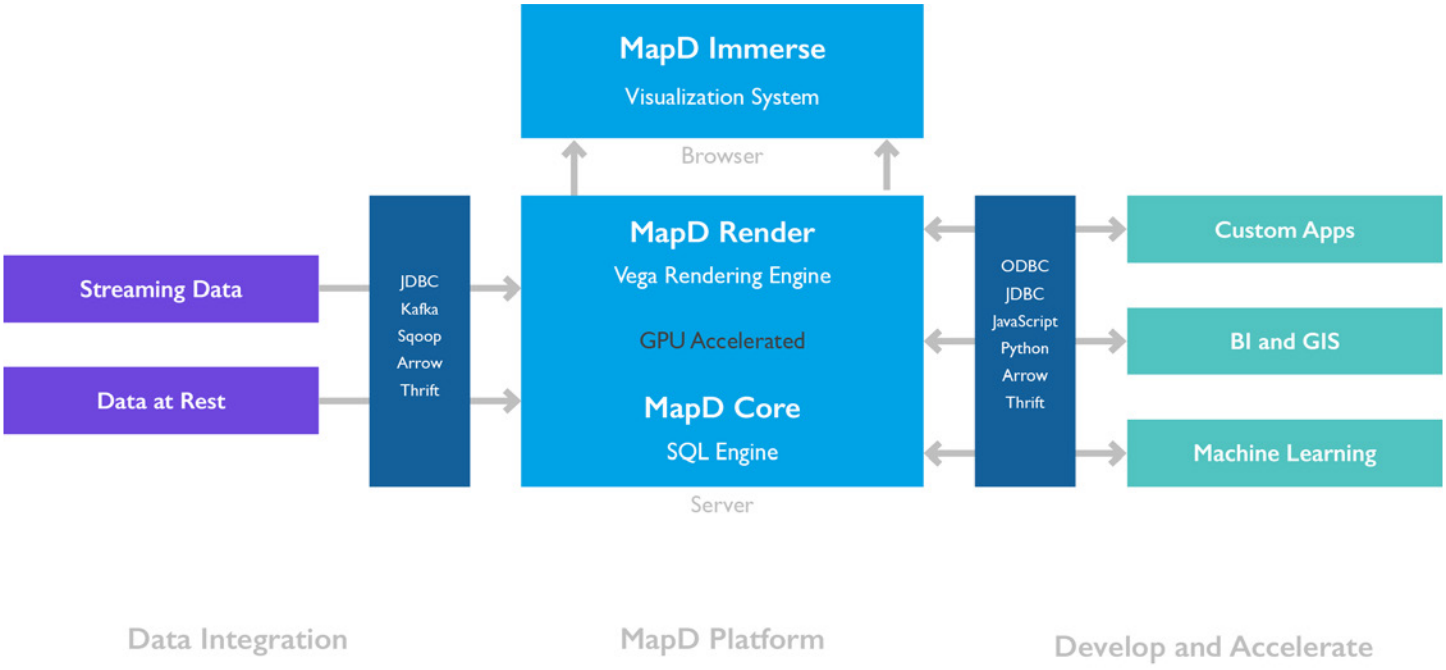
In the GPU Open Analytics Initiative (GOAI), MapD uses Apache Arrow to mediate efficient, high-performance data interchange for analytics and AI workflows.

DYNAMIC VISUALIZATION TO BUILD MACHINE-LEARNING MODELS

Dynamically interact with and visualize billions of data points in milliseconds every time you filter a data feature.

MapD can deliver interactive maps, charts, and graphs with up to billions of rows in milliseconds, all refreshing simultaneously as you explore.

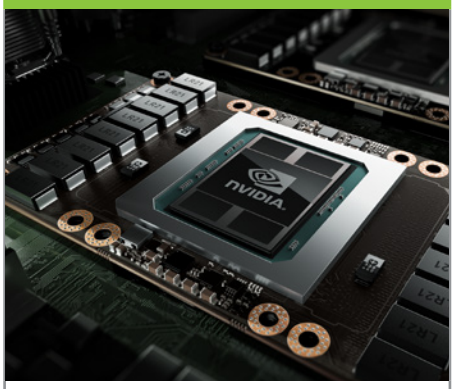
MapD Marketecture



Recommended Infrastructure

NVIDIA data center GPUs are available in servers, supercomputers, and cloud platforms around the world. You can now get end-to-end accelerated analytics solutions powered by NVIDIA GPUs with integrated software technologies and support from NVIDIA experts.

NVIDIA® TESLA™
SERVERS IN EVERY SHAPE AND SIZE



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DGX SYSTEMS
ACCELERATED ANALYTICS SUPERCOMPUTERS FOR INSTANT PRODUCTIVITY

NVIDIA

CLOUD
EVERYWHERE

amazon web services · Google Cloud · Microsoft Azure · IBM Cloud

Industry Insights

Customers are using NVIDIA's massively parallel graphics processors and MapD's analytics platform to accelerate compute-intensive workloads, change the DNA of data science, and speed insight by two orders of magnitude. They do this without the hidden cost of a scale-out architecture.

Advertising	Pricing dashboards match millions of advertisers with active ad units.
Automotive	Carmakers visually explore streaming telematics data from autonomous vehicles.
Energy	Oil and gas companies visually tunnel through their data to find new deposits.
Financial Services	Capital markets firms and hedge funds see new risks and capture fleeting opportunities.
Government	Defense and intelligence agencies assess emerging threats with geospatial mapping.
Pharmaceutical	Drug companies monitor distribution chains to assure timely delivery to pharmacists.
Retail	Category managers explore sales by geographic location to plan future inventory and store locations.
Software	Product managers make their apps more engaging while speeding development cycles.
Telecommunications	Operations centers detect and resolve network anomalies.
Utilities	Utilities map the grid and monitor household services with geospatial analytics.

Learn More

NVIDIA GPUs for accelerated analytics help customers effectively analyze, visualize, and unleash the power of AI to transform their digital business into an AI enterprise.

Website: www.nvidia.com/analytics
Twitter: @NvidiaDC
Blog: www.blog.nvidia.com

MapD is the world's fastest GPU-accelerated database and visual analytics platform.

Website: www.mapd.com
Contact: sales@mapd.com
Twitter: @MapD
Blog: www.mapd.com/blog