NVIDIA AND MAPD FOR ACCELERATED ANALYTICS

The presence of extraordinary amounts of data, to train on, to learn from, and to explore, represents a golden age of computing. But beneath this incredible opportunity lies a massive challenge. Traditional CPU compute cannot keep pace with the growth in data, and as a result, even the most sophisticated organizations are unable to unlock its value.

INTEGRATED SOLUTION

There is a new approach to computing and analytics that solves this yawning gap, involving the application of GPU compute from NVIDIA and analytical software from MapD. By harnessing the parallel processing power of GPUs to power in-memory database and visual analytics applications, MapD enables the exploration of billions of rows of data with millisecond latency. MapD on NVIDIA DGX-1 and NVIDIA GPUs provide a unique combination of unparalleled speed, petabyte scale, and immersive visualization–revealing insights from datasets once considered too large or complex.

INDUSTRY CHALLENGES

- Taking too long to get answers, so teams only ask questions they know will get answered.
- Issuing iterative queries takes so long, so teams don't fully explore an idea.
- Curtailing an analyst's creativity, so a team only does what's asked of them.
- Running out of time on a particular problem area, so teams downsample introducing risk.

Together, NVIDIA and MapD Deliver

UNPARALLELED SPEED

Explore and discover insights in milliseconds with world's fastest data exploration platform.

Independent benchmarks found MapD to be anywhere from 75x to 3,500x faster than the fastest CPU databases over a 1.2B row dataset.

PETABYTE SCALE

Instantaneously visualize and query multi-billion row datasets across multiple high-density nodes.

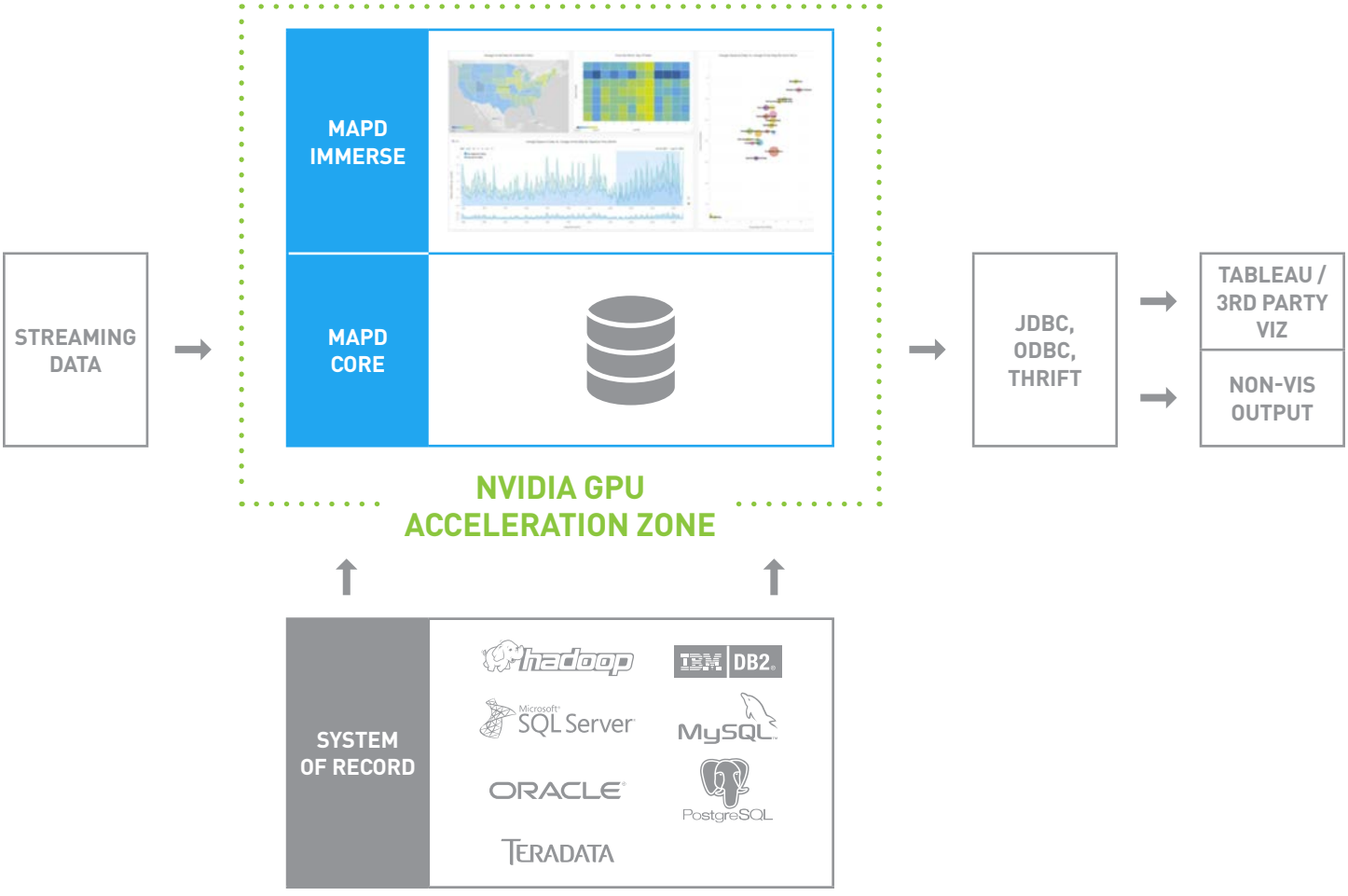
MapD on NVIDIA, powered by IBM Softlayer, were able to query 40 billion rows in 240ms (147 billion rows per second) over 64 GPUs on 16 separate servers.

IMMERSIVE VISUALIZATION

Dynamically interact and visualize billions of data points in milliseconds

MapD can deliver interactive visualizations over hundreds of millions of rows in sub-seconds.

MapD Marketecture



Industry Insights

Customers everywhere are using GPUs for interactive visualization. Providing higher throughput for compute-intensive workloads and achieving significant performance gains without the hidden cost of scale-out architecture—result in dramatic cost savings.

Ad Tech

- Accessing inventory availability by matching millions of audience members against active ad units
- Simulmedia leverages MapD to rapidly explore exceptionally rich data: **http://go3.mapd.com/resources/casestudies/simulmedia/lp**
- Learn more: **www.mapd.com/solutions/industries/ad-tech**

Energy

- Across segment (well, turbine, customer), IoT (Streaming data from pipelines or other equipment) and simulations, the ability to deliver rapid results on massive datasets is key.
- Learn more: **www.mapd.com/solutions/industries/energy**

Finance

- Capital Markets (hedge funds, asset managers + banks) have assembled large proprietary data sets that cannot be queried promptly by CPU-generation solutions.
- Learn more: **www.mapd.com/solutions/industries/financial-services**

Government

- Large-scale geo-visualization is critical across both classified and unclassified use cases, and MapD's extensive capabilities in this area make it a natural fit.
- In-Q-Tel Quarterly Spring 2016 features MapD and how the intelligence community solves performance challenges associated with large scale data problems: **http://go3.mapd.com/resources/analystreports/iqt-quarterlyspring2016/lp**
- Learn more: **www.mapd.com/solutions/industries/government**

Retail

- Analyzed historical sales to assess geographic product demand for future inventory and store locations.
- Learn more: **www.mapd.com/solutions/industries/retail**

Telco

- From real-time network operations management to call center performance to the real-time capabilities of MapD over large data sets solves key use cases.
- Verizon uses MapD to execute queries against 85 million subscribers' SIM cards data to gain real-time insights: **http://go3.mapd.com/resources/casestudies/verizon/lp**
- Learn more: **www.mapd.com/solutions/industries/service-providers**

Recommended NVIDIA Hardware

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

TESLA
SERVERS IN EVERY SHAPE AND SIZE

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DGX-1
THE AI SUPERCOMPUTER FOR INSTANT PRODUCTIVITY

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Find Out More

NVIDIA Accelerated Analytics - Helping customers effectively analyze, visualize, and unleash the power of AI to transform their digital business into an AI enterprise.

Website: **www.nvidia.com/analytics**
Contact: **dgxanalytics@nvdia.com**
Partner Webpage: **www.nvidia.com/dgx-apps**
Twitter: **@NvidiaAI**
Blog: **blogs.nvidia.com**

MapD - the World's fastest GPU-accelerated databases and visual analytics platform

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

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