







Big Data – Real Time – Low Latency

ParStream is the fastest Analytical Database for:

-  Analyzing and filtering **Billions of records** - like CDR, Weblog, Sensors, Financial Tx, M2M Logs, Smart Grids)
-  Querying data structures with **thousands of columns** and multivalued support
-  Getting answers in **milliseconds** without the need for former aggregation
-  Supporting thousands of **concurrent queries** – like in ecommerce online applications
-  Continuously importing data with **very low latency** (< 1 sec) – Basis for Complex Event Processing CEP
-  Building **complex customized calculations** directly into the database - like geocustering algorithms, FFT

Unique Technology

ParStream is a completely inhouse developed software combining unique technology and state of the art architecture

HPCI: High Parallel Compressed Index is a unique technology patent pending for extremely fast data analysis

Hybrid-Storage: Data is stored into column- and/or record oriented storage, customizable by DBA

In-Memory Caching: Data and index are in memory and persisted on hard-disk or SSDs

GPU-Support: ParStream is the first database which utilizes the power of GPU based High-Performance Servers

Linear Scalability: ParStream is based on a MPP shared nothing architecture and scales up to petabytes

Cloud ready: ParStream has been tested on Amazon Web Services including the GPU Servers

Specifications

Server Hardware:
Commodity Server Hardware

GPU-Version:
Certified HPC Server with up to 8 Nvidia Fermi based GPU boards

Operating System
Certified Linux based systems, Windows (Q4/2011)

Drivers and APIs:
SQL, JDBC, ODBC
C++ User defined functions

SQL Standards
ANSI SQL 92 (subset for ADBMS)

Integration with BI Tools:
Jaspersoft, Microstrategy

Testimonials

"ParStream is an extremely innovative idea for processing data in parallel. The fundamental concept of ParStream, as well as its innovative aspects, have convinced me completely."

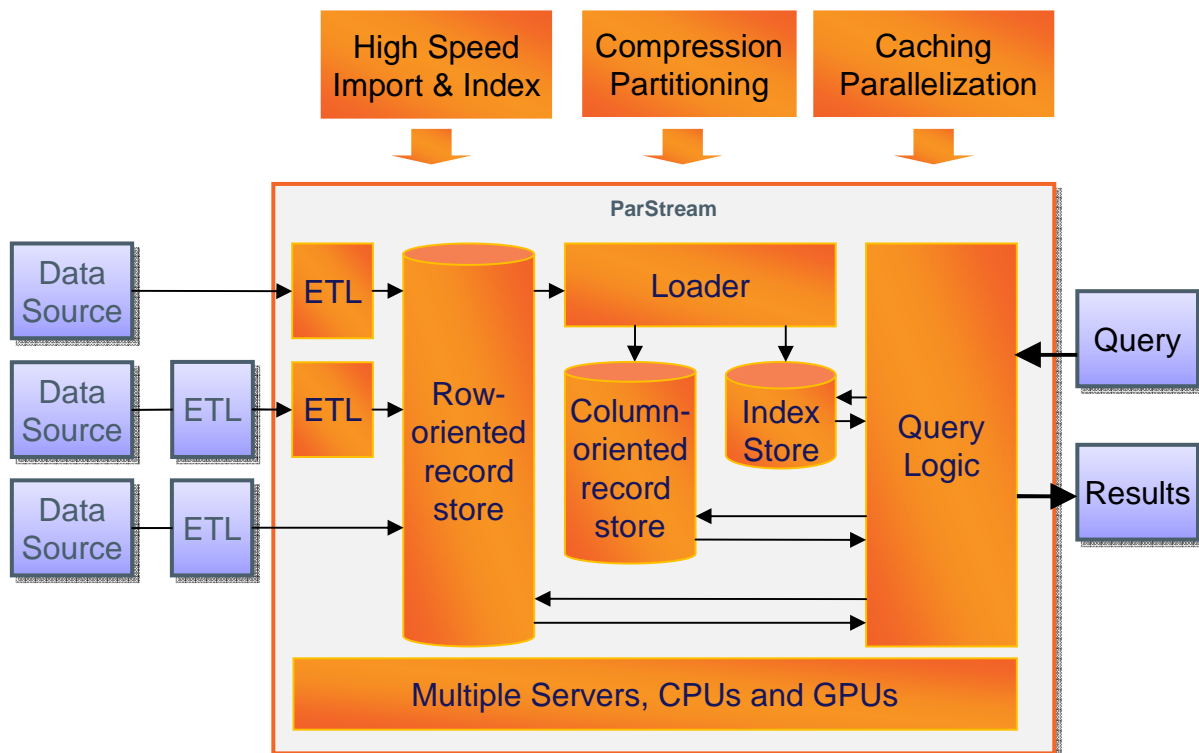
Prof. Dr. Volker Markl, TU Berlin

"ParStream reduced our response time for analyzing unique visitors from 3 minutes to 15 ms... ParStream has been running stable in production with multiple instances running on different servers."

Leading German web analytics service provider

Contact

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Supported Data Types: ParStream supports signed/unsigned integers, floats, doubles, bitvectors, blobs, and string values.

Analytical Modules: ParStream features an interface enabling the incorporation of any user-defined analysis. Currently available, a clustering module.

Inputs Formats: Input is provided in csv files. An extension towards data stream operators and further binary formats will be available soon.

Backup & Recovery: Several internal settings allow the user to distribute data redundantly onto multiple servers.

System Monitoring: ParStream logs all performance data using a JSON description. This log data can easily be read and interpreted by the database administrator.

Compatibility: The usage of the Postgres network protocol ensures that ParStream can be queried with any compatible tool. Furthermore JSON and XML output is available.

Hardware Limits: ParStream needs a 64 bit CPU, at least 4GByte of RAM. Apart from that, there are not lower and upper limits.

Performance: ParStream aggregates and filters 150 million records and identifies unique attributes in billions of rows in a few milliseconds.