MariaDB Adds Support for Big Data Analytics with General Availability of ColumnStore 1.0

Submitted by: MariaDB

Wednesday, 14 December 2016

Pluggable Columnar Engine Delivers Cost Effective, Single SQL Interface for Analytic and Transactional Workloads

MENLO PARK, Calif. and HELSINKI, Finland – December 14, 2016 – MariaDB® Corporation (https://mariadb.com), the company behind the fastest growing open source database, today announced the general availability of MariaDB ColumnStore 1.0 (https://mariadb.com/products/mariadb-columnstore), a powerful open source columnar storage engine. With this release, MariaDB has united transactional and analytic processing with a single front end to deliver an enterprise-grade solution that simplifies high-performance, big data analytics.

"MariaDB ColumnStore is the future of data warehousing. ColumnStore allows us to store more data and analyze it faster," said Aziz Vahora, Head of Data Management at Pinger. "Every day, Pinger's mobile applications process millions of text messages and phone calls. We also process more than 1.5 billion rows of logs per day. Analytic scalability and performance is critical to our business.

MariaDB's ColumnStore manages massive amounts of data and will scale with Pinger as we grow."

Data warehousing and analytics are undergoing massive transformation driven by cloud computing, cost of compute, distributed deployments and big data. But in spite of all the innovation designed to reduce cost and complexity, enterprises continue to be confronted with two imperfect options for big data analytics: build a costly, proprietary data warehouse on premise with vendors like Teradata and Vertica, or get locked into potentially uncontrollable costs with cloud-based solutions like Redshift.

"Data warehouses are famously expensive and complex – requiring proprietary hardware which makes it nearly impossible to deploy on the cloud, or on commodity hardware. MariaDB ColumnStore makes data analytics more accessible, on premise, in the cloud or in a hybrid deployment," said David Thompson, Vice President of Engineering at MariaDB. "Costing on average 90% less per TB per year than the leading data warehouses and offering a scalable solution for the cloud, MariaDB ColumnStore presents a new, open source model for big data analytics that is designed to meet today's enterprise needs."

New features and benefits of ColumnStore 1.0 include:

Lower Cost of Ownership and Better Price Performance

Compared to the licensing and hardware costs of proprietary data warehouses like Teradata and Vertica, MariaDB ColumnStore, an open source solution, provides exponentially better cost per performance for analytics. Additionally, ColumnStore's flexible deployment options mean businesses can deploy in the cloud, or on premise with commodity hardware as opposed to solutions like Redshift which require a commitment to cloud-only deployments.

Rather than buying and maintaining a third platform for data warehousing, MariaDB users simply turn on the columnar engine for a particular dataset and run analytics from the same front end as their transactional system.

ColumnStore's advanced data compression is more efficient at storing big data, requiring less hardware and making big data analytics more affordable.

Easier Enterprise Analytics

Unlike Hadoop solutions, ColumnStore offers full ANSI SQL capabilities including queries for complex joins, aggregation and window functions. This makes it easy for data analysts to run their existing enterprise queries without modification.

MariaDB ColumnStore simplifies enterprise administration and execution by accessing all the same security capabilities delivered in MariaDB Server, including encryption for data in motion, role-based access and auditability. ColumnStore also offers an out-of-the-box connection with BI tools through ODBC/JDBC, as well as the standard MariaDB connectors (https://mariadb.com/kb/en/mariadb/client-libraries/). ColumnStore's automated partitioning, combined with the elimination of the need to create indexes and views, makes it easier to setup, deploy and manage.

Faster, More Efficient Queries

Compared to row-based storage, columnar storage reduces disk I/O with compression, making read-intensive (i.e., analytic) workloads significantly faster.

MariaDB ColumnStore distributes the queries into series of parallel operations, resulting in extremely fast and scalable query results.

"The demand for robust analytics technologies has exploded as companies look to derive greater value from increasing data volume," said Jason Stamper, Analyst, Data Platforms & Analytics, 451 Research.

"MariaDB's ColumnStore is a new option for high-performance analytics to big data, which aims to enable faster and more efficient queries while eliminating delays and reducing enterprise data warehousing expenses."

MariaDB ColumnStore is now available for download (https://mariadb.com/downloads/columnstore). For customers wanting to get started immediately, the MariaDB professional services team is offering a new program called MariaDB ColumnStore JumpStart, which delivers a ready-to-use ColumnStore environment in 3 - 5 days. Contact MariaDB (https://mariadb.com/contact) to learn more.

Learn more about MariaDB ColumnStore during our upcoming webinar on December 20. Register for 10 a.m. PT webinar (http://go.mariadb.com/Introducing_Big_Data_Analytics_with_MariaDB_ColumnStore-registration.html) or for 4 p.m. CET webinar

(http://go.mariadb.com/Introducing_Big_Data_Analytics_with_MariaDB_ColumnStore--EMEA-registration.html).

Resources

IHME Customer Blog: IHME Believes Open Source MariaDB ColumnStore Is The Future of Data Warehousing (https://mariadb.com/resources/blog/ihme-believes-open-source-mariadb-columnstore-future-data-warehousing)
Blog: How MariaDB ColumnStore Handles Big Data Workloads - Storage Architecture
(https://mariadb.com/resources/blog/how-mariadb-columnstore-handles-big-data-workloads-storage-architecture)

Blog: Introducing MariaDB ColumnStore 1.0 (https://mariadb.com/resources/blog/general-availability-mariadb-columnstore-10) MariaDB Services page (http://www.stage.mariadb.com/services/consulting) Get Started with ColumnStore (https://mariadb.com/products/get-started)

About MariaDB Corporation

MariaDB Corporation is the company behind MariaDB, the fastest growing Open Source database. Started by the founders of MySQL, MariaDB Corporation is reinventing the database to support today's enterprise needs. The company also builds complementary products, including MariaDB MaxScale (https://mariadb.com/products/mariadb-maxscale) and MariaDB ColumnStore (https://mariadb.com/products/mariadb-columnstore), that are valuable for deploying MariaDB in large, mission-critical production environments.

MariaDB Corporation provides world-class support (https://mariadb.com/services/technical-support-services) and training (https://mariadb.learnupon.com/store) for its products. The company is an active sponsor of the MariaDB Foundation (https://mariadb.org), a non-profit organization dedicated to ensuring continuity and open collaboration in the MariaDB ecosystem.