# ArangoDB Boosts Multi-Model Database Scalability Across Distributed Environments with Release of ArangoDB 3.5

New features help accelerate enterprise development efforts to query, secure and search across graph, JSON document and key-value data

SAN FRANCISCO AND COLOGNE, GERMANY, August 21, 2019 /EINPresswire.com/ -- ArangoDB, the leading open source native multi-model database, today announced the GA release of ArangoDB 3.5. ArangoDB 3.5 contains new features that allow its growing customer base to more easily query, secure and search their growing data sets across multiple data models, making database scalability across distributed environments a reality.
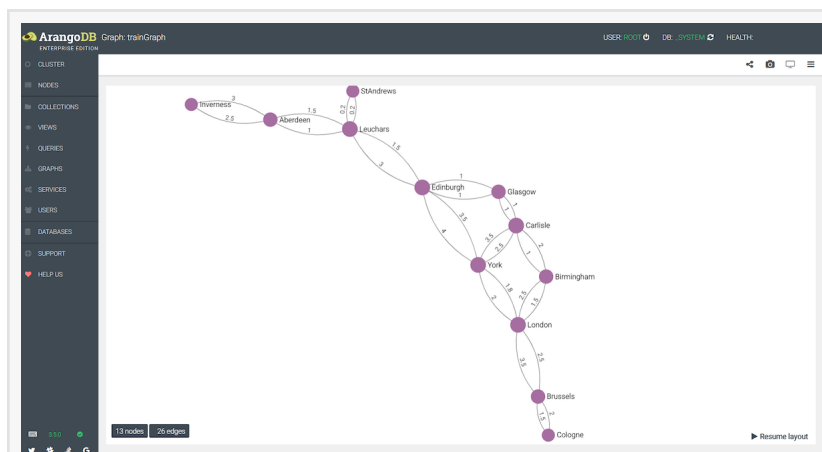
Using k Shortest Path, a new graph query in ArangoDB 3.5, to find the shortest distance between cities.

ArangoDB 3.5 brings updates to both the Community Edition, which is fully open source under the Apache 2.0 license, as well as the Enterprise Edition, ArangoDB's commercial offering that includes features to help more easily secure and scale ArangoDB across an organization.

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Our multi-model core enables developers to leverage other data models by just changing a query, providing the freedom to build powerful applications while keeping their infrastructure lean and agile."

Claudius Weinberger, CEO and co-founder of ArangoDB

"Developers tell us that they increasingly need to leverage multiple data models for their applications, and in large organizations we see up to 20-30 different database technologies in production across the enterprise," said Claudius Weinberger, CEO and co-founder of ArangoDB. "The enhancements in ArangoDB 3.5 on top of our native multi-model core enable developers to leverage other data models by just changing a query, giving them the freedom to create and run powerful applications while keeping their infrastructure lean and agile."

The key features in ArangoDB 3.5 are:

SmartJoins: Co-located Join Operations Across Sharded Data

SmartJoins (available only in ArangoDB Enterprise) follow the concept of co-located joins and power highly-efficient and fast join operations against large volumes of distributed data in a cluster setting. With the addition of SmartJoins, ArangoDB Enterprise provides a unique feature set to work with complex queries against distributed data efficiently.

Streaming Transactions API: ACID transactions via language driver

ArangoDB 3.5 enables BEGIN, COMMIT or ABORT (rollback) ACID transaction operations from supported language drivers, including Java Sync, Go, JavaScript and PHP. While ArangoDB has always supported ACID transactions, the streaming transactions API allows users to execute and control them from their favorite language bindings, creating an experience similar to a RDBMS, but in NoSQL database. ArangoDB currently supports full ACID guarantees in single instance setups only.

Configurable Analyzers and Sorted Indexes: Search Engine Performance Improvements
ArangoSearch is a C++ based full-text search engine that's natively integrated into ArangoDB and can be used in combination with document and graph queries. With ArangoDB 3.5, ArangoSearch now has sorted indexes and configurable analyzers, allowing users to speed up query performance by 1500x, as well as more easily manage ArangoDB in a multi-tenant environment.

k Shortest Path and PRUNE: Additional Graph Database Capabilities
ArangoDB 3.5 sees new graph query performance improvements with k Shortest Path and PRUNE. k Shortest Path enables users to query for all shortest paths between two vertices and analyze result sets by path length or weight. This helps with a variety of use cases, from threat intelligence and cybersecurity to navigation. PRUNE lets users add a syntax to their queries that adds the ability to explicitly stop deeper searching at a specific condition. This helps reduce the overhead generated by a traversal query and speed up query performance.

Data Masking and Time-to-Live Index: Enhanced Data Security and Extended GDPR Compliance
Data masking gives users the ability to safely work with production data in their testing environment by masking personal data like credit cards, social security numbers, names, and addresses in a way that anonymizes sensitive data. In ArangoDB Enterprise, users can preserve the structure of their data to test and develop applications further with production-like data. Data masking helps businesses better comply with security regulations such as the European Union's General Data Protection Regulation (GDPR) and the upcoming Consumer Privacy Act of California.

Time-to-live index is a new index type that lets users configure it to automatically expire documents in a collection. Users can configure these documents to expire on a specific date/time or after a certain period of time, as well as the frequency of the background job deleting the expired documents.

Index Hints and Sort-Limit Optimization: Query Performance Improvements
ArangoDB 3.5 also includes query performance improvements with the introduction of index hints, named indexes, and sort-limit optimization. Index hints allow users to avoid full collection scans by either providing a hint for an index in a given query, or allowing the user to enforce the usage of a certain index. Sort-limit optimization speeds up the performance of SORTS on large quantities of data where users only need a small fraction of the results. It maintains a reduced set of data in memory, preventing the need to sort an entire data set in order to return results.

Learn more
* For more details on the features included in ArangoDB 3.5, read the blog:
www.arangodb.com/2019/08/multi-model-database-arangodb-3-5-released-distributed-joins-streaming-transactions-extended-graphdb-search-capabilities
* To join a webinar for a live overview of what's included in ArangoDB 3.5 with Jörg Schad, ArangoDB Head of Engineering and Machine Learning, register here:
www.arangodb.com/arangodb-events/arangodb-3-5-feature-overview
* To get started with ArangoDB, download the latest version: www.arangodb.com/download

About ArangoDB
One database, one query language, and three data models. With more than 7 million downloads and over 8,000 stargazers on GitHub, ArangoDB is the leading open source native multi-model

database. It combines the power of graphs with JSON documents, a key-value store, and a full-text search engine, enabling developers to access and combine all of these data models with a single, elegant, declarative query language.

Simplifying complexity and increasing productivity is the mission of ArangoDB Inc., the company behind the project. Founded in 2014, ArangoDB Inc. is a privately-held company backed by Bow Capital and Target Partners. It is headquartered in San Francisco and Cologne with offices and employees around the world. Learn more at www.arangodb.com.

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