

AllegroGraph Advances Enterprise Knowledge Graph Solutions with Support for SHACL

Franz's Knowledge Graph Platform Delivers Leading-edge Customer 360 Insights

OAKLAND, Calif., August 14, 2019 – Franz Inc., an early innovator in Artificial Intelligence (AI) and leading supplier of Semantic Graph Database technology for Knowledge Graph Solutions, today announced its flagship product AllegroGraph now supports Shapes Constraint Language (SHACL), a World Wide Web Consortium (W3C) specification for validating graph-based data against a set of conditions. Franz's Knowledge Graph solutions with SHACL improves the ability to validate data and applications from independently maintained sources within an overall system that can interoperate reliably.

"Enterprise systems are increasingly complex, often requiring data and software components to be accessed and maintained by different departments or other companies," said Dr. Jans Aasman, CEO of Franz, Inc. "This complexity often becomes an organization's biggest challenge as changing data fields and adding new applications rapidly grow in order to meet the business demands for increased customer insights. Adding SHACL to AllegroGraph helps our customers simplify the complexity of enterprise systems through the ability to loosely combine independent elements, while allowing the overall system to function smoothly."

AllegroGraph v6.6 includes a SHACL validation engine that confirms whether data is conforming to the desired requirements. SHACL provides a way for a Data Graph to specify

the Shapes Graph that should be used for validation and describes how a given shape is linked to targets in the data. The addition of SHACL is just the most recent enhancement to AllegroGraph, which continues to showcase innovation at the forefront of the graph database market by becoming the first multi-model semantic graph and document database.

Gartner recently named Graph Analytics a *Top 10 Data and Analytics Technology Trend for 2019* to solve critical business priorities. Gartner predicts, “The application of graph processing and graph DBMSs will grow at 100 percent annually through 2022 to continuously accelerate data preparation and enable more complex and adaptive data science.”

“The size, complexity, distributed nature of data, speed of action and the continuous intelligence required by digital business means that rigid and centralized architectures and tools break down,” said Donald Feinberg, vice president and distinguished analyst at Gartner. “The continued survival of any business will depend upon an agile, data-centric architecture that responds to the constant rate of change.” (Source: *Gartner Identifies Top 10 Data and Analytics Trends for 2019*, February 18, 2019)

AllegroGraph: A Semantic Graph and Linked Document Database

AllegroGraph is the only multi-model semantic graph database to support the ingestion of JSON and JSON-LD documents, comma separated value (CSV) files and RDF data. AllegroGraph makes it possible to automatically link structured RDF data to information within JSON documents based on semantic concepts, allowing users to perform graph analytics across linked data within databases, document stores and CSV files.

Unlike NoSQL document databases, which only link data objects within single documents, AllegroGraph semantically links data objects across multiple JSON documents, RDF databases and CSV

files. Users can run a single SPARQL query that results in a combination of structured data and unstructured information inside documents and CSV files. AllegroGraph also enables retrieval of entire documents.

AllegroGraph Lays the Foundation for Knowledge Graphs and AI

Semantic Graph databases provide the core technology environment to enrich and contextualize the understanding of data and provide the foundation for Knowledge Graphs and AI. The ability to rapidly integrate new knowledge is the crux of a Knowledge Graph, which depends on semantic technologies.

Gartner recently recognized knowledge graphs as a key new technology in their Hype Cycle for Artificial Intelligence and Hype Cycle for Emerging Technologies. Gartner's Hype Cycle for Artificial Intelligence 2018 states, "The rising role of content and context for delivering insights with AI technologies, as well as recent knowledge graph offerings for AI applications have pulled knowledge graphs to the surface."

Franz's Knowledge Graph Solutions include both technology and services for building enterprise-class Knowledge Graphs based on best-of-class tools, products, knowledge, skills and experience. At the core of each solution is AllegroGraph, which is utilized by dozens of the top F500 companies worldwide and enables businesses to extract sophisticated decision insights and predictive analytics from highly complex, distributed data that cannot be uncovered with conventional databases.

As a crucial part of Franz's Knowledge Graph solution, Franz provides expertise in designing ontology and taxonomy-based solutions by utilizing standards-based development processes and tools. Franz also offers data integration services from siloed data using W3C industry standard semantics, which can then be continually integrated with information that comes

from other data sources. In addition, the Franz data science team provides expertise in custom algorithms to maximize data analytics and uncover hidden knowledge.

Availability of AllegroGraph SHACL

AllegroGraph 6.6 with SHACL support is immediately available directly from Franz Inc. For more information, go to AllegroGraph.com.

Upcoming Webcasts

Franz Inc. will be hosting a webinar **Advanced Knowledge Graphs using SHACL and JSON-LD** on September 19, 2019 at 10AM Pacific. Register for the webinar.

Additionally, Franz will present, **The Knowledge Graph that Listens – Taxonomy driven speech recognition using AllegroGraph** on October 23, 2019 at 10AM Pacific. Register for the webinar.

About Franz Inc.

Franz Inc. is an early innovator in Artificial Intelligence (AI) and leading supplier of Semantic Graph Database technology with expert knowledge in developing and deploying Knowledge Graph solutions. The foundation for Knowledge Graphs and AI lies in the facets of semantic technology provided by AllegroGraph and Allegro CL. The ability to rapidly integrate new knowledge is the crux of the Knowledge Graph and Franz Inc. provides the key technologies and services to address your complex challenges. Franz Inc. is your Knowledge Graph technology partner.

All trademarks and registered trademarks in this document are the properties of their respective owners.