The Silicon Review article – Delivering Scalable Knowledge Graph solutions Franz Inc.

These days Artificial Intelligence (*"AI"*) is one of the top investment areas for companies looking to improve ROI on operations, products, and create customer 360 views. Using AI to create *"Enterprise Knowledge"* and link it across the Enterprise to create a *"Knowledge Graph"* is a key

Dr. Jans Aasman, CEO, Franz Inc.

differentiator for companies in an ever-increasing competitive landscape. The foundation for Knowledge Graphs and Artificial Intelligence lies in the facets of semantic technology provided by Franz's AllegroGraph database. Semantic Graph databases, such as AllegroGraph provide the core technology environment to enrich and contextualized the understanding of data. The ability to rapidly integrate new knowledge is the crux of the Knowledge Graph and depends entirely on semantic technologies.

Knowledge Graphs and Artificial Intelligence (AI)

An early innovator in Artificial Intelligence, Franz Inc. is a leading supplier of Knowledge Graph solutions with Semantic Graph Database technology as the foundation. The firm's scalable Graph database products provide the storage layer for powerful reasoning and ontology modeling capabilities for these new Enterprise Knowledge Graph solutions. With the goal of providing infrastructure for a new level of data integration and application interoperability, Franz Inc. is well positioned to unleash the potential of Knowledge Graphs for a wide range of industries.

AllegroGraph

AllegroGraph is a database technology that enables businesses to extract sophisticated decision insights and predictive analytics from highly complex, distributed data that cannot be uncovered with conventional databases. Unlike traditional relational databases or other NoSQL databases, AllegroGraph employs semantic graph technologies that process data with contextual and conceptual intelligence. AllegroGraph is able torun queries of unprecedented complexity to support predictive analytics that help organizations make more informed, real-time decisions. AllegroGraph is utilized by dozens of the top F500 companies worldwide.

At the recent Intel launch event for Xeon Scalable Processors, AllegroGraph was featured as a part of the Semantic Data Lake for Healthcare. A collaboration with Franz Inc., Montefiore Medical Center (the eighth largest hospital in the U.S.), and Intel to provide a scalable and extensible Knowledge Graph Healthcare platform designed for Accountable Care and Personalized Medicine initiatives.

Industry Leading Data Security

Semantic graph databases store their data in theW3C standards-based Resource Description Framework (RDF). These are commonly known as *'triples'* or *'quads'.* Each node-link-node combination that forms the graph is stored in these standards compliant *'triples'.* Franz Inc. recently announced an industry leading security feature, AllegroGraph Triple Attributes. This unique feature provides met a data for each individual triple. Triple Attributes provides the linking and discovery power of Graph Databases with the security of need-to-know access. This approach has the flexibility to implement HIPAA for the healthcare industry, the privacy rules for the financial industry and the government models and policies for classified information.

Originally initiated for government level data security, the design of the Triple Attribute feature goes well beyond security. Triple Attributes can be implemented for such diverse data analytics domains as AI truth maintenance systems, atmospheric observations to better understand real-world events like crop yields, or storing blockchain hashes and ICO public keys for KYC applications and analytics.

Graph databases are widely used in many industries such as life sciences, healthcare, financial services, government, and intelligence. Graphs are particularly valuable in these sectors because of the complex nature of the data and needs for powerful, yet flexible data analytics. The main advantage of graph databases is the fact that it allows visibility across the data thereby enabling organizations to share data and show how data is connected.

Products and Services

Franz provides a variety of services as part of its Knowledge Graph solution; from architectural consulting and technical seminars to training. The firm's flagship product, AllegroGraph, provides the necessary power and flexibility to address high-security data environments such as HIPAA access controls, privacy rules for banks and security models for policing, intelligence and government. If you really want to develop your corporate Knowledge Graph and address complex Artificial Intelligence problems, you need a data system that goes beyond just data. You have to create a system that can link to anything outside your own predefined parameters—and that can learn from previous experiences. That is where a Semantic Graph Database, like AllegroGraph, comes into the picture.

Meet the CEO

Dr. Jans Aasman is the **CEO** of Franz Inc. He started his career as an experimental and cognitive psychologist, earning his

Ph.D. in cognitive science with a detailed model of car driver behavior using Lisp and Soar. He has spent most of his professional life in telecommunications research, specializing in intelligent user interfaces and applied artificial intelligence projects. Dr. Aasman has gained notoriety as a conference speaker at such events as Smart Data, NoSQL Now, Semantic Technologies Conference, International Semantic Web Conference, Java One, Linked Data Planet, INSA, GeoWeb, AAAI, Enterprise Data World, STIDS, ODSC, Text Analytics, and DEBS to name a few.

"Enterprises want the flexibility of graph databases, but they also want the security they have come to rely on with relational databases. Our new Triple Attributes give organizations an elegant mechanism to implement the ultimate in graph database security."