

Franz Delivers First Real-time N-Dimensional Analysis for Big Data

Doors Open to New Life-Saving Applications in Personalized Medicine and Public Safety

OAKLAND, Calif. – July 13, 2015 – Franz Inc., the leading supplier of Semantic Graph Database technology, today announced that the company has added patented N-dimensional analysis capabilities to its flagship product, AllegroGraph, marking the first time data scientists can answer complex SPARQL queries across multiple dimensions over billions of records in sub-second time. This technologic breakthrough is propelling new applications in areas such as Personalized Medicine, Insider Threat Detection, National Intelligence, Defense, Cyber Security and Law Enforcement.

AllegroGraph is the first Graph Database to support analysis across N-dimensions – any conceivable measurement of an object, property or operation. For example, AllegroGraph can analyze temporal (time) and geospatial (location) dimensions relative to any ‘event,’ such as a disease, drug interaction, genetic combination, sound, temperature, image, social media post or physical sensor.

“You can capture event data, even multi-dimensional event data, in any data store,” stated Robin Bloor, co-founder and Chief Analyst of The Bloor Group. “The real need is to store and manage the data in an intelligent way and to build applications on top of it. This is where AllegroGraph (from Franz Inc.) shines. It is an RDF Graph database – although in my view, it is best thought of as a platform that is particularly suited for building apps that process event data.” (Source: Inside Analysis, Events that Change the World,

June 8, 2015)

“Expanding the number of dimensions in data also grows the number of interrelationships among data,” said Dr. Jans Aasman, CEO, Franz Inc. “In the past, multi-dimensional analysis has required ‘supercomputing’ techniques and technologies, which has deterred many important types of analysis in healthcare, public safety, agriculture and other areas. But by leveraging the unique ‘many-to-many’ attribute of graph database technology with the semantic query capabilities possible with AllegroGraph, we were able to overcome the historic performance issues that have plagued high-dimensional data analysis for event processing.”

AllegroGraph is a high performance Semantic Graph Database that enables analytics by leveraging the W3C industry standards and enables businesses to extract sophisticated decision insights and predictive analytics from highly complex, distributed data that cannot be uncovered with conventional databases.

“Because it (AllegroGraph) is a Graph database, it can store pretty much any kind of data and query it, not just in the time-worn relational fashion, but also in a graphical manner – carving out graphical maps of relationships. And on top of that, it can apply semantics to deduce as-yet-undiscovered knowledge from the data. Its capabilities are very broad, and they provide a glimpse of the shape of things to come,” added Bloor.

Unlike traditional relational databases or Property Graph Databases, AllegroGraph employs semantic graph technologies that process data with contextual and conceptual intelligence. AllegroGraph is able run queries of unprecedented complexity to support predictive analytics that help organizations make more informed, real-time decisions.

“Previous technology supported searching and reasoning over

two-dimensional geospatial data, whereas more recent technology supports three-dimensional geospatial data,” according to David Frankel, a 30 year technology industry veteran, technical strategist, architect and programmer. “But AllegroGraph can search and reason over an open-ended number of additional dimensions. Thus these new facilities are not merely three-dimensional, because there is no restriction to three dimensions. It is more accurate to use the term N-dimensional to describe the nature of graph databases and related applications that use these new facilities.” (Source: Datanami, Multidimensional Graph Data Open the Door to New Applications, June 2, 2015)

Franz is working with partners and customers to apply AllegroGraph’s N-dimensional analysis in the areas of Personalized Medicine, Insider Threat Detection and National Intelligence/Defense. Given there is no restriction to the number of dimensions, this powerful technology can help predict, prevent and mitigate the impact of high-risk events.

Personalized Medicine

Healthcare generates and processes huge volumes of information. The ability to access all this data interactively and in real-time is key to making Personalized Medicine a reality. Using AllegroGraph Semantic Graph databases that enable N-dimensional graphical analysis over new combinations of data – including individual patient information, genetic data, medical device images, clinical trials, drug information and public health data – will fuel discoveries, significantly improve efficiencies and personalize care.

Insider Threat Detection

There is growing risk that nations, companies and organizations face from insider threats. In most tragedies that involve an insider, there were strong signals that the person was at high risk for erratic or violent behavior

beforehand. AllegroGraph's N-dimensional analysis can empower organizations to predict high-risk events or aid in crisis situations by bringing together knowledge dispersed within documents, spreadsheets and relational databases with data from social media posts, online searches, texts and telephony data from company-owned devices.

Intelligence, National Defense & Law Enforcement

National intelligence, defense and law enforcement officers need to stay a step ahead of those who would do great harm by analyzing massive-scale data across geographically dispersed locations, while simultaneously collaborating with diverse disciplines and respecting privacy, civil liberties and data handling policies. AllegroGraph's N-dimensional analysis empowers data analysts to anticipate emerging threats through timely access to highly granular data from disparate systems that contain a broad array of data, such as: unstructured message data, structured identity data, charts, spreadsheets, telephony data, documents, network data, sensor data, social media posts and images. Analysts can investigate incidents and discover connections between seemingly unrelated events to quickly uncover and predict terrorism threats, cyber attacks, national security threats and other types of hostile attacks.

About Franz Inc.

Franz Inc. is an innovative technology company with expert knowledge in developing and deploying Graph Search solutions. AllegroGraph, Franz's flagship, high-performance, transactional, and scalable Graph Database, provides the solid storage layer for powerful Enterprise grade NoSQL solutions. AllegroGraph's Activity Recognition capabilities provides a powerful means to aggregate and analyze data about individual and organizational behaviors, preferences, relationships, plus spatial and temporal linkages between individuals and groups.

For additional Franz Inc customer success stories please visit:

- AllegroGraph – <https://allegrograph.com/customers/>
- Allegro CL – <http://franz.com/success/>

Franz's Professional Service team is in the business of helping companies turn Data into Information and Information into Knowledge. We combine Data, Business Intelligence, and Analytics consulting services under one roof for our customers.

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