

Bloor Research – 2017 Graph and RDF Database Market Analysis

Bloor Research, the independent technology research, analysis and consultancy firm has released their 2017 Graph and RDF Database Market Analysis.

In the Market Analysis illustration, the highest scoring companies are nearest the center. The analyst then defines a benchmark score for a domain leading company from their overall ratings and all those above that are in the champions segment. Those that remain are placed in the Innovator segment if their innovation rating is over 2.5 and Challenger if it is less than 2.5. The exact position in each segment is calculated based on their combined innovation and overall score. It is important to note that color coded products have been scored relative to other products with the same color coding. Comparisons across color codes are not necessarily valid.

“AllegroGraph is the highest ranked product in its class, and, thanks to Gruff, it was rated as the easiest product to use.” – Bloor Research

Strengths

- Gruff is a major differentiator. It provides by far the easiest way of developing graph queries that we have seen from any vendor. The company also partners with graph visualization vendors such as Linkurious.
- The analytic support provided is extensive and Franz is one of relatively few vendors that is serious about complex analytics. The nDimensional support is also a differentiator.
- We particularly like the semantic data lake concept as well as the ability to associate probabilities with relationships.



Read the Full Review

Click the image to view the larger pdf file.

Franz

Franz Inc. originated with the initial Artificial Intelligence boom and still provides its Lisp compiler to numerous Fortune 500 companies. The company started to develop AllegroGraph more than a decade ago at the request of U.S. DoD and IC customers. It is a quad store which you can employ as either an RDF database or to support property graphs, according to requirements. The product is cloud enabled. Its approach is to automatically index everything and it uses column-based index compression to reduce disk requirements. AllegroGraph supports transaction processing with ACID compliance and immediate consistency. However, many customers also use it for analytic applications. Text indexing is included as well as SOLR and Lucene integration. The product includes reasoning: both forward and backward chaining and it also includes full PROLOG support for logic reasoning. Unusually, AllegroGraph comes with its own browser-based visualisation and discovery engine, Gruff, which includes a visual graph query builder. The product includes "nDimensional" support which means that you can query against any combination of time, location, temperature, pressure and so on. Another major feature is that you can associate a probability with a relationship within a graph. In other words, you can estimate how likely a relationship is to be true. This is exactly the sort of functionality that cognitive computing provides. Graph algorithms and social network analytics are provided out of the box. Security is implemented at the individual triple level.

The other major differentiator for Franz is its focus on vertical market sectors where it has built (along with clients) specific ontologies, for example, for Healthcare. In collaboration with Montefiore Medical Center, Franz developed the first Semantic Data Lake for Healthcare (SDL). The SDL platform integrates complex information for daily healthcare management, clinical, population, community, environmental, behavioural and wellness research data. The SDL is an example of how AllegroGraph can be used as the analytics platform for a wide range of different applications instead of deploying multiple data marts thereby simplifying the computing environment. Because of these capabilities Franz increasingly refers to its database as a "semantic data lake": an apt description.

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Franz
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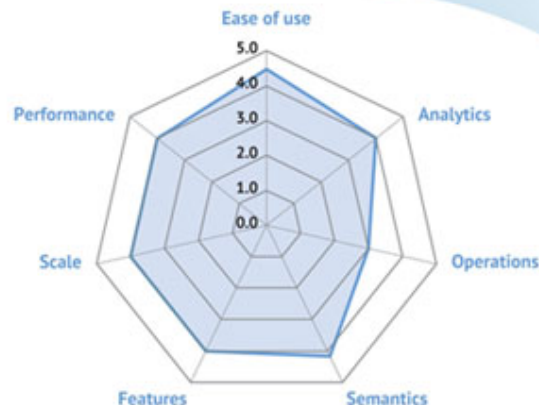
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Threats

- Vertical market focus is a good thing if you are in a relevant space, but it can be off-putting if not. In practice, it doesn't take long to implement appropriate ontologies so this is a perceived rather than a real threat.
- It is impressive that Franz can compete in the cognitive computing space and we especially like the fact that it is not a black box (in other words, you can see what is happening). Nevertheless, this does bring the company into competition with heavyweight vendors that already occupy this space.

Summary

AllegroGraph is the highest ranked product in its class and, thanks to Gruff, we rate it as the easiest product to use.



It is important to note that these scores are in comparison to a theoretical ideal product rather than in comparison to any competitive product.