Allegrograph News — February, 2017

In this issue

Free Webcast: The Power of Machine Learning and Graphs — March 1, 2017

Graphs and Machine Learning have long been a focus for Franz Inc. and currently we are collaborating with a number of companies to deliver the ability to understand possible future events based on a company's internal as well as externally available data. By combining machine learning, semantic technologies, big data, graph databases and dynamic visualizations we will discuss the core components of a Cognitive Computing platform.

We will discuss example Cognitive Computing platforms from Ecommerce, fraud detection and healthcare that combine structured/unstructured data, knowledge, linked open data, predictive analytics, and machine learning to enhance corporate decision making.

Join us 10:00 AM Pacific to learn more. For registration information, see here

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allegRo – The R Project API for AllegroGraph

This is an API for AllegroGraph. It provides an interface to perform actions such as creating repositories, evaluating SPARQL queries, and handling the AllegroGraph server.

R is a free software environment for statistical computing and

graphics. R provides a wide variety of statistical (linear and nonlinear modelling, classical statistical tests, time-series analysis, classification, clustering, i) and graphical techniques, and is highly extensible.

For additional information and to download, see here

AllegroGraph Version 6.1.5 Now Available

Release 6.1.5 is a maintenance release which fixes bugs, and has new improvements and optimizations.

Please see the release notes for a description of the changes.

Smart Data Conference — Tutorial: Build Your Own Cognitive Computing Platform, January 30

Cognitive Computing Platforms are a growing phenomenon that have been shown to add significant value to the Enterprise. IBM's Watson is just one of the more well known examples. The power of these platforms is that you not only base your enterprise decisions on what is in your structured enterprise

data warehouse, but you also mine the unstructured data. In addition, the platform combines proprietary and
public knowledge in the form of vocabularies, taxonomies, ontologies, and linked open data with a powerful layer of machine learning technologies. The resulting analytics are pushed back into the core knowledge corpus resulting in a learning system that continually tunes desired metrics…

For additional information, see here

Smart Data Conference – Presentation: Cognitive Probability Graphs for Smart Knowledge Management, January 31

Knowledge creation via Cognitive Probability Graphs stems from the capability to combine the probability space (statistical inference on patient data) with a knowledge base of comprehensive industry terminology systems. Cognitive Probability Graphs are remarkable not just because of the possibilities they engender, but also because of their practicality. The confluence of knowledge via machine learning, semantics, visual querying, graph databases, and big data not only displays links between objects, but also quantifies the probability of their occurrence. We believe this approach will be transformative across numerous business verticals…

For additional information, see here

Enterprise Data World Presentation: Developing an Advanced Analytics Capability on an Enterprise Data Lake, April 4

Enabling the Data Lake for scalable and extensible analytics with the ultimate goal of developing a learning system is rapidly taking shape for the Enterprise. Until recently big data was focused on processing massive amounts of simple, flat data. But now, there is a requirement to fuse complex data to create more intelligent analytic frameworks to achieve better business decisions. Adding advanced analytics to a Data Lake to create a scalable knowledge-based analytics platform for pattern recognition, classification, predictive modeling, and simulations is rapidly developing with use cases in Fraud Detection, Healthcare, E-commerce, Intelligence, and more…

For additional information, see here.

TechCrunch article — Putting data back into the hands of owners

In healthcare there is a growing desire for patients to own

their medical records. Interestingly, this desire is not coming from patients, it's based on the view from medical practitioners that patient care and quality of life is directly influenced by the ability of patients to access and utilize their data. This view is core to the Precision Medicine Initiative, a White House program for personalizing healthcare treatment for individuals and groups that have historically been underrepresented. Its mission statement points out that "Success will require that health data is portable, that it can be easily shared between providers, researchers, and most importantly, patients and research participants"…

See here to read the full article.

Linkurious plus AllegroGraph

Linkurious is an Enterprise class tool for visualizing graph data. Linkurious is a partner of the International Investigative Journalist Consortium (ICIJ) since the Swiss Leaks scandal. ICIJ network of 370 journalists is using Linkurious to investigate the Panama Papers. Integration with AllegroGraph is currently available for testing. The following images are of Linkurious screenshots displaying graph data stored in AllegroGraph. (Click on image to enlarge).
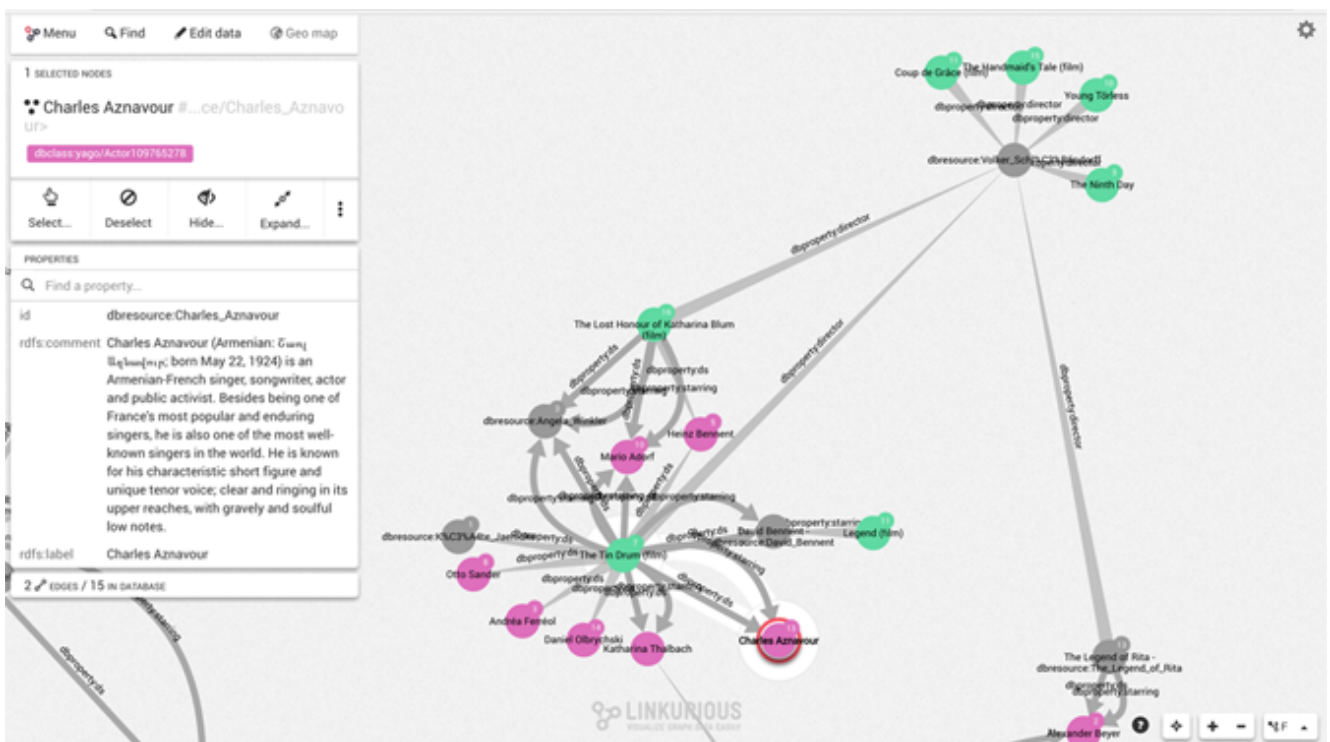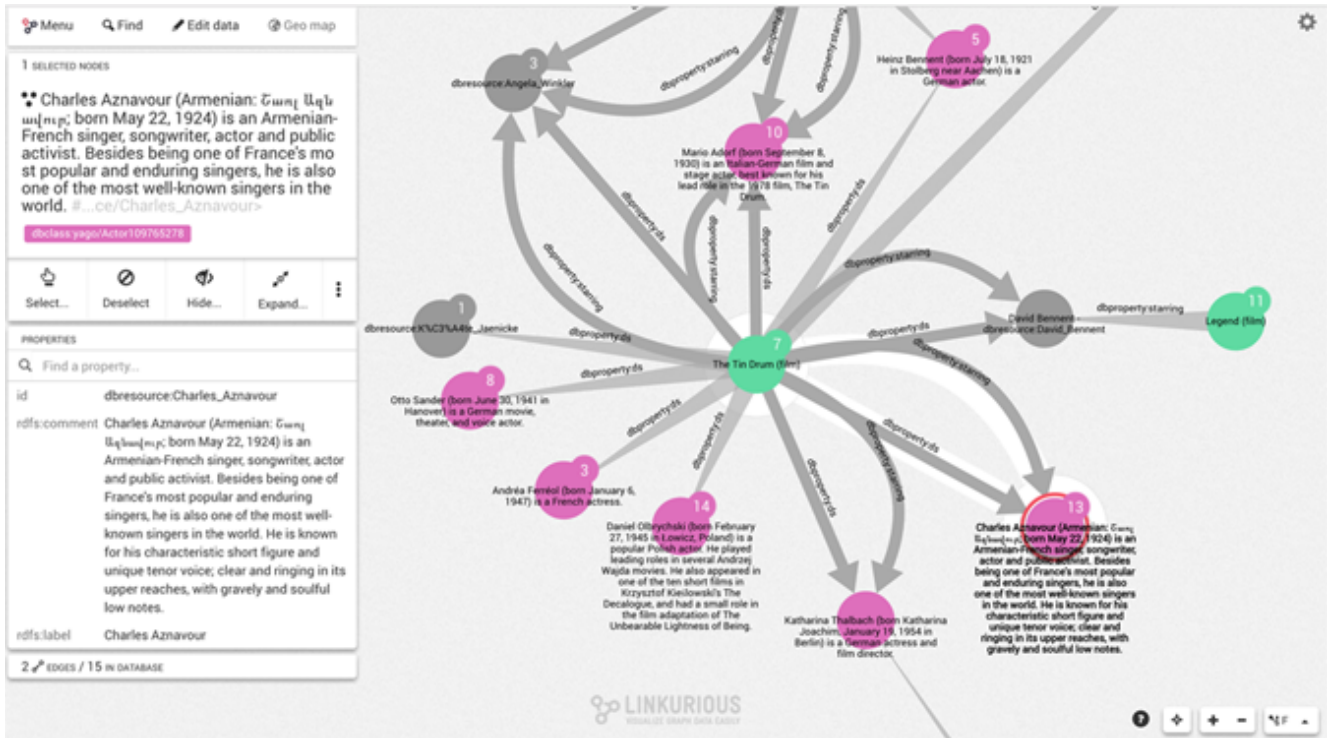
For additional information, please contact Linkurious

Gruff version 6.4 Now Available!

New Features Include:

- Fixed: In 6.3.3, dashes were not drawn where node labels are wrapped to multiple text lines and also at their start and end. This included not drawing the minus sign at the beginning of numeric literals.

- There's a new "View | Web Interaction" child menu where all but the first command are new. Two of them will tell your web browser to search either the web or Wikipedia on the selected node's label. The other two will attempt to import either descriptions or images from DBpedia or Wikipedia (respectively) based on the selected node's label, and display them as linked nodes when any are found.

- On the Mac, nodes can now be highlighted and unhighlighted by using the Command key along with a left click (and also dragging to "lasso" a group of nodes to highlight them). The standard gesture had not worked because the Control key is used instead, and a control-left-click on the Mac is interpreted as a logical right-click.

- Various improvements when displaying images (pixmaps) on nodes: The new option "Visual Graph Options | Node Labels | Maximum Initial Node Pixmap Size" limits the initial size of a node that displays an image. When resizing an image node, its width-to-height ratio will be maintained to avoid distorting it. After resizing an image node you can go back to the state just before resizing it, without going back further. The icon in the lower-right corner of an image node is a resizing icon to indicate that you can drag that corner to resize the

node. Fixed: Going back to an earlier state did not restore the earlier size of resized nodes.

- Fixed: Path-finding in Gruff 6.3.3 and earlier breaks on AllegroGraph 6.1.0 and later when the user does not have the privilege for evaluating arbitrary code on the server.
- Fixed: Doing a tree layout from a node that's connected with another copy of itself could draw the tree layout incorrectly and then cause an infinite recursion when moving the mouse over a node.
- When selecting a predicate in the graphical query view, there's a new option for selecting any of the "magic properties" that Franz provides for enhancing SPARQL queries. (You may not be able to specify the end values that some of them need, though, except by editing the generated query text in the query view.)
- User options are now saved automatically each time you explicity modify an option, to avoid losing changes when Gruff is closed in a way that it doesn't catch, such as with the close button in the title bar on the Mac (and maybe on GTK generally), or if Gruff or the machine should crash. Options are still saved at exit time as well. They are also saved when you save a view or open or create a database.
- The somewhat obscure new option "Visual Graph Options | Constraint-Based Layout Options | Link to Node Ratio Limit" causes the spring layout algorithm to be used even for small numbers of nodes if the links-to-nodes ratio is high enough that the constraint-based algorithm is likely to take a while.
- When a node is both selected and highlighted, two border colors are used to indicate that it is both, rather than only red to indicate that it's selected.
- Fixed: In the store-opening dialog, if both the server and port are filled in and you proceed to modify both of them, Gruff would hang for a bit after you change one of them as it asked the mismatching server and port for its

catalogs. This request is now always done asynchronously to avoid holding you up, though as a consequence you may now see the dialog appear before it has filled in the lists of catalogs and stores.

For additional information, see the Gruff Documentation

Recent Articles about Franz

OXFORD UNIVERSITY PRESS	• Oxford Journals – Briefing in Bioinformatics – How the strengths of Lisp-family languages facilitate building complex and flexible bioinformatics applications
VIRTUAL STRATEGY MAGAZINE virtual-strategy.com	• Virtual Strategy Magazine article – Why Semantics & Data Linking is Vital to Artificial Intelligence
CONTENT, DOCUMENT and KNOWLEDGE Management KMWorld	• KMWorld article – How does precision medicine become a reality? The Semantic Data Lake for Healthcare makes it possible
HealthIT Analytics News and Resources for Healthcare Analytics Pros	• HealthIT Analytics article – Semantic Computing, Predictive Analytics Need Reliable Metadata
inside BIGDATA	• insideBIGDATA article – The Magic of Visual Querying

Brief Customer and News Highlights

WE'RE HIRING!	**We are Hiring!**
HiMSS	2015 HiMSS Conference, Intel's Healthcare Panel, Parsa Mirhaji, MD, PhD, the Director of Clinical Research Informatics at the Montefiore Medical Center discusses their Semantic Data Lake and technical partnerships with Intel and Franz Inc. and Intel – Cisco presenting Franz's Semantic Data Lake Analytics at HIMSS 2015
	Bloor Research Positions AllegroGraph as a "Champion". Click on the image to enlarge.
	Franz was named as one of 21 NoSQL Innovators to Look for in 2020, in a post on The Wikibon technology research and advisory website because of its flagship RDF and Graph Database product, AllegroGraph.
Wolters Kluwer When you have to be right	Graph databases, like AllegroGraph, are one of the new technologies encouraging a rapid re-thinking of the analytics landscape. By tracking relationships – in a network of people, organizations, events and data – and applying reasoning (inference) to the data and connections, powerful new answers and insights are enabled… Wolters Kluwer Presentation: "How does Linked Open Data change the Publishing Landscape?"

Haystax Technology	Recorded Webcast — Haystax presents: Advanced Analytic Techniques for Insider Threat Detection
SaBC Sabah Biodiversity Centre	The Malaysian State of Sabah's Biodiversity Center's (SaBC) is using AllegroGraph to run the Sabah Biodiversity Integrated Information System (SaBIIS) AllegroGraph is the centralized RDF database used to integrate and store biodiversity data coming from more than 20 organizations that collect specimen data in different formats and schemas.Read the press release here.
krste.my	KRSTE.my (Knowledge Resource for Science and Technology Excellence, Malaysia) is an initiative, based on AllegroGraph, by MOSTI and spearheaded by MASTIC to address science and technology issues and challenges faced by the community, the ministry and the country. KRSTE.my is designed to be a Single Point Access Facilities (SPAF) providing intelligent collaborative knowledge management and learning services platform on Science and Technology and Innovation. More info here.
information management	Information Management article — Why Data Lakes Require Semantics
Inside Analysis	Inside Analysis article — Events that Change the World
datanami	Datanami article — Multi-Dimensional Graph Data Opens the Door to New Applications
datanami	Datanami article — Hadoop, Triple Stores, and the Semantic Data Lake

Recorded past Semantic Technologies Webinars: Recorded Webinars