SNML-TNG
Salzburg NewMediaLab – The Next Generation

Main location | Salzburg (Austria)
Other locations | -
Thematic field | Semantic technologies for content- und media-management

Success story summary

A „Marmot“ against the Flood of Data

„Apache Marmotta“ (in English: „Marmot“) provides an open source „Linked Data Platform“ for the interlinking of enterprise data repositories with the “Web of Data” according to the principles of the World Wide Web Consortium. Development was driven by Salzburg NewMediaLab and Salzburg Research. Applications include enterprise information integration, semantic search and annotation as well as recommender systems.

Success story

In its research program, Salzburg NewMediaLab extended the Linked Data Principles of the World Wide Web Consortium (W3C) to multimedia content (videos, photos, graphics, etc.), while at the same time realising W3C’s vision of the Read-Write-Web. The concept developed in Salzburg was called „Linked Media“, because the intention was to interlink structured and unstructured data and media content (or media fragments). The Linked Media concept enables organisations with content and media resources, to master the flood of data by semantic integration: enterprise data and content pools are linked to the Web of Data, allowing innovative solutions for search, navigation, annotation and recommendation.

In addition to the conceptual investigation of the „Linked Media Principles“, Salzburg NewMediaLab also came up with an open source reference implementation called the „Linked Media Framework“. Already at the time of the development of the framework, a working group at W3C published the specification of a generic “Linked Data Platform” (LDP) in response to the requirements of the growing Linked Data community. Since the Linked Media Framework not only covered the functional properties of this specification, but clearly exceeded the specification, the core of the Framework was extracted used to start an incubation project called “Apache Marmotta” (in English: “Marmot”) at the Apache Software Foundation (www.apache.org). The decision to move to the Apache Software Foundation was motivated by the increased awareness of industry that community based open source development is a desirable factor for product stability and business sustainability.

Apache Marmotta (http://marmotta.incubator.apache.org) was incubated in December 2012, published its 3.0 release in June 2013 and is ready to graduate and become an Apache top level project in the last quarter of 2013.

Impact and effects

Apache Marmotta provides an open source framework for the development of enterprise Linked Data Platforms for innovative search, annotation and recommendation solutions. Concrete applications were created by the consortium partners of SNML-TNG and validated in productive use: Red Bull Media House uses the principles for search and navigation in their core content pool. The documentation and archive department at the Austrian Broadcasting Corporation (ORF) supports the annotation of documentaries. Salzburger Nachrichten uses Marmotta to search and recommend content in their online news and community portal (salzburg.com) based on an enterprise knowledge base.

As of June 2013, Apache Marmotta is increasingly being linked with other successful open source developments (Apache Stanbol, Apache Solr) and is thus further contributing to the sustained success of the Linked Data Platform “made in Salzburg”. The software is now being used internationally, in diverse sectors such as media, automotive, and utilities.

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