

The Japanese Visual Media Graph project – lessons learned from four years of work

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Abstract

The Japanese Visual Media Graph (JVMG) project started in 2019 with the goal of developing a knowledge graph for researchers working with popular Japanese visual media such as anime, manga or video games [1]. It has been funded by the German Research Foundation's (Deutsche Forschungsgemeinschaft, DFG) e-Research Technologies program for a duration of three years and recently was extended for another three years. It intended to use the data on Japanese visual media that is being created and curated by the many enthusiast communities on the web and make it available to researchers.[2]

The presentation will explore some of the challenges and learnings from the past four years, mainly focusing on infrastructure aspects and user-facing interfaces for search and browsing. The current system is based on an open source RDF triple store (Apache Jena Fuseki) with multiple graphs containing the data from the individual sources [3]. Considerable effort was put into measuring the performance of different triple stores and comparing different approaches to retrieve the data for browsing.

The triple store is combined with a custom web frontend for end users and a web-based tool to configure multiple custom search indexes (using Elasticsearch). The web frontend includes a plugin API for extensions based on specific research use cases and has been released under an open source licence [4].

References

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