

Activity Charter

Title

REGISTRY

Summary

The purpose of the Registry Activity is to address the challenge of distributed registration and discovery of semantic annotations. A minimal Registry service should permit:

- The registration of a collection of RDF annotations at a URL or series of URLs;
- Requests about the location of collections of annotations, according to some set of criteria, and returning relevant responses;
- Request about the end points of other registries, returning those endpoints as URLs where known.

Activity Coordinator(s)

- 1.
- 2.

Context & Vision

Semantic annotations create the potential for the connection of heterogeneous and independently maintained data by using global identifiers (http URIs) for entity referencing. The realisation of this potential requires End User Service providers to know the existence of collections of those annotations. The sheer scale of the Web, and the lack of specialist search engines for RDF make this near impossible to achieve on a real-time basis, and certainly beyond the capacity of individual End User Service providers. Current practice tends to rely on informal notification (e.g. by email) between annotation hosts and those who make use of their annotations. This is clearly not a scalable system. The need exists for a Registry service (or network of registries), through which hosts can register the existence and availability of annotation collections, and End User Service providers can discover collections of annotations conforming to varying sets of criteria. A Registry should be distinguished from a *repository* service, in that it does not host the annotations themselves.

This Activity is dedicated to the specification, and development or adoption/adaption of a suitable Registry service (potentially with multiple instances) capable of registering the Web address and relevant metadata associated with collections of semantic annotations. The Registry will also serve as a mechanism for the discovery of those collections, and potentially the discovery of other registries within a network. The Activity will seek to determine and implement the minimum set of functionality for such a service, but may also specify and develop additional optional functions where they are deemed to be desirable by the community.

Scope

The focus of the Activity is ultimately to specify and establish a working Registry (or network of registries). Therefore the adoption, repurposing, or further development of existing registry systems should be considered before development work is undertaken. The service itself should focus on the provision of an API that can be used by third parties. While Graphical User Interfaces may improve the service for purposes of administration and browsing, they need not be defined in the specification. While the registry does not host the annotations themselves it should be considered whether storing of high level metadata such as VoID files, spatial footprint, gazetteer usage, or other content should be offered where it is likely to aid in search and discovery.

Actions

The Activity will:

- Specify essential and desirable functions for a Registry or network of registries that permit the registration and discovery of annotation datasets;
- Evaluate current solutions and as necessary adopt, adapt or develop a Registry or network of registries meeting this specification;
- Identify and implement a suitable hosting strategy for Registry instances.

Participants & Stakeholders

Activity Coordinators have overall responsibility for coordinating events and maintaining documentation online.

Annotation Data Hosts maintain semantic annotations and make them available as files or through triple stores, and register such datasets with the Registry to make them more easily discoverable.

Registry Developers specify, and adapt or develop implementations of a Registry service.

Registry Hosts maintain Registry instances, allowing for the registration and discovery of annotation datasets. The sustainability of such registries may require long-term institutional support.

End User Services draw upon Registry search functionality to offer visualization and discovery services that exploit collections of annotation data.

Dependencies & Liaisons

VISUALIZATION & ANALYSIS services are likely to depend on the REGISTRY Activity to discover relevant material.

The SEMANTIC ANNOTATION Activity produces and hosts the Annotation datasets which are registered through this Activity

The DOCUMENTATION & PEDAGOGY Activity will produce public-facing documentation for usage of the Registry.

The COLLABORATION & RESOURCING Activity will develop partnerships to support i) development work, ii) staff time for technical and user support, iii) Registry hosting. The GAZETTEER ALIGNMENT Activity may support advance Registry functionality, such as filtering by Gazetteer use or spatial bounds.

Communication

Communication will be through whatever channels are deemed most suitable among registry developers and hosts. It seems likely that this will be highly diverse. Discussion may also take place in conferences, workshops and meetings. New developments may be communicated via the Pelagios blog. Technical specifications will be made available through GitHub.

Financial Considerations

Registry services will be created and hosted by third parties. Long-term financial sustainability should be discussed in advance. Virtual discussions will make use of either free/low cost technologies (e.g. Skype, Google Hangouts, GitHub) or using infrastructure for other Pelagios Network activities. Face to face meetings are likely to piggy-back off other events such as Linked Pasts or domain-specific conferences, so no funds will be set aside for this unless specified as such in relevant project funding.

Legal & Ethical Considerations

Registry hosts should provide a legal statement clarifying terms and conditions of use. Registries are not responsible for the nature of any content registered, and End User Services make use of it at their own risk.

Given the reliance of both Annotation Data Hosts and End User Services on the persistent and long-term availability of Registry Services, a long-term sustainability policy should be in place.

Document Changes

Version 1 (**draft**). Karl Grossner. 1 December 2018.

Version 2 (draft). Karl, Leif, Wolfgang, Rebecca, Elton. 24 January 2019.

Version 3. Leif and Elton. 5 April 2019.

Accepted by Council Date