



Open Annotation Collaboration Interoperability Thread

Guiding Principles

1. The effort focuses on interoperability for annotations. It aims at allowing the **sharing of annotations across annotation clients and collections/applications**. The effort will explore the evolving interoperability specifications using both existing and special-purpose annotation clients, but it will not in any way prescribe client user interface, nor internal client architecture.
2. The focus is on sharing annotations for scholarly purposes. However, in order to maximize the likelihood of adoption, care will be taken to make the interoperability framework readily applicable in other domains. A direct consequence of these considerations is the choice to firmly base the interoperability approach on the **Architecture of the World Wide Web, Semantic Web principles, and best practices from the Linked Data effort**.
3. In alignment with the prevailing view, **an Annotation is an event** initiated at a moment in **time** by an **author** (human or software agent). Other entities involved in the event are the **Content of the Annotation** (aka Source) and the **Target of the Annotation**. An essential aspect of an annotation is the (implicit or explicit) expression of relationship between the Content and the Target.
4. Contrary to the prevailing view, in which Content is textual, Annotations must allow for **Content and Target of any media type**.
5. Contrary to the prevailing view, in which the author of the Annotation and the author of the Content are the same, the **Annotation, Annotation Content, and Annotation Target can have different authorship**.
6. The previous principles logically lead to an annotation model in which all core entities are Web resources: **Annotations, Content, and Target should all be (HTTP) URI-addressable**.
7. Many annotations involve parts of resources (image regions, slides of a video), and therefore support must be provided for **resource segment addressing**. Preferably this should be done with URIs (eg. URI fragments), but extensibility must be provided for cases where the use of URIs for segment addressing is not possible.
8. A variety of more complex scholarly annotation scenarios involve **multiple**

Targets and/or multiple Contents; the model must support this.

9. In order to delineate the definition of an annotation, **a uniform relationship between the Content(s) and the Target(s) of an annotation is assumed.** The annotation model must allow expressing the nature of this relationship. Note that the existence of such uniform relationship does not preclude the existence of other relationships between and among Content(s) and Target(s).

10. URI-addressable resources are ephemeral: the representations obtained by dereferencing their URI may change over time. Certain Annotations pertain to specific representations of Content and/or Target, and therefore they risk to be misinterpreted once those representations changed. **Measures should be provided that can help in avoiding misinterpretations of Annotations** that result from this fundamental problem of the Web Architecture, including the expression of timestamps and fixity information for Content and Target.

11. The annotation model should provide a set of top-level classes/entities and properties/relationships that will maximize interoperability across annotation clients, servers, collections and applications – but which can be extended and refined for specialist use cases.

12. In order to increase the likelihood of adoption, and in alignment with the goal of sharing annotations, no client-server protocol for publishing/updating/deleting annotations will be specified. Rather, the specifications will take a perspective whereby clients **publish annotations to the Web and make them discoverable using common Web approaches.** Such an approach does not require a preferred annotation server for a client, yet it does not preclude one either.