

Interoperability

What do we mean by “interoperability” with external namespaces?

1. Interoperability is a property of a product or system, whose interfaces are completely understood, to work with other products or systems, present or future, without any restricted access or implementation.

Interoperability - Wikipedia, the free encyclopedia

<https://en.wikipedia.org/wiki/Interoperability>

Modeling Goals:

1. Clearly identify regions of overlap with related standards
2. Identify points of content transfer between standards (cataloging or discovery systems, presentation or analysis systems, data integration systems)
3. Retain the specialized nature of each standard
4. Leverage the commonalities between standards

First we must differentiate between what is in the model and the use of external namespaces in bindings, particularly RDF Vocabularies. In the model we find different levels of interoperability:

Direct use of external namespace classes

- Direct use of Dublin Core in DDI-L and DDI-C
- Direct use of XHTML in DDI-L, DDI-C, and DDI-Views

Replication of external namespace classes mapping within DDI

- Bounding Box, Spatial Object, and related ISO 19115 structures
- Variable Cascade and ISO 11179

Similar functions mapping

- Mapping to earlier versions of DDI
- Mapping to GSIM classes

Plug in points

- DDI-L Geographic Structure and Geographic Location providing information required to link DDI described data to spatial objects

Binding Goals:

1. Leverage the use of commonly used RDF vocabularies
2. Clarify the relationship between commonly used generalized vocabulary terms and specialized DDI terms (see XKOS extensions that refine SKOS terms for use in statistical classification)

Goals for Interoperability Discussions:

1. Clarify terminology
2. Identify where each type of interoperability can be used most efficiently
3. Identify payoff in each type of interoperability
4. Recommend specific targets for interoperability
 - a. Between specific standards
 - b. General usage
 - c. Required documentation to support selected interoperability choices