Metadata Recommendations

Managing metadata in Fedora means considering how best to make use of RDF and Linked Data. Fedora enables RDF properties to be defined for objects it stores or references. This includes all types of metadata, such as technical, rights, provenance, and descriptive.

Fedora uses a set of internal properties (see http://fedora.info/definitions/v4/repository) and supplies the following ontologies by default.

```
premis: http://www.loc.gov/premis/rdf/v1#
test: info:fedora/test/
memento: http://mementoweb.org/ns#
rdfs: http://www.w3.org/2000/01/rdf-schema#
webac: http://fedora.info/definitions/v4/webac#
acl: http://www.w3.org/ns/auth/acl#
vcard: http://www.w3.org/2006/vcard/ns#
iana: http://www.iana.org/assignments/relation/
xsi: http://www.w3.org/2001/XMLSchema-instance
xmlns: http://www.w3.org/2000/xmlns/
rdf: http://www.w3.org/1999/02/22-rdf-syntax-ns#
fedora: http://fedora.info/definitions/v4/repository#
xml: http://www.w3.org/XML/1998/namespace
ebucore: http://www.ebu.ch/metadata/ontologies/ebucore/ebucore#
ldp: http://www.w3.org/ns/ldp#
dcterms: http://purl.org/dc/terms/
xs: http://www.w3.org/2001/XMLSchema
fedoraconfig: http://fedora.info/definitions/v4/config#
foaf: http://xmlns.com/foaf/0.1/
dc: http://purl.org/dc/elements/1.1/
```

This is a configurable list provided within the Fedora codebase: https://github.com/fcrepo4/fcrepo4/blob/master/fcrepo-webapp/src/main/resources/namespaces.yml

It is possible to include and use any ontology that exists, although it is recommended to use ontologies that are shown to be currently active and well-maintained for longevity purposes.

The Samvera Community and Islandora Community have developed metadata recommendations, including mapping recommendations for objects currently defining metadata using XML.

Metadata Recommendations:

- Samvera Community Technical Metadata Application Profile
- Samvera Community Rights Metadata Recommendation
- Samvera Community Referring to segments of a file Recommendation
- Samvera Community Decision Tree for New Predicates/Vocabularies

Additional Works in Progress

- Samvera Community MODS to RDF Mapping Recommendations (work in progress) This mapping recommendation offers two paths to transition MODS descriptive XML to RDF properties:
 - A direct mapping that provides single RDF statements for MODS concepts without any hierarchy or complexity of graphed relationships.
 Some MODS attributes and level of detail is lost but these statements can be managed directly with the Fedora object.
 - A minted object mapping that preserves the hierarchy and complexity of MODS concepts by creating (minting) new objects for subjects, names, and other descriptive elements representing a graphed relationship. Creates empty objects in the digital repository but MODS attributes and details are preserved.
- Islandora Community MODS to RDF Mapping Recommendations (work in progress)

It is possible to use metadata in XML format (or JSON or other file formats) alongside stored digital objects in Fedora but editing, management, and integration with access systems such as Hyrax will require that metadata is added and maintained as RDF properties. See Common metadata design patterns for examples of ways to take advantage of Fedora's capabilities.