EAC-CPF ontology and Linked Archival Data

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International Data Content Standard  
ICA - Committee on Best Practices and Standards (CBPS)  
http://www.ica.org/10206/standards/standards-list.html

ISAD(G), General International Standard Archival Description  (Stoccolma 1999 Congresso ICA Siviglia 2000)

ISAAR (CPF), International Standard Archival Authority Records for Corporate Bodies, Persons and Families  
(Camberra 2003 – Congresso ICA Vienna 2004)

International Data Structure Standard  
EAD – Encoded Archival Standard (version 2002)  
http://www.loc.gov/ead/

EAC – CPF Encoded Archival Context – Corporate bodies, Persons, and Families  
(version 2010)  
http://eac.staatsbibliothek-berlin.de
Linked Data cloud

lod 2007
lod 2008
lod 2009
lod 2010
lod 2011
IBC and EAC-CPF

eac-cpfSchema ontology

eac-cpf ontology for LAD

semantic environment for IBC archivi
EAC-CPFSchema Ontology

Classes

- element
- attribute
- controlled_value

Properties

- mayContainElement
- containRequiredElement
- hasAttribute
- hasRequiredAttribute
- mayContainValue
- reference
- isElementOf
- isRequiredElementOf
- isAttributeOf
- isRequiredAttributeOf
- isControlledValueOf
- mayContainDatatype
- diagram_ref
- occurrence
EAC-CPF Descriptions Ontology

from schema to LAD

basic principles

no new concepts

singular vs plural

no formatting properties

owl:sameAs, GeoNamesID, dc:relation
EAC-CPF Ontology for Linked Archival Data

**Classes**

entity, person, corporateBody,
family, controlArea,
descriptionArea, nameArea,
language, place, relation

**Properties**

authorizedForm, biogHist, control,
conventionDeclaration, cpfRelation,
cpfRelationType, description,
existDates, function, generalContext,
languageDeclaration, languageUsed,
legalStatus, localTypeDeclaration,
maintenanceAgency,
maintenanceHistory,
maintenanceStatus, mandate,
nameEntry, occupation,
publicationStatus, recordID,
resourceRelation, resourceRelationType, source,
structureOrGenealogy
Linked Archival Data

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Linked Archival Data

from XML EAC-CPF record to RDF
configurable way to access RDF data using simple RESTful URLs that are translated into queries to a SPARQL endpoint.
Semantic environment for *IBC Archivi* authority records

The idea of Semantic Environment behind *IBC Archivi* Authority records is very simple, it is about sharing, reuse and extend Linked Data in archival area, using archival data. To do this we try to create a different way to approach authority records, relating them with other resources and persons using semantic web interoperability.

Authority records by their nature are connection points between different resources. Unlocking authority record of somebody means connecting not only with his papers, but also with his library, his publications and with other related persons or entities.

This project, started in summer 2010, had as first step the semantic description of EAC-CPF standard using owl and RDFS.

Here you can find the ontology of the first work that describes only the EAC-CPF schema: http://archivi.ibc.regione.emilia-romagna.it/ontology/EAC-CPF/eac-cpfSchema.rdf and the graph to browse elements and attributes http://archivi.ibc.regione.emilia-romagna.it/ontology/EAC-CPF/genericEAC/RelationBrowseCIA.html

This first testing phase was extremely useful as a feasibility study and made available an effective work tool for archivists, but it could not be used to open the authority records codified with this standard to the world of Linked Open Data.

It was necessary to transform the elements of the schema into properties of the ontology and to change the point of view of the description of the model. It was necessary to move from the description of the XSD schema in RDF to the definition of a new model based on the schema (thus maintaining the names of the elements and the attributes).

To reach a description of the data model (that could be used for the Linked Archival Data), it was necessary to take a further step: starting from the records describing the authorities, bodies, persons and families of the *IBC Archivi* codified in EAC-CPF, we moved on to the definition of a data model based on the standard, maintaining the names of the elements and the attributes, and expressing them in OWL and RDFS.

Following this goal, now we have released a beta version of the EAC-CPF Descriptions Ontology useful to really "unlock" authority records descriptions.

This is the URL of EAC-CPF Descriptions Ontology for Linked Archival Data: http://archivi.ibc.regione.emilia-romagna.it/ontology/EAC-CPF/eac-cpf.rdf.

We have provided too a reference document for the ontology.
grazie

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