RDF based Reference Network Architecture for a distributed Digital Library system

The Royal Museum for Central Africa’s use case on African Bird information

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The STERNA European project funded by the eContentplus program in the topic of Digital libraries stands for Semantic Thematic European Reference Network Architecture. The system is based on a previous project called RNA for Reference Network Architecture which objectives were to set up a distributed knowledge management system based on RDF (Resources Description Framework) and SKOS (Simple Knowledge Management Structure), both W3C standards (http://www.rnaproject.org/).

The Royal Museum for Central Africa’s role in the project is multiple. As work package leader of the part “Technology improvement, target user validation, evaluation of the STERNA approach”, we will try to identify the target end users, perform a user need survey, do user validation tests of the system, and test interoperability with internationally recognized standards (among which TDWG standards) to finally suggest technological and functional enhancement of the existing system. For example we want to test the anthropology extension to the TDWG standard ABCD, presented by Charles Copp at the 2007 TDWG annual meeting.

RMCA’s Afrotropical zoology department will provide its unique African bird specimens information as Use Case Scenario for the project.
- 145 000 specimens
- 78% are digitized and 73% georeferenced
- 987 type specimens of 226 nominal species
- about 500 high quality digital images of these type specimens.

RMCA’s Cultural Anthropology department will collaborate to the Sterna project by providing information on ethnographic object representing birds or composed of bird parts like feathers or beaks. A first search in their database showed
- 36 objects representing birds,
- 311 objects composed of feathers,
- 7 objects composed of or representing a beak.

Raphia headset with red tail feathers of Psittacus erithacus (Kasai oriental, DR Congo)
Headset with human hair and ostrich feathers (N.E Uganda)

More info: http://www.sterna-net.eu
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