Project no. 018340

Project acronym: EDIT

Project title: Toward the European Distributed Institute of Taxonomy

Instrument: Network of Excellence

Thematic Priority: Sub-Priority 1.1.6.3: "Global Change and Ecosystems"

C5.143 Pilot implementation of integration with library catalogue and digital literature services

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Start date of project: 01/03/2006   Duration: 5 years

Organisation name of lead contractor for this component: 9 FUB-BGBM

Revision [draft]

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Dissemination Level		
PU	Public	x
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

Literature is one of the fundaments of a taxonomist's daily work. The Virtual Taxonomic Library (ViTaL) is to provide seamless access from within the EDIT Platform components to library catalogue and digital literature services. ViTaL is therefore a key component of the EDIT Platform for Cybertaxonomy (http://wp5.e-taxonomy.eu/).

Moreover, the CDM Data Stores are valuable repositories of bibliographic information linked to taxa, and in contrast to library catalogues the records are often on the level of individual articles rather than entire journal or book volumes. Making this data available to digital taxonomic literature services like BHL (Biodiversity Heritage Library) will greatly improve their search capabilities.

The Global References Index to Biodiversity (GRIB, http://bhleurope.gbv.de/) has been chosen for the pilot implementation of ViTaL. It is realised by EDIT in cooperation with the BHL-Europe project. The GRIB will incorporate bibliographic data from EDIT (European Distributed Institute of Taxonomy) and BHL-Europe partner's literature catalogues (see C5.146). It will de-duplicate these datasets and link the records to already digitized publications. It will also list the libraries where the related publications can be found and offer the possibility to mark publications for future digitisation.

In order to allow BHL incorporating bibliographic data bibliographic data from CDM Community Stores a harvesting service based on the OAI-PMH (Open Archives Initiative - Protocol for Metadata Harvesting - v.2.0) standard has been established. As another part of this harvesting infrastructure, an OAI-PMH data provider registry has been implemented. The documentation on the OAI-PMH implementation and on the provider registry is found at http://dev.e-taxonomy.eu/trac/wiki/CommunityServerOaiPmh. The screenshot https://dev.e-taxonomy.eu/trac/attachment/wiki/CommunityServerOaiPmh/OAI_2.0_Request_Results.png gives an example of a result page.

A Web service wrapper incorporated into the CDM library allows using the "Search and Retrieve via URL" (SRU) services (see C5.106) of the GRIB (http://kavia1.gbv.de/sru/DB=1.83) directly from within the Taxonomic Editor or DataPortal. The service wrapper will perform the requests to the SRU service and transforms the results into CDM entities which then can directly be integrated into the CDM. The SRU service wrapper is only one specific implementation based on a generic infrastructure which can easily be adapted to other services.

In order to enable the DataPortals to use the SRU service wrapper a RESTful web service exposes this functionality to the web. The following link (http://160.45.63.151:8080/cichorieae/ext/bhl-e/grib/sru?query=pica.tit%3D%22Linnaei+Species+Plantarum%22) demonstrates the functionality of this web service. The GRIB SRU service is being searched for bibliographic references containing the phrase "*Linnaei Species Plantarum"* in their title. The response contains a set of CDM Reference instances serialized in XML.

User interface elements which will make this feature available for specific implementations are subject of further developments.