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"

C5.088 Functional description for service to generate printed publication from the CDM

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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)	

The labour- and time-intensive back and forth between taxonomist and publisher is one of the bottlenecks in the taxonomic workflow. Furthermore, where print publication are created from a database, the final editing stages often involve only formatted print output. This results in inconsistencies between database and final print output.
Integrating a system or service to provide print publishing functionality into the Platform for Cybertaxonomy, and thus turning the database system into the true "master database" right up to the point of publishing would be a substantial improvement in the workflow.
Perhaps the most crucial point affecting the success and acceptance of such a system is that the user needs full control over the format and appearance of the printed product.

The proposed system outputs the data in the CDM into an OpenDocument format (ODF) document. ODF is an ISO-certified open standard that has been adopted worldwide by numerous organizations. Modern word processors or desktop publishing systems such as those included in OpenOffice or MS Office can be used to further edit the document. Alternatively, standard output document formats conforming to the editorial rules of specific publication series can be programmed, which allows direct output as a print-ready formatted document.

Technically, this will be achieved using the XML export functionality already existing in the CDM. An XML document containing all the taxonomic data in a well structured form will be generated. Since ODF is also XML based, the exported XML may be transformed into ODF by using eXtensible Stylesheet Language Transformations (XSLT). XSLT is a language to translate an XML document into another XML document with a potentially different schema or arrangement of data. The purpose of these translations is to bring the original data into a format directly understood by the importing system.

A default transformation stylesheet will be provided to transform the exported XML data into an ODF document. The default stylesheet will contain all data and be suitable for the most common use cases. The ODF document can then be edited using a word processor like OpenOffice.org, returning full control over the layout of the data back to the user. Users (or their publication departments) thus also have the possibility to use the macro functionality of their word processing or desktop publishing program to further automate editing of the output, e.g. to delete unwanted parts of the data.

Alternatively, instead of using the standard template, it will be possible to create specialised templates for individually laid out publications to facilitate the process of publishing for a series or journal with specific editorial rules. Using so-called styles, similar to CSS (Cascading Style Sheets) used in XHTML documents, a layout may be specified for every class of elements. The styles approach allows the user to change the layout of the data in a consistent manner.

To facilitate the publishing of taxonomic names, specialized templates should be provided for a limited number of journals active in the publication of new names.

Updates to this functional description will be published under:
http://dev.e-taxonomy.eu/trac/wiki/PrintPublisher