Missing Link: The EDIT Platform for Cybertaxonomy

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Introduction

A multitude of existing applications supports the many facets of taxonomy, but until now, there has been no platform linking these applications and making them interoperable. The result has been painful gaps in our ability to support the taxonomic workflow.

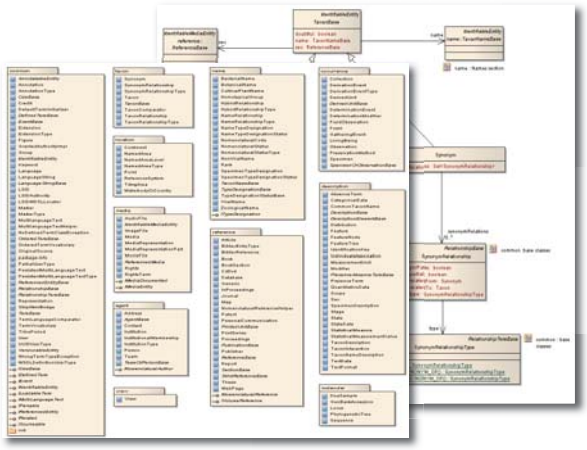

Fig. 1: The Common Data Model (CDM) covers all relevant data areas

EDIT Platform for Cybertaxonomy

The EDIT (European Distributed Institute for Taxonomy) Platform for Cybertaxonomy bridges these gaps by:
(I) offering a Common Data Model (CDM) covering all data relevant to taxonomists;
(II) implementing a Java-based library (CDM Library) to ensure generic access to CDM data independent of the underlying database system;
(III) offering integrated data transformation services for easy data exchange between the CDM and other applications, and supporting the widest possible range of standards and formats;
(IV) implementing a service oriented architecture (SOA) that interacts with other applications via web services;
(V) developing new CDM-based applications to edit, publish and visualize data, and supporting bulk import and editing;
(VI) using a single-sign-on security framework; and
(VII) defining rules for Platform compatibility.

Platform for Taxonomists

A taxonomist can choose from a wide range of tools specializing in particular parts of the taxonomic workflow. By using the platform integration services he can combine all data within one common database, refine it by using a CDM-compatible editor and, if he wishes, publish it via the Platform's tools for web or printed publication.

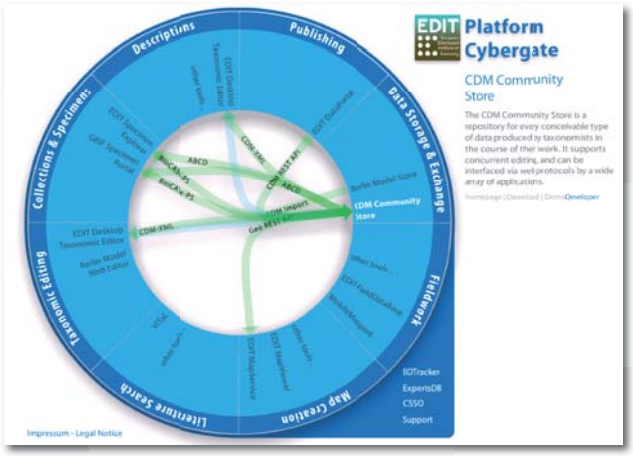

Fig. 2: Platform Cybergate describing pathways between platform components and platform compatible applications

Platform for Developers

The CDM Library's generic nature means it can be used as a base not only for Platform applications, but by all kinds of different software, using the Library's API via web services or local procedure calls. Platform-compatible applications specializing in a particular subset of taxonomic data (e.g. descriptive data) or supporting a defined taxonomic workflow (e.g. revisioning) can thus be developed on top of the CDM Library, using the Library's infrastructure for storing, validating, transforming, integrating and securing data.

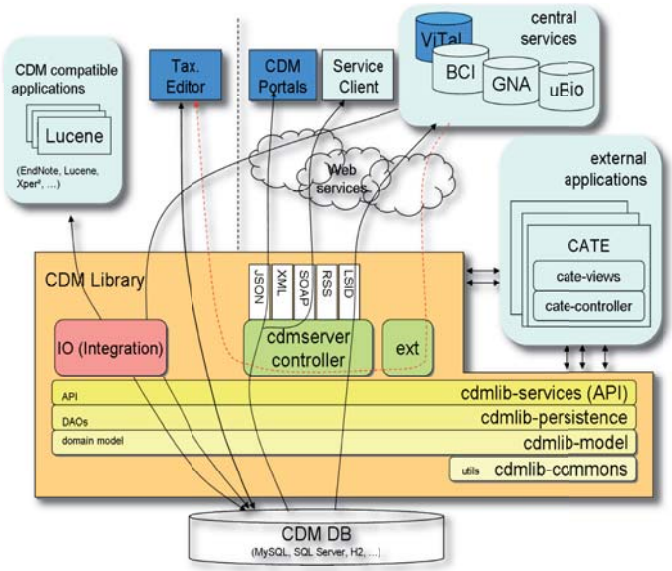

Fig. 3: Java-based library offering generic access to CDM data

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Find more information at
http://wp5.e-taxonomy.eu/
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SIXTH FRAMEWORK PROGRAMME