



Project no. 018340

Project acronym: EDIT

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Instrument: Network of Excellence

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C5.101 Framework Implementation available for Platform release 3

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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)	

C5.101 Framework Implementation available for Platform release 3

The CDM Framework is a Java-based programming library that offers all functionality needed to persistently store data based on the Common Data Model (CDM), to edit the data and to make it available for other applications and thus to the public.

1) CDM

The supported version of the CDM is basically version 3.0 (<http://wp5.e-taxonomy.eu/cdm/v30>, see Milestone M5.35) with some minor changes made due to user or developer demands. Version 3.1, available by February 2011 will incorporate some additional features to satisfy user demand from recently started implementation projects.

2) CDM Library

The technology used for the CDM Framework has already been described in C5.57 and C5.058. The latest architecture is visualized here:

<http://dev.e-taxonomy.eu/trac/wiki/CdmLibrary#layers>.

The integrated framework Spring has been updated to version 3.0. This version includes major changes, one of them being the support for RESTful services. It is intended to make the already existing CDM Library RESTful services fully compliant with the Spring implementation.

The current CDM library's version number is 3.0.

4) New Features in version 3.0

All features available in version 2.2 continue to be available in v. 3.0 and have already been described in C5.058. The following new features have been added and are available in version 3.0

a) Imports/Exports

- Import for eFlora exemplar groups (Flora Malesiana, Flora of Central Africa)
- Imports & Exports for PESI (ERMS – new, Fauna Europaea & Euro+Med - improved)
- Existing imports & exports have been improved (ABCD, Berlin Model, SDD, Images)

b) Database support

- PostgreSQL is now fully supported

c) API simplification

- A simplified API for specimen & observation access (DerivedUnitFacade) has been implemented

d) Migration tools

- Functionality is available to recognize library & default term versions
- Basic functionality is available to update data sources to be compliant with the current version in form of SQL scripts; further functionality is needed to fully run updates via the CDM Library.

e) CDM remote refactoring

- The former remote module has been split in 3 modules, one for building the CDM server, one for the remote API and one for web application related functionality.

- f) Print Publication
 - The print publication functionality is now available (see M5.41 for more information)
- g) Remote editing
 - A remote editing solution for CDM stores has been implemented via terminal services that can be used within a standard web browser (Ulteo Server)
- h) External Services
 - External services like IPNI, BCI, GRIB, GBIF are now accessible via adapters (C5.141)

5) Future developments / support

- a) Import for further data formats (further Excel formats), DarwinCore, and others
- b) Exports for ABCD, TCS, Excel, DarwinCore and others
- c) Improved remote editing of CDM stores through remote procedure call (RCP) or other solutions
- d) Integration of further external services such as ITIS, uBio, EDIT Geo Map Server occurrence data, Global Name Architecture (GNA), etc.
- e) Tested support for further database management systems (Oracle, DB2, Sybase,...)
- f) Improve migration tools to migrate data from older CDM versions to the current version
- g) Performance improvements
- h) Further API simplification
- i) Mirroring of CDM sites
- j) Integration with Community-Single-Sign-On

6) Documentation

The model part of the library is documented using JavaDoc documentation. Please see the model part in the project documentation at <http://wp5.e-taxonomy.eu/cdmlib/site/cdmlib-model/apidocs/index.html> for further information. A work in progress reference guide for the CDM library from the documentation part on the library site is available at <http://dev.e-taxonomy.eu/trac/wiki/CdmLibrary#ReferenceDocumentation>.

The library's developer site is <http://dev.e-taxonomy.eu/trac/wiki/CdmLibrary>. Project documentation for the existing version 3.0 exists at <http://wp5.e-taxonomy.eu/cdmlib/site/>.

7) Download

Download of the CDM Library and the CDM Server is available from the CDM Library download site at <http://dev.e-taxonomy.eu/trac/wiki/CdmLibraryDownload>