

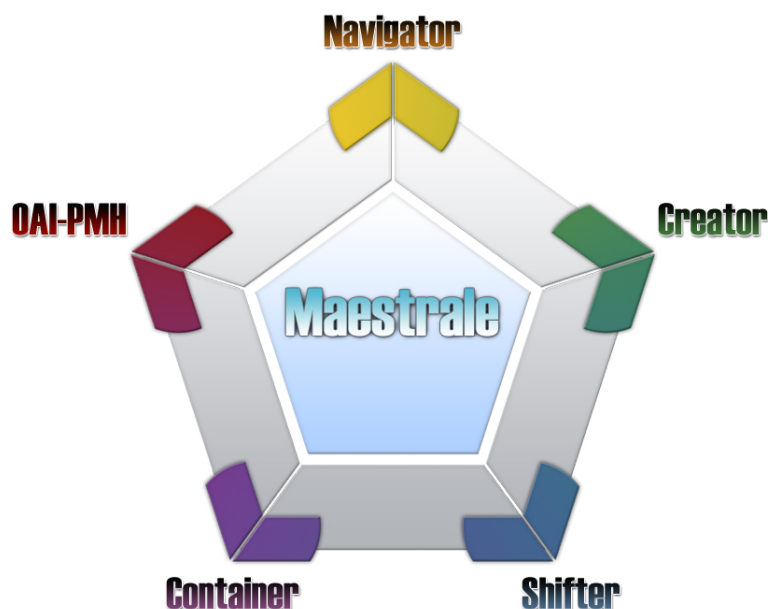
CodeX[ml] – the PRODUCT

Codex[ml] is an integrated system developed by CILEA within the "Piano Territoriale di potenziamento del Servizio Bibliotecario Nazionale - Regione Lombardia", funded partially with UMTS funds and partially by means of a CILEA's own investment, in order to archive, manage, visualize and preserve digital objects produced by digitization processes, together with the metadata related to them. The system allows every agency managing digital objects to make their visualization and preservation available by means of administrative metadata standards (first of all MAG and METS). Codex[ml] is a modular and scalable system able to fulfil the needs of: 1) data storage aimed at the digital preservation of the resources; 2) management, creation, import and export of XML metadata; 3) online fruition of digital objects managed by means of structures and relationships provided by the related administrative metadata; 4) dissemination of XML metadata according to the Open Archives Initiative standard [OAI-PMH](http://www.openarchives.org/OAI/PMH/). The system is quoted by the Multilingual Inventory of Cultural Heritage in Europe (Michael, <http://www.michael-culture.org/>) and, by means of OAI-PMH protocol, is compatible with the Italian portal Culturaitalia.

Structure and Technical Data

The applications constituting the Codex[ml] systems are the followings:

- **Maestrale:** is the framework on which all applications development is based. It deals with making all the shared features available to the rest of the system.
- **Container:** this application stands over the archive aimed



at preserving digital resources. It creates, copies, moves and deletes resources and their metadata. Container, by means of Caronte module, deals with "ferrying" every resource stored in it, whose dissemination is allowed, to the requesting application.

- **Shifter:** It is a metadata importer; using Shifter you can import the resources and store them in Codex[ml] Container. The application deals also with XML validation: the import is completed only if the document is valid. The application is also able to convert images in the Tiled Pyramidal TIFF format required by IIPImage (the image server used by Codex[ml]) and to create administrative metadata according to MAG standard, starting from basic guide files provided by the owner agencies.
- **Navigator:** is the application which allows to visualize and navigate the XML documents stored in the system, and it can be accessed by means of any OPAC or search engine. Once identified the digital object requested, Navigator represents its structure by means of a tree format, which can be fully explored. The information is retrieved in real time from XMLs stored in the database. Images are visualized by means of the image server IIPImage.
- **OAI-PMH:** the application deals with providing XML documents basing on requests expressed according to the OAI-PMH protocol, an international standard aimed at disseminating metadata from open archives. Thus it deals only with metadata retrieval and visualization. It allows to visualize the XML of each resource, by requesting it from the DB.
- **Creator:** Codex[ml] Creator is the application for creating and modifying metadata. It allows to divide a work into Projects (assigning the XML files to the different members of the working group), to connect the images of the digital object described to the XML file and to publish the compiled files.

Terms of use and Contacts

The use of this integrated system is free of charge (Apache License, Version 2.0).

Particularly for those who would like to use Codex[ml] on CILEA's hardware, CILEA provides: the shared use of Codex[ml] and of the data storage, the housing on appropriate hardware, the personalization of the applications.

For those who would like to install Codex[ml] on their hardware CILEA provides technical support for installation, together with the personalization of the system's applications, services for the information system management (servers and libraries management, database administration, backups, etc), customer support and updating activities on local or remote systems, training for the staff assigned to system's management, assistance for the staff assigned to system's management. For further information you can contact Emilia Groppo (groppo@cilea.it) or Claudio Cortese (cortese@cilea.it), phone: +390226995221 or view the website (<http://codex.cilea.it>).