

eMapps.com WP4 Repository Requirements

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Abstract

This document collects the requirements for MINOR. MINOR is a repository of learning resources developed by the WorkPackage 4 of the eMapps.com project (<http://emapps.com>). MINOR is connected to the European Schoolnet Federation of Internet Resources for Education.

Contents

1	Project	2
2	Storage	2
3	Resources submissions	2
4	Resources collections	3
5	Federated search	3
6	Discoverability	3
7	User management	3
8	Supported (natural) languages	4
9	User interfaces	4
10	Technical considerations	5
11	Licensing summary	5
A	Miscellaneous / Pending questions	5

Typographic conventions

The following conventions are used in this document:

- Each requirement is associated to a unique hierarchical number, like **1.1**
- Items like **1.1** *this* are important concepts defined by subpoints.
- Items like 1.1.2 *this* are subpoints.
- ‘*Quoted italic*’ items are used for citations.
- Items in constant width refer to external projects, URLs, email addresses, standards...
- ~~Strikethrough~~ items are removed items

1 Project

- 1.1 The project name is MINOR, which stands for ‘MINOR *Is Not an Object Repository*’.
- 1.2 The project source code and documentation are hosted on <http://minor.sourceforge.net>.
- 1.3 MINOR source code is released under the GNU LGPL licence.

2 Storage

- 2.1 MINOR stores metadata and resources.
- 2.2 Identifiers uniquely identify resources.
- 2.3 Each resource is directly accessible via a URL.
- 2.4 Each connected instance of MINOR that is connected to the federation is uniquely identified.
- 2.5 MINOR uniquely identifies each resource.
- 2.6 Metadata describes either a resource stored in MINOR or an external resource.
- 2.7 MINOR supports different DBMS (e.g., Oracle, MySQL).
- 2.8 MINOR’s default implementation supports Oracle and MySQL.

3 Resources submissions

- 3.1 Only authenticated users get access to the MINOR.
- 3.2 Authenticated users submit resources through a web interface.
 - 3.2.1 Users submit metadata through a web interface.
 - 3.2.1.1 Metadata might be pre-filled on the basis of user’s profile.
 - 3.2.2 Controlled vocabularies are used during metadata submission.
 - 3.2.3 A user can either upload a resource or submit a link (URL) to an external resource.
 - 3.2.4 The licence used for the resources is Creative Commons (CC)¹.
 - 3.2.4.1 CC implies that resources are accessible by a URL.
 - 3.3 A moderator approves or rejects submitted resources.
 - 3.4 Only approved resources are discoverable.
 - 3.5 Only approved resources are accessible.
 - 3.6 A user can only modify the resources that (s)he submitted.
 - 3.6.1 Metadata are modifiable.
 - 3.6.2 A moderator approves or rejects metadata modifications.
 - 3.6.3 Resources are modifiable.
 - 3.6.4 A moderator approves or rejects resource modifications.
 - 3.7 A user can remove the resources that (s)he submitted.
 - 3.8 Mass metadata upload is possible.

¹ <http://creativecommons.org/>

4 Resources collections

- 4.1 Users can define collections of resources.
- 4.2 Resources may belong to one or more collections.

5 Federated search

- 5.1 MINOR is connected to FIRE ².
- 5.2 Queries are submitted through the Simple Query Interface.
- 5.3 *Query Languages.*
 - 5.3.1 Multiple query languages are supported.
 - 5.3.2 Provisionally, the default query language is SQL.
 - 5.3.3 It is possible to easily add new supported query languages.
- 5.4 *Metadata Formats.*
 - 5.4.1 Metadata can be exported in various formats.
 - 5.4.2 Provisionally, the default metadata format is Strict LOM.
 - 5.4.3 It is possible to easily add new supported metadata formats.

6 Discoverability

- 6.1 Approved metadata are exposed to web crawlers.

7 User management

- 7.1 The system allows users to register.
- 7.2 Roles are assigned to registered users.
- 7.3 A user can have multiple roles.
- 7.4 Authorizations depend on user roles.
 - 7.4.1 *Simple User.*
 - 7.4.1.1 A simple user can submit resources.
 - 7.4.1.2 A simple user can modify the resources (s)he submitted.
 - 7.4.1.3 A simple user can delete the resources (s)he submitted.
 - 7.4.1.4 A simple user can manage his/her collections.
 - 7.4.2 *Resource Moderator.*
 - 7.4.2.1 Moderation consists of approval or rejection.
 - 7.4.2.2 A resource moderator moderates resource submissions.
 - 7.4.2.3 A resource moderator moderates resource modifications.

² <http://fire.eun.org>

- ┆ 7.4.2.4 A resource moderator moderates metadata submissions.
- ┆ 7.4.2.5 A resource moderator moderates metadata modifications.
- ┆ 7.4.2.6 A resource moderator has the possibility to motivate his/her moderation decisions.

7.4.3 *User Moderator.*

- ┆ 7.4.3.1 A user moderator moderates user registrations.

7.4.4 *Administrator.*

- ┆ 7.4.4.1 There is at least one administrator.
- ┆ 7.4.4.2 An administrator is also a user, a resources moderator and a user moderator.
- ┆ 7.4.4.3 An administrator has all permissions on all resources.
- ┆ 7.4.4.4 An administrator can delete resources.
- ┆ 7.4.4.5 An administrator can delete metadata.
- ┆ 7.4.4.6 An administrator can assign roles to users.
- ┆ 7.4.4.7 An administrator can banish users.
- ┆ 7.4.4.8 An administrator has the possibility to motivate his/her administration decisions.
- ┆ 7.4.4.9 An administrator has all rights on all collections.
- ┆ 7.4.4.10 An administrator manages supported query languages.
- ┆ 7.4.4.11 An administrator manages supported metadata formats.

8 Supported (natural) languages

- ┆ 8.1 MINOR's first release supports English.
- ┆ 8.2 The repository supports internationalisation (i18n/UTF-8).
- ┆ 8.3 The second release will support the languages of the eMapps.com partners from new members states.
- ┆ 8.4 One resource can be described in many languages.
- ┆ 8.5 One resource can be in zero, one or more languages (for example, an picture has no language).

9 User interfaces

- ┆ 9.1 A management interface handles the connection to the federation.
- ┆ 9.2 A user interface allows users to browse collections.
- ┆ 9.3 An admin interface manages the supported metadata formats.
- ┆ 9.4 An admin interface manages the supported query languages.
- ┆ 9.5 The GUIs are '*skinnable*'.

10 Technical considerations

10.1 The Management interface is built on dynamic pages deployed on TOMCAT³.

10.2 The Resources submission interface is built on dynamic pages deployed on TOMCAT.

11 Licensing summary

11.1 Gnu LGPL applies to the project.

11.2 Creative Commons applies to resources.

A Miscellaneous / Pending questions

A.1 *User management* (cfr section 7).

└ A.1.2 Quid if a user is removed?

└ A.1.3 Are the resources (s)he submitted assigned to the anonymous user ?

└ A.1.4 Are the collections (s)he submitted assigned to the anonymous user ?

³ <http://tomcat.apache.org>