A guide to semantic mapping between terminologies in Xtree

Draft 0.1 - 2012-02-07

URL Xtree 0.9

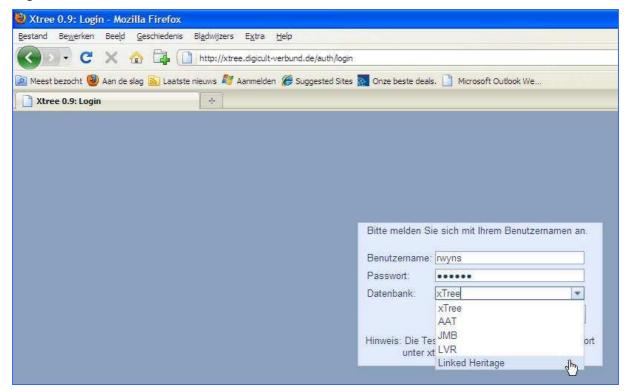
http://xtree.digicult-verbund.de/

1. Authentification

For login request, contact Roxanne Wyns (<u>r.wyns@kmkg.be</u>) and Marie-Véronique Leroi (<u>marie-veronique.leroi@culture.gouv.fr</u>)

- 1) Enter you username in Benutzername
- 2) Enter you password in Passwort
- 3) Select Linked Heritage from drop down list Datenbank
- 4) Click OK

Login

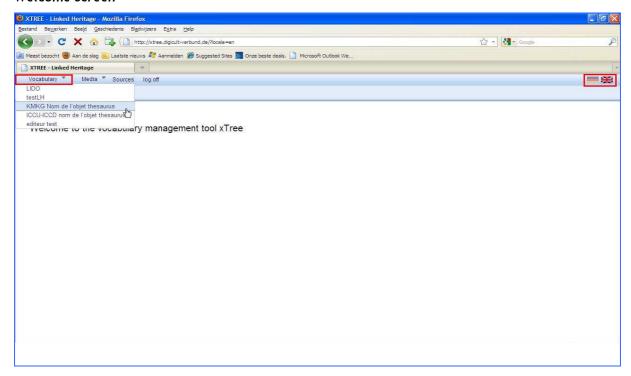


2. Welcome screen

- 1. The Xtree interface is available in German (main language) and English. You can switch languages by clicking on the flags in the upper right corner.
- 2. Select the vocabulary you want to look at or work on in the menu at the upper left corner.

- When clicking on Vocabulary a drop down list will appear with all the Linked Heritage vocabularies uploaded in Xtree¹.
- Rights are managed as such that you can consult all Linked Heritage terminologies, but have only full control over your "own" terminology.

Welcome screen



3. Consultation mode

3.1 Vocabulary browsing

There are multiple ways to browse through a vocabulary in search of a concept or term by selecting one of the following tabs:

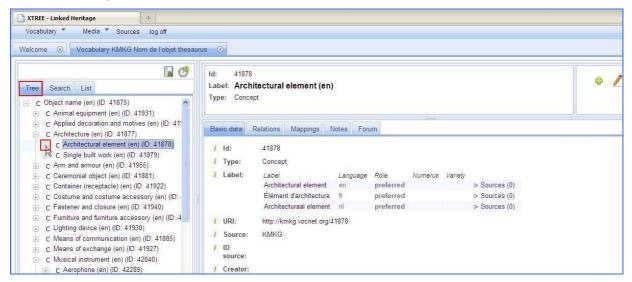
- 1) **Tree** view navigation: Push the sign left of the node entry to go deeper into the hierarchy.
- 2) **Search** for a term or ID²: Type in the term you are looking for and push the green arrow . Use asterisk to search on a partial word (e.g. "archi*" to find all terms starting with this string, or "*archi*" to get e.g. "landscape of architecture").
- 3) **List** (alphabetic): Click on + or at the bottom of the list to navigate through alphabetic list.

To upload a new vocabulary, contact Roxanne Wyns (<u>r.wyns@kmkg.be</u>) and Marie-Véronique Leroi (<u>marie-veronique.leroi@culture.gouv.fr</u>).

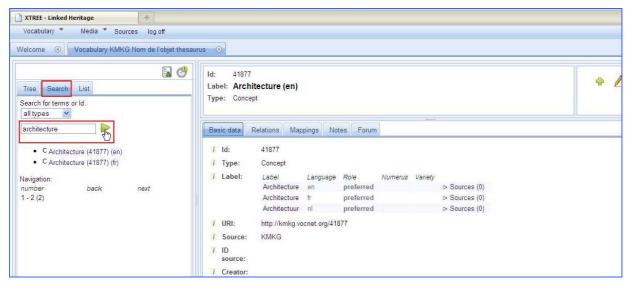
¹ At this moment the list still includes some entries for testing purposes (testLH and Editeur test). The testLH entry can be used by users to get acquainted with the system.

² The default is an exact string search

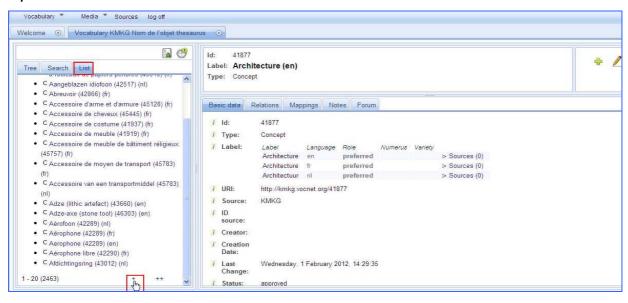
Tree view navigation



Search for a term or ID



Alphabetic list



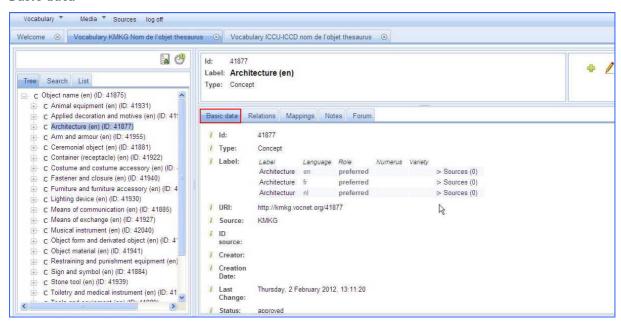
3.2 View concept information

Select a concept in the tree, e.g. Architecture.

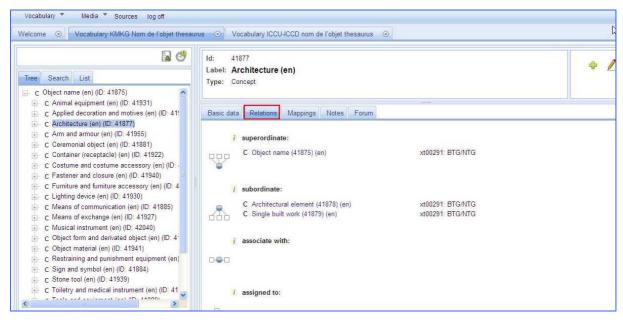
5 different tabs show in the right window:

- 1. Basic data: ID, labels, URI, Source,...
- 2. **Relations**: To concepts and categories, e.g. superordinate, subordinate, associate with,...
- 3. Mappings: For semantic mappings between multiple vocabularies
- 4. Notes: For additional information on the concepts, e.g. definitions, scope notes
- 5. **Forum:** To discuss with partners on concept level, e.g. level of match between mappings

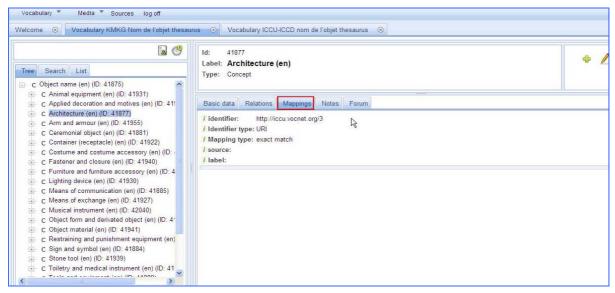
Basic data



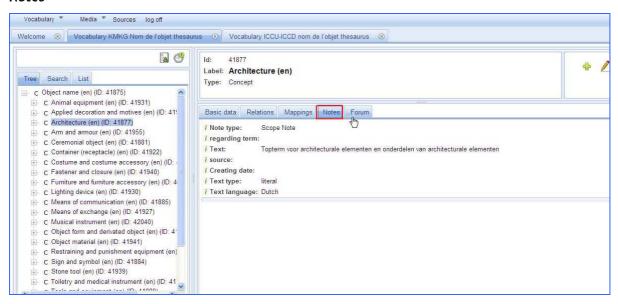
Relations



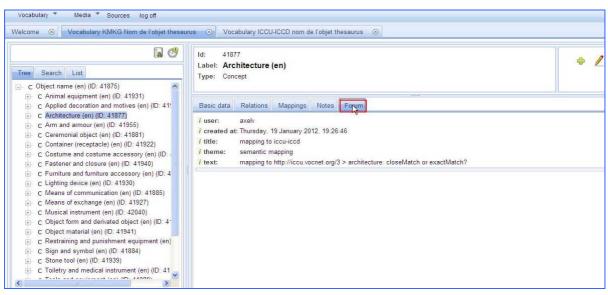
Mappings



Notes



Forum



4. Editing mode

4.1 Main symbols

• Add 🗐

• Edit

• Delete 🔀

Cancel

• Save 🤘

4.2 Create a new entry

- 1. Add a new concept to your vocabulary: click sign in upper right corner or by a right mousse click on a concept in the tree
- 2. Complete Basic data³:
 - Label:
 - o Label: enter term of phrase in a natural language
 - o Language: define the language of the lexical label
 - o Role: define if the lexical label is
 - Preferred: the preferred lexical label assigned to a concept. Can only be used 1 time per language
 - Alternative: e.g. for synonyms, near-synonyms, abbrevations, acronyms,...
 - Hidden: e.g. for misspelled words. The hidden label is meant to be accessible to applications performing text-based indexing and search operations. The hidden label is not visible, it is meant to redirect the user to the alternative label.
 - o Numerus: define if term is
 - Singular
 - Plural
 - Undefined
 - o Variety: possible to define if lexical label is
 - Standard
 - Short form
 - Regional variety
 - Specialised terminology
 - Restricted language
 - Official language

³ Only the basic functionalities are explained in this document. More information can be obtained by pointing your mousse arrow at the *i* in front of each entry field. A pop-up will give you additional information on the meaning of the fields.

Vernacular

More lexical labels can be added to the same concept by clicking on



! Note that the notion of preferred label implies that the conceptual resource can only have one such preferred label per language tag.

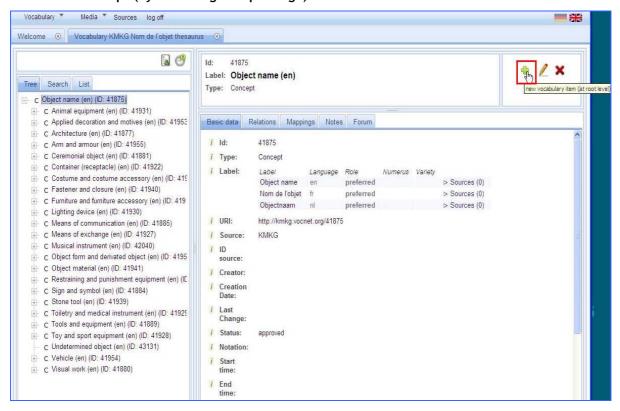
Multiple alternative and/or hidden labels can be given per natural language.

Status: define if the new concept is a

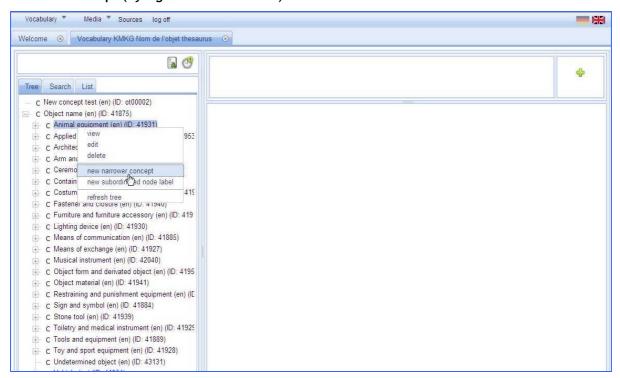
- Candidate
- Approved
- Deprecated
- In process
- 3. Save new concept in upper right corner



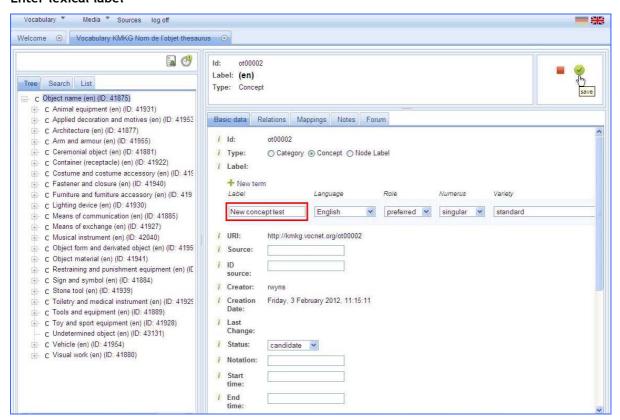
Add a new concept (by click on green plus sign)



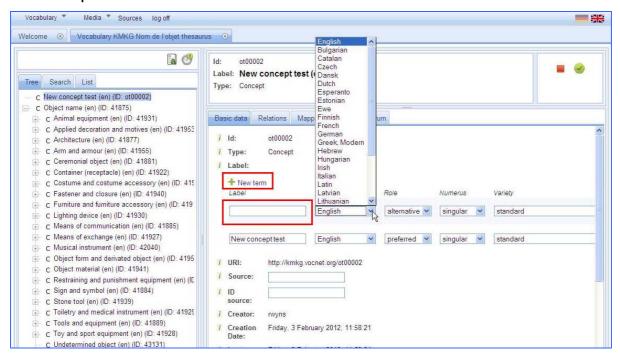
Add new concept (by right click on mousse)



Enter lexical label



Enter multiple lexical labels



4.3 Define semantic relations to other concepts within the same vocabulary

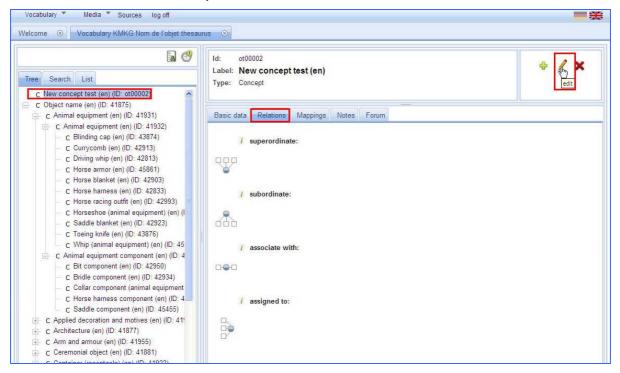
Semantic relations play a crucial role in defining the meaning of a concept. The meaning of a concept is not only defined by the natural language words but also by the position of the concept in relation to other concepts in the vocabulary.

To define the semantic relation of a concept to another concept in the tree:

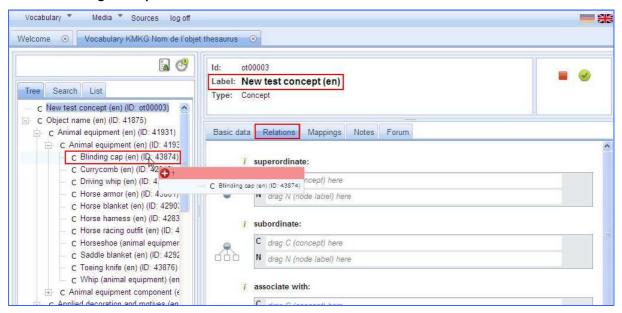
- 1. Select the (new) concept to be repositioned in the tree
- 2. Click the tab Relations
- 3. Click edit / in the upper right corner of the screen. Relations will appear.
- 4. Click on a concept in the tree and drag it to the relation of choice for the previously selected concept:
 - Superordinate: This relationship comprises broader concepts as well as superordinate categories and node labels. This implies that the subject of the statement is a more specific concept that has a broader concept with a more generic in meaning.
 - Subordinate: This relationship comprises narrower concepts as well as subordinate categories and node labels
 - Associate with: This relationship comprises related concepts and see-alsoreferences between categories
 - Assigned to: A concept assigned to a category. Note: This relationship is not
 a logical super-/subordination

- 5. When the dragged concept turns from red to green, release concept and the relation is added. More relations to the same concept can be added in a single edit
- 6. Click on waterelations

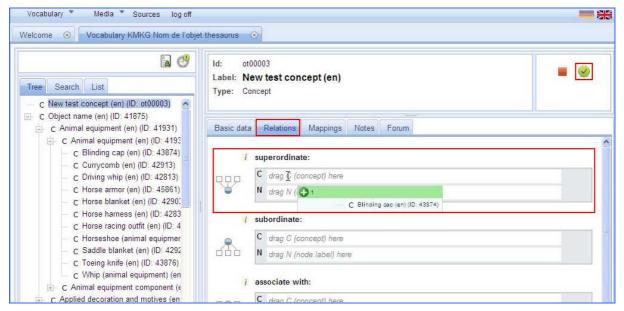
Define relations to other concepts



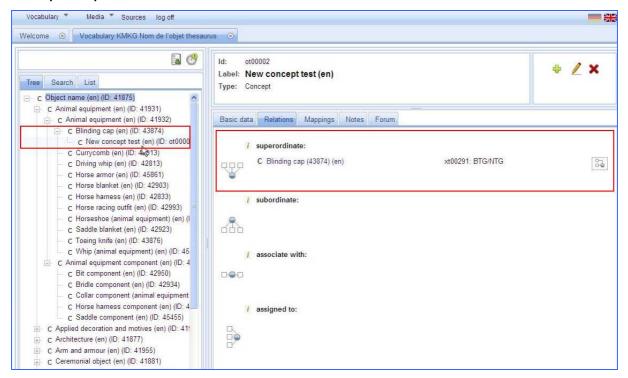
Select and drag concept to relation of choice



Drop concept (when green) to relation of chose and save



Concept is repositioned in tree

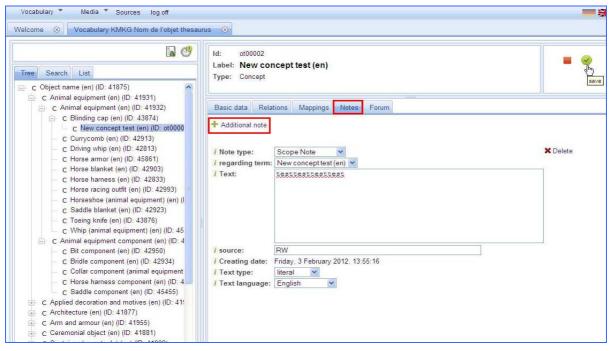


4.4 Add notes to concept

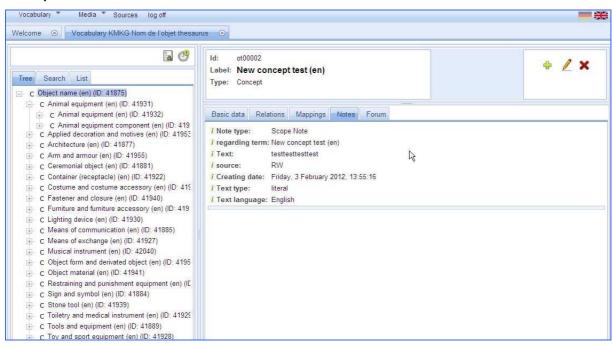
To add notes of different kinds (e.g. Scope note, Definition, Annotation) to a selected concept:

- 1. Select tab Notes and click edit // in the upper right corner of the screen.
- 2. Click on Additional note (more than one additional note can be added)
- 3. Enter information and save

Add notes (Scope notes, Definitions, Change note,...)



Concept notes



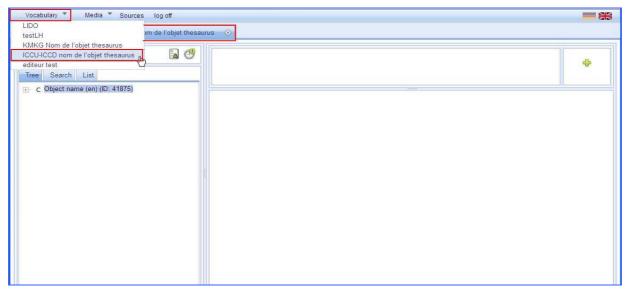
4.5 Semantic mapping between vocabularies

To connect a concept from one vocabulary to a matching concept in another vocabulary:

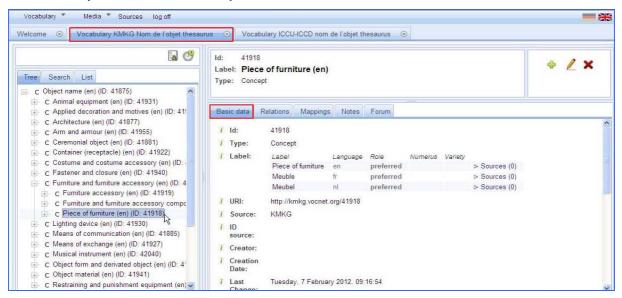
- 1. Open the vocabularies you want to connect to each other in Vocabulary
- 2. Select the concept in your vocabulary you want to map
- 3. Go to the other vocabulary and search for a matching concept⁴:
 - By browsing through the tree
 - By using the search function. For searching on a partial word, use asterisk (e.g. *furniture*).
- 4. When finding a 'matching' concept, copy the URI in basic data and go back to the concept in your vocabulary
- 5. Open the mapping tab and click on edit <a> and create a new mapping for the selected concept by clicking on Additional mapping * Weiteres Mapping in the mapping tab
- 6. Complete mapping information:
 - Identifier: Paste the URI from the matching concept in this field
 - Identifier type: Select URI
 - Mapping type:
 - Exact match: Exact equivalence, identical in meaning and capable of functioning as a preferred term (e.g. adminstration = administración)
 - Close match: Same general concept, although the meaning of these terms are not precisely identical (e.g. crown property ≅ patrimonio nacional)
 - Broad match: The concept of the target schema you want to map to has a broader meaning than your vocabulary concept (e.g. Obelisk < Monument)
 - Narrow match: The concept of the target schema you want to map to has a narrower meaning than your vocabulary concept (e.g. Animal > Mammal)
 - Related match: Associate relationship between two concepts
- 7. Save changes

⁴ To find a matching concept you need to take into account the natural languages of the vocabulary you want to map to. If the vocabulary is only available in Italian, you won't be able to find a match in English. Therefore it is better to always make your terminology bilingual (e.g. with English as the pivot language). In this way people can map to your vocabulary more easily. If the concepts are only in one language and you still want to try to make a mapping, you can use of Google translate and/or other online dictionaries in combination with the Forum (see point 5) to discuss with your colleagues the correctness of the mapping

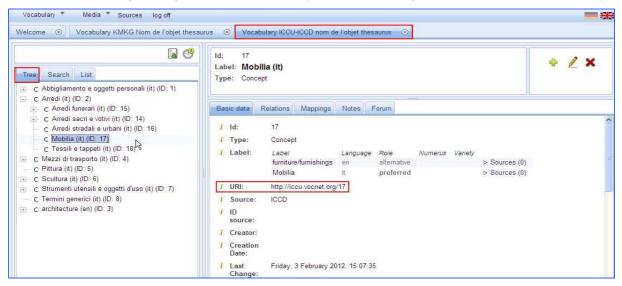
Open multiple vocabularies



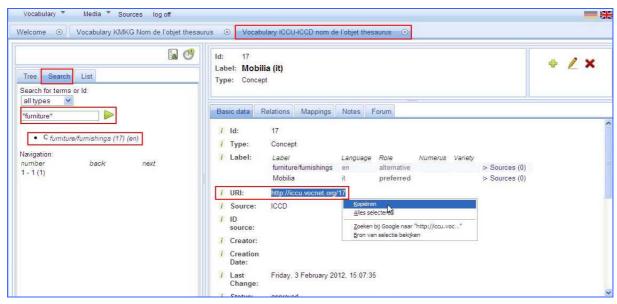
Select concept from own vocabulary



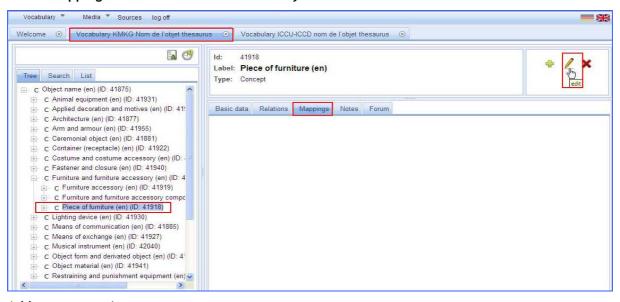
Search for matching concept in other vocabulary - Browse through the tree



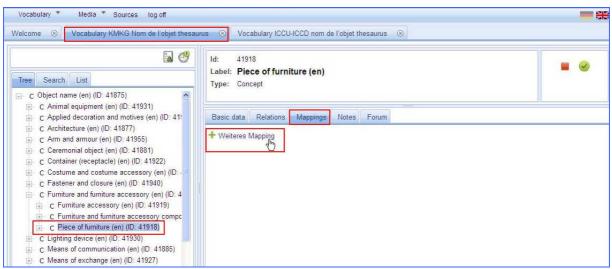
When finding a matching concept, copy URI



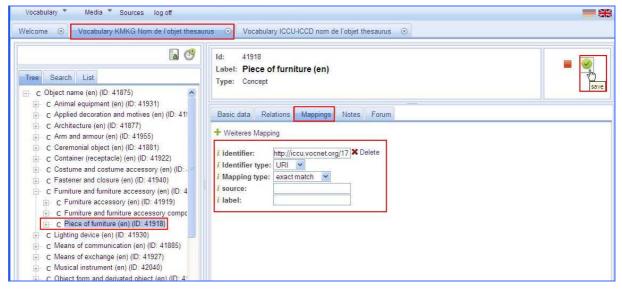
Select mapping tab and edit in own vocabulary



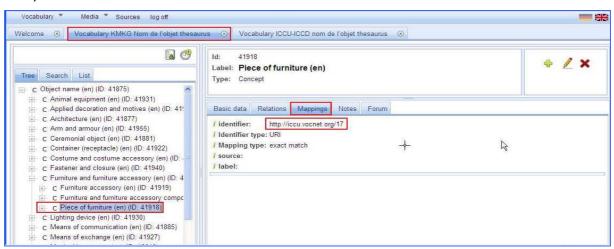
Add a new mapping



Paste URI in identifier, set types and save mapping



Concept Piece of furniture (Vocabulary KMKG) is mapped to concept Mobilia (Vocabulary ICCU-ICCD)



5. Forum

The forum can be used to discuss the work being done in Xtree (e.g. comments on mappings between vocabularies, comments on scope notes, on relations to other concepts, etc.)

To add a forum discussion on concept level:

- 1. Click on the concept and open Forum tab
- 2. Click on the editing pencil 🖊
- 3. Create (additional) forum entries * Additional forum entry or edit/delete existing entry
- 4. Save changes

Add a new forum entry and save

