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innoQ Deutschland GmbH · Krischerstraße 100 · 40789 Monheim

innoQ Schweiz GmbH · Gewerbestrasse 11 · CH-6330 Cham



Editorial Team Tutorial

iQvoc version 4.9

Editor's draft

thomas.bandholtz@innoq.com

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Introduction

This is a quick overview about the editorial team support in iQvoc. It is assumed that you have a basic knowledge about SKOS¹ and the public interface of iQvoc.

The examples have been edited in the public iQvoc sandbox at <http://try.igvoc.net/>. Feel free to create your own examples there or in your own environment.

1 The Editorial Team & the Rest of the World

iQvoc supports the collaborative work of globally distributed editorial teams.

First of all, iQvoc is a Web application, including all editorial functions, so it may be used from anywhere in a common browser without any further local software.

Through the eyes of any editorial team member, the “rest of the world” is the main target audience: the public user.

Through the eyes of any public user, the editorial team does not seem to exist (except from a contact dialog), as everything they do happens behind the scenes, and the results (hopefully) are fine and can be trusted.

This tutorial is about what happens behind the scenes (in the editorial team), and how the public user is finally affected.

1.1 User Roles and What They Can Do

iQvoc supports five user roles: the public as the final target audience (anonymous, not registered) and four different roles of registered participants of the editorial team.

role	rights
public	<i>see published concepts and their properties, URI-reference published concepts, use API, send mail to the team.</i>
reader	+ see work in progress and leave comments not implemented in current version 4.9.
editor	+ create and modify concepts and their properties, but not publish them

¹ <http://www.w3.org/2004/02/skos/>

publisher	+ publish or propose changes before
administrator	+ unlock concepts, create & modify users, export and import, set configuration.

Table 1 Roles and rights

The overall process looks roughly as in the figure below:

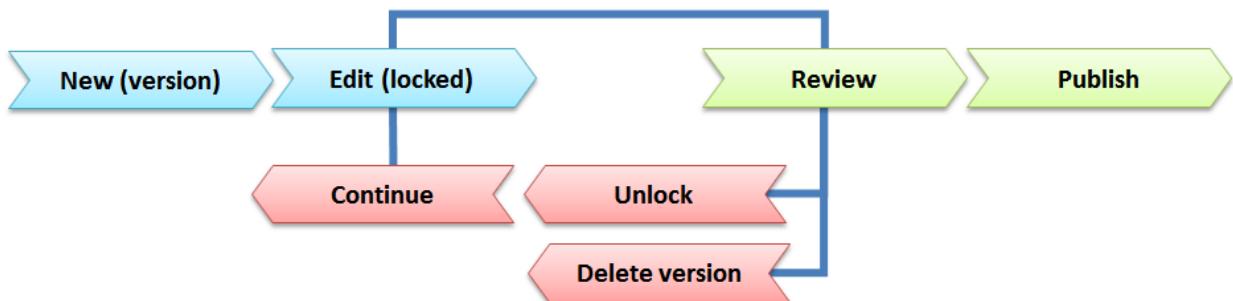


Figure 1 The core process of the editorial team

Table 2 below shortly describes each process step.

Process	What happens?
New (version)	An editor creates a new concept, or a new version of an existing concept
Edit (locked)	The editor exclusively edits the new concept (version) properties. This is not visible to the public, but to the team only.
Review	The publisher reviews the work of the editor and may propose further changes.
Publish	The new version becomes public. The previous version (if there was any) is replaced by the new version.
Unlock	Exclusive rights of the current editor get removed. The new version still is not public.
Continue	Any editor can take over to become exclusive editor of this new version.
Delete version	The new version gets deleted

Table 2 The editorial process

In sections 2 and 3 we will go through these processes by example. If you want to follow interactively, you may use the sandbox at <http://try.iqvoc.net> with these users:

- Robert Reader (reader), robert@example.org
- Emma Editor (editor), emma@example.org
- Pete Publisher (publisher), pete@example.org

All passwords equal the role (lower case).

However, the sandbox is not supervised. They may be more users doing their different thing, and possibly you will find your concept version published by some publisher you have never heard of before.

Now and then we reset sandbox data without warning, and your work will be lost.

For some serious validation or training you should setup your own iQvoc instance.

1.2 Administrator Setup

If you are not the administrator, skip this section and continue reading section 2.

If you are reading on: you cannot login as administrator of the sandbox; you will need a local instance.

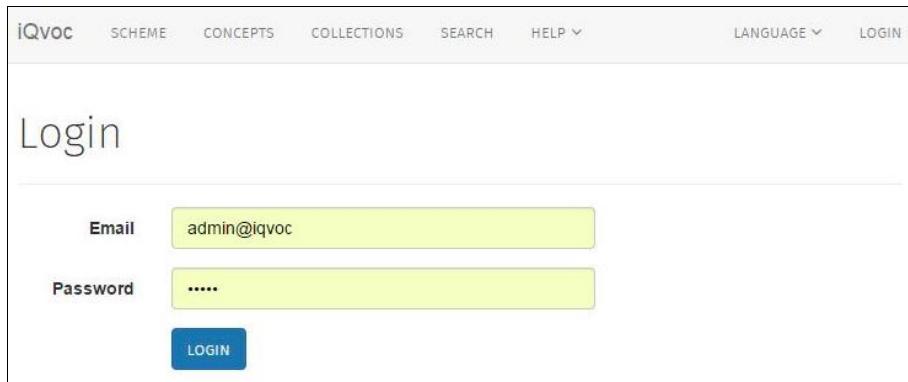
1.2.1 Change Your Password

Initially iQvoc comes with one predefined administrator with email *admin@iqvoc* and password *admin*.



Screen 1 Home screen with LOGIN option

Click on LOGIN on the right hand of the menu bar.

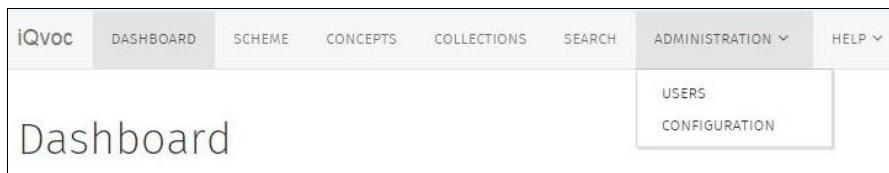


The screenshot shows the iQVOC login interface. At the top, there is a navigation bar with links for IQVOC, SCHEME, CONCEPTS, COLLECTIONS, SEARCH, HELP, LANGUAGE, and LOGIN. Below the navigation bar, the word "Login" is displayed. There are two input fields: "Email" containing "admin@iqvoc" and "Password" containing ".....". A blue "LOGIN" button is located at the bottom of the form.

Screen 2 Login dialog

Type Email admin@iqvoc and password admin, press LOGIN.

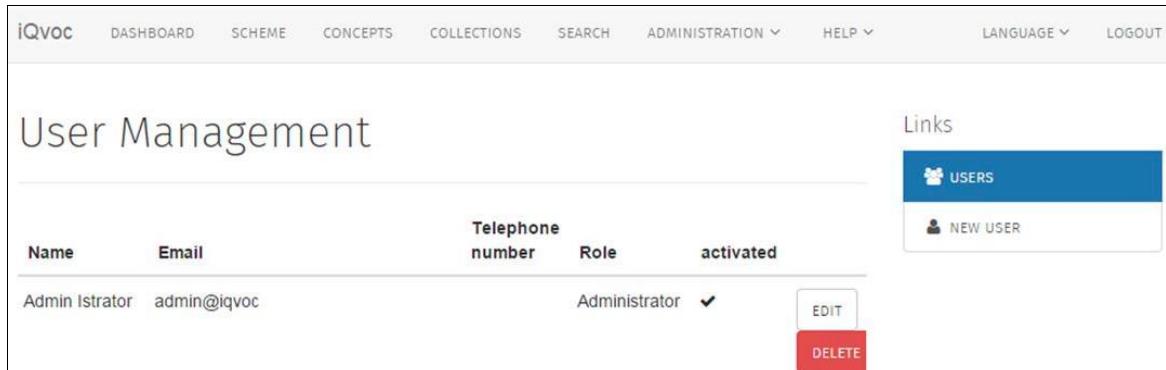
The dashboard appears - we come to this later.



The screenshot shows the iQVOC dashboard. The navigation bar includes links for IQVOC, DASHBOARD, SCHEME, CONCEPTS, COLLECTIONS, SEARCH, ADMINISTRATION, and HELP. The ADMINISTRATION menu is expanded, showing "USERS" and "CONFIGURATION". The main content area displays the word "Dashboard".

Screen 3 Dashboard with ADMINISTRATION submenu

For now, select ADMINISTRATION > USERS from the menu bar.



The screenshot shows the User Management page. The navigation bar includes links for IQVOC, DASHBOARD, SCHEME, CONCEPTS, COLLECTIONS, SEARCH, ADMINISTRATION, HELP, LANGUAGE, and LOGOUT. The ADMINISTRATION menu is expanded, showing "USERS" and "CONFIGURATION". The main content area is titled "User Management". It contains a table with columns: Name, Email, Telephone number, Role, and activated. One row is present, showing "Admin Istrator" and "admin@iqvoc" under Name and Email, "Administrator" under Role, and a checked "activated" checkbox. To the right of the table, there is a "Links" sidebar with "USERS" and "NEW USER" options. Below the table, there are "EDIT" and "DELETE" buttons.

Screen 4 User management dialog

Find yourself in the users list. Initially, there will be only you. Click EDIT on the right in the table row.

The screenshot shows the iQvoc user administration interface. At the top, there is a navigation bar with links for DASHBOARD, SCHEME, CONCEPTS, COLLECTIONS, SEARCH, ADMINISTRATION, HELP, LANGUAGE, and LOGOUT. Below the navigation bar, the title "Edit user" is displayed. The main form contains fields for Forename (Admin), Surname (Istrator), Email (admin@iqvoc), Phone number, Password, and Password (Confirmation). A dropdown menu for Role is set to "Administrator". There is also a checkbox labeled "active" which is checked. On the right side of the form, there is a sidebar titled "Links" containing two items: "USERS" (with a user icon) and "NEW USER" (with a person icon). At the bottom left of the form area, there is a blue "SAVE" button.

Screen 5 Edit user dialog

Edit your profile and password, press SAVE.

If you are the only member of your editorial team, you're done. There are many thesauri that are managed completely by one single individual. In this case you do not need different users with different rights, as the administrator has any right.

It might be a good idea to create at least one publisher anyway. The publisher's rights include those of the editor, so one publisher can do all the editorial work alone while the administrator role remains reserved for administrative issues.

1.2.2 Create More Users

To see how a team works together with iQvoc you should create one reader, editor and publisher at least.

Click to NEW USER in the user administration.

Edit the profile for each user and make sure to select the intended role and check "active" before you save.

iQVOC DASHBOARD SCHEME CONCEPTS COLLECTIONS SEARCH ADMINISTRATION ▾ HELP ▾ LANGUAGE ▾ LOGOUT

New user

Forename

Surname

Email

Phone number

Password

Password (Confirmation)

Role

active

Links

Screen 6 New user dialog

For simplicity we will refer to the following users in this tutorial:

- Robert Reader (reader), robert@example.org
- Emma Editor (editor), emma@example.org
- Pete Publisher (publisher), pete@example.org

All passwords equal the role (lower case).

2 Artistic Hobbies Example

The iQvoc sandbox holds a “Hobbies Thesaurus” as an example. Emma Editor finds that artistic hobbies are under-represented and wants to make some extension and modifications.

To start with, she will execute three steps:

1. Create “Artistic Hobbies” as a new Top Concept.
2. Create “Painting” as the first child of “Artistic Hobbies”.
3. Move “Dance” from “Achievement hobbies” to “Artistic Hobbies”.

2.1 The Editor

2.1.1 Creating Concepts

Log in as Emma (emma@example.org).

The dashboard appears:

The screenshot shows the iQvoc dashboard with the following elements:

- Header:** iQVOC, DASHBOARD, SCHEME, CONCEPTS, COLLECTIONS, SEARCH, HELP, LANGUAGE, EMMA EDITOR.
- Main Area:** A large green banner displays the message "Login successful."
- Right Sidebar:**
 - Links:** NEW CONCEPT, NEW COLLECTION.
 - Extras:** SYNC WITH TRIPLESTORE.
- Table:** A table for creating new concepts with columns: Type, Name, Locked by, Follow up, Updated at, State, and Check consistency.

Screen 7 Editor's view of the dashboard

The table in the bottom is still empty.

Select NEW CONCEPT on the right.

The following dialog is quite large, so we will walk though it section by section.

The screenshot shows the iQVOC application interface. At the top, there is a navigation bar with links for 'iQVOC', 'DASHBOARD', 'SCHEME', 'CONCEPTS', 'COLLECTIONS', 'SEARCH', 'HELP', 'LANGUAGE', and 'EMMA EDITOR'. Below the navigation bar, the title 'New Concept' is displayed. Underneath the title, there is a section titled 'Properties' containing two input fields: 'Reminder' and 'Expired at'. Both fields have placeholder text indicating they are empty.

Screen 8 Creating a concept (1)

- Reminder: give a date in the future and this concept will be listed in the dashboard even after it has been published.
- Expired at: once a concept has been published it should not be deleted, as it may be referenced somewhere in the open world. Set an expiration date instead.

The screenshot shows the 'Labels' section of the concept creation form. It includes instructions stating 'Multiple values can be entered comma-separated.' Below this, there are four rows for entering labels. Each row has a 'Preferred labels' section with an 'en' button and a text input field containing 'Artistic hobbies', and a 'de' button and a text input field containing 'Künstlerische Hobbies'. There are also sections for 'Alternative labels' in both English and German, each with an 'en' button and an empty text input field.

Screen 9 Creating a concept (2) - labels

- Labels: Following SKOS, there must be not more than one Preferred label in each supported language. There may be any number of Alternative labels in any supported language. The number of languages is not limited. This example uses English and German only; see section 3.3 about *Working with Multiple Languages*.

Move down to the Definitions section. It is still empty.

Definitions

ADD

Screen 10 Creating a concept (3) – empty definition

Press ADD.

Definitions

Value

Any artistic activity not performed by professionals!

Language

en

ADD

Screen 11 Creating a concept (4) – adding a definition

Type some definition and select a language.

You (or later someone else) may click ADD again to add more definitions, maybe in a different language.

Emma wants this concept to be a top concept. So she scrolls down to the Relations section.

Relations

Top Term

Broader term

Related terms

Screen 12 Creating a concept (5) – relations

Check the Top Term box.

Press SAVE so far (page bottom). You will see the new concept in editorial mode. Note the options in the header:

The screenshot shows the iQVOC interface with the following elements:

- Header:** iQVOC, DASHBOARD, SCHEME, CONCEPTS, COLLECTIONS, SEARCH, HELP ▾, LANGUAGE ▾, EMMA EDITOR.
- Title:** Artistic hobbies Concept
- Message Bar:** Concept has been successfully created.
- Status Bar:** Unpublished version. Current revision 1 is being edited by Emma Editor.
- Action Buttons:** CHECK CONSISTENCY, SEND TO REVIEW, UNLOCK, CONTINUE EDITING.
- Representations:** HTML, RDF/XML, RDF/TURTLE, RDF/NTRIPLES.
- Links:** CONCEPT URI, NEW CONCEPT.

Screen 13 Header of a created concept

- CHECK CONSISTENCY will try to detect logical mistakes.
- SEND TO REVIEW will indicate to the publisher that you feel you have done.
- UNLOCK will allow other editors to take over.
- CONTINUE EDITING - continue editing this concept version.

Now Emma creates a second concept “Painting” as a child of “Artistic Hobbies”. Everything works in the same way as before, except from the Relations section.

The Relations section shows the following:

- Top Term:** Artistic hobbies
- Broader term:** Artistic hobbies
- Related terms:** Artistic hobbies

Screen 14 Selecting a Broader term

„Painting“ shall not be another top concept, but a child of „Artistic Hobbies“. Start typing “Art...” in the Broader term field, and the full label will appear by auto-completion.

Don't forget to press SAVE.

Now examine the appearance of the new concepts in the dashboard (click DASHBOARD in the menu bar).

The screenshot shows the iQvoc dashboard interface. At the top, there is a navigation bar with tabs: DASHBOARD (selected), SCHEME, CONCEPTS, COLLECTIONS, SEARCH, and HELP. On the right side of the navigation bar are LANGUAGE and EMMA EDITOR buttons. Below the navigation bar, the word "Dashboard" is displayed. To the right of the dashboard area, there is a sidebar titled "Links" containing three buttons: "NEW CONCEPT", "NEW COLLECTION", and "SYNC WITH TRIPLESTORE". Below the "Links" section is a heading "Extras". The main content area displays a table of concepts:

Type	Name	Locked by	Follow up	Updated at	State	Check consistency
Concept	Artistic hobbies	Emma Editor		20 Aug 13:32	CHECKED OUT	
Concept	Painting	Emma Editor		20 Aug 13:49	CHECKED OUT	

Screen 15 New concepts shown in the dashboard

2.1.2 Creating and Editing Concept Versions

Emma remembers an already existing concept “Dance” which is child of “Achievement hobbies”. She wants to move this in the hierarchy and make it a child of “Artistic hobbies”.

In the iQvoc home page she starts typing “Da...” in the search field and gains two concept labels by auto-completion.

The screenshot shows the iQvoc search interface. At the top, there is a navigation bar with tabs: DASHBOARD, SCHEME, CONCEPTS, COLLECTIONS, SEARCH, and HELP. On the right side of the navigation bar are LANGUAGE and EMMA EDITOR buttons. Below the navigation bar, the iQvoc logo is displayed. A search bar contains the partial text "Da". Below the search bar, the results show two suggestions: "Dance" and "Darts", each with a link: "http://try.iqvoc.net/dance" and "http://try.iqvoc.net/darts" respectively.

Screen 16 Selecting a published concept

She selects „Dance“, and the concept view appears with an (editor-only) option CREATE NEW VERSION.

The screenshot shows the innoQ interface with the title 'Dance Concept'. In the top right corner, there is a 'Representations' section with three options: 'HTML', 'RDF/XML', and 'RDF/TURTLE'. A 'CREATE NEW VERSION' button is located in the bottom left of the main content area.

Screen 17 Header of a published concept

She presses CREATE NEW VERSION, and a copy of this concept gets created as a new version.

The screenshot shows the 'Dance Concept' page again. A green message bar at the top states 'Instance copy has been created and locked.' The 'Representations' section is visible on the right.

Screen 18 New version created

The new version is locked and can be edited by Emma exclusively. Nobody else can create a second new version now. The original version is still public.

To move this concept in the hierarchy Emma scrolls down down to the Relations section.

The screenshot shows the 'Relations' section. It includes a 'Top Term' checkbox, a 'Broader term' field containing 'Achievement hobbies x', and a 'Related terms' section with an empty input field.

Screen 19 Removing a Broader term

She finds a box labelled „Achievement hobbies“. Press the little cross at the right end of the box to remove it.

Relations

Top Term

Broader term

Related terms

Screen 20 Selecting a new Broader term relation

Now you can use auto-completion to select „Artistic hobbies“, just like above when you created the “Painting” concept.

Finally Emma finds three concepts in the dashboard.

Dashboard

Type	Name	Locked by	Follow up	Updated at	State	Check consistency
Concept	Artistic hobbies	Emma Editor		20 Aug 13:32	CHECKED OUT	
Concept	Dance	Emma Editor		20 Aug 14:02	CHECKED OUT	
Concept	Painting	Emma Editor		20 Aug 13:49	CHECKED OUT	

Links

NEW CONCEPT

NEW COLLECTION

Extras

SYNC WITH TRIPLESTORE

Screen 21 State of work in the dashboard

2.1.3 Passing Over to the Publisher

Now Emma finds these concepts good enough to go public, and so she presses SEND TO REVIEW in each concept header.

Painting Concept

Unpublished version. Current revision 1 is being edited by Emma Editor.

CHECK CONSISTENCY SEND TO REVIEW UNLOCK CONTINUE EDITING

Representations

HTML

RDF/XML

RDF/TURTLE

RDF/NTRIPLES

Links

Screen 22 Concept saved – full options

Afterwards the same header looks as below:

Painting Concept

Sent to review.

Unpublished version. Current revision 1 is being edited by Emma Editor.

CHECK CONSISTENCY UNLOCK CONTINUE EDITING

Representations

- HTML
- RDF/XML
- RDF/TURTLE
- RDF/NTRIPLES

Links

- CONCEPT URI
- NEW CONCEPT

Screen 23 Concept saved – options after SEND TO REVIEW

She also needs to UNLOCK, so the publisher can take over. (See section 3.2 *Working with Multiple Editors* for an advanced collaboration using UNLOCK without SEND TO REVIEW and vice versa).

Artistic hobbies Concept

Instance has been unlocked.

Unpublished version. Current revision 1

CHECK CONSISTENCY START EDITING

Representations

- HTML
- RDF/XML
- RDF/TURTLE
- RDF/NTRIPLES

Links

- CONCEPT URI
- NEW CONCEPT

Screen 24 Concept saved – options after UNLOCK

Now Emma might (re-)START EDITING this concept, but we want to proceed.

The dashboard shows the new state:

Dashboard

Type	Name	Locked by	Follow up	Updated at	State	Check consistency
Concept	Artistic hobbies			20 Aug 14:28	FOR REVIEW	
Concept	Dance			20 Aug 14:31	FOR REVIEW	
Concept	Painting			20 Aug 14:31	FOR REVIEW	

Links

[NEW CONCEPT](#)

[NEW COLLECTION](#)

Extras

[SYNC WITH TRIPLESTORE](#)

Screen 25 Dashboard ready for review

2.2 The Publisher

Logout and log in again as Pete (pete@example.org).

The dashboard looks exactly the same as in Emma's view above, but now you have the right to make changes go public.

2.2.1 The Publishing Process

Pete will examine each of these concepts and finally publish them one by one.

Painting Concept

Unpublished version. Current revision 1

[PUBLISH](#) [CHECK CONSISTENCY](#) [START EDITING](#)

MAIN LABELS RELATIONS NOTES CONCEPT MAPPINGS

Assigned collections

Broader terms

Artistic hobbies

Representations

- [HTML](#)
- [RDF/XML](#)
- [RDF/TURTLE](#)
- [RDF/NTRIPLES](#)

Links

- [CONCEPT URI](#)
- [NEW CONCEPT](#)

Screen 26 Publishing a concept

The PUBLISH button is only visible to the publisher role.

At first the publisher should review the content before publishing, and think about what will happen. Can you do anything wrong?

Which concept to start with, would it make any difference?

You may be afraid about some possible trouble with the hierarchy for the public user:

“Painting” has Broader term „Artistic hobbies“. The latter has just been created and not been published. So – to the public - it simply does not exist. The same is true vice versa.

What happens when you publish “Painting” (or “Artistic Hobbies”) anyway? Will there be a dead link in the Broader (Narrower) terms property for the public? Do you need to be very fast in the publishing sequence so that no public user has a real chance to get mousetrapped in a dead link?

Let's try. Press PUBLISH.

The screenshot shows the 'Painting' Concept page in the innoQ interface. The main content area includes tabs for MAIN, LABELS, RELATIONS, NOTES, and CONCEPT MAPPINGS. Below these tabs are sections for Assigned collections and Broader terms, both of which are currently empty. On the right side, there are two panels: 'Representations' containing links to HTML, RDF/XML, RDF/TURTLE, and RDF/NTRIPLES; and 'Links' containing links to CONCEPT URI and NEW CONCEPT. A 'CREATE NEW VERSION' button is located in the top left corner of the main content area.

Screen 27 Hidden Broader term reference

What you will find is a public concept to be accessed by anybody in the world, but the Broader terms property is left empty. There is no public parent (yet) – and there is no dead link.

Now go back to the Dashboard and publish “Artistic Hobbies” in the same way.

Artistic hobbies Concept

Instance has been successfully published.

[CREATE NEW VERSION](#)

[MAIN](#) [LABELS](#) [RELATIONS](#) [NOTES](#) [CONCEPT MAPPINGS](#)

Assigned collections

Broader terms

Top Term

Narrower terms

└ [Painting](#) 

Representations

-  [HTML](#)
-  [RDF/XML](#)
-  [RDF/TURTLE](#)
-  [RDF/NTRIPLES](#)

Links

-  [CONCEPT URI](#)
-  [NEW CONCEPT](#)

Screen 28 Public Narrower term reference

Of course the Narrower term „Painting“ can be presented to the public in this case, as the child has been published before. This is not a dead link. Click it!

The screenshot shows the innoQ interface for managing concepts. At the top left, the title 'Painting Concept' is displayed. Below it is a button labeled 'CREATE NEW VERSION'. A navigation bar at the top right includes tabs for 'MAIN', 'LABELS', 'RELATIONS', 'NOTES', and 'CONCEPT MAPPINGS'. On the right side, there are two sections: 'Representations' containing links for 'HTML', 'RDF/XML', 'RDF/TURTLE', and 'RDF/NTRIPLES'; and 'Links' containing 'CONCEPT URI' and 'NEW CONCEPT'. In the main content area, there are two sections: 'Assigned collections' (which is currently empty) and 'Broader terms', which lists 'Artistic hobbies'.

Screen 29 Public Broader term reference

Now the Broader term „Artistic Hobbies“ appears like magic ;-)

We are really interested in your experience. There might be some automatic meta-publish feature for large trees in the future, but we find that approval by the publisher needs to be done one by one before.

2.2.2 Collaboration

There might be different issues to be resolved before publishing, such as missing definitions or different plans about evolution of hierarchy, and so on.

From our experience, most editorial teams are leading such discussions since years in some well-established environment. Why should iQvoc implement any social media feature on its own to compete with?

People can link to a single concept that they are talking about in an e-mail or a wiki, this is the core of any kind of integration.

iQvoc focusses on the enforcement of three general decisions that may follow from this discussion:

1. The editor re-edits the concept using the START EDITING button, UNLOCKs again, and then gets published.

2. Somebody else should take over. Use a combination of UNLOCK (original editor) and CONTINUE (new editor).
3. They all agree that the new version was a bad idea: DELETE VERSION.

See section 3.2 *Working with Multiple Editors* for an advanced example and discussion of collaboration.

2.3 Options of the Reader

The reader role has not been implemented yet. The idea is to have some external domain expert who cannot edit anything but add comments. Those comments are not visible to the public but only to the editorial team.

3 Advanced Topics

3.1 Working in the Hierarchy View

In the example above Emma has moved “Dance” in the hierarchy by replacing the Broader term in a single selection dialog form field (section 2.1.2).

If you want to tidy up the hierarchy as a whole this is not a very intuitive approach.

First of all: you want to see the hierarchy while you change it. So select CONCEPTS from the main menu and HIERARCHICAL under “Sections” on the right.

The screenshot shows the iQVOC application interface. At the top, there's a navigation bar with tabs: iQVOC, DASHBOARD, SCHEME, CONCEPTS (which is highlighted in blue), COLLECTIONS, SEARCH, and HELP. To the right of the navigation bar are LANGUAGE and EMMA EDITOR buttons. The main content area is titled "Concepts Hierarchical". On the left, there's a list of concepts: "Achievement hobbies", "Artistic hobbies", "Collection hobbies", and "Competition hobbies", each preceded by a small icon. On the right, there's a sidebar titled "Sections" with four options: "HIERARCHICAL" (which is selected and highlighted in blue), "ALPHABETICAL", "DRAFT", and "EXPIRED". Below the sidebar, there's a "Links" section and a button labeled "NEW CONCEPT".

Screen 30 Editor's view of the hierarchy

3.1.1 Moving a Concept in the Hierarchy

The following discussion refers to the situation right after the end of the example in section 2, but if you have more concepts in between this does not really matter now.

Make sure you are logged in as Emma.

Under “Sections” on the right you also find DRAFT. Click it.

The screenshot shows the iQVOC interface with a top navigation bar including 'iQVOC', 'DASHBOARD', 'SCHEME', 'CONCEPTS' (which is highlighted), 'COLLECTIONS', 'SEARCH', 'HELP', 'LANGUAGE', and 'EMMA EDITOR'. On the left, a tree view shows concepts under 'Achievement hobbies': 'Artistic hobbies', 'Collection hobbies', and 'Competition hobbies'. Each concept has a small icon next to it. To the right, a sidebar titled 'Sections' lists 'HIERARCHICAL', 'ALPHABETICAL', 'DRAFT' (which is selected and highlighted in blue), and 'EXPIRED'. Below that is a 'Links' section with a 'NEW CONCEPT' button.

Screen 31 Draft mode in the hierarchy

There is only very little visible difference to the previous screen. But note the MOVE symbol added to each concept now.

- ⊕ MOVE this concept to a different place in the hierarchy.

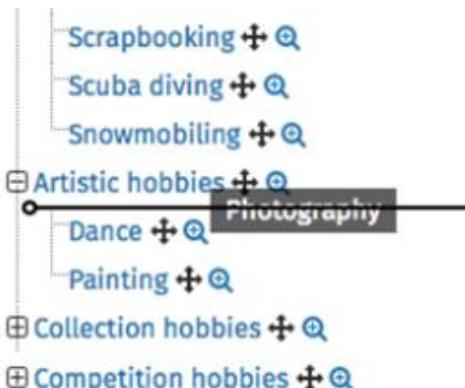
This only works if the concept is not already locked by some other editor, and it will leave the moved concept in locked mode.

Emma wants “Photography” to become an “Artistic Hobby” just like “Dance” before.

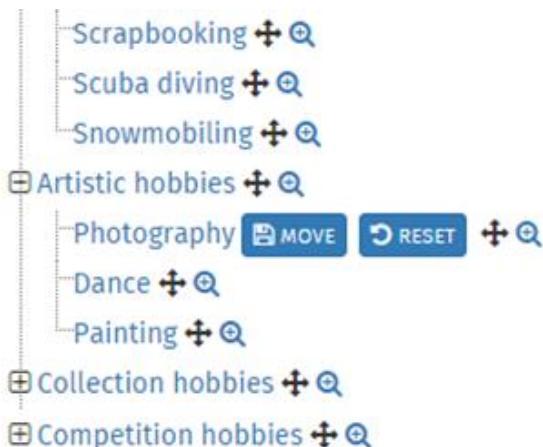
So open the “Achievement hobbies” sub-tree by clicking on the cross at the left, and you will find “Photography” near the bottom of its children.

When you place your cursor on the MOVE symbol this symbol becomes larger, and after pressing and holding down the (left) mouse button it starts moving with your cursor.

Hold the mouse button down and drag right below the new target parent (as shown in the snapshot below) and then release the mouse button.



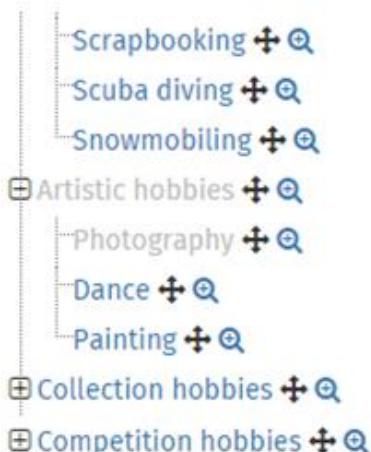
After having released the button, „Photography“ is shown in the new position, and there are two new options.



MOVE – confirm moving the concept to this place.

RESET – let the moved concept snap back to where it came from.

Emma presses MOVE.



Now you find “Photography” in the new position. The label is gray to indicate this is a new version that has been locked by yourself.

Any other editor will see an added LOCK symbol.





LOCKED - indicates the concept has been locked by another editor, you cannot move it.

Dragging the concept somewhere else in the tree is equivalent to replacing the Broader term in a single-concept dialog of the example above.

iQvoc understood you started moving the concept and executed “CREATE NEW VERSION” automatically behind the scenes.

In the dashboard, “Photography” is now listed as locked by Emma.

3.1.2 Locking Strategy in the Hierarchy

You may wonder why only the moved concept gets LOCKED and not the previous and the new parent. They have lost/gained children, isn’t this a change?

It surely is, but these changes fully depend on the change in the moved concept. You cannot get the child back from the previous parent.

Children and parents are inverse properties; you cannot change one without changing the other.

We have decided that Broader should be the master while editing the hierarchy. You cannot remove a child from a parent; you have to remove the parent from the child.

Consequently the children of the moved concept remain unaffected. They move with their parent, but they still reference the same concept as a parent. This is why there not get LOCKED either.

iQvoc will always lock the concept that you are actively changing.

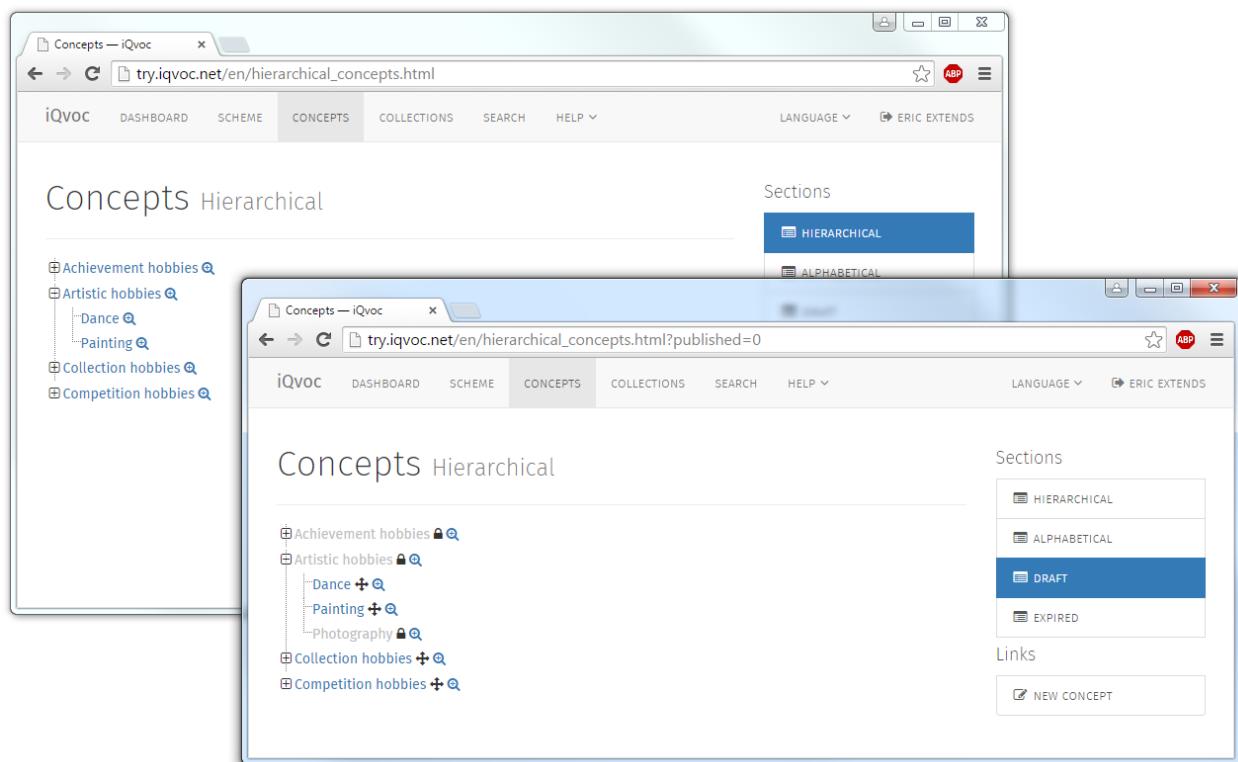
See section 3.2.2 *Eric in Working with Multiple Editors* for an advanced example.

3.1.3 Comparing two Versions of the Hierarchy

Switching between HIERARCHICAL and DRAFT in the CONCEPTS view means switching between the current public version (HIERARCHICAL) and a preview of the version to come (DRAFT).

If there is any difference, the tree needs to be repainted and so it loses the previous state of visible subtrees.

To make this more comfortable, open both views in separate browser windows.



Screen 32 Comparing two versions of the hierarchy

3.2 Working with Multiple Editors

The Artistic hobbies example above (section 2) showed a fast run through the editorial process with only one editor and one publisher. Now we take a look at a more complex team.

We introduce Eric Extends, editor, eric@example.org with password editor2.

- As the administrator of your iQvoc instance, create this user as described in section 1.2.2.

3.2.1 Emma

After Emma had finished her work at the end of section 2.1.2, she used both UNLOCK and SEND TO REVIEW virtually at the same time to execute one single decision: Pete should publish this concept version with no necessary feedback.

Now, with Eric on board, she might pass over to him before bothering the busy publisher. So she would use UNLOCK only and tell Eric she wants him to continue editing this concept².

To see this scenario by a full example, we need the three concepts of the Artistic Hobbies Example locked by Emma again.

If you are not in this state (probably not), login as emma@example.org, search for and open “Artistic hobbies”, “Dance” and “Painting” one by one, and press CREATE NEW VERSION. In each new version just press SAVE.

Now Emma treats each concept differently after having saved:

- “Artistic hobbies”. She wants the publisher to review her work, but not to publish unchanged. Press SEND TO REVIEW. Do not press UNLOCK.
- “Dance”. She wants the publisher to publish “as is”. Press both SEND TO REVIEW and UNLOCK.
- “Painting”. This is the concept she wants Eric to take over. Press UNLOCK only. Do not press SEND TO REVIEW.

Check Emma’s dashboard now. It should look like this:

Type	Name	Locked by	Follow up	Updated at	State	Check consistency
Concept	Artistic hobbies	Emma Editor		22 Aug 08:28	FOR REVIEW	
Concept	Dance			20 Aug 14:31	FOR REVIEW	
Concept	Painting			22 Aug 08:30	CHECKED OUT	

Screen 33 Dashboard showing concepts in different state

What can Emma do to continue in this state?

She may continue editing any of the three topics. One is locked by herself and two are unlocked. Unlocked means that any editor may continue editing, so why not Emma herself?

² In the current version 4.9 there is no formal way to express that UNLOCK is meant for Eric. Any editor can take over after UNLOCK.

3.2.2 Eric

Now login as eric@example.org. The dashboard looks exactly the same.

What can Eric do to continue in this state?

- “Artistic hobbies”. This one is locked by Emma, so he cannot take over. State is FOR REVIEW. Hm. Emma is not interested in his contribution. Might give her a call.
- “Dance” is not locked, so he might take over. But State is FOR REVIEW, so his contribution might not be necessary. If not too busy, take a look and decide.
- “Painting”. Not locked as well. State is CHECKED OUT, so this one needs some further work before review.

Eric decides to continue with “Painting” first. Select it from the dashboard and press START EDITING.

The screenshot shows a page titled "Painting Concept". At the top, there is a green bar with the text "Instance has been locked.". Below this, in a blue bar, it says "Some referenced concepts are currently being edited." followed by a list: "Broader term Artistic hobbies by editor Emma Editor".

Screen 34 Concept header shows notification

The header now shows additional support for multiple editors. iQvoc notifies Eric that Emma is currently editing the direct parent of “Painting”. It might be a good idea to get coordinated if they aren’t. iQvoc does not force them to anything, this just a hint.

Now Eric does some editing and presses SAVE. How does the dashboard reflect this?

The screenshot shows a table on the dashboard with the following data:

Type	Name	Locked by	Follow up	Updated at	State	Check consistency
Concept	Artistic hobbies	Emma Editor		22 Aug 08:28	FOR REVIEW	
Concept	Dance			20 Aug 14:31	FOR REVIEW	
Concept	Painting	Eric Extends		22 Aug 08:50	CHECKED OUT	

Screen 35 Dashboard shows concepts locked by different editors

3.2.3 Emma Again, and the Concept History

In Emma's view the dashboard looks the same as in Eric's (above). She sees that Eric has taken over "Painting", so she cannot continue editing this. Try it even so!

The screenshot shows a dashboard titled "Painting Concept". A blue banner at the top states "Unpublished version. Current revision 2 is being edited by Eric Extends.". Below the banner is a button labeled "CHECK CONSISTENCY".

Screen 36 Concept locked by another editor

Emma can't. She may look through the state of Eric's work, and she may CHECK CONSISTENCY. She may discuss with Eric, but she cannot enforce control over this concept by just pressing any button in iQvoc.

The dashboard also shows that Eric still did not SEND TO REVIEW. So he might UNLOCK later again to pass it back to Emma or someone else.

Finally this scenario will extend to a concept history with possibly many editors. It is a good idea to make use of Change notes. We did not mention them before. You find them in the editing view of each concept version.

The screenshot shows a form for editing a change note. It includes fields for "Value" (a large text area), "Language" (set to "en"), and "Annotations" (with "dct:creator" and "dct:modified" entries). At the bottom right is a "ADD" button.

Screen 37 Editing a change note

They come initialized with your user name and a time stamp. You should give a note about your changes in the “Value” field.

As you see in the screen snippet above you (or someone else later) can add more change notes.

Finally the change notes represent the history of the concept.

en	Should be a better definition. Published it anyway, with a reminder.
dct:creator	Pete Publisher
dct:modified	2015-08-26T12:54:40+00:00

en	Someone should find a good definition
dct:creator	Emma Editor
dct:modified	2015-08-26T12:48:43+00:00

en	Found one at Wikipedia
dct:creator	Eric Extends
dct:modified	2015-08-26T12:52:20+00:00

Screen 38 Change note sequence

3.2.4 Pete

The publisher's options have already been described in section 2.2. with Emma as the only editor.

Nothing is really different from that when there are multiple editors.

Type	Name	Locked by	Follow up	Updated at	State	Check consistency
Concept	Artistic hobbies	Emma Editor		22 Aug 08:28	FOR REVIEW	
Concept	Dance			20 Aug 14:31	FOR REVIEW	
Concept	Painting	Eric Extends		22 Aug 08:50	CHECKED OUT	

Screen 39 Publisher's view of dashboard

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Pete's dashboard looks exactly like Emma's and Eric's. What can he do?

- “Artistic hobbies” is in state FOR REVIEW, but still locked by Emma. So he cannot publish. Emma is obviously waiting for some help.
- “Dance” can be published as it is not locked and FOR REVIEW.
- “Painting” is locked and CHECKED OUT, so nothing to do so far.

iQvoc does not prevent the publisher from looking at any ongoing work even if it is not FOR REVIEW, but he cannot publish such a concept before the editor has UNLOCKed. This certainly is an implemented decision about the balance of power in the team, but we think it is a wise decision.

3.2.5 The Administrator

What if they don't agree? What if an editor leaves the team and did not tidy up his locked concepts before?

Somebody has to call the administrator.

The administrator's dashboard looks like everybody else's, but finally he can overcome all locking restrictions.

When he selects Artistic hobbies, he finds the following concept header:

The screenshot shows a concept header for 'Artistic hobbies'. At the top, it says 'Artistic hobbies Concept'. Below that, a blue bar contains the text 'Unpublished version. Current revision 2 is being edited by Emma Editor.' At the bottom, there are three buttons: 'CHECK CONSISTENCY', 'UNLOCK', and 'CONTINUE EDITING'.

Screen 40 UNLOCK option of the administrator

He can see that this version is being edited (=locked) by Emma, who has left the team for some reason, or persistently cannot agree with Pete.

The administrator (only he) can UNLOCK this version without being Emma herself. Finally someone else can take over.

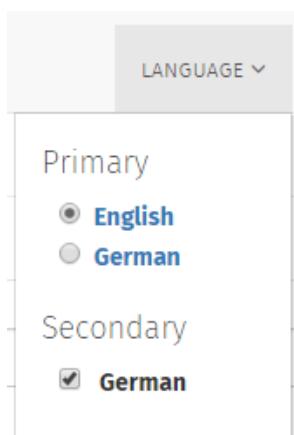
3.3 Working with Multiple Languages

iQvoc supports as many languages as you like, as long as they are supported by *UTF-8*.

3.3.1 Usage of Languages

A language can appear in two contexts:

- as the language of the iQvoc user interface,
- as the language of the lexical properties of the thesaurus.



Screen 41 Language selection

The LANGUAGE option of the main menu provides selections of the primary and secondary language.

- Primary language (single-selection) is the language of the user interface and language of the lexical concept properties at minimum.
- Secondary language (multi-selection) hides or shows lexical concept properties in that language in addition.

In the example above, you can only switch primary between English and German.

When you switch to German as primary, secondary will show English now.

3.3.2 Configuring Languages

Login as administrator again and select ADMINISTRATION > CONFIGURATION.

Languages

Languages for preferred labels	en,de
Languages for alternative labels	en,de
Languages for notes	en,de

Screen 42 Languages configuration

To add French, Spanish and Russian, add “,fr,es,ru” in each field, so you get “en,de,fr,es,ru”.
SAVE and look at the language options again.



Screen 43 Language selection with incomplete labels

To add a working primary language, you will also have to provide the set of UI labels in that language. Screen 43 unveils, that the English label set still misses “Russian”, so the two-letter encoding is shown. The language selection is fully functional anyway. Editors may start translating even in this state.

You need to provide a full label set of the user interface for Russian.

See the Administrator Manual for details.

Login as Eric and CONTINUE EDITING Painting again.

3.3.3 Translator's Scenario

The Labels section (as well as any language selection below) now offers the languages that have been selected.



Labels

Multiple values can be entered comma-separated.

Preferred labels	en	Painting
Preferred labels	de	Malerei
Preferred labels	fr	Peinture
Preferred labels	es	Pintura
Preferred labels	ru	картина

Screen 44 Editing labels in multiple languages

As a translator, you will probably have a single target language, and this generally is your mother language.

Generally there is a given source language, but maybe you want to see a third language translation while you translate.

Say, you are Spanish, translate from English, but you have a good understanding of French as well.

In this case select Spanish as Primary, and English and French as Secondary.

iQvoc 4.9 has not deeper support of the translator role so far. Translators need to be Editors with all rights of an editor and are not restricted to only translation.

3.3.4 Support of Asymmetrical Multilingualism

Most multilingual thesauri support a symmetric pattern, where each concept has a preferred label and (recommended) definition in each supported language.

However, languages are not really like that. Concepts have designed and evolved in each language differently over centuries. For example, the English distinction between “Wood” and “Forest” is completely different from the German distinction between “Wald” and “Forst”, there is no “golden rule” which one may translate the other.

This is why linguists came up with concept of Asymmetrical Multilingualism. Here all concepts are language specific, and have a preferred label and description in one language only.

There are two ways to handle translations in this case:

1. Provide one concept scheme per language and use iQvoc federation features (see section 3.3 *Working with Multiple Concept Schemes*) for translations and similarity relations.
2. Provide one language-centric concept scheme with preferred labels in one language only and alternative labels in any language that may be considered as a translation.

3.4 Working with Multiple Concept Schemes

SKOS (and iQvoc) support many kinds of “knowledge organization systems, such as thesauri, taxonomies, classification schemes and subject heading systems” (SKOS). Each of them will be represented by a skos:ConceptScheme.

Multiple concept schemes are strictly separated from each other. Semantic relations as Broader, Narrower or Related are only valid between two concepts from the same scheme. Any editorial team usually is responsible for exactly one concept scheme.

iQvoc implements this in a very natural way by supporting exactly one concept scheme per instance, such as the Hobbies thesaurus at <http://try.iqvoc.net/>.

If you need a second concept scheme, you will have to deploy a second iQvoc instance hosting this scheme with a different URI.

Now both of them are completely separated. Concepts cannot be accidentally mixed, and editors have a clear responsibility.

But, if appropriate by content, concepts from different schemes should be mapped to each other.

3.4.1 Matching by URI Reference

The simplest way is copying an external concept URI into the Matches property.

Get the Painting concept in edit mode and scroll down to Matches.

The screenshot shows a user interface for managing concept mappings. At the top, a header reads 'Matches'. Below it is a horizontal toolbar with four items: a dropdown menu set to 'Other', a text input field containing a URL (<https://www.eionet.europa.eu/gemet/concept?cp=600z>), a dropdown menu set to 'Close Matches', and a blue '+' button.

Screen 45 Adding a concept mapping

Make sure “Other” is selected on the left.

Say, you found “Paint” in the GEMET Thesaurus and want to create a mapping.

The Paint URI in GEMET is <https://www.eionet.europa.eu/gemet/concept?cp=600z>.

Paste it into the field in the middle.

Now you need to select from different (SKOS-) flavors of matching on the right:

- Close
- Exact
- Related
- Broader
- Narrower

In this case, Related looks best.

The screenshot shows the same 'Matches' interface as before, but with a few changes. The URL in the middle input field has been replaced by '<https://www.eionet.europa.eu/gemet/concept?cp=600z>'. The dropdown menu on the right is now set to 'Related Matches'.

Screen 46 Related match by URI reference

Press the + button on the right to add this mapping.

Now SAVE the concept version.

The preview now shows this link, and you may navigate to the GEMET concept “Paint”.

Wouldn’t it be nicer to see the label of the external concept as a link, instead of “naked” URI reference here?

As external labels may be changed over time, we avoid saving a redundant duplicate. But see what a federation can do.

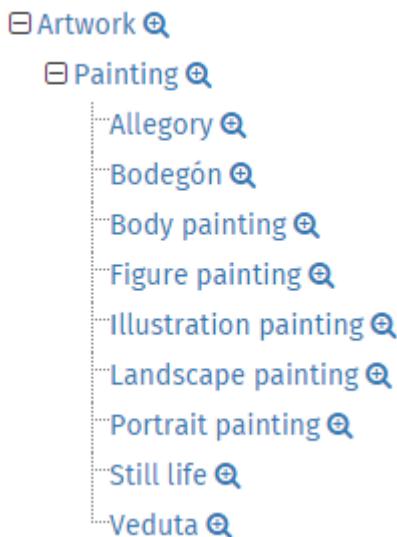
3.4.2 Concept Scheme Federation

To make mappings more comfortably maintainable (and too add more features), iQvoc supports the federation feature.

Today, federation only works between iQvoc instances, so we cannot use it with GEMET, as GEMET is SKOS, but not hosted in iQvoc.

Establishing a federation is easy and can be started from one side only.

Emma knows some exiting Art Thesaurus which goes more in detail about Painting. The hierarchy looks as follows:



She wants to maintain mappings between the Hobbies and the Art thesaurus in a comfortable way and make them bi-directional.

Again, we have to call the administrator.

Login as amin@iqvoc and select ADMINISTRATION > CONFIGURATION.

In the Federation block you find only one input field Sources (iQvoc).

Copy the URI of the Art concept scheme here.

Federation

Sources (iQvoc) http://try-iqvoc-federation-client.herokuapp.com/

Screen 47 Configuration of a federation

Press SAVE. You are done.

Now login as Emma or Eric again and get the “Painting” concept it edit mode.

Look at the Matches property now:

Matches

Art Thesaurus ▾ https://www.eionet.europa.eu/gemet/concept?cp=6007 Related Matches ✕

Close Matches +

Screen 48 Select a match from a federated scheme

How did iQvoc guess the name of the newly federated partner?

Right after Admin saved the modified configuration iQvoc sent an API request (GET /scheme) to the external URI to retrieve the name behind the scenes. As there is no standardization of such issues (so far), this only works when the external thesaurus is hosted by iQvoc.

Now Emma can use auto-completion in the input field to select a concept from the external thesaurus just like she used it locally before (iQvoc API requests behind the scenes again).

Matches

Art Thesaurus ▾ Pai Close Matches ▾ +

Painting https://www.eionet.europa.eu/gemet/concept?cp=6007 Related Matches ✕

Screen 49 Auto-completion of federated concept labels

But she hesitates. Which concept to select and what flavor of mapping?

She can use an exact (or close?) match to the external “Painting”, or she can use a narrower match to each of its children.

She decides for a single exact match, selects both the match type and the external “Painting”, presses the + button.

After having SAVEed, the preview now shows the label of the federated concept. More precisely, it first shows the external URI, and then retrieves the external label to replace the URI by this label. In cases of low latency you can see this happen.

The shown label has a hyperlink to the Painting concept of the Art thesaurus. Move over!

Now you see can the children of this concept in the Art thesaurus.

So far, there is no back link to the Hobbies thesaurus yet.

3.4.3 Managing Reverse Matches

If you are maintaining mapping relations from your thesaurus to someone else's, you probably want to invite them to map back.

There are two ways to get this managed:

1. iQvoc can export the full set of reverse mappings to an external scheme in form of SKOS statements, and the other side only needs to import. This is the only way if the external scheme is not hosted in iQvoc.
2. If you have a federation partner with another iQvoc instance, you may let iQvoc do everything for you in the background over an asynchronous API function. The federated instance may give your instance the permission to perform this fully automated. This is what we call a "trustful federation".

Emma has already agreed about bi-directional matches with the administrator of the Art Thesaurus. He has edited his configuration in the same way, linking back to the Hobbies Thesaurus.

If she SAVEs a modified match now, an asynchronous API request will be started.

She may see the following note before the job has completed:

Pending jobs. There are pending jobs for this concept.

1. Creation: ExactMatch-Relation of concept http://try-iqvoc-federation-client.herokuapp.com/_a3033845 from remote ontology to Painting pending.

Screen 50 Asynchronous API request to mirror a new match

Now Emma looks at the „Painting“ concept in the Art thesaurus. So far, there is no back link to the Hobbies thesaurus yet. Latency is awful today.

3.4.4 Distributed Search

Even if not part of the specific editorial functions, the distributed search needs at least to be mentioned.

Search

For: Labels

Mode: begins with

Search term(s): Paint

For:

- Concepts
- Collections
- all

Collection: all

language: de en es fr ru ALL NONE

External sources: Art Thesaurus ALL NONE

SEARCH

Screen 51 Including external sources in a search

The search results show the results from both thesauri.

Search results (2)

Painting
type: Preferred label
language: en

Painting
http://iqvoc-fed-demo-2.herokuapp.com/_63618e17
type: Preferred label
language: en

Screen 52 Finding local and external concepts in a federation

If you search with the same setting apart from „Portrait“ as the search term, you will find „Portrait painting“ in the Art thesaurus, even though there is no mapping to this concept in the Hobbies Thesaurus.

Search results (1)

Portrait painting
http://iqvoc-fed-demo-2.herokuapp.com/_a5320138
type: Preferred label
language: en

Screen 53 Finding external concepts in a federation

Inlucing external sources in a search will search these sources, not their local matches.

4 Extended Options

Some options which are not supported in iQvoc core and neither in <http://try.iqvoc.net/>, but have been implemented by customization to the needs of customers.

4.1 Poly-hierarchy

Emma has moved “Dance” in the concept hierarchy from parent “Achievement hobbies” to “Artistic hobbies” in section 2.1.2.

Wouldn’t she have done better to *add* a second parent?

Multiple parents are supported in the German Environmental Thesaurus “UMTHES”³.

The screenshot shows a software interface for managing environmental terms. It consists of two main sections: "Allgemeinere Begriffe" (General Terms) and "Spezifischere Begriffe" (More Specific Terms).

Allgemeinere Begriffe:

- Partikelförmige Luftverunreinigung
- Luftverunreinigung
- Partikel
- Luftschadstoff
- Luftverunreinigung
- Schadstoff

Spezifischere Begriffe:

- Feinstaub
- Faserstaub
- Gesteinsstaub
- Kohlenstaub
- Sedimentationsstaub
- Schwebstaub
- Pollen

Screen 54 Multiple parents (“Allgemeinere Begriffe”)

³ <http://sns.uba.de/umthes/>

The Broader term subtree (above) looks just like the Narrower term subtree (below). But this tree actually points “upwards”, finally ending in multiple top concepts.

4.2 XL-Labels

The Simple Knowledge Organization System eXtension for Labels (SKOS-XL)⁴ has been added as another W3C recommendation “providing additional support for describing and linking lexical entities”.

Concept labels are no longer character strings (“lexical entities”), but class instances which can have properties on their own and link to other labels.

Predefined are just one lexical property “literalForm” and one generic relation “labelRelation”.

Concepts now link to their label instances, and their literalForm value is equivalent to what would be a simple label value without XL.

There are many use cases, such as:

- Inflection
- Abbreviation
- Translation
- Term Composition

All of them need specializations to become meaningful and distinguishable.

The German Environmental Thesaurus “UMTHES” implements Inflection (rather complex and irregular in German) and Term Composition (rather complex and irregular as well) to enable full concept detection in written language.

Based on these extensions, UMTHES provides automatic indexing of documents.

⁴ <http://www.w3.org/TR/skos-reference/skos-xl.html>