

SWickyNotes - Philospace

Starting Guide

Abstract

SWickyNotes is a **Semantic Web** application for **semantically enriching Web contents** by ontology assisted annotations. It is a flexible application that can be configured to work in specific scenarios and domains.

The first SWickyNotes deployment is called **Philospace** and has been developed within the **Discovery EU project**.

1. Download and Installation

Mac OSX

Philospace comes in DMG format. Click on file to mount the DMG.

Before being able to properly run SWickyNotes, you need to install XULRunner, that is packed with Philospace. To install XULRunner double click on the XULRunner.pkg file and follow the instructions.

Then simply drag the Philospace 1.2.6 into your Applications folder and startup Philospace from there.

Windows XP/Vista/7

Just run the exe file to launch the installation wizard and follow the instructions. **Windows Vista and Windows 7 users must run Philospace with administrator privileges.** You just have to right-click on the Philospace.exe file and choose "Run as administrator".

2. Basic settings

The first time Philospace is run it requires you to set up a network identity. If you are not yet registered follow the link to <http://public.dbin.org/signup.php>, here you can create a new user and choose a username and password that will allow you to run Philospace.

Philospace includes a Web browser based on Mozilla. From the starting page you can reach one of the web sites of the Philosource federation or, clicking the link at the bottom of the page, you can try the "fairy tales demo". This is a simple web site where you can experiment in annotating and adding semantic notes to some famous child stories.

The following section of this guide refer to such a demo site to demonstrate SWickyNotes functionalities. The reason for using this simple demo trough the user guide is two fold: demonstrate the functionalities independently from the Philosource web sites and let the user experimenting with a very simple ontology in order to make concepts clear. All the functionalities shown in this section are available for the Philosource web sites as well.

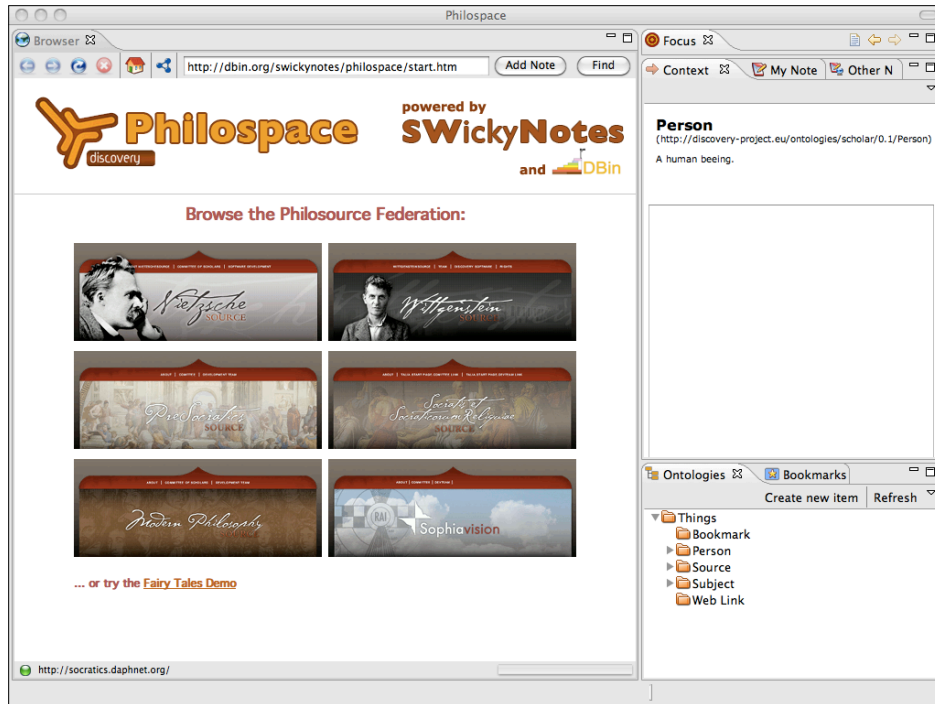


Figure 6. A screenshot of Philospace 2.0

3. The Fairy Tales Demo

For this demo we set up some web pages (a minimalist digital library) with four famous tales (taken from the web site <http://www.short-stories.co.uk/>) and we created a simple ontology that describes some common elements in fairy tales (character types, functions, etc.). Before starting the “semantic enrichment”, Philospace must be fed with such an ontology, that will provide a set of “verbs” and “nouns” to use in the annotations.

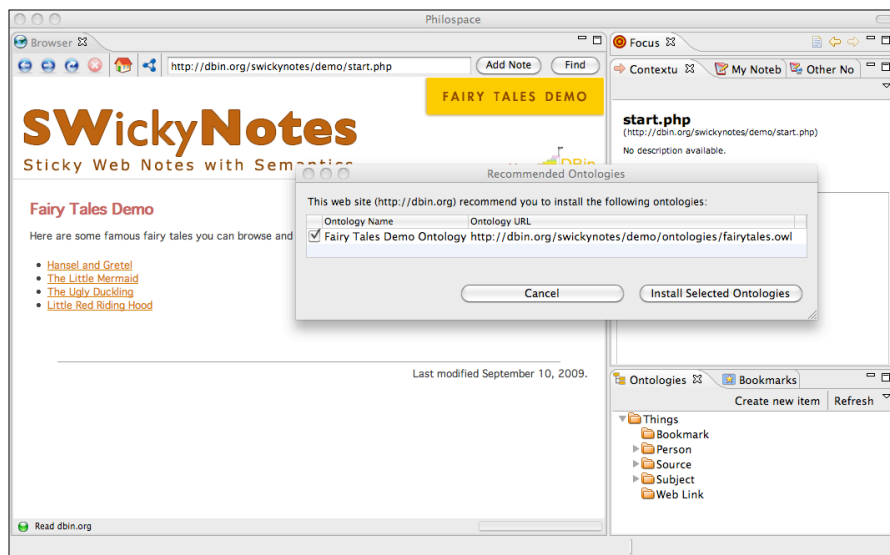


Figure 7. Recommended ontologies installation

SWickyNotes can automatically import ontologies from enabled web sites that expose a special “ontology advertisement”. Once browser loaded the demo start page, the button with the RDF icon (immediately after the

home button in the browser toolbar) will become enabled. Clicking on it will cause SWickyNotes to search for recommended ontologies. In this case the ontology is called “Fairy Tales Demo Ontology”, by clicking the dialog button the ontology will be installed.

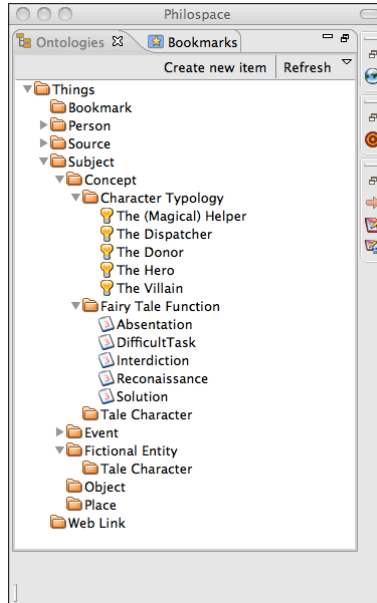


Figure 8. *The ontology navigator*

Once the ontology has been correctly installed, please take a look at the “Ontologies” view (right-bottom), you can maximize it by double-clicking the view title. You should be able to see new classes and instances, as shown in **Figure 8**.

Now that the domain ontology has been installed, let us show how to add notes to the demo pages.

By opening the first tale, “Hansel and Gretel”, you can notice that, as soon as the page is loaded, the “Contextual Graph” view (on the right-top) focuses on “Hansel And Gretel”. The graph is empty as no metadata has been added yet.

Clicking the “Add Note” button, close to the location bar of the web browser, a wizard will guide you through the annotation process.

Annotation are made by a free-text part, where you can write textual comments, and a structured part where you can add semantically structured statements, as discussed in the previous sections of this document. A note can contain one of these two parts or both of them. In **Figure 9** we show a simple annotation: a title (optional) and a short comment has been added. Now let us consider the structured part of the note.

One can think of structured data as very simple statements composed by subject, verb and object. The subject in this case is the source that is being annotated (Hansel and Gretel). The verb can be chosen from the “relations” drop down. For example, we could choose “has author”. At this point, to complete the statement, it is necessary to specify a target, that is the object of the statement.

SWickyNotes queries the installed ontologies to obtain a set of “things” that can be suitable as objects of the statements, depending on the relation that has been chosen. In this case the object of “has author” should be a person, and the “target” drop down collects all the persons known at this moment (e.g. included in one of the ontologies). As in this case the authors of the tale are two (brothers Grimm), one more statement is needed. To add a statement, simply click the “Add Statement” button and reiterate the process of choosing the relation and target. Once the form is complete, clicking the finish button will create the actual note.

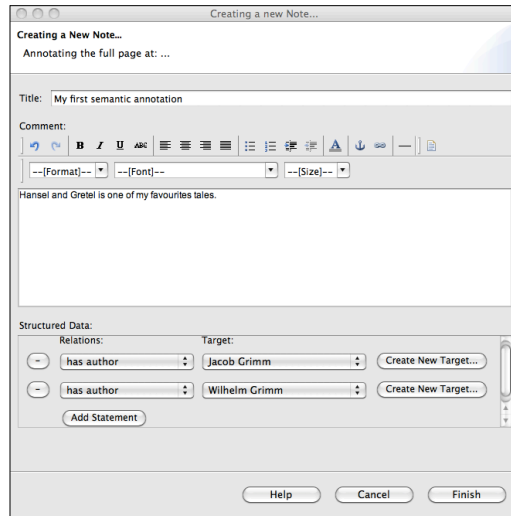


Figure 9. The note creation GUI wizard

As the newly created note contains structured data, the “Contextual Graph” will show new connections (if it doesn’t please reload the web page in the browser). Furthermore, the note can be visualized in the “My Notebook” view (**Figure 10**), along with some additional information including note’s author and creation time.

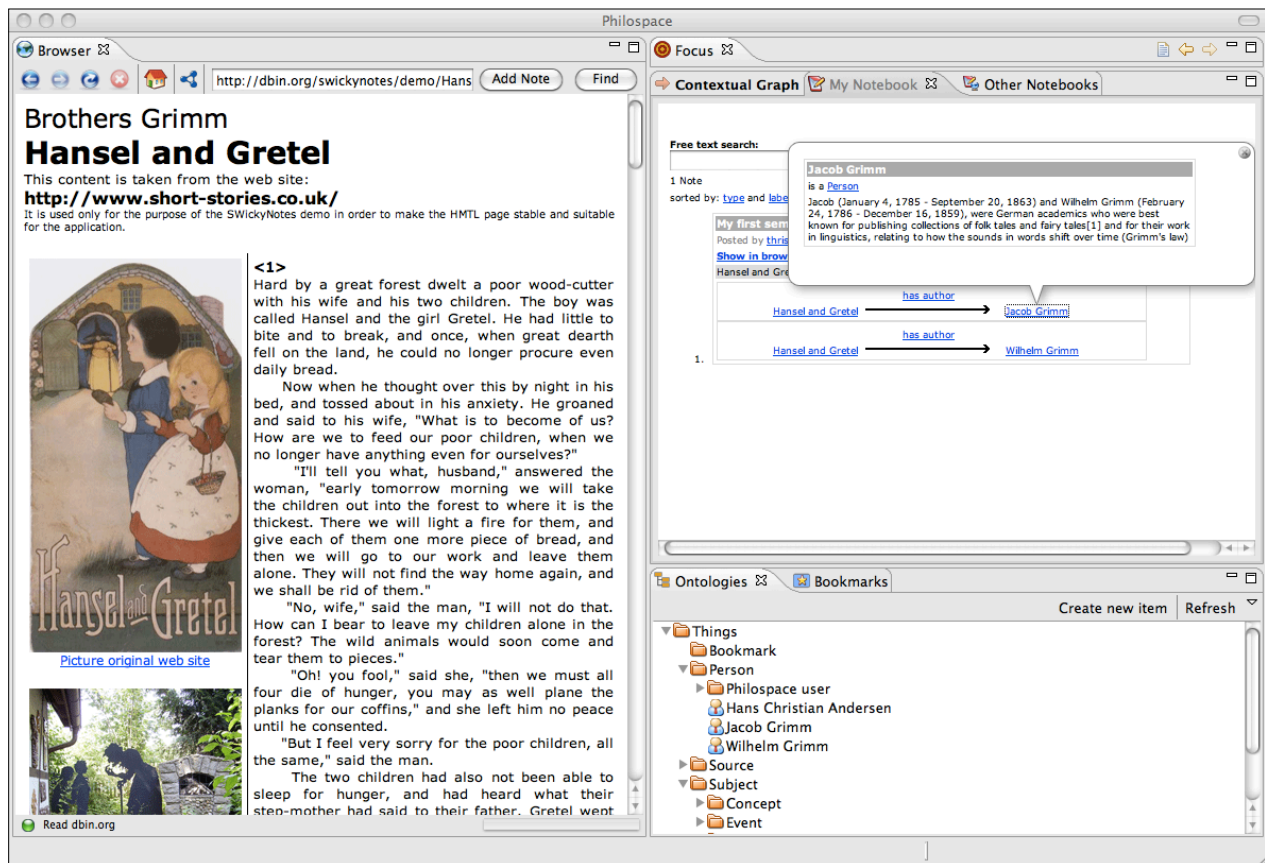


Figure 10. visualizing notes in the My Notebook view

Now let us show how to create annotations referring to a fragment of the web page. This is as easy as selecting a sentence in the browser, right-clicking on it and choosing “add note”. Let us suppose we want to state that a sentence is a manifestation of one of the typical functions (or events) of fairy tales. This time we can proceed in a slightly different way.

Without closing the annotation wizard, we can browse the ontologies view three and explode the Fairy Tale Function class (represented as a folder): the list of instances of the class will be shown. To use one of the instances (e.g. Absentation) in the note, we can drag it into the “target” field of a statement. At this point SWickyNotes uses the ontology to suggest possible verbs, let us, for example, choose “is manifestation of” among the possibilities. The process is depicted in **Figure 11**.

Now let us suppose we want to refer to a function that is not included in the ontology (e.g. Lie). In this case we could add a new statement, choose the “is manifestation of” relation and then click on “create new target” for creating a new instance of the correct class recommended by the ontology (in this case Fairy Tale Function). Note that the new instance, created in this way, will not be added to the ontology: it will be instead written in the current personal notebook. We explain more about notebooks in next sections. To create a new instance, users can choose among two options: simply typing a name for the instance and short description (recommended), or identify the instance by using a URI (for example if the instance is an existing web page).

At this point a small icon should appear in the Web page, near the sentence that has been annotated. By clicking the icon such a sentence will be highlighted and the contextual graph will show all the relevant information known about the sentence itself.

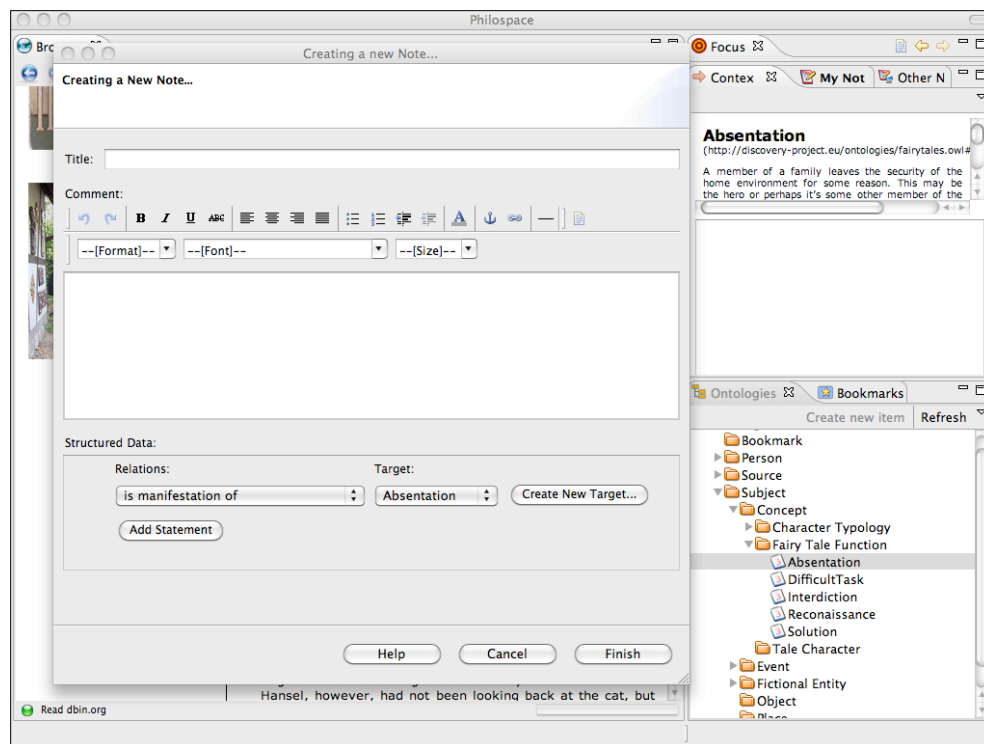


Figure 11. *Creating structured notes from ontology items*

4. Contextual navigation of entities

The contextual Graph view (**Figure 12**) shows, at every moment, the relations that a selected entity have with other entities. The selected entity can be the Web page displayed in the browser (or a fragment of a page, as happens in the next figure) or an entity selected from the Ontology view.

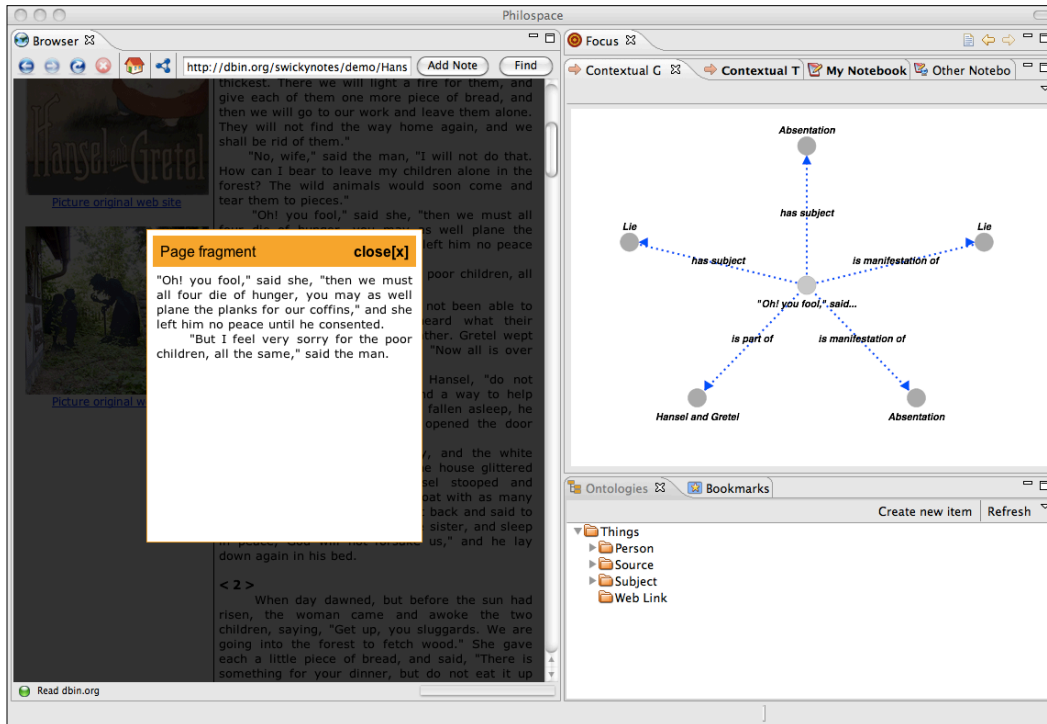


Figure 12. The contextual graph

The Contextual Graph can be used to explore the conceptual network constituted by ontologies and user-made annotations (referred to as knowledge graph previously in this document). Such a network is made of nodes that can be Sources (in this case they will be also opened in browser) or other kind of entities, e.g. Persons, Concepts, etc. (in this case the browser will remain on the last Source you visited).

By clicking on one of the nodes of the graph the description of the item (taken directly from the `rdfs:comment` fields in the ontologies) will be shown and a "focus on item" function will be made available. Focusing on one item (node) causes the Contextual Graph to change, showing the relevant information about the focused node. The Focus view, on top of the contextual graph, allows you to go back and forward in focusing history. It works similarly to the back and forward arrows in a web browser.

The same information available in the contextual graph can be explored in the Contextual Tree view. The only difference is that, in this case, relations are shown in the form of a tree, where the arrow name indicates the kind of relation that the selected item has with the children items in the tree. In the **Figure 13** the Contextual Tree is focusing on an instance selected from the ontology view.



Figure 13. The contextual tree

Both the contextual graph and tree show, by default, only relevant connections, hiding other parts of the graph that represent structural knowledge. However, as expert users might be interested in exploring the overall graph, SWickyNotes provides an advanced modality. By clicking on the arrow at the top-right of the view, a menu will be shown. By selecting "show overall graph" all the relations present in the knowledge graph will be displayed. This option is not recommended for regular users.

5. Private and Shared Notebooks

As already discussed, SWickyNotes uses the notebook metaphor to organize notes and to group them. All the notes that a user creates are collected in the personal notebook. External notebooks from other users can also be imported, in order to view annotations from friends or colleagues. The structured statements present in such external notes will be automatically merged into the knowledge graph.

The Personal Notebook

The Personal Notebook is a RDF/XML file containing all the notes created with SWickyNotes. While browsing the Web, the 'My Notebook' view will show all the notes related to the current web page. The personal notebook can be configured from the My Notebook preference page, shown in **Figure 14**.

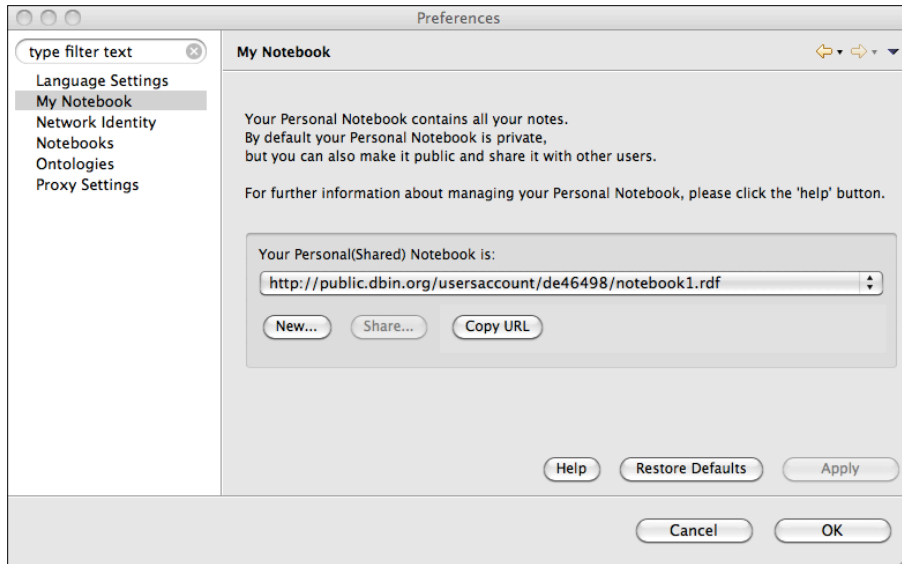


Figure 14. The My Notebook preference page

By default the Personal Notebook is private. This means that it is stored in the local machine and that the notes it contains are visible only to the local user. In this case the My Notebook preference page shows the location of Personal Notebook as a local URL. For example the location "file:/Users/Christian/SwickyNotes/mynotebook.rdf" points to a precise folder where the notebook RDF file is actually located.

However, the notes that a user created could be of interest to other people (friends, colleagues, etc.). That is why SWickyNotes allows to make the Personal Notebook public and to share it with other users to create a collaborative environment.

To share the Personal Notebook one only have to click on the "share" button in the "My Notebook" preference page and choose a name for it. SWickyNotes will automatically create a new notebook file, copying all the notes from the private local notebook to a new notebook that will be automatically uploaded on the Web. In Philospace, such shared notebooks are uploaded to the Philospace web site where each user has a personal data uploading folder.

A new location will appear in the preference page and the personal notebook will be publicly available on the Web.

All the notes added from this moment on will be added to the public notebook and will be immediately available on the Web. To avoid this, one could switch back to the private notebook by choosing it in the the drop down and by clicking 'apply'.

To share the notebook with a friend, one needs to copy its URL (using the "copy URL" button provided in the preference page) and send it to your friend (e.g. by e-mail). He/she will be able to import the shared notebook into SWickyNotes just by going to the 'Notebooks' preference page (**Figure 15**), clicking 'Add Notebook' and typing the URL (for more details on adding and removing notebooks please refer to Other Notebooks).

SwickyNotes allows to manage multiple notebooks, a new private Personal Notebook can be created by clicking on the 'new' button in the preference page.

All notebooks

In the Personal Notebook section we explained how a Personal Notebook can be made public and shared. The Notebooks preference page allows to import external notebooks (shared by your friends or colleagues). It is as simple as clicking the 'add Notebook' button and typing the URL of the notebook you want to import.

A user can decide to temporarily disable or remove one or more notebooks from the list. By selecting a notebook, it is also possible to inspect its RDF/XML content or copy its URL to clipboard. Notice that the

current Personal Notebook (being it private or public) is by default included in this list and cannot be removed or disabled.

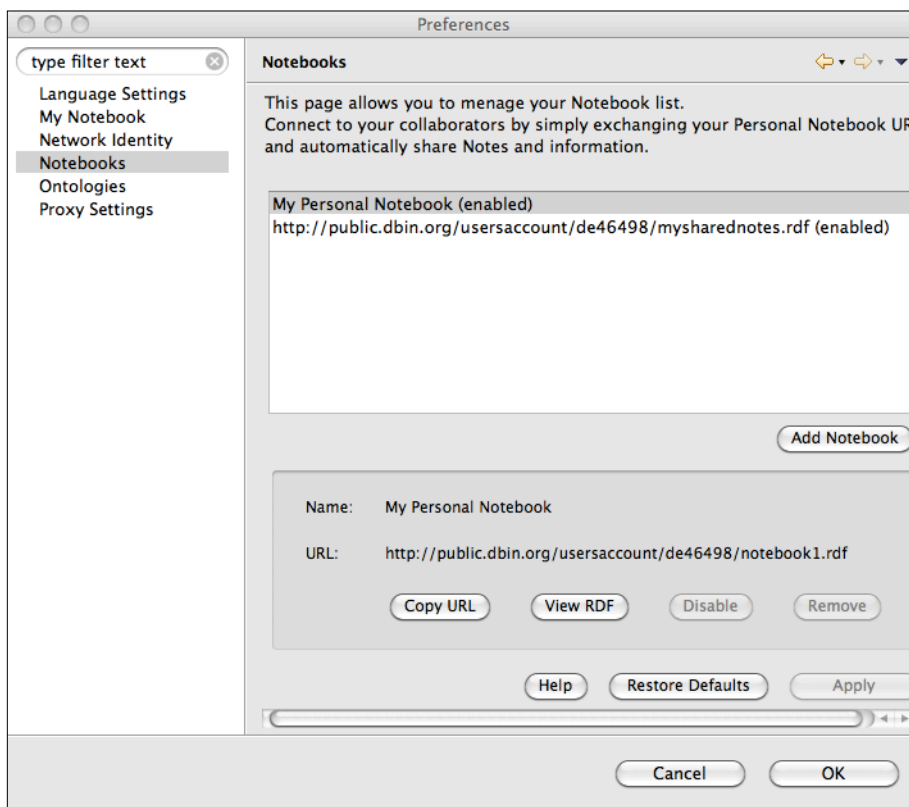


Figure 15. *The Notebooks preference page*

All ontologies

Similar to the Notebooks preference page, the Ontologies preference page shows the list of all the ontologies installed. In **Figure 16**, for example, five ontologies are present, each one has a name and a location on the web where in ca neb retrieved in the form of RDF/XML data. Expert users can use this preference page to add custom ontologies and to enable/disable or remove the ontologies in the list.

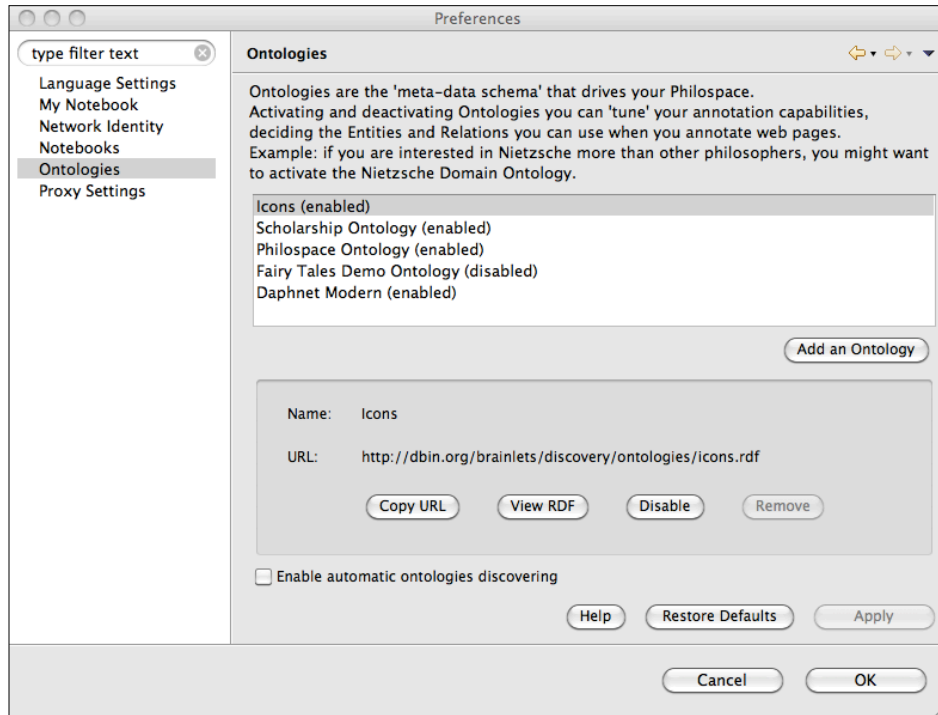


Figure 16. *The Ontologies preference page*

Preferences and Settings

General aspects of Philospace can be set using specific “Preferences Page”. It is possible to open the Philospace’s Preferences Page going to the “Philospace” menu and selecting the the “Preferences...” option. Some of Philospace’s Preference Pages have been already described in the previous chapters. Here, a brief presentation of the others Preference Pages will be given.

The “Language Settings” preference page allow users to specify the default language used to show RDF labels and comments. If the specified language is not available for a given resource, the default language (english) or the only available language will be used.

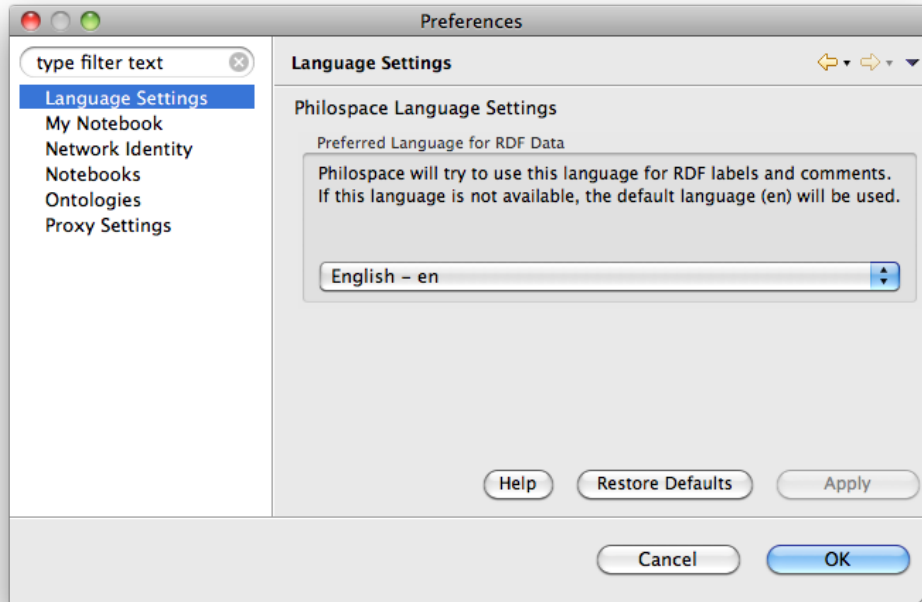


Figure 13. The language preferences

The “Network Identity” preference page allow users to change its own Philospace identity. This page cold be useful only if a user has two or more identity to manage. To change the Philospace identity the user will have to press the “Change Account” button and then (s)he will have to enter the username and password associated to the new Philospace identity. The new Philospace identity must be already active.

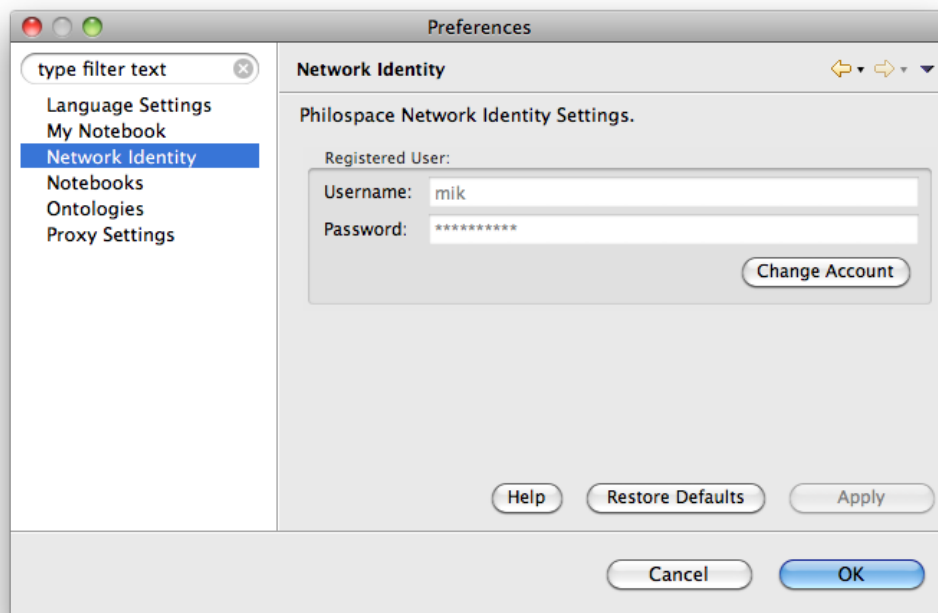


Figure 14. The network identity preference page

The “Proxy Settings” preference page allow user to disable or enable a network HTTP proxy, specifying its HTTP address and the related port.

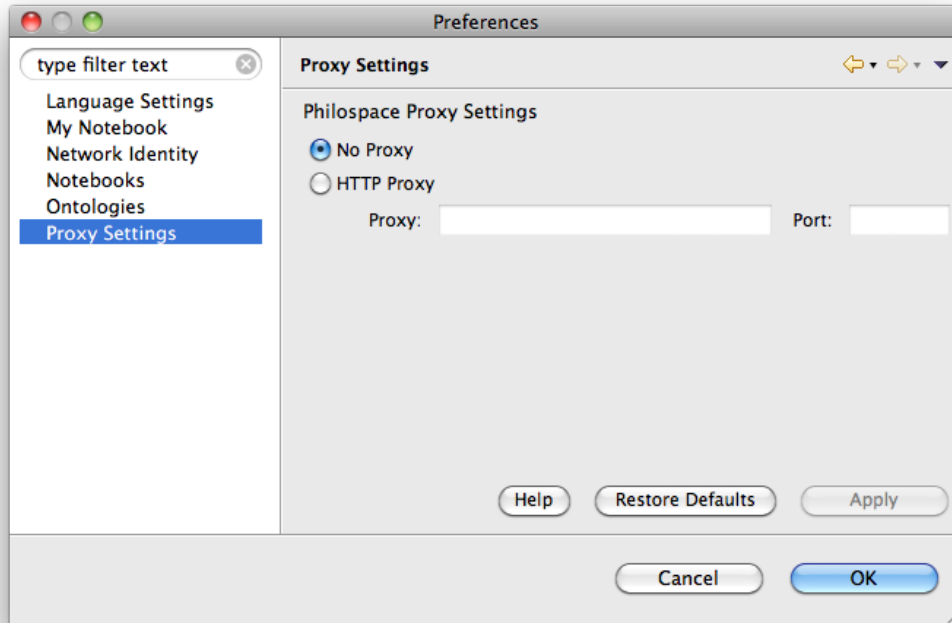


Figure 14. The network settings preference page

6. Upgrading Philospace

New releases of the software will be uploaded on the Philospace web sites to fix bugs and tune the application. The current version number is 2.0.1.

When installing a new version of Philospace, the user can choose, during the installation phase, whether the software should be installed into a new folder (this is the default option, the new folder will be named with the version number) or into an existing one (e.g. the folder where a previous version was already installed).

If the first case, the new version will be independent from any other previous version installed in the system, while in the second case the old version will be replaced.

What about my old notebook?

Users might want to preserve their personal notebook after upgrading to a new version.

This can be done in two ways.

- 1) Install the new version into a new folder and then copy the “mynotebook.rdf” file from the old folder to the new one.
- 2) Install the new version into the folder where the old version was installed. This will preserve the notebook automatically.

In every case we recommend to make a copy of the notebook file before proceeding and backup it somewhere in the local file system. The default notebook file is located in the Philospace installation folder and is called “mynotebook.rdf” (unless the user has indicated an other file).