

## **\*\*Preface**

Since user guides tend to be boring to write and then boring to read, we've tried to have fun writing this one and hopefully you'll have also fun reading it, in between you'll discover how Deepamehta works!

**\*\*Just imagine the computer would let you do what you want....**

Normally when we think about things we make certain relations that for us are obvious, of course that I put the spare keys with the socks and obviously the health care card is in the fridge .. we know that we are not going to leave home without socks, so each time you pick some socks you will see where the spare keys are and since the fridge is full of healthy stuff that is the right place for the health care card to be.

Each one of us, make our own connections full of sense to us, so once we have made this connections we don't have to make an effort to think where to look for the keys or the health care card, our brain is quite happy not to be stressed by the fact of having to search all over the place when we look for the spare keys set or the health care card, it's able to go automatically to the right place. Less stress for the brain, less stress for us, the happier we are :-)

Probably you've chosen your connections based on some kind of situation, the last time you could not enter the house because you forgot the keys, you thought that if they had been with the socks you would not have forgotten them, clic! connection done.

Also there is no right way of establishing the connections, we use the one that fits for us, cool and happy, others will find other ways, sometimes you will share habits and you may change yours for something else that you consider better. When you live with people you find out that those connections are created collectively.

Now, comes the computer, this kind of black box that tells us how to organize things, nobody has asked us if that way makes sense for us, you have to store you images in the images folder, well not quite, you can do it somewhere else but inside you user space, if you put them inside the configuration folders, probably at some point someone will yell at you. You also keep seeing all sort of files with strange names all over the place, that annoys you, you don't want to see them and you want to have them all together somewhere, if you proceed to do so probably the next time you try to start your computer it won't start, those strange files were configuration files and you'll think oh shi\*\*\*!!!

But lets for a moment imagine that we don't have to care where the computer considers that the right place is, and that we are just able to make our own connections between the files that are in our computer. Imagine that we don't have to navigate through endless trees of folders to find things, having to make all kind of forced thinking to remember how once you decided to structure the tree.

Imagine

- you could just define your own semantic relations
- that all the files could be treated it in the same way
- you could relate any kind of file with any kind of other file
- that you stop talking on terms of files and start talking about concepts
- that you could establish relations between one concepts on your own way

maybe then you could see what is in your mind, it sounds kind of cool, right? well that is what Deepamehta enables you to do, to forget about a working context based on applications and tree

structured folders and to draw your way of thinking, well at least is on it's way to do it :-) ...

\*\* it sounds confusing, how can I draw my mind?

Yes, maybe at first it almost sounds like science-fiction, but that is how things evolve, first imagine them, then do them, as if it were that easy :-D

But let's stop talking and begin to see how DM works.

In the guide we won't cover the installation process, because that is already very good explained in the README file [<https://github.com/jri/deepamehta#readme>]. Here we will just remind you the way to start DM, it depends on your platform

```
deepamehta-linux.sh      # if you are under a GNU/Linux system choose "Run in terminal"
deepamehta-macosx.command # if you are under MacOS double-click it
deepamehta-windows.bat   # if you are under Windows double-click it
```

So now you should be seeing this

[dm\_1.png]

Just to dive better in DM, a suggestion is to set your browser to full screen, so you enter in DM mode ;-)

We are not going to log in for the moment, so let's see what's on the screen. The screen is divided in three parts, a toolbar on the top, a right panel and a left panel. This screen divided in three is called the Deepamehta Webclient, and is the standard user interface for DM.

Before explaining each of them, we'll introduce a few DM concepts, the basic ones, the ones you are going to use all the time.

Workspace, which is the more general container of the information that you are going to have. You will be able to define as many Workspaces as you want, you will be able to share "things" between workspaces.

Topic map, is part of a Workspace and for the moment let's say is the visualization of the information that is important to you in the current moment.

So the toolbar in the top part allows you to select and perform various operations. If you are not logged in, you will be able to select your Workspace, your topic map, to search by name or by type an item that you know, access the help and the link to log in.

Summing up the panel on the left hand side will be where you will visualize your topic maps and on the right hand side, you will see the content and details of the topic map.

If you are not logged in, you will see the last topic map you were and you will be able to switch to different topic maps or workspaces and also to search for any kind of item that is in your DM world.

Now we'll log in to do some stuff, click on the login link and introduce "admin" as user and leave the password blank

Before we have said that in DM we could see what is in our mind, let's check how can we do that. We were saying that for us the right place to put the keys is with the socks, let's build a simple sentence with it's subject and verb.

Tina has keys which are in the drawer that contains socks.

This can be turned into 3 sentences.

Tina has keys.

Key are in a drawer

A drawer contains socks

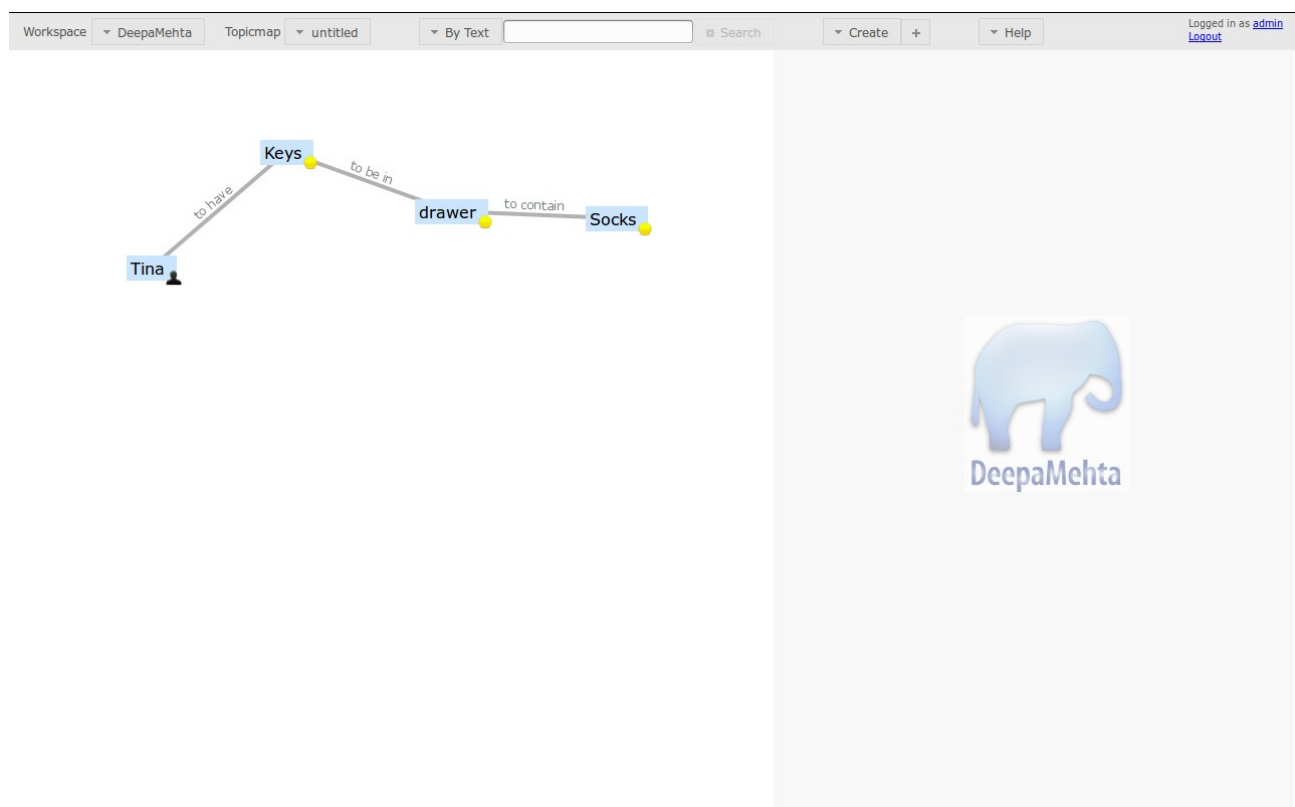
So there we have 3 sentences with 3 subjects and 3 verbs.

In DM the subjects are called topics and the verbs are called associations.

**\*Remember\***

Topics represent any concept, from people, countries, and organizations to software modules, individual files, and events,  
Associations represent relationships between topics

Maybe it could look something like this



[  
dm\_example01.png]

**\*\*How to do it**

Go to the toolbar and click on the "Create" drop down list, where you'll see 4 default topic types:

- Institution
- Note
- Person
- Web resource

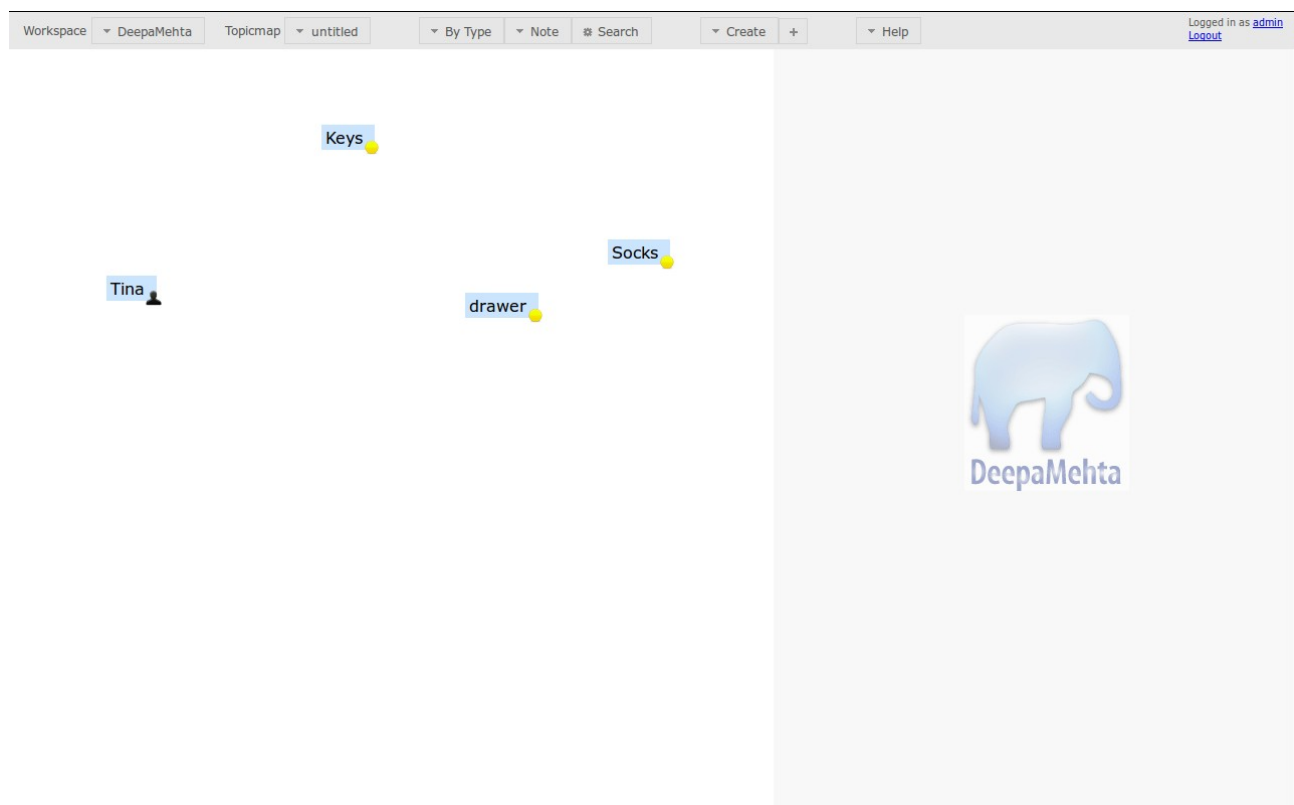
Oh wait, we didn't talk about topic types yet!!

We've said that topics are concepts, and we group concepts by types.

Topic types are topics grouped by type.

So when we say that a topic type is "Institution" we are managing the general concept of Institution, that is a place or organization founded for a specific purpose. We can think that a hospital is an institution, a school is an institution, a theater is an institution. All of those places have a certain number of common features that define them, so in DM when you select the topic type "Institution" you'll see those common default features (a name, an address, a mail, a url). The same happens with the rest of topic types.

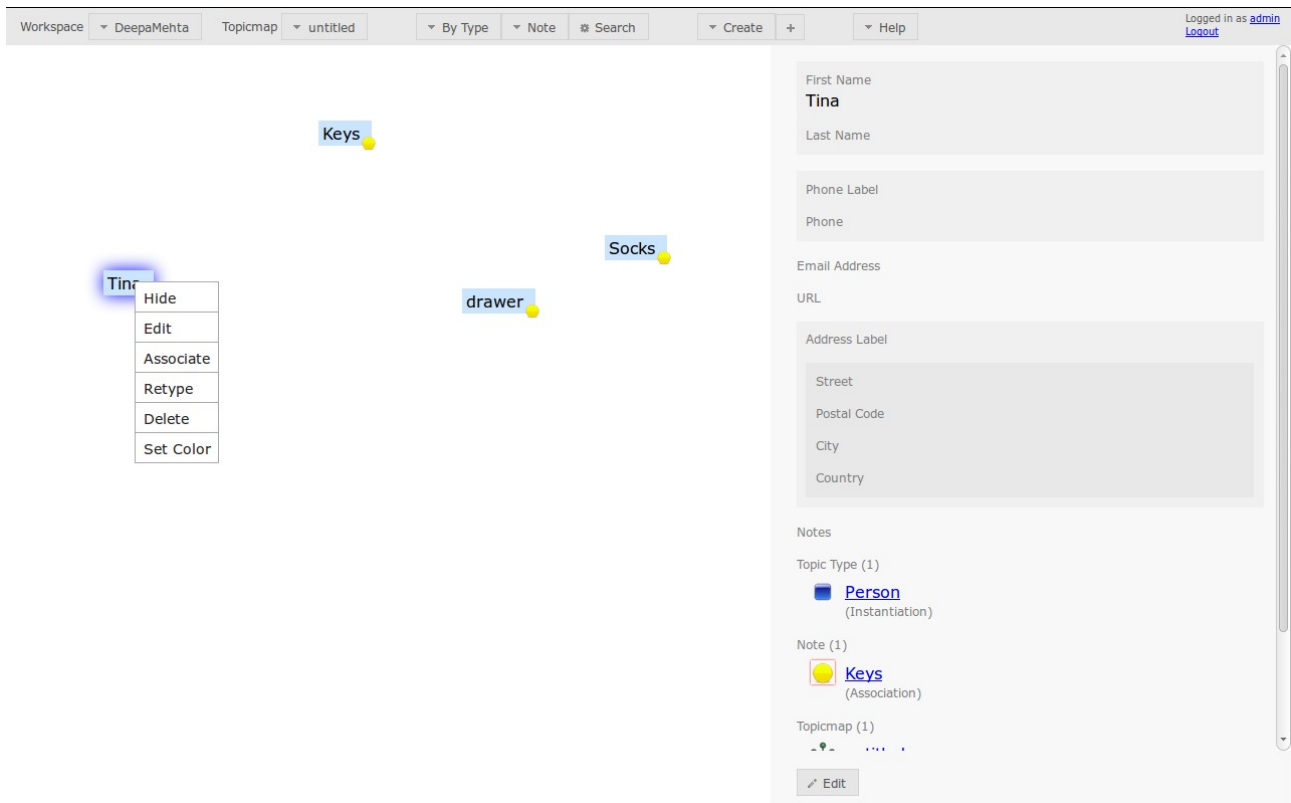
In our example we've created one topic type "Person", which is Tina. Tina is a person so it has certain common features with the rest of Humanity, a name, a last name, a phone, an email, a URL, an address (all optional). Then we've created 3 topic types "Note", which are kind of a wildcard, simple topics with a name and a description.



[dm\_example03.png]

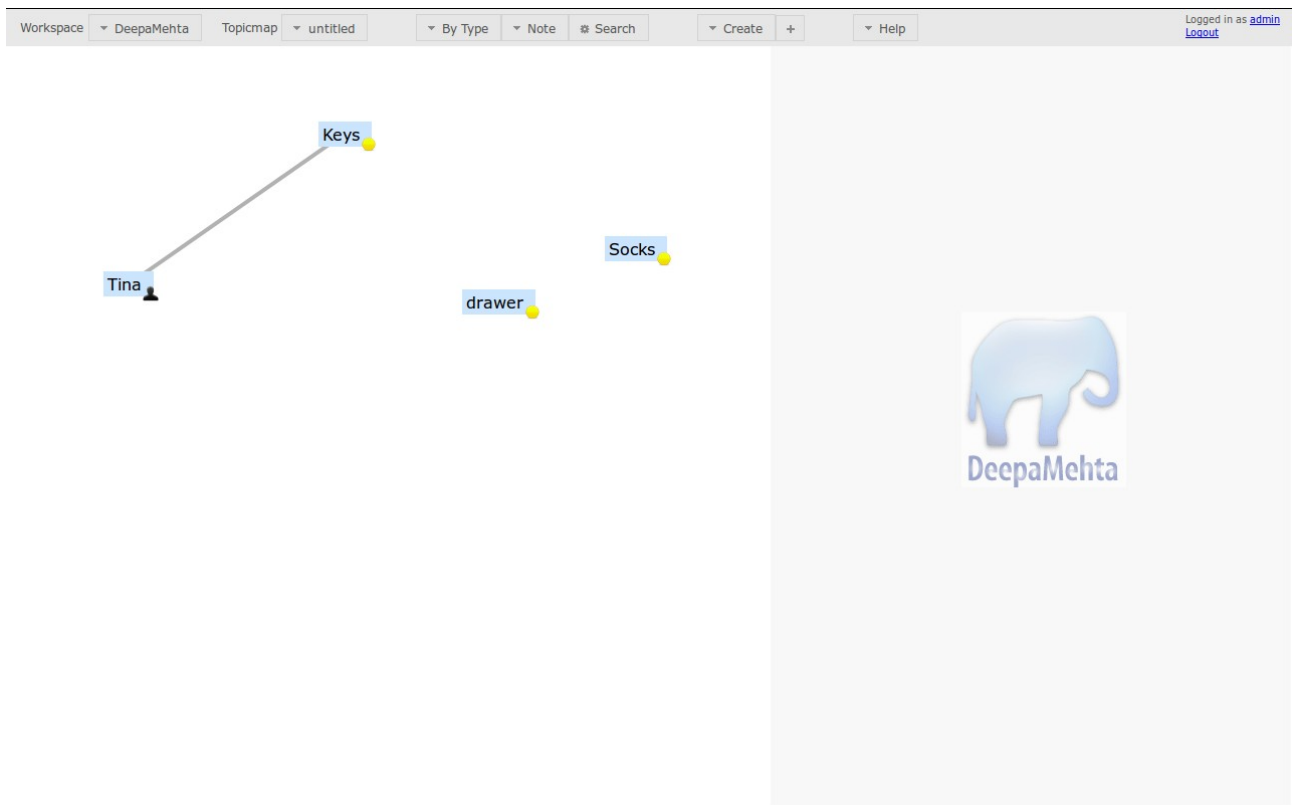
So now we have the topics but the topics alone don't make much sense, so we need to create the associations, that is how are those topics related.

First we wanted to say that Tina has keys (specifically a spare set of keys), for that we have to right click on topic Person Tina, where a menu with display and we will see the "Associate" option, we will clic on it



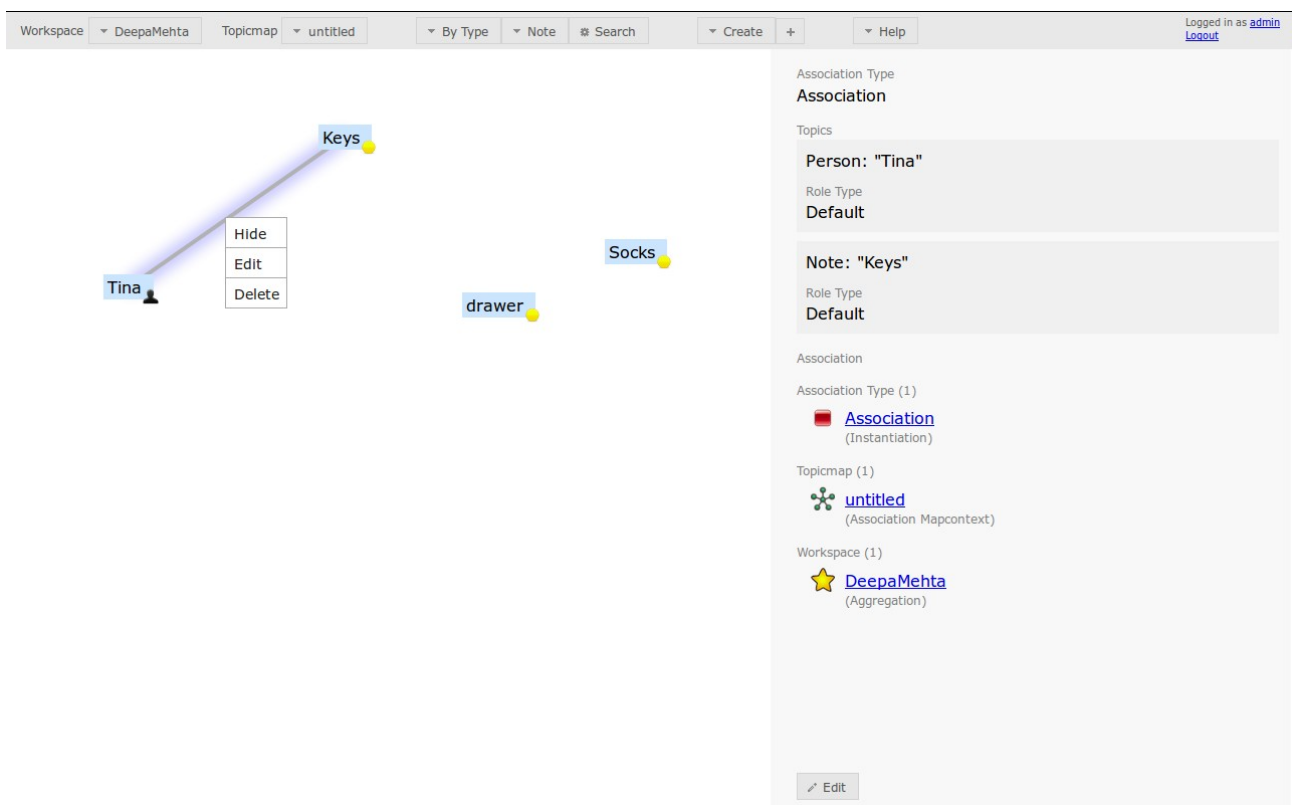
[dm\_example04.png]

A line will appear and you have "to take it" till the topic with which we want to create the association, in our case topic Person Tina has to be associated with Topic Note Keys



[dm\_example05.png]

another cool thing we can do is to name the association, because associations are also editable,



[dm\_example06.png]

so that we can actually read the sentence that we have in our mind. As a practice, we will use verbs

in infinitive, so that is general, in our case name this association "to have"

The screenshot shows a topic map editor interface. The top toolbar includes 'Workspace' (DeepaMehta), 'Topicmap' (untitled), 'By Type', 'Note', 'Search', 'Create', and 'Help'. The main canvas displays a diagram with nodes 'Tina' (person icon), 'Keys' (yellow dot), 'drawer' (yellow dot), and 'Socks' (yellow dot). A line connects 'Tina' and 'Keys'. The right-hand 'Properties' panel is open, showing 'Association Type' as 'Association'. Under 'Topics', it lists 'Person: "Tina"' with 'Role Type' 'Default', and 'Note: "Keys"' with 'Role Type' 'Default'. The 'Association' field contains the text 'to have'. An 'OK' button is at the bottom.

localhost:8080/topicmap/2584#

[dm\_example07.png]

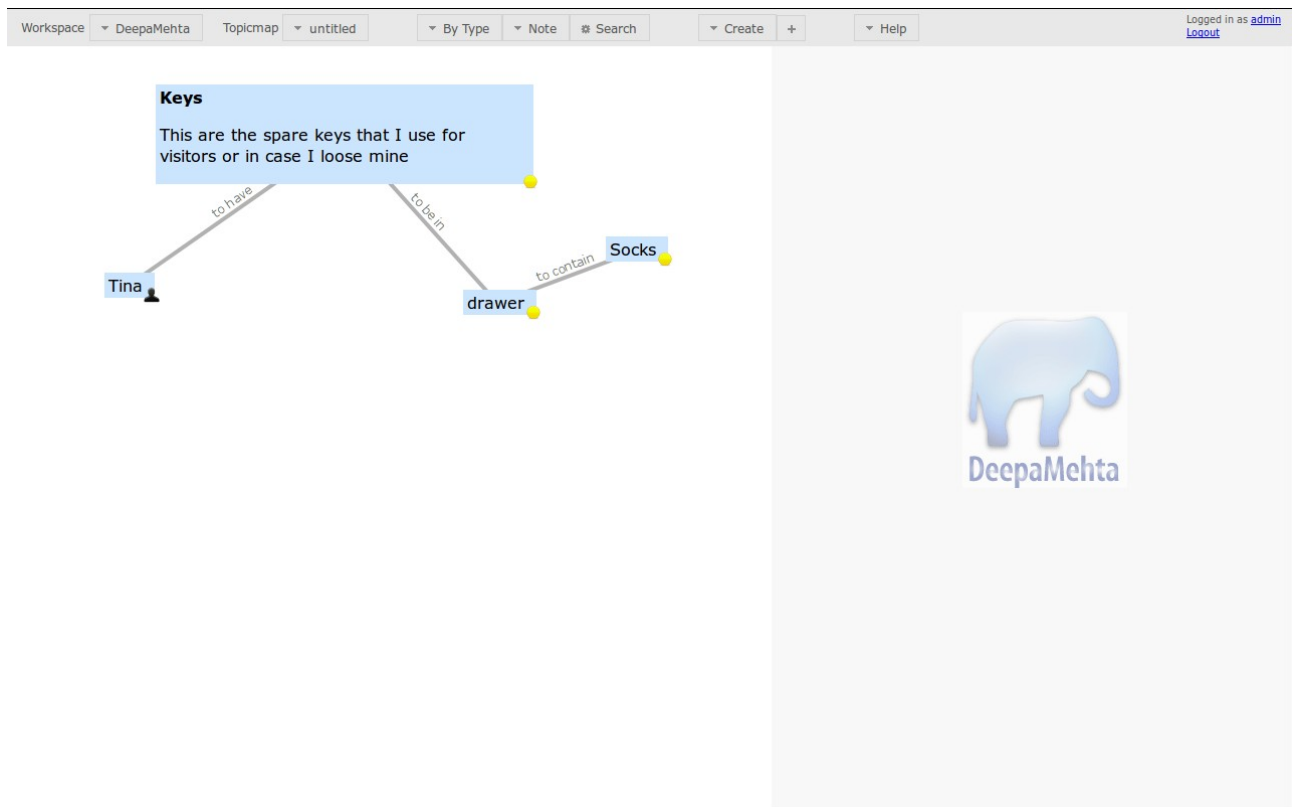
so now we can see "Tina has keys"

This screenshot shows the same topic map editor. The diagram now has the association line between 'Tina' and 'Keys' labeled 'to have'. The 'Properties' panel is more detailed: 'Association Type' is 'Association'; 'Topics' lists 'Person: "Tina"' (Role Type: Default) and 'Note: "Keys"' (Role Type: Default); the 'Association' field is 'to have'. Below, it shows a hierarchy: 'Association Type (1)' with 'Association' (Instantiation); 'Topicmap (1)' with 'untitled' (Association Mapcontext); and 'Workspace (1)' with 'DeepaMehta' (Aggregation). An 'Edit' button is at the bottom.

localhost:8080/topicmap/2584#

[dm\_example08.png]

We proceed in the same way with the other topic types, till we have



[dm\_example02.png]

so you are now creating your first topic map, cool!!!

**\*Remember\***

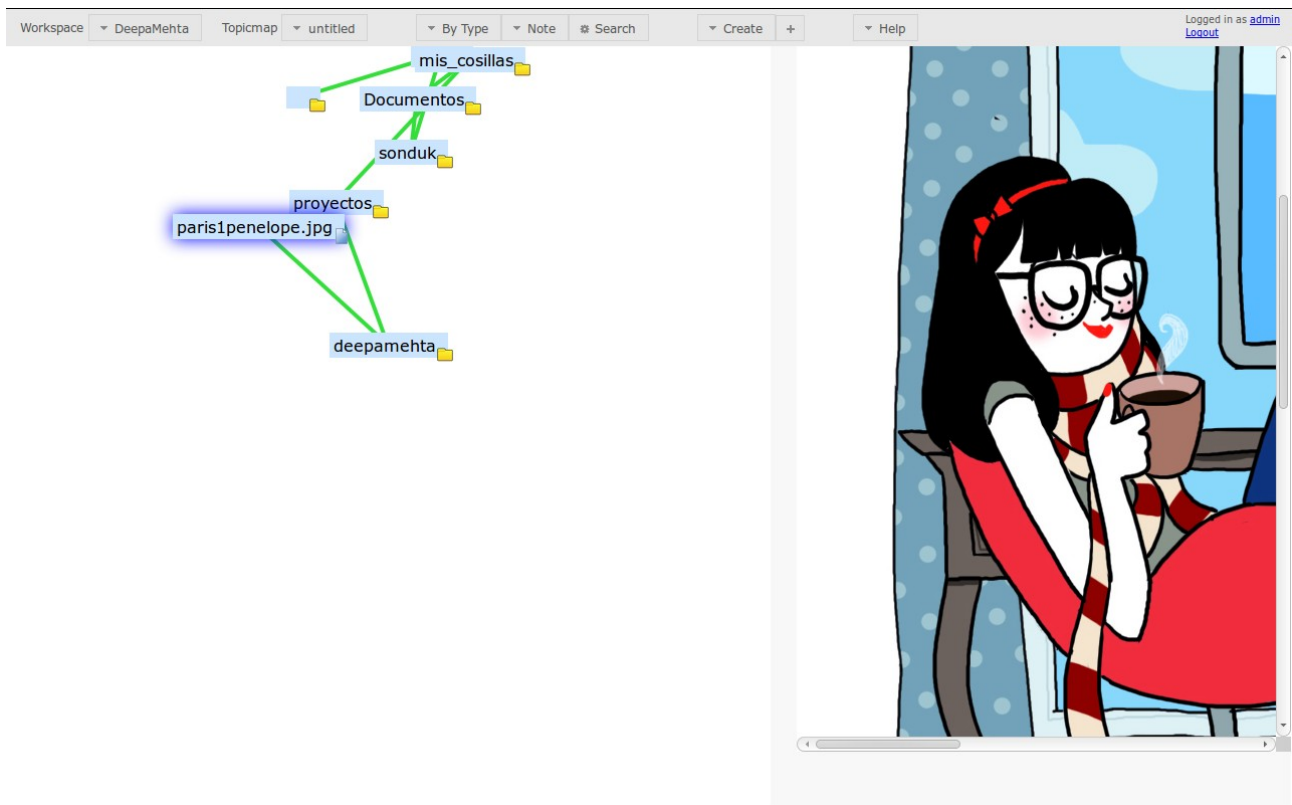
All topics and associations exist independently of topic maps and are stored centrally in the corporate memory (CM).

Topic maps are personalized views of extracts of the CM. Virtually every topic can be made visible in every topic map.

Now that you've remembered that DM is more like a brain let's continue, we have a nice photo from Tina. Ok that we want to associate it with her topic Person.

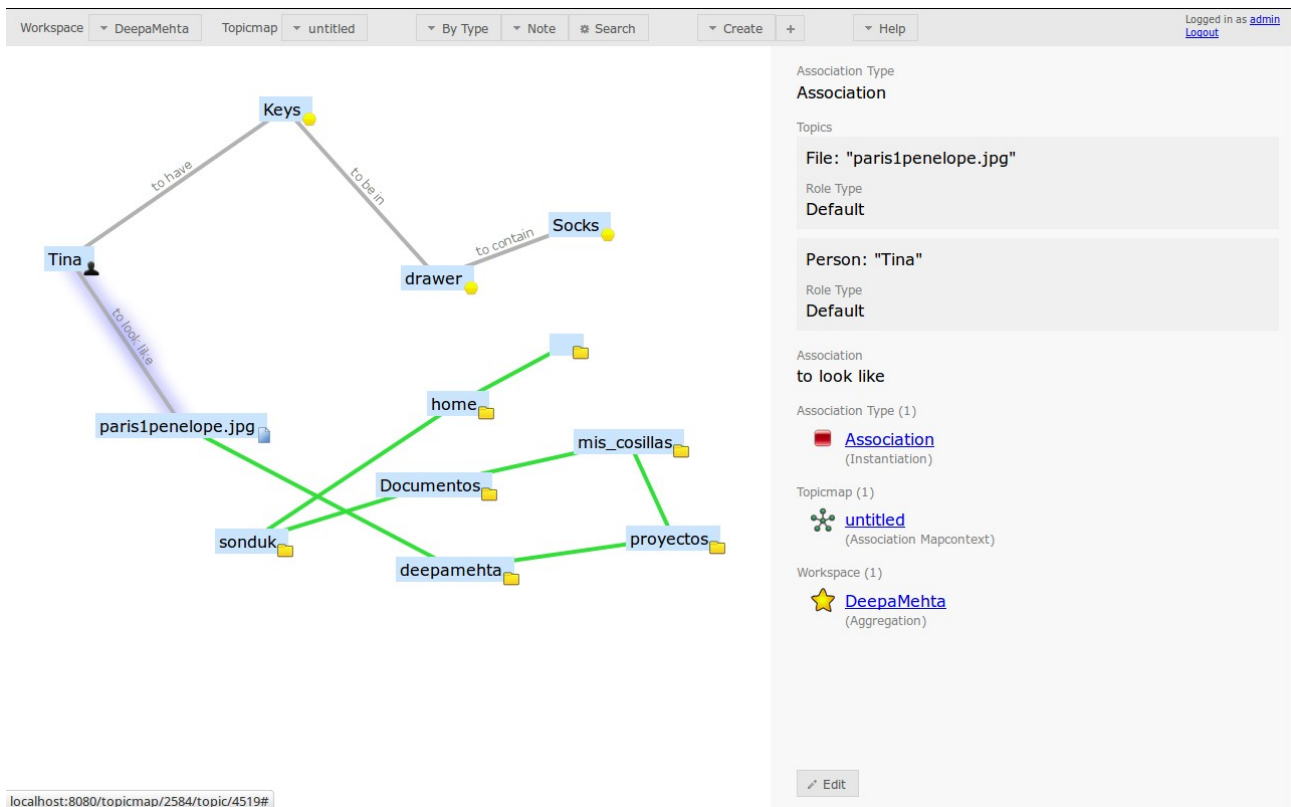
Go to the toolbar, click on the drop-down menu Create, there you will see "New File Browser", on the Detail panel on the right side you will see the File Browser and you'll recognize your computer's tree structure, browse until you select the photo you are looking for.





[dm\_example09.png]

You will see that a lot of topics and associations begin to appear with each click you make, it's drawing the path that your brain is making while remembering how did you organize your files till it get's you to the photo. At some point, the canvas may "move down" to find space to draw everything, but one the canvas is infitieve so there is no problem of space here :). Once you've selected the photo, you'll see it on the Detail Panel :). Now you can associate it with the topic type Person Tina, right click on the Photo associate and drag to topic type Person-Tina.



[dm\_example12.png]

Ok, you've made the relation but now there are lot of topic and associations that you don't really want to see, so it's time to Hide things, right click on each of the topic and click on Hide, hiding the topic will hide also the association, if at some point you want to see the topic but not the association, you can right click on the association, click hide and then just the association will be hidden.

The screenshot shows the Topicmap software interface. On the left, a network diagram displays nodes: 'Keys', 'Socks', 'drawer', 'Tina', 'sonduk', 'home', 'Documentos', 'mis\_cosillas', 'proyectos', and 'deepamehta'. 'Keys' is connected to 'Socks' (to be in), 'drawer' (to have), and 'Tina' (to have). 'Socks' is connected to 'drawer' (to contain). 'Tina' is connected to 'sonduk' (has photo). 'sonduk' is connected to 'home' (to be in). 'home' is connected to 'Documentos' (to be in). 'Documentos' is connected to 'mis\_cosillas' (to be in). 'mis\_cosillas' is connected to 'proyectos' (to be in). 'proyectos' is connected to 'deepamehta' (to be in). A context menu is open over the 'deepamehta' node, showing options: Hide, Associate, Retype, Delete, and Set Color. On the right, a panel shows the 'Folder Name' as 'deepamehta', the 'Path' as '/home/sonduk/Documentos/mis\_cosillas/proyectos/deepamehta', and a list of 'Folder Content' including files like 'dm\_user\_guide\_draft0.pdf', 'pens1penelope.jpg', 'thoughts\_replacesby\_images.jpg', 'penelope\_ukulele\_bleu.gif', 'dm\_0.png', 'dm\_user\_guide', 'dm\_user\_guide~', 'sport\_4.jpg', 'penelope.jpeg', 'solaire5.jpg', and 'dm\_1.png'. Below the list, it shows 'Topic Type (1)' as 'Folder' (Instantiation) with 'Create Folder' and 'Upload File' buttons.

[dm\_example13.png]

Repeat this operation with all the topics that you want to hide and you'll have a clearer screen :D

The screenshot shows the Topicmap software interface. On the left, a network diagram displays nodes: 'Keys', 'Socks', 'drawer', 'Tina', and 'pens1penelope.jpg'. 'Keys' is connected to 'Socks' (to be in), 'drawer' (to have), and 'Tina' (to have). 'Socks' is connected to 'drawer' (to contain). 'Tina' is connected to 'pens1penelope.jpg' (has photo). On the right, a panel shows the 'Association Type' as 'Association'. The 'Topics' section lists 'File: "pens1penelope.jpg"' with 'Role Type' as 'Default'. The 'Person: "Tina"' section lists 'Role Type' as 'Default'. The 'Association' section shows 'has photo' with 'Association Type (1)' as 'Association' (Instantiation). The 'Topicmap (1)' section shows 'untitled' (Association Mapcontext). The 'Workspace (1)' section shows 'DeepaMehta' (Aggregation). An 'Edit' button is at the bottom.

[dm\_example14.png]

**\*\*Remember\*\***

Topic maps do not show all the information that is there, only the information that is relevant to you in the moment that you are working.

Tea time!!! It's always good to let everything settle down, why not take a break, get a cup of tea and back in a few minutes

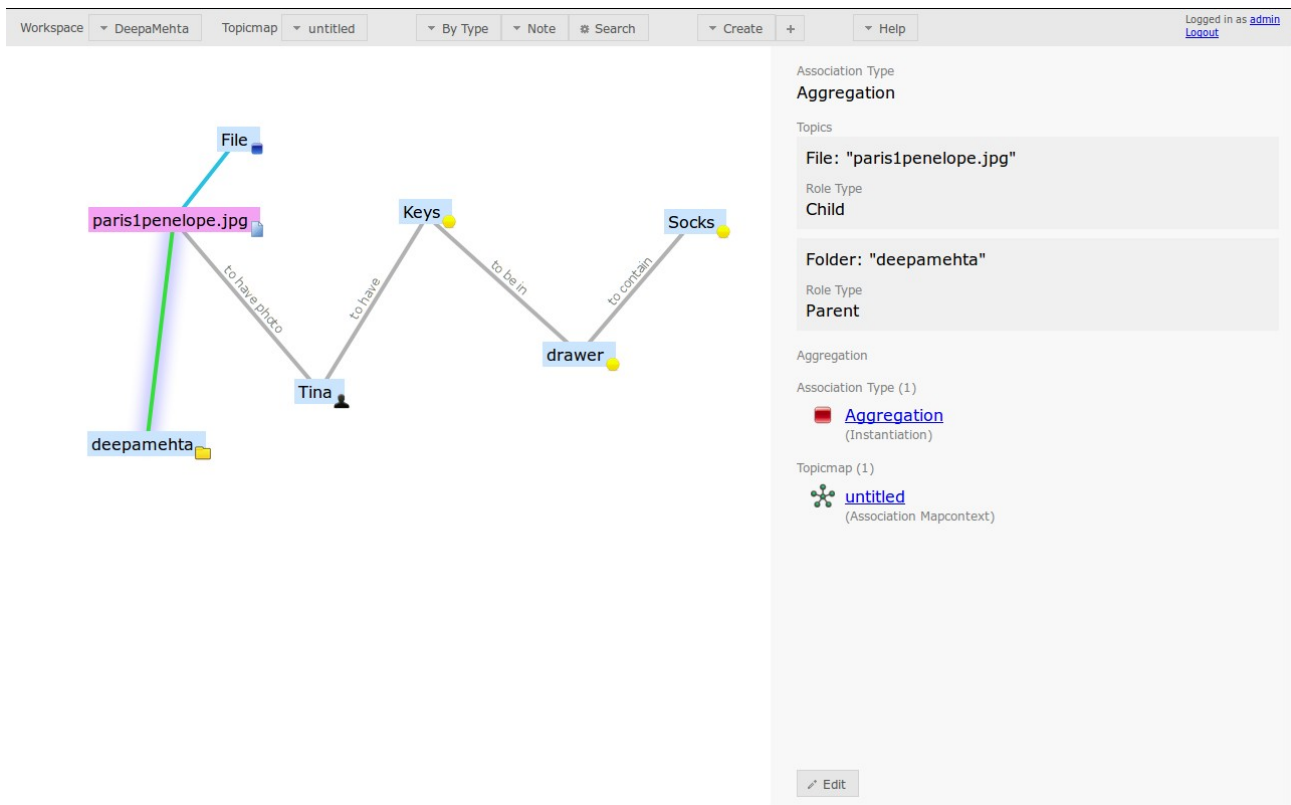


[cup\_of\_tea\_bagieu-bio.jpg]

Now, after a break, let's go back a bit, and check a couple of things before continuing.

We've said that our topic map shows only what we want to see depending on the moment, so let's make visible again the topics and relations that appeared when we added Tina's photo to the topic map. The photo was inside a folder, true? so click on the photo, then move your eyes to the Detail Panel, there we have quite a lot of information, that we are going to be understanding little by little. On the detail panel scroll down (if necessary) until you see a folder icon which is called like the folder where your photo was stored.

In our case Deepamehta, click on the folder, and alehop!!! now it becomes visible what was hidden, the folder and its relation with the photo file of Tina.

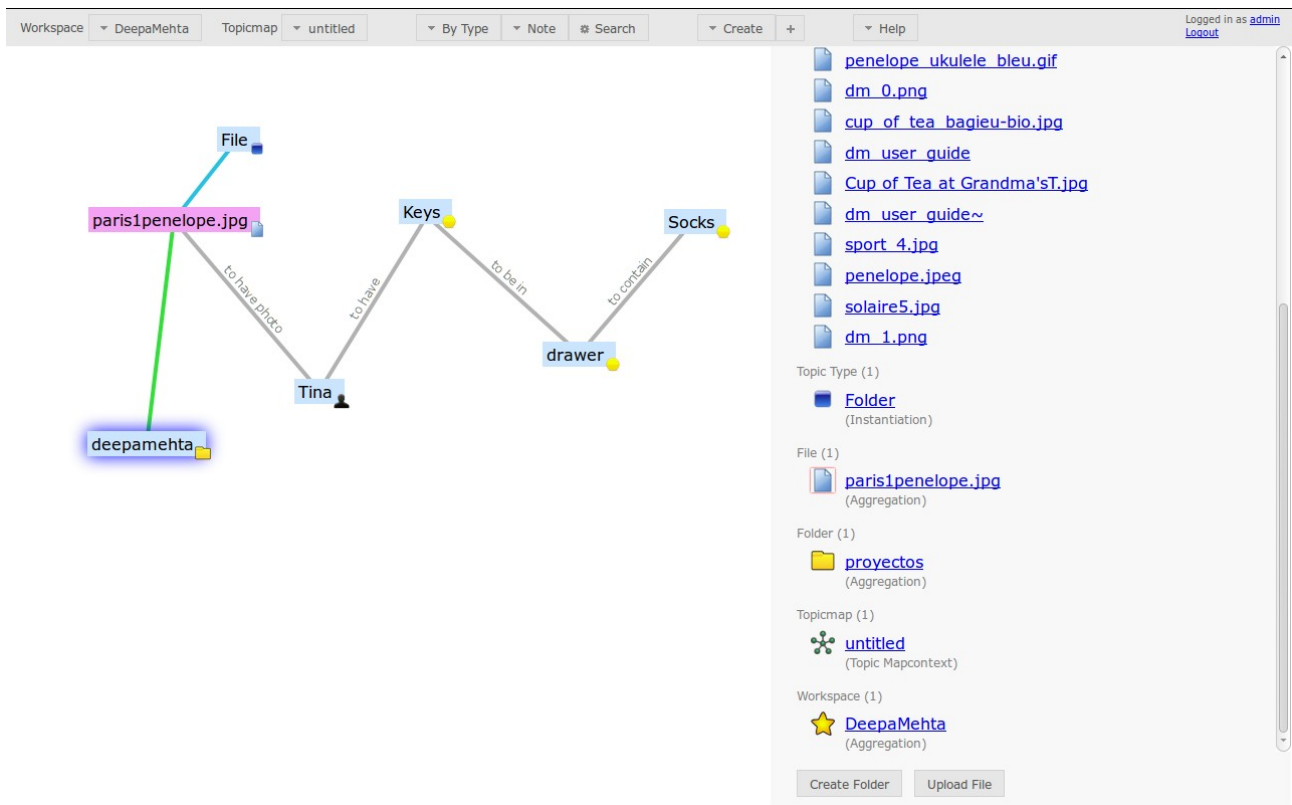


[dm\_example15.png]

Maybe you've already noticed that the association has a different color, now is green, while the ones that we've been creating was grey. Apart from beauty reason, it means that is a different type of relation, if you click on the association, you'll see that the association Type is Aggregation, while the others the association type was Association.

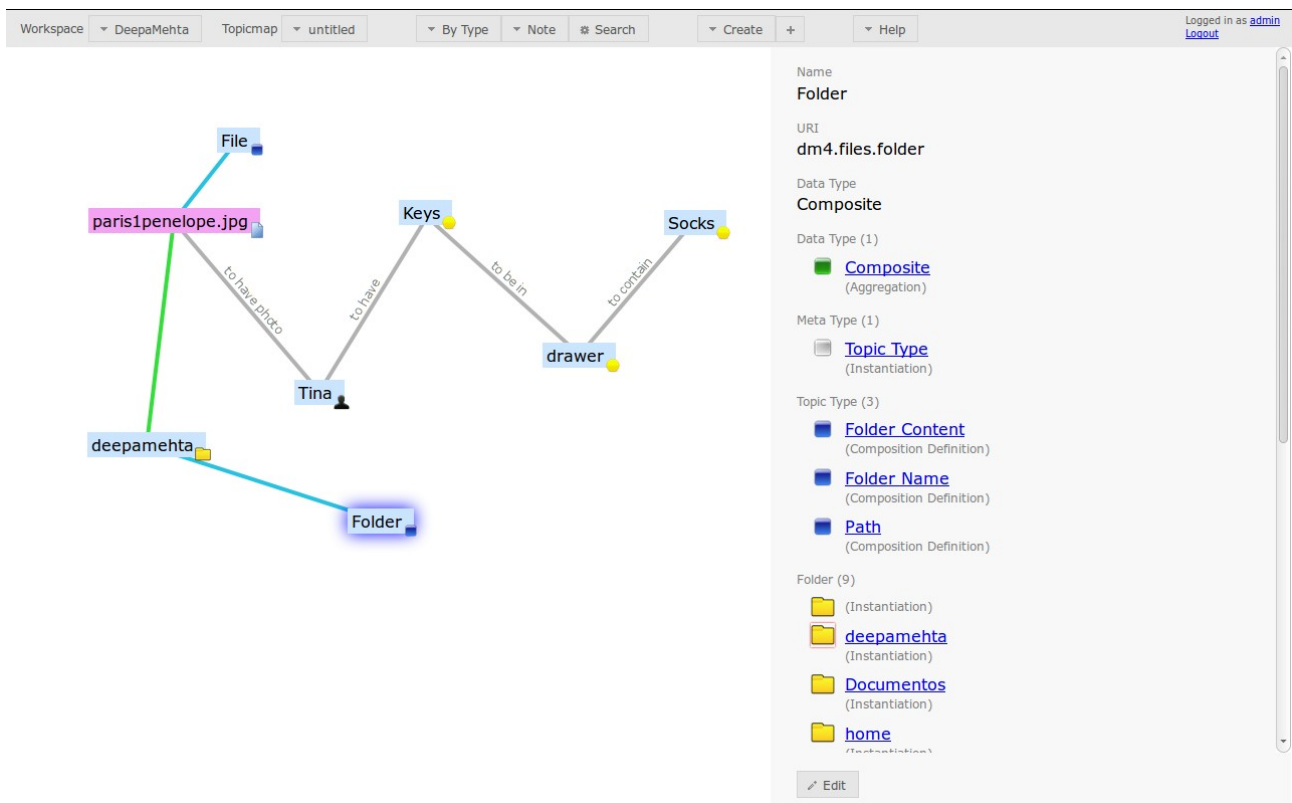
Association Type Aggregation means.....

Now if you click on the folder itself, and you scroll down until you see Topic Type, you'll see it's a Folder and the Association Type that has been created is called "Instantiation". In case someone is not familiar with the term instantiation, it means that is a specific folder, there is the concept "Folder" and then there is the specific folder that you create with a specific name.



[dm\_example16.png]

Then if you click on Folder(here goes blue icon), you will see that it's Data Type is Composite, which means that is something composed of other things. In the case of "Folder" is a topic composed of "Folder content"+"Folder name"+"Path", so each Folder topic will have a name, a content and a path.



[dm\_example17.png]

**\*Remember\***

Data Type Composite is

Association Type Aggregation is

Association Type Instantiation is

Now take another sip of tea and let's continue.

Thinking about socks, you've remembered that Tina had a nice friend with whom she works, Greg, who used really fancy socks, can't forget those one that stared at you, and he worked in a Bookshop. So we have

Greg is a friend of Tina

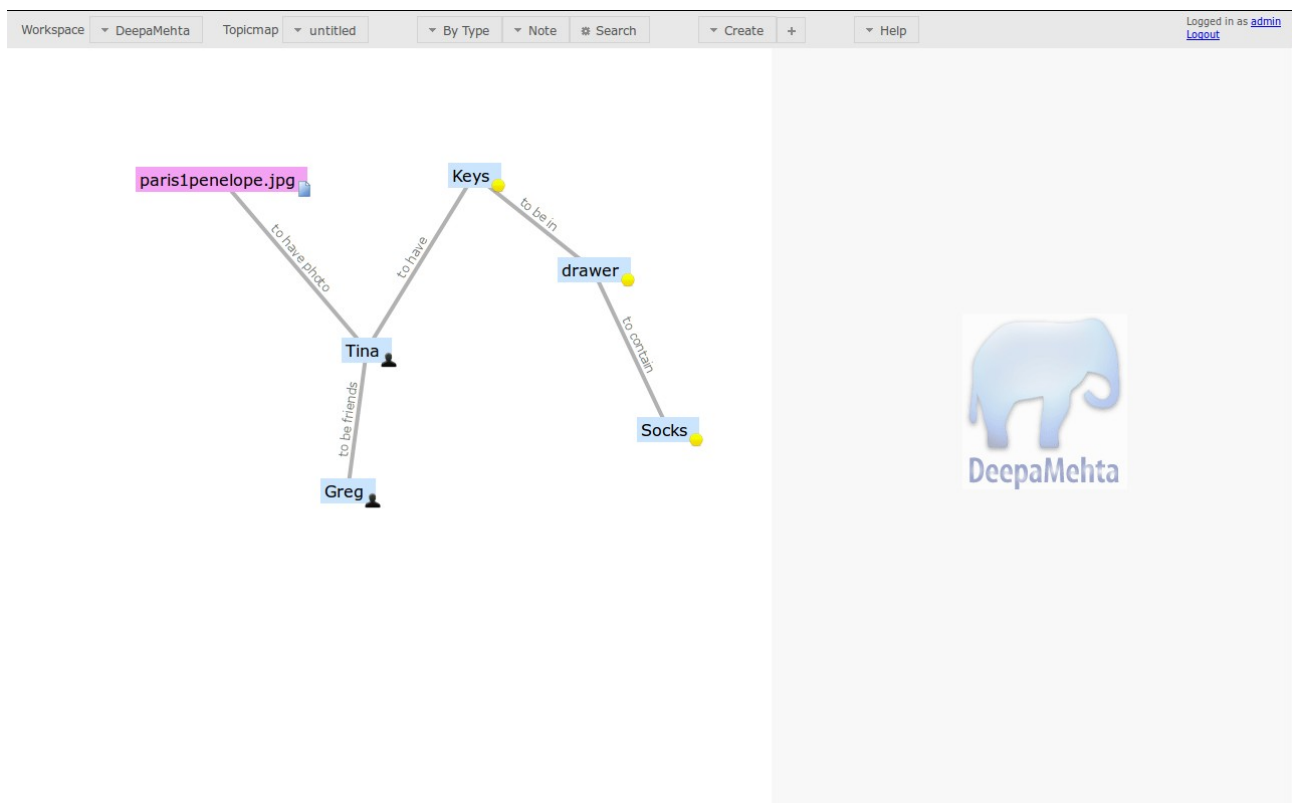
Greg has fancy socks

Greg works in a Bookshop

Let's just define that info in our topic map.

Go to the toolbar, create Person, there you can fill in the Name with Greg and any other info that you may consider interesting.

Then right click on Greg and create the association by dragging the line to Tina. As you know if you want to can name the association, we've named it "to be friends".

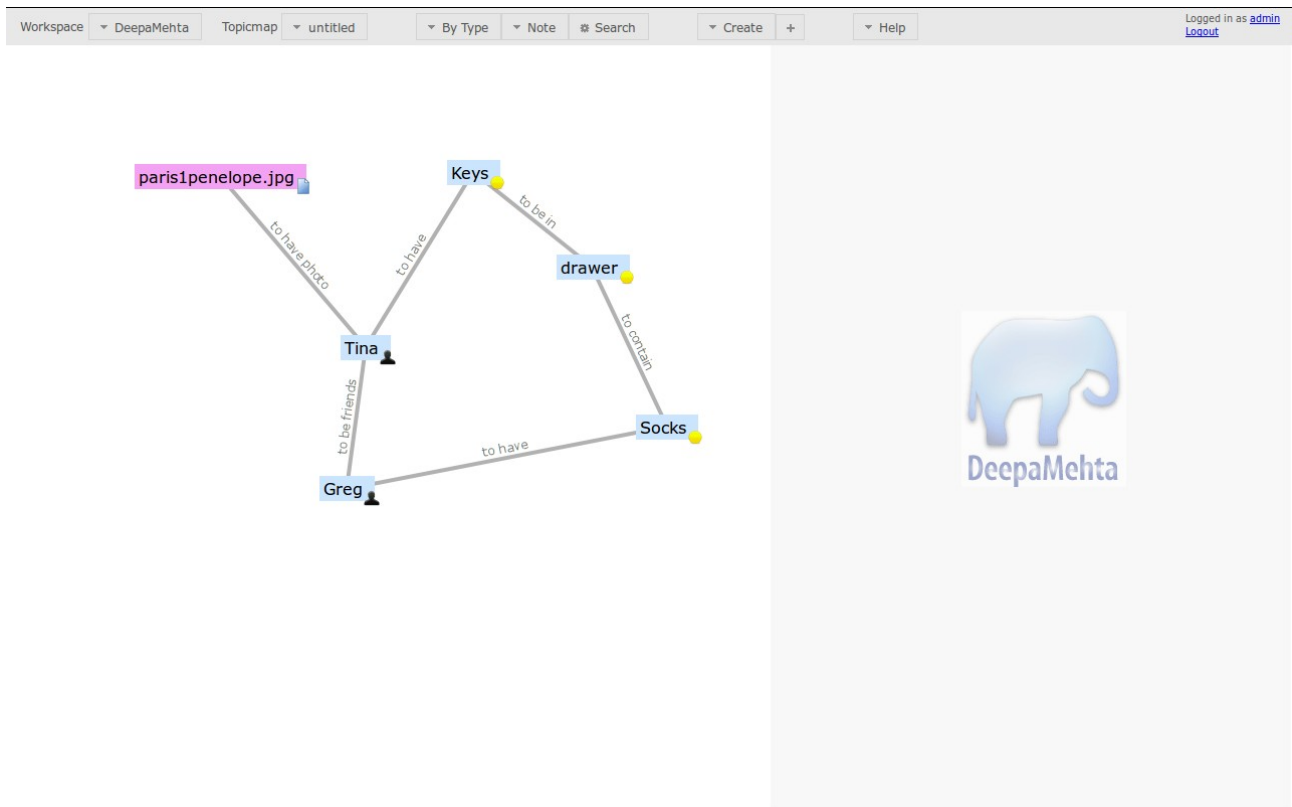


[dm\_example18.png]

We were thinking about Greg because he had fancy socks, so let's put that in our topic map

Ohh, yes we've already have socks in our topic map, so we just need to create a new association.

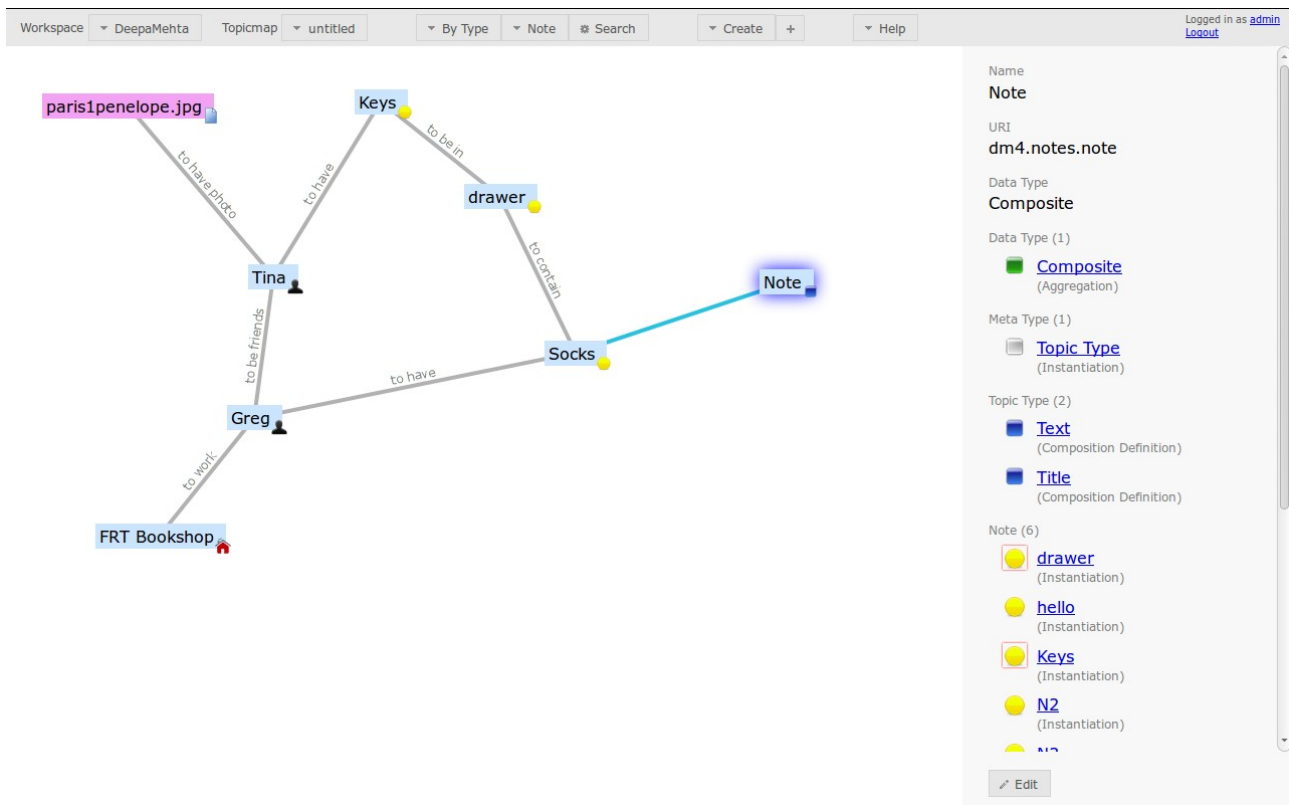
Right click on Greg, click associate, drag to socks.



[dm\_example19.png]

Ok, but I must say that till now we've been cheating a bit, just a bit. We've said that we used topic type Note, as a kind of wildcard, but well that is not 100% fair because a Note is a note, that has a title and a text, if you are thinking of a Note it won't have the form of a sock, it would be confusing.





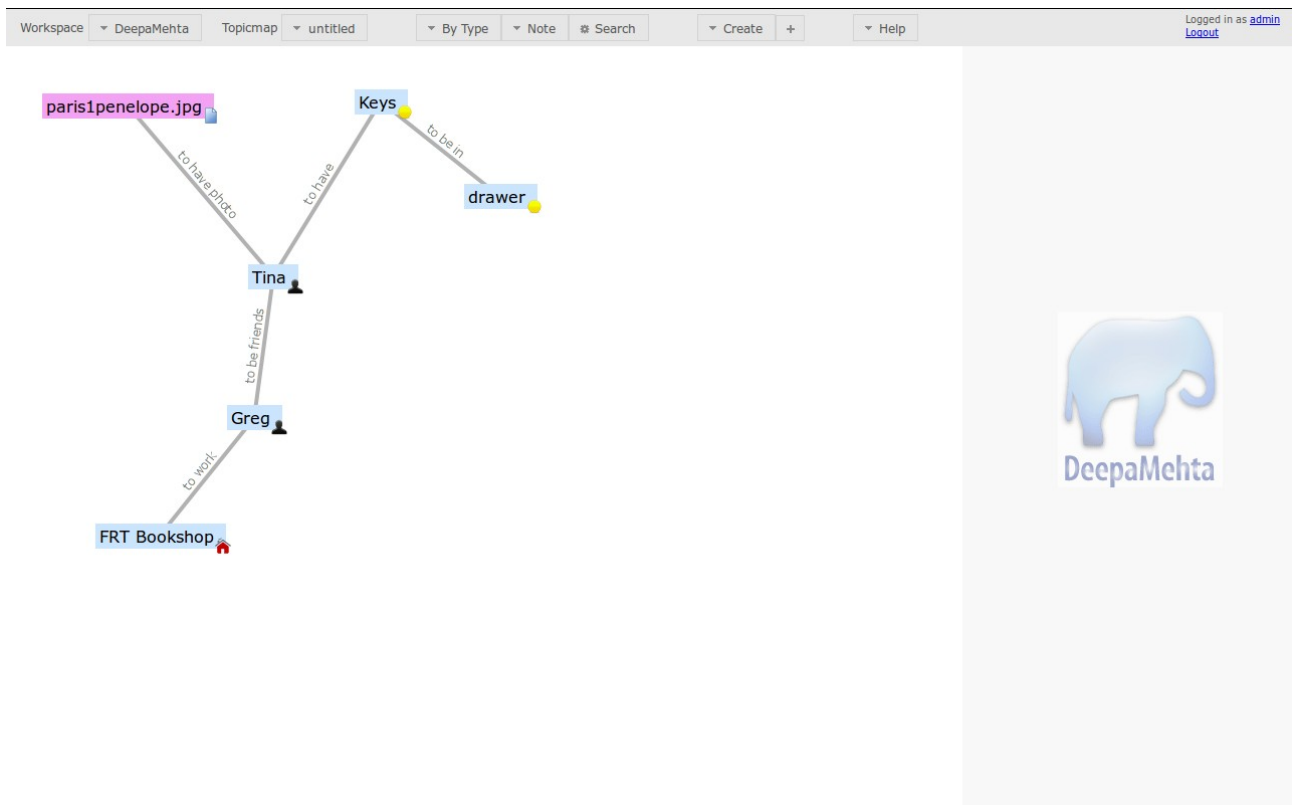
[dm\_example21.png]

**\*Tip\***

You can resize the Detail Panel. You just need to put the mouse on the border between the two pannels and when appears (put here the icon) just drag the panel to the size you want.

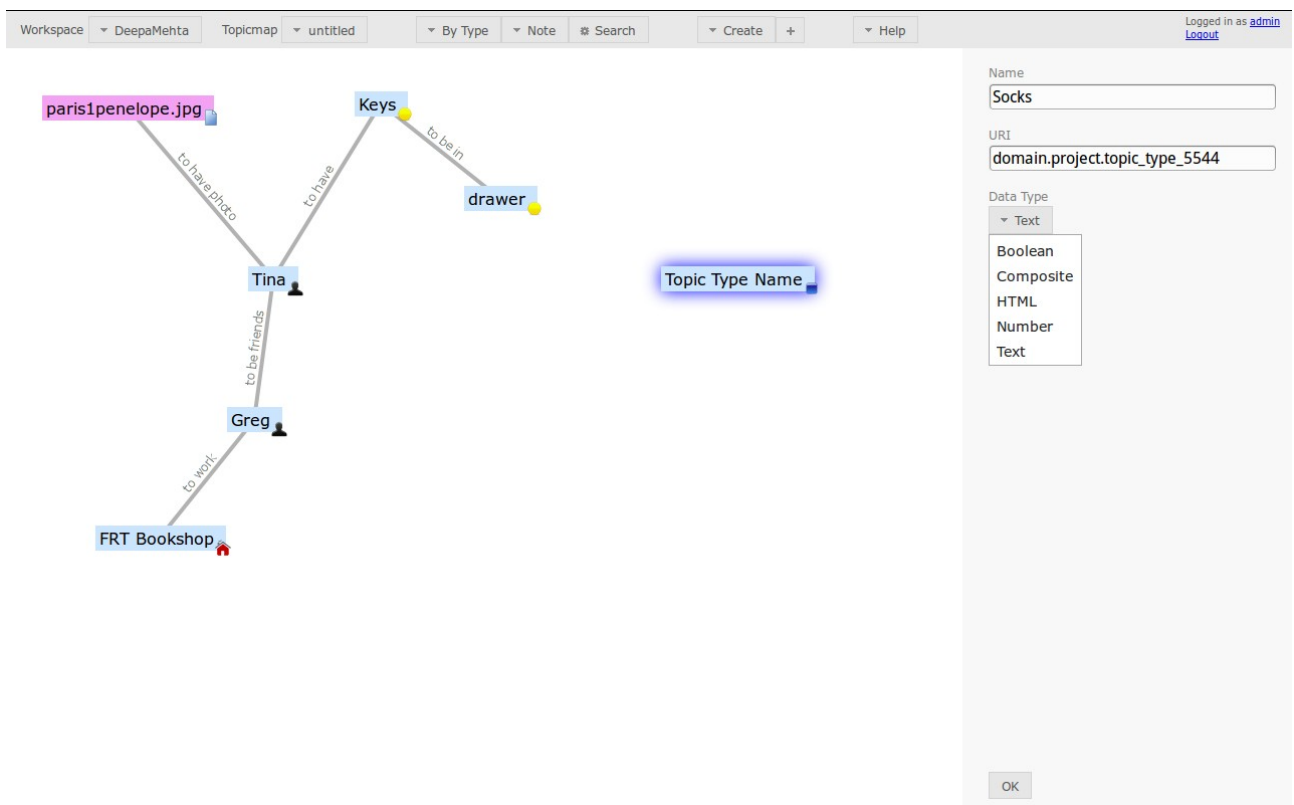
So time to create our own topic type "Socks" and redo things :)

First delete your current "socks", right click on the topic type and click on delete, this means you will delete this instance from the whole of your DM world, you are getting rid of all the socks and their relations, so in general be careful when deleting, but sure you know the dangers of delete word :D



[dm\_example23.png]

Go to the toolbar menu, down to where it says "New topic type", name it Socks, done!!



[dm\_example24.png]

now you have your class Socks, remember that the class is the abstract concept, so now you have defined the idea "Socks", so if you check Create drop down menu, you will see the new type that you just created "Socks", so if you click on it you will get an instance of socks.

The screenshot shows a Topicmap application interface. On the left, a network diagram is displayed with nodes and relationships:

- Nodes:**
  - paris1penelope.jpg** (Image icon)
  - Keys** (Yellow circle icon)
  - drawer** (Yellow circle icon)
  - Tina** (Person icon)
  - Greg** (Person icon)
  - FRT Bookshop** (Home icon)
- Relationships (Edges):**
  - paris1penelope.jpg** to **Tina**: "to have photo"
  - Keys** to **Tina**: "to have"
  - Keys** to **drawer**: "to be in"
  - Tina** to **Greg**: "to be friends"
  - Greg** to **FRT Bookshop**: "to work"

On the right, a sidebar menu is visible with the following options:

- Event
- Institution
- Note
- Person
- Socks** (Selected)
- Topic Type Name
- Topic Type Name
- Topic Type Name
- Web Resource
- sock
- sock

Below the menu, there are buttons for:

- New Topic Type
- New Association Type
- New File Browser
- New User Account

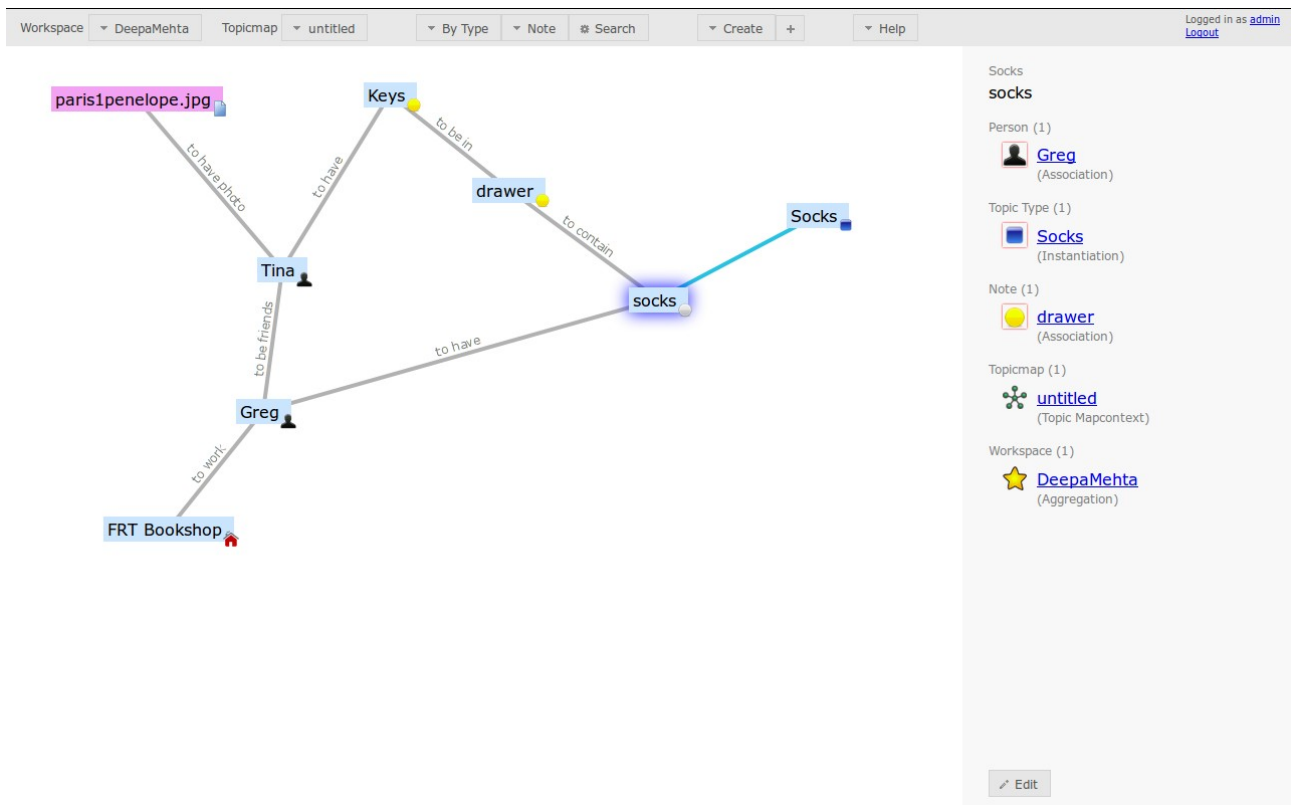
On the far right, a panel displays the details for the selected "Socks" topic type:

- Name:** Socks
- URI:** domain.project.topic\_type\_5544
- Data Type:** Text
- Data Type (1):** Text (Aggregation)
- Index Mode (1):** Fulltext (Aggregation)
- Meta Type (1):** Topic Type (Instantiation)
- Topicmap (1):** untitled (Topic Mapcontext)
- View Configuration (1):** View Configuration (Aggregation)
- Workspace (1):** DeepaMehta (Aggregation)

At the bottom left, a URL bar shows: localhost:8080/topicmap/2584/topic/5544#

[dm\_example26.png]

We will need this instance of socks, to re-do the association between "drawer" (where Tina has her socks) and socks, and the Greg and socks.



[dm\_example28.png]

Now, everything is nicer, you brain feels happier when seen that "socks" is an instance of "Socks" instead of "Note" :-). But you don't need to see the topic type Socks, so hide it. Right click on the topic type Socks, click on hide, and it and its association will be hidden.

**\*Remember\***

When deleting you are actually deleting your topic type instance from the whole DM world, not just from the topic map.

You can create New topic types. Your topic type can have one of the five following data types Boolean, Composite, HTML, Number, Text