Component Registry

Exercises

Logging in to the Component Registry

- Use your browser to go to http://www.clarin.eu/cmdi
- Look for the link that says “Component Registry” and click it. This should bring you to the Component Registry web interface.[1]
- Use the tabs of the **Component Browser** to switch between the “Profiles” and “Components” views and scroll down both lists.
- Click the drop down item that says “Public space” and select “Work space”. This should cause a pop-up to appear telling you that you should login first.
- Press the ‘login’ link and follow the instructions to find your home institution in the list.[2] Select it, and authenticate with the selected provider. After a successful authentication you will be redirected to the Component Registry. Your username should appear in the top right corner.
- You can now switch from the public space to the workspace, which will appear empty if this is the first time you are using the Component Registry and have not created any profiles or components yet.

Exercise 1: Creating a new component

In this exercise we will create a new component in our private workspace.

- In the workspace, switch to the “Components” tab and press the “Create new” button. This will open the **Component Editor**.
- Notice that on the first line “Component” is selected; the same editor can be used for creating both profiles and components. At this point, you could still switch to profile (but in this exercise we will be creating a component so leave it as selected).
- In the first couple of fields, enter the following:
    - Name: Poem
    - Group Name: CMDI tutorial
    - Description: A single poem
    - Domain Name: Linguistics and Literature
- To select the **concept link** (data category), press the button “Search in Isocat”. In the dialog that appears, enter ‘poem’ as a

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[1] The Component Registry web interface requires the Flash plugin to be installed

[2] If you don’t have an account with any of the available providers, you can register at the Clarin.eu website and use that provider.

search term and press “Search”. Select the matching result and press “Ok”. The identifier of the data category will be inserted into the ConceptLink field.

- Scroll down (if required) until you see a section marked “**Element**”. This represents the first element of our new component and has been added automatically. We will now remove it by pressing the red **X**.
- Now re-create an empty element by clicking the action link “**+element**”. We will make this an element representing the title of the described poem, takes a textual (string) value, is mandatory (has to appear at least once) and can appear in the metadata in multiple languages.
- Enter the following values:
    - Name: Title
    - ConceptLink: http://www.isocat.org/datcat/DC-2965 (enter this manually into the field, do not use the ‘Search in isocat’ button)
    - Documentation: The title of the poem; if untitled, use the first line
    - DisplayPriority: 1
- Leave the other fields as they are, but check the **Multilingual** checkbox
- Press the “Save as new” button to save the new component to the workspace. This will close the editor and show the workspace that should now have a Poem component in it.
- Select the Poem component and press the “Edit” button. Notice that this time the “Save” button is enabled. Pressing this button would save any changes to the existing component, while pressing “Save as new” would save the component with its changes as a new component, leaving the original component unchanged.
- Add another mandatory element below “Title” called “NumberOfStanzas” (notice that the element name cannot contain spaces). Search for an appropriate concept link and set its **Type** to decimal by pressing the “Edit” button next to the Type field, selecting “decimal” from the drop down that initially has “string” selected and pressing “Use type”. Leave display priority at 0. Hover the mouse cursor over the “DisplayPriority” label to learn what this means.
- Before saving the component again, add one or more spaces to the name of the new element (e.g. “Number Of Stanzas”). Press the “Save” button, and notice that a red border appears around the “Name” field. Hover the mouse cursor over this field to see an explanation for the failure. Fix the name and save the component.

Exercise 2: Creating a new profile based on an existing one

In this exercise we will use an existing profile as a basis for a new one, and reuse some existing components in this new profile.

- Go to the view of the **profiles** in the **public workspace**.
- In the filter in the top right, type “Book”.
- In the table, select the profile called “Book”.
- Select it and use the view panel in the bottom to look at its structure. Scroll down to the subcomponent called “component-dc-publisher”. The blue border indicates that this is a linked (reused) component, which means that the elements inside that subcomponent are defined in the component of that name and not in this profile. You can click the component to see it expanded. The same goes for the subcomponent “cmdi-language” which itself contains another linked subcomponent.
- Switch to the components view and find the specifications of “component-dc-publisher” and “cmdi-language”.
- Switch back to the profiles view and select the “Book” profile again.
- Press the button labeled “Edit as new”. This will open a copy of the book profile in the editor. Notice that the “Save” action is not available; you can only “Save as new”, which will put the copy with its changes in your workspace.
- We will use the Book profile as a basis to create an **AudioBook** profile. Scroll to the top of the editor and change the name of the profile and its description accordingly. Then press “Save as new” and see how it has been added to the profiles view in the workspace.
- Open it in the editor again and replace the following elements[3]:
    - NumberOfPages
    - Chapter ➔ FirstPage
    - Chapter ➔ LastPage

  by the elements “TotalTime”, “StartTime” and “EndTime” respectively, all with a value type of “time” instead of “decimal”.
- Below the editor there is a table that by default shows your private components. From here you can drag existing components onto the component or profile that you are editing. Use the drop down above the table to switch to the public space and look for the component called “AudioFile”.
- Select the “AudioFile” component and drag it from the table onto the editor. Notice that if you drag it over subcomponents in the editor a blue box will appear to indicate that dropping the

[3] Pressing the ‘collapse all’ link will make it easier to find specific elements. Use the + buttons to expand individual elements.

component there will add it to that subcomponent. In this case we want to add it at the top level so drop it anywhere else in the editor. This will cause it to be added at the end of the profile. If you accidentally drop it in the wrong location, you can simply remove it by clicking its red "**X**" delete link.

- Search for the "VoiceActor" component and add it as well. Notice the blue border around the newly added components that indicate they are linked, and not inline.
- Set the maximum number of occurrences of both components to "unbounded".
- Use the up/down arrows next to the delete link to move the "VoiceActor" component within the profile so that it appears below "Author" but above "Chapter". Collapsing all elements and components first will make it easier to see what's happening.
- Save the profile to the current workspace.

Exercise 3: Using a private profile in Arbil

In this exercise we will instantiate a profile that we have created without moving it to the public space.

- Navigate to the profiles in your **work space**
- Right click the AudioBook profile that you have created in the previous exercise. Choose the menu item "Show info".
- You will see two links, each with a button to copy the link to the clipboard. Press the lower button to copy the "Link to xsd" to the clipboard.
- Start Arbil.
- In Arbil, from the "Options" menu choose "Templates and Profiles".
- Press the button labeled "Add URL" below "Clarin Profiles".
- Paste the copied link into the dialog (use CTRL-V or CMD-V).
- You will notice it appears in the list by its ID (something that looks like clarin.eu:cr1:p_1345561703682); only published profiles appear by their name. Make sure the profile is selected through the checkbox before it, then close the profiles and templates dialog.
- Right click the "Local corpus" node and from the "Add" submenu select the profile, which again appears by its ID.
- In the editing table that appears, enter a title for this audio book instance and see how the node in the tree adopts this value.
- In the local corpus tree, right click the node for the audio book itself and verify that options are available for adding AudioFiles, Authors, Chapters and VoiceActors in the Add submenu.
- Open the AudioBook instance in the long field editor and verify that the field documentation appears as entered in the Component Registry.

Exercise 4: Create a new profile using custom components

In this exercise we will use a custom component in a new profile.

Use the “Book” profile as a basis again, this time to create a profile for metadata that describes a poetry collection. Extend the “Poem” component created in the first exercise and use it in the new poetry collection profile in such a way that it can contain any number of poem descriptions.

Publishing profiles and components

In these exercises we have not covered publishing profiles, because as soon as a profile has been published it is visible to everyone and can no longer be changed. Components and profiles should only be published as soon as they are complete and fit to be used for actual metadata production.

Publishing components and profiles is easy: open the item you want to publish in the editor and after making any (final!) changes, instead of pressing save, press “Publish in public space”.

If you are publishing a profile or component that makes use of other components in your workspace, make sure to publish these first.