

CaSS AUTHORIZING TOOLS

User Guide (February 2021)



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The ADL Initiative

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1.0 INTRODUCTION

This document details the functionality of the Competencies and Skills System (CaSS) Authoring Tools and includes detailed instructions for their use. If looking for help with a specific function of the Authoring Tools, users can navigate to the appropriate section using the table of contents above. A list of helpful resources and links is also included at the end of this document.

2.0 WELCOME SCREEN

When first visiting the CaSS Authoring Tools (CAT), users will be presented with the Welcome Screen (see Figure 1), which offers simple instructions for getting started. More detailed instructions on how the CAT can be used are included in this document.

Welcome to CaSS

Competency Authoring Tools

CaSS Authoring Tools support authoring frameworks, importing existing frameworks from supported document types, and editing competency frameworks within the system. You can navigate to the [frameworks page](#) and start creating framework right away without following the below steps.

Getting Started

1. Create your user and login

Navigate to the [login screen](#) and select create a new user. Input your details. After creation, login to your account using the username you created. You can now access the user and groups manager as well as create comments on frameworks.

2. Create user groups for collaborating

If your team members have also created their account, and you are logged in, you can navigate to the [user/groups page](#) and configure a group with defined readers and authors.

3. Create a configuration

The [configuration manager](#) allows you to have full control over the properties you can add to frameworks and competencies. This includes relationship types and resource types. Configure the labels you want to use on editable forms for managing these properties.

4. Author a framework

Navigate to the [framework page](#) and create a new framework. Give your framework a memorable name and save it.

5. Collaborate with your team

Members with view access will be able to read and comment on the framework when logged in. Members with admin access will be able to view, edit, manage users, and delete the framework when logged in. Use comments to create dialogues around your authoring process.

Figure 1 – Welcome Screen

3.0 APPLICATION NAVIGATION MENU

The CAT navigation menu is used to access the different functionality modules within the application. It can be viewed and used in two specific ways.

3.1 Expanded Navigation Menu

The expanded navigation menu can be accessed by clicking on the *expand menu* icon on the top left corner of the screen, as shown in Figure 2.

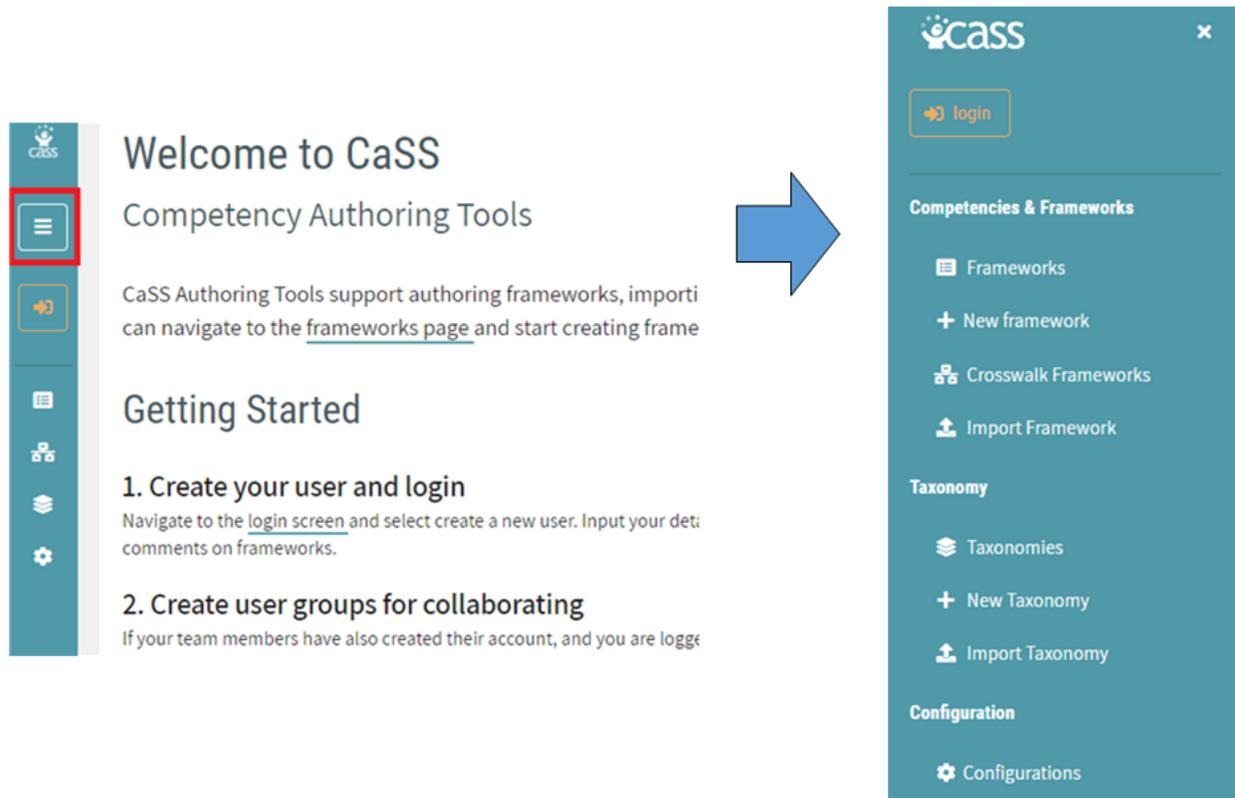


Figure 2 - CAT Navigation Menu - Expand Menu Button, and Expanded Menu

Once expanded, the navigation menu displays links to the following application areas:

- **Application Login** - Login to the application
- **Competencies & Frameworks**
 - **Frameworks** - Competency framework search
 - **New Framework** - Competency framework creation
 - **Crosswalk Frameworks** - Dual competency framework alignment/relationships
 - **Import Framework** - Import of competency frameworks
- **Taxonomy**
 - **Taxonomies** - Taxonomy search
 - **New Taxonomy** - Taxonomy creation
 - **Import Taxonomy** - Import of taxonomies
- **Configuration**
 - **Configurations** - Configuration management
 - **Users and Groups** - User group management (*note: this option only appears if logged into the application*)

3.2 Collapsed Navigation Menu

The navigation menu can be collapsed by clicking on the **x** button on the upper righthand corner of the expanded navigation menu, as shown in Figure 3.

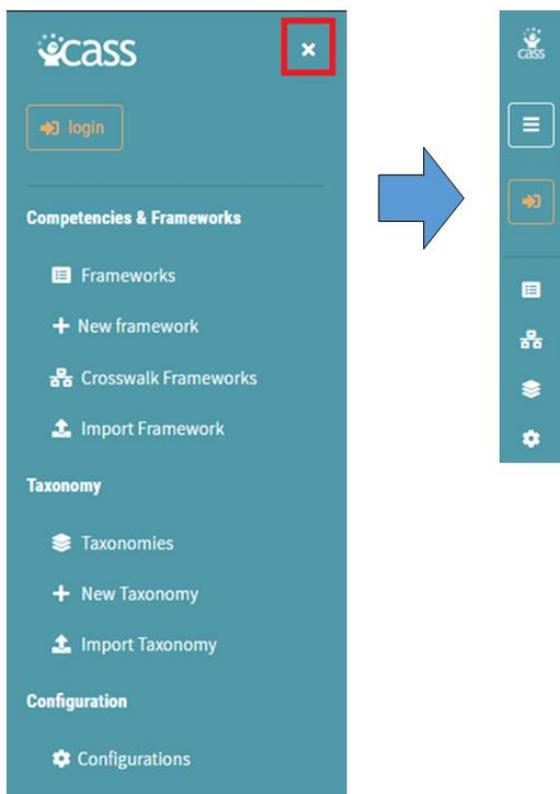


Figure 3 - CAT Navigation Menu - Collapse Menu Button, and Collapsed Menu

Once collapsed, the navigation menu displays links to the following application areas:

- **Application Login** - Login to the application
- **Frameworks** - Competency framework search
- **Crosswalk Frameworks** - Dual competency framework alignment/relationships
- **Taxonomies** - Taxonomy search
- **Configurations** - Configuration management
- **Users and Groups** - User group management (*note: this option only appears if logged into the application*)

4.0 APPLICATION LOGIN

By default, most CAT functionality is available without being logged in. Users can search, create, and manage public frameworks, competencies, and other CaSS data. Some tools, however, will not be available until after completing the login process. Accessing secure CaSS data, securing users' own CaSS data, and explicitly granting access and permissions to owned data all require users to be logged into the environment. (*More details about managing user groups and data permissions can be found in the corresponding sections.*)

The *login* button can be accessed through the application navigation menu, as shown in Figure 4.

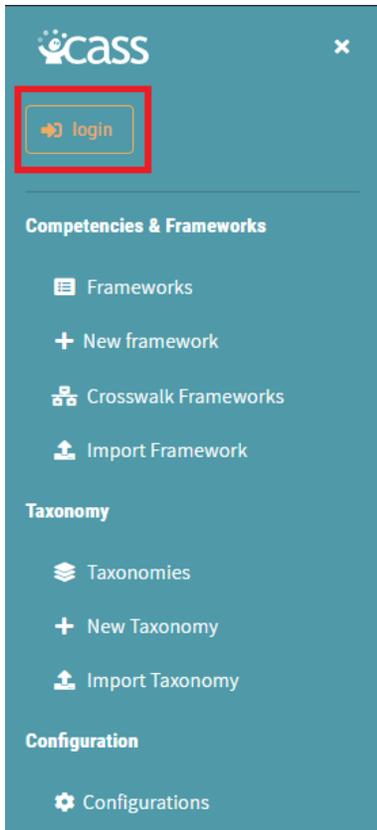


Figure 4 - CAT Navigation Menu - Login Button

4.1 Creating an Account

From the landing page users have the option to login or create a new account to access CAT. At the login page users have the option to select the *create account* button shown in Figure 5.

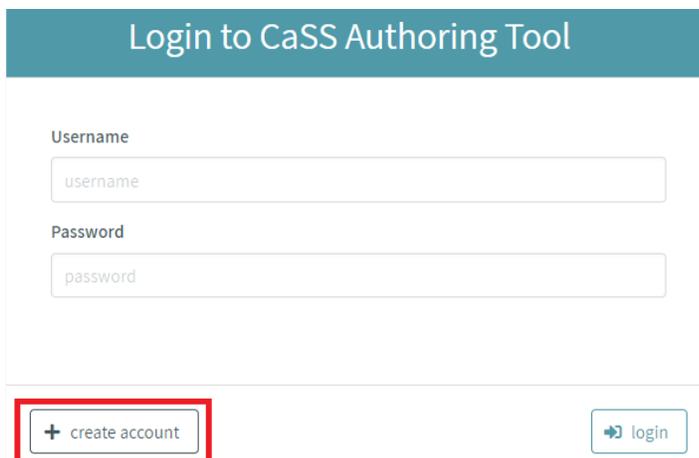


Figure 5 - CAT Login - Create Account Button

From here, users will be prompted to input basic information required to register their account with CAT.

Once users have successfully entered the required information, they can hit the *create* button to begin the registration of their account, as shown in Figure 6. Once successfully registered, users will be automatically logged into the application.

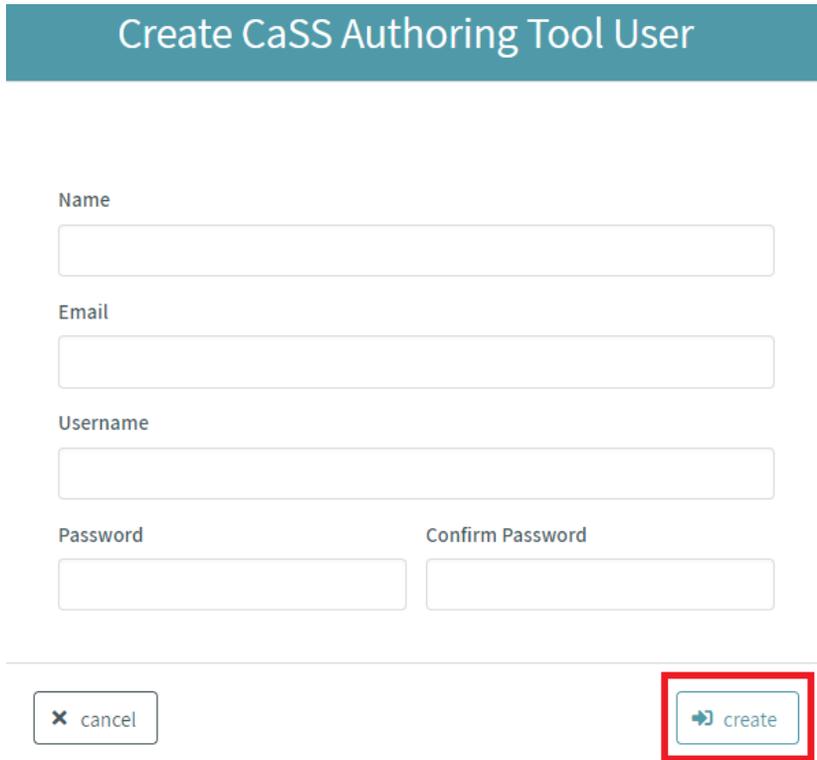


Figure 6 - CAT Login - Create Account Submit Button

4.2 Logging into an Existing Account

Users can login with existing accounts by filling out the appropriate fields on the login form and clicking the *login* button, as shown in Figure 7.



Figure 7 - CAT Login - Login Button

5.0 CREATING AN ORGANIZATION, GROUP, OR TEAM

In CAT, user groups provide the capability to assign multiple users the ability to share permissions across an organization or team. Members of a group are granted access to any CaSS framework or competency that the group has been explicitly assigned.

5.1 Accessing the CAT User Group Manager

(Important: To access the CAT user group manager, users must be logged into the CAT application.)

The CAT user group manager can be accessed at any time by selecting the *Users and Groups* icon on the lower left corner of the navigation menu, as shown in Figure 8.

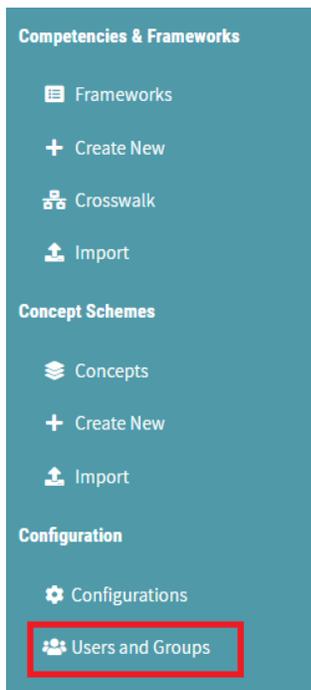


Figure 8 - CAT User Group Manager - Navigation Menu - Users and Groups

Upon entering the user group manager, a list of all existing user groups in the current CAT instance are displayed. User groups managed by the current logged-in user can be managed by clicking the *manage* button to the right of the group entry, as shown in Figure 9.

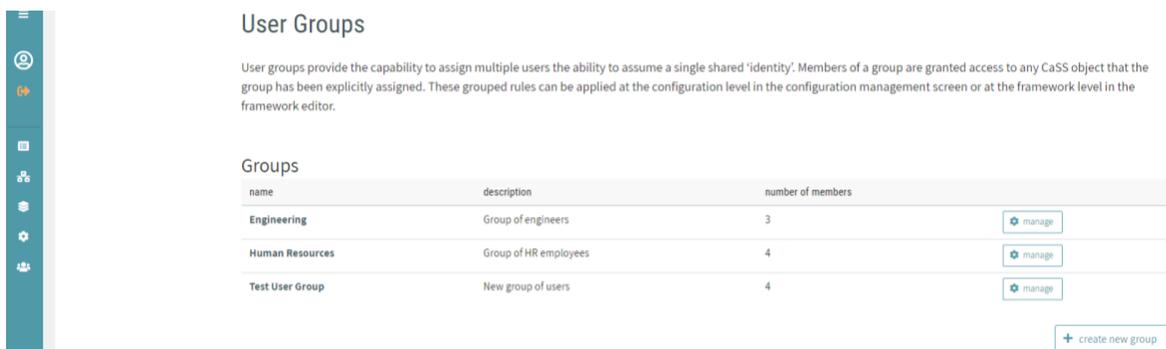


Figure 9 - CAT User Group Manager - User Group Selection

5.2 Creating a New User Group

User groups can be created by clicking the *create new group* button at the bottom right corner of the configuration management list screen, as shown in Figure 10.

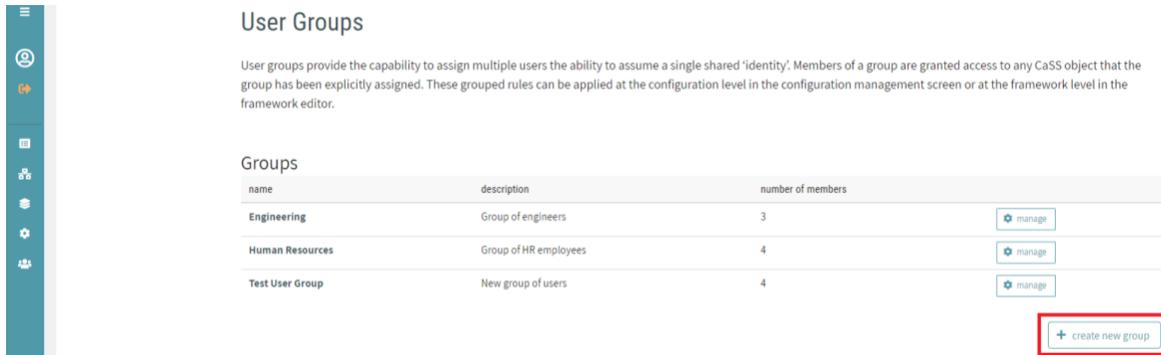


Figure 10 - CAT User Group Manager - Create New User Group

Note: There may be noticeable processing time when creating a new group. CAT user groups are assigned identity keys that must be generated at creation time. This process may take several seconds.

5.3 Managing a User Group

After creating a new user group or clicking the *manage* button on an existing user group, the user group details screen is displayed. This screen is divided into several sections.

5.3.1 General Details

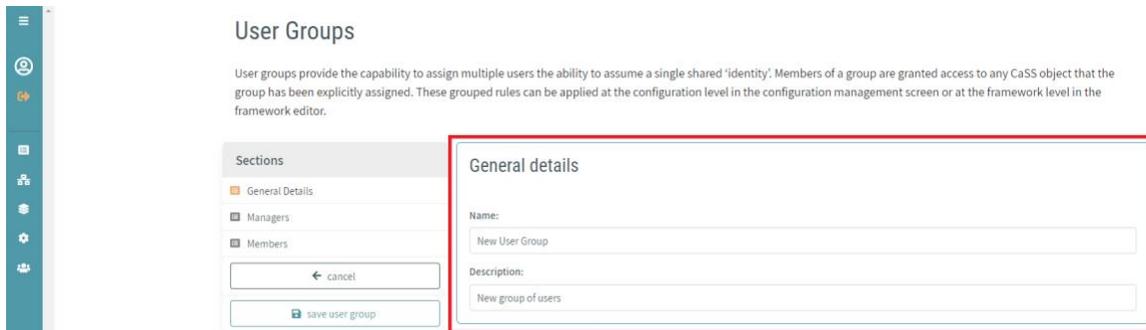


Figure 11 - CAT User Group Details - General Details

The general details configuration settings provide fields for editing the **name** and **description** of the user group, as shown in Figure 11.

5.3.2 Group Managers

Group managers, as shown in Figure 12, can add and remove members and other managers to the group. Managers also share the owner and reader privileges assigned to the group.

Note: A user cannot remove his/herself as a manager from the current group.

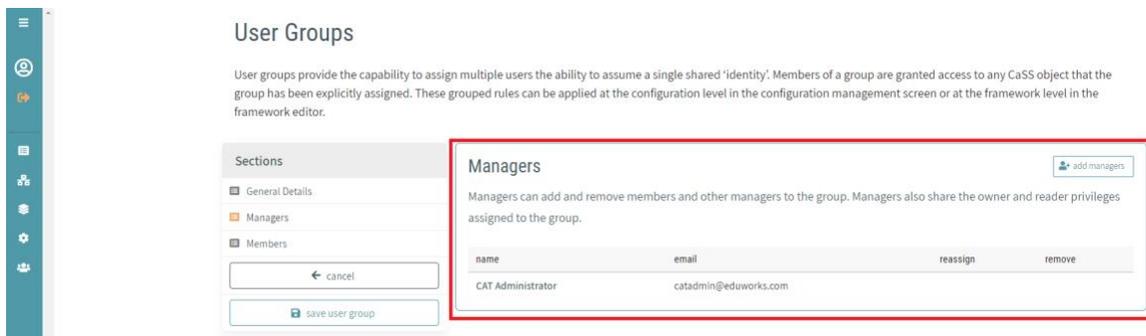


Figure 12 - CAT User Group Details - Group Managers

5.3.2.1 Add Managers

The group manager list can be managed by clicking the *add managers* button on the right side of the *managers* section, as shown in Figure 13.

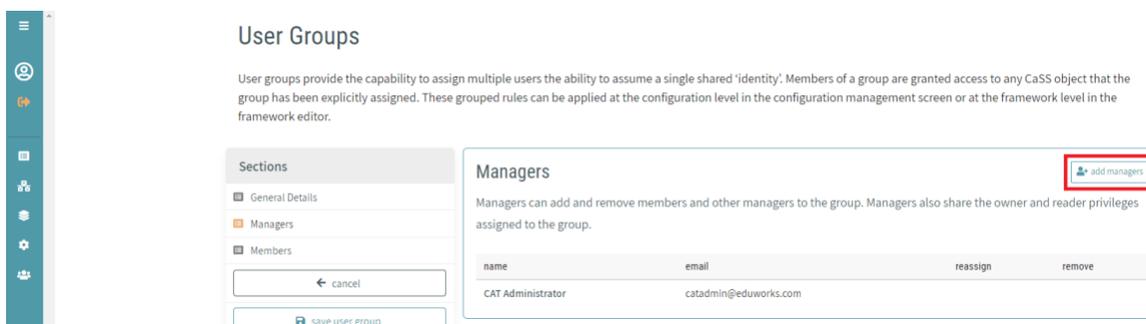


Figure 13 - CAT User Group Details - Add Managers

Once clicked, the *add managers* dialogue window is displayed. Select the desired managers and click the *apply* button in the bottom right of the dialogue window, as shown in Figure 14.

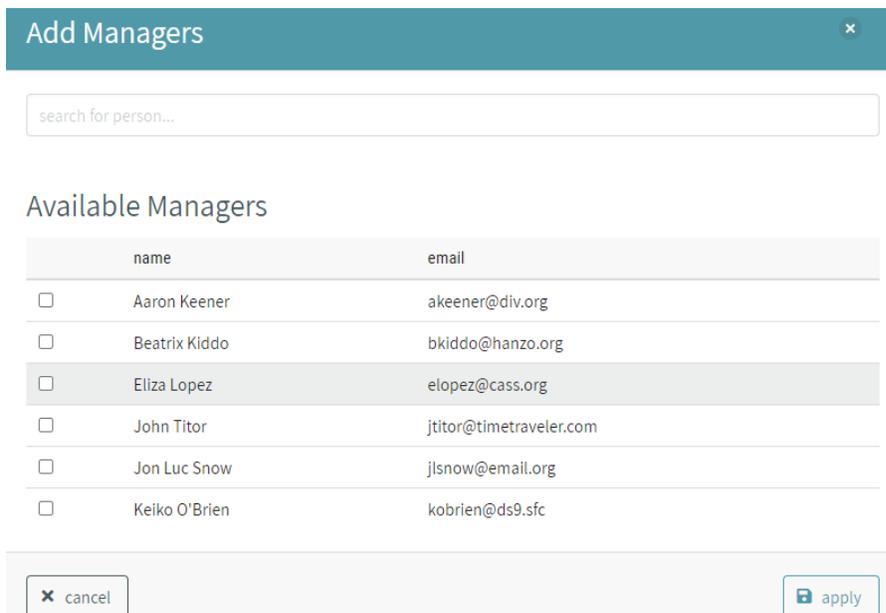


Figure 14 - CAT User Group Details - Add Managers Dialogue

5.3.2.2 Remove Managers

Group managers can be removed from the group by clicking the *remove* button, as shown in Figure 15.

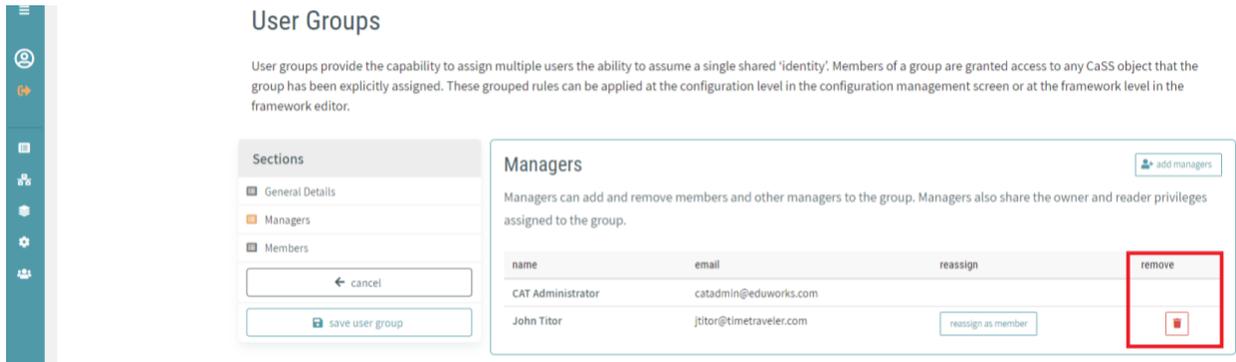


Figure 15 - CAT User Group Details - Remove Manager

Note: A user cannot remove his/herself as a manager from the current group.

5.3.2.3 Reassign Manager

Managers can be reassigned as a group member by clicking the *reassign as member* button, shown in Figure 16.

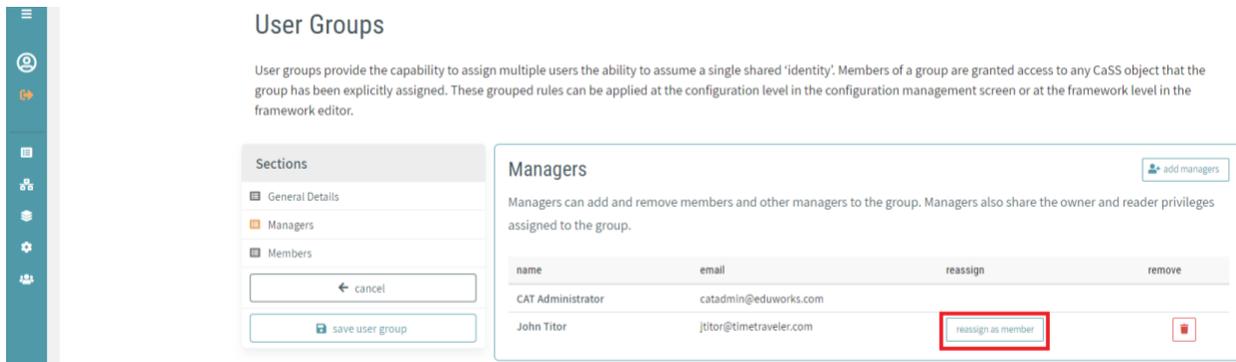


Figure 16 - CAT User Group Details - Reassign Manager

5.3.3 Group Members

Group members, as shown in Figure 17, share the owner and reader privileges assigned to the group.

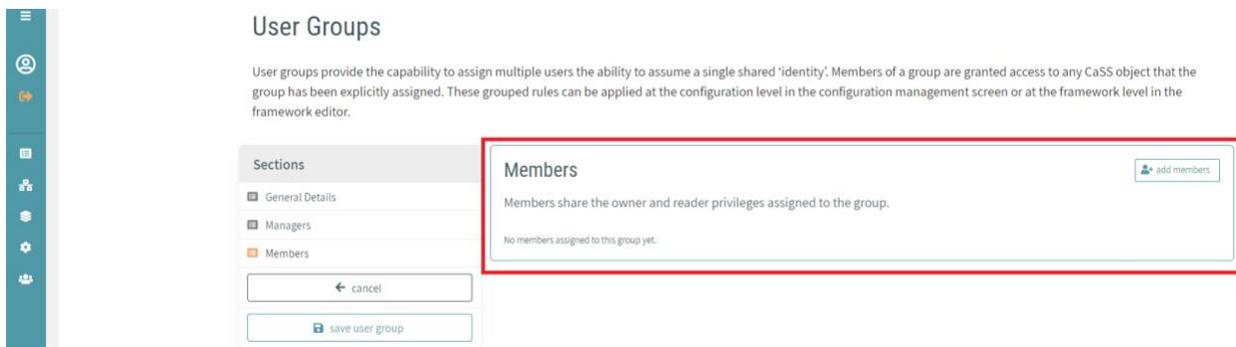


Figure 17 - CAT User Group Details - Group Members

5.3.3.1 Add Members

The group member list can be managed by clicking the *add members* button on the right side of the *members* section, as shown in Figure 18.

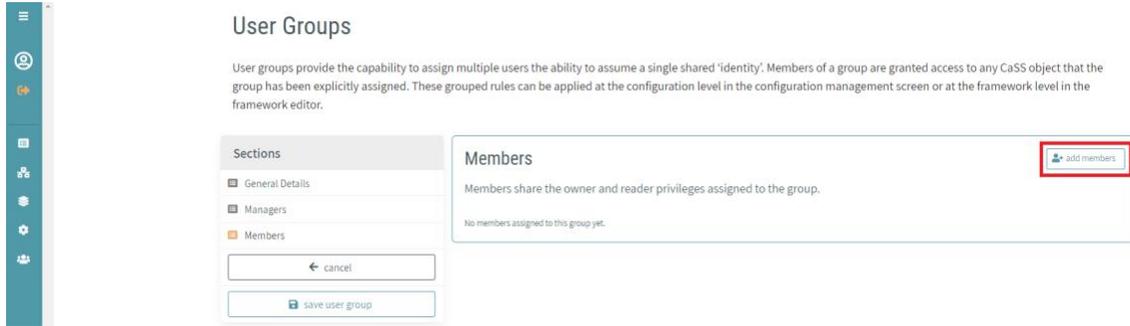


Figure 18 - CAT User Group Details - Add Members

Once clicked, the *add members* dialogue window is displayed. Select the desired group members and click the *apply* button in the bottom right of the dialogue window, as shown in Figure 19.

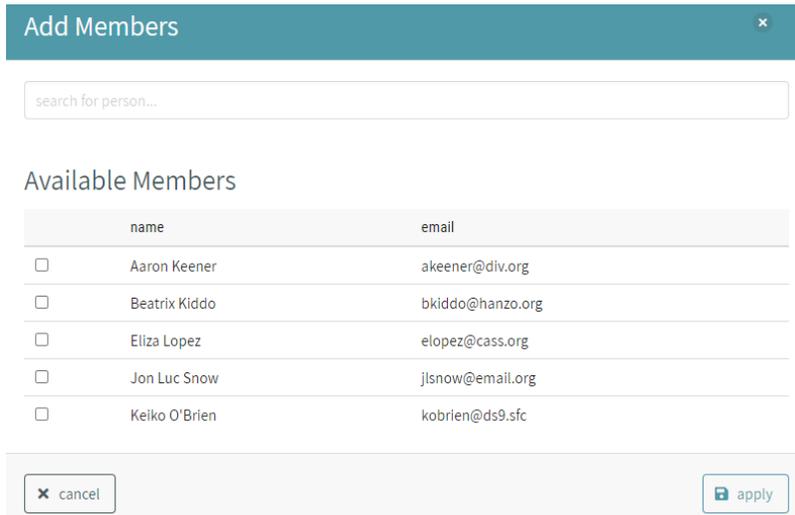


Figure 19 - CAT User Group Details - Add Members Dialogue

5.3.3.2 Remove Members

Group members can be removed from the group by clicking the *remove* button, as shown in Figure 20.

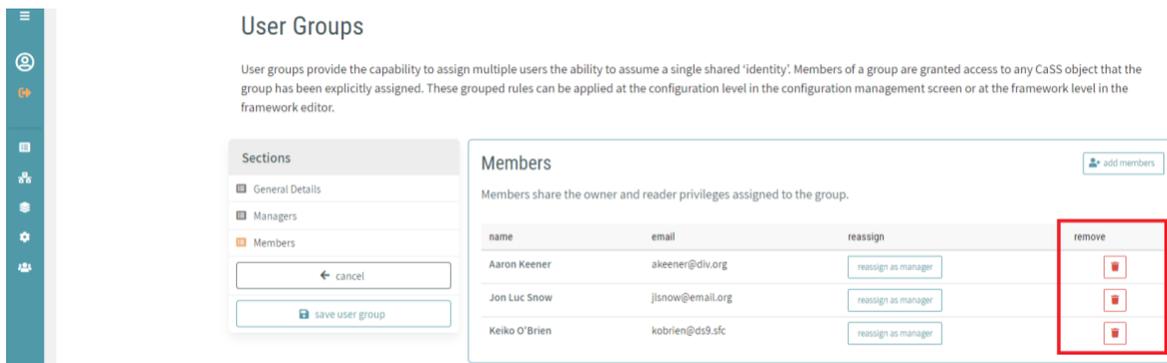


Figure 20 - CAT User Group Details - Remove Member

5.3.3.3 Reassign Member

Members can be reassigned as a group manager by clicking the *reassign as manager* button, as shown in Figure 21.

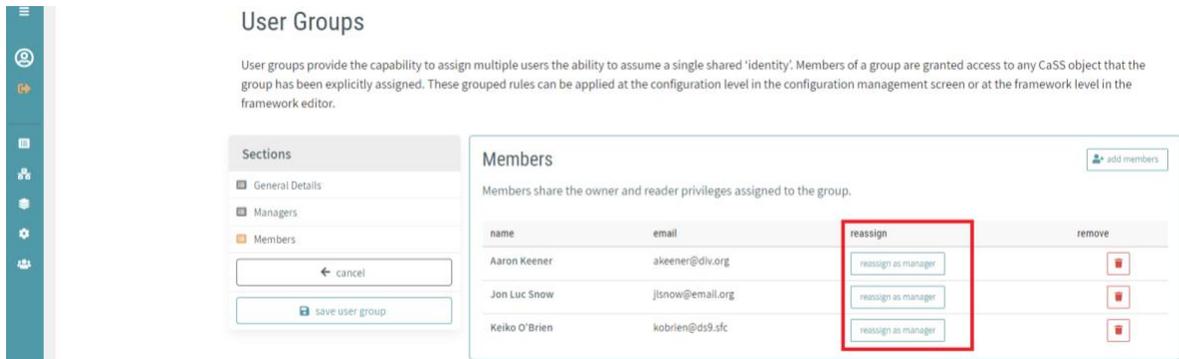


Figure 21 - CAT User Group Details - Reassign Member

5.3.4 Saving the User Group

User Groups can be saved by clicking on the *save user group* button on the left side of the *user group details* screen, as shown in Figure 22.

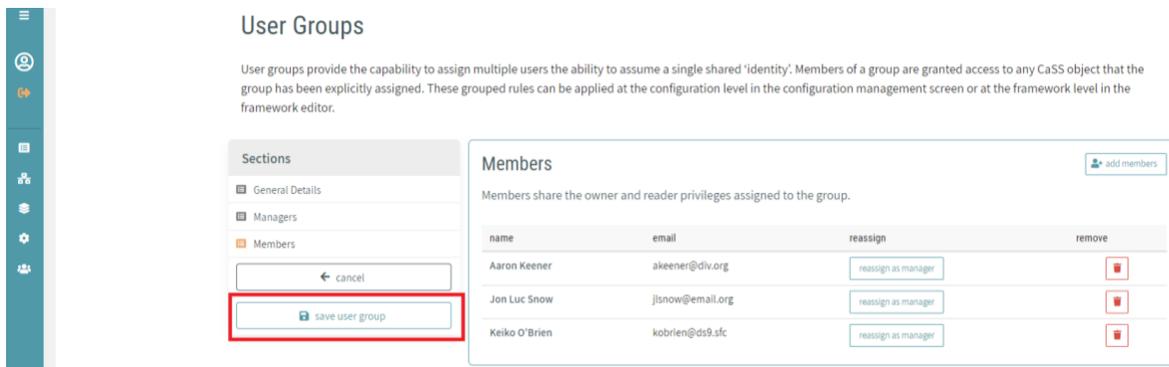


Figure 22 - CAT User Group Details - Save User Group

6.0 COMPETENCY FRAMEWORK AND COMPETENCY CONFIGURATION

Configurations control the way frameworks and competencies appear in the editor, as well as what properties, relationships, and in some cases value types of properties and relationships can be added to frameworks and competencies.

Configurations are assigned to competency frameworks. If a framework does not have a configuration assigned, then the following priority is made to determine which configuration will be applied to the framework:

1. Browser default configuration
2. Instance default configuration
3. CaSS nomenclature fallback

Note: Only a single configuration can be set to the CAT instance default at any given time. In order to change the instance default, the owner of the CAT instance default must toggle the default switch off.

Once the default instance configuration is switched off, another configuration can be set as the new instance default.

6.1 Accessing the CAT Configuration Manager

The CAT configuration manager can be accessed at any time by selecting the *Configurations* icon on the lower left corner of the navigation menu, as shown in Figure 23.

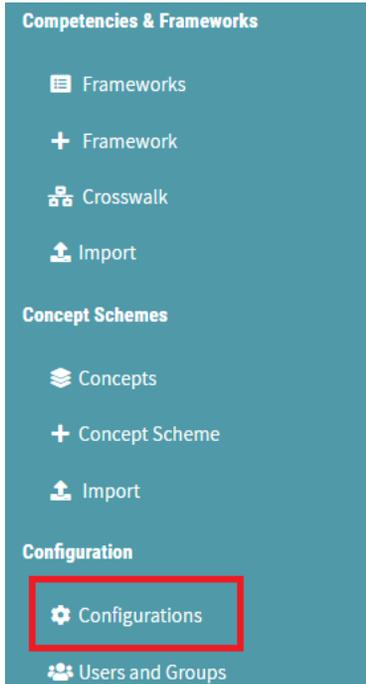


Figure 23 - CAT Configuration Manager - Navigation Menu - Configurations

Upon entering the configuration manager, a list of all existing configurations in the current CAT instance are displayed, as shown in Figure 24. Public configurations or configurations owned by the current logged in user can be managed or deleted by selecting one of the actions icons to the right of the configuration item. Unowned configurations can be viewed by selecting the appropriate action icon.

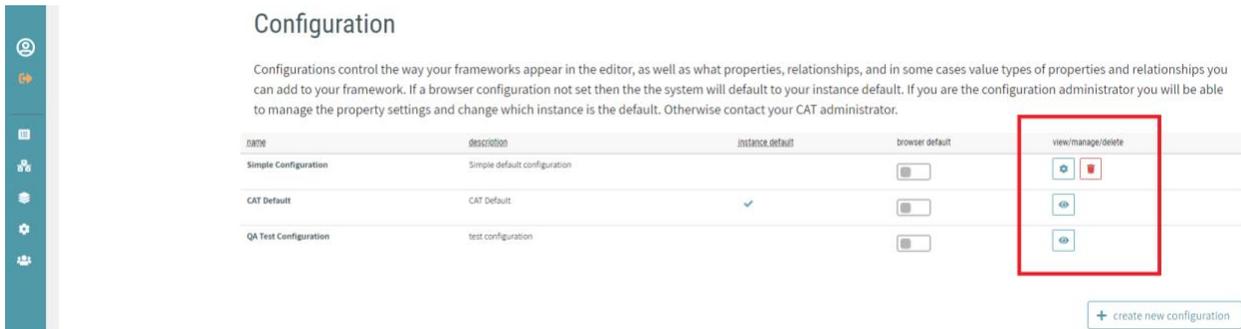


Figure 24 - CAT Configuration Manager - Configuration Actions

It is also possible for users to set their browser default configuration from this screen, as shown in Figure 25.

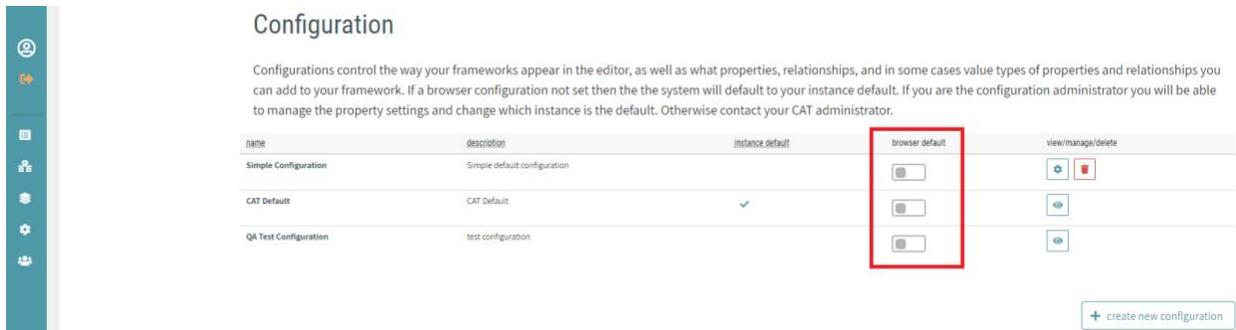


Figure 25 - CAT Configuration Manager - Browser Default

6.2 Creating a New Configuration

Configurations can be created by clicking the *create new configuration* button at the bottom right corner of the configuration management list screen. By default, all required fields are pre-populated with default CaSS terminology and settings, as shown in Figure 26.

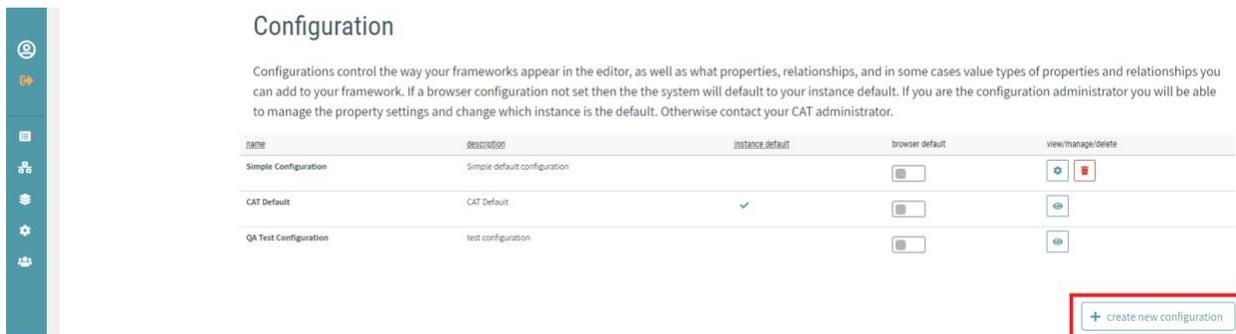


Figure 26 - CAT Configuration Manager - Create New Configuration

6.3 Managing a Configuration

After creating a new configuration or selecting the *manage* action on an existing configuration, the configuration details screen is displayed. This screen is divided into several sections.

6.3.1 General Details

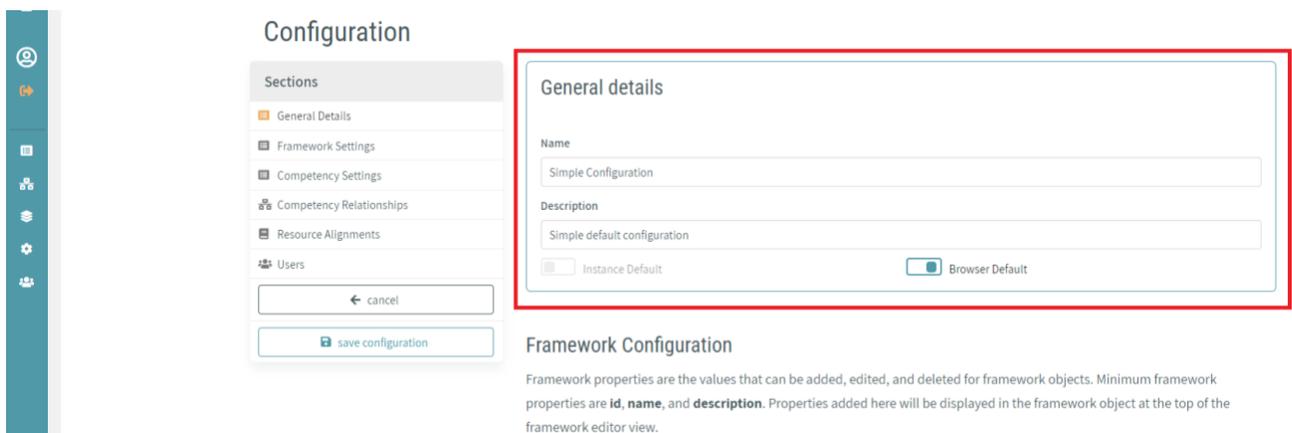


Figure 27 - CAT Configuration Details - General Details

The *general details* configuration settings provide fields for editing the **name** and **description** of the configuration, as shown in Figure 27. From this section users can also toggle the *instance default* switch and set their browser default.

Note: Only a single configuration can be set to the instance default at any given time. In order to change the instance default, the owner of the current instance default must toggle the default switch off. At that point, another configuration can be set as the instance default.

6.3.2 Framework Property Configuration

Framework properties are the values that can be added, edited, and deleted for competency frameworks. Minimal framework properties are **id**, **name**, and **description**. Properties added here will be displayed in the framework at the top of the *framework editor*, as shown in Figure 28.

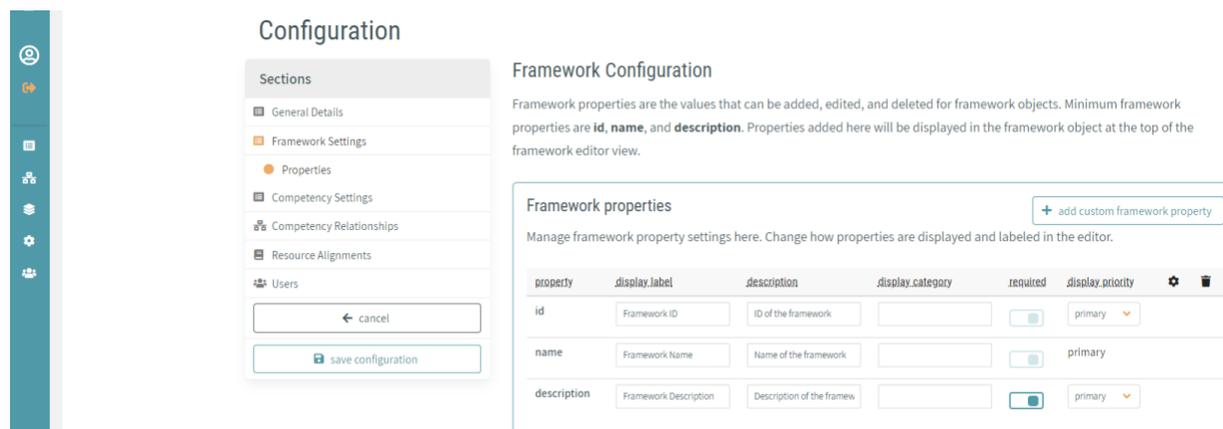


Figure 28 - CAT Configuration Details - Framework Configuration

6.3.2.1 Property Fields

Certain property fields can be modified directly from the property list:

- **display label** - label to be displayed in form inputs for that property
- **description** - description of this property to be displayed in tooltips for that property
- **display category** - heading (if any) under which the property is displayed in form inputs
- **required** - property required toggle
- **display priority** - priority in which the property is displayed in form inputs (primary, secondary, or tertiary)

At the framework level the following static rules apply:

- The **id** property is *required*
- The **name** property is *required* and has a display priority of *primary*

6.3.2.2 Custom Framework Properties

Custom properties can be added to a framework by clicking the *add custom framework property* button, as shown in Figure 29.

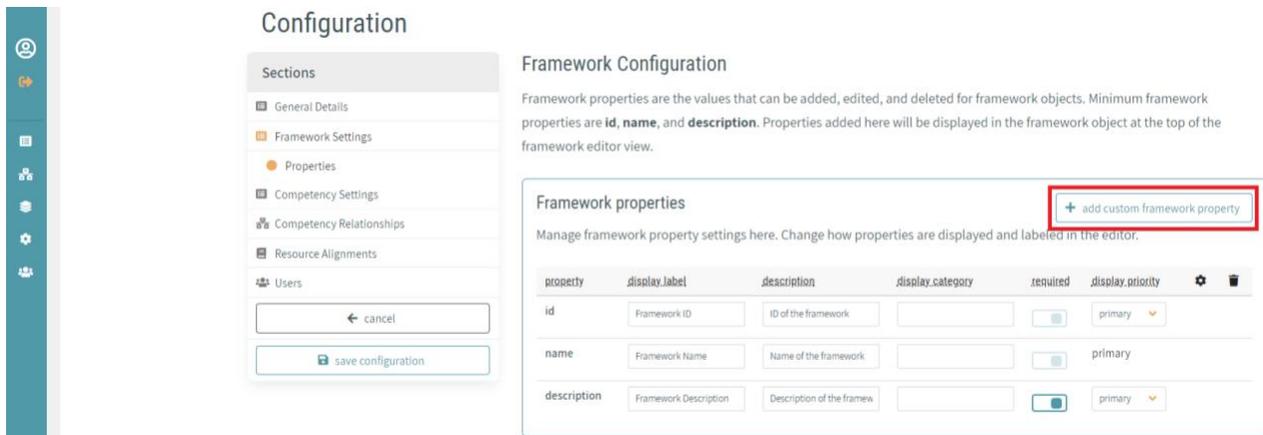


Figure 29 - CAT Configuration Details - Add Custom Framework Property

Once clicked, the *New Framework Property* dialogue window is displayed, as shown in Figure 30.

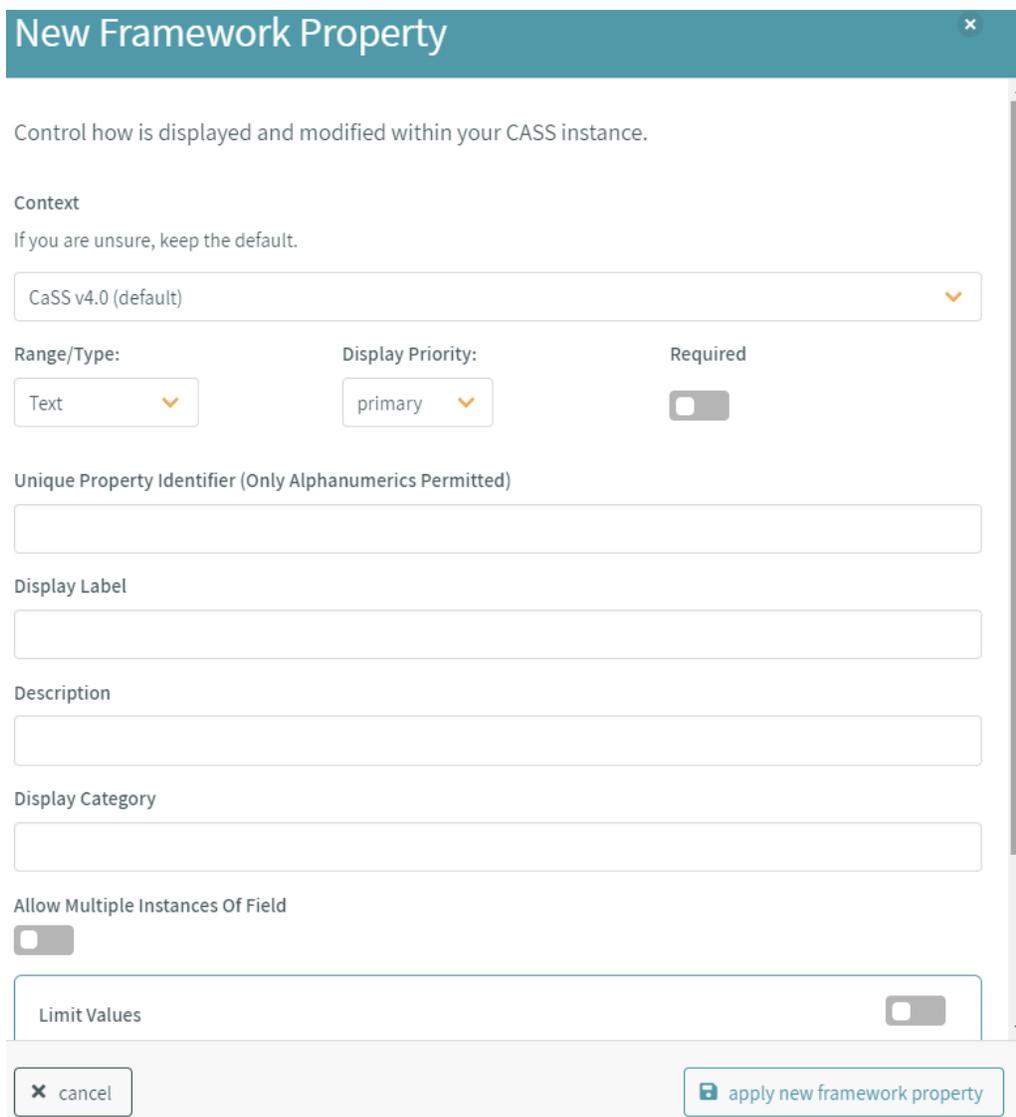


Figure 30 - CAT Configuration Details - New Framework Property Creation

6.3.2.3 Custom Framework Property Fields

Several fields must be completed in order to add the new property. Some field options (such as *range/type: Text*) allow further customization of the property.

6.3.2.4 Context (only editable at the time of property creation)

Custom properties in CaSS are stored as namespaced linked JSON-LD records. Because of this, all new properties must have a context. By default, all custom properties have the **CaSS v4.0** (<https://schema.cassproject.org/0.4/>) context. However, it is also possible to modify this field to the following values:

- **CTDL-ASN** - <https://purl.org/ctdlasn/terms/>
- **RDF Semantic Web Standards 1999** - <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
- **RDF Semantic Web Standards 2000** - <http://www.w3.org/2000/01/rdf-schema#>
- **Key Based Authorization and Control** - <https://schema.cassproject.org/kbac/0.4/>
- **Eduworks v3.0** - <http://schema.eduworks.com/general/0.3/>
- **Schema.org** - <http://schema.org/>
- **Achievements Standard Network** - <http://purl.org/ASN/schema/core/>
- **DCMI Elements v1.1** - <http://purl.org/dc/elements/1.1/>
- **DCMI Terms** - <http://purl.org/dc/terms/>
- **Gem v2.0** - <http://purl.org/gem/qualifiers/>
- **Relators Scheme** - <http://www.loc.gov/loc/terms/relators/>
- **Simple Knowledge Organization System** - <http://www.w3.org/2004/02/skos/core#>

It is highly recommended to accept the default for this field unless users have a reason for not doing so.

6.3.2.5 Range/Type (only editable at the time of property creation)

The *range/type* field defines the property type. Certain range/types allow for further customization of the property. The following values are available for this field:

- **Lang-String** - An RDF schema lang string as defined by <http://www.w3.org/2000/01/rdf-schema#langString>
 - Selecting this value opens the *One Entry Per Language* property field
- **URL** - A schema.org URL as defined by <http://schema.org/URL>
- **Text** - A schema.org Text (plain string) value as defined by <http://schema.org/Text>
 - Selecting this value opens the *Limit Values* property field
- **Date-Time** - A w3.org dateTime value as defined by <http://www.w3.org/2001/XMLSchema#dateTime>
- **Date** - A dublin core date value as defined by <http://purl.org/dc/terms/date>
- **SKOS Concept** - A CaSS concept value as defined by <https://schema.cassproject.org/0.4/skos/Concept>

6.3.2.6 Display Priority

The priority in which the property is displayed in form inputs (primary, secondary, or tertiary).

6.3.2.7 Required

The property is *required* toggle.

6.3.2.8 Unique Property Identifier (only editable at the time of property creation)

The name of the property in the data record. Only alphanumerics are allowed.

6.3.2.9 Display Label

The label to be displayed in form inputs for the property.

6.3.2.10 Description

The description of the property.

6.3.2.11 Display Category

The category (if any) under which the property is displayed in form inputs.

6.3.2.12 One Entry Per Language (only available for range/type Lang-String)

The screenshot shows a form titled "New Framework Property" with a close button (x) in the top right corner. The form contains the following fields and controls:

- Context:** A dropdown menu with "CaSS v4.0 (default)" selected and a downward arrow.
- Range/Type:** A dropdown menu with "Lang-String" selected and a downward arrow.
- Display Priority:** A dropdown menu with "primary" selected and a downward arrow.
- Required:** A toggle switch that is currently turned off.
- Unique Property Identifier (Only Alphanumerics Permitted):** An empty text input field.
- Display Label:** An empty text input field.
- Description:** An empty text input field.
- Display Category:** An empty text input field.
- Allow Multiple Instances Of Field:** A toggle switch that is currently turned off.
- One Entry Per Language:** A toggle switch that is currently turned on (highlighted with a red box).

At the bottom of the form, there are two buttons: "cancel" (with an x icon) and "apply new framework property" (with a save icon).

Figure 31 - CAT Configuration Details - One Entry Per Language

By toggling the *One Entry Per Language* field on (see Figure 31), custom properties of the *range/type Lang-String* can be limited so that only a single entry can be made per language chosen.

6.3.2.13 Limit Values (only available for range/type Text)

When creating a custom property of *range/type Text*, users can limit the values allowed to the property. To do this, toggle the *Limit Values* field on and click the *add* button to begin managing the list of allowable values, as shown in Figure 32.

The image shows a 'New Framework Property' dialog box. At the top, there's a teal header with the title and a close button. Below the header, a dropdown menu shows 'CaSS v4.0 (default)'. The main form area includes three columns: 'Range/Type:' with a 'Text' dropdown, 'Display Priority:' with a 'primary' dropdown, and a 'Required' toggle switch. Below these are several text input fields: 'Unique Property Identifier (Only Alphanumerics Permitted)', 'Display Label', 'Description', and 'Display Category'. There's also an 'Allow Multiple Instances Of Field' toggle switch. A red box highlights the 'Limit Values' section, which has a 'Limit Values' label and a toggle switch that is currently off. Below the toggle is the text: 'Limit values disabled, any values allowed. To limit, turn on limit values.' At the bottom, there are two buttons: 'cancel' and 'apply new framework property'.

Figure 32 - CAT Configuration Details - Limit Values

For each entry in the limit values table, a *display label* and *field value* must be entered, as shown in Figure 33.

- **display label** - the label displayed to the user when selecting the value
- **field value** - the recorded value when the value is selected by the user

6.3.2.14 Applying the Custom Framework Property

Once complete, the new property can be applied to the framework by clicking the *apply new property* in the lower right corner of the dialogue window.

New Framework Property

Display Label

Description

Display Category

Allow Multiple Instances Of Field

Limit Values

Values limited to only those listed below. To allow any, turn off limit values.

display label	field value	
<input type="text" value="Label LV1"/>	<input type="text" value="ftv1"/>	<input type="button" value="🗑"/>
<input type="text" value="Label LV2"/>	<input style="border: 2px solid orange;" type="text" value="ftv2"/>	<input type="button" value="🗑"/>

Figure 33 - CAT Configuration Details - Limit Values Entries

6.3.2.15 Editing/Deleting Custom Framework Properties

Custom properties can be edited and deleted by selecting the appropriate action buttons to the right of the corresponding property entry in the *Framework Properties* list, as shown in Figure 34.

Configuration

- General Details
- Framework Settings
- Properties
- Competency Settings
- Competency Relationships
- Resource Alignments
- Users

Framework Configuration

Framework properties are the values that can be added, edited, and deleted for framework objects. Minimum framework properties are **id**, **name**, and **description**. Properties added here will be displayed in the framework object at the top of the framework editor view.

Framework properties

Manage framework property settings here. Change how properties are displayed and labeled in the editor.

property	display_label	description	display_category	required	display_priority	<input type="button" value="⚙"/>	<input type="button" value="🗑"/>
id	Framework ID	ID of the framework		<input type="checkbox"/>	primary		
name	Framework Name	Name of the framework		<input type="checkbox"/>	primary		
description	Framework Description	Description of the frame		<input checked="" type="checkbox"/>	primary		
newTextProp	Some Text Property	Some text property for t		<input type="checkbox"/>	primary	<input type="button" value="⚙"/>	<input type="button" value="🗑"/>

Figure 34 - CAT Configuration Details - Edit/Delete Custom Properties

6.3.3 Competency Property Configuration

Competency properties are the values that can be added, edited, and deleted for competency objects, as shown in Figure 35. Default competency properties are **id**, **name**, **description**, and **type**. Properties added here will be displayed when editing competency level objects in the framework editor.

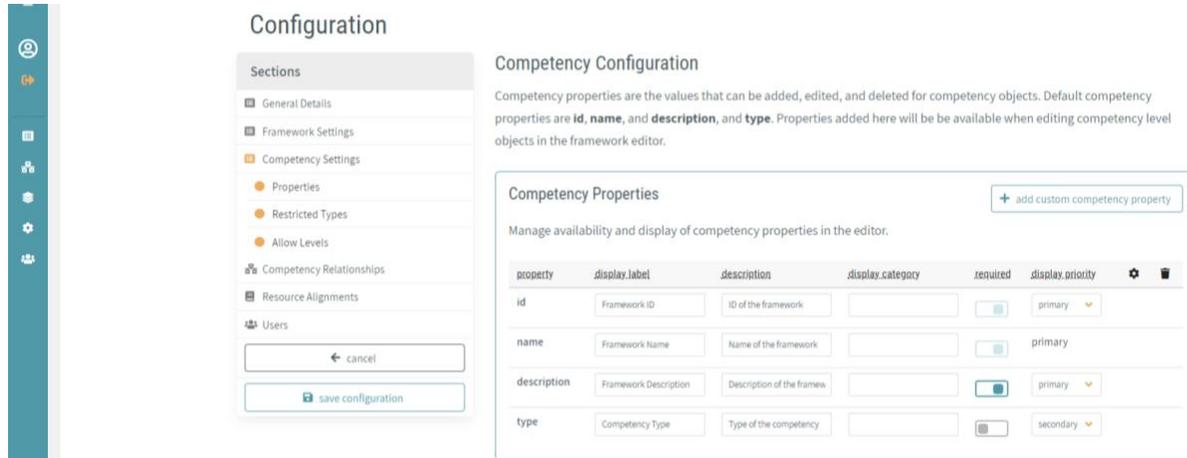


Figure 35 – CAT Configuration Details – Property Configuration

6.3.3.1 Property Fields

Certain property fields can be modified directly from the property list:

- **display label** - label to be displayed in form inputs for that property
- **description** - description of this property
- **display category** - heading (if any) under which the property is displayed in form inputs
- **required** - property required toggle
- **display priority** - priority in which the property is displayed in form inputs (primary, secondary, or tertiary)

At the competency level the following static rules apply:

- The **id** property is *required*
- The **name** property is *required* and has a display priority of *primary*

6.3.3.2 Custom Competency Properties

Custom properties can be added to a competency by clicking the *add custom competency property* button, as shown in Figure 36.

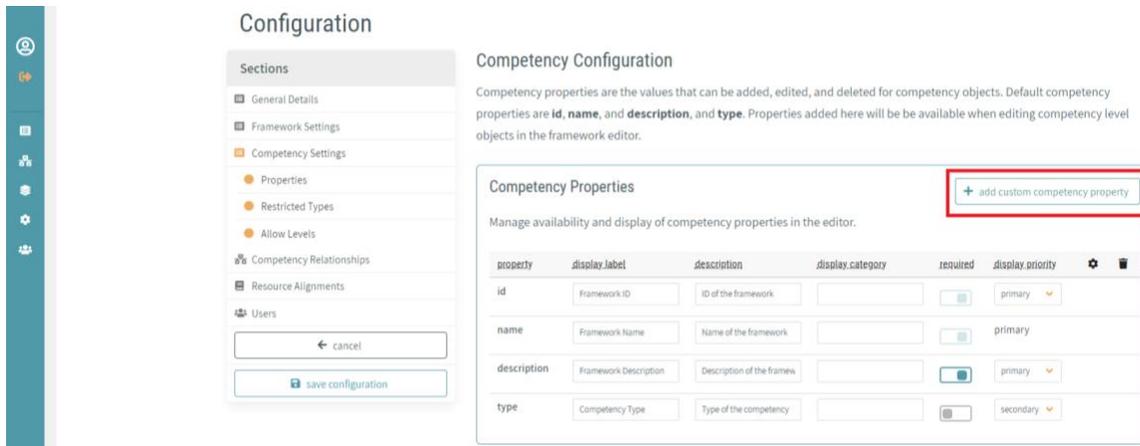


Figure 36 - CAT Configuration Details - Add Custom Competency Property

Once clicked, the *New Competency Property* dialogue window is displayed, as shown in Figure 37.

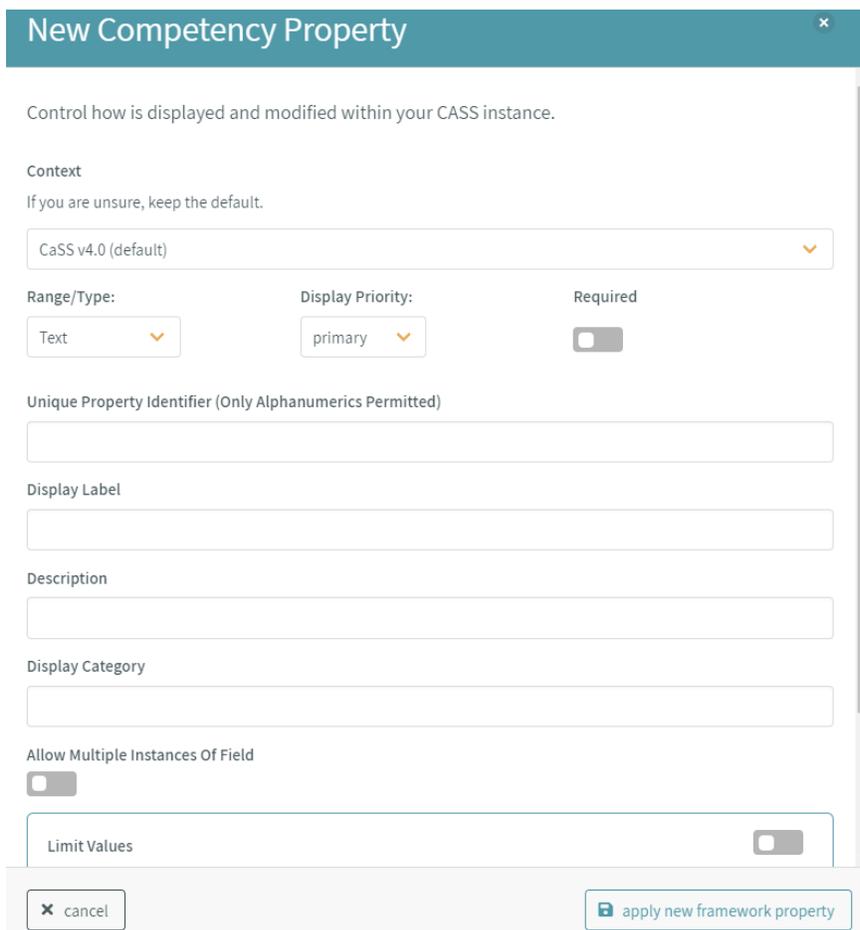


Figure 37 - CAT Configuration Details - New Competency Property Creation

6.3.3.3 Custom Competency Property Fields

Several fields must be completed in order to add the new property. Some field options (such as *range/type: Text*) allow further customization of the property.

6.3.3.4 Context (only editable at the time of property creation)

Custom properties in CaSS are stored as namespaced linked JSON-LD records. Because of this, all new properties must have a context. By default, all custom properties have the **CaSS v4.0** (<https://schema.cassproject.org/0.4/>) context. However, it is also possible to modify this field to the following values:

- **CTDL-ASN** - <https://purl.org/ctdlasn/terms/>
- **RDF Semantic Web Standards 1999** - <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
- **RDF Semantic Web Standards 2000** - <http://www.w3.org/2000/01/rdf-schema#>
- **Key Based Authorization and Control** - <https://schema.cassproject.org/kbac/0.4/>
- **Eduworks v3.0** - <http://schema.eduworks.com/general/0.3/>
- **Schema.org** - <http://schema.org/>
- **Achievements Standard Network** - <http://purl.org/ASN/schema/core/>
- **DCMI Elements v1.1** - <http://purl.org/dc/elements/1.1/>
- **DCMI Terms** - <http://purl.org/dc/terms/>
- **Gem v2.0** - <http://purl.org/gem/qualifiers/>
- **Relators Scheme** - <http://www.loc.gov/loc/terms/relators/>
- **Simple Knowledge Organization System** - <http://www.w3.org/2004/02/skos/core#>

It is highly recommended to accept the default for this field unless there is an actionable reason for not doing so.

6.3.3.5 Range/Type (only editable at the time of property creation)

The *range/type* field defines the property type. Certain range/types allow for further customization of the property. The following values are available for this field:

- **Lang-String** - An RDF schema lang string as defined by <http://www.w3.org/2000/01/rdf-schema#langString>
 - Selecting this value opens the *One Entry Per Language* property field
- **URL** - A schema.org URL as defined by <http://schema.org/URL>
- **Text** - A schema.org Text (plain string) value as defined by <http://schema.org/Text>
 - Selecting this value opens the *Limit Values* property field
- **Date-Time** - A w3.org dateTime value as defined by <http://www.w3.org/2001/XMLSchema#dateTime>
- **Date** - A dublin core date value as defined by <http://purl.org/dc/terms/date>
- **SKOS Concept** - A CaSS concept value as defined by <https://schema.cassproject.org/0.4/skos/Concept>

6.3.3.6 Display Priority

The priority in which the property is displayed in form inputs (primary, secondary, or tertiary).

6.3.3.7 Required

The property is *required* toggle.

6.3.3.8 Unique Property Identifier (only editable at the time of property creation)

The name of the property in the data record. Only alphanumerics are allowed.

6.3.3.9 Display Label

The label to be displayed in form inputs for the property.

6.3.3.10 Description

The description of the property.

6.3.3.11 Display Category

The category (if any) under which the property is displayed in form inputs.

6.3.3.12 One Entry Per Language (only available for range/type Lang-String)

The screenshot shows a web form titled "New Competency Property". The form includes several fields and controls:

- Context:** A dropdown menu with "CaSS v4.0 (default)" selected.
- Range/Type:** A dropdown menu with "Lang-String" selected.
- Display Priority:** A dropdown menu with "primary" selected.
- Required:** A toggle switch that is currently turned off.
- Unique Property Identifier (Only Alphanumerics Permitted):** An empty text input field.
- Display Label:** An empty text input field.
- Description:** An empty text input field.
- Display Category:** An empty text input field.
- Allow Multiple Instances Of Field:** A toggle switch that is currently turned off.
- One Entry Per Language:** A toggle switch that is currently turned on. This field is highlighted with a red rectangular box.

At the bottom of the form, there are two buttons: "cancel" and "apply new framework property".

Figure 38 - CAT Configuration Details - One Entry Per Language

By toggling the *One Entry Per Language* field on, as shown in Figure 38, custom properties of the *range/type Lang-String* can be limited so that only a single entry can be made per language chosen.

6.3.3.13 Limit Values (only available for range/type Text)

When creating a custom property of *range/type Text*, users can limit the values allowed to the property. To do this, toggle the *Limit Values* field on and click the *add* button to begin managing the list of allowable values, as shown in Figure 39.

The screenshot shows a 'New Competency Property' dialog box. At the top, it says 'CaSS v4.0 (default)'. Below that are three settings: 'Range/Type' set to 'Text', 'Display Priority' set to 'primary', and a 'Required' toggle switch. There are four text input fields: 'Unique Property Identifier (Only Alphanumerics Permitted)', 'Display Label', 'Description', and 'Display Category'. Below these is an 'Allow Multiple Instances Of Field' toggle switch. A red box highlights the 'Limit Values' section, which has a toggle switch and the text: 'Limit values disabled, any values allowed. To limit, turn on limit values.' At the bottom, there are two buttons: 'cancel' and 'apply new framework property'.

Figure 39 - CAT Configuration Details - Limit Values

For each entry in the limit values table, a *display label* and *field value* must be entered, as shown in Figure 40.

- **display label** - the label displayed to the user when selecting the value
- **field value** - the recorded value when the value is selected by the user
 - Only alphanumerics are allowed for field values

New Competency Property ✕

testCompTextField

Display Label

Test Text Field

Description

Test Text Field for competency

Display Category

Allow Multiple Instances Of Field

Limit Values

Values limited to only those listed below. To allow any, turn off limit values.

display label	field value	
<input type="text" value="Label LV1"/>	<input type="text" value="ftv1"/>	<input type="button" value="✖"/>
<input type="text" value="Label LV2"/>	<input style="border: 2px solid orange;" type="text" value="ftv2"/>	<input type="button" value="✖"/>

✕ cancel

📄 apply new framework property

Figure 40 - CAT Configuration Details - Limit Values Entries

6.3.3.14 Applying the Custom Competency Property

Once complete, the new property can be applied to the framework by clicking the *apply new property* in the lower right corner of the dialogue window.

6.3.3.15 Editing/Deleting Custom Competency Properties

Custom properties can be edited and deleted by selecting the appropriate action buttons to the right of the corresponding property entry in the *Competency Properties* list, as shown in Figure 41.

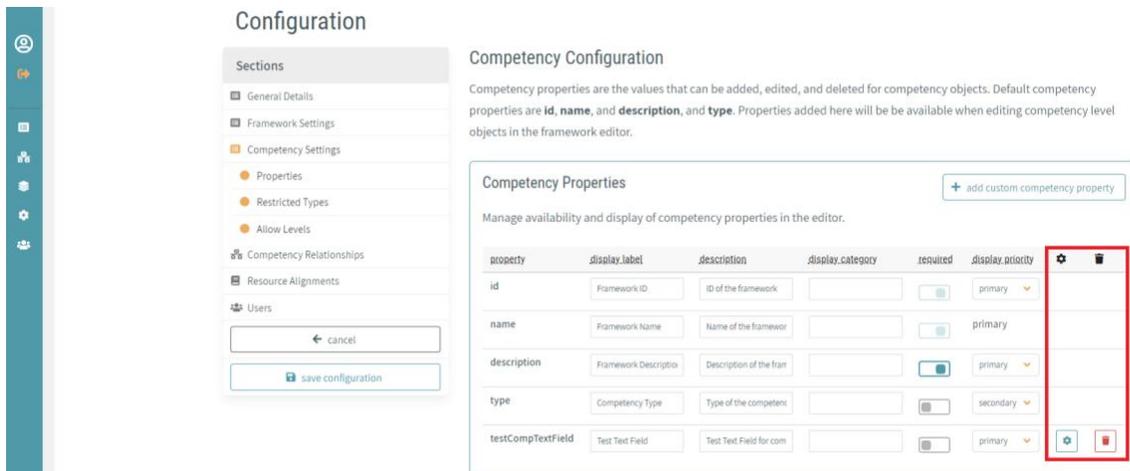


Figure 41 - CAT Configuration Details - Edit/Delete Custom Properties

6.3.3.16 Restrict Competency Types

By default, values for the competency *type* property are not limited. By toggling this setting, competency types can be restricted to a list of predetermined values, as shown in Figure 42.

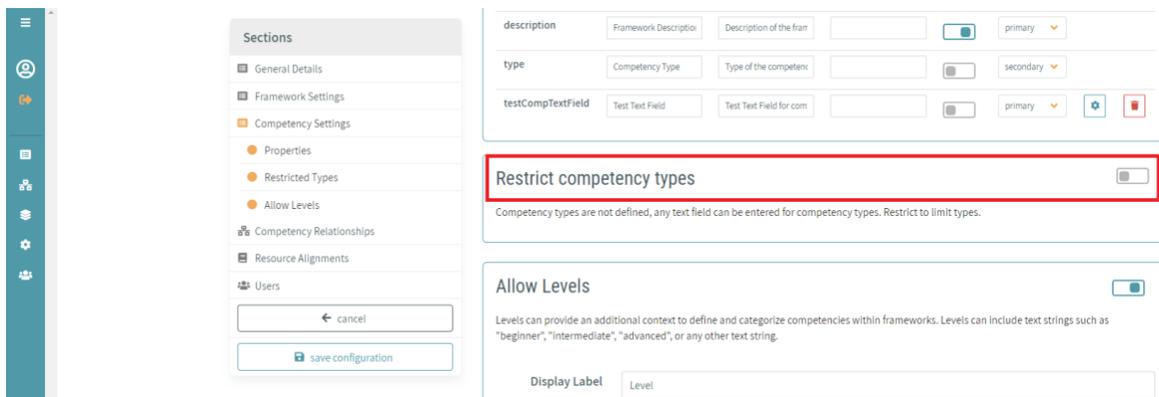


Figure 42 - CAT Configuration Details - Restrict Competency Types

For each entry in the permitted values table, a *display label* and *field value* must be entered, as shown in Figure 43.

- **display label** - the label displayed to the user when selecting the type value
- **field value** - the recorded value when the type is selected by the user
 - Only alphanumeric characters are allowed for field values

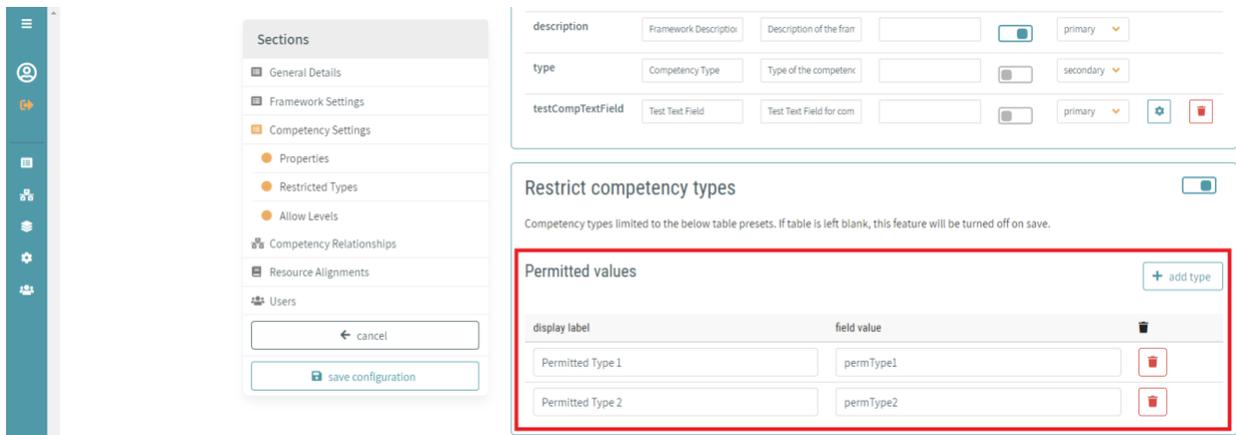


Figure 43 - CAT Configuration Details - Types Permitted Values Table

6.3.3.17 Competency Levels

By default, the level property is enabled for competency objects created in CaSS Authoring Tools. Levels can be disabled by toggling the *allow levels* switch, as shown in Figure 44.

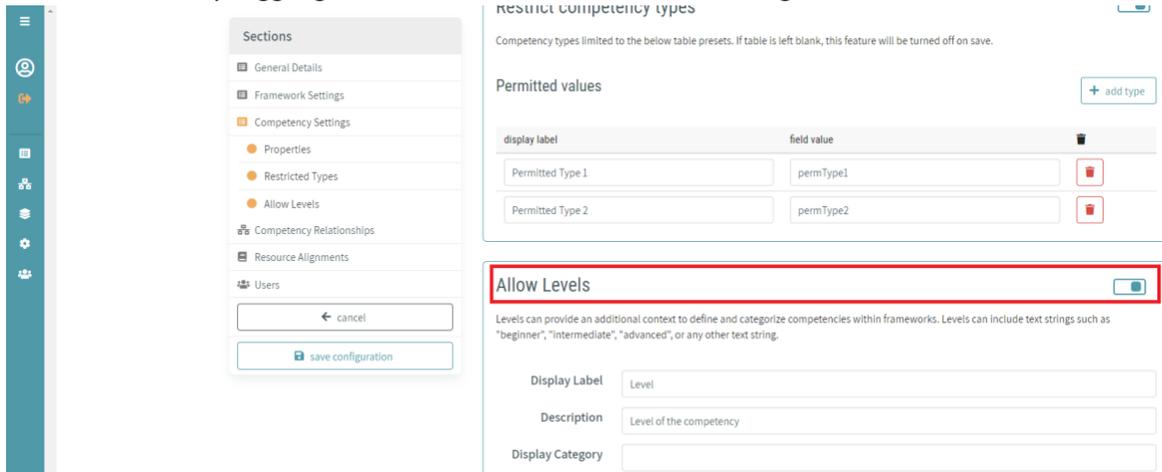


Figure 44 - CAT Configuration Details - Allow Levels Switch

6.3.3.18 Level Property Fields

Level property fields can be modified from the *allow levels* section of the competency configuration settings:

- **display label** - label to be displayed in form inputs for *levels*
- **description** - description of the *levels* property
- **display category** - heading (if any) under which levels are displayed in form inputs
- **level display priority** - priority in which levels are displayed in form inputs (primary, secondary, or tertiary)

6.3.3.19 Restrict Competency Levels

By default, levels in CaSS can be created during framework/competency editing. To restrict competencies that allow levels to a limited selection, toggle the *restrict level values* switch and click the *manage levels* button, as shown in Figure 45.

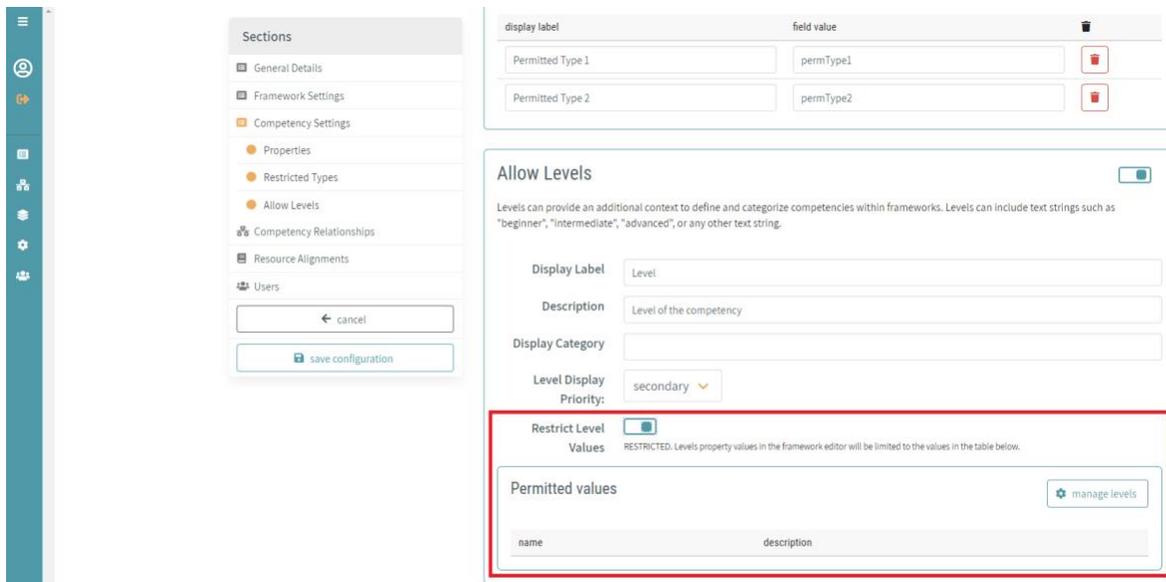


Figure 45 - CAT Configuration Details - Restrict Level Values

6.3.3.20 Manage Competency Levels

Clicking the *manage levels* button displays the *select enforced levels* dialogue screen, as shown in Figure 46. From here, users can select from all existing levels in CaSS or create more appropriate levels. Any previously selected levels will already be checked and can be removed from the enforced levels list by unchecking the appropriate item.

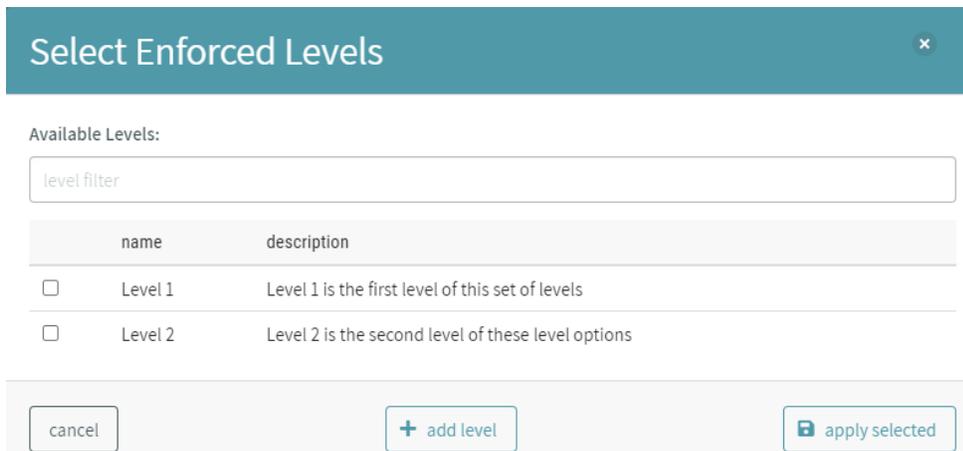


Figure 46 - CAT Configuration Details - Select Enforced Levels Dialogue

6.3.3.21 Add Competency Levels

To add a new level to the available level list, click on the *add level* button in the *select enforced levels* dialogue window, as shown in Figure 47.

Select Enforced Levels ×

Available Levels:

level filter

	name	description
<input type="checkbox"/>	Level 1	Level 1 is the first level of this set of levels
<input type="checkbox"/>	Level 2	Level 2 is the second level of these level options

cancel + add level 🔒 apply selected

Figure 47 - CAT Configuration Details - Add Level

Once clicked, the *add new level* dialogue is open. Enter the new level **name** (and optionally the new level **description**), as shown in Figure 48. Clicking the *save new level* button on the bottom right corner of the dialogue will create this level in CaSS and return users to the *select enforced levels* dialogue.

Add New Level ×

Add Level

Name:

Test Level

Description:

Test competency level

🔒 cancel 🔒 save new level

Figure 48 - CAT Configuration Details - Add New Level Dialogue

6.3.3.22 Apply Selected Competency Levels

Upon selecting the desired enforced levels, click the *apply selected* button at the bottom right of the select enforced levels dialog window (shown in Figure 49) to apply the enforced levels to competencies.

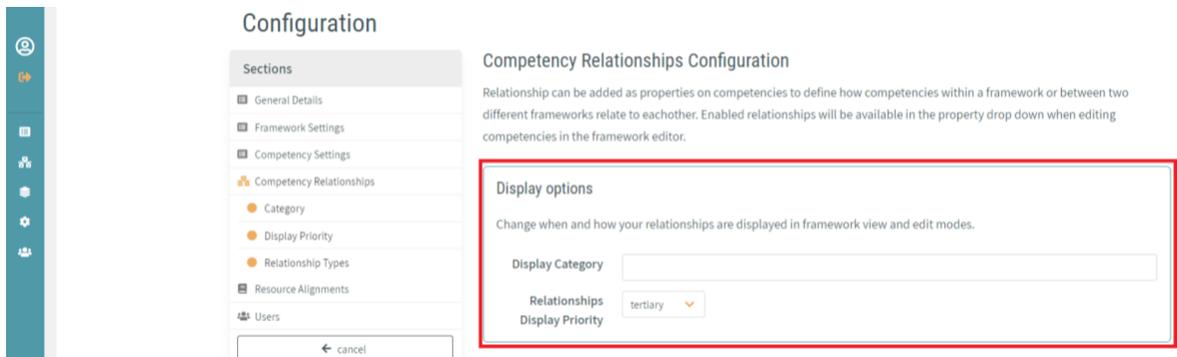


Figure 51 - CAT Configuration Details - Competency Relationships Display Options

6.3.4.2 Relationship Type Management

The types of relationships available to competencies using the configuration can be managed under the *relationship types* section, shown in Figure 52. Relationship types can be enabled, disabled and relabeled.

By default, the following relationship types are enabled:

- **isEnabledBy**
- **requires**
- **desires**
- **narrows**
- **isRelatedTo**
- **isEquivalentTo**

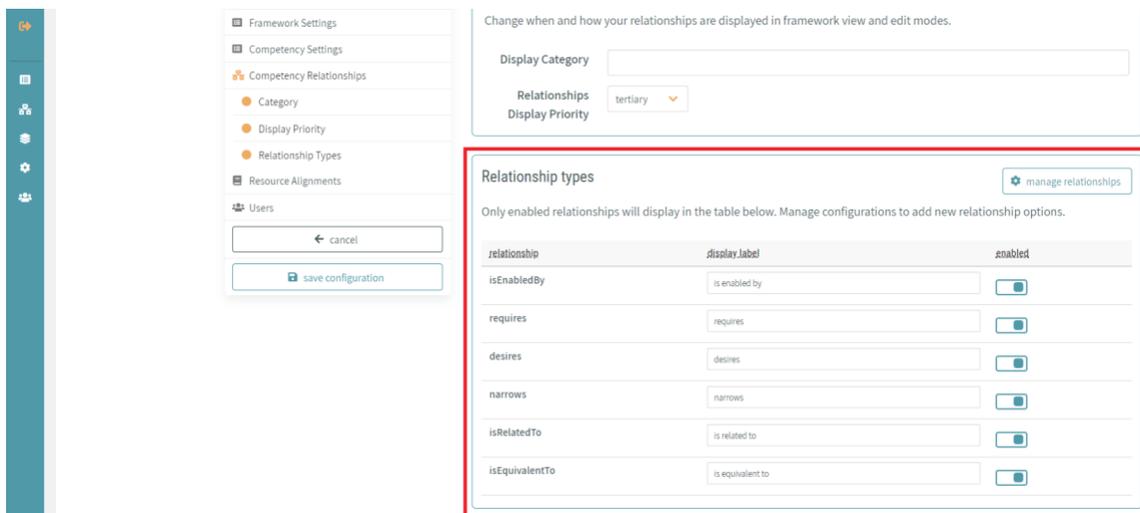


Figure 52 - CAT Configuration Details - Competency Relationships Type Management

To reduce screen clutter, the *relationship types* section only displays enabled relationship types, as shown in Figure 53. Currently enabled relationships can be disabled using the corresponding *enabled* toggle switch to the right of the relationship entry.

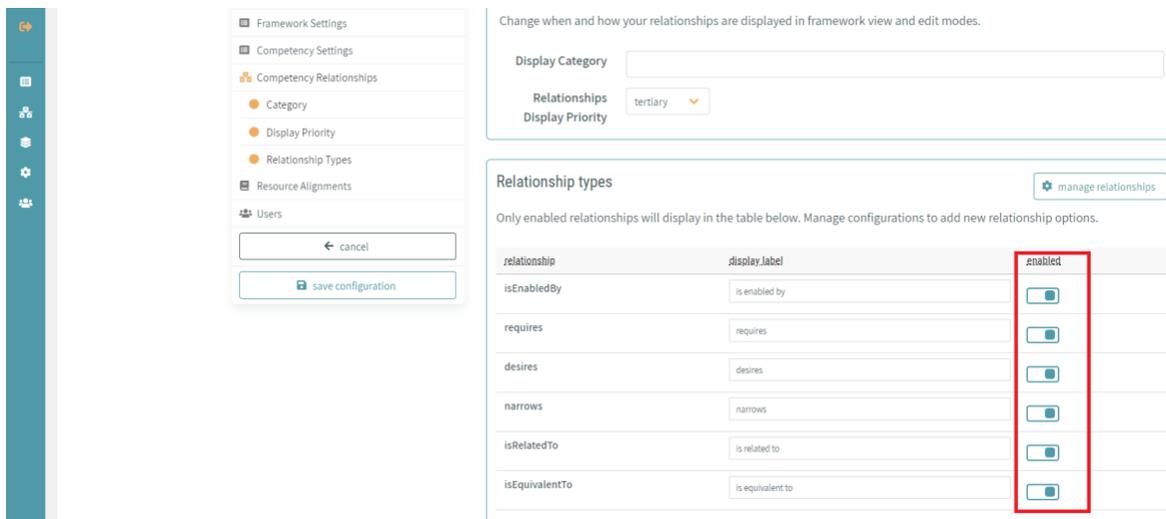


Figure 53 - CAT Configuration Details - Competency Relationships Type Enable Toggle

To add other relationship types to a configuration, click on the *manage relationships* button on the upper right of the *relationship types* section, as shown in Figure 54.

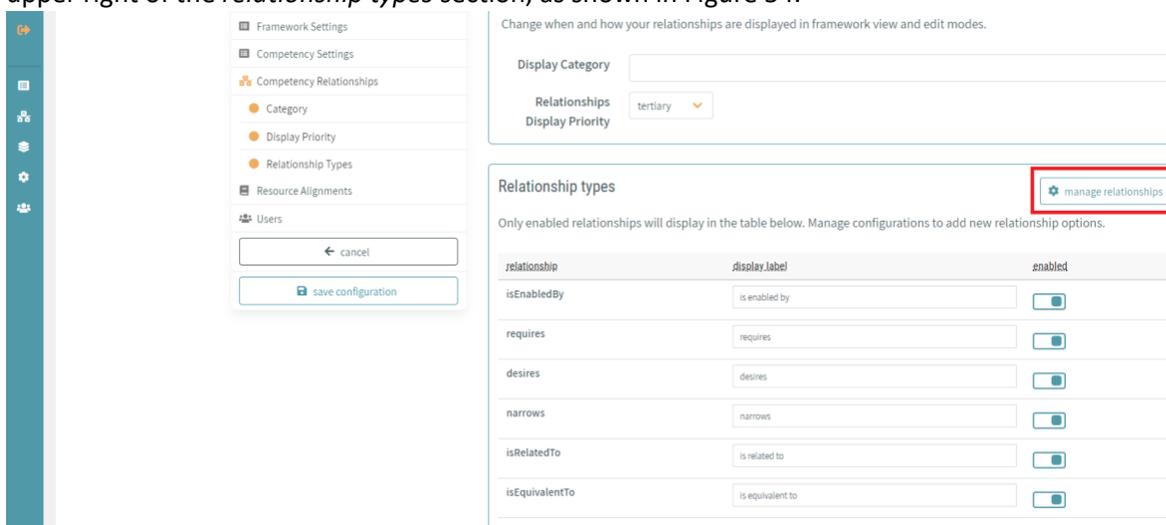


Figure 54 - CAT Configuration Details - Competency Relationships Type - Manage Relationships

Once clicked, the *manage relationship types* dialogue window is open, as shown in Figure 55. From this screen, all relationships type currently available in CaSS are categorized and displayed.

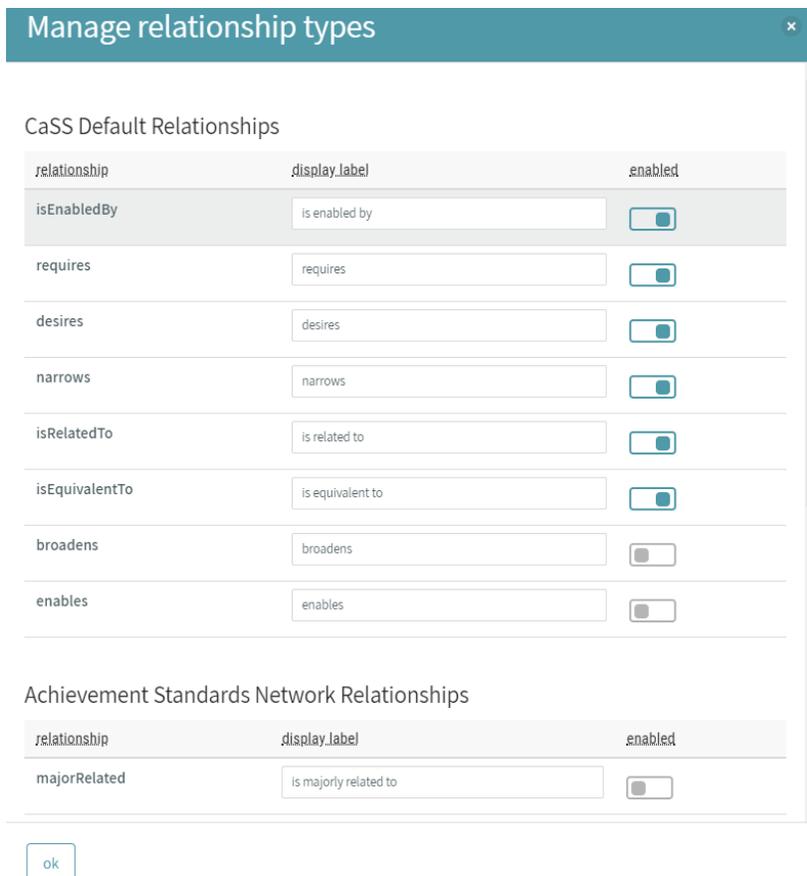


Figure 55 - CAT Configuration Details - Manage Relationship Types Dialogue

The available relationship types are as follows:

- **CaSS Default Relationships**
 - isEnabledBy
 - requires
 - desires
 - narrows
 - isRelatedTo
 - isEquivalentTo
 - broadens
 - enables
- **Achievement Standards Network Relationships**
 - majorRelated
 - minorRelated
- **GEMQ**
 - hasChild
 - isChildOf
- **Other**
 - isSimilarTo
 - isPartiallySameAs

To enable or disable a relationship type for the configuration, toggle the *enabled* switch to the right of the corresponding type and click the *ok* button.

6.3.5 Resource Alignment Configuration

Resource alignment terms are used to map resources such as learning materials, courses, and other content to competencies in CAT. If enabled, the alignment type property will show up in the framework editor when aligning competencies to resources, as shown in Figure 56.

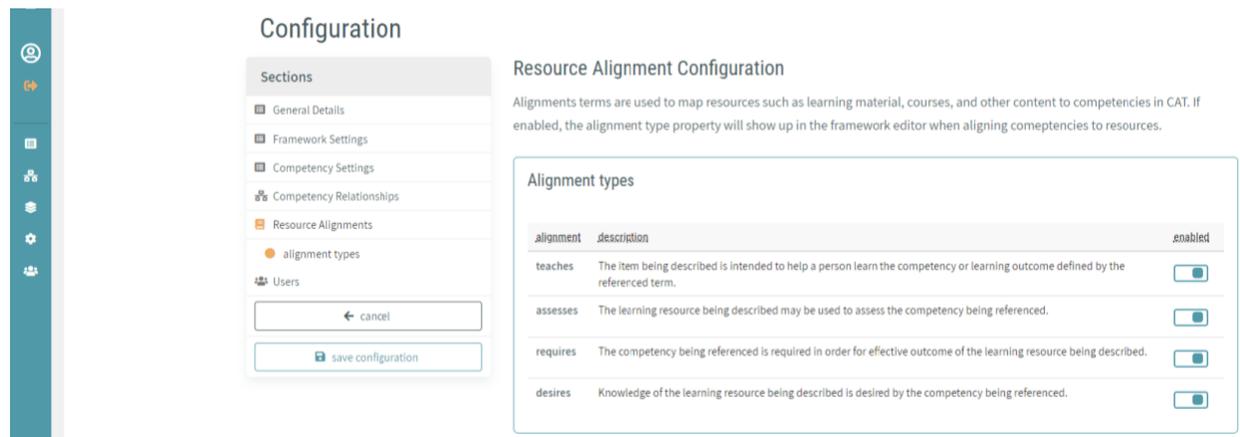


Figure 56 - CAT Configuration Details - Resource Alignment Configuration

CAT supports four types of resource alignments:

- **teaches** - The item being described is intended to help a person learn the competency or learning outcome defined by the referenced term
- **assesses** - The learning resource being described may be used to assess the competency being referenced
- **requires** - The competency being referenced is required in order for effective outcome of the learning resource being described
- **desires** - Knowledge of the learning resource being described is desired by the competency being referenced

Each alignment type can be enabled and disabled by toggling the *enabled* switch to the right of each corresponding item.

6.3.6 Default User Configuration

By default, the creator of a CaSS framework, competency, or other object is assigned as the sole owner of that record. By using the *user configuration* section of the configuration, other specified users and groups can be assigned as owners and readers to objects created in the framework/competency editor that use the configuration, as shown in Figure 57.

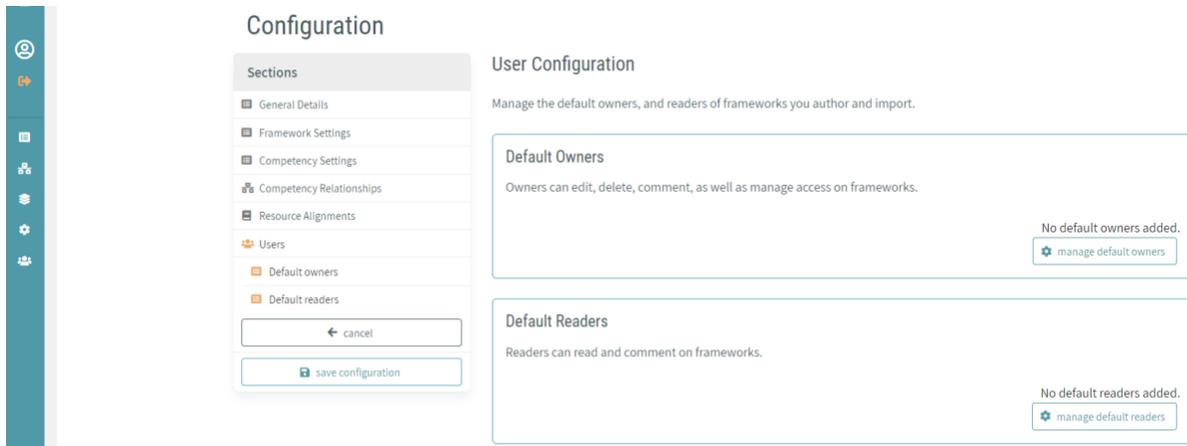


Figure 57 - CAT Configuration Details - User Configuration

6.3.6.1 Default Owners

Users and groups added to this section are automatically added to the owner list of any object created in the framework/competency editor that uses this configuration. To manage the list of default owners, click the *manage default owners* button in the *default owners* section, as shown in Figure 58.

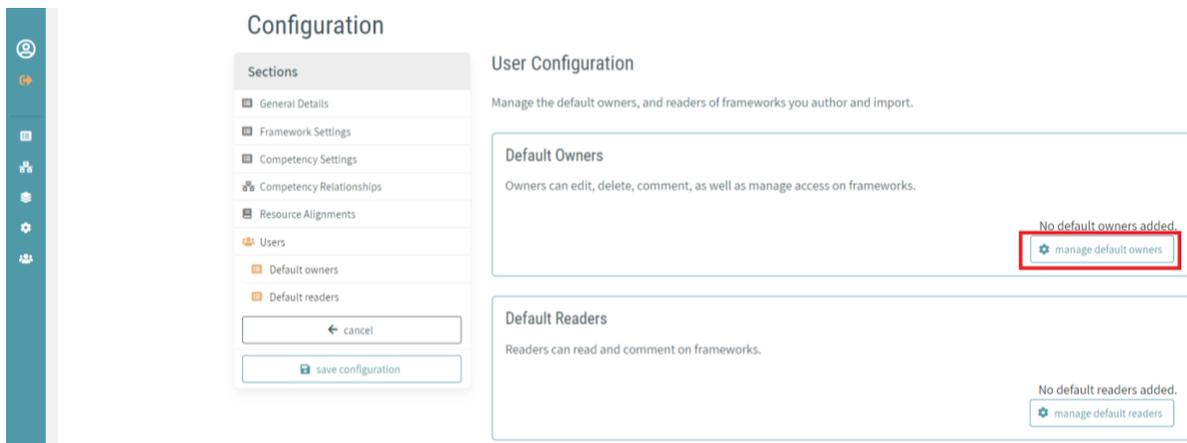


Figure 58 - CAT Configuration Details - User Configuration - Manage Default Owners

Once clicked, the *select default owners* dialogue window is displayed. Select the desired default owner entries and click the *apply* button in the bottom right of the dialogue window, as shown in Figure 59.

Note: Default owners can also be removed in a similar fashion.

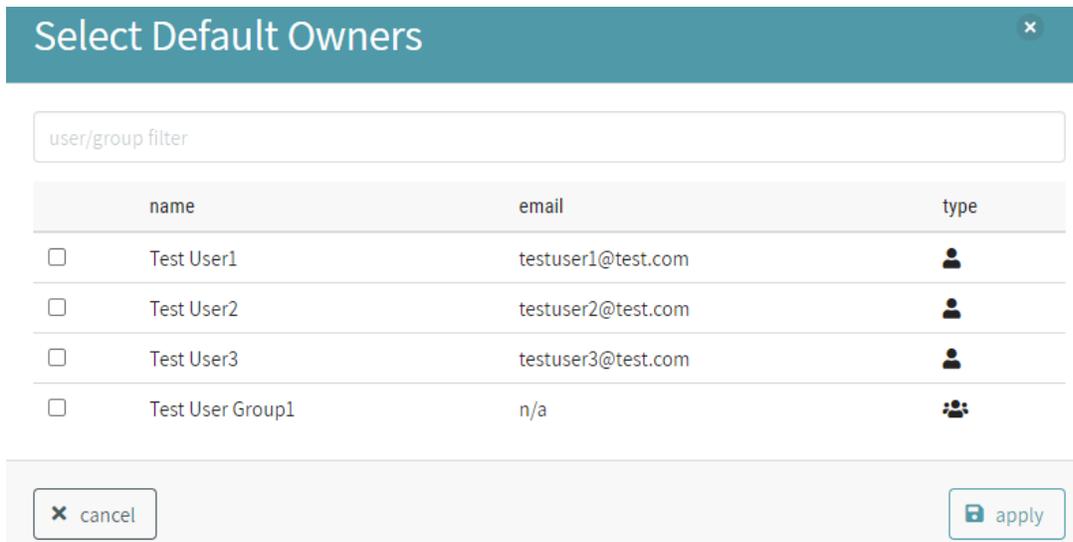


Figure 59 - CAT Configuration Details - Select Default Owners

Note: Users and groups can be differentiated by the type column icon and email address. All assignable users will have an email address and single person icon. All group assignable groups will display 'n/a' for an email address and a multi person icon.

6.3.6.2 Default Readers

Users and groups added to this section are automatically added to the reader list of any object created in the framework/competency editor that uses this configuration. To manage the list of default readers, click the *manage default readers* button in the *default readers* section, as shown in Figure 60.

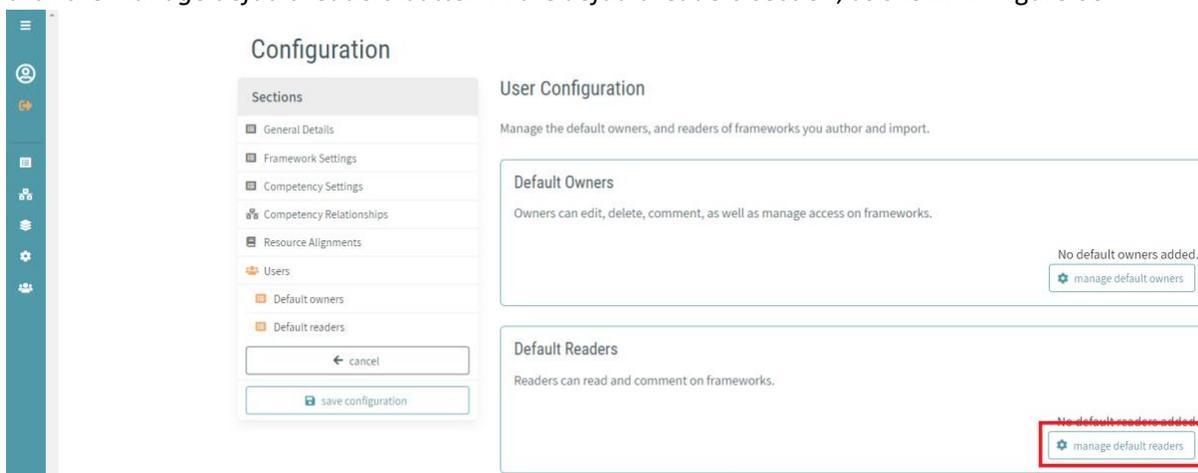


Figure 60 - CAT Configuration Details - User Configuration - Manage Default Readers

Once clicked, the *select default readers* dialogue window is displayed, as shown in Figure 61. Select the desired default reader entries and click the *apply* button in the bottom right of the dialogue window.

Note: Default readers can also be removed in a similar fashion.



Figure 61 - CAT Configuration Details - Select Default Readers

Note: Users and groups can be differentiated by the type column icon and email address. All assignable users will have an email address and single person icon. All group assignable groups will display 'n/a' for an email address and a multi person icon.

6.3.7 Saving the Configuration

Configurations can be saved by clicking on the *save configuration* button on the left side of the *configuration details* screen, as shown in Figure 62.

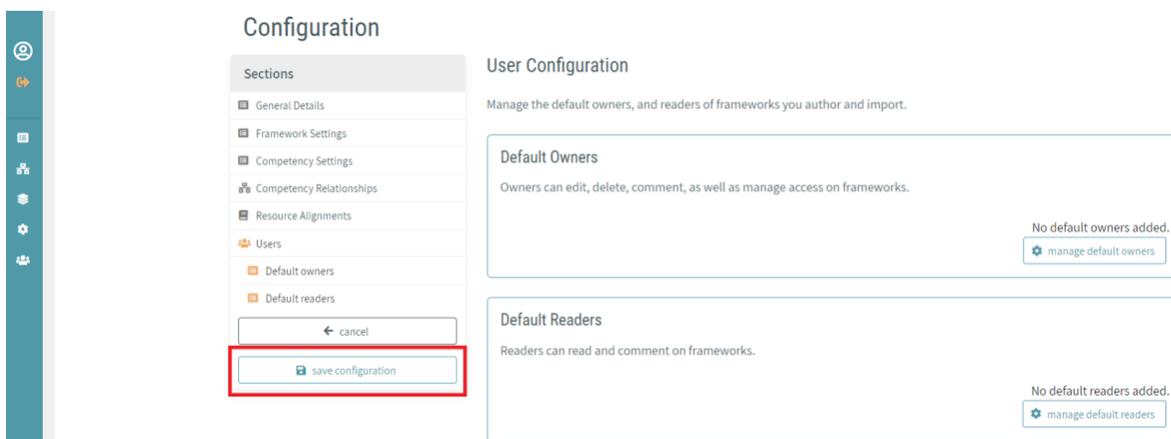


Figure 62 - CAT Configuration Details - Save Configuration

7.0 COMPETENCY FRAMEWORK MANAGEMENT

Competency frameworks can be viewed and managed in CAT by navigating to the Frameworks page, as shown in Figure 63. The Frameworks page can be visited by clicking on the *Frameworks* button on the left sidebar highlighted by the red box in the image below.



Figure 63 - CAT Competency Framework Management - Frameworks Page

On this page, frameworks are shown with their names in bold. Beneath the name, users can see how many competencies are in the framework, when it was created and last modified. If users have permission to edit the framework, it will say “Editable”.

7.1 Sorting and Filtering Frameworks

Users can sort and filter the list of frameworks by clicking the *filter* button next to the search bar, as shown in Figure 64. The button next to it clears any filters the user has applied.



Figure 64 - CAT Competency Framework Management - Filter Button

The *filter* button will open up a side panel to the right of the framework list with options to sort, filter, and apply the user’s search term to various fields, as shown in Figure 65.

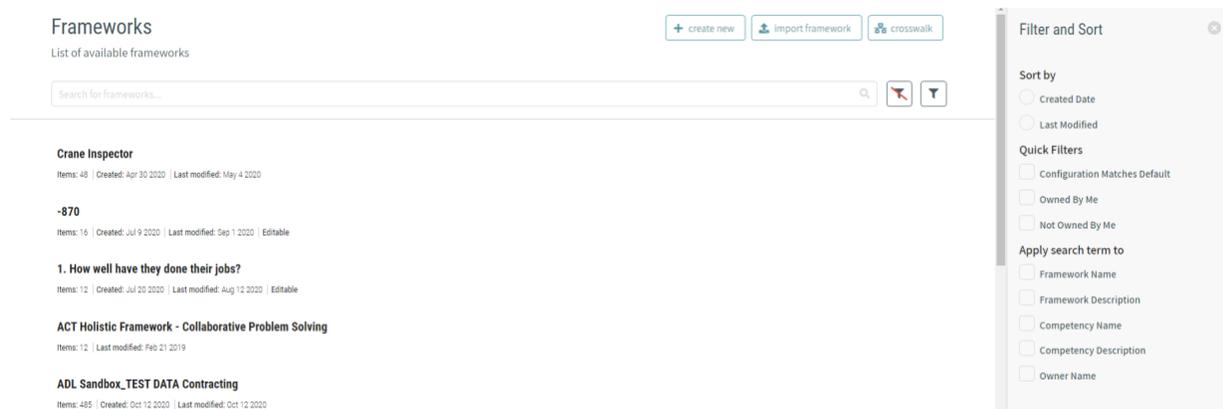


Figure 65 - CAT Competency and Framework Management - Filter and Sort Panel

7.2 Creating a New Competency Framework

A new competency framework can be created within CAT by pressing the *Create New* button at the top of the framework management page, as shown in Figure 66.

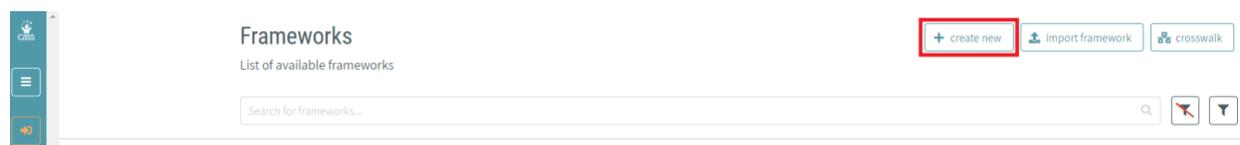


Figure 66 - CAT Competency Framework Management - Create New Framework

When users click on the *Create New* button to create a new competency framework, they will be required to enter a Framework Name and Framework description to the new competency framework. Additional properties can be added to a competency framework that are controlled by CaSS Authoring Tools’ configuration settings. For more information about configuration settings and managing the properties of competency frameworks, see the “Custom Framework Properties” section (6.3.2.2) of this User Guide.

7.3 Adding Competencies

To add competencies to a framework, click the *add competency* button below the framework details, as shown in Figure 67.



Figure 67 - CAT Competency Framework Management - Add Competencies

Users can construct a hierarchy of competencies by checking the box to the left of a competency. The *add competency* button text will change to *add child* (see Figure 68), which users can click to place a competency underneath the one that has been checked.



Figure 68 - CAT Competency Framework Management - Add Children to Competencies

7.4 Editing Frameworks and Competencies

To edit a single competency or framework, hover over the item desired to edit and an *edit* icon will appear, as shown in Figure 69. Click the icon highlighted in red in the image below.



Figure 69 - CAT Competency Framework Management - Edit

A modal will allow the user to edit the framework or competency's properties. This modal also allows users to delete the competency or framework, remove a competency from the current framework without deleting it, and export the object. Click the *done* button, as shown in Figure 70, when the changes are complete.

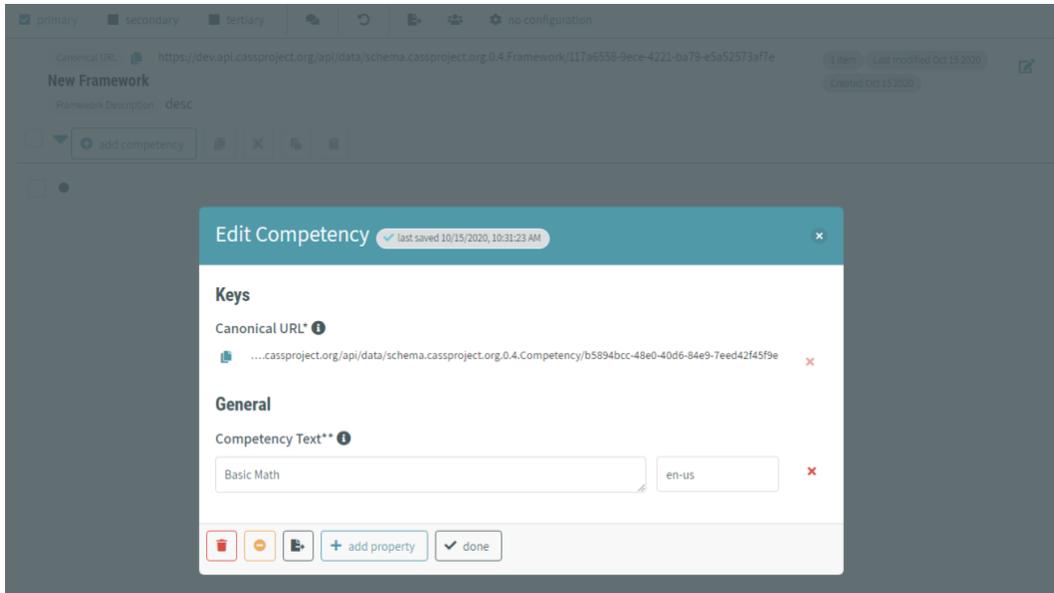


Figure 70 - CAT Competency Framework Management - Edit Modal

Users can add new properties to their object from here too by clicking the *add property* button at the bottom of the modal. The user will see a list of properties that are available to add, determined by the configuration they are using. Select the property to be added, enter in the value, and click the *save property* button, as shown in Figure 71.

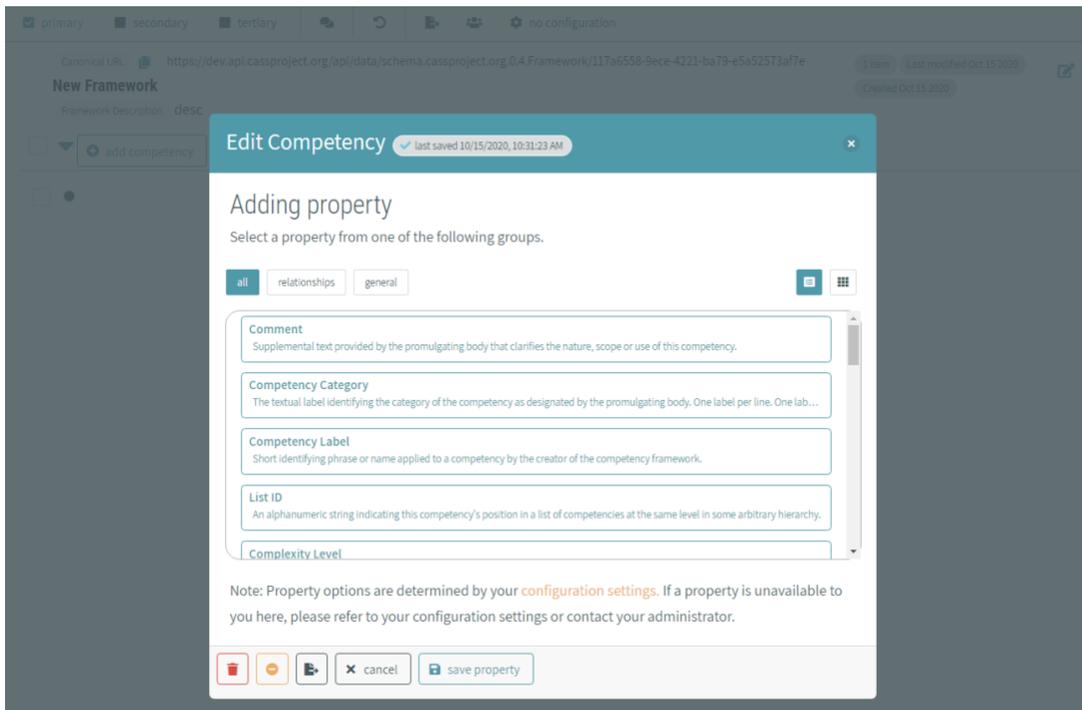


Figure 71 - CAT Competency Framework Management - Add a Property

To add a property to multiple competencies, use the checkboxes to select the competencies to be edited and click the *edit multiple* button, as shown in Figure 72.

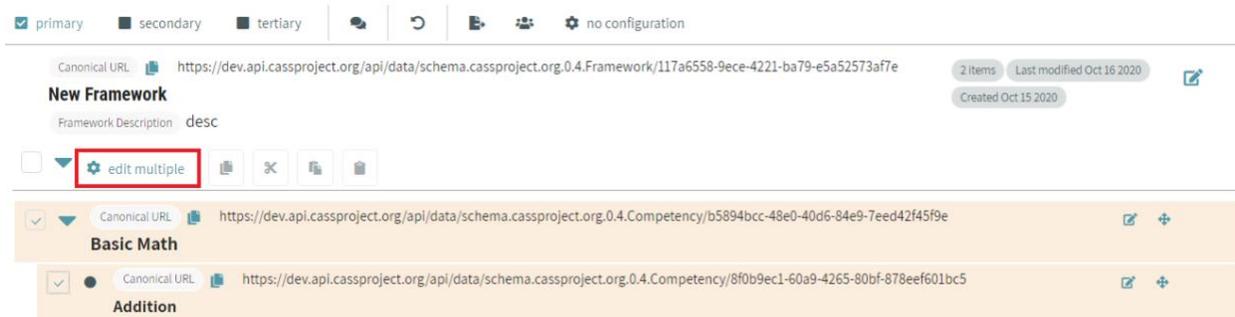


Figure 72 - CAT Competency Framework Management - Edit Multiple Competencies

Users will see a list of properties that are available to add, determined by the configuration being used. Select the property to be added, enter the value, and click the *apply to multiple* button, as shown in Figure 73.

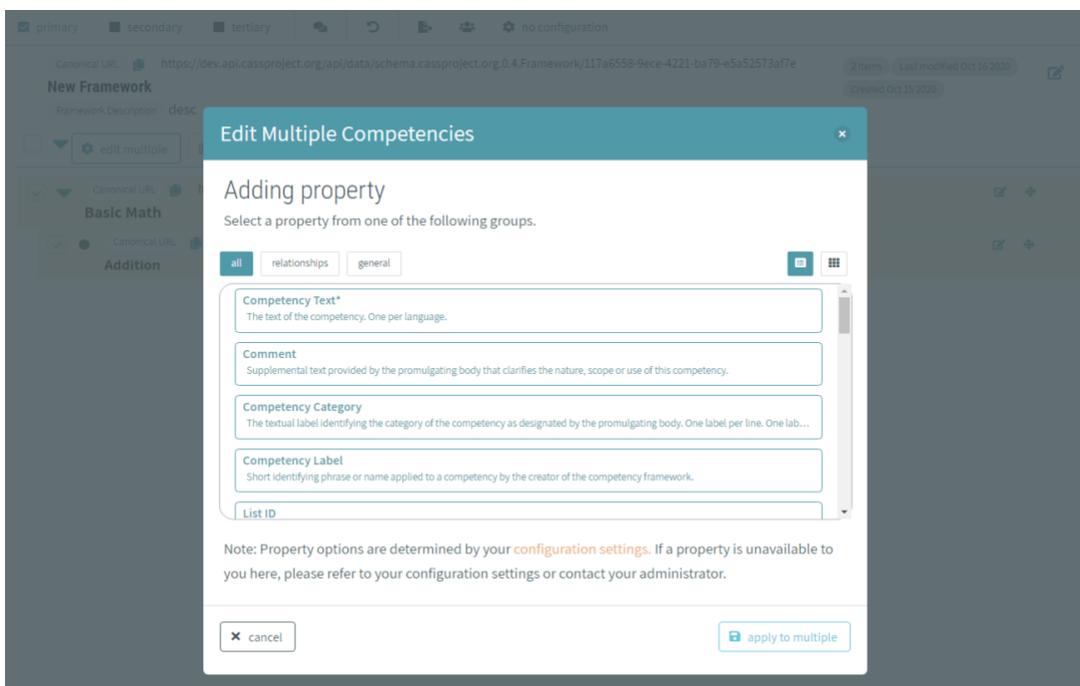


Figure 73 - CAT Competency Framework Management - Adding Property to Multiple Competencies

If a mistake is made while editing, click the *undo* button in the bar at the top of the page to revert to the most recent changes, as shown in Figure 74.

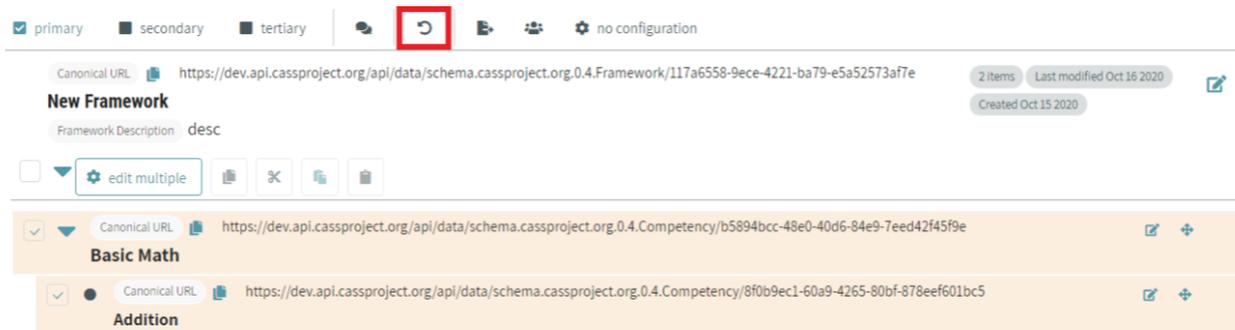


Figure 74 - CAT Competency Framework Management - Undo Button

7.4.1 Changing Competency Hierarchy

There are several ways to move competencies around in the hierarchy. Users can drag and drop the competency to the spot they would like to move it to by hovering over the competency. The icon highlighted in Figure 75 will appear and users can click on it, hold down, and drag the competency to the appropriate position.



Figure 75 - CAT Competency Framework Management - Drag and Drop

Users can also move a competency by selecting its checkbox. Click the *cut* or *copy* icon highlighted in red in Figure 76, select another competency, and click the *paste* icon.

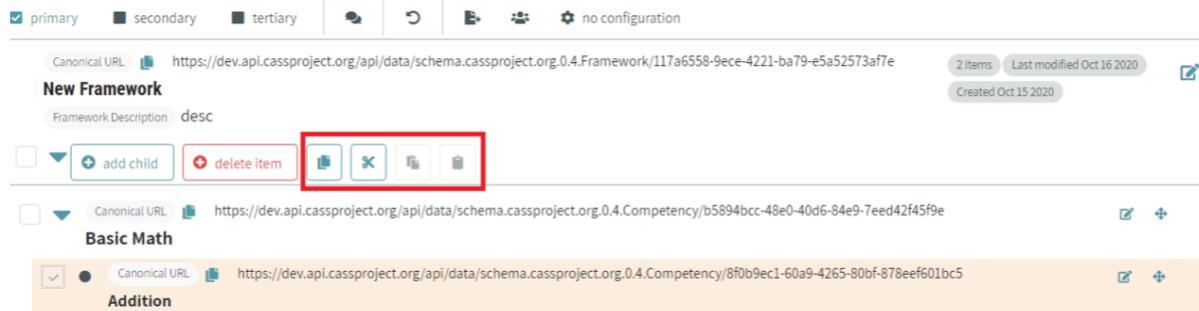


Figure 76 - CAT Competency Framework Management - Cut, Copy, Paste

With one competency selected, users can move it with keyboard commands as well. Users can cut, copy and paste, or use the arrow keys to move it to the position desired.

- **Tab** - Switch focus between elements on the page
- **Space** - Select the element currently in focus
- **Shift + X** - Cut competency
- **Shift + C** - Cut and copy competency
- **Shift + V** - Drop competency
- **Shift + ↑ & Shift + ↓** - Move competency up and down in the list
- **Shift + ← & Shift + →** - Move competency indent and outdent in the list

7.5 Setting a Configuration

Configurations control which properties users can edit and display within a framework, and what types of values they can have. If users do not specify a configuration for their framework, the browser, instance, or CaSS default will control the properties, as shown in Figure 77. If users want a framework to have a different configuration, they can set one by clicking the *framework configuration* button.



Figure 77 - CAT Competency Framework Management - Setting a Framework Configuration

This will open a panel with a list of available configurations to apply, as shown in Figure 78. Click *set as framework default* next to the configuration desired.

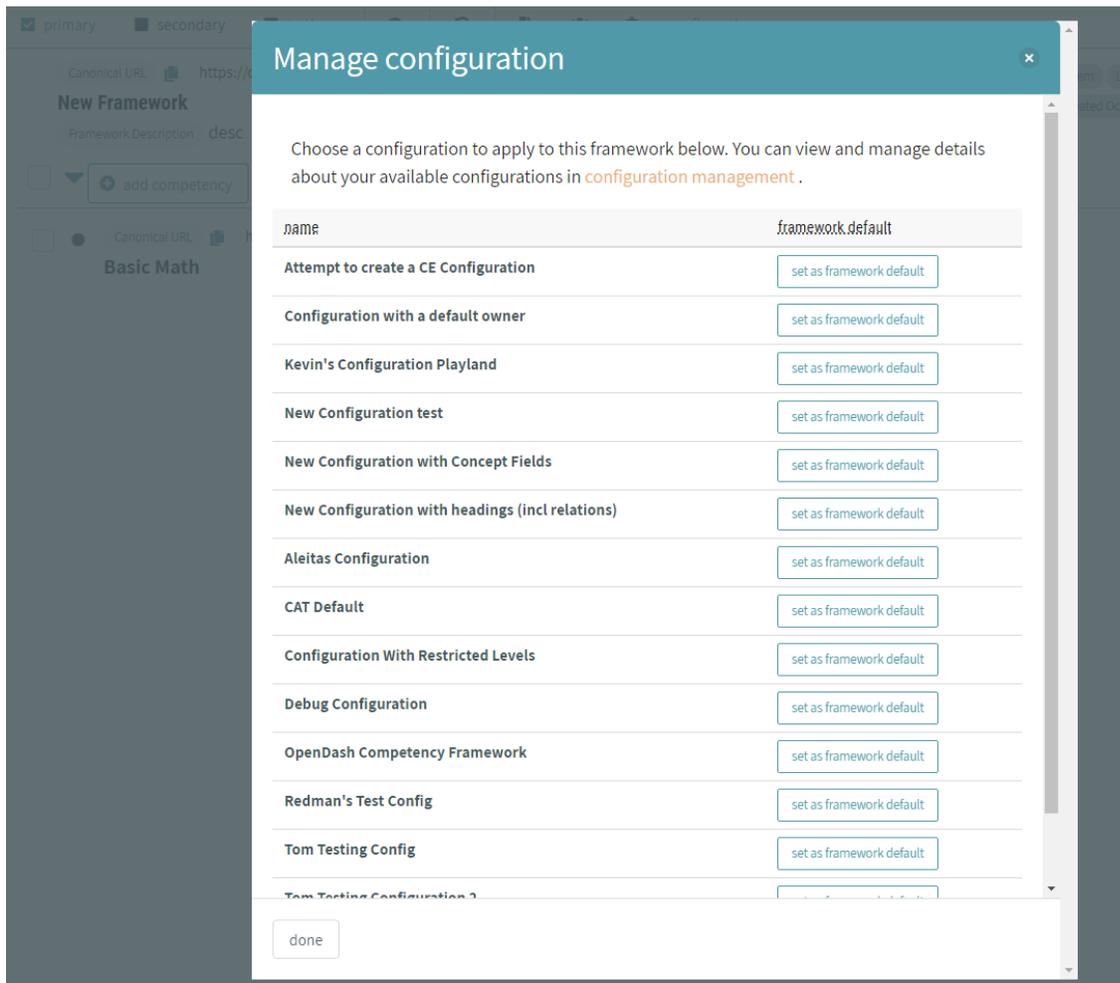


Figure 78 - CAT Competency Framework Management - Manage Framework Configuration

7.6 Managing Users and Sharing a Framework

Users can control who can view and edit a framework they own by clicking the *manage users* button highlighted in red in Figure 79.

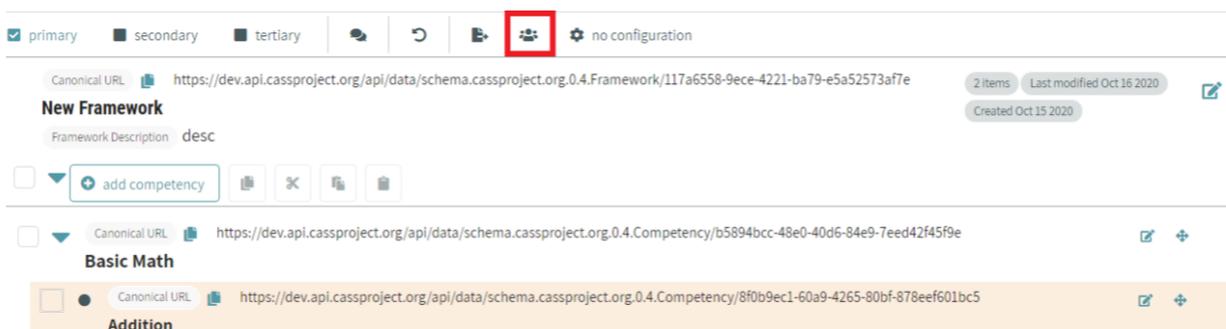


Figure 79 - CAT Competency Framework Management - Manage Users Button

Users can see who the admins and viewers of their framework are, and add or remove users and organizations. This view, shown in Figure 80, also has a shareable link to the framework that users can copy to their clipboard and provide to someone else.

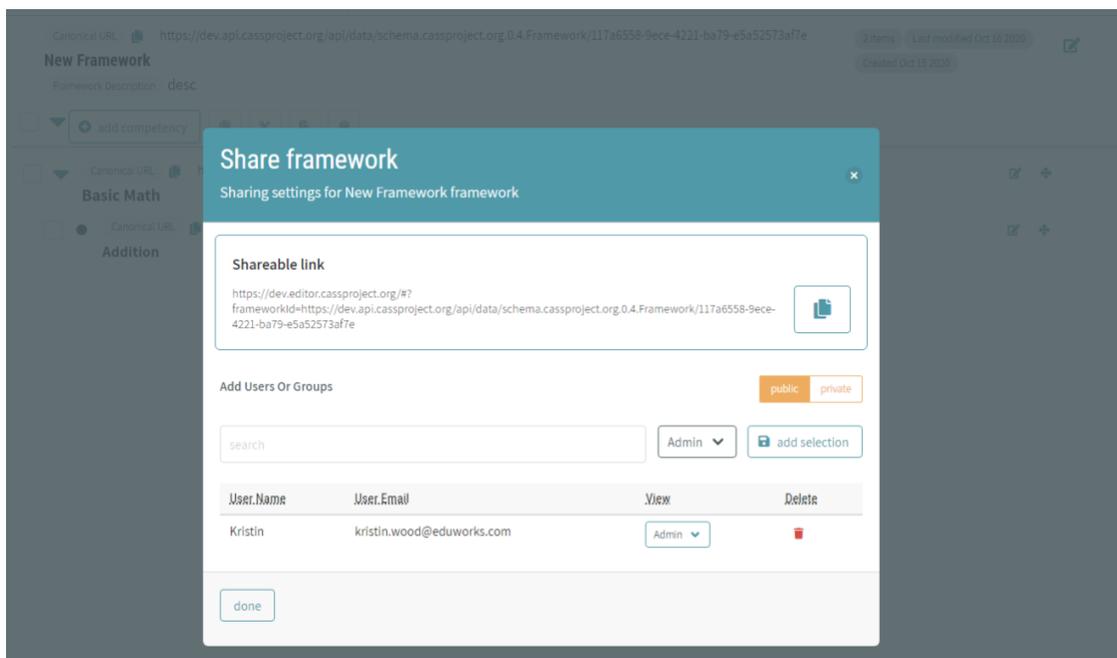


Figure 80 - CAT Competency Framework Management - Share Framework and Manage Users

7.7 Viewing Frameworks and Competencies in More Detail

By default, only primary properties are shown on a framework and competencies. To see some additional properties, click *secondary* in the panel at the top of the screen, as shown in Figure 81. This will show all the properties assigned as primary and secondary in the configuration that have values. To see all properties that have values, click on *tertiary*.

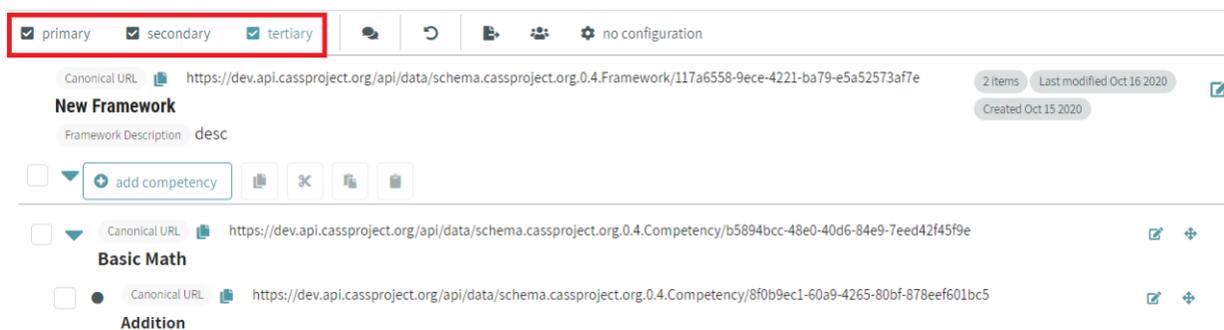


Figure 81 - CAT Competency Framework Management - Property Details

7.8 Exporting a Competency Framework

Once a user has created or imported a new framework, exporting the framework is a relatively simple process. Users must first view their frameworks through the *frameworks* tab in CAT and select the desired framework to be exported. Once the framework is selected, users can select the *export* button at the top of the screen (see Figure 82) and will be prompted to choose their desired file format to export that framework.

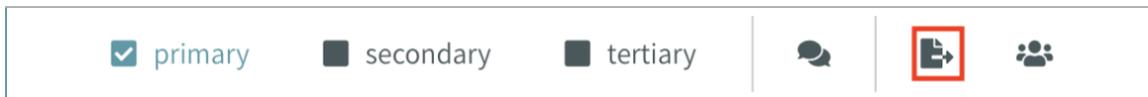


Figure 82 – Exporting a Competency Framework

Users will be prompted with the window displayed in Figure 83 and can select their desired file format from the options provided in the dropdown menu.

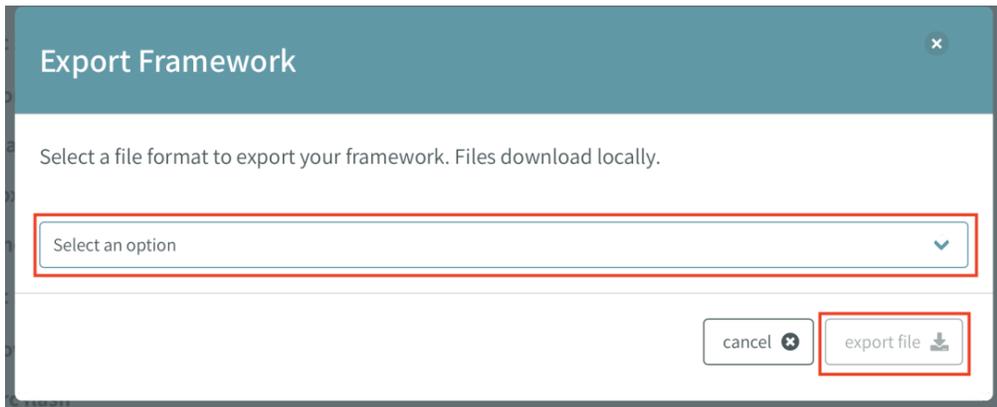


Figure 83 – Exporting a Competency Framework

Once the desired format is selected users can select the *export file* button at the bottom right corner of the window and the competency will be downloaded to their computer or opened in a new tab of their browser.

7.9 Importing a Competency Framework

The process of importing a new framework is also relatively simple. From the frameworks tab on the sidebar, users have the ability to view all existing frameworks within the system. At the top of the page is a list of options, which allow users to import new frameworks into the database of existing frameworks.



Figure 84 – Importing a Competency Framework

After clicking the *import framework* button (see Figure 84) users will be prompted with a new page where they have the ability to select the source of the frameworks they are trying to import. Options include: *file import*, *remote server*, *paste text*, and *URL source*. For file imports, users can select their desired source and drag the framework into the dotted window displayed below. Users have the ability to upload csv, json, and xml files in specific formats. Html, pdf, and docx formats are also experimentally supported. Example files and templates are linked from the panel on the right side of the screen.

Import a framework

info

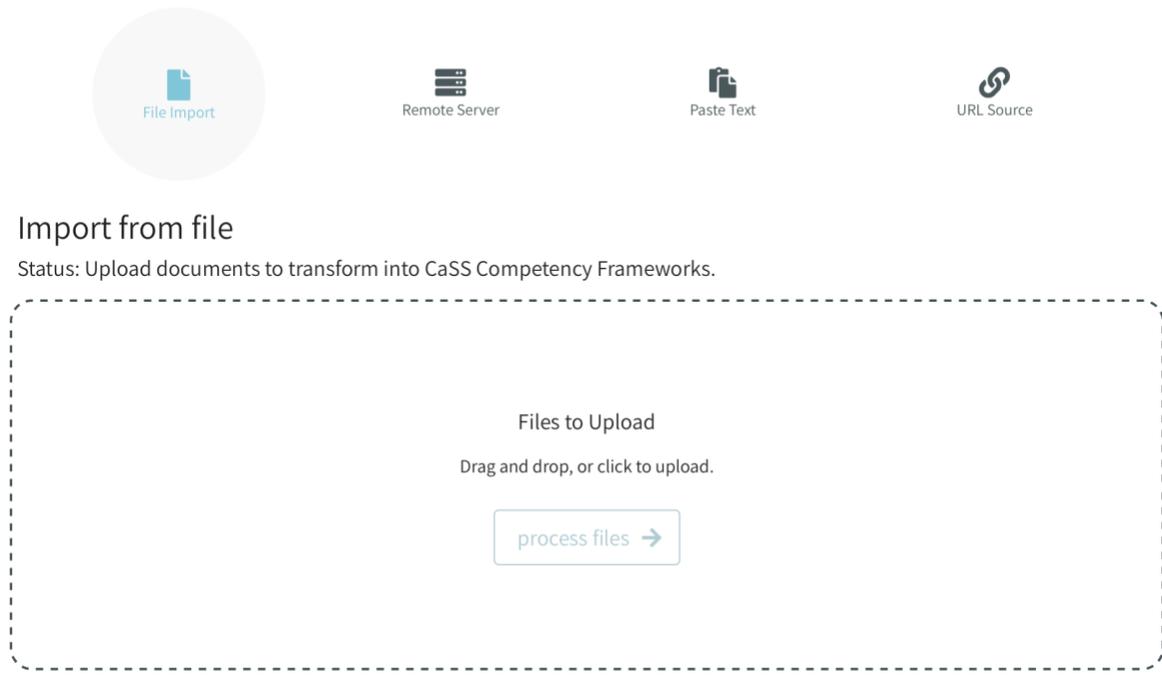


Figure 85 – Importing a Competency Framework

Once imported, users can select the *process files* button and the desired framework will be imported into the CAT database, as shown in Figure 85.

The *Remote Server* option handles imports from IMS CASE repositories, *URL Source* handles imports from links to CTDL-ASN JSON-LD graphs, and *Paste Text* allows users to input lists of competency names. All import types have instructions in the panel on the right side of the screen.

8.0 FRAMEWORK CROSSWALK TOOL

The Framework Crosswalk Tool can be used to create relationships across two separate frameworks.

Note: In order to apply any relationships created with the crosswalk tool, at least one of the frameworks initially selected in the tool wizard must be owned and editable by the logged-in user.

8.1 Accessing the Crosswalk Framework Tool

The Crosswalk Frameworks Tool can be accessed at any time by selecting the *Crosswalk Frameworks* icon under the *Competencies & Frameworks* category in the navigation menu, as shown in Figure 86.



Figure 86 - CAT Navigation Menu - Crosswalk Frameworks

8.2 Crosswalk Overview

Framework crosswalking is comprised of four steps:

1. **Select Source** - Selection of the source framework
 - a. The selection for the source framework is limited to frameworks that are owned and editable by the current user.
 - b. The source framework also defines the relationship types available for the crosswalk by determining the applied configuration of that framework. If there is no explicit configuration applied to the selected framework, the relationships available for the crosswalk are determined by the selected browser default configuration or the instance default configuration.
2. **Select Target** - Selection of the target framework
3. **Align Frameworks** - Creation of the relationships between the competencies of the two frameworks
4. **Save & Review** - Review of created relationships, determination of where the relationships will reside (one or both of the chosen frameworks), and the saving of the relationships

The current step will be highlighted by the *progress bar* (shown in Figure 87) at the top of the crosswalk tool screen.



XWalk Framework 1

Figure 87 - CAT Crosswalk Frameworks - Progress Bar

8.3 Aligning Framework Competencies

After selecting the source and target frameworks, the selected frameworks will be displayed in side-by-side panes, as shown in Figure 88. Any existing relationships between the two frameworks will be indicated by orange bubbles underneath the corresponding competency in the source framework pane.



Figure 88 - CAT Crosswalk Frameworks - Main Alignment Screen

At the top of each framework pane are four action buttons (see Figure 89). Clicking these will affect only the framework view in the corresponding pane.

- **show aligned only** - show only competencies that have alignments to competencies in the other framework
- **show unaligned only** - show only competencies that do not have alignments to competencies in the other framework
- **show all** (default) - show all competencies regardless of existing alignments
- **change framework** - change the source/target framework
 - Selecting this action will remove all unsaved alignments from the current crosswalk session.

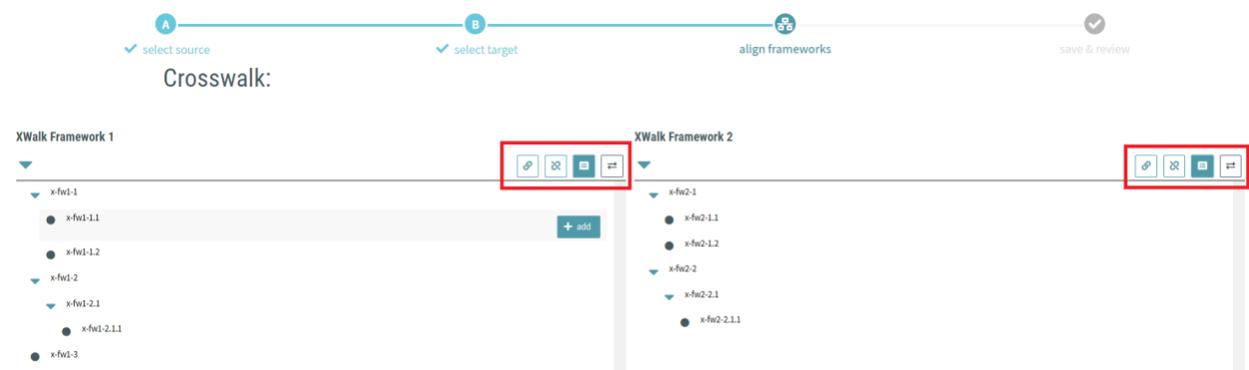


Figure 89 - CAT Crosswalk Frameworks - Action Buttons

8.3.1 Adding a Crosswalk Relationship/Alignment

To begin adding a relationship between the competencies within the frameworks, hover over the appropriate competency in the source framework pane and click the *add* button, as shown in Figure 90.



Figure 90 - CAT Crosswalk Frameworks - Relationship Add Button

Select the desired relationship type from the dropdown, as shown in Figure 91.



Figure 91 - CAT Crosswalk Frameworks - Relationship Type Selection

Once a relationship type has been selected, click the + button to the right of each competency in the target framework pane to apply the relationship, as shown in Figure 92. When clicked, the + button will transition into a checkmark. Clicking on this checkmark will remove the relationship.

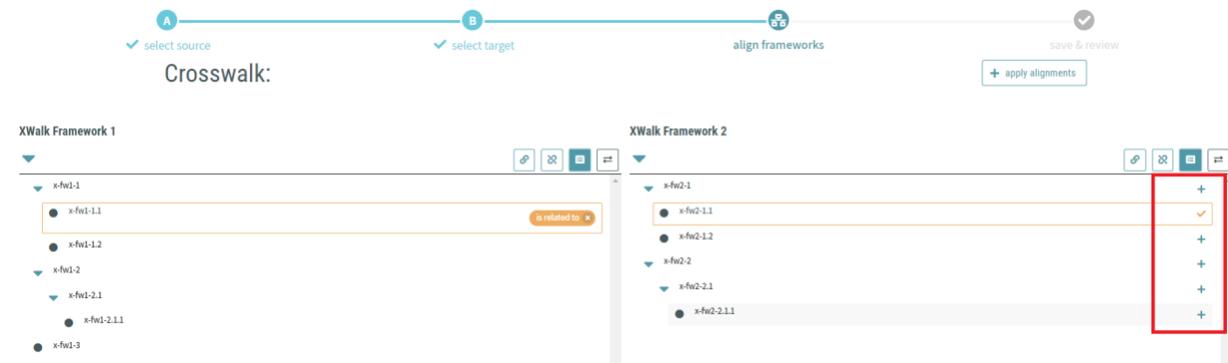


Figure 92 - CAT Crosswalk Frameworks - Target Competency Selection

After selecting the desired competencies, click the *apply alignments* button, as shown in Figure 93. Once applied, users will notice a running tally of added and removed alignments under the crosswalk progress bar.



Figure 93 - CAT Crosswalk Frameworks - Apply Alignments Button.

The alignment tally will keep track of both the addition of new alignments and the removal of alignments created in previous crosswalk sessions, as shown in Figure 94.



Figure 94 - CAT Crosswalk Frameworks - Alignment Change Tally

Once applied, alignments can be quickly accessed by clicking on the corresponding alignment bubble underneath the source competency, as shown in Figure 95.



Figure 95 - CAT Crosswalk Frameworks - Alignment Bubble

8.3.2 Removing a Crosswalk Relationship/Alignment

To remove an existing relationship, click on the corresponding alignment bubble underneath the source competency, as shown in Figure 96.



Figure 96 - CAT Crosswalk Frameworks - Alignment Bubble

In the target pane, click on the *checkmark* icon to the right of the competency to be removed from the relationship, as shown in Figure 97. When clicked, the *checkmark* icon will transition into a + button.

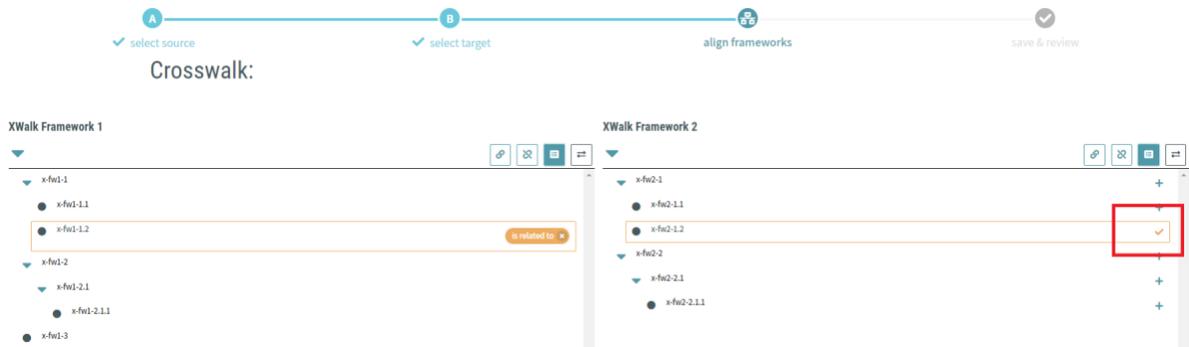


Figure 97 - CAT Crosswalk Frameworks - Target Competency Removal

After removing the undesired competencies, click the *apply alignments* button, as shown in Figure 98. Once applied, users will notice a running tally (Figure 99) of added and removed alignments under the crosswalk progress bar.

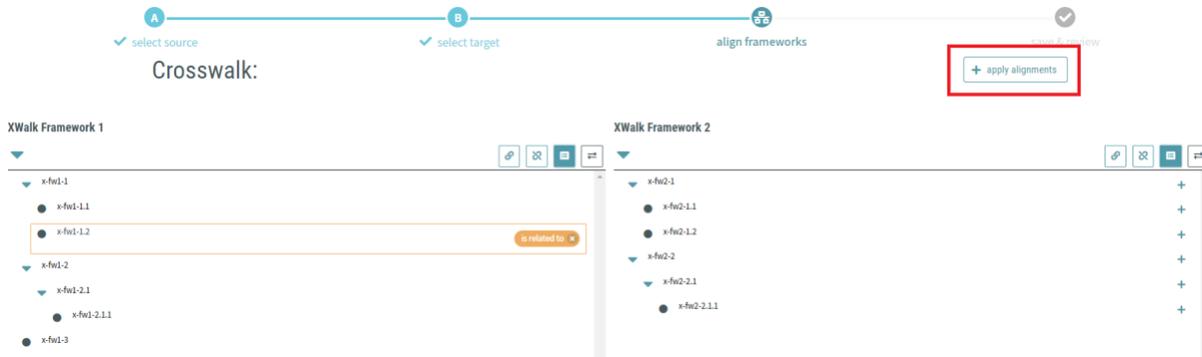


Figure 98 - CAT Crosswalk Frameworks - Apply Alignments Button.



Figure 99 - CAT Crosswalk Frameworks - Alignment Change Tally

8.4 Crosswalk Review and Save

To save all changes made during the crosswalk session to the repository, click on the *save & review* button, as shown in Figure 100.



Figure 100 - CAT Crosswalk Frameworks - Save & Review

The summary screen will be displayed detailing the overall alignment changes between the two frameworks and the framework application selector. By default, all owned or editable frameworks used in the crosswalk will be checked, as shown in Figure 101. A check mark next to the framework means all alignment/relationship changes made will be applied to that framework, as shown in Figure 102.

Note: Users may only apply alignment changes to frameworks that they own or can edit.

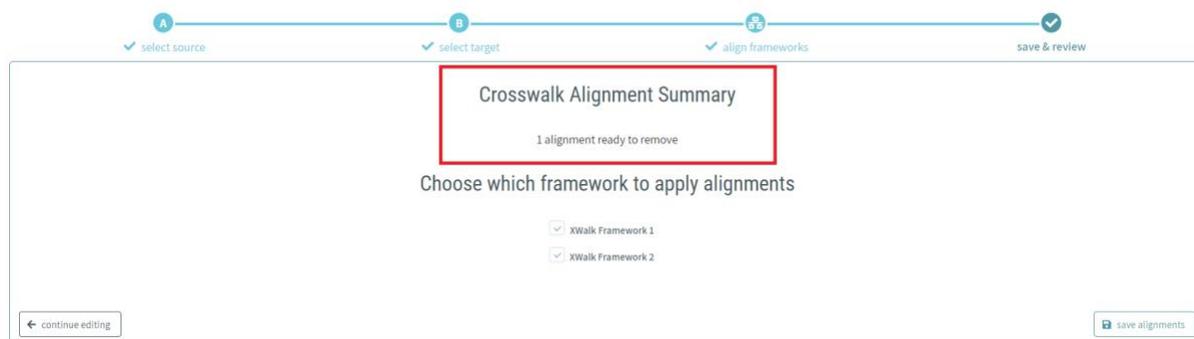


Figure 101 - CAT Crosswalk Frameworks - Crosswalk Alignment Summary

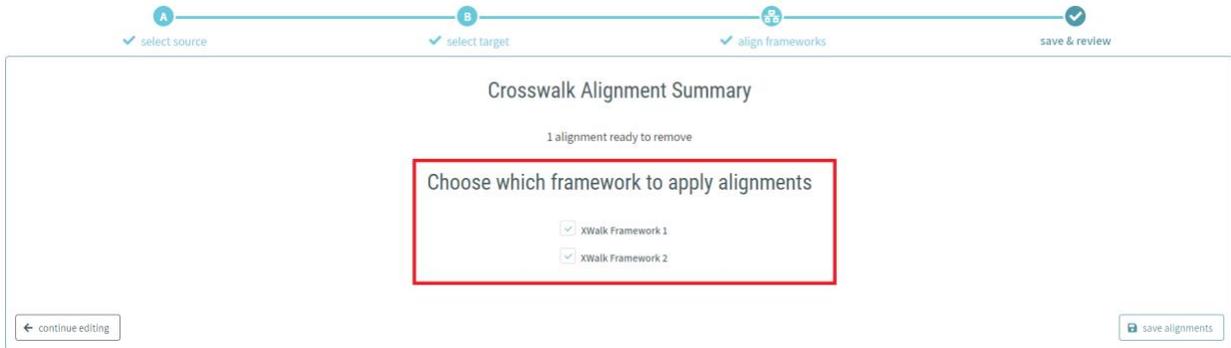


Figure 102 - CAT Crosswalk Frameworks - Framework Application Selection

To make further changes to the alignments, click on the *continue editing* button, shown in Figure 103.

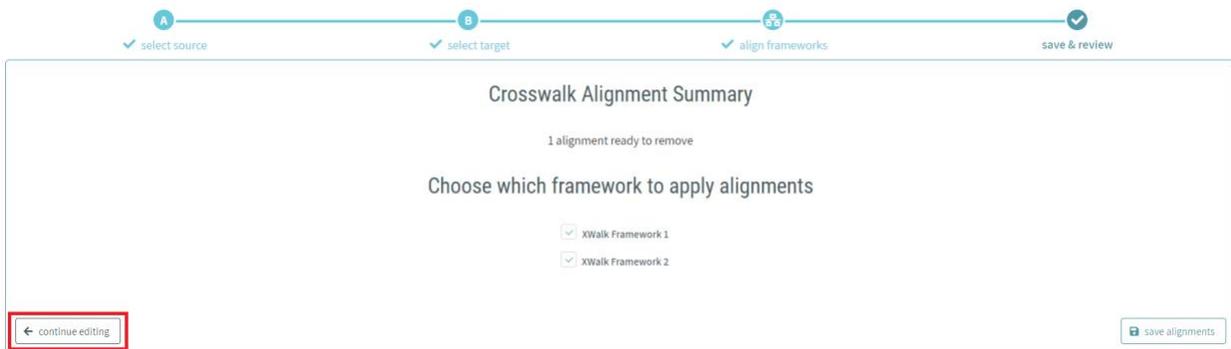


Figure 103 - CAT Crosswalk Frameworks - Continue Editing Button

When satisfied with the changes, click on the *save alignments* button, as shown in Figure 104.

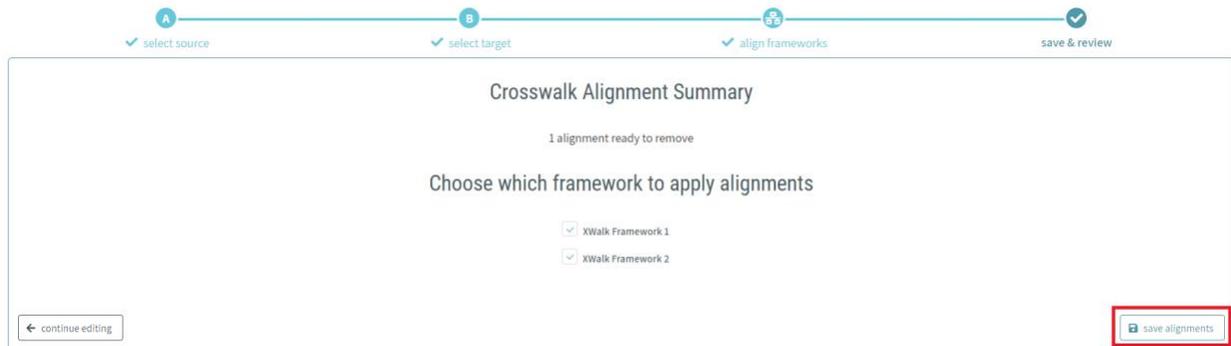


Figure 104 - CAT Crosswalk Frameworks - Save Alignments Button

9.0 TAXONOMY MANAGEMENT

Taxonomies can be used to categorize and label competencies in frameworks. The Taxonomies page can be visited by clicking on the *Taxonomies* icon on the left side bar highlighted by the red box shown in Figure 105.

Welcome to CaSS
Competency Authoring Tools

CaSS Authoring Tools support authoring frameworks, importing existing frameworks from supported document types, and editing competency frameworks within the system. You can navigate to the [frameworks page](#) and start creating framework right away without following the below steps.

Getting Started

1. Create your user and login
Navigate to the [login screen](#) and select create a new user. Input your details. After creation, login to your account using the username you created. You can now access the user and groups manager as well as create comments on frameworks.
2. Create user groups for collaborating
If your team members have also created their account, and you are logged in, you can navigate to the [user/groups page](#) and configure a group with defined readers, and authors.

Helpful links

Documentation
[Framework properties](#)
[Competency properties](#)
[Configuration](#)
[User groups](#)

Resources
[Authoring Report](#)
[cassproject.org](#)
[CaSS Developer Guide](#)
[CaSS Official Documentation](#)
[CaSS on Github](#)
[Advanced Distributed Learning Initiative](#)

Figure 105 - CAT Taxonomy Management - Taxonomies Icon

On this page, taxonomies are shown with their names in bold. Beneath the name, users can see when it was created and last modified, as shown in Figure 106. If the user has permission to edit the taxonomy, it will say “Editable”.

Taxonomies + new taxonomy import taxonomy

List of available taxonomies.
Taxonomies can be used to categorize and label competencies in frameworks.

Search for concept schemes...

last modified

Title **123**
Last modified: Oct 8 2020 | Editable

Title **New Taxonomy**
Created: Oct 7 2020 | Last modified: Oct 7 2020

Title **Travis' Taxonomy**
Created: Oct 6 2020 | Last modified: Oct 6 2020

Figure 106 - CAT Taxonomy Management - Taxonomy List

9.1 Sorting and Filtering Taxonomies

Users can sort and filter the list of taxonomies by clicking the *filter* button next to the search bar, as shown in Figure 107. The button next to it clears any filters that have been applied.

Taxonomies + new taxonomy import taxonomy

List of available taxonomies.
Taxonomies can be used to categorize and label competencies in frameworks.

Search for concept schemes...

filter

Figure 107 - CAT Taxonomy Management - Filter Button

The *filter* button will open a side panel to the right of the taxonomy list with options to sort and filter the list, as shown in Figure 108.



Figure 108 - CAT Taxonomy Management - Filter and Sort Panel

9.2 Creating New Taxonomies

A new taxonomy can be created within CAT by pressing the *Create New* button at the top of the taxonomy management page, as shown in Figure 109.

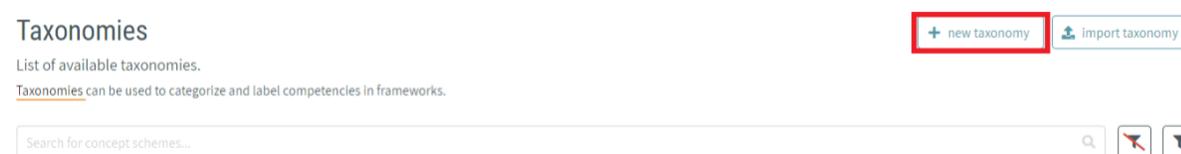


Figure 109 - CAT Taxonomy Management - Create New Taxonomy

When users click on the *Create New* button to create a new taxonomy, they will be required to enter a Taxonomy Name for their new taxonomy. Additional properties can be added by clicking the *add property* button.

9.3 Adding Concepts to Taxonomies

To add concepts to a taxonomy, click the *add concept* button below the taxonomy details as shown in Figure 110.



Figure 110 - CAT Taxonomy Management - Add Concepts

Users can construct a hierarchy of concepts by checking the box to the left of a concept. The *add concept* button text will change to *add child* (as shown in Figure 111), which users can click to place a concept underneath the one they have checked.



Figure 111 - CAT Taxonomy Management - Add Children to Concepts

9.4 Editing Taxonomies and Concepts

To edit a single concept or taxonomy, hover over the item to be edited and an *edit* icon will appear. Click the icon highlighted in red in Figure 112.

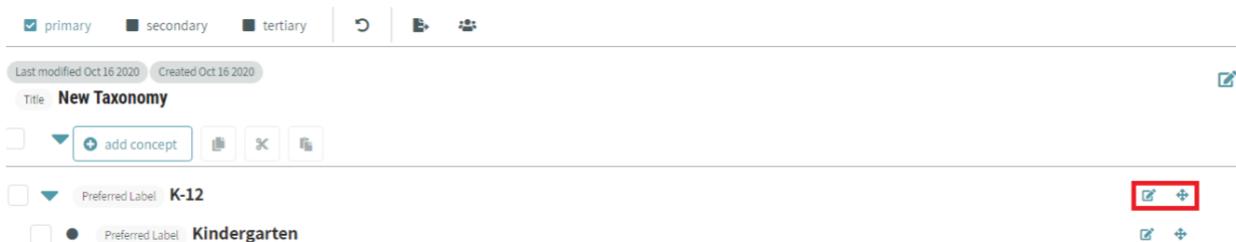


Figure 112 - CAT Taxonomy Management - Edit

A modal will appear allowing users to edit the taxonomy or concept's properties, as shown in Figure 113. This modal also allows users to delete the concept or taxonomy and export the object. Click *done* when finished making changes.

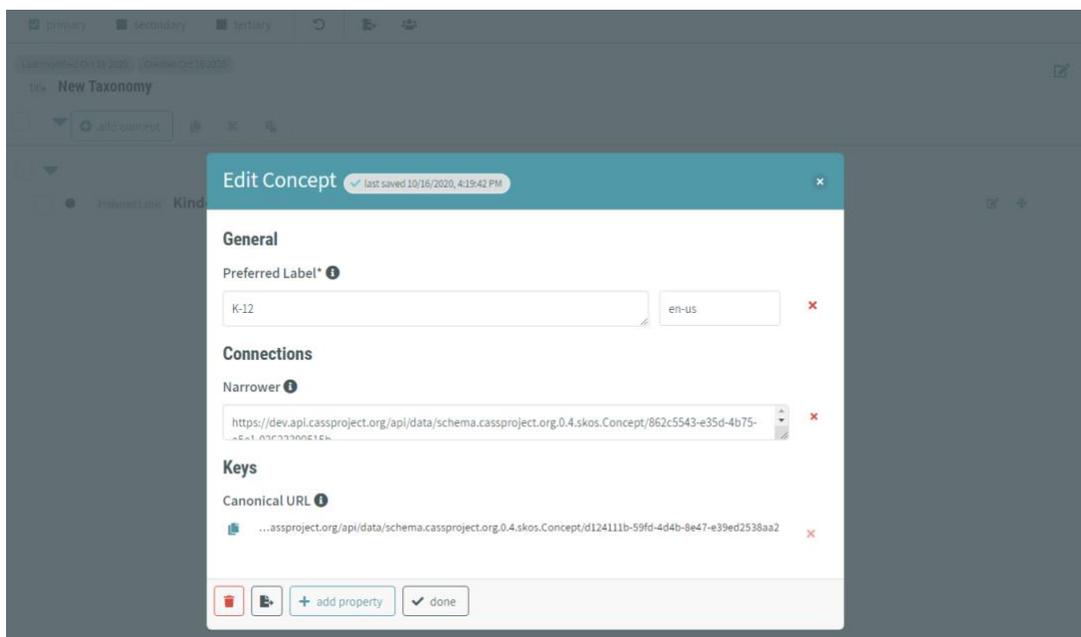


Figure 113 - CAT Taxonomy Management - Edit Modal

Users can add new properties to their objects from here too by clicking the *add property* button at the bottom of the modal. They will see a list of properties that are available to add (see Figure 114). Select the property to add, enter in the value, and click *save property*.

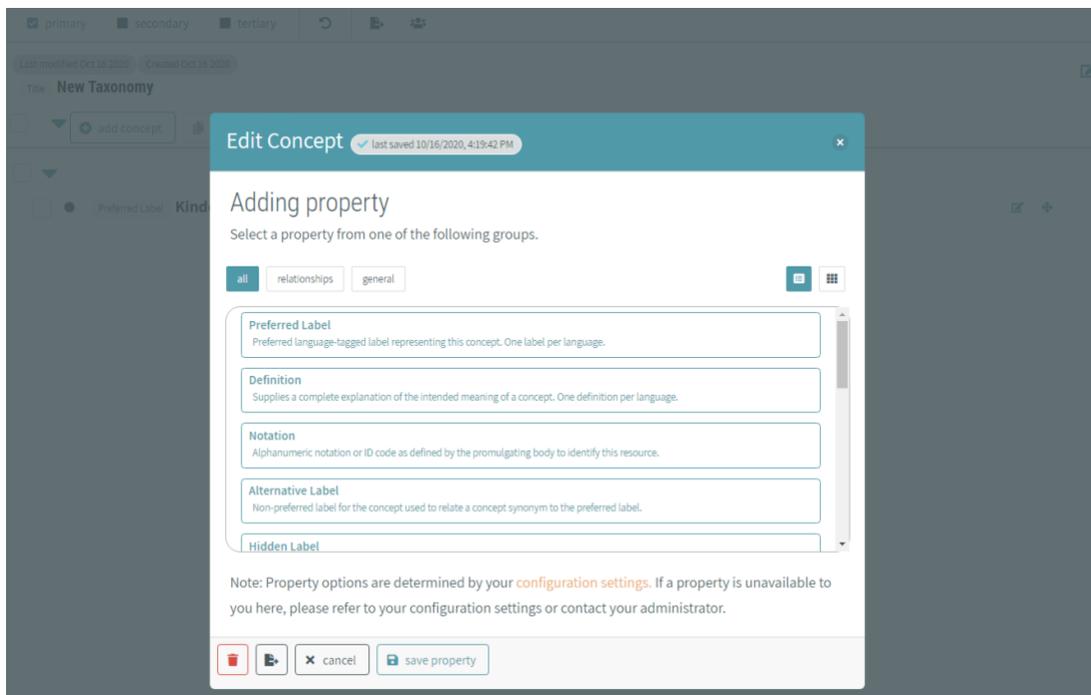


Figure 114 - CAT Taxonomy Management - Add a Property

To add a property to multiple concepts, use the checkboxes to select the concepts intended for edit and click *edit multiple*, as shown in Figure 115.

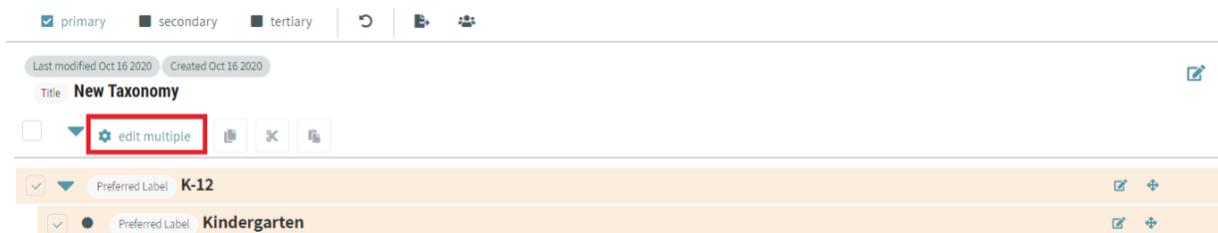


Figure 115 - CAT Taxonomy Management - Edit Multiple Concepts

Users will see a list of properties that are available to add (see Figure 116). Select the property to add, enter in the value, and click *apply to multiple*.

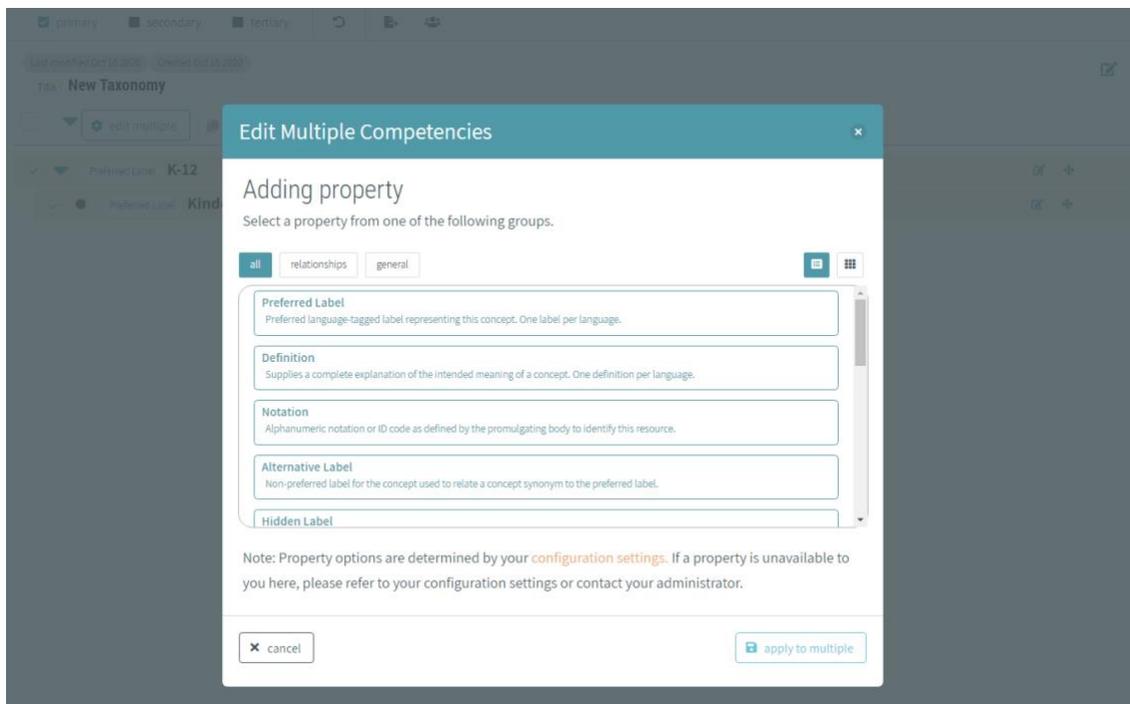


Figure 116 - CAT Taxonomy Management - Adding Property to Multiple Concepts

If a mistake is made while editing, click the *undo* button in the bar at the top of the page to revert to the most recent changes, as shown in Figure 117.

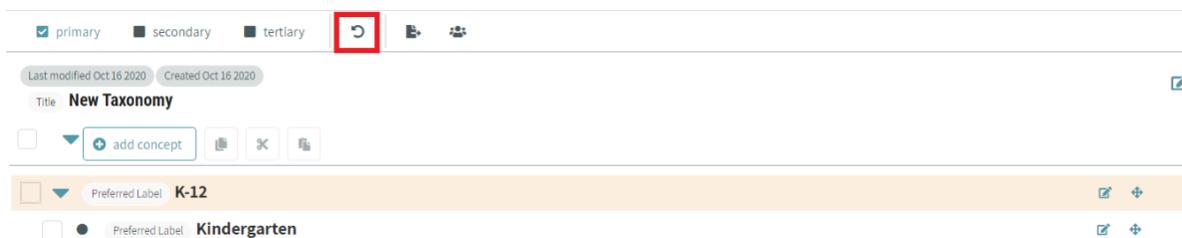


Figure 117 - CAT Taxonomy Management - Undo Button

9.4.1 Changing Concept Hierarchy

There are several ways to move concepts around in the hierarchy. Users can drag and drop the concept to the spot they want to move it to by hovering over the concept. The icon highlighted in Figure 118 will appear and users can click on it, hold down, and drag the concept to the appropriate position.

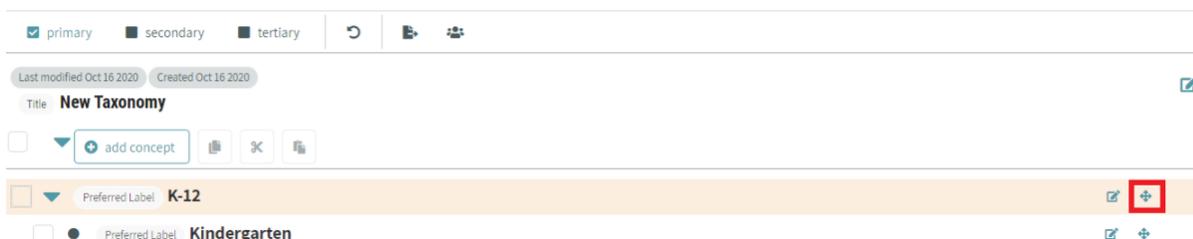


Figure 118 - CAT Taxonomy Management - Drag and Drop

Users can also move a concept by selecting its checkbox. Click the *cut* or *copy* icon highlighted in red in Figure 119, select another concept, and click the *paste* icon.

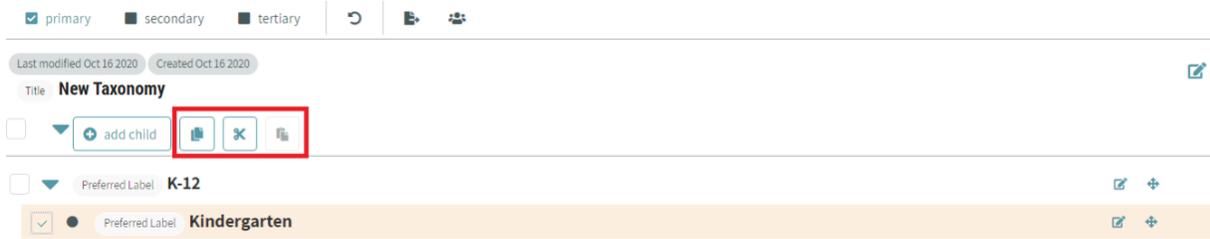


Figure 119 - CAT Taxonomy Management - Cut, Copy, Paste

With one concept selected, users can move it with keyboard commands as well. Users can *cut*, *copy*, and *paste*, or use the arrow keys to move it to the desired position.

- **Tab** - Switch focus between elements on the page
- **Space** - Select the element currently in focus
- **Shift + X** - Cut competency
- **Shift + C** - Cut and copy competency
- **Shift + V** - Drop competency
- **Shift + ↑ & Shift + ↓** - Move concept up and down in the list
- **Shift + ← & Shift + →** - Move concept indent and outdent in the list

9.5 Managing Users and Sharing a Taxonomy

To control who can view and edit taxonomies they own, users can click the *manage users* button highlighted in red in Figure 120.

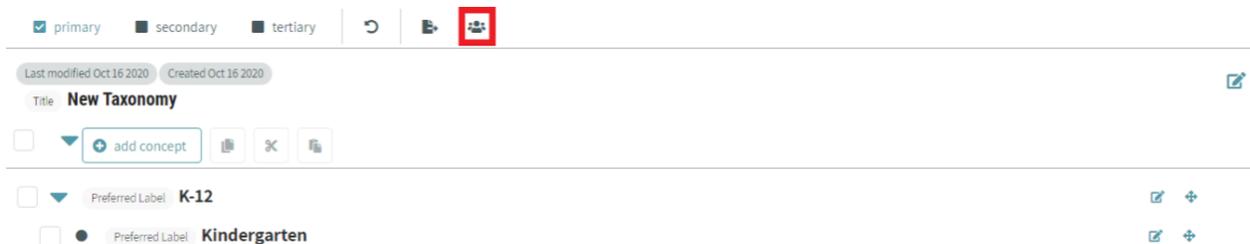


Figure 120 - CAT Taxonomy Management - Manage Users Button

Users can see who the admins and viewers of their taxonomies are, and add or remove users and organizations. This view also has a shareable link to their taxonomies that can be copied to a clipboard and shared with someone else, as shown in Figure 121.

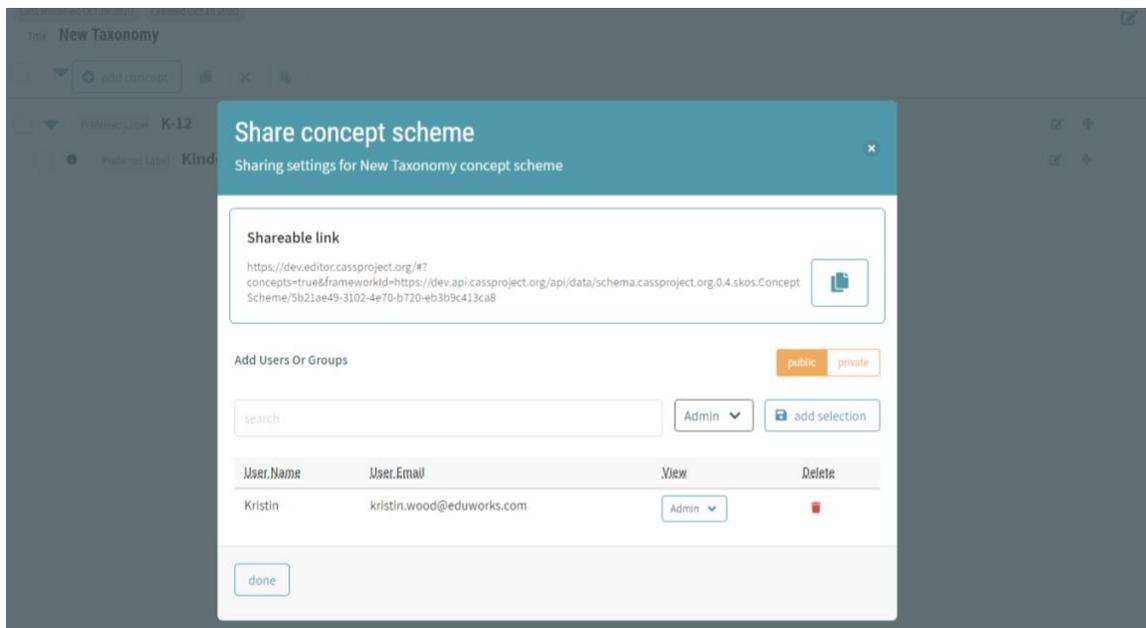


Figure 121 - CAT Taxonomy Management - Share Taxonomy and Manage Users

9.6 Viewing Taxonomies and Concepts in More Detail

By default, only primary properties are shown for a taxonomy and concepts. To see some additional properties, click *secondary* in the panel at the top of the screen, as shown in Figure 122. This will show all primary and secondary properties that have values. To see all properties that have values, click on *tertiary*.



Figure 122 - CAT Taxonomy Management - Property Details

9.7 Exporting a Taxonomy

Once a user has created or imported a new taxonomy, exporting the taxonomy is a relatively simple process. Users must first view their taxonomies through the taxonomy tab in CAT and select the desired taxonomy to be exported. Once the taxonomy is selected, users can select the *export* button at the top of the screen (see Figure 123) and will be prompted to choose their desired file format to export that taxonomy.



Figure 123 – Exporting a Taxonomy

Users will be prompted with the window displayed in Figure 124 and can select their desired file format from the options provided in the dropdown menu.

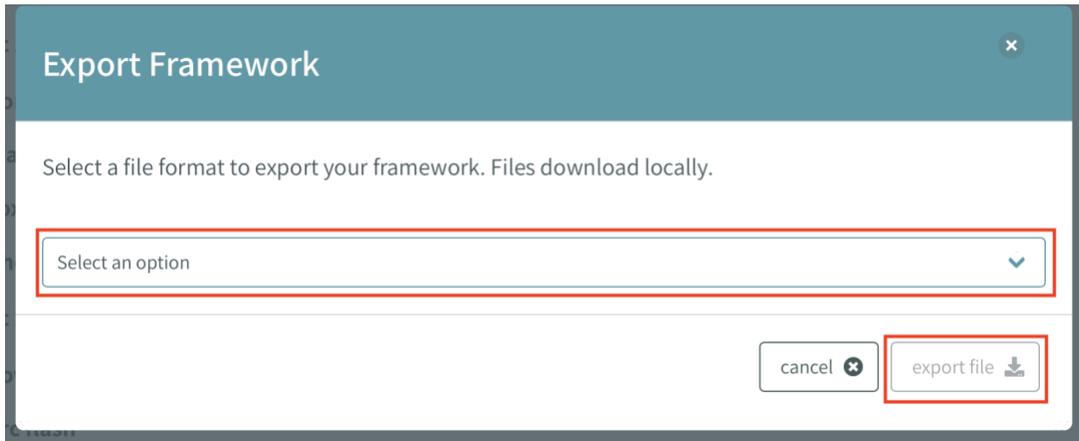


Figure 124 – Exporting a Taxonomy

Once the desired format is selected users can select the *export file* button at the bottom right corner of the window and the taxonomy will be downloaded to their computer or opened in a new tab of their browser.

9.8 Importing a Taxonomy

The process for importing a new taxonomy is also relatively simple. From the taxonomy tab on the sidebar, users have the ability to view all existing taxonomies within the system. At the top of the page is a list of options, which allow users to import and create new taxonomies into the database of existing taxonomies, as shown in Figure 125.



Figure 125 – Importing a Taxonomy

After clicking the *import taxonomy* button users will be prompted with a new page (see Figure 126) where they have the ability to select the source of the taxonomy they are trying to import. Users have the ability to upload csv and json files. Examples and templates are linked from the panel on the right side of the screen. Users can drag the taxonomy into the dotted window.

Import a taxonomy

info



Import from file

Status: Upload documents to transform into CaSS Taxonomies.

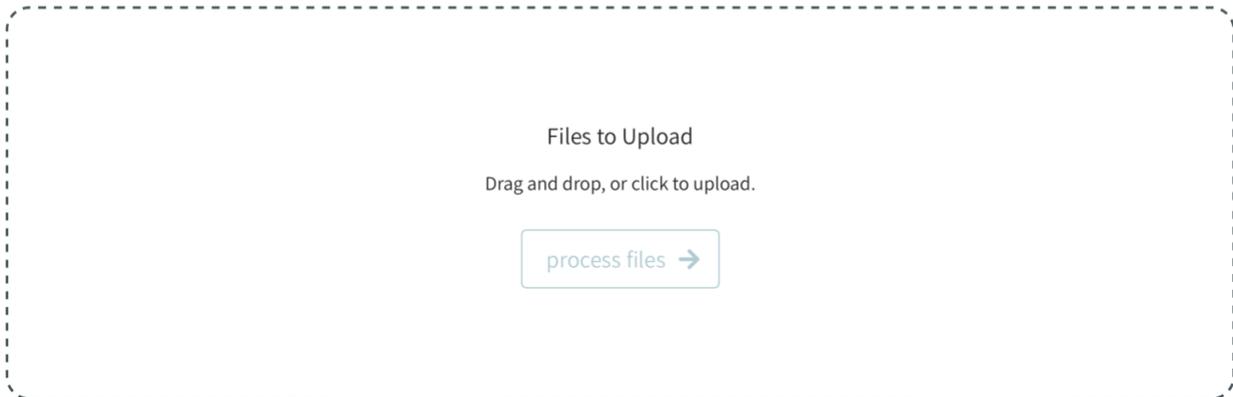


Figure 126 – Importing a Taxonomy

Once imported users can select the *process files* button and the desired taxonomy will be imported into their CAT database.

10.0 HELPFUL LINKS

On the right-side bar of the CAT welcome page users will find a list of documentation, resources, example framework imports, options for getting in touch with the CaSS community, and exploring other applications of CaSS, as shown in Figure 127.

Welcome to CaSS

Competency Authoring Tools

CaSS Authoring Tools support authoring frameworks, importing existing frameworks from supported document types, and editing competency frameworks within the system. You can navigate to the [frameworks page](#) and start creating framework right away without following the below steps.

Getting Started

1. Create your user and login

Navigate to the [login screen](#) and select create a new user. Input your details. After creation, login to your account using the username you created. You can now access the user and groups manager as well as create comments on frameworks.

2. Create user groups for collaborating

If your team members have also created their account, and you are logged in, you can navigate to the [user/groups page](#) and configure a group with defined readers and authors.

3. Create a configuration

The [configuration manager](#) allows you to have full control over the properties you can add to frameworks and competencies. This includes relationship types and resource types. Configure the labels you want to use on editable forms for managing these properties.

4. Author a framework

Navigate to the [framework page](#) and create a new framework. Give your framework a memorable name and save it.

5. Collaborate with your team

Members with view access will be able to read and comment on the framework when logged in. Members with admin access will be able to view, edit, manage users, and delete the framework when logged in. Use comments to create dialogues around your authoring process.

Helpful links

- Documentation**
 - [Framework properties](#)
 - [Competency properties](#)
 - [Configuration](#)
 - [User groups](#)
- Resources**
 - [Authoring Report](#)
 - [cassproject.org](#)
 - [CaSS Developer Guide](#)
 - [CaSS Official Documentation](#)
 - [CaSS on Github](#)
 - [Advanced Distributed Learning Initiative](#)
- Import Example Frameworks**
 - [ONET: Basic Skills](#)
 - [Harvard: Emotional Intelligence](#)
 - [ACT: Collaborative Problem Solving](#)
- Legacy Demo CaSS Applications**
 - [Dashboards](#)
- Get in touch**
 - [Join the Slack Channel](#)
 - [Email us](#)

Figure 127 – Helpful Links