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# **TROMPA CE client**

**MTG-UPF**

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The TROMPA CE client is a Python library that can be used to read data from and write data to the TROMPA Contributor Environment using its GraphQL interface.



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CHAPTER  
ONE

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## INSTALLATION

To install the package, use pip:

```
pip install trompace-client
```

For information about the TROMPA schema, see [TROMPA Schema](#)

## 1.1 Mutations

Mutations are queries used to create or update data in the CE.

### 1.1.1 AudioObject

```
trompace.mutations.audioobject.mutation_create_audioobject (*, title: str, contributor: str, creator: str, source: str, format_: str, name: str = None, description: str = None, date: str = None, encodingformat: str = None, embedurl: str = None, url: str = None, contenturl: str = None, language: str = None, inlanguage: str = None, license: str = None, subject: str = None)
```

Returns a mutation for creating a AudioObject.

#### Parameters

- **name** – The name of the audio object.
- **description** – An account of the audio object.
- **date** – The date associated with the audio object.
- **creator** – The person, organization or service who created the thing the web resource is about.

- **contributor** – A person, an organization, or a service responsible for contributing the audio object to the web resource. This can be either a name or a base URL.
- **format\_** – A MimeType of the format of the page describing the audio object.
- **encodingformat** – A MimeType of the format of object encoded by the audio object.
- **source** – The URL of the web resource about this audio object. If no such resource is available, use the same value as contentUrl.
- **subject** – The subject of the audio object.
- **contenturl** – The URL of the content encoded by the audio object.
- **url** –
- **license** –
- **language** – The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
- **inlanguage** – The language of the audio object.
- **title** – The title of the resource indicated by *source*

**Returns** The string for the mutation for creating the AudioObject.

**Raises**

- **UnsupportedLanguageException if the input language is not one of the supported languages.** –
- **ValueError if a required argument is None** –

`trompace.mutations.audioobject.mutation_delete_audioobject(identifier: str)`

Returns a mutation for deleting a AudioObject based on the identifier.

**Parameters** **identifier** – The unique identifier of the AudioObject.

**Returns** The string for the mutation for deleting the AudioObject based on the identifier.

`trompace.mutations.audioobject.mutation_merge_audioobject_encoding(audioobject_identifier: str, audiob-  
ject_derivative_identifier: str)`

Returns a mutation for indicating that a derivative AudioObject *encodes* a primary AudioObject (<https://schema.org/encoding>). For example a transcription of a score is an *encoding* of that score.

**Parameters**

- **audioobject\_identifier** – The unique identifier of the “main” AudioObject.
- **audioobject\_derivative\_identifier** – The unique identifier of the AudioObject which is the encoding.

**Returns** A GraphQL mutation for MergeAudioObjectEncoding.

`trompace.mutations.audioobject.mutation_merge_audioobject_exampleofwork(audioobject_identifier: str, work_identifier: str)`

Returns a mutation for indicating that a AudioObject is an example of a work (<https://schema.org/exampleOfWork>).

**Parameters**

- **audioobject\_identifier** – The unique identifier of the AudioObject.
- **work\_identifier** – The unique identifier of the work that the AudioObject is an example of.

**Returns** A GraphQL mutation for MergeAudioObjectExampleOfWork.

```
trompace.mutations.audioobject.mutation_remove_audioobject_encoding(audioobject_identifier:  
                      str,  
                      audiob-  
                      ject_derivative_identifier:  
                      str)
```

Returns a mutation for removing that a derivative AudioObject *encodes* a primary AudioObject (<https://schema.org/encoding>). For example a transcription of a score is an *encoding* of that score.

#### Parameters

- **audiobook\_identifier** – The unique identifier of the “main” AudioObject.
- **audiobook\_derivative\_identifier** – The unique identifier of the AudioObject which is the encoding.

**Returns** A GraphQL mutation for RemoveAudioObjectEncoding.

```
trompace.mutations.audioobject.mutation_remove_audioobject_exampleofwork(audioobject_identifier:  
                      str,  
                      work_identifier:  
                      str)
```

Returns a mutation for removing that a AudioObject is an example of a work (<https://schema.org/exampleOfWork>).

#### Parameters

- **audio\_object\_identifier** – The unique identifier of the AudioObject.
- **work\_identifier** – The unique identifier of the work that the AudioObject is an example of.

**Returns** A GraphQL mutation for RemoveAudioObjectExampleOfWork.

```
trompace.mutations.audioobject.mutation_update_audioobject(identifier: str, *,  
                           name: str = None,  
                           title: str = None,  
                           description: str =  
                           None, date: str =  
                           None, creator: str =  
                           None, contributor: str  
                           = None, format_: str  
                           = None, encoding-  
                           format: str = None,  
                           source: str = None,  
                           license: str = None,  
                           subject: str = None,  
                           contenturl: str =  
                           None, language: str =  
                           None, inlanguage: str  
                           = None)
```

Returns a mutation for updating a AudioObject.

#### Parameters

- **identifier** – The identifier of the AudioObject in the CE to be updated.

- **name** – The name of the audio object.
- **description** – An account of the audio object.
- **date** – The date associated with the audio object.
- **creator** – The person, organization or service who created the thing the web resource is about.
- **contributor** – A person, an organization, or a service responsible for contributing the audio object to the web resource. This can be either a name or a base URL.
- **format\_** – A MimeType of the format of the page describing the audio object.
- **encodingformat** – A MimeType of the format of object encoded by the audio object.
- **source** – The URL of the web resource about this audio object. If no such resource is available, use the same value as contentUrl.
- **subject** – The subject of the audio object.
- **contenturl** – The URL of the content encoded by the audio object.
- **url** –
- **license** –
- **language** – The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
- **inlanguage** – The language of the audio object.
- **title** – The title of the resource indicated by *source*

**Returns** The string for the mutation for updating the AudioObject.

**Raises Assertion error if the input language or inlanguage is not one of the supported languages.** –

### 1.1.2 ControlAction

```
trompace.mutations.controlaction.mutation_add_actioninterface_result(controlaction_id:  
                      str,  
                      thing_interface_id:  
                      str)
```

Returns a mutation for linking a control action object and a thing interface with the result relation :param controlaction\_id: The unique identifier of the control action. :param thing\_interface\_id: the unique identifier of a thing interface object

**Returns** The string for the mutation for adding a control action to an object.

```
trompace.mutations.controlaction.mutation_add_controlaction_additionalproperty(controlaction_id:  
                      str,  
                      prop-  
                      erty_id:  
                      str)
```

Returns a mutation for adding a control action to a property value specification. :param controlaction\_id: The unique identifier of the control action. :param property\_id: The unique identifier of the property.

**Returns** The string for the mutation for adding a control action to a property.

```
trompace.mutations.controlaction.mutation_add_controlaction_object(controlaction_id:  
str, object_id:  
str)
```

Returns a mutation for adding a control action to an object, either a property value specification or a property  
:param controlaction\_id: The unique identifier of the control action. :param object\_id: The unique identifier of the  
object (property / property value specification).

**Returns** The string for the mutation for adding a control action to an object.

```
trompace.mutations.controlaction.mutation_add_entrypoint_controlaction(entrypoint_id:  
str,  
con-  
tro-  
lac-  
tion_id:  
str)
```

Returns a mutation for adding an entry point object to a control action :param entrypoint\_id: The unique identifier of the entry point. :param controlaction\_id: The unique identifier of the control action.

**Returns** The string for the mutation for adding an entry point object to a control action

```
trompace.mutations.controlaction.mutation_add_propertyvaluespecification_potentialaction(pr  
st  
co  
tr  
la  
ti  
st
```

Returns a mutation for adding a control action to a property value specification. :param controlaction\_id: The unique identifier of the control action. :param propertyvaluespecification\_id: The unique identifier of the property value specification.

**Returns** The string for the mutation for adding a control action to a property value specification.

```
trompace.mutations.controlaction.mutation_create_controlaction(name: str,  
actionstatus:  
trompace.constants.ActionStatusType  
= <ActionSta-  
tusType.PotentialActionStatus:  
4>, description:  
str = None)
```

Returns a mutation for creating a ControlAction. If an action status is not set, defaults to a PotentialActionStatus  
:param name: The name of the ControlAction. :param description: An account of the ControlAction. :param  
actionstatus: The status of the ControlAction.

**Returns** The string for the mutation for creating the ControlAction object.

```
trompace.mutations.controlaction.mutation_modify_controlaction(controlaction_id:  
str, actionstatus:  
trompace.constants.ActionStatusType,  
error: str =  
None)
```

Returns a mutation for modifying the status and errors of the ControlAction :param controlaction\_id: The unique identifier of the ControlAction. :param actionstatus: the status to update to. :param error: An error to set if the actionstatus is FailedActionStatus

**Returns** The string for the mutation for modifying a ControlAction.

```
trompace.mutations.controlaction.mutation_request_controlaction(controlaction_id:  
    str,      entry-  
    point_id: str,  
    properties:  
    list,      prop-  
    ertyValues:  
    list)
```

**Returns a mutation for requesting a control action** controlaction\_id: The unique identifier of the control action. entrypoint\_id: The unique identifier of the entry point linked to this control action properties: a list of the properties objects of the control action propertyValues: a list of the properties objects of the control action

**Returns** The string for the mutation for requesting a control action.

```
trompace.mutations.controlaction.mutation_update_controlaction_status(controlaction_id:  
    str,  
    ac-  
    tion_status:  
    trompace.constants.ActionStat
```

Returns a mutation for updating the status of a control action to an object :param controlaction\_id: The unique identifier of the control action. :param action\_status: the action status enum object.

**Returns** The string for the mutation for adding a control action to an object.

### 1.1.3 DefinedTerm

```
trompace.mutations.definedterm.create_defined_term(*, creator: str, term-  
    code: str, additionaltype:  
    List[str], broader_url: str  
    = None, broader_schema:  
    trompace.mutations.annotation.AnnotationSchemaMotivati  
    = None, image: str = None)
```

Return a mutation for making a DefinedTerm. A DefinedTerm (<https://schema.org/DefinedTerm>) is a word, name, acronym, phrase, etc. with a formal definition. It is part of a DefinedTermSet.

#### Parameters

- **creator** – a URI to the identity of the user who created this DefinedTerm
- **termcode** – The name of this term
- **additionaltype** – A list of schema.org additionalTypes used to categorise this DefinedTerm
- **broader\_url** (*optional*) – a type to be related with skos:broader
- **broader\_schema** (*optional*) – an annotation motivation to be related with skos:broader
- **image** (*optional*) – an image to describe this DefinedTerm

**Returns** A GraphQL Mutation to create a DefinedTerm in the Trompa CE

```
trompace.mutations.definedterm.create_defined_term_set(*, creator: str, name: str,  
    additionaltype: List[str],  
    image: str = None)
```

Return a mutation for making a DefinedTermSet. A DefinedTermSet (<https://schema.org/DefinedTermSet>) is a group of defined terms, e.g. categories or labels.

### Parameters

- **creator** – a URI to the identity of the user who created this DefinedTermSet
- **name** – the name of this DefinedTermSet
- **additionaltype** – A list of schema.org additionalTypes used to categorise this DefinedTermSet
- **image (optional)** – an image to describe this DefinedTermSet

**Returns** A GraphQL Mutation to create a DefinedTermSet in the Trompa CE

```
trompace.mutations.definedterm.defined_term_add_to_defined_term_set(*, defined_term_set: str, defined_term: str)
```

Return a mutation for adding a DefinedTerm to a DefinedTermSet.

### Parameters

- **defined\_term\_set** – The identifier of the DefinedTermSet to add to
- **defined\_term** – The identifier of the DefinedTermSet to add

**Returns** A GraphQL Mutation to add a DefinedTerm to the DefinedTermSet

```
trompace.mutations.definedterm.delete_defined_term(identifier: str)
```

Return a mutation for deleting a DefinedTermSet.

**Parameters** **identifier** – The identifier of the DefinedTerm to delete

**Returns** A GraphQL Mutation to delete a DefinedTerm from the Trompa CE

```
trompace.mutations.definedterm.delete_defined_term_set(identifier: str)
```

Return a mutation for deleting a DefinedTermSet.

**Parameters** **identifier** – The identifier of the DefinedTermSet to delete

**Returns** A GraphQL Mutation to delete a DefinedTermSet from the Trompa CE

```
trompace.mutations.definedterm.update_defined_term(identifier: str, *, creator: str = None, termcode: str = None, additionaltype: List[str] = None, broader_url: str = None, broader_schema: str = None, image: str = None)
```

Return a mutation for updating a DefinedTerm.

TODO: Copy arguments from **create\_**

**Returns** A GraphQL Mutation to update a DefinedTerm in the Trompa CE

```
trompace.mutations.definedterm.update_defined_term_set(identifier: str, *, creator: str = None, name: str = None, additionaltype: List[str] = None, image: str = None)
```

Return a mutation for updating a DefinedTermSet.

TODO: Copy arguments from **create\_**

**Returns** A GraphQL Mutation to update a DefinedTermSet in the Trompa CE

### 1.1.4 DigitalDocument

```
trompace.mutations.digitaldocument.mutation_create_digitaldocument(*, title:  
str, contributor:  
str, creator:  
str, source:  
str, format_: str,  
subject:  
str =  
None, language:  
str =  
None,  
description:  
str =  
None)
```

Returns a mutation for creating a digital document object.

#### Parameters

- **title** – The title of the resource indicated by *source*
- **contributor** – The main URL of the site where the information about this DigitalDocument was taken from
- **creator** – The person, organization or service who is creating this DigitalDocument (e.g. URL of the software)
- **source** – The URL of the web resource where information about this DigitalDocument is taken from
- **format\_** – The mimetype of the resource indicated by *source*
- **subject** (*optional*) – The subject of the music composition.
- **language** (*optional*) – The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
- **description** (*optional*) – A description about the item referred to by source.

**Returns** The string for the mutation for creating the digital document.

#### Raises

- **UnsupportedLanguageException if the input language is not one of the supported languages.** –
- **NotAMimeTypeException** – if format\_ is not a valid mimetype.

```
trompace.mutations.digitaldocument.mutation_delete_digitaldocument(identifier:  
str)
```

Returns a mutation for deleting a digital document object based on the identifier.

**Parameters** **identifier** – The unique identifier of the digital document object.

**Returns** The string for the mutation for deleting the digital document object based on the identifier.

```
trompace.mutations.digitaldocument.mutation_update_digitaldocument(identifier:  
    str,      *,  
    title:   str  
    = None,  
    contribu-  
    tor: str =  
    None, cre-  
    ator: str  
    = None,  
    source:  
    str      =  
    None, for-  
    mat_: str  
    = None,  
    subject:  
    str      =  
    None, lan-  
    guage: str  
    = None,  
    descrip-  
    tion: str =  
    None)
```

Returns a mutation for updating a digital document object.

#### Parameters

- **identifier** – The identifier of the media object in the CE to be updated.
- **title** – The title of the resource indicated by *source*
- **contributor** – The main URL of the site where the information about this DigitalDocument was taken from
- **creator** – The person, organization or service who is creating this DigitalDocument (e.g. URL of the software)
- **source** – The URL of the web resource where information about this DigitalDocument is taken from
- **format\_** – The mimetype of the resource indicated by *source*
- **subject** (*optional*) – The subject of the music composition.
- **language** (*optional*) – The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
- **description** (*optional*) – A description about the item referred to by source.

**Returns** The string for the mutation for creating the artist.

**Raises Assertion error if the input language is not one of the supported languages. –**

### 1.1.5 EntryPoint

```
trompace.mutations.entrypoint.mutation_create_entry_point(*, name: str, contributor: str, subject: str, creator: str, source: str, language: str, actionPlatform: str, contentType: List, encodingType: list, formatin='text/html', identifier=None, description: str = None)
```

Returns a mutation for creating an entry point object :param name: The name of the entry point. :param contributor: A person, an organization, or a service responsible for contributing the entry point to the web resource. This can be either a name or a base URL. :param creator: The person, organization or service who created the thing the entry point is about. :param source: The URL of the web resource to be represented by the node. :param description: An account of the entry point.. :param language: The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr. :param actionPlatform: The action platform. :param contentType: The content type associated with the entry point, should be a mimetype. :param encodingType: The encoding type associated with the entry point, should be a mimetype.

**Returns** The string for the mutation for creating the artist.

**Raises Assertion error if the input language is not one of the supported languages . –**

### 1.1.6 ItemList

```
trompace.mutations.itemlist.mutation_add_itemlist_itemlist_element(itemlist_id: str, element_id: str)
```

Returns a mutation for adding a ThingInterface in an ItemList object based on the identifier. (<https://schema.org/itemListElement>)

#### Parameters

- **itemlist\_id** – The unique identifier of the ItemList object.
- **element\_id** – The unique identifier of the ThingInterface object.

**Returns** The string for the mutation for adding an ThingInterface in an ItemList object based on the identifier,

```
trompace.mutations.itemlist.mutation_add_listitem_item(listitem_id: str, item_id: str)
```

Returns a mutation for adding an Item to a ListItem object based on the identifier. (<https://schema.org/item>)

#### Parameters

- **listitem\_id** – The unique identifier of the ListItem object.
- **item\_id** – The unique identifier of the Item object.

**Returns** The string for the mutation for adding a Item to a ListItem object based on the identifier.

```
trompace.mutations.itemlist.mutation_add_listitem_nextitem(listitem_id: str, nextitem_id: str)
```

Returns a mutation for adding a NextItem to a ListItem object based on the identifier. (<https://schema.org/nextItem>)

#### Parameters

- **listitem\_id** – The unique identifier of the ListItem object.
- **nextitem\_id** – The unique identifier of the NextItem object.

**Returns** The string for the mutation for adding a NextItem to a ListItem object

based on the identifier.

```
trompace.mutations.itemlist.mutation_create_itemlist(name: str, creator: str, itemlistorder: trompace.constants.ItemListOrderType = <ItemListOrderType.ItemListUnordered: 3>, description: str = None, contributor: str = None, additionatype: List[str] = None)
```

Returns a mutation for creating an ItemList object. (<https://schema.org/ItemList>)

#### Parameters

- **name** – The name of the ItemList object.
- **creator** – The person, organization or service who created the ItemList.
- **itemlistorder** – The type of ordering for the list (ascending, descending, unordered, ordered)
- **contributor** (*optional*) – A person, an organization, or a service responsible for contributing the ItemList to the web resource. This can be either a name or a base URL.
- **description** (*optional*) – The description of the ItemList object
- **additionatype** (*optional*) – A list of schema.org additionalTypes used to categorise this ItemList

**Returns** The string for the mutation for creating the ItemList.

```
trompace.mutations.itemlist.mutation_create_listitem(creator: str, name: str = None, contributor: str = None, description: str = None, itemurl: str = None, position: Optional[int] = None)
```

Returns a mutation for creating a ListItem object. (<https://schema.org/ListItem>)

#### Parameters

- **name** – The name of the ListItem object.
- **creator** – The person, organization or service who created the ListItem.
- **contributor** – A person, an organization, or a service responsible for contributing the ListItem to the web resource. This can be either a name or a base URL.
- **description** – The description of the ListItem object
- **itemurl** – If the item of this ListItem points to a URL outside of the CE, the item URL
- **position** – the position of the ListItem

**Returns** The string for the mutation for creating the ListItem.

`trompace.mutations.itemlist.mutation_delete_itemlist(identifier: str)`

Returns a mutation for deleting an ItemList object based on the identifier. (<https://schema.org/ItemList>)

**Parameters** `identifier` – The unique identifier of the ItemList object.

**Returns** The string for the mutation for deleting the ItemList object based on the identifier.

`trompace.mutations.itemlist.mutation_delete_listitem(identifier: str)`

Returns a mutation for deleting a ListItem object based on the identifier. (<https://schema.org/ListItem>)

**Parameters** `identifier` – The unique identifier of the ListItem object.

**Returns** The string for the mutation for deleting the ListItem object based on the identifier.

`trompace.mutations.itemlist.mutation_remove_itemlist_itemlist_element(itemlist_id: str, element_id: str)`

Returns a mutation for removing a ThingInterface from an ItemList object based on the identifier. (<https://schema.org/itemListElement>)

**Parameters**

- `itemlist_id` – The unique identifier of the ItemList object.
- `element_id` – The unique identifier of the ThingInterface object.

**Returns** The string for the mutation for removing an ThingInterface from an ItemList object based on the identifier.

`trompace.mutations.itemlist.mutation_remove_listitem_item(listitem_id: str, item_id: str)`

Returns a mutation for removing a Item from a ListItem object based on the identifier. (<https://schema.org/item>)

**Parameters**

- `listitem_id` – The unique identifier of the ListItem object.
- `item_id` – The unique identifier of the Item object.

**Returns** The string for the mutation for removing a Item from a ListItem

object based on the identifier.

`trompace.mutations.itemlist.mutation_remove_listitem_nextitem(listitem_id: str, nextitem_id: str)`

Returns a mutation for removing a NextItem from a ListItem object based on the identifier. (<https://schema.org/nextItem>)

**Parameters**

- `listitem_id` – The unique identifier of the ListItem object.
- `nextitem_id` – The unique identifier of the NextItem object.

**Returns** The string for the mutation for removing a NextItem from a ListItem

object based on the identifier.

```
trompace.mutations.itemlist.mutation_sequence_add_itemlist_itemlist_element(itemlist_id:  
                      str,  
                      el-  
                      e-  
                      ment_ids:  
                      list)
```

Returns a mutation for adding a sequence of ThingInterface in an ItemList object based on the identifiers.  
(<https://schema.org/itemListElement>)

#### Parameters

- **itemlist\_id** – The unique identifier of the ItemList object.
- **element\_ids** – The list of unique identifiers of the ThingInterface objects.

**Returns** The string for the mutation for adding a sequence of ThingInterface in an ItemList object based on the identifiers.

```
trompace.mutations.itemlist.mutation_sequence_add_listitem_item(listitem_ids:  
                      list, item_ids:  
                      list)
```

Returns a mutation for adding a sequence of ThingInterface in an ListItem objects based on the identifiers.  
(<https://schema.org/itemListElement>)

#### Parameters

- **listitem\_ids** – The list of unique identifiers of the ListItem objects.
- **item\_ids** – The list of unique identifiers of the ThingInterface objects.

**Returns** The string for the mutation for adding a sequence of ThingInterface in an ListItem objects based on the identifiers.

```
trompace.mutations.itemlist.mutation_sequence_add_listitem_nextitem(listitem_ids:  
                      list)
```

Returns a mutation for adding a sequence of NextItem to an ListItem objects based on the identifiers. (<https://schema.org/itemListElement>)

**Parameters** **listitem\_ids** – The list of unique identifier of the ListItems objects.

**Returns** The string for the mutation for adding a sequence of NextItem to an ListItem objects based on the identifiers.

```
trompace.mutations.itemlist.mutation_sequence_create_listitem(listitems: list,  
                           contributor: str,  
                           creator: str =  
                           None, name:  
                           str = None, de-  
                           scription: list =  
                           None)
```

Returns a mutation for creating a sequence of ListItem objects (<https://schema.org/itemListElement>)

#### Parameters

- **listitems** – the ListItems objects to create
- **creator** – The person, organization or service who created the items.
- **contributor** – A person, an organization, or a service responsible for contributing the ListItem to the web resource. This can be either a name or a base URL.
- **name** – The name of the ListItem object.

**Returns** The string for the mutation for creating a sequence of ListItem objects

```
trompace.mutations.itemlist.mutation_update_itemlist(identifier: str, name: str  
= None, creator: str  
= None, itemlistorder:  
trompace.constants.ItemListOrderType  
= None, description: str =  
None, contributor: str = None,  
additionaltype: List[str] =  
None)
```

Returns a mutation for updating an ItemList object. (<https://schema.org/ItemList>)

#### Parameters

- **identifier** – The identifier of the ItemList in the CE to be updated.
- **name** – The name of the ItemList object.
- **creator** – The person, organization or service who created the ItemList.
- **itemlistorder** – The type of ordering for the list (ascending, descending, unordered, ordered)
- **contributor** (*optional*) – A person, an organization, or a service responsible for contributing the ItemList to the web resource. This can be either a name or a base URL.
- **description** (*optional*) – The description of the ItemList object
- **additionaltype** (*optional*) – A list of schema.org additionalTypes used to categorise this ItemList

**Returns** The string for the mutation for updating the ItemList.

```
trompace.mutations.itemlist.mutation_update_listitem(identifier: str, creator: str =  
None, name: str = None, contributor: str = None, description: str = None, itemurl: str  
= None, position: int = None)
```

Returns a mutation for updating a ListItem object. (<https://schema.org/ListItem>)

#### Parameters

- **identifier** – The identifier of the ListItem in the CE to be updated.
- **name** – The name of the ListItem object.
- **creator** – The person, organization or service who created the ListItem.
- **contributor** – A person, an organization, or a service responsible for contributing the ListItem to the web resource. This can be either a name or a base URL.
- **description** – The description of the ListItem object
- **itemurl** – If the item of this ListItem points to a URL outside of the CE, the item URL
- **position** – the position of the ListItem

**Returns** The string for the mutation for updating the ListItem.

### 1.1.7 MediaObject

```
trompace.mutations.mediaobject.mutation_add_media_object_used(mediaobject_identifier:  
                      str,  
                      thing_identifier:  
                      str)
```

Returns a mutation for indicating that a MediaObject *used* some other thing to create it (<http://www.w3.org/ns/prov#used>). For example an MEI file converted from musicxml might use the verovio software.

#### Parameters

- **mediaobject\_identifier** – The unique identifier of a MediaObject.
- **thing\_identifier** – The unique identifier of some Thing that was used to create the MediaObject.

**Returns** A GraphQL mutation for MergeMediaObjectUsed.

```
trompace.mutations.mediaobject.mutation_create_media_object(*, title: str, con-  
                                                       tributor: str, cre-  
                                                       ator: str, source: str,  
                                                       format_: str, name:  
                                                       str = None, descrip-  
                                                       tion: str = None,  
                                                       date: str = None, en-  
                                                       codingformat: str =  
                                                       None, embedurl: str  
                                                       = None, url: str =  
                                                       None, contenturl: str  
                                                       = None, language:  
                                                       str = None, inlan-  
                                                       guage: str = None,  
                                                       license: str = None)
```

Returns a mutation for creating a media object object.

#### Parameters

- **name** – The name of the media object.
- **description** – An account of the media object.
- **date** – The date associated with the media object.
- **creator** – The person, organization or service who created the thing the web resource is about.
- **contributor** – A person, an organization, or a service responsible for contributing the media object to the web resource. This can be either a name or a base URL.
- **format\_** – A MimeType of the format of the page describing the media object.
- **encodingformat** – A MimeType of the format of object encoded by the media object.
- **source** – The URL of the web resource about this media object. If no such resource is available, use the same value as contentUrl.
- **subject** – The subject of the media object.
- **contenturl** – The URL of the content encoded by the media object.
- **url** –
- **license** –

- **language** – The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
- **inLanguage** – The language of the media object.
- **title** – The title of the resource indicated by *source*

**Returns** The string for the mutation for creating the media object.

**Raises** `UnsupportedLanguageException` if the input language is not one of the supported languages. –

```
trompace.mutations.mediaobject.mutation_delete_media_object(identifier: str)
```

Returns a mutation for deleting a media object object based on the identifier.

**Parameters** **identifier** – The unique identifier of the media object object.

**Returns** The string for the mutation for deleting the media object object based on the identifier.

```
trompace.mutations.mediaobject.mutation_merge_media_object_encoding(mediaobject_identifier: str, mediaobject_derivative_identifier: str)
```

Returns a mutation for indicating that a derivative MediaObject *encodes* a primary MediaObject (<https://schema.org/encoding>). For example a transcription of a score is an *encoding* of that score.

**Parameters**

- **mediaobject\_identifier** – The unique identifier of the “main” MediaObject.
- **mediaobject\_derivative\_identifier** – The unique identifier of the MediaObject which is the encoding.

**Returns** A GraphQL mutation for MergeMediaObjectEncoding.

```
trompace.mutations.mediaobject.mutation_merge_media_object_wasderivedfrom(mediaobject_derivative_identifier: str, mediaobject_source_identifier: str)
```

Returns a mutation for indicating that a MediaObject *was derived from* a primary MediaObject (<http://www.w3.org/ns/prov#wasDerivedFrom>). For example a PDF generated from a MusicXML source file was derived from that source file.

**Parameters**

- **mediaobject\_derivative\_identifier** – The unique identifier of the MediaObject which is the derivative.
- **mediaobject\_source\_identifier** – The unique identifier of the “source” MediaObject.

**Returns** A GraphQL mutation for MergeMediaObjectWasDerivedFrom.

```
trompace.mutations.mediaobject.mutation_merge_mediaobject_example_of_work(mediaobject_identifier: str, work_identifier: str)
```

Returns a mutation for indicating that a MediaObject is an example of a work (<https://schema.org/exampleOfWork>).

**Parameters**

- **mediaobject\_identifier** – The unique identifier of the media object.
- **work\_identifier** – The unique identifier of the work that the media object is an example of.

**Returns** A GraphQL mutation for MergeMediaObjectExampleOfWork.

```
trompace.mutations.mediaobject.mutation_remove_media_object_encoding(mediaobject_identifier:  
str, me-  
diaob-  
ject_derivative_identifier:  
str)
```

Returns a mutation for removing that a derivative MediaObject *encodes* a primary MediaObject (<https://schema.org/encoding>).

#### Parameters

- **mediaobject\_identifier** – The unique identifier of the “main” MediaObject.
- **mediaobject\_derivative\_identifier** – The unique identifier of the MediaObject which is the encoding.

**Returns** A GraphQL mutation for RemoveMediaObjectEncoding.

```
trompace.mutations.mediaobject.mutation_remove_media_object_wasderivedfrom(mediaobject_derivative:  
str,  
me-  
diaob-  
ject_source_identifier:  
str)
```

Returns a mutation for removing that a MediaObject *was derived from* a primary MediaObject (<http://www.w3.org/ns/prov#wasDerivedFrom>).

#### Parameters

- **mediaobject\_derivative\_identifier** – The unique identifier of the MediaObject which is the derivative.
- **mediaobject\_source\_identifier** – The unique identifier of the “source” MediaObject.

**Returns** A GraphQL mutation for RemoveMediaObjectWasDerivedFrom.

```
trompace.mutations.mediaobject.mutation_remove_mediaobject_example_of_work(mediaobject_identifier:  
str,  
work_identifier:  
str)
```

Returns a mutation for removing that a MediaObject is an example of a work (<https://schema.org/exampleOfWork>).

#### Parameters

- **mediaobject\_identifier** – The unique identifier of the media object.
- **work\_identifier** – The unique identifier of the work that the media object is an example of.

**Returns** A GraphQL mutation for RemoveMediaObjectExampleOfWork.

```
trompace.mutations.mediaobject.mutation_update_media_object(identifier: str, *,  
    name: str = None,  
    title: str = None,  
    description: str =  
        None, date: str =  
        None, creator: str  
        = None, contributor: str = None, format_: str = None,  
        encodingformat: str  
        = None, source: str  
        = None, license: str  
        = None, subject: str  
        = None, url: str =  
        None, contenturl: str  
        = None, language:  
        str = None, inlanguage: str = None)
```

Returns a mutation for updating a media object object.

#### Parameters

- **identifier** – The identifier of the media object in the CE to be updated.
- **name** – The name of the media object.
- **description** – An account of the media object.
- **date** – The date associated with the media object.
- **creator** – The person, organization or service who created the thing the web resource is about.
- **contributor** – A person, an organization, or a service responsible for contributing the media object to the web resource. This can be either a name or a base URL.
- **format\_** – A MimeType of the format of the page describing the media object.
- **encodingformat** – A MimeType of the format of object encoded by the media object.
- **source** – The URL of the web resource about this media object. If no such resource is available, use the same value as contentUrl.
- **subject** – The subject of the media object.
- **contenturl** – The URL of the content encoded by the media object.
- **url** –
- **license** –
- **language** – The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
- **inLanguage** – The language of the media object.
- **title** – The title of the resource indicated by *source*

**Returns** The string for the mutation for updating the media object.

**Raises Assertion error if the input language or inLanguage is not one of the supported languages. –**

### 1.1.8 MusicComposition

```
trompace.mutations.musiccomposition.mutation_create_music_composition(*,
    title:
        str,
    contrib-
        utor:
        str,
    crea-
        tor:
        str,
    source:
        str,
    for-
        mat_:
        str,
    sub-
        ject:
        str =
        None,
    lan-
        guage:
        str =
        None,
    inlan-
        guage:
        str =
        None,
    name:
        str =
        None,
    de-
        scrip-
        tion:
        str =
        None,
    posi-
        tion:
        int =
        None)
```

Returns a mutation for creating a music composition object

#### Parameters

- **title** – The title of the resource indicated by *source*
- **contributor** – The main URL of the site where the information about this MusicComposition was taken from
- **creator** – The person, organization or service who is creating this MusicComposition (e.g. URL of the software)
- **source** – The URL of the web resource where information about this MusicComposition is taken from
- **format\_** – The mimetype of the resource indicated by *source*

- **subject** – The subject of the music composition.
- **language** – The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
- **inlanguage** – The language of the music composition.
- **name** – The name of the music composition.
- **description** – An account of the music composition.
- **position** – In the case that this is a movement of a larger work (e.g. a Symphony), the position of this MusicComposition in the larger one.

**Returns** The string for the mutation for creating the music composition.

**Raises**

- **UnsupportedLanguageException** – if language is not one of the supported languages.
- **NotAMimeTypeException** – if format\_ is not a valid mimetype

```
trompace.mutations.musiccomposition.mutation_delete_music_composition(identifier:  
str)
```

Returns a mutation for deleting a MusicComposition.

**Parameters** **identifier** – The identifier of the MusicComposition.

**Returns** The string for the mutation for deleting the music composition object based on the identifier.

```
trompace.mutations.musiccomposition.mutation_merge_music_composition_composer(composition_iden-  
per-  
son_identifier)
```

Returns a mutation for adding a Person as the composer of a MusicComposition (<https://schema.org/composer>).

**Parameters**

- **composition\_identifier** – The identifier of a MusicComposition.
- **person\_identifier** – The identifier of a Person who composed the MusicComposition.

```
trompace.mutations.musiccomposition.mutation_merge_music_composition_exact_match(from_iden-  
to_identifier)
```

Returns a mutation for indicating that two MusicComposition objects represent the same composition (<http://www.w3.org/2004/02/skos/core#exactMatch>).

**Parameters**

- **from\_identifier** – The identifier of one MusicComposition.
- **to\_identifier** – The identifier of another MusicComposition.

```
trompace.mutations.musiccomposition.mutation_merge_music_composition_has_part(main_identifier,  
part_identifier)
```

Returns a mutation for adding a MusicComposition as a part of another MusicComposition (<https://schema.org/hasPart>). For example, the first movement of a composition could be represented as a hasPart of a main symphony.

**Parameters**

- **main\_identifier** – The identifier of a main MusicComposition.
- **part\_identifier** – The identifier of a MusicComposition which is a part of the main MusicComposition.

`trompace.mutations.musiccomposition.mutation_merge_music_composition_included_composition (music_composition_id: str, part_identifier: str)`

Returns a mutation for adding a MusicComposition as an included composition of another MusicComposition (<https://schema.org/includedComposition>). For example, the first movement of a composition could be represented as an includedComposition of a main symphony.

#### Parameters

- **main\_identifier** – The identifier of a main MusicComposition.
- **part\_identifier** – The identifier of a MusicComposition which is an included part of the main MusicComposition.

`trompace.mutations.musiccomposition.mutation_merge_music_composition_recorded_as (music_composition_id: str, music_recording_id: str)`

Returns a mutation for adding a MusicRecording as an recording of a MusicComposition (<https://schema.org/recordingAs>).

#### Parameters

- **music\_composition\_id** – The identifier of a MusicComposition.
- **music\_recording\_id** – The identifier of a MusicRecording which is a recording of the MusicComposition.

`trompace.mutations.musiccomposition.mutation_merge_music_composition_work_example (music_composition_id: str, creative_work_id: str)`

Returns a mutation for adding a CreativeWork as an example of a MusicComposition (<https://schema.org/workExample>).

#### Parameters

- **music\_composition\_id** – The identifier of a MusicComposition.
- **creativework\_id** – The identifier of a CreativeWork which is an example of the MusicComposition.

`trompace.mutations.musiccomposition.mutation_remove_music_composition_composer (composition_id: str, person_identifier: str)`

Returns a mutation for removing a Person as the composer of a MusicComposition (<https://schema.org/composer>).

#### Parameters

- **composition\_identifier** – The identifier of a MusicComposition.
- **person\_identifier** – The identifier of a Person who composed the MusicComposition.

`trompace.mutations.musiccomposition.mutation_remove_music_composition_exact_match (from_identifier: str, to_identifier: str)`

Returns a mutation for removing two MusicComposition representing the same composition (<http://www.w3.org/2004/02/skos/core#exactMatch>).

#### Parameters

- **from\_identifier** – The identifier of one MusicComposition.
- **to\_identifier** – The identifier of another MusicComposition.

`trompace.mutations.musiccomposition.mutation_remove_music_composition_has_part`(*main\_identifier*,  
*part\_identifier*)

Returns a mutation for removing a MusicComposition as a part of another MusicComposition (<https://schema.org/hasPart>).

#### Parameters

- **main\_identifier** – The identifier of a main MusicComposition.
- **part\_identifier** – The identifier of a MusicComposition which is a part of the main MusicComposition.

`trompace.mutations.musiccomposition.mutation_remove_music_composition_included_composition`

Returns a mutation for removing a MusicComposition as an included composition of another MusicComposition (<https://schema.org/includedComposition>).

#### Parameters

- **main\_identifier** – The identifier of a main MusicComposition.
- **part\_identifier** – The identifier of a MusicComposition which is an included part of the main MusicComposition.

`trompace.mutations.musiccomposition.mutation_remove_music_composition_recorded_as`(*music\_com-  
str,  
mu-  
sic\_recordin-  
str*)

Returns a mutation for removing a MusicRecording as a recording of a MusicComposition. (<https://schema.org/recodedAs>).

#### Parameters

- **music\_composition\_id** – The identifier of a MusicComposition.
- **music\_recording\_id** – The identifier of a MusicRecording which is a recording of the MusicComposition.

`trompace.mutations.musiccomposition.mutation_remove_music_composition_work_example`(*music\_com-  
str,  
cre-  
ative-  
work\_id:  
str*)

Returns a mutation for removing a CreativeWork as an example of a MusicComposition (<https://schema.org/workExample>).

#### Parameters

- **music\_composition\_id** – The identifier of a MusicComposition.
- **creativework\_id** – The identifier of a CreativeWork which is an example of the MusicComposition.

```
trompace.mutations.musiccomposition.mutation_update_music_composition(identifier:  
    str *,  
    title:  
    str =  
    None,  
    contrib-  
    utor:  
    str =  
    None,  
    creator:  
    str =  
    None,  
    source:  
    str =  
    None,  
    for-  
    mat_:  
    str =  
    None,  
    sub-  
    ject:  
    str =  
    None,  
    lan-  
    guage:  
    str =  
    None,  
    inlan-  
    guage:  
    str =  
    None,  
    name:  
    str =  
    None,  
    de-  
    scrip-  
    tion:  
    str =  
    None,  
    posi-  
    tion:  
    int =  
    None)
```

Returns a mutation for updating a MusicComposition object.

#### Parameters

- **identifier** – The identifier of the MusicComposition in the CE to be updated
- **title** – The title of the resource indicated by *source*
- **contributor** – The main URL of the site where the information about this MusicComposition was taken from
- **creator** – The person, organization or service who is creating this MusicComposition

(e.g. URL of the software)

- **source** – The URL of the web resource where information about this MusicComposition is taken from
- **format\_** – The mimetype of the resource indicated by *source*
- **subject** – The subject of the music composition.
- **language** – The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
- **inlanguage** – The language of the music composition.
- **name** – The name of the music composition.
- **description** – An account of the music composition.
- **position** – In the case that this is a movement of a larger work (e.g. a Symphony), the position of this MusicComposition in the larger one.

**Returns** The string for the mutation for updating the music composition.

**Raises**

- **UnsupportedLanguageException** – if *language* is not one of the supported languages.
- **NotAMimeTypeException** – if *format\_* is not a valid mimetype

## 1.1.9 Person

A Person objects represents a web resource about a person. For example, this could be a composer or performer.

We recommend that the following fields are set:

field	re-required	Description
<b>title</b>	yes	The title of the resource indicated by <code>source</code>
<b>contributor</b>	yes	The main URL of the site where the information about this Person was taken from
<b>creator</b>	yes	The person, organization or service who is creating this Person (e.g. URL of the software)
<b>source</b>	yes	The URL of the web resource where information about this Person is taken from
<b>language</b>	yes	The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
<b>format_</b>	yes	The mimetype of the resource indicated by <code>source</code>
<b>name</b>	yes	The name of the person
<b>family_name</b>		The family name of the person
<b>given_name</b>		The given name of the person
<b>gender</b>		The person's gender
<b>birth_date</b>		The birth date of the person, formatted as yyyy, yyyy-mm or yyyy-mm-dd
<b>death_date</b>		The date of death of the person , formatted as yyyy, yyyy-mm or yyyy-mm-dd
<b>description</b>		A biographical description of the person
<b>image</b>		URL to an image associated with the person
<b>publisher</b>		An entity responsible for making the resource available
<b>hon-orific_prefix</b>		An honorific prefix
<b>hon-orific_suffix</b>		An honorific suffix
<b>job_title</b>		The person's job title

## Relations

exactMatch: Use `trompace.mutations.person.mutation_person_add_exact_match_person()`

```
trompace.mutations.person.mutation_create_person(*, title: str, contributor: str, creator: str, source: str, format_: str, language: str = None, name: str = None, family_name: str = None, given_name: str = None, gender: str = None, birth_date: str = None, death_date: str = None, description: str = None, image: str = None, publisher: str = None, honorific_prefix: str = None, honorific_suffix: str = None, job_title: str = None)
```

Returns a mutation for creating a Person

### Parameters

- **title** – The title of the resource indicated by `source`
- **contributor** – The main URL of the site where the information about this Person was taken from
- **creator** – The person, organization or service who is creating this Person (e.g. URL of the software)
- **source** – The URL of the web resource where information about this Person is taken from

- **language** – The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
- **format\_** – The mimetype of the resource indicated by *source*
- **name** – The name of the person
- **family\_name** (*optional*) – The family name of the person
- **given\_name** (*optional*) – The given name of the person
- **gender** (*optional*) – The person's gender
- **birth\_date** (*optional*) – The birth date of the person, formatted as yyyy, yyyy-mm or yyyy-mm-dd
- **death\_date** (*optional*) – The date of death of the person , formatted as yyyy, yyyy-mm or yyyy-mm-dd
- **description** (*optional*) – A biographical description of the person
- **image** (*optional*) – URL to an image associated with the person
- **publisher** (*optional*) – An entity responsible for making the resource available
- **honorific\_prefix** (*optional*) – An honorific prefix.
- **honorific\_suffix** (*optional*) – An honorific suffix.
- **job\_title** (*optional*) – The person's job title.

**Returns** The string for the mutation for creating the person.

#### Raises

- **UnsupportedLanguageException** – if language is not one of the supported languages.
- **ValueError** – if gender is not a value supported by the CE
- **NotAMimeTypeException** – if format\_ is not a valid mimetype.

`trompace.mutations.person.mutation_delete_person(identifier: str)`

Returns a mutation for deleting a Person with the given identifier.

**Parameters** **identifier** – The identifier of the Person to delete.

**Returns** A mutation string to delete a Person

`trompace.mutations.person.mutation_person_add_exact_match_person(identifier_from: str, identifier_to: str)`

Returns a mutation for linking two Person objects with skos:exactMatch.

#### Parameters

- **identifier\_from** – the identifier of the Person to match to
- **identifier\_to** – the identifier of the Person that is an exact match of identifier\_from

**Returns:** a mutation to make an exactMatch relationship between the Person objects

`trompace.mutations.person.mutation_person_remove_exact_match_person(identifier_from: str, identifier_to: str)`

Returns a mutation for removing the skos:exactMatch relation between two Person objects

### Parameters

- **identifier\_from** – the identifier of the Person to match to
- **identifier\_to** – the identifier of the Person that is an exact match of identifier\_from

Returns: a mutation to remove the exactMatch relationship from the Person objects

```
trompace.mutations.person.mutation_update_person(identifier: str, *, title: str = None,  
                                                 contributor: str = None, creator: str  
                                                 = None, source: str = None, language:  
                                                 str = None, format_: str  
                                                 = None, name: str = None, family_name:  
                                                 str = None, given_name:  
                                                 str = None, gender: str = None,  
                                                 birth_date: str = None, death_date:  
                                                 str = None, description: str = None,  
                                                 image: str = None, publisher: str  
                                                 = None, honorific_prefix: str =  
                                                 None, honorific_suffix: str = None,  
                                                 job_title: str = None)
```

Returns a mutation for updating a Person

### Parameters

- **identifier** – The identifier of the person in the CE to be updated
- **title** – The title of the resource indicated by *source*
- **contributor** – The main URL of the site where the information about this Person was taken from
- **creator** – The person, organization or service who is creating this Person (e.g. URL of the software)
- **source** – The URL of the web resource where information about this Person is taken from
- **language** – The language the metadata is written in. Currently supported languages are en,es,ca,nl,de,fr
- **format\_** – The mimetype of the resource indicated by *source*
- **name** – The name of the person
- **family\_name** (*optional*) – The family name of the person
- **given\_name** (*optional*) – The given name of the person
- **gender** (*optional*) – The person's gender
- **birth\_date** (*optional*) – The birth date of the person, formatted as yyyy, yyyy-mm or yyyy-mm-dd
- **death\_date** (*optional*) – The date of death of the person , formatted as yyyy, yyyy-mm or yyyy-mm-dd
- **description** (*optional*) – A biographical description of the person
- **image** (*optional*) – URL to an image associated with the person
- **publisher** (*optional*) – An entity responsible for making the resource available
- **honorific\_prefix** (*optional*) – An honorific prefix.
- **honorific\_suffix** (*optional*) – An honorific suffix.

- **job\_title** (*optional*) – The person's job title.

**Returns** The string for the mutation for updating the person.

**Raises**

- **UnsupportedLanguageException** – if language is not one of the supported languages.
- **ValueError** – if gender is not a value supported by the Ce
- **NotAMimeTypeException** – if format\_ is not a valid mimetype.

### 1.1.10 Place

```
trompace.mutations.place.mutation_create_place(*, title: str, contributor: str, creator: str,  
source: str, format_: str, name: str = None, language: str = None)
```

Returns a mutation for creating a place object.

**Parameters**

- **name** – The name of the place object.
- **creator** – The person, organization or service who created the thing the web resource is about.
- **contributor** – A person, an organization, or a service responsible for contributing the place to the web resource. This can be either a name or a base URL.
- **format\_** – A MimeType of the format of the page describing the place.
- **source** – The URL of the web resource about this place.
- **title** – The title of the resource indicated by source

**Returns** The string for the mutation for creating the place.

```
trompace.mutations.place.mutation_delete_place(identifier: str)
```

Returns a mutation for deleting a place object based on the identifier.

**Parameters** **identifier** – The unique identifier of the place object.

**Returns** The string for the mutation for deleting the place object based on the identifier.

```
trompace.mutations.place.mutation_merge_person_birthplace(person_identifier: str,  
place_identifier: str)
```

Returns a mutation for adding a place as the place of birth of a person.

**Parameters**

- **person\_identifier** – The unique identifier of the person object.
- **place\_identifier** – The unique identifier of the place where the person was born.

**Returns** The string for the mutation for merging a place as the birth place of a person.

```
trompace.mutations.place.mutation_merge_person_deathplace(person_identifier: str,  
place_identifier: str)
```

Returns a mutation for adding a place as the place of death of a person.

**Parameters**

- **person\_identifier** – The unique identifier of the person.
- **place\_identifier** – The unique identifier of the place where the person died.

**Returns** The string for the mutation for merging a place as the place of death of a person.

```
trompace.mutations.place.mutation_remove_person_birthplace(person_identifier: str,  
place_identifier: str)
```

Returns a mutation for removing a place as the place of birth of a person.

#### Parameters

- **person\_identifier** – The unique identifier of the person object.
- **place\_identifier** – The unique identifier of the place where the person was born.

**Returns** The string for the mutation for removing a place as the birth place of a person.

```
trompace.mutations.place.mutation_remove_person_deathplace(person_identifier: str,  
place_identifier: str)
```

Returns a mutation for removing a place as the place of death of a person.

#### Parameters

- **person\_identifier** – The unique identifier of the person.
- **place\_identifier** – The unique identifier of the place where the person died.

**Returns** The string for the mutation for removing a place as the place of death of a person.

```
trompace.mutations.place.mutation_update_place(identifier: str, *, name: str = None, ti-  
tle: str = None, creator: str = None,  
contributor: str = None, format_: str =  
None, source: str = None, language: str  
= None)
```

Returns a mutation for updating a place object.

#### Parameters

- **identifier** – The identifier of the place in the CE to be updated.
- **name** – The name of the place object.
- **creator** – The person, organization or service who created the thing the web resource is about.
- **contributor** – A person, an organization, or a service responsible for contributing the place to the web resource. This can be either a name or a base URL.
- **format\_** – A MimeType of the format of the page describing the place.
- **source** – The URL of the web resource about this place.
- **title** – The title of the resource indicated by *source*

**Returns** The string for the mutation for updating the place.

### 1.1.11 Property

```
trompace.mutations.property.mutation_create_property(title: str, name:  
str, rangeIncludes:  
List[trompace.StringConstant],  
description: str = None)
```

Returns a mutation for creating a property :param title: The title of the property :param name: The name of the property :param description: An account of the property :param rangeIncludes: accepts an array of possible node types for this content reference and can be used by the Component developer to limit the type of nodes (content types) that can be selected.

**Returns** The string for the mutation for creating the property.

```
trompace.mutations.property.mutation_create_propertyvaluespecification(name:  
    str,  
    de-  
    fault-  
    Value:  
    str,  
    val-  
    ue-  
    MaxLength:  
    int,  
    val-  
    ueMinLength:  
    int,  
    mul-  
    ti-  
    ple-  
    Val-  
    ues:  
    bool,  
    val-  
    ue-  
    Name:  
    str,  
    val-  
    uePat-  
    tern:  
    str,  
    val-  
    ueRequired:  
    bool,  
    de-  
    scrip-  
    tion:  
    str  
    =  
    None)
```

Returns a mutation for creating a property value specification. Each PropertyValueSpecification defines a scalar input parameter that the Component user should be prompted with when preparing the request for an algorithm process job. There are numerous properties that can be used to set requirements, type and limits for a scalar parameter. With these properties, a Component developer can set up the input field for this parameter.

- :param name: The name of the property value specification.
- :param description: An account of the property
- :param defaultValue: the default value to use for the property value specification.
- :param valueMaxLength: The maximum length of the value.
- :param valueMinLength: The minimum length of the value.
- :param multipleValues: A boolean that states if multiple values are accepted or not.
- :param valueName: The name of the value.
- :param valuePattern: The format of the value.
- :param valueRequired: A boolean stating if the value is required or not.

**Returns** The string for the mutation for creating the property value specification.

### 1.1.12 Rating

```
trompace.mutations.rating.create_rating(*,
    creator: str,
    bestrating: int = None,
    worstrating: int = None,
    ratingexplanation: str = None,
    additionaltypes: str = None)
```

Return a mutation for making a Rating. A Rating (<https://schema.org/Rating>) is an evaluation on a numeric scale.

#### Parameters

- **creator** – a URI to the identity of the user who created this DefinedTerm
- **bestrating** – The highest value allowed in this rating system
- **ratingvalue** – The rating for the content.
- **worstrating** (*optional*) – The lowest value allowed in this rating system. If worstRating is omitted, 1 is assumed.
- **ratingexplanation** (*optional*) – A freeform text box describing why this rating was given
- **additionaltypes** (*optional*) – A schema.org additionalType used to categorise this Rating

**Returns** A GraphQL Mutation to create a Rating in the Trompa CE

```
trompace.mutations.rating.create_rating_definition(*,
    creator: str,
    bestrating: int,
    worstrating: int,
    name: str = None)
```

Return a mutation for making a Rating definition. A Rating (<https://schema.org/Rating>) is an evaluation on a numeric scale. A Rating definition describes the structure that a rating can take. It is used so that an annotation tool can give a title and present an input according to the correct scale (e.g. 1-5 or 1-100).

This is a helper method that requires a bestrating and worstrating value and automatically sets additionaltypes to RATING\_DEFINITION\_ADDITIONAL\_TYPE

A name is recommended if multiple ratings are going to be shown on the same annotator, but isn't necessary.

```
trompace.mutations.rating.delete_rating(identifier: str)
```

Return a mutation for deleting a Rating.

**Parameters** **identifier** – The identifier of the Rating to delete

**Returns** A GraphQL Mutation to delete a Rating from the Trompa CE

```
trompace.mutations.rating.rating_add_was_derived_from_rating(rating_id: str,
    original_rating_id: str)
```

Generate a mutation to link two ratings with the prov:wasDerivedFrom relation

#### Parameters

- **rating\_id** – the id of the new rating
- **original\_rating\_id** – the id of the original rating from which rating\_id was derived

**Returns** A GraphQL Mutation for MergeRatingWasDerivedFrom

```
trompace.mutations.rating.rating_remove_was_derived_from_rating(rating_id: str,
    original_rating_id: str)
```

Generate a mutation to remove the prov:wasDerivedFrom relation between two ratings

**Parameters**

- **rating\_id** – the id of the new rating
- **original\_rating\_id** – the id of the original rating from which rating\_id was derived

**Returns** A GraphQL Mutation for RemoveRatingWasDerivedFrom

## 1.2 Queries

Queries are used to retrieve information from the CE

### 1.2.1 Person

```
trompace.queries.person.query_person(identifier: str = None, contributor: str = None, creator: str = None, source: str = None, language: str = None, format_: str = None, name: str = None, family_name: str = None, given_name: str = None, return_items_list: list = ['identifier', 'name'])
```

Returns a query for retrieving a person or people.

**Parameters**

- **identifier** – The identifier of the person in the CE.
- **contributor** – The main URL of the site where the information about the Person was taken from
- **creator** – The person, organization or service who is creating this Person (e.g. URL of the software)
- **source** – The URL of the web resource where information about this Person is taken from
- **language** – The language the metadata is written in.
- **format\_** – The mimetype of the resource indicated by *source*
- **name** – The name of the person
- **family\_name** – The family name of the person
- **given\_name** – The given name of the person
- **return\_items\_list** – A list of item fields that the query must return.

**Returns** The string for a person query.

## 1.2.2 MusicComposition

```
trompace.queries.musiccomposition.query_musiccomposition(identifier: str = None, title: str = None, contributor: str = None, creator: str = None, source: str = None, inlanguage: str = None, name: str = None, position: int = None, filter_: dict = None, return_items: Union[list, str] = None)
```

Returns a query for querying the database for a music composition. :param identifier: The identifier of the music composition in the CE. :param title: The title of the resource indicated by *source* :param creator: The person, organization or service who created the thing the web resource is about. :param contributor: A person, an organization, or a service responsible for contributing the music composition to the web resource. This can be either a name or a base URL. :param source: The source URL that an item comes from :param inlanguage: The language of the music composition. Currently supported languages are en,es,ca,nl,de,fr :param name: The name of the music composition. :param position: In the case that this is a movement of a larger work (e.g. a Symphony), the position of this

MusicComposition in the larger one.

### Parameters

- **filter\_** – return nodes with this custom filter
- **return\_items** – return these items in the response

**Returns** The string for the quereing the music composition.

**Raises** `UnsupportedLanguageException if the input language is not one of the supported languages.` –

## 1.2.3 MediaObject

```
trompace.queries.mediaobject.query_mediaobject(identifier: str = None, creator: str = None, contributor: str = None, encodingformat: str = None, source: str = None, contenturl: str = None, inlanguage: str = None, filter_: dict = None, return_items: Union[list, str] = None)
```

Returns a query for querying the database for a media object. :param identifier: The identifier of the media object in the CE. :param creator: The person, organization or service who created the thing the web resource is about. :param contributor: A person, an organization, or a service responsible for contributing the media object to the web resource. This can be either a name or a base URL. :param encodingformat: AMimeType of the format of object encoded by the media object. :param source: The URL of the web resource to be represented by the node. :param contenturl: The URL of the content encoded by the media object. :param inlanguage: The language of the media object. Currently supported languages are en,es,ca,nl,de,fr. :param filter\_: return nodes with this custom filter :param return\_items: return these items in the response

**Returns** The string for the quereing the media object.

**Raises** `UnsupportedLanguageException if the input language is not one of the supported languages.` –

## 1.3 Algorithms

The algorithms module allows for the realtime interaction between external algorithms and the CE.

## 1.4 TROMPA Schema

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