geonode$_{c}ustom_{m}etadataappDocumentation$

Release latest

Mar 10, 2023

CONTENTS

Custom metadata

Attention this application is under development and not released for live operation.

CHAPTER

ONE

ABOUT

GeoNode's metadata model is based on the ISO 19115 standard. This standard defines the structure and content of metadata for geographic information and is widely used in the spatial data community. The standard includes information such as resource title, summary, keywords, spatial and temporal extent and contact information.

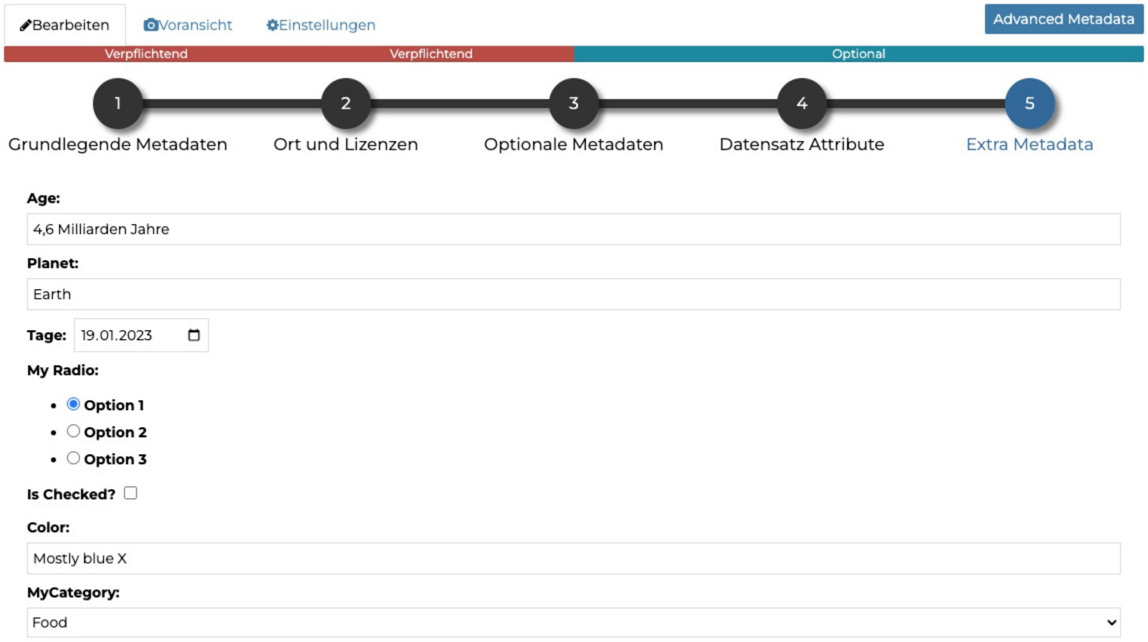
However, there is often a need to add custom metadata to layers or maps.

1.1 What can this app do for you?

This app extends

- the metadata wizard with freely definable form fields
- the metadata detail view of a resource
- the XML export of a dataset
- creates form fields for data added by the REST API

This is how the Wizard looks like with extra fields



Age:

4,6 Milliarden Jahre

Planet:

Earth

Tage: 19.01.2023

My Radio:

- ● **Option 1**
- ○ **Option 2**
- ○ **Option 3**

Is Checked? □

Color:

Mostly blue X

MyCategory:

Food

1.2 Currently available fields

The app currently offers following input fields

- NumberField
- CharField
- DateField (with a calendar picker)
- RadioSelectField
- BooleanField

and following widgets:

- TextInput
- Select
- CheckboxInput
- TextArea
- HiddenInput
- DatePicker
- RadioSelect

CHAPTER TWO

INSTALLATION

The app is currently still under development and should not be installed. It can be installed later via pypi or github. Instructions will follow.

CHAPTER

THREE

CONTRIBUTION

Participation is most welcome. The following link shows the things that are currently pending

TODO

CHAPTER

FOUR

TRANSLATIONS

By adding a file called custom_metadata/metadata_fields/translations.json one can add language specific translations. An example is shown below. The object key is the name of the field, the value the translated label.

CHAPTER

FIVE

DEVELOPMENT

This document explains the program flow in case you plan to contribute.

5.1 URLs

The app overwrites the route defined in geonode depending on the resource/app. Responsible for this are the url definitions in custom_metadata/urls

5.2 View decorators

The views defined here can be found in custom_metadata/views.py Currently there are two generic views that "decorate" the original views in geonode.

A deocrator view responsible for feeding the matdata detail view with its own template.

```
custom_metadata.views.handle_generic_metadata_form
```

A decorator view responsible for feeding a custom Django form into the context for GET requests. It also updates the m2m relation of the resource base model for POST requests.

5.3 Helpers

```
custom_metadata.dynamic_form.CreateExtraMetadataForm
```

Generates the Django form enriched with data from the database.

```
custom_metadata.get_item_config.GetItemConfig
```

Sets the appropriate configuration based on the called URL (defines the app).

```
custom_metadata.resolve_resource.resolve_resource_type
```

Reads the matching resource from the database based on the type. (used by handle_generic_metadata_form)

```
custom_metadata.get_item_config.GetItemConfig
```

Selects the right "return" object matching the app (decorated by the handle_generic_metadata_form).

5.4 Templates

The customized templates can be found in

custom_metadata/templates

5.5 Form defintions

The json based Django Form definitions can be found in

custom_metadata/metadata_fields

CHAPTER

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MANAGEMENT COMMANDS

The App currently defines three basic management commands

```
delete_all_custom_metadata
```

Delete all ManyToMany relations from geonode.models.ResourceBase

```
delete_resource_custom_metadata
```

Delete the metadata associated with a ResourceBase instance

```
show_resource_custom_metadata
```

Print the metadata associated with a ResourceBase instance