Isogeo Python SDK

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Isogeo

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QUICKSTART

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Source code https://github.com/Isogeo/isogeo-api-py-minsdk/

Issues https://github.com/Isogeo/isogeo-api-py-minsdk/issues

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CHAPTER

ONE

INDICES AND TABLES

- genindex
- modindex
- search

1.1 Installation

```
pip install isogeo-pysdk
```

1.2 Authenticate to the API

1.2.1 Load API credentials from a JSON or INI file

Isogeo delivers API credentials in a JSON file. Its structure depends on the kind of oAuth2 application you are developing. Please referer to the API documentation to know more about different types of oAuth2 application.

For example, here is the JSON structure for a "workgroup" application:

```
{
"web": {
    "client_id": "python-minimalist-sdk-test-uuid-1a2b3c4d5e6f7g8h9i0j11k12l",
    "client_secret": "application-secret-1a2b3c4d5e6f7g8h9i0j11k12l13m14n15o16p17Q18rS
↪",
    "auth_uri": "https://id.api.isogeo.com/oauth/authorize",
    "token_uri": "https://id.api.isogeo.com/oauth/token"
    }
}
```

The module isogeo_pysdk.utils comes with a method to load automatically credentials from JSON and INI files:

```
# load package
from isogeo_pysdk import Isogeo, IsogeoUtils

# instanciate IsogeoUtils as utils
utils = IsogeoUtils()

# load from file
api_credentials = utils.credentials_loader("client_secrets_group.json")
```

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```
# could also be:
# api_credentials = utils.credentials_loader("client_secrets_user.json")
# api_credentials = utils.credentials_loader("client_secrets.ini")

# authenticate your client application
isogeo = Isogeo(client_id=api_credentials.get("client_id"),
                client_secret=api_credentials.get("client_secret")
                )

# get the token
isogeo.connect()
```

Keys of returned dict:

- auth_mode
- client_id
- client_secret
- scopes
- uri_auth
- uri_base
- uri_redirect
- uri_token

1.2.2 Authenticate using oAuth2 Client Credentials Grant ("group application")

This is the oAuth2 Backend Application flow, used by the named "group application" in Isogeo terms.

Supposing secrets are stored as environment variables:

```
# for oAuth2 Backend (Client Credentials Grant) Flow
isogeo = Isogeo(
    auth_mode="group",
    client_id=environ.get("ISOGEO_API_GROUP_CLIENT_ID"),
    client_secret=environ.get("ISOGEO_API_GROUP_CLIENT_SECRET"),
    auto_refresh_url="{}/oauth/token".format(environ.get("ISOGEO_ID_URL")),
    platform=environ.get("ISOGEO_PLATFORM", "qa"),
    max_retries=1,
)

# getting a token
isogeo.connect()
```

1.3 Usage

1.3.1 Manipulate shares

Shares are the features allowing to manage access to metadata catalogs via applications such as GIS plugins or Isogeo2office.

Get informations about shares (2 methods)

There are several ways to obtain more or less detailed informations about the shares accessible to an API client.

```
from isogeo_pysdk import Isogeo

# authenticate your client application
isogeo = Isogeo(
    client_id=app_id,
    client_secret=app_secret,
    auto_refresh_url=isogeo_token_uri,
)

# get the token
isogeo.connect()

# -- BASIC INFORMATIONS ------------------------------------------
# by making a search
search = isogeo.search(page_size=0, whole_results=0, augment=1)  # set augment option
↪on True
# retieving shares uuid and name from search tags
shares_basic = ["{}:{}".format(k, v) for k, v in search.tags.items() if k.startswith(
↪'share:')]
print(shares_basic)

# -- DETAILED INFORMATIONS ---------------------------------------
# through API client attribute
shares_detailed = isogeo._shares
print(shares_detailed)

# properly closing connection
isogeo.close()
```

Get OpenCatalog URL for a share

OpenCatalog is an online metadata browser generated on Isogeo platform. As a third-party application, it can be set or not in a share.

Here is how to check if it's set or not in a share.

```
from isogeo_pysdk import Isogeo

# authenticate your client application
isogeo = Isogeo(
    client_id=app_id,
    client_secret=app_secret,
    auto_refresh_url=isogeo_token_uri
```

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```
)

# get the token
isogeo.connect()

# -- RETRIEVE A SHARE UUID USING SEARCH ROUTE ----------------------------------------
↪--
# get a list of detailed informations about shares accessible by the API client
shares = isogeo.share.listing()

# get one share UUID in the list
share_id = shares[0].get("_id")

# -- ONCE SHARE UUID RETRIEVED -------------------------------------------------
# make an augmented share request
share_augmented = isogeo.share.get(share_id)

if share_augmented.opencatalog_url() is not None:
    print("OpenCatalog is set: {}".format(share_augmented.opencatalog_url()))
else:
    print("OpenCatalog is not set in this share")
```

Check if a metadata is in a share

With the augmented share, it's also possible to check if a metadata is present within.

```
# -- see above to get augmented share

# get a metadata
search = isogeo.search(
    page_size=1,     # get only one result
    whole_results=0    # do not retrieve the whole application scope
)
# retrieve metadata uuid
md_id = md_search.results[0].get("_id")

# make a search on metadatas accessibles through the share
share_search = isogeo.search(
    share=share_augmented.get("_id"),  # filter on the share
    whole_results=1  # retrieve the whole application scope
)
# check if the metadata is in the result
share_mds_ids = [md.get("_id") for md in share_search.results]

if md_id in share_mds_ids:
    print("Metadata is present in this share.")
else:
    print("Not present.")

# properly closing connection
isogeo.close()
```

1.3.2 URL Builder for web applications

All examples in this section must be precede by the following code:

```
from isogeo_pysdk import IsogeoUtils, Isogeo

utils = IsogeoUtils()
# authenticate your client application
isogeo = Isogeo(
    client_id=app_id,
    client_secret=app_secret,
    auto_refresh_url=isogeo_token_uri
)

# get the token
isogeo.connect()
```

Isogeo metadata can be displyed in others web applications. Some webapps are built-in:

- OpenCatalog (oc)
- *Data portal by PixUp (pixup_portal)
- *CSW GetCapabilities (for a share)
- *CSW GetRecords (for a metadata)

It's also possible to register a custom web app (see below).

Get URL to online editor for a metadata

A metadata can only be edited by an authenticated Isogeo user (with editor level at least). A built-in method make it easy to contruct it:

```
md = isogeo.metadata.get(md_id="36fde4261bcb4ef2a849d94a50488713")

url = utils.get_edit_url(metadata=md, tab="attributes")
```

Get OpenCatalog URL for a metadata

```
oc_args = {
    "md_id": "36fde4261bcb4ef2a849d94a50488713",
    "share_id": "344d51c3edfb435daf9d98d948fa207e",
    "share_token": "TokenOhDearToken"
}

oc_url = utils.get_view_url(webapp="oc", **oc_args)
```

Get CSW GetCapabilities for a share

```
csw_getcap_args = {
    "share_id": "344d51c3edfb435daf9d98d948fa207e",
    "share_token": "TokenOhDearToken",
}

csw_getcap_url = utils.get_view_url(webapp="csw_getcap", **csw_getcap_args)
```

Get CSW GetRecords for a share

```
csw_getrecords_args = {
    "share_id": "344d51c3edfb435daf9d98d948fa207e",
    "share_token": "TokenOhDearToken",
}

csw_getrecords_url = utils.get_view_url(webapp="csw_getrecords", **csw_getrecords_
↪args)
```

Get CSW GetRecordById for a metadata

```
uuid_md_source = "36fde4261bcb4ef2a849d94a50488713"

csw_getrec_args = {
    "md_uuid_urn": utils.convert_uuid(uuid_md_source, 2),
    "share_id": "344d51c3edfb435daf9d98d948fa207e",
    "share_token": "TokenOhDearToken"
}

csw_getrec_url = utils.get_view_url(webapp="csw_getrec", **csw_getrec_args)
```

Register a custom webapp and get URL

```
# register the web app
utils.register_webapp(
    webapp_name="PPIGE v3",
    webapp_args=["md_id", ],
    webapp_url="https://www.ppige-npdc.fr/portail/geocatalogue?uuid={md_id}"
)
# get url
custom_url_args = {
    "md_id": "36fde4261bcb4ef2a849d94a50488713",
    "share_id": "344d51c3edfb435daf9d98d948fa207e",
    "share_token": "TokenOhDearToken"
}
custom_url = utils.get_view_url(webapp="PPIGE v3", **custom_url_args)
```

1.3.3 Download metadata as XML ISO 19139

In Isogeo, every metadata resource can be downloaded in its XML version (ISO 19139 compliant). The Python SDK package inclue a shortcut method:

```
from isogeo_pysdk import Isogeo, Metadata

# authenticate your client application
isogeo = Isogeo(
    client_id=app_id,
    client_secret=app_secret,
    auto_refresh_url=isogeo_token_uri
)

# get the token
isogeo.connect()

# search metadata
search_to_be_exported = isogeo.search(
    page_size=10,
    query="type:dataset",
    whole_results=0
)

# loop on results and export
for md in search_to_be_exported.results:
    metadata = Metadata.clean_attributes(md)
    title = metadata.title
    xml_stream = isogeo.metadata.download_xml(metadata)

    with open("{}.xml".format(title), 'wb') as fd:
        for block in xml_stream.iter_content(1024):
            fd.write(block)

# properly closing connection
isogeo.close()
```

Others examples:

- Batch export into XML within Isogeo to Office application.
- Batch export into XML in the package sample.

1.3.4 Download hosted data from Isogeo cloud

Administrators and editors can link raw data and docs (.zip, .pdf...) to metadata to allow final users to access the data. To do that, it's possible to upload data to Isogeo cloud (Azure blob storage).Through the API, it's possible to download these data:

```
from isogeo_pysdk import Isogeo

# authenticate your client application
isogeo = Isogeo(
```

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```
    client_id=app_id,
    client_secret=app_secret,
    auto_refresh_url=isogeo_token_uri
)

# get the token
isogeo.connect()

# search with _include = links and action = download
latest_data_modified = isogeo.search(
    page_size=10,
    order_by="modified",
    whole_results=0,
    query="action:download",
    include=("links",),
)

# parse links and download hosted data recursively
for md in latest_data_modified.results:
    for link in filter(lambda x: x.get("type") == "hosted", md.get("links")):
        dl_stream = isogeo.metadata.links.download_hosted(link=link)
        filename = re.sub(r'[\\/*?:"<>|]', "", dl_stream[1])
        with open(dl_stream[1], "wb") as fd:
            for block in dl_stream[0].iter_content(1024):
                fd.write(block)

# properly closing connection
isogeo.close()
```

Example:

- Batch export hosted data in the package sample.

1.3.5 Add versions to a format

It is necessary to update Isogeo database with new formats versions, so that users can properly fill metadata sheets on app.isogeo.com.

```
from isogeo_pysdk import Isogeo

# -- Authentication using 'user_legacy' flow
# Isogeo client
isogeo = Isogeo(
    auth_mode="user_legacy",
    client_id=api_dev_id,
    client_secret=api_dev_secret,
    auto_refresh_url=isogeo_token_uri
)

# getting a token
isogeo.connect(
    username=isogeo_user_name,
    password=isogeo_user_password,
)
```

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```
# get a format
fmt_postgis = isogeo.formats.get("postgis")
# add versions to this format
fmt_postgis.versions.extend(li_new_versions)
# update the format with added versions
fmt_postgis_updated = isogeo.formats.update(fmt_postgis)

# properly closing connection
isogeo.close()
```

1.4 isogeo_pysdk

1.4.1 isogeo_pysdk package

This module is an abstraction class about the Isogeo REST API.

https://www.isogeo.com/

Subpackages

isogeo_pysdk.api package

Submodules

isogeo_pysdk.api.routes_about module

Module to easily get versions about Isogeo platform components.

class isogeo_pysdk.api.routes_about.**ApiAbout**(*platform='prod'*, *proxies=None*, *protocol='https'*)

Bases: object

Routes as methods of Isogeo API used to get platform informations.

api()
Get API version.

Return type str

authentication()
Get authentication server (ID) version.

Return type str

database()
Get database version.

Return type str

scan()
Get daemon version.

Return type str

services()
Get services.api version.

Return type str

isogeo_pysdk.api.routes_account module

Isogeo API v1 - API Routes for Account entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_account.**ApiAccount**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate account (user).

get(*include='_abilities'*, *caching=1*)
Get authenticated user account(= profile) informations.

Parameters

- **include** (*tuple*) – additional parts of model to include in response
- **caching** (*bool*) – option to cache the response

Return type *User*

memberships()
Returns memberships for the authenticated user.

Example

```
>>> my_groups = isogeo.account.memberships()
>>> print(len(my_groups))
10
>>> groups_where_iam_admin = list(filter(lambda d: d.get("role") == "admin",␣
↪my_groups))
>>> print(len(groups_where_iam_admin))
5
>>> groups_where_iam_editor = list(filter(lambda d: d.get("role") == "editor",
↪ my_groups))
>>> print(len(groups_where_iam_editor))
4
>>> groups_where_iam_reader = list(filter(lambda d: d.get("role") == "reader",
↪ my_groups))
>>> print(len(groups_where_iam_reader))
1
```

Return type list

update(*account*, *caching=1*)
Update authenticated user account(= profile) informations.

Parameters

- **account** (*class*) – user account model object to update
- **caching** (*bool*) – option to cache the response

Return type *User*

isogeo_pysdk.api.routes_application module

Isogeo API v1 - API Routes for Applications entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_application.**ApiApplication**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate applications.

associate_group(*application*, *workgroup*, *force=0*)
Associate a application with a workgroup.

Parameters

- **application** (Application) – Application model object to update
- **workgroup** (Workgroup) – object to associate
- **force** (*bool*) – option to force association with multiple groups changing the *canHaveManyGroups* property

Return type tuple

create(*application*, *check_exists=1*)
Add a new application to Isogeo.

Parameters **check_exists** (*int*) – check if a application already exists inot the workgroup:

- 0 = no check
- 1 = compare name [DEFAULT]

Parameters **application** (*class*) – Application model object to create

Return type *Application*

delete(*application_id*)
Delete a application from Isogeo database.

Parameters **application_id** (*str*) – identifier of the resource to delete

dissociate_group(*application*, *workgroup*)
Removes the association between the specified group and the specified application.

Parameters

- **application** (Application) – Application model object to update
- **workgroup** (Workgroup) – object to associate

Return type tuple

exists(*application_id*)
Check if the specified application exists and is available for the authenticated user.

Parameters **application_id** (*str*) – identifier of the application to verify

Return type bool

get(*application_id*, *include='_abilities', 'groups'*)
Get details about a specific application.

Parameters

- **application_id** (*str*) – application UUID
- **include** (*tuple*) – additionnal subresource to include in the response

Return type *Application*

listing(*workgroup_id=None*, *include='_abilities'*, *caching=1*)
Get all applications which are accessible by the authenticated user OR applications for a workgroup.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup. If *None*, then list applications for the autenticated user
- **include** (*tuple*) – additionnal subresource to include in the response.
- **caching** (*bool*) – option to cache the response

Return type list

update(*application*, *caching=1*)
Update a application owned by a workgroup.

Parameters

- **application** (*class*) – Application model object to update
- **caching** (*bool*) – option to cache the response

Return type *Application*

workgroups(*application_id=None*)
Get all groups associated with an application.

Parameters **application_id** (*str*) – identifier of the application

Return type list

isogeo_pysdk.api.routes_catalog module

Isogeo API v1 - API Routes for Catalogs entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_catalog.**ApiCatalog**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate catalogs.

associate_metadata(*metadata*, *catalog*)
Associate a metadata with a catalog.

If the specified catalog is already associated, the response is still 204.

Parameters

- **metadata** (Union[*Metadata*, Tuple[*Metadata*, ...]]) – metadata object to update
- **catalog** (Catalog) – catalog model object to associate

Example

```
isogeo.catalog.associate_metadata(
    isogeo.metadata.get(METADATA_UUID),
    isogeo.catalog.get(WORKGROUP_UUID, CATALOG_UUID)
    )

<Response [204]>
```

Return type Response

create(*workgroup_id*, *catalog*, *check_exists=1*)
Add a new catalog to a workgroup.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **catalog** (*class*) – Catalog model object to create
- **check_exists** (*bool*) – check if a catalog already exists into the workgroup:
  - 0 = no check
  - 1 = compare name [DEFAULT]

Returns the created catalog or False if a similar cataog already exists or a tuple with response error code

Return type *Catalog*

delete(*workgroup_id*, *catalog_id*)
Delete a catalog from Isogeo database.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **catalog_id** (*str*) – identifier of the resource to delete

dissociate_metadata(*metadata*, *catalog*)
Removes the association between a metadata and a catalog.

If the specified catalog is not associated, the response is 404.

Parameters

- **metadata** (Metadata) – metadata object to update
- **catalog** (Catalog) – catalog model object to associate

Return type Response

exists(*workgroup_id*, *catalog_id*)
Check if the specified catalog exists and is available for the authenticated user.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **catalog_id** (*str*) – identifier of the catalog to verify

Return type bool

get(*workgroup_id*, *catalog_id*, *include='_abilities', 'count'*)
Get details about a specific catalog.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **catalog_id** (*str*) – catalog UUID
- **include** (*list*) – additionnal subresource to include in the response

Return type *Catalog*

listing(*workgroup_id=None*, *include='_abilities', 'count'*, *caching=1*)

Get workgroup catalogs.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **include** (*tuple*) – additionnal subresource to include in the response
- **caching** (*bool*) – option to cache the response

Return type list

Example

```
# retrieve the catalogs of workgroup
wg_catalogs = isogeo.catalog.listing(
    workgroup_id=isogeo_workgroup._id,
    include=None
)
# filter on catalogs with the Sacn checked
for cat in wg_catalogs:
    if cat.get("$scan", False):
        print(cat.get("name"))
```

metadata(*metadata_id*)

List metadata's catalogs with complete information.

Parameters **metadata_id** (*str*) – metadata UUID

Returns the list of catalogs associated with the metadata

Return type list

shares(*catalog_id*)

Returns shares for the specified catalog.

Parameters **catalog_id** (*str*) – catalog UUID

Returns list of Shares containing the catalog

Return type list

statistics(*catalog_id*)

Returns statistics for the specified catalog.

Parameters **catalog_id** (*str*) – catalog UUID

Return type dict

statistics_by_tag(*catalog_id*, *tag*)

Returns statistics on a specific tag for the specified catalog.

Be careful: if an invalid character is present into the response (e.g. contact.name = 'bureau GF-3A'), a ConnectionError / ReadTimeout will be raised.

Parameters

- **catalog_id** (*str*) – catalog UUID

- **tag** (*str*) – tag name. Must be one of: catalog, coordinate-system, format, keyword:inspire-theme, keyword, owner

Return type dict

update(*catalog*, *caching=1*)
Update a catalog owned by a workgroup.

Parameters

- **catalog** (*class*) – Catalog model object to update
- **caching** (*bool*) – option to cache the response

Return type *Catalog*

isogeo_pysdk.api.routes_condition module

Isogeo API v1 - API Routes for Conditions entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_condition.**ApiCondition**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate conditions.

create(*metadata*, *condition*)
Add a new condition (license + specific description) to a metadata.

Parameters

- **metadata** (Metadata) – metadata object to update
- **condition** (Condition) – condition to create

Return type *Condition*

delete(*metadata*, *condition*)
Removes a condition from a metadata.

Parameters

- **metadata** (Metadata) – metadata object to update
- **condition** (Condition) – license model object to associate

Return type Response

get(*metadata_id*, *condition_id*)
Get details about a specific condition.

Parameters

- **metadata_id** (*str*) – identifier of the owner workgroup
- **condition_id** (*str*) – condition UUID

Return type *Condition*

listing(*metadata_id*)
List metadata's conditions with complete information.

Parameters **metadata_id** (*str*) – metadata UUID

Returns the list of conditions associated with the metadata

Return type list

isogeo_pysdk.api.routes_conformity module

Isogeo API v1 - API Routes for Conformity entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_conformity.**ApiConformity**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate conformity with specifications.

create(*metadata*, *conformity*)
Add a new conformity (specification + specific conformant) to a metadata.

Parameters

- **metadata** (Metadata) – metadata object to update
- **conformity** (Conformity) – conformity to create

Return type *Conformity*

delete(*metadata*, *conformity=None*, *specification_id=None*)
Removes a conformity from a metadata.

Parameters

- **metadata** (Metadata) – metadata object to update
- **conformity** (Conformity) – specification model object to associate. If empty, the specification_id must be passed.
- **specification_id** (Specification) – specification model object to associate. If empty, the conformity must be passed.

Return type Response

listing(*metadata_id*)
List metadata's conformity specifications with complete information.

Parameters **metadata_id** (*str*) – metadata UUID

Returns the list of specifications + conformity status associated with the metadata

Return type list

isogeo_pysdk.api.routes_contact module

Isogeo API v1 - API Routes for Contacts entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_contact.**ApiContact**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate contacts.

associate_metadata(*metadata*, *contact*, *role='pointOfContact'*)
Associate a metadata with a contact.

If the specified contact is already associated, the response is still 200.

Parameters

- **metadata** (Metadata) – metadata object to update
- **contact** (Contact) – contact model object to associate
- **role** (*str*) – role to assign to the contact

Example

```
# retrieve a metadata
md = isogeo.metadata.get(METADATA_UUID)
# retrieve a contact
ctct = isogeo.contact.get(CONTACT_UUID)
# associate a contact to a metadata
isogeo.contact.associate_metadata(metadata = md, contact = ctct)
```

Return type Response

create(*workgroup_id*, *contact*, *check_exists=1*)

Add a new contact to a workgroup.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **contact** (*class*) – Contact model object to create
- **check_exists** (*int*) – check if a contact already exists inot the workgroup:
  - 0 = no check
  - 1 = compare name [DEFAULT]
  - 2 = compare email

Returns the created contact or the existing contact if case oof a matching name or email or a tuple with response error code

Return type *Contact*

delete(*workgroup_id*, *contact_id*)

Delete a contact from Isogeo database.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **contact_id** (*str*) – identifier of the resource to delete

dissociate_metadata(*metadata*, *contact*)

Removes the association between a metadata and a contact.

If the specified contact is not associated, the response is 404.

Parameters

- **metadata** (Metadata) – metadata object to update
- **contact** (Contact) – contact model object to associate

Return type Response

exists(*contact_id*)

Check if the specified contact exists and is available for the authenticated user.

Parameters **contact_id** (*str*) – identifier of the contact to verify

Return type bool

get(*contact_id*)
Get details about a specific contact.

Parameters **contact_id** (*str*) – contact UUID

Return type *Contact*

listing(*workgroup_id=None*, *include='count'*, *caching=1*)
Get workgroup contacts.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **include** (*tuple*) – identifier of the owner workgroup
- **caching** (*bool*) – option to cache the response

Return type list

update(*contact*, *caching=1*)
Update a contact owned by a workgroup.

Parameters

- **contact** (*class*) – Contact model object to update
- **caching** (*bool*) – option to cache the response

Return type *Contact*

isogeo_pysdk.api.routes_coordinate_systems module

Isogeo API v1 - API Routes to retrieve CoordinateSystems

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_coordinate_systems.**ApiCoordinateSystem**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate coordinate-systems.

associate_metadata(*metadata*, *coordinate_system*)
Associate a coordinate-system (SRS) to a metadata.

If a coordinate-system is already associated to the metadata, it'll be oversritten.

Parameters

- **metadata** (Metadata) – metadata object to update
- **coordinate_system** (CoordinateSystem) – coordinate-system model object to associate

Return type *CoordinateSystem*

Example

```
# retrieve metadata
md = isogeo.metadata.get(
        metadata_id=METADATA_UUID,
        include=()
)
```

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```
# retrieve one of the SRS selected in the workgroup of the metadata
wg_srs = self.isogeo.coordinate_system.listing(md._creator.get("_id
↪"))
random_srs = CoordinateSystem(**sample(wg_srs, 1)[0])
# associate them
isogeo.coordinateSystem.associate_metadata(
    metadata=md,
    coordinateSystem=random_srs,
)
```

associate_workgroup(*coordinate_system*, *workgroup=None*)

Add a coordinate system to the workgroup selection or/adn edit the SRS custom alias.

Parameters

- **coordinate_system** (CoordinateSystem) – EPSG code of the coordinate system to add to the workgroup selection
- **workgroup** (Workgroup) – identifier of the owner workgroup.

Return type *CoordinateSystem*

Example

```
# retrieve the SRS
coordsys = isogeo.srs.get("4326")
# add a custom alias
coordsys.alias = "World SRS"
# add it to the workgroup selection
isogeo.srs.associate_workgroup(
    workgroup=isogeo.workgroup.get(WORKGROUP_UUID),
    coordinate_system=coordsys
)
```

dissociate_metadata(*metadata*)

Removes the coordinate-system from a metadata.

Parameters **metadata** (Metadata) – metadata object to update

Return type Response

dissociate_workgroup(*coordinate_system_code*, *workgroup_id=None*)

Remove a coordinate system from the workgroup selection.

Parameters

- **coordinate_system_code** (*str*) – EPSG code of the coordinate system to reomve from the workgroup selection
- **workgroup_id** (*str*) – identifier of the owner workgroup.

Return type *CoordinateSystem*

Example

```
>>> isogeo.srs.dissociate_workgroup(
    workgroup_id=WORKGROUP_TEST_FIXTURE_UUID,
    coordinate_system_code="2154"
    )
```

get(*coordinate_system_code*, *workgroup_id=None*)
Get details about a specific coordinate_system, from the whole Isogeo database or into a specific workgroup (to get the SRS alias for example).

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup. OPTIONNAL: if present, list SRS slected into the workgroup.
- **coordinate_system_code** (*str*) – EPSG code of the coordinate system

Return type *CoordinateSystem*

Example

```
>>> # list all coordinate-systems in the whole Isogeo database
>>> srs = isogeo.srs.listing()
>>> # print details about the first SRS found
>>> pprint.pprint(isogeo.srs.get(srs[0].get("code")))
{
    '_tag': 'coordinate-system:4143',
    'code': 4143,
    'name': 'Abidjan 1987'
}
```

listing(*workgroup_id=None*, *caching=1*)
Get coordinate-systems in the whole Isogeo database or into a specific workgroup.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup. OPTIONNAL: if present, list SRS slected into the workgroup.
- **caching** (*bool*) – option to cache the response

Return type list

Example

```
>>> # list all coordinate-systems in the whole Isogeo database
>>> srs = isogeo.srs.listing()
>>> print(len(srs))
4301
>>> # list coordinate-systems which have been selected in a specific workgroup
>>> srs = isogeo.srs.listing(workgroup_id=WORKGROUP_UUID)
>>> print(len(srs))
5
```

isogeo_pysdk.api.routes_datasource module

Isogeo API v1 - API Routes for Datasources entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_datasource.**ApiDatasource**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate datasources (CSW entry-points).

create(*workgroup_id*, *datasource={'_created': None, '_id': None, '_modified': None, '_tag': None, 'enabled': None, 'lastSession': None, 'location': None, 'name': None, 'resourceCount': None, 'sessions': None}*, *check_exists=2*)
Add a new datasource to a workgroup.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **check_exists** (*int*) – check if a datasource already exists inot the workgroup:

- 0 = no check
- 1 = compare name
- 2 = compare URL (location) [DEFAULT]

Parameters **datasource** (*class*) – Datasource model object to create

Return type *Datasource*

datasource(*workgroup_id*, *datasource_id*)
Get details about a specific datasource.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **datasource_id** (*str*) – datasource UUID

Return type *Datasource*

delete(*workgroup_id*, *datasource_id*)
Delete a datasource from Isogeo database.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **datasource_id** (*str*) – identifier of the resource to delete

exists(*workgroup_id*, *datasource_id*)
Check if the specified datasource exists and is available for the authenticated user.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **datasource_id** (*str*) – identifier of the datasource to verify

Return type bool

listing(*workgroup_id=None*, *include=None*, *caching=1*)
Get workgroup datasources.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **include** (*list*) – additionnal subresource to include in the response
- **caching** (*bool*) – option to cache the response

Return type list

update(*workgroup_id*, *datasource*, *caching=1*)
Update a datasource owned by a workgroup.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **datasource** (*class*) – Datasource model object to update
- **caching** (*bool*) – option to cache the response

Return type *Datasource*

isogeo_pysdk.api.routes_directives module

Isogeo API v1 - API Routes to retrieve EU environment code Directives used as INSPIRE limitations

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_directives.**ApiDirective**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate directives (Europe Environment code for INSPIRE limitations).

listing(*caching=1*)
Get directives.

Parameters **caching** (*bool*) – option to cache the response

Return type list

isogeo_pysdk.api.routes_event module

Isogeo API v1 - API Routes for Events entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_event.**ApiEvent**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate events.

create(*metadata*, *event*)
Add a new event to a metadata (= resource).

Parameters

- **metadata** (Metadata) – metadata (resource) to edit
- **Event** (Event) – event object to create

Return type *Event*

delete(*event*, *metadata=None*)
Delete a event from Isogeo database.

Parameters

- **event** (*class*) – Event model object to delete
- **metadata** (Metadata) – parent metadata (resource) containing the event

event(*metadata_id*, *event_id*)
Get details about a specific event.

Parameters

- **event_id** (*str*) – event UUID to get
- **event_id** – event UUID

Return type *Event*

listing(*metadata*)
Get all events of a metadata.

Parameters **metadata** (Metadata) – metadata (resource) to edit

Return type list

update(*event*, *metadata=None*)
Update an event.

Parameters

- **event** (*class*) – Event model object to update
- **metadata** (Metadata) – parent metadata (resource) containing the event

Return type *Event*

isogeo_pysdk.api.routes_feature_attributes module

Isogeo API v1 - API Routes for FeatureAttributes entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_feature_attributes.**ApiFeatureAttribute**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate feature attributes into a Metadata.

create(*metadata*, *attribute*)
Add a new feature attribute to a metadata (= resource).

Parameters

- **metadata** (Metadata) – metadata (resource) to edit
- **attribute** (FeatureAttribute) – feature-attribute object to create

Returns 409 if an attribute with the same name already exists.

Return type *FeatureAttribute* or tuple

Example

```
>>> # retrieve metadata
>>> md = isogeo.metadata.get(METADATA_UUID)
>>> # create the attribute locally
>>> new_attribute = FeatureAttribute(
    alias="Code INSEE de la commune",
    name="INSEE_COM",
    description="Une commune nouvelle résultant d'un regroupement de communes
↪"
    "préexistantes se voit attribuer le code INSEE de l'ancienne␣
↪commune "
    "désignée comme chef-lieu par l'arrêté préfectoral qui l'institue.
↪"
    "En conséquence une commune change de code INSEE si un arrêté "
```

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```
    "préfectoral modifie son chef-lieu.",
    dataType="CharacterString (5)",
    language="fr",
    )
>>> # add it to the metadata
>>> isogeo.metadata.attributes.create(md, new_attribute)
```

delete(*attribute*, *metadata=None*)

Delete a feature-attribute from a metadata.

Parameters

- **attribute** (FeatureAttribute) – FeatureAttribute model object to delete
- **metadata** (Metadata) – parent metadata (resource) containing the feature-attribute

get(*metadata_id*, *attribute_id*)

Get details about a specific feature-attribute.

Parameters

- **metadata_id** (*str*) – metadata UUID
- **attribute_id** (*str*) – feature-attribute UUID

Example

```
>>> # get a metadata
>>> md = isogeo.metadata.get(METADATA_UUID)
>>> # list all og its attributes
>>> md_attributes = isogeo.metadata.attributes.listing(md)
>>> # get the first attribute
>>> attribute = isogeo.metadata.attributes.get(
    metadata_id=md._id,
    attribute_id=md_attributes[0].get("_id")
    )
```

Return type *FeatureAttribute*

import_from_dataset(*metadata_source*, *metadata_dest*, *mode='add'*)

Import feature-attributes from another vector metadata.

Parameters

- **metadata_source** (Metadata) – metadata from which to import the attributes
- **metadata_dest** (Metadata) – metadata where to import the attributes
- **mode** (*str*) – mode of import, defaults to 'add':
  - 'add': add the attributes except those with a duplicated name
  - 'update': update only the attributes with the same name
  - 'update_or_add': update the attributes with the same name or create

Raises

- **TypeError** – if one metadata is not a vector
- **ValueError** – if mode is not one of accepted value

Example

```
# get the metadata objects
md_source = isogeo.metadata.get(METADATA_UUID_SOURCE)
md_dest = isogeo.metadata.get(METADATA_UUID_DEST)

# launch import
isogeo.metadata.attributes.import_from_dataset(md_source, md_dest, "add")
```

Return type bool

listing(*metadata*)
Get all feature-attributes of a metadata.

Parameters **metadata** (Metadata) – metadata (resource)

Return type list

update(*attribute*, *metadata=None*)
Update a feature-attribute.

Parameters

- **attribute** (FeatureAttribute) – Feature Attribute model object to update
- **metadata** (Metadata) – parent metadata (resource) containing the feature-attribute

Return type *FeatureAttribute*

isogeo_pysdk.api.routes_format module

Isogeo API v1 - API Routes for Formats entities

See: http://help.isogeo.com/api/complete/index.html

NOTE: *format* being the name of a Python built-in function (see: https://docs.python.org/3/library/functions.html#format), we use the *frmt* shorter as replacement.

class isogeo_pysdk.api.routes_format.**ApiFormat**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate formats.

create(*frmt*, *check_exists=1*)
Add a new format to the Isogeo formats database.

If a format with the same code already exists, the Isogeo API returns a 500 HTTP code. To prevent this error, use the check_exists option or check by yourself before.

Parameters

- **frmt** (Format) – Format model object to create
- **check_exists** (*bool*) – check if a format with the same code exists before

Return type *Format* or tuple

Example

```
format_to_add = Format(
    code="geojson",
    name="GeoJSON",
    type="vectorDataset"
```

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```
)
isogeo.formats.create(format_to_add)
```

delete (*frmt*)
Delete a format from Isogeo database.

Parameters **frmt** (Format) – Format model object to delete

get (*format_code*)
Get details about a specific format.

Parameters **format_code** (*str*) – format code

Return type *Format*

Example

```
>>> pprint.pprint(isogeo.formats.get("postgis"))
{
    '_id': string (uuid),
    '_tag': 'format:postgis',
    'aliases': [],
    'code': 'postgis',
    'name': 'PostGIS',
    'type': 'dataset',
    'versions': [
        '2.2',
        '2.1',
        '2.0',
        '1.5',
        '1.4',
        '1.3',
        '1.2',
        '1.1',
        '1.0',
        '0.9',
        None
        ]
}
```

listing (*data_type=None*, *caching=1*)
List formats available in Isogeo API.

Parameters

- **data_type** (*str*) – type of metadata to filter on
- **caching** (*bool*) – option to cache the response

Returns list of dicts

Return type list

Example

```
>>> formats = isogeo.formats.listing()
>>> # count all formats
>>> print(len(formats))
32
>>> # count formats which are only for vector dataset
```

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```
>>> print(len(isogeo.formats.listing(data_type="vector-dataset")))
21
>>> # list all unique codes
>>> formats_codes = [i.get("code") for i in formats]
>>> pprint.pprint(formats_codes)
[
    'apic',
    'arcsde',
    'dgn',
    'dwg',
    'dxf',
    ...
]
```

nogeo_search (*query=None*, *page_size=10*, *offset=0*)

Search within data formats available in Isogeo API for NON GEOGRAPHICAL DATA ONLY.

Parameters

- **query** (*str*) – search terms. Equivalent of **q** parameter in Isogeo API.
- **page_size** (*int*) – limits the number of results. Useful to paginate results display. Default value: 10. Max value: 100.
- **offset** (*int*) – offset to start page size from a specific results index

Returns list of dicts

Return type list

Example

```
>>> isogeo.formats.search(query="a", page_size=1, offset=0)
[
    {
        'aliases': [],
        'name': 'Adobe PDF',
        'versions':
        [
            '7',
            '1.7',
            None,
            None
        ]
    }
]
```

update (*frmt*)

Update a format in Isogeo database.

Parameters **frmt** (Format) – Format model object to update

Return type *Format*

Example

```
>>> # retrieve format to update
>>> fmt_postgis = isogeo.formats.get("postgis")
>>> # add new versions locally
>>> fmt_postgis.versions.extend(["3.0", "3.1"])
```

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```
>>> # update online
>>> fmt_postgis_updted = isogeo.formats.update(fmt_postgis)
```

isogeo_pysdk.api.routes_invitation module

Isogeo API v1 - API Routes for Invitations entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_invitation.**ApiInvitation**(*api_client=None*)

Bases: object

Routes as methods of Isogeo API used to manipulate invitations.

accept(*invitation=<class 'isogeo_pysdk.models.invitation.Invitation'>*)

Accept the invitation to join an Isogeo Workgroup.

Parameters **invitation** (*class*) – Invitation model object to accept

Return type *Invitation*

create(*workgroup_id*, *invitation={'_created': None, '_id': None, '_modified': None, 'email': None, 'expiresIn': None, 'group': None, 'role': None}*)

Add a new invitation to Isogeo.

Parameters **invitation** (*class*) – Invitation model object to create

Return type *Invitation*

Example

```
>>> # create the invitation locally
>>> invit = Invitation(
    email="prenom.nom@organisation.com",
    role="admin"
    )
>>> # send the invitation
>>> isogeo.invitation.create(WORKGROUP_UUID, new_invit)
```

decline(*invitation=<class 'isogeo_pysdk.models.invitation.Invitation'>*)

Decline the invitation to join an Isogeo Workgroup.

Parameters **invitation** (*class*) – Invitation model object to decline

Return type *Invitation*

delete(*invitation_id*)

Delete an invitation from Isogeo database.

Parameters **invitation_id** (*str*) – identifier of the invitation

get(*invitation_id*)

Get details about a specific invitation.

Parameters **invitation_id** (*str*) – invitation UUID

Return type *Invitation*

listing(*workgroup_id*)

Returns pending invitations (including expired) for the specified workgroup.

Parameters **workgroup_id** (*str*) – workgroup UUID

Return type list

update(*invitation*)
Update a invitation owned by a invitation.

Parameters **invitation** (*class*) – Invitation model object to update

Return type *Invitation*

isogeo_pysdk.api.routes_keyword module

Isogeo API v1 - API Routes for Keywords entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_keyword.**ApiKeyword**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate keywords.

create(*keyword*)
Add a new keyword to the Isogeo thesaurus.

If a keyword with the same text already exists, the Isogeo API returns a 409 HTTP code. Then this method will try to get the closest matching keyword and return it.

Parameters **keyword** (Keyword) – Keyword model object to create

Return type *Keyword*

delete(*keyword*)
Delete a keyword from Isogeo database.

Parameters **keyword** (Keyword) – Keyword model object to create

get(*keyword_id*, *include='_abilities', 'count', 'thesaurus'*)
Get details about a specific keyword.

Parameters

- **keyword_id** (*str*) – keyword UUID
- **include** (*tuple*) – additionnal subresource to include in the response

Example

```
>>> # get a metadata with its tags (or keywords)
>>> md = isogeo.metadata.get(METADATA_UUID, include=("tags",))
>>> # list Isogeo keywords
>>> li_keywords_uuids = [
    tag[8:] for tag in self.metadata_source.tags
    if tag.startswith("keyword:isogeo:")
    ]
>>> # pick a random one
>>> random_keyword = sample(li_keywords_uuid, 1)[0]
>>> # get its details
>>> keyword = isogeo.keyword.get(random_keyword)
```

Return type *Keyword*

metadata(*metadata_id=None*, *include='_abilities', 'count', 'thesaurus'*)
List a metadata's keywords with complete information.

Parameters

- **metadata_id** (*str*) – metadata UUID
- **include** (*tuple*) – subresources that should be returned. Available values:
  - '_abilities'
  - 'count'
  - 'thesaurus'

Return type list

tagging (*metadata*, *keyword*, *check_exists=0*)
Associate a keyword to a metadata.

Parameters

- **metadata** (Metadata) – metadata (resource) to edit
- **keyword** (Keyword) – object to associate
- **check_exists** (*bool*) – check if a metadata with the same service base URL and format already exists. Defaults to True.

Example

```
# retrieve a metadata
md = isogeo.metadata.get(METADATA_UUID)
# retrieve a keyword
kw = isogeo.keyword.get(KEYWORD_UUID)
# associate a keyword to a metadata
isogeo.keyword.tagging(metadata = md, keyword = kw)
```

Return type dict

thesaurus (*thesaurus_id='1616597fbc4348c8b11ef9d59cf594c8'*, *query=''*, *offset=0*, *order_by='text'*, *order_dir='desc'*, *page_size=20*, *specific_md=[]*, *specific_tag=[]*, *include='_abilities', 'count'*, *caching=1*)
Search for keywords within a specific thesaurus or a specific group.

Parameters

- **thesaurus_id** (*str*) – thesaurus UUID
- **query** (*str*) – search terms, equivalent of **q** parameter in API.
- **offset** (*int*) – offset to start page size from a specific results index
- **order_by** (*str*) – sorting results. Available values:
  - 'count.isogeo': count of associated resources within Isogeo
  - 'text': alphabetical order [DEFAULT if relevance is null]
- **order_dir** (*str*) – sorting direction. Available values:
  - 'desc': descending [DEFAULT]
  - 'asc': ascending
- **page_size** (*int*) – limits the number of results. Default: 20.
- **specific_md** (*list*) – list of metadata UUIDs to filter on
- **specific_tag** (*list*) – list of tags UUIDs to filter on

- **include** (*tuple*) – subresources that should be returned. Available values:
  - '_abilities'
  - 'count'
  - 'thesaurus'

Return type *KeywordSearch*

untagging(*metadata*, *keyword*)
Dissociate a keyword from a metadata.

Parameters

- **metadata** (Metadata) – metadata (resource) to edit
- **keyword** (Keyword) – object to associate

Return type dict

workgroup(*workgroup_id=None*, *thesaurus_id=None*, *query=''*, *offset=0*, *order_by='text'*, *order_dir='desc'*, *page_size=20*, *specific_md=[]*, *specific_tag=[]*, *include='_abilities', 'count', 'thesaurus'*, *caching=1*)
Search for keywords within a specific group's used thesauri.

Parameters

- **thesaurus_id** (*str*) – thesaurus UUID to filter on
- **query** (*str*) – search terms, equivalent of **q** parameter in API.
- **offset** (*int*) – offset to start page size from a specific results index
- **order_by** (*str*) – sorting results. Available values:
  - 'count.group': count of associated resources within the specified group
  - 'count.isogeo': count of associated resources within Isogeo
  - 'text': alphabetical order [DEFAULT]
- **order_dir** (*str*) – sorting direction. Available values:
  - 'desc': descending [DEFAULT]
  - 'asc': ascending
- **page_size** (*int*) – limits the number of results. Default: 20.
- **specific_md** (*list*) – list of metadata UUIDs to filter on
- **specific_tag** (*list*) – list of tags UUIDs to filter on
- **include** (*tuple*) – subresources that should be returned. Available values:
  - '_abilities'
  - 'count'
  - 'thesaurus'

Return type *KeywordSearch*

isogeo_pysdk.api.routes_license module

Isogeo API v1 - API Routes for Licenses (= CGUs, conditions) entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_license.**ApiLicense**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate licenses (conditions).

associate_metadata(*metadata*, *license*, *description*, *force=0*)
Associate a condition (license + specific description) to a metadata. When a license is associated to a metadata, it becomes a condition.

By default, if the specified license is already associated, the method won't duplicate the association. Use *force* option to overpass this behavior.

Parameters

- **metadata** (Metadata) – metadata object to update
- **license** (License) – license model object to associate
- **description** (*str*) – additional description to add to the association. Optional.
- **force** (*bool*) – force association even if the same license is already associated

Example

```
>>> # retrieve objects to be associated
>>> md = isogeo.metadata.get(
        metadata_id="6b5cc93626634d0e9b0d2c48eff96bc3",
        include=['conditions']
    )
>>> lic = isogeo.license.license("f6e0c665905a4feab1e9c1d6359a225f")
>>> # associate them
>>> isogeo.license.associate_metadata(
        metadata=md,
        license=lic,
        description="Specific description for this license when applied to␣
↪this metadata."
    )
```

Return type Response

create(*workgroup_id*, *check_exists=1*, *license={'_abilities': None, '_id': None, '_tag': None, 'content': None, 'count': None, 'link': None, 'name': None, 'owner': None}*)
Add a new license to a workgroup.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **check_exists** (*int*) – check if a license already exists inot the workgroup:

- 0 = no check
- 1 = compare name [DEFAULT]

Parameters **license** (*class*) – License model object to create

Return type *License*

delete (*workgroup_id*, *license_id*)
Delete a license from Isogeo database.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **license_id** (*str*) – identifier of the resource to delete

exists (*license_id*)
Check if the specified license exists and is available for the authenticated user.

Parameters **license_id** (*str*) – identifier of the license to verify

Return type bool

get (*license_id*)
Get details about a specific license.

Parameters **license_id** (*str*) – license UUID

Return type *License*

listing (*workgroup_id=None*, *include='_abilities', 'count'*, *caching=1*)
Get workgroup licenses.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **include** (*tuple*) – additionnal subresource to include in the response
- **caching** (*bool*) – option to cache the response

Return type list

update (*license*, *caching=1*)
Update a license owned by a workgroup.

Parameters

- **license** (*class*) – License model object to update
- **caching** (*bool*) – option to cache the response

Return type *License*

isogeo_pysdk.api.routes_limitation module

Isogeo API v1 - API Routes to manage metadata limitations.

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_limitation.**ApiLimitation** (*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate metadata limitations (CGUs).

create (*metadata*, *limitation*)
Add a new limitation to a metadata (= resource).

Parameters

- **metadata** (Metadata) – metadata (resource) to edit
- **limitation** (Limitation) – limitation object to create

Returns 409 if a limitation with the same name already exists.

Return type *Limitation* or tuple

Example

```
# retrieve metadata
md = isogeo.metadata.get(METADATA_UUID)
# create the limitation locally
new_limitation = Limitation(
    type="legal",
    restriction="patent",
    description="Do not use for commercial purpose.",
    )
# add it to the metadata
isogeo.metadata.limitations.create(md, new_limitation)
```

delete(*limitation*, *metadata=None*)

Delete a limitation from a metadata.

Parameters

- **limitation** (Limitation) – Limitation model object to delete
- **metadata** (Metadata) – parent metadata (resource) containing the limitation

get(*metadata_id*, *limitation_id*)

Get details about a specific limitation.

Parameters

- **metadata_id** (*str*) – metadata UUID
- **limitation_id** (*str*) – limitation UUID

Example

```
>>> # get a metadata
>>> md = isogeo.metadata.get(METADATA_UUID)
>>> # list its limitations
>>> md_limitations = isogeo.metadata.limitations.listing(md)
>>> # get the first limitation
>>> limitation = isogeo.metadata.limitations.get(
    metadata_id=md._id,
    limitation_id=md_limitations[0].get("_id")
    )
```

Return type *Limitation*

listing(*metadata*)

Get limitations of a metadata.

Parameters **metadata** (Metadata) – metadata (resource)

Return type list

update(*limitation*, *metadata=None*)

Update a limitation.

Parameters

- **limitation** (Limitation) – Limitation model object to update

- **metadata** (Metadata) – parent metadata (resource) containing the limitation

Return type *Limitation*

isogeo_pysdk.api.routes_link module

Isogeo API v1 - API Routes to manage metadata links.

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_link.**ApiLink**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate metadata links (CGUs).

clean_kind_action_liability(*link_actions*, *link_kind*)
Link available actions depend on link kind. Relationships between kinds and actions are described in the */link-kinds* route. This is a helper checking the liability between kind/actions/type and cleaning if needed. Useful before creating or updating a link.

Parameters

- **link_actions** (*list*) – link actions
- **link_kind** (*str*) – link kind

Return type tuple

Example

```
# invalid action will be removed
print(isogeo.metadata.links.clean_kind_action_liability(
    link_actions=("download", "stream"),
    link_kind="url"
    )
)
>>> ('download',)
```

create(*metadata*, *link*)
Add a new link to a metadata (= resource).

Parameters

- **metadata** (Metadata) – metadata (resource) to edit
- **link** (Link) – link object to create

Returns the created link or a tuple with the request's response error code

Return type *Link* or tuple

Example

```
# retrieve metadata
md = isogeo.metadata.get(METADATA_UUID)
# create the link locally
new_link = Link(
    type="url",
    restriction="patent",
    description="Do not use for commercial purpose.",
    )
# add it to the metadata
```

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```
isogeo.metadata.links.create(md, new_link)

# to create a link which is a pointer to another link, add the link attribute:
new_link = Link(
    actions=["other"],
    title="Associated link",
    kind="url",
    type="link",
    link=Link(_id=LINK_UUID)
    )
```

delete(*link*, *metadata=None*)

Delete a link from a metadata.

Parameters

- **link** (Link) – Link model object to delete
- **metadata** (Metadata) – parent metadata (resource) containing the link. Optional if the link contains the 'parent_resource' attribute.

Return type Response

download_hosted(*link*, *encode_clean=1*)

Download hosted resource.

Parameters

- **link** (Link) – link object
- **encode_clean** (*bool*) – option to ensure a clean filename and avoid OS errors

Returns tuple(stream, filename, human readable size)

Return type tuple

Example:

```
# get links from a metadata
md_links = isogeo.metadata.links.listing(Metadata(_id=METADATA_UUID))
# filter on hosted links
hosted_links = [
    link for link in md_links
    if link.get("type") == "hosted"
    ]
# get the stream, the filename and the size (in human readable format)
dl_stream = isogeo.metadata.links.download_hosted(Link(**hosted_links[0]))
# download the file and store it locally
with open("./" + dl_stream[1], "wb") as fd:
    for block in dl_stream[0].iter_content(1024):
        fd.write(block)
```

get(*metadata_id*, *link_id*)

Get details about a specific link.

Parameters

- **metadata_id** (*str*) – metadata UUID
- **link_id** (*str*) – link UUID

Return type *Link*

Example

```
# get a metadata
md = isogeo.metadata.get(METADATA_UUID)
# list its links
md_links = isogeo.metadata.links.listing(md)
# get the first link
link = isogeo.metadata.links.get(
    metadata_id=md._id,
    link_id=md_links[0].get("_id")
    )
```

kinds_actions(*caching=1*)

Get the relation between kinds and action for links.

Parameters **caching** (*bool*) – cache the response into the main API client instance. Defaults to True.

Returns list of dictionaries per link kinds

Return type list

Example

```
import pprint
pprint.pprint(isogeo.metadata.links.kinds_actions())

>>> [
        {
            'actions':
            [
                'download',
                'view',
                'other'
            ],
            'kind': 'url',
            'name': 'Lien'
        },
        {
            'actions': ['download', 'view', 'other'],
            'kind': 'wfs',
            'name': 'Service WFS'
        },
        {
            'actions': ['view', 'other'],
            'kind': 'wms',
            'name': 'Service WMS'
        },
        {
            'actions': ['view', 'other'],
            'kind': 'wmts',
            'name': 'Service WMTS'
        },
        {
            'actions': ['download', 'view', 'other'],
            'kind': 'esriFeatureService',
            'name': 'Service ESRI Feature'
        },
        {
```

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```
            'actions': ['view', 'other'],
            'kind': 'esriMapService',
            'name': 'Service ESRI Map'
        },
        {
            'actions': ['view', 'other'],
            'kind': 'esriTileService',
            'name': 'Service ESRI Tile'
        },
        {
            'actions': ['download', 'other'],
            'kind': 'data',
            'name': 'Donnée brute'
        }
    ]
```

listing(*metadata*)
Get links of a metadata.

Parameters **metadata** (Metadata) – metadata (resource)

Return type list

update(*link*, *metadata=None*)
Update a link.

Parameters

- **link** (Link) – Link model object to update
- **metadata** (Metadata) – parent metadata (resource) containing the link. Optional if the link contains the 'parent_resource' attribute.

Return type *Link*

upload_hosted(*metadata*, *link*, *file_to_upload*)
Add a new link to a metadata uploading a file to hosted data. See: https://requests.readthedocs.io/en/latest/user/quickstart/#post-a-multipart-encoded-file

Parameters

- **metadata** (Metadata) – metadata (resource) to edit
- **link** (Link) – link object to create
- **file_to_upload** (*Path*) – file path to upload

Returns the new Link if successed or the tuple with the request error code

Return type *Link* or tuple

Example

```
from pathlib import Path

# define metadata
md = isogeo.metadata.get(METADATA_UUID)

# localize the file on the OS
my_file = Path("./upload/documentation.zip")

# create the link locally
```

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```
lk = Link(
    title=my_file.name
    )

# add it to the metadata
send = isogeo.metadata.links.upload_hosted(
    metadata=md,
    link=lk,
    file_to_upload=my_file.resolve()
    )
```

isogeo_pysdk.api.routes_metadata module

Isogeo API v1 - API Routes for Resources (= Metadata) entity

See: http://help.isogeo.com/api/complete/index.html#definition-resource

class isogeo_pysdk.api.routes_metadata.**ApiMetadata**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate metadatas (resources).

catalogs(*metadata*)
Returns asssociated catalogs with a metadata. Just a shortcut.

Parameters **metadata** (Metadata) – metadata object

Return type list

create(*workgroup_id*, *metadata*, *return_basic_or_complete=0*)
Add a new metadata to a workgroup.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **metadata** (Metadata) – Metadata model object to create
- **return_basic_or_complete** (*int*) – creation of metada uses a bulk script. So, by default API does not return the complete object but the minimal info. This option allow to overrides the basic behavior. Options:
  - 0 = dry (only the _id, title and attributes passed for the creation) [DEFAULT]
  - 1 = basic without any include (requires an additionnal request)
  - 2 = complete with all include (requires an additionnal request)

Return type *Metadata*

Example

```
# create a local metadata
my_metadata = Metadata(
    title="My awesome metadata",     # required
    type="vectorDataset",            # required
    abstract="Here comes my **awesome** description with a piece of markdown.
↪"  # optional
)
```

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```
# push it online
isogeo.metadata.create(
    workgroup_id=WORKGROUP_UUID,
    metadata=my_metadata
)
```

delete (*metadata_id*)
Delete a metadata from Isogeo database.

Parameters **metadata_id** (*str*) – identifier of the resource to delete

Return type Response

download_xml (*metadata*)
Download the metadata exported into XML ISO 19139.

Parameters **metadata** (Metadata) – metadata object to export

Return type Response

Example

```
# get the download stream
xml_stream = isogeo.metadata.download_xml(Metadata(_id=METADATA_UUID))
# write it to a file
with open("./{}.xml".format("metadata_exported_as_xml"), "wb") as fd:
    for block in xml_stream.iter_content(1024):
        fd.write(block)
```

exists (*resource_id*)
Check if the specified resource exists and is available for the authenticated user.

Parameters **resource_id** (*str*) – identifier of the resource to verify

Return type bool

get (*metadata_id*, *include=()*)
Get complete or partial metadata about a specific metadata (= resource).

Parameters

- **metadata_id** (*str*) – metadata UUID to get
- **include** (*tuple*) – subresources that should be included. Available values:
  - one or various from MetadataSubresources (Enum)
  - ”all” to get complete metadata with every subresource included

Return type *Metadata*

keywords (*metadata*, *include='_abilities', 'count', 'thesaurus'*)
Returns asssociated keywords with a metadata. Just a shortcut.

Parameters

- **metadata** (Metadata) – metadata object
- **include** (*tuple*) – subresources that should be returned. Available values:

- ‘_abilities’
- ‘count’

- 'thesaurus'

Return type list

update(*metadata*, *_http_method='PATCH'*)

Update a metadata, but **ONLY** the root attributes, not the subresources.

Certain attributes of the Metadata object to update are required:

- _id
- editionProfile
- type

See: https://github.com/isogeo/isogeo-api-py-minsdk/issues/116

Parameters

- **metadata** (Metadata) – metadata object to update
- **_http_method** (*str*) – HTTP method (verb) to use. Default to 'PATCH' but can be set to 'PUT' in certain cases (services).

Return type *Metadata*

Returns the updated metadata or the request error.

Example

```
# get a metadata
my_metadata = isogeo.metadata.get(metadata_id=METADATA_UUID)
# add an updated watermark in the abstract
my_metadata.abstract += '**Updated!**'
# push it online
isogeo.metadata.update(my_metadata)
```

isogeo_pysdk.api.routes_metadata_bulk module

Isogeo API v1 - API Route for bulk update on resources (= Metadata)

class isogeo_pysdk.api.routes_metadata_bulk.**ApiBulk**(*api_client=None*)

Bases: object

Routes as methods of Isogeo API used to mass edition of metadatas (resources).

Example

```
# retrieve objects to be associated
catalog_1 = isogeo.catalog.get(
    workgroup_id={WORKGROUP_UUID},
    catalog_id={CATALOG_UUID_1},
)

catalog_2 = isogeo.catalog.get(
    workgroup_id={WORKGROUP_UUID},
    catalog_id={CATALOG_UUID_2},
)

keyword = isogeo.keyword.get(keyword_id={KEYWORD_UUID},)
```

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```
# along the script, prepare the bulk requests
isogeo.metadata.bulk.prepare(
    metadatas=(
        {METADATA_UUID_1},
        {METADATA_UUID_2},
    ),
    action="add",
    target="catalogs",
    models=(catalog_1, catalog_2),
)

isogeo.metadata.bulk.prepare(
    metadatas=(
        {METADATA_UUID_1},

    ),
    action="add",
    target="keywords",
    models=(keyword,),
)

# send the one-shot request
isogeo.metadata.bulk.send()
```

BULK_DATA = []

prepare(*metadatas*, *action*, *target*, *models*)
Prepare requests to be sent later in one shot.

Parameters

- **metadatas** (*tuple*) – tuple of metadatas UUIDs or Metadatas to be updated
- **action** (*str*) – type of action to perform on metadatas. See: *bulk_actions*.
- **target** (*str*) – kind of object to add/delete/update to the metadatas. See: *bulk_targets*.
- **models** (*tuple*) – tuple of objects to be associated with the metadatas.

Return type *BulkRequest*

send()
Send prepared BULK_DATA to the *POST BULK resources/*.

Return type List[*BulkReport*]

isogeo_pysdk.api.routes_search module

Isogeo API v1 - API Routes for Search

See: http://help.isogeo.com/api/complete/index.html#definition-resource

class isogeo_pysdk.api.routes_search.**ApiSearch**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate metadatas (resources).

add_tags_shares(*search*)
Add shares list to the tags attributes in search.

Parameters **search** (MetadataSearch) – search to add shares

search(*group=None*, *query=''*, *share=None*, *specific_md=()*, *include=()*, *bbox=None*, *poly=None*, *georel=None*, *order_by='_created'*, *order_dir='desc'*, *page_size=20*, *offset=0*, *augment=False*, *check=True*, *expected_total=None*, *tags_as_dicts=False*, *whole_results=False*)

Search within the resources shared to the application. It's the mainly used method to retrieve metadata.

Parameters

- **group** (*str*) – context to search. Pass a workgroup UUID to search within a group or pass None (default) to search in a global context.
- **query** (*str*) – search terms and semantic filters. Equivalent of **q** parameter in Isogeo API. It could be a simple string like *oil* or a tag like *keyword:isogeo:formations* or *keyword:inspire-theme:landcover*. The *AND* operator is applied when various tags are passed.
- **bbox** (*tuple*) – Bounding box to limit the search. Must be a 4 tuple of coordinates in WGS84 (EPSG 4326). Could be associated with *georel*.
- **poly** (*str*) – Geographic criteria for the search, in WKT format. Could be associated with *georel*.
- **georel** (*str*) – geometric operator to apply to the *bbox* or *poly* parameters. Available values:
  - 'contains',
  - 'disjoint',
  - 'equals',
  - 'intersects' - [APPLIED BY API if NOT SPECIFIED]
  - 'overlaps',
  - 'within'.
- **order_by** (*str*) – sorting results. Available values:
  - '_created': metadata creation date [DEFAULT if relevance is null]
  - '_modified': metadata last update
  - 'title': metadata title
  - 'created': data creation date (possibly None)
  - 'modified': data last update date
  - 'relevance': relevance score calculated by API [DEFAULT].
- **order_dir** (*str*) – sorting direction. Available values:
  - 'desc': descending
  - 'asc': ascending
- **page_size** (*int*) – limits the number of results. Useful to paginate results display. Default value: 100.
- **offset** (*int*) – offset to start page size from a specific results index
- **share** (*str*) – share UUID to filter on
- **specific_md** (*tuple*) – list of metadata UUIDs to filter on

- **include** (*tuple*) – subresources that should be returned. See: enums.MetadataSubresources.
- **whole_results** (*bool*) – option to return all results or only the page size. *False* by DEFAULT.
- **check** (*bool*) – option to check query parameters and avoid erros. *True* by DEFAULT.
- **augment** (*bool*) – option to improve API response by adding some tags on the fly (like shares_id)
- **expected_total** (*int*) – if different of None, value will be used to paginate. Can save a request.
- **tags_as_dicts** (*bool*) – option to store tags as key/values by filter.

Return type *MetadataSearch*

Example

```
# get the search context (without results), useful to populate a search widget
search_context = isogeo.search(page_size=0, whole_results=0, augment=1)

# search the 10 first results in alphabetically order
search_10 = isogeo.search(
    page_size=10,
    include="all",
    order_by="title",
    order_dir="asc",
    expected_total=search_context.total
)

# returns all results, filtering on vector-datasets
search_full = isogeo.search(
    query="type:vector-dataset",
    order_by="title",
    order_dir="desc",
    include="all",
    augment=1,
    whole_results=1
)
```

async search_metadata_asynchronous(*total_results*, *max_workers=10*, ***kwargs*)

Meta async method used to request big searches (> 100 results), using asyncio. It's a private method launched by the main search method.

Parameters

- **total_results** (*int*) – total of results to retrieve
- **max_workers** (*int*) – maximum number of thread to use python.concurrent.futures

Return type *MetadataSearch*

isogeo_pysdk.api.routes_service module

Isogeo API v1 - API Routes for Metadata of Services (web geo services)

See: http://help.isogeo.com/api/complete/index.html#definition-resource

class isogeo_pysdk.api.routes_service.**ApiService**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate metadatas of web geo services (services).

It's a set of helpers and shortcuts to make easier the sevrice management with the isogeo API.

create(*workgroup_id*, *service_url*, *service_type='guess'*, *service_format=None*, *service_title=None*, *check_exists=1*, *ignore_avaibility=0*, *http_verb='HEAD'*)
Add a new metadata of a geographic webservice to a workgroup.

It's just a helper to make it easy to create a metadata of a service with autofill for service layers.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **service_url** (*str*) – URL of the service
- **service_type** (*str*) – type of service. Must be one of: 'esri', 'esri_ogc', 'ogc', 'guess'
- **service_format** (*str*) – format of the web service. Must be one of the accepted codes in API (Non exhaustive list: 'efs', 'ems', 'wfs', 'wms', 'wmts'). If is None, so the it'll try to guess it from the URL.
- **service_title** (*str*) – title for the metadata service in case of analisis fail. OPTIONNAL.
- **check_exists** (*bool*) – check if a metadata with the same service base URL and format alerady exists. Defaults to True.
- **ignore_avaibility** (*bool*) – the service URL is tested to determine if it can be reached (HEAD then GET). This option allow to ignore the test result. Can be useful if the service is only reachable by certains URLs or domains like *.isogeo.com. Defaults to False.
- **http_verb** (*str*) – HTTP verb to use to check the if the service is available. Must be one of: GET, HEAD

Return type Service

Raises

- **ValueError** – if workgroup_id is not a correct UUID | if http_verb or service_type is not a correct value
- ***AlreadyExistError*** – if a metadata service with the same base URL already exists in the workgroup

Example

```
# for an OGC WMS by GeoServer, passing type and format
isogeo.services.create(
    workgroup_id=WORKGROUP_UUID,
    service_type="ogc",
    service_format="wms",
    service_url="https://magosm.magellium.com/geoserver/ows?service=wms&
↪version=1.3.0&request=GetCapabilities"
```

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```
)
# for an OGC WFS by ArcGIS Server, passing only the service URL with query␣
↪parameters
new_srv = isogeo.services.create(
    workgroup_id=WORKGROUP_UUID,
    service_url="https://ligeo.paysdelaloire.fr/server/services/Le_Mans/Le_
↪Mans_service/MapServer/WFSServer?request=GetCapabilities&service=WFS",
)
# for an Esri FeatureServer
new_srv = isogeo.services.create(
    workgroup_id=WORKGROUP_UUID,
    service_url="https://api-carto.dijon.fr/arcgis/rest/services/
↪SIGNALISATION/signalisation_MAJ/FeatureServer?f=pjson",
)
```

update(*service*, *check_only=0*)

Update a metadata of service while keeping the associations of the layers.

Parameters

- **metadata** (Metadata) – identifier of the resource to verify
- **check_only** (*bool*) – option to only get the diff

Return type *Metadata*

isogeo_pysdk.api.routes_service_layers module

Isogeo API v1 - API Routes for ServiceLayers entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_service_layers.**ApiServiceLayer**(*api_client=None*)

Bases: object

Routes as methods of Isogeo API used to manipulate service_layers.

associate_metadata(*service*, *layer*, *dataset*)

Associate a service layer with a dataset metadata.

If the specified layer is already associated, the response is 409.

Parameters

- **service** (Metadata) – metadata of the service which contains the layer
- **layer** (ServiceLayer) – layer model object to associate
- **dataset** (Metadata) – metadata of the dataset to associate with

Example

```
>>> # retrieve objects to be associated. First: the metadata of the service.
>>> service = isogeo.metadata.get(
        metadata_id=str,
    )
>>> # second: the layer of the service you want to associate
>>> layer = isogeo.metadata.layers.layer(
        metadata_id=service._id,
        layer_id=str,
```

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```
    )
>>> # third: the dataset to be associated with the service layer
>>> dataset = isogeo.metadata.get(
        metadata_id=str,
    )
>>> # associate them
>>> isogeo.metadata.layers.associate_metadata(
        service=service,
        layer=layer,
        dataset=metadata
    )
```

Return type Response

create(*metadata*, *layer*)

Add a new layer to a metadata (= resource).

Parameters

- **metadata** (Metadata) – metadata (resource) to edit. Must be a service.
- **ServiceLayer** (ServiceLayer) – service_layer object to create

Return type *ServiceLayer*

delete(*layer*, *metadata=None*)

Delete a service layer from Isogeo database.

Parameters

- **layer** (ServiceLayer) – ServiceLayer model object to delete
- **metadata** (Metadata) – parent metadata (resource) containing the service_layer

dissociate_metadata(*service*, *layer*, *dataset*)

Removes the association between a a service layer with a dataset metadata.

If the association doesn't exist, the response is 404.

Parameters

- **service** (Metadata) – metadata of the service which contains the layer
- **layer** (ServiceLayer) – layer model object to associate
- **dataset** (Metadata) – metadata of the dataset to associate with

Return type Response

layer(*metadata_id*, *layer_id*)

Get details about a specific service_layer.

Parameters

- **metadata_id** (*str*) – metadata with layers
- **layer_id** (*str*) – service layer UUID

Return type *ServiceLayer*

listing(*metadata*)

Get all service layers of a metadata.

Parameters **metadata** (Metadata) – metadata (resource) to edit

Return type list

update(*layer*, *metadata=None*)
Update a service layer.

Parameters

- **layer** (ServiceLayer) – ServiceLayer model object to update
- **metadata** (Metadata) – parent metadata (resource) containing the service_layer

Return type *ServiceLayer*

isogeo_pysdk.api.routes_service_operations module

Isogeo API v1 - API Routes for ServiceOperations entities

See: http://help.isogeo.com/api/complete/index.html#tag-operation

class isogeo_pysdk.api.routes_service_operations.**ApiServiceOperation**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate service_operations.

create(*metadata*, *operation*)
Add a new operation to a metadata (= resource).

Parameters

- **metadata** (Metadata) – metadata (resource) to edit. Must be a service.
- **ServiceOperation** (ServiceOperation) – service_operation object to create

Return type *ServiceOperation*

listing(*metadata*)
Get all operations of a metadata service.

Parameters **metadata** (Metadata) – metadata (resource) to edit. Must be type of service.

Return type list

operation(*metadata_id*, *operation_id*)
Get details about a specific service operation and expand the model with the parent service metadata '_id' reference.

Parameters

- **metadata_id** (*str*) – metadata with operations
- **operation_id** (*str*) – service operation UUID

Return type *ServiceOperation*

isogeo_pysdk.api.routes_share module

Isogeo API v1 - API Routes for Shares entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_share.**ApiShare**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate shares.

associate_application(*share*, *application*)
Associate a share with an application.

Parameters

- **share** (Share) – share model object to update
- **application** (Application) – application object to associate

Return type tuple

associate_catalog(*share*, *catalog*)
Associate a share with a catalog.

Parameters

- **share** (Share) – share model object to update
- **catalog** (Catalog) – object to associate

Return type tuple

associate_group(*share*, *group*)
Associate a group with a share of type 'group'.

If the specified group is already associated, the response is still 204.

Parameters

- **share** (Share) – share model object to update
- **group** (Workgroup) – group object to associate

Return type Response

create(*workgroup_id*, *share={'_created': None, '_creator': None, '_id': None, '_modified': None, 'applications': None, 'catalogs': None, 'groups': None, 'name': None, 'rights': None, 'type': None, 'urlToken': None}*, *check_exists=1*)
Add a new share to Isogeo.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **share** (Share) – Share model object to create
- **check_exists** (*int*) – check if a share already exists into the workgroup:

- 0 = no check
- 1 = compare name [DEFAULT]

Return type *Share*

delete(*share_id*)
Delete a share from Isogeo database.

Parameters **share_id** (*str*) – identifier of the resource to delete

Return type Response

dissociate_application(*share*, *application*)
Removes the association between the specified share and the specified application.

Parameters

- **share** (Share) – share model object to update
- **application** (Application) – object to associate

Return type tuple

dissociate_catalog(*share*, *catalog*)
Removes the association between the specified share and the specified catalog.

Parameters

- **share** (Share) – share model object to update
- **catalog** (Catalog) – object to associate

Return type tuple

dissociate_group(*share*, *group*)
Removes the association between the specified share and the specified group.

If the specified group is associated, the association is removed, Response is 204. If not, the Response is 500.

Parameters

- **share** (Share) – share model object to update
- **group** (Workgroup) – object to associate

Return type tuple

exists(*share_id*)
Check if the specified share exists and is available for the authenticated user.

Parameters **share_id** (*str*) – identifier of the share to verify

Return type bool

get(*share_id*, *include='_abilities', 'groups'*)
Returns details about a specific share.

Parameters

- **share_id** (*str*) – share UUID
- **inlude** (*tuple*) – additionnal subresource to include in the response

Return type *Share*

listing(*workgroup_id=None*, *caching=1*)
Get all shares which are accessible by the authenticated user OR shares for a workgroup.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup. If *None*, then list shares for the autenticated user

- **caching** (*bool*) – option to cache the response

Return type list

refresh_token(*share*)
Refresh the URL token of a share, used by Cartotheque, CSW, OpenCatalog.

Parameters **share** (Share) – Share model object to update

Return type *Share*

reshare(*share*, *reshare=1*)
Enable/disable the reshare option for the given share.

Only available for shares of type 'group'.

Parameters

- **share** (Share) – Share model object to update
- **reshare** (*bool*) – set option to allow recipients groups

Return type *Share*

update(*share*, *caching=1*)
Update a share owned by a workgroup.

Parameters

- **share** (Share) – Share model object to update
- **caching** (*bool*) – option to cache the response

Return type *Share*

isogeo_pysdk.api.routes_specification module

Isogeo API v1 - API Routes for Specifications entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_specification.**ApiSpecification**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate specifications.

associate_metadata(*metadata*, *specification*, *conformity=0*)
Associate a specification (specification + conformity) to a metadata. When a specification is associated to a metadata, it becomes a ResourceConformity object.

If the specified specification is already associated, the API responses is still a 200.

Parameters

- **metadata** (Metadata) – metadata object to update
- **specification** (Specification) – specification model object to associate
- **conformity** (*bool*) – indicates whether the dataset is compliant

Example

```
>>> # retrieve objects to be associated
>>> md = isogeo.metadata.get(
        metadata_id=my_metadata_uuid,
        include=['specifications']
    )
>>> spec = isogeo.specification.get(my_specification_uuid)
>>> # associate them
>>> isogeo.specification.associate_metadata(
        metadata=md,
        specification=spec,
        conformity=1
    )
```

Return type Response

create(*workgroup_id*, *check_exists=1*, *specification={'_abilities': None, '_id': None, '_tag': None, 'count': None, 'link': None, 'name': None, 'owner': None, 'published': None}*)

Add a new specification to a workgroup.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **check_exists** (*int*) – check if a specification already exists inot the workgroup:

- 0 = no check
- 1 = compare name [DEFAULT]

Parameters **specification** (*class*) – Specification model object to create

Return type *Specification*

delete(*workgroup_id*, *specification_id*)

Delete a specification from Isogeo database.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **specification_id** (*str*) – identifier of the resource to delete

Return type dict

dissociate_metadata(*metadata*, *specification_id*)

Removes the association between a metadata and a specification.

If the specified specification is not associated, the response is 404.

Parameters

- **metadata** (Metadata) – metadata object to update
- **specification_id** (Specification) – specification model object to associate

Return type Response

exists(*specification_id*)

Check if the specified specification exists and is available for the authenticated user.

Parameters **specification_id** (*str*) – identifier of the specification to verify

Return type bool

get (*specification_id*)
Get a specification.

Parameters **specification_id** (*str*) – specification UUID

Return type *Specification*

listing (*workgroup_id=None*, *include='_abilities', 'count'*, *caching=1*)
Get workgroup specifications.

Parameters

- **workgroup_id** (*str*) – identifier of the owner workgroup
- **include** (*tuple*) – additional parts of model to include in response
- **caching** (*bool*) – option to cache the response

Return type list

update (*specification*, *caching=1*)
Update a specification owned by a workgroup.

Parameters

- **specification** (*class*) – Specification model object to update
- **caching** (*bool*) – option to cache the response

Return type *Specification*

isogeo_pysdk.api.routes_thesaurus module

Isogeo API v1 - API Routes for Thesaurus entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_thesaurus.**ApiThesaurus** (*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate thesaurus.

thesauri (*caching=1*)
Get all thesauri.

Return type list

thesaurus (*thesaurus_id='1616597fbc4348c8b11ef9d59cf594c8'*, *include='_abilities'*)
Get a thesaurus.

Parameters

- **thesaurus_id** (*str*) – thesaurus UUID
- **include** (*list*) – subresources that should be returned. Available values:
  - '_abilities'
  - 'count'

Return type *Thesaurus*

isogeo_pysdk.api.routes_user module

Isogeo API v1 - API Routes for Users entities

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.api.routes_user.**ApiUser**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate users.

create(*user=<class 'isogeo_pysdk.models.user.User'>*, *check_exists=1*)
Add a new user to Isogeo.

Parameters

- **user** (*class*) – User model object to create
- **check_exists** (*bool*) – check if a user already exists:

- 0 = no check
- 1 = compare email [DEFAULT]

Return type *User*

delete(*user*)
Delete an user.

Parameters **user** (*class*) – User model object to be deteled

Return type *User*

get(*user_id*, *include='_abilities'*)
Get details about a specific user.

Parameters

- **user_id** (*str*) – user UUID
- **include** (*list*) – additionnal subresource to include in the response

Return type *User*

listing()
Get registered users.

Example

```
>>> # get all registered users
>>> users = isogeo.user.listing()
>>> print(len(users))
925
>>> # filter on staff users (as list)
>>> staff = [user for user in users if user.get("staff")]
>>> print(len(staff))
10
>>> # filter on users with an email from isogeo(as list)
>>> users_isogeo = [user for user in users if "@isogeo" in user.get("contact
↪").get("email")]
>>> print(len(users_isogeo))
37
```

Return type list

memberships(*user_id*)
Returns memberships for the specified user.

Parameters **user_id** (*str*) – user UUID

Return type dict

subscriptions(*user*, *subscription*, *subscribe*)
Subscribe or unsubscribe an user to/from one of the available subscriptions.

Parameters

- **user** (*class*) – User model object to be updated
- **subscription** (*str*) – subscription (newsletter) targetted. Must be one of: NewReleases | TipsAndTricks
- **subscribe** (*bool*) – subscribe (1) or unsubscribe (0)

Return type *User*

Example

```
# retrieve the user
uzer = isogeo.user.get(user_id={user_uuid})

# unsubscribe the user from the newsletter 'TipsAndTricks'
isogeo.user.subscriptions(uzer, "TipsAndTricks", 0)

# subscribe the user to the newsletter 'NewReleases'
isogeo.user.subscriptions(uzer, "TipsAndTricks", 0)
```

update(*user*)
Update an user.

Parameters **user** (*class*) – User model object to be updated

Return type *User*

Example

```
# retrieve the user
uzer = isogeo.user.get(user_id={user_uuid})

# unsubscribe the user from a newsletter
uzer.mailchimp.get("subscriptions")[0]["isInterested"] = False

# update it online
isogeo.user.update(uzer)
```

isogeo_pysdk.api.routes_workgroup module

Isogeo API v1 - API Routes for Workgroups entities

See: http://help.isogeo.com/api/complete/index.html#tag-workgroup

class isogeo_pysdk.api.routes_workgroup.**ApiWorkgroup**(*api_client=None*)
Bases: object

Routes as methods of Isogeo API used to manipulate workgroups.

coordinate_systems(*workgroup_id*, *caching=1*)
Returns coordinate-systems for the specified workgroup. It's just an alias for the ApiCoordinateSystem.listing method.

Parameters

- **workgroup_id** (*str*) – workgroup UUID
- **caching** (*bool*) – option to cache the response

Return type list

create(*workgroup*, *check_exists=1*)
Add a new workgroup to Isogeo.

Parameters

- **workgroup** (*class*) – Workgroup model object to create
- **check_exists** (*int*) – check if a workgroup already exists:
  - 0 = no check
  - 1 = compare name [DEFAULT]

Return type *Workgroup*

delete(*workgroup_id*)
Delete a workgroup from Isogeo database.

Parameters **workgroup_id** (*str*) – identifier of the workgroup

exists(*workgroup_id*)
Check if the specified workgroup exists and is available for the authenticated user.

Parameters **workgroup_id** (*str*) – identifier of the workgroup to verify

Return type bool

get(*workgroup_id*, *include='_abilities', 'limits'*)
Get details about a specific workgroup.

Parameters

- **workgroup_id** (*str*) – workgroup UUID
- **include** (*tuple*) – additionnal subresource to include in the response

Return type *Workgroup*

invitations(*workgroup_id*)
Returns active invitations (including expired) for the specified workgroup. Just a shortcut.

Parameters **workgroup_id** (*str*) – workgroup UUID

Return type dict

invite(*workgroup_id*, *invitation*)
Invite new user to a workgroup. Just a shortcut.

Parameters

- **workgroup_id** (*str*) – workgroup UUID
- **invitation** (Invitation) – Invitation object to send

Return type dict

limits(*workgroup_id*)
Returns limits for the specified workgroup.

Parameters **workgroup_id** (*str*) – workgroup UUID

Return type dict

listing(*include='_abilities', 'limits'*, *caching=1*)
Get workgroups.

Parameters

- **include** (*list*) – additionnal subresource to include in the response
- **caching** (*bool*) – option to cache the response

Return type list

memberships(*workgroup_id*)
Returns memberships for the specified workgroup.

Parameters **workgroup_id** (*str*) – workgroup UUID

Return type dict

statistics(*workgroup_id*)
Returns statistics for the specified workgroup.

Parameters **workgroup_id** (*str*) – workgroup UUID

Return type dict

statistics_by_tag(*workgroup_id*, *tag*)
Returns statistics for the specified workgroup. See: http://help.isogeo.com/api/complete/index.html#operation–groups–gid–stag–tag–get

Be careful: if an invalid character is present into the response (e.g. contact.name = 'bureau GF-3A'), a ConnectionError / ReadTimeout will be raised.

Parameters

- **workgroup_id** (*str*) – workgroup UUID
- **tag** (*str*) – tag name. Must be one of: catalog, contact, coordinate-system, format, keyword:inspire-theme, keyword, owner

Return type dict

update(*workgroup*, *caching=1*)
Update a workgroup owned by a workgroup.

Parameters

- **workgroup** (*class*) – Workgroup model object to update
- **caching** (*bool*) – option to cache the response

Return type *Workgroup*

isogeo_pysdk.enums package

Submodules

isogeo_pysdk.enums.application_types module

Isogeo API v1 - Enums for Resource entity accepted kinds

See: http://help.isogeo.com/api/complete/index.html#definition-application

class isogeo_pysdk.enums.application_types.**ApplicationTypes**
Bases: enum.Enum

Closed list of accepted Application (metadata subresource) kinds in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for md_kind in ApplicationTypes:
>>>     print("{0:<30} {1:>20}".format(md_kind, md_kind.value))
Enum                                          Value
ApplicationTypes.group                            1
ApplicationTypes.user                             2
```

```
>>> # check if a var is an accepted value
>>> print("group" in ApplicationTypes.__members__)
True
>>> print("User" in ApplicationTypes.__members__)  # case sensitive
False
>>> print("confidential" in ApplicationTypes.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

group = 1

user = 2

isogeo_pysdk.enums.bulk_actions module

Isogeo API v1 - Enums for Resource entity accepted kinds

See: http://help.isogeo.com/api/complete/index.html#definition-application

class isogeo_pysdk.enums.bulk_actions.**BulkActions**
Bases: enum.Enum

Closed list of accepted Application (metadata subresource) kinds in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for md_kind in BulkActions:
```

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```
>>>     print("{0:<30} {1:>20}".format(md_kind, md_kind.value))
Enum                                          Value
BulkActions.add                                   1
BulkActions.delete                                2
BulkActions.update                                3
```

```
>>> # check if a var is an accepted value
>>> print("add" in BulkActions.__members__)
True
>>> print("Delete" in BulkActions.__members__)  # case sensitive
False
>>> print("truncate" in BulkActions.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

add = 1

delete = 2

update = 3

isogeo_pysdk.enums.bulk_ignore_reasons module

Isogeo API v1 - Enums for bulk ignore reasons

class isogeo_pysdk.enums.bulk_ignore_reasons.**BulkIgnoreReasons**

Bases: enum.Enum

Closed list of accepted Application (metadata subresource) kinds in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for md_kind in BulkIgnoreReasons:
>>>     print("{0:<30} {1:>20}".format(md_kind, md_kind.value))
Enum                                          Value
BulkIgnoreReasons.AlreadyPresent                  1
BulkIgnoreReasons.Forbidden                       2
BulkIgnoreReasons.Invalid                         3
BulkIgnoreReasons.NotApplicable                   4
BulkIgnoreReasons.NotFound                        5
```

```
>>> # check if a var is an accepted value
>>> print("alreadyPresent" in BulkIgnoreReasons.__members__)
True
>>> print("NotValid" in BulkIgnoreReasons.__members__)  # case␣
↪sensitive
False
>>> print("NotExists" in BulkIgnoreReasons.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

alreadyPresent = 1

forbidden = 2

invalid = 3

notApplicable = 4

notFound = 5

isogeo_pysdk.enums.bulk_targets module

Isogeo API v1 - Enums for Resource entity accepted kinds

See: http://help.isogeo.com/api/complete/index.html#definition-application

class isogeo_pysdk.enums.bulk_targets.**BulkTargets**

Bases: enum.Enum

Closed list of accepted Application (metadata subresource) kinds in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for md_kind in BulkTargets:
>>>     print("{0:<30} {1:>20}".format(md_kind, md_kind.value))
Enum                                          Value
BulkTargets.title                                 1
BulkTargets.abstract                              2
BulkTargets.keywords                              3
```

```
>>> # check if a var is an accepted value
>>> print("title" in BulkTargets.__members__)
True
>>> print("Delete" in BulkTargets.__members__)  # case sensitive
False
>>> print("truncate" in BulkTargets.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

abstract = 2

catalogs = 4

codePage = 12

collectionContext = 6

collectionMethod = 7

contacts = 5

distance = 10

keywords = 3

scale = 11

title = 1

validFrom = 8

validityComment = 9

isogeo_pysdk.enums.catalog_statistics_tags module

Isogeo API v1 - Enums for Catalog statistics entity accepted tags

See: http://help.isogeo.com/api/complete/index.html#operation–groups–gid–statistics-tag–tag–get

class isogeo_pysdk.enums.catalog_statistics_tags.**CatalogStatisticsTags**
Bases: enum.Enum

Closed list of accepted tags for workgroup statistics in Isogeo API (used by the dashboard).

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for tag in CatalogStatisticsTags:
>>>     print("{0:<30} {1:>20}".format(tag, tag.value))
Enum                                                Value
CatalogStatisticsTags.catalog                           catalog
CatalogStatisticsTags.coordinateSystem            coordinate-system
CatalogStatisticsTags.format                             format
CatalogStatisticsTags.inspireTheme              keyword:inspire-theme
CatalogStatisticsTags.owner                               owner
```

```
>>> # check if a var is an accepted value
>>> print("catalog" in CatalogStatisticsTags.__members__)
True
>>> print("Catalog" in CatalogStatisticsTags.__members__)  # case␣
↪sensitive
False
>>> print("coordinate-system" in CatalogStatisticsTags.__members__)
False
>>> print("coordinateSystem" in CatalogStatisticsTags.__members__)
True
```

See: https://docs.python.org/3/library/enum.html

contact = 'contact'

coordinateSystem = 'coordinate-system'

format = 'format'

classmethod has_value(*value*)

inspireTheme = 'keyword:inspire-theme'

keyword = 'keyword'

isogeo_pysdk.enums.contact_roles module

Isogeo API v1 - Enums for ResourceContact entity accepted roles

See: http://help.isogeo.com/api/complete/index.html#/definitions/resourceContact

class isogeo_pysdk.enums.contact_roles.**ContactRoles**
Bases: enum.Enum

Closed list of accepted Contact roles in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for role in ContactRoles:
>>>     print("{0:<30} {1:>20}".format(role, role.value))
Enum                                          Value
ContactRoles.author                          author
ContactRoles.pointOfContact          pointOfContact
...
```

```
>>> # check if a var is an accepted value
>>> print("author" in ContactRoles.__members__)
True
>>> print("Author" in ContactRoles.__members__)  # case sensitive
False
>>> print("follower" in ContactRoles.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

author = 'author'

custodian = 'custodian'

distributor = 'distributor'

originator = 'originator'

owner = 'owner'

pointOfContact = 'pointOfContact'

principalInvestigator = 'principalInvestigator'

processor = 'processor'

publisher = 'publisher'

resourceProvider = 'resourceProvider'

user = 'user'

isogeo_pysdk.enums.contact_types module

Isogeo API v1 - Enums for Contact entity accepted types

See: http://help.isogeo.com/api/complete/index.html#/definitions/resourceContact

class isogeo_pysdk.enums.contact_types.**ContactTypes**

Bases: enum.Enum

Closed list of accepted Contact types in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for i in ContactTypes:
>>>     print("{0:<30} {1:>20}".format(i, i.value))
Enum                                          Value
ContactTypes.custom                               1
```

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```
ContactTypes.group                                  2
ContactTypes.user                                   3
```

```
>>> # check if a var is an accepted value
>>> print("group" in ContactTypes.__members__)
True
>>> print("Custom" in ContactTypes.__members__)  # case sensitive
False
>>> print("global" in ContactTypes.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

custom = 1

group = 2

user = 3

isogeo_pysdk.enums.edition_profiles module

Isogeo API v1 - Enums for Resource entity accepted types

See: http://help.isogeo.com/api/complete/index.html#/definitions/resourceMetadata

class isogeo_pysdk.enums.edition_profiles.**EditionProfiles**

Bases: enum.Enum

Closed list of accepted edition profiles values in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for i in EditionProfiles:
>>>     print("{0:<30} {1:>20}".format(i, i.value))
Enum                                            Value
EditionProfiles.csw                                 1
EditionProfiles.manual                              2
```

```
>>> # check if a var is an accepted value
>>> print("rasterDataset" in EditionProfiles.__members__)
True
>>> print("Service" in EditionProfiles.__members__)  # case sensitive
False
>>> print("dataset" in EditionProfiles.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

csw = 1

manual = 2

isogeo_pysdk.enums.event_kinds module

Isogeo API v1 - Enums for Resource entity accepted kinds

See: http://help.isogeo.com/api/complete/index.html#definition-resourceEvent

class isogeo_pysdk.enums.event_kinds.**EventKinds**
Bases: enum.Enum

Closed list of accepted Event (metadata subresource) kinds in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for md_kind in EventKinds:
>>>     print("{0:<30} {1:>20}".format(md_kind, md_kind.value))
Enum                                          Value
EventKinds.creation                               1
EventKinds.publication                            2
EventKinds.update                                 3
```

```
>>> # check if a var is an accepted value
>>> print("creation" in EventKinds.__members__)
True
>>> print("Update" in EventKinds.__members__)  # case sensitive
False
>>> print("modification" in EventKinds.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

creation = 1

publication = 2

update = 3

isogeo_pysdk.enums.keyword_casing module

Isogeo API v1 - Enums for Workgroup's keywords casing

See: http://help.isogeo.com/api/complete/index.html#definition-workgroup

class isogeo_pysdk.enums.keyword_casing.**KeywordCasing**
Bases: enum.Enum

Closed list of accepted Keyword casing in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for i in KeywordCasing:
>>>     print("{0:<30} {1:>20}".format(i, i.value))
Enum                                          Value
KeywordCasing.capitalized                         1
KeywordCasing.lowercase                           2
KeywordCasing.mixedcase                           3
KeywordCasing.uppercase                           4
```

```
>>> # check if a var is an accepted value
>>> print("capitalized" in KeywordCasing.__members__)
True
>>> print("Uppercase" in KeywordCasing.__members__)  # case sensitive
False
>>> print("initials" in KeywordCasing.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

capitalized = 1

lowercase = 2

mixedcase = 3

uppercase = 4

isogeo_pysdk.enums.limitation_restrictions module

Isogeo API v1 - Enums for Limitation restrictions entity accepted values.

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.enums.limitation_restrictions.**LimitationRestrictions**

Bases: enum.Enum

Closed list of accepted restrictions for limitations in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for tag in LimitationRestrictions:
>>>     print("{0:<30} {1:>20}".format(tag, tag.value))
Enum                                                    Value
LimitationRestrictions.copyright                            1
LimitationRestrictions.intellectualPropertyRights           2
LimitationRestrictions.license                              3
LimitationRestrictions.other                                4
LimitationRestrictions.patent                               5
LimitationRestrictions.patentPending                        6
LimitationRestrictions.trademark                            7
```

```
>>> # check if a var is an accepted value
>>> print("license" in LimitationRestrictions.__members__)
True
>>> print("License" in LimitationRestrictions.__members__)  # case␣
↪sensitive
False
>>> print("other" in LimitationRestrictions.__members__)
True
```

See: https://docs.python.org/3/library/enum.html

copyright = 1

intellectualPropertyRights = 2

license = 3

other = 4

patent = 5

patentPending = 6

trademark = 7

isogeo_pysdk.enums.limitation_types module

Isogeo API v1 - Enums for Limitation types entity accepted values.

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.enums.limitation_types.**LimitationTypes**

Bases: enum.Enum

Closed list of accepted types for limitations in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for tag in LimitationTypes:
>>>     print("{0:<30} {1:>20}".format(tag, tag.value))
Enum                                                Value
LimitationTypes.legal                                   1
LimitationTypes.security                                2
```

```
>>> # check if a var is an accepted value
>>> print("legal" in LimitationTypes.__members__)
True
>>> print("Legal" in LimitationTypes.__members__)  # case sensitive
False
>>> print("security" in LimitationTypes.__members__)
True
```

See: https://docs.python.org/3/library/enum.html

legal = 1

security = 2

isogeo_pysdk.enums.link_actions module

Isogeo API v1 - Enums for Links actions

See: http://help.isogeo.com/api/complete/index.html#definition-resourceLink

class isogeo_pysdk.enums.link_actions.**LinkActions**

Bases: enum.Enum

Closed list of accepted Link actions in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for i in LinkActions:
```

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```
>>>     print("{0:<30} {1:>20}".format(i, i.value))
Enum                                        Value
LinkActions.download                            1
LinkActions.other                               2
LinkActions.view                                3
```

```
>>> # check if a var is an accepted value
>>> print("download" in LinkActions.__members__)
True
>>> print("Other" in LinkActions.__members__)  # case sensitive
False
>>> print("extract" in LinkActions.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

download = 1

other = 2

view = 3

isogeo_pysdk.enums.link_kinds module

Isogeo API v1 - Enums for Links kinds

See: http://help.isogeo.com/api/complete/index.html#definition-resourceLink

class isogeo_pysdk.enums.link_kinds.**LinkKinds**

Bases: enum.Enum

Closed list of accepted Link kinds in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for i in LinkKinds:
>>>     print("{0:<30} {1:>20}".format(i, i.value))
Enum                                        Value
LinkKinds.data                                  1
LinkKinds.esriFeatureService                    2
LinkKinds.esriMapService                        3
LinkKinds.esriTileService                       4
LinkKinds.url                                   5
LinkKinds.wfs                                   6
LinkKinds.wms                                   7
LinkKinds.wmts                                  8
```

```
>>> # check if a var is an accepted value
>>> print("data" in LinkKinds.__members__)
True
>>> print("EsriFeatureService" in LinkKinds.__members__)  # case␣
↪sensitive
False
>>> print("csw" in LinkKinds.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

data = 1

esriFeatureService = 2

esriMapService = 3

esriTileService = 4

url = 5

wfs = 6

wms = 7

wmts = 8

isogeo_pysdk.enums.link_types module

Isogeo API v1 - Enums for Links types

See: http://help.isogeo.com/api/complete/index.html#definition-resourceLink

class isogeo_pysdk.enums.link_types.**LinkTypes**

Bases: enum.Enum

Closed list of accepted Link types in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for i in LinkTypes:
>>>     print("{0:<30} {1:>20}".format(i, i.value))
Enum                                          Value
LinkTypes.hosted                                  1
LinkTypes.link                                    2
LinkTypes.url                                     3
```

```
>>> # check if a var is an accepted value
>>> print("hosted" in LinkTypes.__members__)
True
>>> print("Link" in LinkTypes.__members__)  # case sensitive
False
>>> print("external" in LinkTypes.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

hosted = 1

link = 2

url = 3

isogeo_pysdk.enums.metadata_subresources module

Isogeo API v1 - Enums for Metadata subresources

See: http://help.isogeo.com/api/complete/index.html#operation–resources–id–get

class isogeo_pysdk.enums.metadata_subresources.**MetadataSubresources**

Bases: enum.Enum

Closed list of accepted Metadata subresources that can be passed in *_include* queries paramater.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for i in MetadataSubresources:
>>>     print("{0:<30} {1:>20}".format(i, i.value))
Enum                                          Value
MetadataSubresources.tags                         1
MetadataSubresources.link                         2
MetadataSubresources.url                          3
```

```
>>> # check if a var is an accepted value
>>> print("tags" in MetadataSubresources.__members__)
True
>>> print("Links" in MetadataSubresources.__members__)  # case␣
↪sensitive
False
>>> print("attributes" in MetadataSubresources.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

conditions = 'conditions'

contacts = 'contacts'

coordinateSystem = 'coordinate-system'

events = 'events'

featureAttributes = 'feature-attributes'

classmethod has_value(*value*)

keywords = 'keywords'

layers = 'layers'

limitations = 'limitations'

links = 'links'

operations = 'operations'

serviceLayers = 'serviceLayers'

specifications = 'specifications'

tags = 'tags'

isogeo_pysdk.enums.metadata_types module

Isogeo API v1 - Enums for Resource entity accepted types

See: http://help.isogeo.com/api/complete/index.html#/definitions/resourceMetadata

class isogeo_pysdk.enums.metadata_types.**MetadataTypes**
Bases: enum.Enum

Closed list of accepted Metadata (= Resource) types in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for md_type in MetadataTypes:
>>>     print("{0:<30} {1:>20}".format(md_type, md_type.value))
Enum                                        Value
MetadataTypes.rasterDataset          raster-dataset
MetadataTypes.resource                     resource
MetadataTypes.service                       service
MetadataTypes.vectorDataset          vector-dataset
```

```
>>> # check if a var is an accepted value
>>> print("rasterDataset" in MetadataTypes.__members__)
True
>>> print("Service" in MetadataTypes.__members__)  # case sensitive
False
>>> print("dataset" in MetadataTypes.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

dataset = 'dataset'

classmethod has_value(*value*)

rasterDataset = 'raster-dataset'

resource = 'resource'

service = 'service'

vectorDataset = 'vector-dataset'

isogeo_pysdk.enums.search_filters_georelations module

Isogeo API v1 - Enums for Search geographic filter's geometric relationship

class isogeo_pysdk.enums.search_filters_georelations.**SearchGeoRelations**
Bases: enum.Enum

Closed list of accepted geometric relationship as search filters.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for i in SearchGeoRelations:
>>>     print("{0:<30} {1:>20}".format(i, i.value))
```

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```
Enum                                        Value
SearchGeoRelations.contains                     1
SearchGeoRelations.disjoint                     2
SearchGeoRelations.equal                        3
SearchGeoRelations.intersects                   4
SearchGeoRelations.overlaps                     5
SearchGeoRelations.within                       6
```

```
>>> # check if a var is an accepted value
>>> print("contains" in SearchGeoRelations.__members__)
True
>>> print("Overlaps" in SearchGeoRelations.__members__)  # case␣
↪sensitive
False
>>> print("crosses" in SearchGeoRelations.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

contains = 1

disjoint = 2

equal = 3

classmethod has_value(*value*)

intersects = 4

overlaps = 5

within = 6

isogeo_pysdk.enums.session_status module

Isogeo API v1 - Enums for Session entity accepted status

See: http://help.isogeo.com/api/complete/index.html#definition-session

class isogeo_pysdk.enums.session_status.**SessionStatus**

Bases: enum.Enum

Closed list of accepted session (CSW) status values in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for i in SessionStatus:
>>>     print("{0:<30} {1:>20}".format(i, i.value))
Enum                                        Value
SessionStatus.canceled                          1
SessionStatus.failed                            2
SessionStatus.started                           3
SessionStatus.succeeded                         4
```

```
>>> # check if a var is an accepted value
>>> print("started" in SessionStatus.__members__)
```

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```
True
>>> print("Failed" in SessionStatus.__members__)  # case sensitive
False
>>> print("aborted" in SessionStatus.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

canceled = 1

failed = 2

started = 3

succeeded = 4

isogeo_pysdk.enums.share_types module

Isogeo API v1 - Enums for Share entity accepted types.

See: http://help.isogeo.com/api/complete/index.html#definition-share

class isogeo_pysdk.enums.share_types.**ShareTypes**

Bases: enum.Enum

Closed list of accepted session (CSW) status values in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for i in ShareTypes:
>>>     print("{0:<30} {1:>20}".format(i, i.value))
Enum                                          Value
ShareTypes.canceled                               1
ShareTypes.failed                                 2
ShareTypes.started                                3
ShareTypes.succeeded                              4
```

```
>>> # check if a var is an accepted value
>>> print("application" in ShareTypes.__members__)
True
>>> print("Group" in ShareTypes.__members__)  # case sensitive
False
>>> print("user" in ShareTypes.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

application = 1

group = 2

isogeo_pysdk.enums.user_roles module

Isogeo API v1 - Enums for ResourceContact entity accepted roles

See: http://help.isogeo.com/api/complete/index.html#definition-user

class isogeo_pysdk.enums.user_roles.**UserRoles**
Bases: enum.Enum

Closed list of accepted Contact roles in Isogeo API.

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for role in UserRoles:
>>>     print("{0:<30} {1:>20}".format(role, role.value))
Enum                                          Value
UserRoles.admin                               admin
UserRoles.writer          writer
...
```

```
>>> # check if a var is an accepted value
>>> print("admin" in UserRoles.__members__)
True
>>> print("Author" in UserRoles.__members__)  # case sensitive
False
>>> print("follower" in UserRoles.__members__)
False
```

See: https://docs.python.org/3/library/enum.html

admin = 'admin'

reader = 'reader'

writer = 'writer'

isogeo_pysdk.enums.workgroup_statistics_tags module

Isogeo API v1 - Enums for Workgroup statistics entity accepted tags

See: http://help.isogeo.com/api/complete/index.html#operation–groups–gid–statistics-tag–tag–get

class isogeo_pysdk.enums.workgroup_statistics_tags.**WorkgroupStatisticsTags**
Bases: enum.Enum

Closed list of accepted tags for workgroup statistics in Isogeo API (used by the dashboard).

Example

```
>>> # parse members and values
>>> print("{0:<30} {1:>20}".format("Enum", "Value"))
>>> for tag in WorkgroupStatisticsTags:
>>>     print("{0:<30} {1:>20}".format(tag, tag.value))
Enum                                                Value
WorkgroupStatisticsTags.catalog                                 catalog
WorkgroupStatisticsTags.coordinateSystem              coordinate-system
WorkgroupStatisticsTags.format                                  format
```

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```
WorkgroupStatisticsTags.inspireTheme                keyword:inspire-theme
WorkgroupStatisticsTags.owner                                       owner
```

```
>>> # check if a var is an accepted value
>>> print("catalog" in WorkgroupStatisticsTags.__members__)
True
>>> print("Catalog" in WorkgroupStatisticsTags.__members__)  # case␣
↪sensitive
False
>>> print("coordinate-system" in WorkgroupStatisticsTags.__members__)
False
>>> print("coordinateSystem" in WorkgroupStatisticsTags.__members__)
True
```

See: https://docs.python.org/3/library/enum.html

catalog = 'catalog'

contact = 'contact'

coordinateSystem = 'coordinate-system'

format = 'format'

classmethod has_value(*value*)

inspireTheme = 'keyword:inspire-theme'

keyword = 'keyword'

owner = 'owner'

isogeo_pysdk.models package

Submodules

isogeo_pysdk.models.application module

Isogeo API v1 - Model of Application entity

See: http://help.isogeo.com/api/complete/index.html#definition-application

class isogeo_pysdk.models.application.**Application**(*_abilities=None*, *_created=None*, *_id=None*, *_modified=None*, *canHaveManyGroups=None*, *client_id=None*, *client_secret=None*, *groups=None*, *kind=None*, *name=None*, *redirect_uris=None*, *scopes=None*, *staff=None*, *type=None*, *url=None*)

Bases: object

Applications are entities which can be used in shares.

Example

```
{
    "_abilities": [
        "application:delete",
        "application:manage",
        "application:update"
    ],
    "_created": "2018-02-13T16:53:37.4622+00:00",
    "_id": "2ad9ccd2c76a4fc3be9f8de4239701df",
    "_modified": "2018-02-13T16:53:43.085621+00:00",
    "canHaveManyGroups": true,
    "client_id": "plugin-arcmap-client-987a654z321e234r567t890y987u654i",
    "client_secret":
↪"LoremipsumdolorsitametconsecteturadipiscingelitDonecmaurismauris",
    "groups": [
        'groups': [{'_created': '2015-05-21T12:08:16.4295098+00:00',
        '_id': '32f7e95ec4e94ca3bc1afda960003882',
        '_modified': '2019-05-03T10:31:01.4796052+00:00',
        'canHaveManyGroups': 'groups:32f7e95ec4e94ca3bc1afda960003882',
        'areKeywordsRestricted': True,
        'canCreateLegacyServiceLinks': True,
        'canCreateMetadata': True,
        'contact': {'_deleted': False,
                    '_id': '2a3aefc4f80347f590afe58127f6cb0f',
                    'canHaveManyGroups':
↪'contact:group:2a3aefc4f80347f590afe58127f6cb0f',
                    'addressLine1': '26 rue du faubourg Saint-Antoine',
                    'addressLine2': '4 éme étage',
                    'available': True,
                    'city': 'Paris',
                    'client_secretryCode': 'FR',
                    'email': 'dev@isogeo.com',
                    'fax': '33 (0)9 67 46 50 06',
                    'name': 'Isogeo Test',
                    'phone': '33 (0)9 67 46 50 06',
                    'type': 'group',
                    'zipCode': '75012'},
        'hasCswClient': True,
        'hasScanFme': True,
        'keywordsCasing': 'lowercase',
        'metadataLanguage': 'fr',
        'themeColor': '#4499A1'}
    ],
    "kind": "public",
    "name": "Plugin ArcMap - DEV",
    "scopes": [
        "resources:read"
    ],
    "staff": false,
    "type": "group",
    "url": "http://help.isogeo.com/arcmap/"
}
```


ATTR_CREA = {'canHaveManyGroups': <class 'bool'>, 'name': <class 'str'>, 'redirect_u

ATTR_MAP = {}

ATTR_TYPES = {'_abilities': <class 'list'>, '_created': <class 'str'>, '_id': <clas

admin_url(*url_base='https://manage.isogeo.com'*)

Returns the administration URL (https://manage.isogeo.com) for this application.

Parameters **url_base** (*str*) – base URL of admin site. Defaults to: https://manage.isogeo.com

Return type str

property canHaveManyGroups
Gets the option of this Application.

Returns The option of this Application.

Return type bool

property client_id
Gets the client_id of this Application.

Returns The client_id of this Application.

Return type str

property client_secret
Gets the client_secret of this Application.

Returns The client_secret of this Application.

Return type str

property groups
Gets the groups of this Application. # noqa: E501.

Returns The groups of this Application. # noqa: E501

Return type *Workgroup*

property kind
Gets the kind of this Application.

Returns The kind of this Application.

Return type str

property name
Gets the name of this Application.

Returns The name of this Application.

Return type str

property redirect_uris
Gets the redirect_uris of this Application.

Returns The redirect_uris of this Application.

Return type list

property scopes
Gets the scopes of this Application. # noqa: E501.

Returns The scopes of this Application. # noqa: E501

Return type *Workgroup*

property staff
Gets the staff of this Application.

Returns The staff of this Application.

Return type bool

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

property type
Gets the type of this Application. # noqa: E501.

Returns The type of this Application. # noqa: E501

Return type str

property url
Gets the url of this Application.

Returns The url of this Application.

Return type str

isogeo_pysdk.models.bulk_report module

Isogeo API v1 - Model of Metadata bulk report

See: https://github.com/isogeo/isogeo-api-py-minsdk/issues/133

class isogeo_pysdk.models.bulk_report.**BulkReport**(*ignored=None*, *request=None*)
Bases: object

Bulk report used to perform batch operation add/remove/update on Isogeo resources (= metadatas)

ATTR_TYPES = {'ignored': <class 'dict'>, 'request': <class 'isogeo_pysdk.models.bulk

property ignored
Gets the ignored operations of this Bulk Request.

Returns igno of this Bulk Request.

Return type dict

property request
Gets the created of this Bulk Request.

Returns The created of this Bulk Request.

Return type *BulkRequest*

to_dict()
Returns the request properties as a dict.

Return type dict

to_str()
Returns the string representation of the request.

Return type str

isogeo_pysdk.models.bulk_request module

Isogeo API v1 - Model of Metadata bulk request

See: https://github.com/isogeo/isogeo-api-py-minsdk/issues/133

class isogeo_pysdk.models.bulk_request.**BulkRequest**(*action=None*, *model=None*, *query=None*, *target=None*)

Bases: object

Bulk request used to perform batch operation add/remove/update on Isogeo resources (= metadatas)

ATTR_TYPES = {'action': <class 'object'>, 'model': <class 'int'>, 'query': <class '

property action

Gets the abilities of this Bulk Request.

Returns The abilities of this Bulk Request.

Return type str

property model

Gets the created of this Bulk Request.

Returns The created of this Bulk Request.

Return type list

property query

Gets the modified of this Bulk Request.

Returns The modified of this Bulk Request.

Return type dict

property target

Gets the tag of this Bulk Request.

Returns The tag of this Bulk Request.

Return type str

to_dict()

Returns the model properties as a dict.

Return type dict

to_str()

Returns the string representation of the model.

Return type str

isogeo_pysdk.models.catalog module

Isogeo API v1 - Model of Catalog entity

See: http://help.isogeo.com/api/complete/index.html#definition-catalog

class isogeo_pysdk.models.catalog.**Catalog**(*_abilities=None*, *_created=None*, *_id=None*, *_modified=None*, *_tag=None*, *code=None*, *count=None*, *name=None*, *owner=None*, *scan=None*)

Bases: object

Catalogs are entities used to organize and shares metadata of a workgroup.

Example

```
{
    '$scan': boolean,
    '_abilities': array,
    '_created': string (datetime),
    '_id': string (uuid),
    '_modified': string (datetime),
    '_tag': string,
    'code': string,
    'count': integer,
    'name': string,
    'owner': {
        '_created': string (datetime),
        '_id': string (uuid),
        '_modified': string (datetime),
        '_tag': string,
        'areKeywordsRestricted': boolean,
        'canCreateLegacyServiceLinks': boolean,
        'canCreateMetadata': boolean,
        'contact': {
            '_deleted': boolean,
            '_id': string (uuid),
            '_tag': string,
            'addressLine1': string,
            'addressLine2': string,
            'available': boolean,
            'city': string,
            'countryCode': string,
            'email': string (email),
            'fax': string,
            'name': string,
            'phone': string,
            'type': string,
            'zipCode': string
            },
        'hasCswClient': boolean,
        'hasScanFme': boolean,
        'keywordsCasing': string,
        'metadataLanguage': string
        }
}
```

ATTR_CREA = {'code': <class 'str'>, 'name': <class 'str'>, 'scan': <class 'bool'>}

ATTR_MAP = {'scan': '$scan'}

ATTR_TYPES = {'_abilities': <class 'list'>, '_created': <class 'str'>, '_id': <clas

classmethod clean_attributes(*raw_object*)
Renames attributes wich are incompatible with Python (hyphens...).

See related issue: https://github.com/isogeo/isogeo-api-py-minsdk/issues/82

property code
Gets the code of this Catalog.

Returns The code of this Catalog.

Return type str

property count
Gets the count of this Catalog.

Returns The count of this Catalog.

Return type str

property name
Gets the name of this Catalog.

Returns The name of this Catalog.

Return type str

property owner
Gets the owner of this Catalog. # noqa: E501.

Returns The owner of this Catalog. # noqa: E501

Return type *Workgroup*

property scan
Gets the scan of this Catalog.

Returns The scan of this Catalog.

Return type bool

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.condition module

Isogeo API v1 - Model of Condition entity

See: http://help.isogeo.com/api/complete/index.html#definition-resourceCondition

class isogeo_pysdk.models.condition.**Condition**(*_id=None*, *description=None*, *license=None*, *parent_resource=None*)

Bases: object

Conditions are entities defining general conditions of use (CGUs) of a data. It's mainly composed by a license and a description.

Parameters

- **_id** (*str*) – object UUID
- **description** (*str*) – description of the condition
- **license** (*dict*) – license object or dict linked to the condition
- **parent_resource** (*str*) – UUID of the metadata containing the condition

Example

```
{
    "_id": "string (uuid)",
    "description": "string",
    "license": "string",
}
```

ATTR_CREA = {'description': 'str', 'license': <class 'isogeo_pysdk.models.license.Li

ATTR_MAP = {}

ATTR_TYPES = {'_id': <class 'str'>, 'description': <class 'str'>, 'license': <class

property description

Gets the description of this Condition.

Returns The description of this Condition.

Return type str

property license

Gets the license of this Condition.

Returns The license of this Condition.

Return type str

property parent_resource

Gets the parent_resource of this Condition.

Returns The parent_resource of this Condition.

Return type UUID

to_dict()

Returns the model properties as a dict.

Return type dict

to_dict_creation()

Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.conformity module

Isogeo API v1 - Model of Conformity entity

See: http://help.isogeo.com/api/complete/index.html#definition-resourceConformity

class isogeo_pysdk.models.conformity.**Conformity**(*conformant=None*, *specification=None*, *parent_resource=None*)

Bases: object

Conformity is an entity defining if a data respects a specification. It's a quality indicator. It's mainly composed by a specification and a boolean.

Parameters

- **_id** (*str*) – object UUID
- **conformant** (*bool*) – conformity with the specification
- **specification** (*dict*) – specification object or dict linked to the conformity
- **parent_resource** (*str*) – UUID of the metadata containing the conformity

Example

```
{
    "conformant": "bool",
    "specification": "string",
}
```

ATTR_CREA = {'conformant': 'bool', 'specification': <class 'isogeo_pysdk.models.spec

ATTR_MAP = {}

ATTR_TYPES = {'conformant': <class 'bool'>, 'parent_resource': <class 'str'>, 'speci

property conformant
Gets the conformant status.

Returns The conformant status

Return type bool

property parent_resource
Gets the parent_resource of this Conformity.

Returns The parent_resource of this Conformity.

Return type UUID

property specification
Gets the specification of this Conformity.

Returns The specification of this Conformity.

Return type *Specification*

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.contact module

Isogeo API v1 - Model of Contact entity

See: http://help.isogeo.com/api/complete/index.html#definition-contact

class isogeo_pysdk.models.contact.**Contact**(*_abilities=None*, *_deleted=None*, *_id=None*, *_tag=None*, *addressLine1=None*, *addressLine2=None*, *addressLine3=None*, *available=None*, *city=None*, *count=None*, *countryCode=None*, *email=None*, *fax=None*, *hash=None*, *name=None*, *organization=None*, *owner=None*, *phone=None*, *type=None*, *zipCode=None*, *created=None*, *modified=None*)

Bases: object

Contacts are entities used into Isogeo adress book that can be associated to metadata.

ATTR_CREA = {'addressLine1': 'str', 'addressLine2': 'str', 'addressLine3': 'str', '

ATTR_MAP = {'fax': 'faxNumber', 'organization': 'organizationName', 'phone': 'phone

ATTR_TYPES = {'_abilities': <class 'str'>, '_id': <class 'str'>, '_tag': <class 'st

property addressLine1
Gets the id of this Contact.

Returns The id of this Contact.

Return type str

property addressLine2
Gets the id of this Contact.

Returns The second address line of this Contact.

Return type str

property addressLine3
Gets the third address line of this Contact.

Returns The The third address line of this Contact.

Return type str

property available
Gets the availibility of this Contact.

Returns The availibility of this Contact.

Return type str

property city
Gets the city of this Contact.

Returns The city of this Contact.

Return type str

property count
Gets the id of this Contact.

Returns The id of this Contact.

Return type str

property countryCode
Gets the country code of this Contact.

Returns The country code of this Contact.

Return type str

property email
Gets the email of this Contact.

Returns The email of this Contact.

Return type str

property fax
Gets the fax of this Contact.

Returns The fax of this Contact.

Return type str

property hash
Gets the hash of this Contact.

Returns The hash of this Contact.

Return type str

property name
Gets the name of this Contact.

Returns The name of this Contact.

Return type str

property organization
Gets the organization of this Contact.

Returns The organization of this Contact.

Return type str

property owner
Gets the owner of this Specification.

Returns The owner of this Specification.

Return type *Workgroup*

property phone
Gets the phone number of this Contact.

Returns The phone number of this Contact.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

property type
Gets the type of this Contact.

Returns The type of this Contact.

Return type str

property zipCode
Gets the zip (postal) code of this Contact.

Returns The zip (postal) code of this Contact.

Return type str

isogeo_pysdk.models.coordinates_system module

Isogeo API v1 - Model of CoordinateSystem entity

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.models.coordinates_system.**CoordinateSystem**(*_tag=None*, *alias=None*, *code=None*, *name=None*)

Bases: object

CoordinateSystems.

Example

```
{
    '_tag': 'coordinate-system:31154',
    'code': 31154,
    'name': 'Zanderij / TM 54 NW'
}
```

ATTR_CREA = {}

ATTR_MAP = {}

ATTR_TYPES = {'_tag': <class 'str'>, 'alias': <class 'str'>, 'code': <class 'str'>,

property alias
Gets the custom alias of this CoordinateSystem in a workgroup.

Returns The alias of this CoordinateSystem in a workgroup.

Return type str

property code
Gets the EPSG code of this CoordinateSystem.

Returns The EPSG code of this CoordinateSystem.

Return type str

property name
Gets the name of this CoordinateSystem.

Returns The name of this CoordinateSystem.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.datasource module

Isogeo API v1 - Model of Datasource entity

See: http://help.isogeo.com/api/complete/index.html#definition-datasource

class isogeo_pysdk.models.datasource.**Datasource**(*_created=None*, *_id=None*, *_modified=None*, *_tag=None*, *enabled=None*, *lastSession=None*, *location=None*, *name=None*, *resourceCount=None*, *sessions=None*)

Bases: object

Datasources are CSW client entry-points.

Example

```
{
    '_created': '2019-05-17T13:56:56.6162418+00:00',
    '_id': '2c891ce8692146c4901115a4232b13a2',
    '_modified': '2019-05-17T13:57:50.4434219+00:00',
    '_tag': 'data-source:2c891ce8692146c4901115a4232b13a2',
    'enabled': True,
    'lastSession': {
        '_created': '2019-05-17T13:58:06.5165889+00:00',
        '_id': 'ea99c37d809c4b1b9b4f257326ad1975',
        '_modified': '2019-05-17T13:58:28.5554966+00:00',
        'status': 'failed'
        },
```

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```
    'location': 'http://ogc.geo-ide.developpement-durable.gouv.fr/csw/all-
↪harvestable',
    'name': 'TEST - CSW entrypoint (datasource)',
    'resourceCount': 0,
    'sessions': [
        {
            '_created': '2019-05-17T13:58:06.5165889+00:00',
            '_id': 'ea99c37d809c4b1b9b4f257326ad1975',
            '_modified': '2019-05-17T13:58:28.5554966+00:00',
            'status': 'failed'
        }]
}
```

ATTR_CREA = {'location': <class 'str'>, 'name': <class 'str'>}

ATTR_MAP = {}

ATTR_TYPES = {'_created': <class 'str'>, '_id': <class 'str'>, '_modified': <class

property enabled
Gets the enabled of this Datasource.

Returns The enabled of this Datasource.

Return type str

property lastSession
Gets the lastSession of this Datasource.

Returns The lastSession of this Datasource.

Return type dict

property location
Gets the location (URL) of this Datasource.

Returns The location (URL) of this Datasource.

Return type str

property name
Gets the name of this Datasource.

Returns The name of this Datasource.

Return type str

property resourceCount
Gets the resourceCount of this Datasource.

Returns The resourceCount of this Datasource.

Return type *Workgroup*

property sessions
Gets the sessions of this Datasource.

Returns The sessions of this Datasource.

Return type *Workgroup*

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.directive module

Isogeo API v1 - Model of Directive entity

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.models.directive.**Directive**(*_id=None*, *description=None*, *name=None*)

Bases: object

Directives are entities included as subresource of limitations into metadata CGUs.

Example

```
{
    "_id": string (uuid),
    "name": string,
    "description": string
}
```

ATTR_MAP = {}

ATTR_TYPES = {'_id': <class 'str'>, 'description': <class 'str'>, 'name': <class 's

property description
Gets the description of this Directive.

Returns The description of this Directive.

Return type str

property name
Gets the name of this Directive.

Returns The name of this Directive.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.event module

Isogeo API v1 - Model of Event entity

See: http://help.isogeo.com/api/complete/index.html#definition-event

class isogeo_pysdk.models.event.**Event**(*_id=None*, *date=None*, *description=None*, *kind=None*, *parent_resource=None*, *waitForSync=1*)

Bases: object

Events are entities included as subresource into metadata for data history description.

Example

```
{
    '_id': string (uuid),
    'date': string (datetime),
    'description': string,
    'kind': string
}
```

ATTR_CREA = {'date': <class 'str'>, 'description': <class 'str'>, 'kind': <class 's

ATTR_MAP = {}

ATTR_TYPES = {'_id': <class 'str'>, 'date': <class 'str'>, 'description': <class 's

property date

Gets the date of this Event.

Returns The date of this Event.

Return type str

property description

Gets the description of this Event.

Returns The description of this Event.

Return type str

property kind

Gets the kind of this Event.

Returns The kind of this Event.

Return type str

to_dict()

Returns the model properties as a dict.

Return type dict

to_dict_creation()

Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()

Returns the string representation of the model.

Return type str

isogeo_pysdk.models.feature_attributes module

Isogeo API v1 - Model of FeatureAttributes entity

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.models.feature_attributes.**FeatureAttribute**(*_id=None*, *alias=None*, *dataType=None*, *description=None*, *isAutoGenerated=None*, *isNullable=None*, *isReadOnly=None*, *hasElevation=None*, *hasMeasure=None*, *language=None*, *length=None*, *name=None*, *precision=None*, *propertyType=None*, *scale=None*, *spatialContext=None*, *parent_resource=None*)

Bases: object

FeatureAttributes are entities included as subresource into metadata.

Parameters

- **_id** (*str*) – UUID, defaults to None
- **alias** (*str*) – alias of the feature attribute, defaults to None
- **dataType** (*str*) – kind of field (varchar, integer32...), defaults to None
- **description** (*str*) – description of the feature attribute, defaults to None
- **language** (*str*) – language of the description, defaults to None
- **length** (*int*) – length of the values accepted in the attribute, defaults to None
- **name** (*str*) – attribute name, defaults to None
- **precision** (*int*) – value precision, defaults to None
- **scale** (*int*) – scale of display, defaults to None

Example

```
{
    "_id": string (uuid),
    "alias": string,
    "dataType": string,
    "description": string,
    "language": string,
```

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```
    "length": int,
    "name": string,
    "precision": int,
    "scale": int,
}
```

ATTR_CREA = {'alias': <class 'str'>, 'dataType': <class 'str'>, 'description': <cla

ATTR_MAP = {}

ATTR_TYPES = {'_id': <class 'str'>, 'alias': <class 'str'>, 'dataType': <class 'str

property alias
Gets the alias of this FeatureAttribute.

Returns The alias of this FeatureAttribute.

Return type str

property dataType
Gets the dataType of this FeatureAttribute.

Returns The dataType of this FeatureAttribute.

Return type str

property description
Gets the description of this FeatureAttribute.

Returns The description of this FeatureAttribute.

Return type str

property hasElevation
Gets the hasElevation of this FeatureAttribute.

Returns The hasElevation of this FeatureAttribute.

Return type bool

property hasMeasure
Gets the hasMeasure of this FeatureAttribute.

Returns The hasMeasure of this FeatureAttribute.

Return type bool

property isAutoGenerated
Gets the isAutoGenerated of this FeatureAttribute.

Returns The isAutoGenerated of this FeatureAttribute.

Return type bool

property isNullable
Gets the isNullable of this FeatureAttribute.

Returns The isNullable of this FeatureAttribute.

Return type bool

property isReadOnly
Gets the isReadOnly of this FeatureAttribute.

Returns The isReadOnly of this FeatureAttribute.

Return type bool

property language
Gets the language of this FeatureAttribute.

Returns The language of this FeatureAttribute.

Return type str

property length
Gets the length of this FeatureAttribute.

Returns The length of this FeatureAttribute.

Return type int

property name
Gets the name of this FeatureAttribute.

Returns The name of this FeatureAttribute.

Return type str

property precision
Gets the precision of this FeatureAttribute.

Returns The precision of this FeatureAttribute.

Return type int

property propertyType
Gets the propertyType of this FeatureAttribute.

Returns The propertyType of this FeatureAttribute.

Return type str

property scale
Gets the scale of this FeatureAttribute.

Returns The scale of this FeatureAttribute.

Return type int

property spatialContext
Gets the spatialContext of this FeatureAttribute.

Returns The spatialContext of this FeatureAttribute.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.format module

Isogeo API v1 - Model of Format entity

See: http://help.isogeo.com/api/complete/index.html#definition-format

class isogeo_pysdk.models.format.**Format**(*_id=None*, *_tag=None*, *aliases=None*, *code=None*, *name=None*, *type=None*, *versions=None*)

Bases: object

Formats are entities included as subresource into metadata for data history code.

Example

```
{
    "_id": string (uuid),
    "_tag": "format:dgn",
    "aliases": [
        "dgnv7",
        "dgnv8",
        "igds"
    ],
    "code": "dgn",
    "name": "DGN",
    "type": "dataset",
    "versions": [
        "v8",
        "V7",
        null
    ]
}
```

ATTR_CREA = {'aliases': <class 'list'>, 'code': <class 'str'>, 'name': <class 'str'

ATTR_MAP = {}

ATTR_TYPES = {'_id': <class 'str'>, '_tag': <class 'str'>, 'aliases': <class 'list'

property aliases

Gets the aliases of this Format.

Returns The aliases of this Format.

Return type list

property code

Gets the code of this Format.

Returns The code of this Format.

Return type str

property name

Gets the name of this Format.

Returns The name of this Format.

Return type str

to_dict()

Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

property type
Gets the type of this Format.

Returns The type of this Format.

Return type str

property versions
Gets the versions of this Format.

Returns The versions of this Format.

Return type list

isogeo_pysdk.models.invitation module

Isogeo API v1 - Model of Invitation entity

See: http://help.isogeo.com/api/complete/index.html#definition-invitation

class isogeo_pysdk.models.invitation.**Invitation**(*_created=None*, *_id=None*, *_modified=None*, *email=None*, *expiresIn=None*, *group=None*, *role=None*)

Bases: object

Invitations are CSW client entry-points.

Example

```
{
    "_id": "6c7c9e0c63a943f79ba1e00766d0082d",
    "_created": "2019-07-25T09:23:37.0975771+00:00",
    "_modified": "2019-07-25T09:23:37.0975771+00:00",
    "role": "admin",
    "email": "prenom.nom@organisation.code",
    "expiresIn": 657364,
    "group": {
        "_id": "string (uuid)",
        "_tag": "owner:string (uuid)",
        "_created": "2019-05-07T15:11:08.5202923+00:00",
        "_modified": "2019-07-25T09:13:29.7858081+00:00",
        "contact": {
            "_id": "string (uuid)",
            "_tag": "contact:group:string (uuid)",
            "_deleted": false,
            "type": "group",
            "group": "Isogeo TEST",
            "available": false
        },
        "canCreateMetadata": true,
```

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```
        "canCreateLegacyServiceLinks": false,
        "areKeywordsRestricted": false,
        "hasCswClient": false,
        "hasScanFme": false,
        "keywordsCasing": "lowercase"
    }
```

ATTR_CREA = {'email': <class 'str'>, 'group': <class 'str'>, 'role': <class 'str'>}

ATTR_MAP = {}

ATTR_TYPES = {'_created': <class 'str'>, '_id': <class 'str'>, '_modified': <class

property email
Gets the email of this Invitation.

Returns The email of this Invitation.

Return type str

property expiresIn
Gets the expiresIn of this Invitation.

Returns The expiresIn of this Invitation.

Return type int

property group
Gets the group of this Invitation.

Returns The group of this Invitation.

Return type *Workgroup*

property role
Gets the role of this Invitation.

Returns The role of this Invitation.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.keyword module

Isogeo API v1 - Model of Keyword entity

See: http://help.isogeo.com/api/complete/index.html#definition-keyword

class isogeo_pysdk.models.keyword.**Keyword**(*_abilities=None*, *_created=None*, *_id=None*, *_modified=None*, *_tag=None*, *code=None*, *count=None*, *description=None*, *thesaurus=None*, *text=None*)

Bases: object

Keywords are entities used to organize and shares metadata of a workgroup.

Example

```
{
    '_abilities': [
        'keyword:delete',
        'keyword:restrict'
        ],
    '_created': None,
    '_id': 'ac56a9fbe6f348a79ec9899ebce2d6da',
    '_modified': None,
    '_tag': 'keyword:isogeo:tests-unitaires',
    'code': 'tests-unitaires',
    'count': {
        'isogeo': 0
        },
    'description': None,
    'text': 'tests unitaires',
    'thesaurus': {
        '_id': '1616597fbc4348c8b11ef9d59cf594c8',
        'code': 'isogeo'
        }
}
```

ATTR_CREA = {'text': <class 'str'>}

ATTR_MAP = {}

ATTR_TYPES = {'_abilities': <class 'list'>, '_created': <class 'str'>, '_id': <clas

property code

Gets the code of this Keyword.

Returns The code of this Keyword.

Return type str

property count

Gets the count of this Keyword.

Returns The count of this Keyword.

Return type dict

property description

Gets the description of this Keyword.

Returns The description of this Keyword.

Return type str

property text
Gets the text of this Keyword.

Returns The text of this Keyword.

Return type bool

property thesaurus
Gets the thesaurus of this Keyword. # noqa: E501.

Returns The thesaurus of this Keyword. # noqa: E501

Return type *Thesaurus*

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.keyword_search module

Isogeo API v1 - Model of Keyword search entity

See: http://help.isogeo.com/api/complete/index.html#definition-search

class isogeo_pysdk.models.keyword_search.**KeywordSearch**(*limit=None*, *offset=None*, *results=None*, *total=None*)

Bases: object

Keyword searchs are entities used to organize and shares metadata of a workgroup.

ATTR_TYPES = {'limit': <class 'int'>, 'offset': <class 'int'>, 'results': <class 'l

property limit
Gets the created of this Keyword search.

Returns The created of this Keyword search.

Return type str

property offset
Gets the offset of this Keyword search.

Returns The offset of this Keyword search.

Return type int

property results
Gets the tag of this Keyword search.

Returns The tag of this Keyword search.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_str()
Returns the string representation of the model.

Return type str

property total
Gets the total of this Keyword search.

Returns The total of this Keyword search.

Return type str

isogeo_pysdk.models.license module

Isogeo API v1 - Model of License entity

See: http://help.isogeo.com/api/complete/index.html#definition-license

class isogeo_pysdk.models.license.**License**(*_abilities=None*, *_id=None*, *_tag=None*, *count=None*, *content=None*, *link=None*, *name=None*, *owner=None*)

Bases: object

Licenses are entities included as subresource into metadata.

Example

```
{
    "_id": "string (uuid)",
    "content": "string",
    "count": "integer (int32)",
    "link": "string",
    "name": "string"
}
```

Attributes: ATTR_TYPES (dict): basic structure of license attributes. {"attribute name": "attribute type"}. ATTR_CREA (dict): only attributes used to POST requests. {"attribute name": "attribute type"}

ATTR_CREA = {'content': 'str', 'link': 'str', 'name': 'str'}

ATTR_MAP = {}

ATTR_TYPES = {'_abilities': <class 'str'>, '_id': <class 'str'>, '_tag': <class 'st

property content
Gets the content of this License.

Returns The content of this License.

Return type str

property count
Gets the count of this License.

Returns The count of this License.

Return type int

property link
Gets the link (URL) of this License.

Returns The link (URL) of this License.

Return type str

property name
Gets the name of this License.

Returns The name of this License.

Return type str

property owner
Gets the owner of this License.

Returns The owner of this License.

Return type *Workgroup*

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.limitation module

Isogeo API v1 - Model of Limitation entity

See: http://help.isogeo.com/api/complete/index.html

class isogeo_pysdk.models.limitation.**Limitation**(*_id=None*, *description=None*, *directive=None*, *restriction=None*, *type=None*, *parent_resource=None*)

Bases: object

Limitations are entities included as subresource into metadata which can contain a Directive.

Example

```
{
    "_id": "string (uuid)",
    "description": "string",
    "directive": "dict",
    "restriction": "string",
    "type": "string"
}
```

ATTR_CREA = {'description': 'str', 'directive': <class 'isogeo_pysdk.models.directive

ATTR_MAP = {}

ATTR_TYPES = {'_id': <class 'str'>, 'description': <class 'str'>, 'directive': <cla

property description
Gets the description of this Limitation.

Returns The description of this Limitation.

Return type str

property directive
Gets the directive of this Limitation.

Returns The directive of this Limitation.

Return type *Directive*

property restriction
Gets the restriction of this Limitation.

Returns The restriction of this Limitation.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

property type
Gets the type of this Limitation.

Returns The type of this Limitation.

Return type str

isogeo_pysdk.models.link module

Isogeo API v1 - Model of Link entity

See: http://help.isogeo.com/api/complete/index.html#definition-link

class isogeo_pysdk.models.link.**Link**(*_id=None*, *actions=None*, *kind=None*, *link=None*, *size=None*, *title=None*, *type=None*, *url=None*, *parent_resource=None*)

Bases: object

Links are entities included as subresource into metadata for data history title.

Example

```
{
    '_id': string (uuid),
    'actions': list,
    'kind': string,
    'parent_resource': string (uuid),
    'size': int,
```

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```
    'title': string,
    'type': string,
    'url': string
}
```

ATTR_CREA = {'actions': <class 'list'>, 'kind': <class 'str'>, 'link': <class 'dict

ATTR_MAP = {}

ATTR_TYPES = {'_id': <class 'str'>, 'actions': <class 'list'>, 'kind': <class 'str'

property actions
Gets the actions of this Link.

Returns The actions of this Link.

Return type list

property kind
Gets the kind of this Link.

Returns The kind of this Link.

Return type str

property link
Gets the associated link of this Link.

Returns The associated link of this Link.

Return type dict

property size
Gets the size of the hosted data.

Returns The size of the hosted data.

Return type int

property title
Gets the title of this Link.

Returns The title of this Link.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

property type
Gets the type of this Link.

Returns The type of this Link.

Return type str

property url
Gets the url of this Link.

Return type str

Returns The url of this Link.

Rurl str

isogeo_pysdk.models.metadata module

Isogeo API v1 - Model of Metadata (= Resource) entity

See: http://help.isogeo.com/api/complete/index.html#definition-resource

class isogeo_pysdk.models.metadata.**Metadata**(*_abilities=None*, *_created=None*, *_creator=None*, *_id=None*, *_modified=None*, *abstract=None*, *collectionContext=None*, *collectionMethod=None*, *conditions=None*, *contacts=None*, *coordinateSystem=None*, *created=None*, *distance=None*, *editionProfile=None*, *encoding=None*, *envelope=None*, *events=None*, *featureAttributes=None*, *features=None*, *format=None*, *formatVersion=None*, *geometry=None*, *keywords=None*, *language=None*, *layers=None*, *limitations=None*, *links=None*, *modified=None*, *name=None*, *operations=None*, *path=None*, *precision=None*, *published=None*, *scale=None*, *series=None*, *serviceLayers=None*, *specifications=None*, *tags=None*, *thumbnailUrl=None*, *title=None*, *topologicalConsistency=None*, *type=None*, *updateFrequency=None*, *validFrom=None*, *validTo=None*, *validityComment=None*, ***kwargs*)

Bases: object

Metadata are the main entities in Isogeo.

Example

```
{
    "_abilities": [
        "string"
    ],
    "_created": "string (date-time)",
    "_creator": {
        "_abilities": [
        "string"
        ],
        "_created": "string (date-time)",
        "_id": "string (uuid)",
        "_modified": "string (date-time)",
        "areKeywordsRestricted": "boolean",
        "canCreateMetadata": "boolean",
```

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```
        "code": "string",
        "contact": {
        "_created": "string (date-time)",
        "_id": "string (uuid)",
        "_modified": "string (date-time)",
        "addressLine1": "string",
        "addressLine2": "string",
        "addressLine3": "string",
        "available": "string",
        "city": "string",
        "count": "integer (int32)",
        "countryCode": "string",
        "email": "string",
        "fax": "string",
        "hash": "string",
        "name": "string",
        "organization": "string",
        "phone": "string",
        "type": "string",
        "zipCode": "string"
        },
        "keywordsCasing": "string",
        "metadataLanguage": "string",
        "themeColor": "string"
    },
    "_id": "string (uuid)",
    "_modified": "string (date-time)",
    "abstract": "string",
    "bbox": [
        "number (double)"
    ],
    "collectionContext": "string",
    "collectionMethod": "string",
    "conditions": [
        {
        "_id": "string (uuid)",
        "description": "string",
        "license": {
            "_id": "string (uuid)",
            "content": "string",
            "count": "integer (int32)",
            "link": "string",
            "name": "string"
        }
        }
    ],
    "contacts": [
        {
        "_id": "string (uuid)",
        "contact": {
            "_created": "string (date-time)",
            "_id": "string (uuid)",
            "_modified": "string (date-time)",
            "addressLine1": "string",
            "addressLine2": "string",
            "addressLine3": "string",
            "available": "string",
```


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```
            "city": "string",
            "count": "integer (int32)",
            "countryCode": "string",
            "email": "string",
            "fax": "string",
            "hash": "string",
            "name": "string",
            "organization": "string",
            "phone": "string",
            "type": "string",
            "zipCode": "string"
        },
        "role": "string"
        }
    ],
    "context": "object",
    "coordinate-system": "object",
    "created": "string (date-time)",
    "distance": "number (double)",
    "editionProfile": "string",
    "encoding": "string",
    "envelope": "object",
    "features": "integer (int32)",
    "format": "string",
    "formatVersion": "string",
    "geometry": "string",
    "height": "integer (int32)",
    "keywords": [
        {}
    ]
}
```


ATTR_CREA = {'abstract': <class 'str'>, 'collectionContext': <class 'str'>, 'collect

ATTR_MAP = {'coordinateSystem': 'coordinate-system', 'featureAttributes': 'feature-a

ATTR_TYPES = {'_abilities': <class 'list'>, '_created': <class 'str'>, '_creator':

property abstract

Gets the abstract.

Returns The abstract of this Metadata.

Return type str

admin_url(*url_base='https://app.isogeo.com'*)

Returns the administration URL (https://app.isogeo.com) for this metadata.

Parameters **url_base** (*str*) – base URL of admin site. Defaults to: https://app.isogeo.com

Return type str

classmethod clean_attributes(*raw_object*)

Renames attributes which are incompatible with Python (hyphens...). See related issue: https://github.com/isogeo/isogeo-api-py-minsdk/issues/82.

Parameters **raw_object** (*dict*) – metadata dictionary returned by a request.json()

Returns the metadata with correct attributes

Return type *Metadata*

property collectionContext
Gets the collectionContext of this Metadata.

Returns The collectionContext of this Metadata.

Return type str

property collectionMethod
Gets the collection method of this Metadata.

Returns The collection method of this Metadata.

Return type str

property conditions
Gets the conditions of this Metadata.

Returns The conditions of this Metadata.

Return type list

property contacts
Gets the contacts of this Metadata.

Returns The contacts of this Metadata.

Return type list

property coordinateSystem
Gets the coordinateSystem of this Metadata.

Returns The coordinateSystem of this Metadata.

Return type *CoordinateSystem*

property created
Gets the creation date of the data described by the Metadata. It's the equivalent of the *created* original attribute (renamed to avoid conflicts with the _created` one).

Date format is: *%Y-%m-%dT%H:%M:%S+00:00*.

Returns The creation of this Metadata.

Return type str

property distance
Gets the distance of this Metadata.

Returns The distance of this Metadata.

Return type str

property editionProfile
Gets the editionProfile of this Metadata.

Returns The editionProfile of this Metadata.

Return type str

property encoding
Gets the encoding of this Metadata.

Returns The encoding of this Metadata.

Return type str

property envelope
Gets the envelope of this Metadata.

Returns The envelope of this Metadata.

Return type str

property events
Gets the events of this Metadata.

Returns The events of this Metadata.

Return type list

property featureAttributes
Gets the featureAttributes of this Metadata.

Returns The featureAttributes of this Metadata.

Return type list

property features
Gets the features of this Metadata.

Returns The features of this Metadata.

Return type int

property format
Gets the format of this Metadata.

Returns The format of this Metadata.

Return type str

property formatVersion
Gets the formatVersion of this Metadata.

Returns The formatVersion of this Metadata.

Return type str

property geometry
Gets the geometry of this Metadata.

Returns The geometry of this Metadata.

Return type str

property groupId
Shortcut to get the UUID of the workgroup which owns the Metadata.

Return type str

property groupName
Shortcut to get the name of the workgroup which owns the Metadata.

Return type str

property keywords
Gets the keywords of this Metadata.

Returns The keywords of this Metadata.

Return type str

property language
Gets the language of this Metadata.

Returns The language of this Metadata.

Return type str

property layers
Gets the layers of this Metadata.

Returns The layers of this Metadata.

Return type list

property limitations
Gets the limitations of this Metadata.

Returns The limitations of this Metadata.

Return type str

property links
Gets the links of this Metadata.

Returns The links of this Metadata.

Return type str

property modified
Gets the last modification date of the data described by this Metadata.

It's the equivalent of the *created* original attribute (renamed to avoid conflicts with the _created` one).

Returns The modification of this Metadata.

Return type str

property name
Gets the name of this Metadata.

Returns The name of this Metadata.

Return type str

property operations
Gets the operations of this Metadata.

Returns The operations of this Metadata.

Return type list

property path
Gets the path of this Metadata.

Returns The path of this Metadata.

Return type str

property precision
Gets the precision of this Metadata.

Returns The precision of this Metadata.

Return type str

property published
Gets the published of this Metadata.

Returns The published of this Metadata.

Return type str

property scale
Gets the scale of this Metadata.

Returns The scale of this Metadata.

Return type str

property series
Gets the series of this Metadata.

Returns The series of this Metadata.

Return type str

property serviceLayers
Gets the serviceLayers of this Metadata.

Returns The serviceLayers of this Metadata.

Return type list

signature(*included_attributes='coordinateSystem', 'envelope', 'features', 'featureAttributes', 'format', 'geometry', 'groupId', 'name', 'path', 'series', 'title', 'type'*)
Calculate a hash cumulating certain attributes values. Useful to Scan or comparison operations.

Parameters **included_attributes** (*tuple*) – object attributes to include in hash. Default: {("coordinateSystem","envelope","features","featuresAttributes","format","geometry","groupId","name","path","series","title","type

Return type str

property specifications
Gets the specifications of this Metadata.

Returns The specifications of this Metadata.

Return type str

property tags
Gets the tags of this Metadata.

Returns The tags of this Metadata.

Return type str

property thumbnailUrl
Gets the thumbnailUrl of this Metadata.

Returns The thumbnailUrl of this Metadata.

Return type str

property title
Gets the title of this Metadata.

Returns The title of this Metadata.

Return type str

title_or_name(*slugged=False*)
Gets the title of this Metadata or the name if there is no title. It can return a slugified value.

Parameters **slugged** (*bool*) – slugify title. Defaults to *False*.

Returns the title or the name of this Metadata.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

property topologicalConsistency
Gets the topologicalConsistency of this Metadata.

Returns The topologicalConsistency of this Metadata.

Return type str

property type
Gets the type of this Metadata.

Returns The type of this Metadata.

Return type str

property typeFilter
Shortcut to get the type as expected in search filter.

Return type str

property updateFrequency
Gets the updateFrequency of this Metadata.

Returns The updateFrequency of this Metadata.

Return type str

property validFrom
Gets the validFrom of this Metadata.

Returns The validFrom of this Metadata.

Return type str

property validTo
Gets the validTo of this Metadata.

Returns The validTo of this Metadata.

Return type str

property validityComment
Gets the validityComment of this Metadata.

Returns The validityComment of this Metadata.

Return type str

isogeo_pysdk.models.metadata_search module

Isogeo API v1 - Model of Metadata search entity

See: http://help.isogeo.com/api/complete/index.html#definition-search

class isogeo_pysdk.models.metadata_search.**MetadataSearch**(*envelope=None*, *limit=None*, *offset=None*, *query=None*, *results=None*, *tags=None*, *total=None*)

Bases: object

Metadata searchs are entities used to organize and shares metadata of a workgroup.

ATTR_TYPES = {'envelope': <class 'object'>, 'limit': <class 'int'>, 'offset': <clas

property envelope
Gets the abilities of this Metadata search.

Returns The abilities of this Metadata search.

Return type dict

property limit
Gets the created of this Metadata search.

Returns The created of this Metadata search.

Return type str

property offset
Gets the offset of this Metadata search.

Returns The offset of this Metadata search.

Return type int

property query
Gets the modified of this Metadata search.

Returns The modified of this Metadata search.

Return type dict

property results
Gets the tag of this Metadata search.

Returns The tag of this Metadata search.

Return type list

property tags
Gets the tags of this Metadata search.

Returns The tags of this Metadata search.

Return type dict

to_dict()
Returns the model properties as a dict.

Return type dict

to_str()
Returns the string representation of the model.

Return type str

property total
Gets the total of this Metadata search.

Returns The total of this Metadata search.

Return type int

isogeo_pysdk.models.service_layer module

Isogeo API v1 - Model of ServiceLayer entity

See: http://help.isogeo.com/api/complete/index.html#definition-serviceLayer

class isogeo_pysdk.models.service_layer.**ServiceLayer**(*_id=None*, *dataset=None*, *id=None*, *name=None*, *mimeTypes=None*, *titles=None*, *parent_resource=None*)

Bases: object

ServiceLayers are entities defining rules of data creation.

Example

```
{
    "_id": "string (uuid)",
    "id": "string",
    "mimeTypes": [
        "string"
    ],
    "titles": [
        {
            "lang": "string",
            "value": "string"
        }
    ]
}
```

ATTR_CREA = {'name': <class 'str'>, 'titles': <class 'list'>}

ATTR_MAP = {'name': 'id'}

ATTR_TYPES = {'_id': <class 'str'>, 'dataset': <class 'dict'>, 'mimeTypes': <class

property dataset
Gets the dataset used for Isogeo filters of this ServiceLayer.

Returns The dataset of this ServiceLayer.

Return type dict

property mimeTypes
Gets the mimeTypes of this ServiceLayer.

Returns The mimeTypes of this ServiceLayer.

Return type str

property name
Gets the name used for Isogeo filters of this ServiceLayer.

Returns The name of this ServiceLayer.

Return type str

property titles
Gets the titles of this ServiceLayer.

Returns The titles of this ServiceLayer.

Return type list

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.service_operation module

Isogeo API v1 - Model of ServiceOperation entity

See: http://help.isogeo.com/api/complete/index.html#definition-serviceOperation

class isogeo_pysdk.models.service_operation.**ServiceOperation**(*_id=None*, *mimeTypesIn=None*, *mimeTypesOut=None*, *name=None*, *url=None*, *verb=None*, *parent_resource=None*)

Bases: object

ServiceOperations are entities defining rules of data creation.

Example

```
{
    "_id": "string (uuid)",
    "mimeTypesIn": [
        "string"
    ],
    "mimeTypesOut": [
        "string"
    ],
    "name": "string",
    "url": "string",
    "verb": "string"
}
```

ATTR_CREA = {'name': <class 'str'>, 'verb': <class 'str'>}

ATTR_MAP = {}

ATTR_TYPES = {'_id': <class 'str'>, 'mimeTypesIn': <class 'list'>, 'mimeTypesOut':

property mimeTypesIn
Gets the mimeTypesIn used for Isogeo filters of this ServiceOperation.

Returns The mimeTypesIn of this ServiceOperation.

Return type dict

property mimeTypesOut
Gets the mimeTypesOut of this ServiceOperation.

Returns The mimeTypesOut of this ServiceOperation.

Return type str

property name
Gets the name used for Isogeo filters of this ServiceOperation.

Returns The name of this ServiceOperation.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

property url
Gets the url of this ServiceOperation.

Returns The url of this ServiceOperation.

Return type list

property verb
Gets the verb of this ServiceOperation.

Returns The verb of this ServiceOperation.

Return type list

isogeo_pysdk.models.share module

Isogeo API v1 - Model of Share entity

See: http://help.isogeo.com/api/complete/index.html#definition-share

class isogeo_pysdk.models.share.**Share**(*_created=None*, *_creator=None*, *_id=None*, *_modified=None*, *applications=None*, *catalogs=None*, *groups=None*, *name=None*, *rights=None*, *type=None*, *urlToken=None*)
Bases: object

Shares are entities used to publish catalog(s) of metadata to applications.

Example

```
{
    "_created": "string (date-time)",
    "_creator": {
        "_abilities": [
        "string"
        ],
        "_created": "string (date-time)",
        "_id": "string (uuid)",
        "_modified": "string (date-time)",
        "areKeywordsRestricted": "boolean",
        "canCreateMetadata": "boolean",
        "catalogs": "string",
        "contact": {
        "_created": "string (date-time)",
        "_id": "string (uuid)",
        "_modified": "string (date-time)",
        "addressLine1": "string",
        "addressLine2": "string",
        "addressLine3": "string",
        "available": "string",
        "city": "string",
        "groups": "integer (int32)",
        "groupsryCode": "string",
        "email": "string",
        "fax": "string",
        "hash": "string",
        "name": "string",
        "organization": "string",
        "phone": "string",
        "type": "string",
        "zipCode": "string"
        },
        "keywordsCasing": "string",
        "metadataLanguage": "string",
        "themeColor": "string"
    },
    "_id": "string (uuid)",
    "_modified": "string (date-time)",
    "applications": [
        {
        "_created": "string (date-time)",
        "_id": "string (uuid)",
        "_modified": "string (date-time)",
        "canHaveManyGroups": "boolean",
        "client_id": "string",
        "client_secret": "string",
        "groups": [
            {
            "_abilities": [
                "string"
            ],
            "_created": "string (date-time)",
            "_id": "string (uuid)",
            "_modified": "string (date-time)",
            "areKeywordsRestricted": "boolean",
            "canCreateMetadata": "boolean",
            "catalogs": "string",
```


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```
            "contact": {
                "_created": "string (date-time)",
                "_id": "string (uuid)",
                "_modified": "string (date-time)",
                "addressLine1": "string",
                "addressLine2": "string",
                "addressLine3": "string",
                "available": "string",
                "city": "string",
                "groups": "integer (int32)",
                "groupsryCode": "string",
                "email": "string",
                "fax": "string",
                "hash": "string",
                "name": "string",
                "organization": "string",
                "phone": "string",
                "type": "string",
                "zipCode": "string"
            },
            "keywordsCasing": "string",
            "metadataLanguage": "string",
            "themeColor": "string"
            }
        ],
        "kind": "string",
        "name": "string",
        "redirect_uris": [
            "string"
        ],
        "scopes": [
            "string"
        ],
        "staff": "boolean",
        "url": "string"
        }
    ],
    "catalogs": [
        {
        "$scan": "boolean",
        "_abilities": [
            "string"
        ],
        "_created": "string (date-time)",
        "_id": "string (uuid)",
        "_modified": "string (date-time)"
        }
    ]
}
```


ATTR_CREA = {'name': <class 'str'>, 'rights': <class 'list'>, 'type': <class 'str'>

ATTR_MAP = {}

ATTR_TYPES = {'_created': <class 'str'>, '_creator': <class 'isogeo_pysdk.models.wor

admin_url(*url_base='https://app.isogeo.com'*)

Returns the administration URL (https://app.isogeo.com) for this share.

Parameters **url_base** (*str*) – base URL of admin site. Defaults to: https://app.isogeo.com

Return type str

property applications
Gets the applications of this Share.

Returns The applications of this Share.

Return type str

property catalogs
Gets the catalogs of this Share.

Returns The catalogs of this Share.

Return type str

property groups
Gets the groups of this Share.

Returns The groups of this Share.

Return type list

property name
Gets the name of this Share.

Returns The name of this Share.

Return type str

opencatalog_url(*url_base='https://open.isogeo.com'*)
Returns the OpenCatalog URL for this share or None if OpenCatalog is not enabled.

Parameters **url_base** (*str*) – base URL of OpenCatalog. Defaults to: https://open.isogeo.com

Return type str

Returns

- False if the share type is not 'application'
- None if OpenCatalog is not enabled in the share
- URL of the OpenCatalog when everything is fine

property rights
Gets the rights of this Share.

Returns The rights of this Share.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

property type
Gets the type of this Share.

Returns The type of this Share.

Return type str

property urlToken
Gets the urlToken of this Share.

Returns The urlToken of this Share.

Return type str

isogeo_pysdk.models.specification module

Isogeo API v1 - Model of Specification entity

See: http://help.isogeo.com/api/complete/index.html#definition-specification

class isogeo_pysdk.models.specification.**Specification**(*_abilities=None*, *_id=None*, *_tag=None*, *count=None*, *link=None*, *name=None*, *owner=None*, *published=None*)

Bases: object

Specifications are entities defining rules of data creation.

Example

```
{
    '_abilities': [],
    '_id': 'string (uuid)',
    '_tag': 'specification:isogeo:string (uuid)',
    'count': int,
    'link': string,
    'name': string,
    'published': '2016-06-30T00:00:00'
}
```

ATTR_CREA = {'link': <class 'str'>, 'name': <class 'str'>, 'published': <class 'str

ATTR_MAP = {}

ATTR_TYPES = {'_abilities': <class 'str'>, '_id': <class 'str'>, '_tag': <class 'st

property count
Gets the id of this Specification.

Returns The id of this Specification.

Return type str

property isLocked
Shortcut to know if the Specification is owned by Isogeo or a workgroup.

Return type bool

Returns

- None if tag is None too

- True if the specification is owned by Isogeo = locked
- False if the specification is owned by a workgroup = not locked

property link
Gets the link (URL) of this Specification.

Returns The link (URL) of this Specification.

Return type str

property name
Gets the id of this Specification.

Returns The id of this Specification.

Return type str

property owner
Gets the owner of this Specification.

Returns The owner of this Specification.

Return type *Workgroup*

property published
Gets the zip (postal) code of this Specification.

Returns The zip (postal) code of this Specification.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.thesaurus module

Isogeo API v1 - Model of Thesaurus entity

See: http://help.isogeo.com/api/complete/index.html#definition-thesaurus

class isogeo_pysdk.models.thesaurus.**Thesaurus**(*_abilities=None*, *_id=None*, *code=None*, *name=None*)

Bases: object

Thesaurus are entities which can be used in shares.

Example

```
{
    '_abilities': [],
    '_id': '926f969ee2bb470a84066625f68b96bb',
```

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```
    'code': 'iso19115-topic',
    'name': 'MD_TopicCategoryCode'
}
```

ATTR_CREA = {'name': <class 'str'>}

ATTR_MAP = {}

ATTR_TYPES = {'_abilities': <class 'list'>, '_id': <class 'str'>, 'code': <class 's

property code
Gets the code of this Thesaurus.

Returns The code of this Thesaurus.

Return type str

property name
Gets the name of this Thesaurus.

Returns The name of this Thesaurus.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.user module

Isogeo API v1 - Model of User entity

See: http://help.isogeo.com/api/complete/index.html#definition-user

class isogeo_pysdk.models.user.**User**(*_abilities=None*, *_created=None*, *_id=None*, *_modified=None*, *contact=None*, *language=None*, *mailchimp=None*, *memberships=None*, *staff=None*, *timezone=None*)

Bases: object

Users in Isogeo platform.

Example

```
{
    "_abilities": [
        "string"
    ],
    "_created": "string (date-time)",
    "_id": "string (uuid)",
```

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```
    "_modified": "string (date-time)",
    "contact": {
        "_created": "string (date-time)",
        "_id": "string (uuid)",
        "_modified": "string (date-time)",
        "addressLine1": "string",
        "addressLine2": "string",
        "addressLine3": "string",
        "available": "string",
        "city": "string",
        "count": "integer (int32)",
        "countryCode": "string",
        "email": "string",
        "fax": "string",
        "hash": "string",
        "name": "string",
        "organization": "string",
        "phone": "string",
        "type": "string",
        "zipCode": "string"
    },
    "language": "string",
    "staff": "boolean",
    "timezone": "string"
}
```

ATTR_CREA = {'contact': <class 'isogeo_pysdk.models.contact.Contact'>, 'language': <

ATTR_MAP = {}

ATTR_TYPES = {'_abilities': <class 'list'>, '_created': <class 'str'>, '_id': <class

property contact

Gets the contact of this user.

Returns The contact of this user.

Return type *Contact*

property email

Shortcut to get the email from the contact data linked to the user.

Return type str

property language

Gets the id of this User.

Returns The id of this User.

Return type str

property mailchimp

Gets the id of this User.

Returns The second address line of this User.

Return type str

property name

Shortcut to get the name from the contact data linked to the user.

Return type str

property staff
Staff status for the User.

Returns the staff status of the User

Return type bool

property timezone
Gets the timezone of this User.

Returns The timezone of this User.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

isogeo_pysdk.models.workgroup module

Isogeo API v1 - Model of Workgroup entity

See: http://help.isogeo.com/api/complete/index.html#definition-workgroup

class isogeo_pysdk.models.workgroup.**Workgroup**(*_abilities=None*, *_created=None*, *_id=None*, *_modified=None*, *_tag=None*, *areKeywordsRestricted=None*, *canCreateLegacyServiceLinks=None*, *canCreateMetadata=None*, *code=None*, *contact=None*, *hasCswClient=None*, *hasScanFme=None*, *keywordsCasing=None*, *limits=None*, *metadataLanguage=None*, *themeColor=None*)

Bases: object

Workgroups are entities containing metadata.

Example

```
{
    '_abilities': [
        'group:manage',
        'group:update'
    ],
    '_created': '2015-05-21T12:08:16.4295098+00:00',
    '_id': '32f7e95ec4e94ca3bc1afda960003882',
    '_modified': '2018-12-27T10:47:28.7880956+00:00',
    '_tag': 'owner:32f7e95ec4e94ca3bc1afda960003882',
    'areKeywordsRestricted': False,
    'canCreateLegacyServiceLinks': True,
```

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```
    'canCreateMetadata': True,
    'contact': {
        '_deleted': False,
        '_id': '2a3aefc4f80347f590afe58127f6cb0f',
        '_tag': 'contact:group:2a3aefc4f80347f590afe58127f6cb0f',
        'addressLine1': '26 rue du faubourg Saint-Antoine',
        'addressLine2': '4éme étage',
        'addressLine3': 'bouton porte',
        'available': False,
        'city': 'Paris',
        'countryCode': 'FR',
        'email': 'dev@isogeo.com',
        'fax': '33 (0)9 67 46 50 06',
        'name': 'Isogeo Test',
        'phone': '33 (0)9 67 46 50 06',
        'type': 'group',
        'zipCode': '75012'
    },
    'hasCswClient': True,
    'hasScanFme': True,
    'keywordsCasing': 'lowercase',
    'limits': {
        'canDiffuse': False,
        'canShare': True,
        'Workgroups': {
            'current': 1,
            'max': -1
        },
        'resources': {
            'current': 2,
            'max': 20
        },
        'upload': {
            'current': 0,
            'max': 1073741824
        },
        'users': {
            'current': 1,
            'max': 2}
        },
    'metadataLanguage': 'fr',
    'themeColor': '#4499A1'
}
```


ATTR_CREA = {'canCreateLegacyServiceLinks': <class 'bool'>, 'canCreateMetadata': <cl

ATTR_MAP = {'contact': ['contact.addressLine1', 'contact.addressLine2', 'contact.addr

ATTR_TYPES = {'_abilities': <class 'list'>, '_created': <class 'str'>, '_id': <class

admin_url(*url_base='https://app.isogeo.com'*)

Returns the administration URL (https://app.isogeo.com) for this group.

Parameters **url_base** (*str*) – base URL of admin site. Defaults to: https://app.isogeo.com. Can also be https://manage.isogeo.com.

Return type str

property areKeywordsRestricted

Gets the areKeywordsRestricted of this Workgroup.

Returns The areKeywordsRestricted of this Workgroup.

Return type str

property canCreateLegacyServiceLinks
Gets the canCreateLegacyServiceLinks of this Workgroup.

Returns The canCreateLegacyServiceLinks of this Workgroup.

Return type str

property canCreateMetadata
Gets the canCreateMetadata of this Workgroup.

Returns The canCreateMetadata of this Workgroup.

Return type str

property code
Gets the code of this Workgroup.

Returns The code of this Workgroup.

Return type str

property contact
Gets the contact of this Workgroup.

Returns The contact of this Workgroup.

Return type dict

property hasCswClient
Gets the hasCswClient of this Workgroup.

Returns The hasCswClient of this Workgroup.

Return type bool

property hasScanFme
Find out if the group has access to the Scan.

Returns The hasScanFme value of this Workgroup.

Return type bool

property keywordsCasing
Gets the keywordsCasing of this Workgroup.

Returns The keywordsCasing of this Workgroup.

Return type str

property limits
Gets the limits of this Workgroup.

Returns The limits of this Workgroup.

Return type dict

property metadataLanguage
Gets the metadataLanguage of this Workgroup.

Returns The metadataLanguage of this Workgroup.

Return type str

property name
Shortcut to get the name of the workgroup.

Return type str

property themeColor
Gets the themeColor of this Workgroup.

Returns The themeColor of this Workgroup.

Return type str

to_dict()
Returns the model properties as a dict.

Return type dict

to_dict_creation()
Returns the model properties as a dict structured for creation purpose (POST)

Return type dict

to_str()
Returns the string representation of the model.

Return type str

Submodules

isogeo_pysdk.api_hooks module

Complementary set of hooks to use with Isogeo API.

class isogeo_pysdk.api_hooks.**IsogeoHooks**
Bases: object

Custom requests event hooks for Isogeo API.

Requests has a hook system that you can use to manipulate portions of the request process, or signal event handling. This module is a set of custom hooks to handle Isogeo API responses.

WIP

autofix_attributes_resource(*resp*, **args*, ***kwargs*)

check_for_error(*resp*, **args*, ***kwargs*)

isogeo_pysdk.checker module

Complementary set of tools to make some checks on requests to Isogeo API.

class isogeo_pysdk.checker.**IsogeoChecker**
Bases: object

Complementary set of tools to make some checks on requests to Isogeo API.

check_api_response(*response*)
Check API response and raise exceptions if needed.

Parameters **response** (*requests.models.Response*) – request response to check

Return type True or tuple

Example

```
>>> checker.check_api_response(<Response [500]>)
(False, 500)
```

check_edit_tab(*tab*, *md_type*)
Check if asked tab is part of Isogeo web form and reliable with metadata type.

Parameters

- **tab** (*str*) – tab to check. Must be one one of EDIT_TABS attribute
- **md_type** (*str*) – metadata type. Must be one one of FILTER_TYPES

check_internet_connection(*remote_server='api.isogeo.com'*, *proxies=None*)
Test if an internet connection is operational. Src: https://stackoverflow.com/a/20913928/2556577.

Parameters **remote_server** (*str*) – remote server used to check

Return type bool

classmethod check_is_uuid(*uuid_str*)
Check if it's an Isogeo UUID handling specific form.

Parameters **uuid_str** (*str*) – UUID string to check

check_request_parameters(*parameters={}*)
Check parameters passed to avoid errors and help debug.

Parameters **response** (*dict*) – search request parameters

isogeo_pysdk.decorators module

Isogeo Python SDK - Decorators

class isogeo_pysdk.decorators.**ApiDecorators**
Bases: object

api_client = None

isogeo_pysdk.exceptions module

Isogeo Python SDK - Custom exceptions

See: https://docs.python.org/fr/3/tutorial/errors.html#user-defined-exceptions

exception isogeo_pysdk.exceptions.**AlreadyExistError**
Bases: *isogeo_pysdk.exceptions.IsogeoSdkError*

An object with similar properties already exists in Isogeo database.

exception isogeo_pysdk.exceptions.**IsogeoSdkError**
Bases: Exception

Base class for exceptions in Isogeo Python SDK package.

isogeo_pysdk.isogeo module

Python SDK wrapping the Isogeo API.

Author: Julien Moura (@geojulien) for @Isogeo

class isogeo_pysdk.isogeo.**Isogeo**(*auth_mode='group'*, *client_secret=None*, *platform='qa'*, *proxy=None*, *timeout=15, 45*, *lang='fr'*, *app_name='isogeo-pysdk/3.4.3'*, *max_retries=2*, *pool_connections=20*, *pool_maxsize=50*, ***kwargs*)

Bases: requests_oauthlib.oauth2_session.OAuth2Session

Main class in Isogeo API Python wrapper. Manage authentication and requests to the REST API. Inherits from requests_oauthlib.OAuth2Session.

Inherited:

Parameters

- **client_id** (*str*) – Client id obtained during registration
- **redirect_uri** (*str*) – Redirect URI you registered as callback
- **auto_refresh_url** (*list*) – Refresh token endpoint URL, must be HTTPS. Supply this if you wish the client to automatically refresh your access tokens.

Package specific:

Parameters

- **client_secret** (*str*) – application oAuth2 secret
- **auth_mode** (*str*) – oAuth2 authentication flow to use. Must be one of 'AUTH_MODES'
- **platform** (*str*) – to request production or quality assurance
- **proxy** (*dict*) – dictionary of proxy settings as described in Requests
- **lang** (*str*) – API localization ("en" or "fr"). Defaults to 'fr'.
- **app_name** (*str*) – to custom the application name and user-agent
- **max_retries** (*int*) – custom the maximum number of retries each connection should attempt. See: Requests
- **pool_connections** (*int*) – custom the number of urllib3 connection pools to cache. See: Requests
- **pool_maxsize** (*int*) – custom the maximum number of connections to save in the pool. See: Requests

Returns authenticated requests Session you can use to send requests to the API.

Return type requests_oauthlib.OAuth2Session

Example

```
# using oAuth2 Password Credentials Grant (Legacy Application)
#  (for scripts executed on the server-side with user credentials
#  but without requiring user action)
isogeo = Isogeo(
    client_id=environ.get("ISOGEO_API_USER_LEGACY_CLIENT_ID"),
    client_secret=environ.get("ISOGEO_API_USER_LEGACY_CLIENT_SECRET"),
    auth_mode="user_legacy",
    auto_refresh_url="{}/oauth/token".format(environ.get("ISOGEO_ID_URL")),
```

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```
    platform=environ.get("ISOGEO_PLATFORM", "qa"),
)

# getting a token
isogeo.connect(
    username=environ.get("ISOGEO_USER_NAME"),
    password=environ.get("ISOGEO_USER_PASSWORD"),
)

# using oAuth2 Client Credentials Grant (Backend Application)
#  (for scripts executed on the server-side with only application credentials
#  but limited to read-only in Isogeo API)
isogeo = Isogeo(
    client_id=environ.get("ISOGEO_API_DEV_ID"),
    client_secret=environ.get("ISOGEO_API_DEV_SECRET"),
    auth_mode="group",
    auto_refresh_url="{}/oauth/token".format(environ.get("ISOGEO_ID_URL")),
    platform=environ.get("ISOGEO_PLATFORM", "qa"),
)

# getting a token
isogeo.connect()
```

AUTH_MODES = {'group': {'client_id': <class 'str'>, 'client_secret': <class 'str'>}

connect(*username=None*, *password=None*)

Custom the HTTP client and authenticate application with user credentials and fetch token.

Isogeo API uses oAuth 2.0 protocol (https://tools.ietf.org/html/rfc6749) see: http://help.isogeo.com/api/fr/authentication/concepts.html

Parameters

- **username** (*str*) – user login (email). Not required for group apps (Client Credentials).
- **password** (*str*) – user password. Not required for group apps (Client Credentials).

classmethod guess_auth_mode()

property header

Return type dict

isogeo_pysdk.translator module

Additionnal strings to be translated from Isogeo API.

class isogeo_pysdk.translator.**IsogeoTranslator**(*lang='FR'*)

Bases: object

Makes easier the translation of Isogeo API specific strings.

Parameters **lang** (*str*) – language code to apply. EN or FR.

tr(*subdomain*, *string_to_translate=''*)

Returns translation of string passed.

Parameters

- **subdomain** (*str*) – subpart of strings dictionary. Must be one of self.translations.keys() i.e. 'restrictions'

- **string_to_translate** (*str*) – string you want to translate

Return type str

isogeo_pysdk.type_hints_custom module

Custom type hints used in the SDK

isogeo_pysdk.utils module

Complementary set of utils to use with Isogeo API.

class isogeo_pysdk.utils.**IsogeoUtils**(*proxies={}*)
Bases: object

Complementary set of utilitary methods and functions to make it easier using Isogeo API.

API_URLS = {'prod': 'api', 'qa': 'api.qa'}

APP_URLS = {'prod': 'https://app.isogeo.com', 'qa': 'https://qa-isogeo-app.azurewebs

CSW_URLS = {'prod': 'https://services.api.isogeo.com/', 'qa': 'http://services.api.q

MNG_URLS = {'prod': 'https://manage.isogeo.com', 'qa': 'https://qa-isogeo-manage.azu

OC_URLS = {'prod': 'https://open.isogeo.com', 'qa': 'https://qa-isogeo-open.azureweb

WEBAPPS = {'csw_getcap': {'args': ('share_id', 'share_token'), 'url': 'https://serv

classmethod cache_clearer(*only_already_hit=1*)
Clear all LRU cached functions.

Parameters **only_already_hit** (*bool*) – option to clear cache only for functions which have been already hit. Defaults to True.

classmethod convert_octets(*octets*)
Convert a mount of octets in readable size.

Parameters **octets** (*int*) – mount of octets to convert

Example

```
>>> IsogeoUtils.convert_octets(1024)
"1ko"
```

Return type str

classmethod convert_uuid(*in_uuid=<class 'str'>*, *mode=0*)
Convert a metadata UUID to its URI equivalent. And conversely.

Parameters

- **in_uuid** (*str*) – UUID or URI to convert
- **mode** (*int*) – conversion direction. Options:
  - 0 to HEX
  - 1 to URN (RFC4122)
  - 2 to URN (Isogeo specific style)

classmethod credentials_loader(*in_credentials='client_secrets.json'*)
Loads API credentials from a file, JSON or INI.

Parameters **in_credentials** (*str*) – path to the credentials file. By default, *./client_secrets.json*

Return type dict

Returns a dictionary with credentials (ID, secret, URLs, platform...)

Example

```
api_credentials = IsogeoUtils.credentials_loader("./_auth/client_secrets.json
↪")
pprint.pprint(api_credentials)
>>> {
        'auth_mode': 'group',
        'client_id': 'python-minimalist-sdk-test-uuid-
↪1a2b3c4d5e6f7g8h9i0j11k12l',
        'client_secret': 'application-secret-
↪1a2b3c4d5e6f7g8h9i0j11k12l13m14n15o16p17Q18rS',
        'kind': None,
        'platform': 'prod',
        'scopes': ['resources:read'],
        'staff': None,
        'type': None,
        'uri_auth': 'https://id.api.isogeo.com/oauth/authorize',
        'uri_base': 'https://api.isogeo.com',
        'uri_redirect': None,
        'uri_token': 'https://id.api.isogeo.com/oauth/token'
    }
```

classmethod encoded_words_to_text(*in_encoded_words*)
Pull out the character set, encoding, and encoded text from the input encoded words. Next, it decodes the encoded words into a byte string, using either the quopri module or base64 module as determined by the encoding. Finally, it decodes the byte string using the character set and returns the result.

See:

- https://github.com/isogeo/isogeo-api-py-minsdk/issues/32
- https://dmorgan.info/posts/encoded-word-syntax/

Parameters **in_encoded_words** (*str*) – base64 or quori encoded character string.

get_edit_url(*metadata*, *tab='identification'*)
Returns the edition URL of a metadata.

Parameters

- **metadata** (Metadata) – metadata
- **tab** (*str*) – target tab in the web form. Optionnal. Defaults to 'identification'.

Return type str

get_isogeo_version(*component='api'*, *prot='https'*)
Get Isogeo components versions. Authentication not required.

Parameters **component** (*str*) – which platform component. Options:

- api [default]

- db
- app

get_request_base_url(*route*, *prot='https'*)
Build the request url for the specified route.

Parameters

- **route** (*str*) – route to format
- **prot** (*str*) – https [DEFAULT] or http

Return type str

classmethod get_url_base_from_url_token(*url_api_token='https://id.api.isogeo.com/oauth/token'*)
Returns the Isogeo API root URL (not included into credentials file) from the token or the auth URL (always included).

Parameters **str** (*url_api_token*) – url to Isogeo API ID token generator

Return type str

Example

```
IsogeoUtils.get_url_base_from_url_token()
>>> "https://api.isogeo.com"
IsogeoUtils.get_url_base_from_url_token(url_api_token="https://id.api.qa.
↪isogeo.com/oauth/token")
>>> "https://api.qa.isogeo.com"
```

get_view_url(*webapp='oc'*, ***kwargs*)
Constructs the view URL of a metadata.

Parameters

- **webapp** (*str*) – web app destination
- **kwargs** (*dict*) – web app specific parameters. For example see WEBAPPS

classmethod guess_platform_from_url(*url='https://api.isogeo.com/'*)
Returns the Isogeo platform from a given URL.

Parameters **str** (*url*) – URL string to guess from

Return type str

Returns “prod” or “qa” or “unknown”

Example

```
IsogeoUtils.guess_platform_from_url("https://api.isogeo.com")
>>> "prod"
IsogeoUtils.guess_platform_from_url("https://api.qa.isogeo.com")
>>> "qa"
IsogeoUtils.guess_platform_from_url("https://api.isogeo.ratp.local")
>>> "unknown"
```

classmethod hlpr_datetimes(*in_date*, *try_again=1*)
Helper to handle differnts dates formats. See: https://github.com/isogeo/isogeo-api-py-minsdk/issues/85

Parameters

- **raw_object** (*dict*) – metadata dictionary returned by a request.json()
- **try_again** (*bool*) – iterations on the method

Returns a correct datetime object

Return type datetime

Example

```
# for an event date
IsogeoUtils.hlpr_datetimes"2018-06-04T00:00:00+00:00")
>>> 2018-06-04 00:00:00
# for a metadata creation date with 6 digits as milliseconds
IsogeoUtils.hlpr_datetimes"2019-05-17T13:01:08.559123+00:00")
>>> 2019-05-17 13:01:08.559123
# for a metadata creation date with more than 6 digits as milliseconds
IsogeoUtils.hlpr_datetimes"2019-06-13T16:21:38.1917618+00:00")
>>> 2019-06-13 16:21:38.191761
```

lang = 'fr'

classmethod pages_counter(*total*, *page_size=100*)

Simple helper to handle pagination. Returns the number of pages for a given number of results.

Parameters

- **total** (*int*) – count of metadata in a search request
- **page_size** (*int*) – count of metadata to display in each page

Return type int

register_webapp(*webapp_name*, *webapp_args*, *webapp_url*)

Register a new WEBAPP to use with the view URL builder.

Parameters

- **webapp_name** (*str*) – name of the web app to register
- **webapp_args** (*list*) – dynamic arguments to complete the URL. Typically 'md_id'.
- **webapp_url** (*str*) – URL of the web app to register with args tags to replace. Example: 'https://www.ppige-npdc.fr/portail/geocatalogue?uuid={md_id}'

set_base_url(*platform='prod'*)

Set Isogeo base URLs according to platform.

Parameters **platform** (*str*) – platform to use. Options:

- prod [DEFAULT]
- qa
- int

classmethod set_lang_and_locale(*lang*)

Set requests language and the matching locale.

Parameters **lang** (*str*) – language code to set API localization ("en" or "fr"). Defaults to 'fr'.

tags_to_dict(*tags=<class 'dict'>*, *prev_query=<class 'dict'>*, *duplicated='rename'*)

Reverse search tags dictionary to values as keys. Useful to populate filters comboboxes for example.

Parameters

- **tags** (*dict*) – tags dictionary from a search request
- **prev_query** (*dict*) – query parameters returned after a search request. Typically *search.get("query")*.

- **duplicated** (*str*) – what to do about duplicated tags label. Values:
  - ignore - last tag parsed survives
  - merge - add duplicated in value as separated list (sep = 'll')
  - rename [default] - if duplicated tag labels are part of different workgroup, so the tag label is renamed with workgroup.

PYTHON MODULE INDEX

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