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# viapy Documentation

*Release 0.3.0-dev*

**CDH @ Princeton**

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# CHAPTER 1

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## viapy Code Documentation

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### 1.1 API

**class** viapy.api.SRUItem(*items=None, sequence\_type=<type 'tuple'>*)

Single item returned by a SRU search, for use with `ViafAPI.search()` and `SRUResult`.

**label**

first main heading for this item

**nametype**

type of name (personal, corporate, title, etc)

**uri**

VIAF URI for this result

**viaf\_id**

VIAF numeric identifier

**class** viapy.api.SRUResult(*data*)

SRU search result object, for use with `ViafAPI.search()`.

**records**

list of results as `SRUItem`.

**total\_results**

number of records matching the query

**class** viapy.api.ViafAPI

Wrapper for VIAF API.

<https://platform.worldcat.org/api-explorer/apis/VIAF>

**api\_base = 'https://www.viaf.org/viaf'**

base url for VIAF API methods

**find\_corporate(*name*)**

Search VIAF for local.corporateNames

```
find_person(name)
    Search VIAF for local.personalNames

find_place(name)
    Search VIAF for local.geographicNames

search(query)
    Query VIAF search interface. Returns a list of SRUItem :param query: CQL query in viaf syntax (e.g.,
    cql.any all "term")

suggest(term)
    Query autosuggest API. Returns a list of results, or an empty list if no suggestions are found or if something
    went wrong

uri_base = 'http://viaf.org/viaf'
    base url for VIAF URIs

classmethod uri_from_id(viaf_id)
    Generate a canonical VIAF URI for the specified id

class viapy.api.ViafEntity(viaf_id)
    Object for working with a single VIAF entity.

    Parameters viaf_id – viaf identifier (either integer or uri)

    birthdate
        schema birthdate as rdflib.Literal

    birthyear
        birth year

    deathdate
        schema deathdate as rdflib.Literal

    deathyear
        death year

    rdf
        VIAF data for this entity as rdflib.Graph

    uriref
        VIAF URI reference as instance of rdflib.URIRef

    classmethod year_from_isodate(date)
        Return just the year portion of an ISO8601 date. Expects a string, returns an integer
```

## 1.2 Views

```
class viapy.views.ViafLookup(**kwargs)
    View to provide VIAF suggestions for autocomplete lookup. Based on dal.
    autocompleteSelect2ListView. Expects search term as query string parameter q. Returns viaf
    URI as identifier and display form as text.

    get(request, *args, **kwargs)
        Return JSON with suggested VIAF ids and display names.

class viapy.views.ViafSearch(**kwargs)
    View to provide VIAF suggestions for autocomplete lookup. Based on dal.
    autocompleteSelect2ListView. Expects search term as query string parameter q. Returns viaf
    URI as identifier and display form as text.
```

```
get (request, *args, **kwargs)
    Return JSON with suggested VIAF ids and display names.
```

## 1.3 Widgets

```
class viapy.widgets.ViafWidget (url=None, forward=None, *args, **kwargs)
    Custom autocomplete select widget that displays VIAF id as a link. Extends dal.autocomplete.Select2.

    render (name, value, renderer=None, attrs=None)
        Call Django render together with render_forward_conf.
```



# CHAPTER 2

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## CHANGELOG

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### 2.1 0.2

- Now supports Django versions 1.11 through 3.0.

### 2.2 0.1.4

- Fix Travis-CI build for building with and without Django.

### 2.3 0.1.3

- Fix GitHub repository name in sphinx documentation config file.

### 2.4 0.1.2

- Update sphinx configuration to support building documentation on readthedocs.org

### 2.5 0.1.1

- Document permissions.

### 2.6 0.1

Initial release.

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- Basic support for VIAP API use: autocomplete, SRU search, information about a single VIAF entity.
- Basic Django integration (optional); django-autocomplete-light lookup view and a VIAF url widget.

*VIAF via Python*

Python module for interacting with [VIAF](#) (the Virtual International Authority File) data and APIs.

**viapy** provides optional Django integration; this currently includes a django-autocomplete-light lookup view and a VIAF url widget.

# CHAPTER 3

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## Installation

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Use pip to install from GitHub. Use a branch or tag name, e.g. @develop or @1.0 if you want to install a specific tagged release or branch:

```
pip install git+https://github.com/Princeton-CDH/viapy.git@develop#egg=viapy
```



# CHAPTER 4

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## Configuration for use with Django

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Using *viapy* with Django requires additional configuration. Add *viapy* to installed applications along with the needed django-autocomplete-light modules:

```
INSTALLED_APPS = (
    ...
    'dal',
    'dal_select2',
    'viapy',
    ...
)
```

Include the viapy urls at the desired base url with the namespace:

```
urlpatterns = [
    ...
    url(r'^viaf/', include('viapy.urls', namespace='viaf')),
    ...
]
```



# CHAPTER 5

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## Development instructions

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This git repository uses `git flow` branching conventions.

Initial setup and installation:

- Recommended: create and activate a python 3.5 virtualenv:

```
virtualenv viapy -p python3.5
source viapy/bin/activate
```

- pip install the package with its python dependencies:

```
pip install -e .
pip install -e ".[django]"
```

## 5.1 Unit Testing

Unit tests are set up to be run with `py.test`

- Copy sample test settings and add a `SECRET_KEY`:

```
cp ci/testsettings.py testsettings.py
```

- To run the tests, either use the configured `setup.py test` command:

```
python setup.py test
```

- Or install test requirements and use `py.test` directly:

```
pip install -e '.[test_all]'
py.test
```

## 5.2 Documentation

Documentation is generated using [sphinx](#). To generate documentation, first install development requirements:

```
pip install -e ".[docs]"
```

Then build the documentation using the customized make file in the `docs` directory:

```
cd sphinx-docs  
make html
```

When building documentation for a production release, use `make docs` to update the published documentation on GitHub Pages.

# CHAPTER 6

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## License

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**viapy** is distributed under the Apache 2.0 License.

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# CHAPTER 7

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## Indices and tables

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- modindex
- search



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