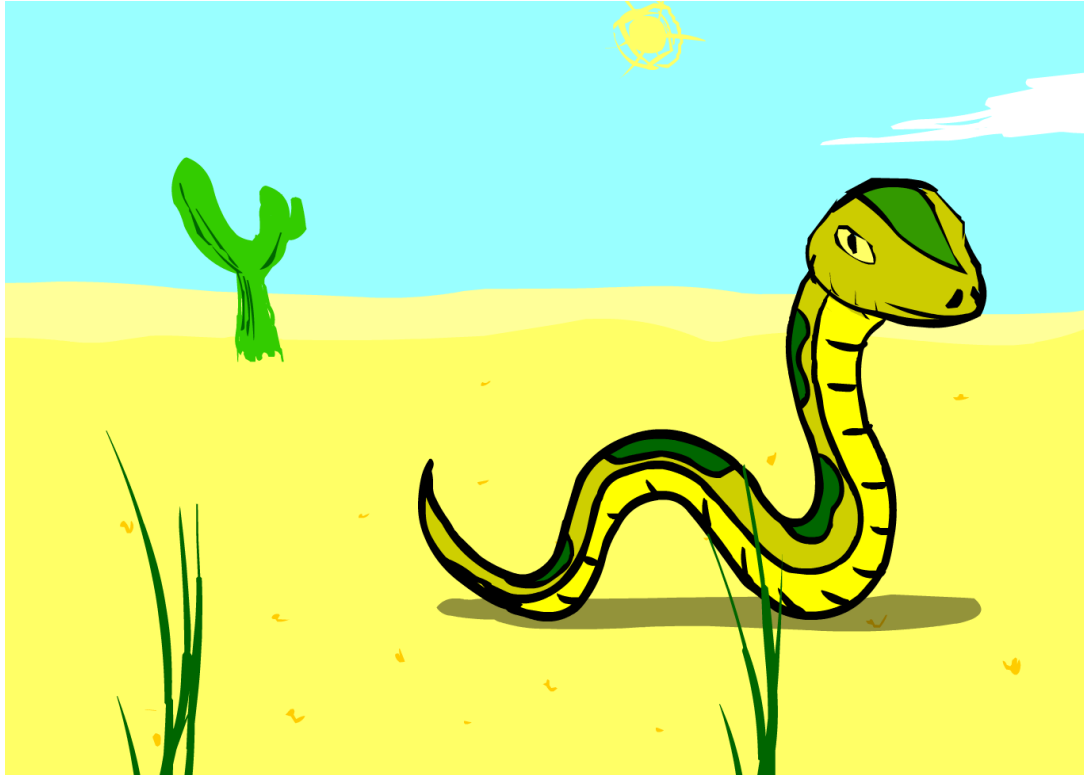# ArchivesSnake

A Community-developed Python API Client

Ooooh, it's ASnake...

ArchivesSnake: What?

ArchivesSnake is a Python client library for the ASpace API.

Goals:

- Make it easier to use the ASpace API
- Reduce duplication of effort in the ASpace community
- Capture a body of examples and knowledge on the API

ASnake Install (Python 3.4+)

```
pip3 install ArchivesSnake
```

Configuration: ~/.archivessnake.yml

```yaml
baseurl: 'http://localhost:4567'
username: 'admin'
password: 'admin'
```

```
In [1]: from asnake.client import ASnakeClient

In [2]: client = ASnakeClient() # default config!

In [3]: client.authorize()
Out[3]: 'af9c2498dfb2267c3842a1a7271d8e152d0fe963be215a92721ba19cf91c5f49'

In [4]: resp = client.get('repositories/2/resources/1')

In [5]: resp
Out[5]: <Response [200]>

In [6]: resp.json()
Out[6]:
{'lock_version': 5,
 'title': 'Recordy?',
 'publish': True,
 'restrictions': False,
 'ead_id': 'numpy',
 'ead_location': 'Dorp',
 'created_by': 'admin',
 'last modified by': 'admin',
```

```
In [13]: resource = client.get('repositories/2/resources/1').json()

In [14]: resource['title']
Out[14]: 'Recordy?'

In [15]: resource['title'] = 'Super Cool Recordy?'

In [16]: client.post(resource['uri'], json=resource)
Out[16]: <Response [200]>

In [17]: client.get('repositories/2/resources/1').json()['title']
Out[17]: 'Super Cool Recordy?'
```

```
In [29]: client.get_paged('repositories')
Out[29]: <generator object ASnakeClient.get_paged at 0x103377f10>

In [30]: for repo in client.get_paged('repositories'):
    ...:     print(repo['name'])
    ...:
Davetown Township
Daveburg
Castle Daveskull
Daveport on Sea
```

ASnake Abstraction Layer

- Higher level
- Read only (for now!)
- Convenient way to drill down into ASpace

```
In [27]: from asnake.aspace import ASpace

In [28]: aspace = ASpace()

In [29]: aspace.repositories
Out[29]: #<JSONModelRelation:/repositories:{'all_ids': True}>

In [30]: aspace.repositories(2)
Out[30]: #<JSONModel:repository:/repositories/2>

In [31]: aspace.repositories(2).name
Out[31]: 'Davetown Township'

In [32]: aspace.repositories(2).agent_representation
Out[32]: #<JSONModel:agent_corporate_entity:/agents/corporate_entities/1>

In [33]: aspace.repositories(2).agent_representation.json()
Out[33]: {'ref': '/agents/corporate_entities/1'}

In [34]: aspace.repositories(2).agent_representation.display_name.sort_name
Out[34]: 'Davetown Township'
```

```
In [41]: aspace.by_external_id("thingumie")
Out[41]: <generator object ASpace.by_external_id at 0x11008f728>

In [42]: x = list(aspace.by_external_id("thingumie"))[0]

In [43]: x
Out[43]: #<JSONModel:archival_object:/repositories/2/archival_objects/1>

In [44]: x.json()
Out[44]:
{'lock_version': 1,
 'position': 0,
 'publish': True,
 'ref_id': '290ef5c4d4db9d3a224c39aff5e437a1',
```

Thank you!

Image on slide 1 is from "Badger Badger Badger", a flash video by Weebl

Console screenshots taken with Grab + ITerm2 + Jupyter

Config file screenshot taken with Grab + Emacs

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