Playing with Launchpad API using launchpadlib

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Agenda

- What is Launchpad?
- Components of Launchpad?
- Installation
- Overview
- API
- launchpadlib in action
- References

What is Launchpad?

- Software development portal like Sourceforge, GNU Savannah, Assembla
- Free Software. Released under Affero General Public License
- Features like Bug tracking, Code hosting,
 Translations, Blueprints, Answers, Packaging etc
- Written using Zope Framework

Components of Launchpad

- Bazaar Code Hosting
- Malone Bug Tracker
- Rosetta Translations
- Blueprints Collaborative design
- Answers Knowledge Base
- Registry People, projects, teams information
- Soyuz Packaging

Important Projects using Launchpad

- Inkscape
- Mailman
- MySQL
- Drizzle

Launchpadlib Installation

On Debian/Ubuntu

```
sudo apt-get install python-launchpadlib
```

Using easy_install

```
sudo easy_install launchpadlib
```

Launchpad API

- RESTful web service
- launchpadlib client library
- Uses OAuth for authentication
- Provides proper API for various accessing various components

Overview of using launchpadlib

- Login / Signing Requests
- Fetching Data
- Editing Data

Login / Signing Requests

- Anonymous access
- Authenticated Access

Anonymous Access

- from launchpadlib.launchpad import Launchpad
- cache_dir = /home/manish/.launchpad/testing
- > lp = Launchpad.login_anonymously('testing',
 'production', cache_dir)

First parameter is client name, second is installation type and third is the cache dir where it caches all fetched data

- HTTPError (401 Unauthorized) is raised when the user tries to change any value
- HTTPError (401 Unauthorized) is raised when the user tries to check his/her user profile

Authenticated Access

- from launchpadlib.launchpad import Launchpad
- cache_dir = /home/manish/.launchpad/testing
- > lp = Launchpad.login_with('testing', 'production', cache_dir)

You can change the data if you authenticate with Launchpad

Fetching Data

```
> unaward = lp.bugs[632276]
> unaward.title
   u'Wrap UnAwardTrophy'
> unaward.owner.display_name
   u'Manish Sinha'
> unaward.id
```

632276

Editing Data

```
vunaward = lp.bugs[632276]
vunaward.unsubscribe()

x=unaward.subscribe(lp.me)

x
{u'resource_type_link':
    u'https://api.launchpad.net/1.0/#bug_subscription', u'bug_link':
    u'https://api.launchpad.net/1.0/bugs/632276', u'http_etag':
    u'"b75eaa767315064c21dae3f5859b8077ea876a40-
    ef55edafcc10a3474ac06bedabf1498f5ab4b4fb"', u'subscribed_by_link':
    u'https://api.launchpad.net/1.0/~manishsinha', u'self_link':
    u'https://api.launchpad.net/1.0/bugs/632276/+subscription/manishsinha',
    u'date_created': u'2010-09-09T15:18:34.746458+00:00', u'person_link':
    u'https://api.launchpad.net/1.0/~manishsinha'}
```

Launchpad top-level Objects

- Collection like bugs, people, projects etc
- Entries like bug, branch, project, project_group, language etc
- Complete API at

```
https://edge.launchpad.net/+apidoc/devel.html
```

Getting Help

- lp_attributes Fields
- lp_collections Associated Collections
- lp_entries Associated Entries
- lp_operations Methods

References

- http://help.launchpad.net/API
- http://edge.launchpad.net/+apidoc
- http://help.launchpad.net/API/launchpadlib

Any questions?

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