

Apache Libcloud

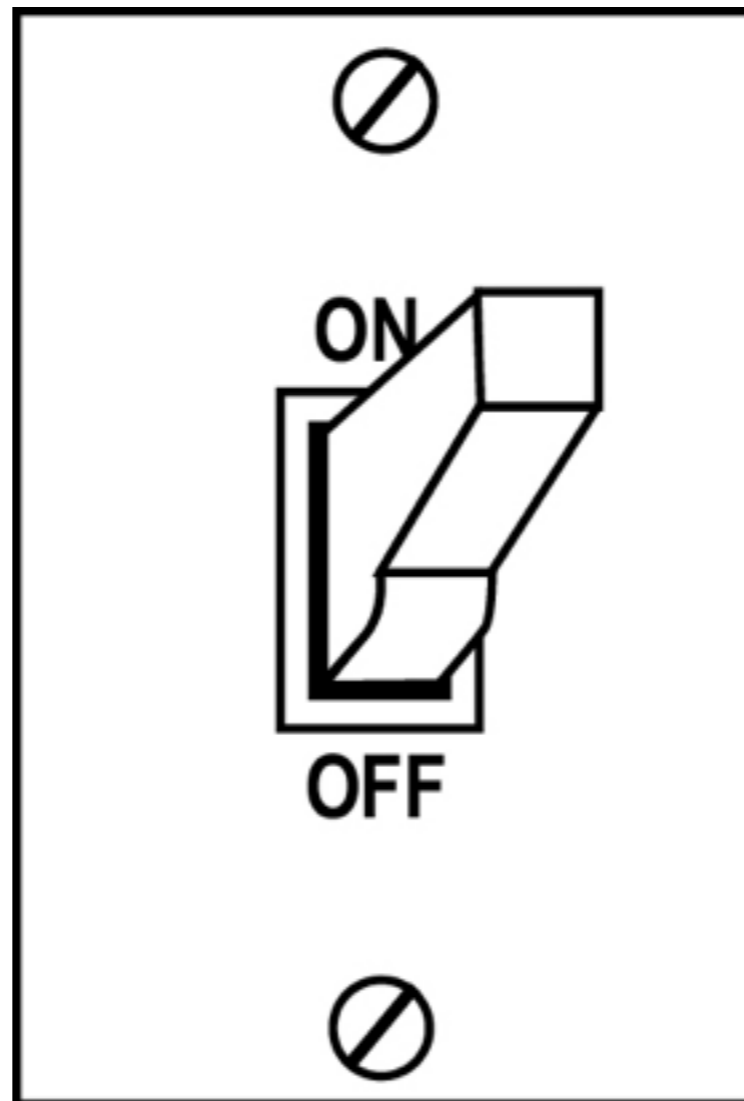
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I want a server.



I want a server right now.



Libcloud is about Compute

- Not SaaS, PaaS, or Cloud Storage

Why!?!?

- Amazon: XML + Custom HMAC Auth
- Rackspace: JSON + Auth Tickets
- SoftLayer: XML RPC + User / Password

Cloud API Standards

- Haven't worked.

16 Providers

slicehost



linode.com

OpenNebula

DreamHost



enomaly
elastic computing

GOGRID



Eucalyptus

IBM

the rackspace cloud



SOFTLAYER®

VPS NET



voxel

terremark®

vmware®

Simple APIs

- `list_nodes()`
- `reboot_node()`
- `destroy_node()`
- `create_node()`

Tricks!

- Included data:
 - Location
 - Price-per-hour in USD
- Cheapest 4 gigabyte node outside the US

Code on Slides, at Ignite!

```
possible = []
for d in drivers:
    loc = filter(lambda x: x.country != 'US',
                 d.list_locations())
    for l in loc:
        sizes = filter(lambda x: x.ram >= 4096, d.list_sizes(l))
        for s in sizes:
            possible.append({'size': s,
                             'location': l,
                             'driver': d})

best = sorted(possible, lambda x,y:
              x['size'].price < y['size'].price)[0]
print best
```

Don't update that Wiki!

- `pssh on list list_nodes()`

Fabric + Libcloud

```
$ fab hostname
```

```
[173.45.245.33] run: hostname
```

```
[173.45.245.33] out: lctest3.klk.me
```

```
[173.45.245.32] run: hostname
```

```
[173.45.245.32] out: lctest2.klk.me
```

```
Done.
```

```
Disconnecting from 173.45.245.33... done.
```

```
Disconnecting from 173.45.245.32... done.
```

Building on Top

- Silver Lining: Python Deployment on the Cloud

Building on Top

- Mercury: Drupal Deployment on the Cloud

Up Next

- No World Domination, just clouds

Image Formats

- Standards haven't worked (yet!)

Multiple Languages

- Java experiment started

It's Open Source



Related Projects

- JClouds: Java-world-equivalent
- Apache Deltacloud: Ruby-ish equivalent

- Apache Libcloud:

<http://libcloud.org/>

#libcloud on Freenode IRC

- Slides online:

<http://paul.querna.org/slides>