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
amazon web services
enomaly
gogrid
Eucalyptus
IBM
rackspace cloud
RIMUHOSTING
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!

```python
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.k1k.me
[173.45.245.32] run: hostname
[173.45.245.32] out: lctest2.k1k.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

The Apache Software Foundation
http://www.apache.org/
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