The Dao of OpenStack

Christopher MacGown
Dark Lord and God Emperor
The Dao of OpenStack

...I shouldn’t be allowed to name things anymore.

Christopher MacGown
Co-Founder and Chief Scientist at Piston Cloud
at Piston Cloud,
WE BELIEVE
it’s good to be
OPINIONATED
No, really...

“...the most opinionated people in cloud...”

Christopher MacGown
March 2012
Although...

“Fuck!”

Christopher MacGown
March 2012
• The leading open source cloud framework
• Founded by NASA and Rackspace in 2010
• Global collaboration of companies
• Massively scalable compute, storage and networking
2 kinds of cloud
The lessons are the same

• Create simple building blocks that are easy to scale
• Full Convergence
• Compute, storage, network, & management on every server
• No special puppies.
2 kinds of cloud
There are no puppy clouds...
Meanwhile, yesterday...

“OpenStack is really about shooting cows. Somebody is going to tweet that. You watch. Somebody will.”

@hartsock quoting @jmkkenty
3 interfaces

1. curl http://mycloud/v2.0/glance/image007

2. Command-line interface to the OpenStack Nova API.

Optional arguments:

- --username USERNAME: Defaults to env[OS_USERNAME].
- --password PASSWORD: Defaults to env[OS_PASSWORD].
- --projectid PROJECTID: Defaults to env[OS_PROJECTID].
- --url URL: Defaults to env[OS_AUTH_URL].
- --region_name REGION_NAME: Defaults to env[OS_REGION_NAME].
- --endpoint_name ENDPOINT_NAME: Defaults to env[OS_ENDPOINT_NAME] or "publicURL".
- --version VERSION: Accepts 1.1, defaults to env[OS_VERSION].

See "nova help COMMAND" for help on a specific command.
4 resources

- Nova
- Cinder
- Swift
- Quantum + (Your SDN here)

- And sure, Glance and Keystone and Oslo — oh my!
5 actors with different desires

- Consumer
- Developer
- Operator
- Provider
- Auditor
Consumers
Developers
Operators
Providers
Auditors
The desires are the same...

- The targets are different.
  - Op focus on resilience -> happy devs
  - Dev focus on application resilience -> happy consumers
  - Happy users -> happy providers
  - Nothing makes an auditor happy, just less sad.
Thank you.