



Lessons Learned From Public Cloud Billing

Lingxian Kong
Feilong Wang
Adrian Turjak

Who Are We?

- ❖ Catalyst Cloud is a public cloud running on OpenStack based in New Zealand
- ❖ We love, use, contribute OpenStack since 2013
- ❖ Billing-as-a-Service: Distil (<https://github.com/openstack/distil>)



Problems to Solve

- ❖ Integrate with existing ERP system (Odoo)
- ❖ Integrate with Keystone
- ❖ Integrate with Ceilometer
- ❖ Discounts
- ❖ Reseller
- ❖ Easy to use

Lesson 1

- ❖ Collect as more data usage as possible, but...
 - MongoDB index configuration for Ceilometer
 - customized pollsters (traffic usage data, magnum cluster usage, etc.)
 - Swift cross region traffic usage
 - Be careful of the data storage size

Lesson 2

- ❖ When bug happens
 - Bug in Distil --> trust Ceilometer
 - Bug in Ceilometer --> trust other OpenStack services
 - Bug in other OpenStack services --> Fix that and notify the customer

It Never Ends

- ❖ More services are joining, more business related tasks emerging
- ❖ Balance notification & billing alarm
- ❖ Per-minute/Per-second billing
- ❖ ...



Catalyst Cloud: <https://catalystcloud.nz/>