

# Hosted Cloud Services

Virtualisation

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# HOSTED CLOUD SERVICES

We can think of hosted cloud services as falling into three categories:

- ▶ Infrastructure as a Service
- ▶ Platform as a Service
- ▶ Software as a Service

# W<sub>HY</sub>?

- ▶ They are cheap
- ▶ They are flexible

# WHY NOT?

- ▶ You're operating at such a large scale that it's not cheap.
- ▶ You don't need the flexibility.
- ▶ You have a special use case.

## SOME PROVIDERS

- ▶ AWS (Amazon)
- ▶ Azure (Microsoft)
- ▶ Digital Ocean
- ▶ Linode
- ▶ Catalyst

This is absolutely not an exhaustive list.

# OUR CLOUD

Our cloud is operated by Catalyst. They host OpenStack services.  
Some OpenStack background

- ▶ It started in about 2010 from projects at Rackspace and Anso Labs.
- ▶ Free/Open Source
- ▶ It's a big collection of projects that run together operate a cloud.
- ▶ You can run your own, or there are a number of service providers who will run it for you.

# WHAT IT DOES

## OpenStack

- ▶ Hosts and manages **images**
- ▶ Hosts **volumes** (a.k.a block storage)
- ▶ Runs **instances**
- ▶ Provide **networking**
- ▶ Also, some other stuff.

And every other IaaS cloud service does basically the same things.

# HOW WE USE IT

We work with OpenStack using

- ▶ A web console
- ▶ A CLI
- ▶ A remote API