

openSUSE でおうちクラウド

@openSUSE mini Summit 2018

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<https://github.com/masayukig/cheap-cloud>

Agenda

- ▶ What is “the OpenStack”?
- ▶ What I did
- ▶ Why do I need it?
- ▶ How to build it? (Design, Hardware, Yahoo! auction, Rent a car, LackRack)
- ▶ Benefits
- ▶ Issues
- ▶ Conclusion
- ▶ Demo

What is “the OpenStack”?

- ▶ Open Source Cloud Software: Apache License Version 2.0
- ▶ consists of a lot of projects: **xx projects**
- ▶ released every 6 month: Latest version is called ‘Queens’

What I did

- ▶ Buy 1U servers * 3
- ▶ Install the servers
- ▶ Install openSUSE
- ▶ Install OpenStack

Buy 1U servers

- ▶ Yahoo! Auction
- ▶ Dell PowerEdge R410
- ▶ 1U, Xeon L5640(6cores * 2CPU HT), 32GB RAM, 250GB HDD*2, 15k JPY
- ▶ Bring it By car

TODO Add Pictures

Install the servers

- ▶ Stack on the floor?
- ▶ Rack?
- ▶ LackRack

TODO Add Pictures for LackRack

Install openSUSE

No automation such as autoyast, ansible, puppet, etc

- ▶ Download image and burn it to a USB stick
- ▶ Install from that media
- ▶ Update it to the latest

TODO Add Pictures for openSUSE

Install OpenStack

Use openSUSE rpm packages

- ▶ Read the Doc
- ▶ Install from the openSUSE repo
- ▶ Configure

TODO Add Pictures for OpenStack dashboard

Update OpenStack

- ▶ Install from the openSUSE repo (Just needed to update repo URL)
- ▶ No Configure

Benefits

- ▶ Free!!!
- ▶ Low Cost??
- ▶ Powerful
- ▶ Low Network Latency
- ▶ Warm (in winter)

Issues

- ▶ Electricity (xxxx JPY/month) COSTY!
- ▶ Noise (xxx db)
- ▶ Space
- ▶ Failures (HDD, Power Unit) COSTY!
- ▶ Abandonment COSTY!

Demo

- ▶ TBD: Boot an Instance or Cloud Native something?

TODO Add images for demo just in case(?)

Future work

- ▶ Replace the broken HDD
- ▶ Upgrade openSUSE to Leap 15.0

Conclusion

- ▶ It's high cost and noisy
- ▶ Own physical servers and play with it is super fun!
- ▶ It's more transparent than public Clouds