openSUSE でおうちクラウド @openSUSE mini Summit 2018

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@openSUSE mini Summit 2018 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

- ► 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

- ► 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

► 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