OpenStack:

1. Neutron
2. Firewall as a service
3. Swift – OpenStack object storage

Ceilometer project

Heat terminology

DevStack repo: http://git.openstack.org

Big data: myths and reality

* <http://www.cl.cam.ac.uk/~jac22>
* <http://www.turing.ac.uk/> (Alan Turing institute for data science).

The ‘Big’ in Big Data is relative (social science, natural science, computational science).

DCN (data center networking) and SDN

* Internet do not really need a separate control plan (?)
* ServerSwitch project
* The rise of merchant switch chip (Broadcom,…)

Cloud-based networking (using cloud to solve networking problems)

* distributed vs centralized vs cloud-based
* azure scale monitoring - Pingmesh

Industry challenges in cloud computing (Dr. Volker Hilt, Bell Labs/Alcatel-Lucent, Germany)

* Bell Labs history: 8 Nobel prices
* Youtube: more than ½ of all traffic
* Dynamics of cloud apps and content: requiring automation and adaptive control

Insight-driven cloud orchestration

Real-time anomaly detection for a typical traffic conditions, fast reaction on irregular traffic patterns

* detect deviation for regular traffic
* if deviation detected: forecast incoming traffic during anomaly
* online optimization for on-the-fly growth/de-growth

Achieve cloud reliability

Exploiting VM migration and replication for disaster & energy resiliency

Cloud enterprise:

* Infrastructure as a service

Deployment models: public clouds, private clouds, hybrid clouds

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Scientific writing

- Paper writing

- Proposal writing

1. Reading
2. Writing

* Write top down: point first, then explanation
* If reader not excited by intro, paper is lost
* Para 1,

1. Publishing
2. Reviewing

What happen to your paper after submission (review process)

1. Case study

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GOOD AND BAD SCIENTIFIC PRACTICE

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