OpenStack Summit Feedback
5-8 November 2013 Hong Kong
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OpenStack Summit Hong Kong

- Location: first summit outside US

- 3000+ attendees

- Top contribution: Beijing, Shanghai in Top10

- Local community

Use Cases

iQiyi.com

- Chinese YouTube clone

- 8 million transcodes

- OpenStack powered backend, searches

Quihoo 360

- Top3 ISP, 2nd most popular search engine, Nr1 Antivirus

- 20 datacenter

- 4000 instances

CTrip

- biggest travel and booking site

- 20k members/day

- 200k calls/day

- currently 1000 VDIs

- 13000 planned in 2014

CEILOMETER

Ceilometer / TELEMETRY

- Official name now "OpenStack Telemetry"

- Project objective: collect measurement data for monitoring and measuring

- across all components

- user-oriented feature

- effort since Grizzly release

Ceilometer project

- track usage data: usage of instances

- monitor performance: analyse resource consumption

- metering demand for further resources

- API contact for external systems (i.e. billing)

Ceilometer architecture
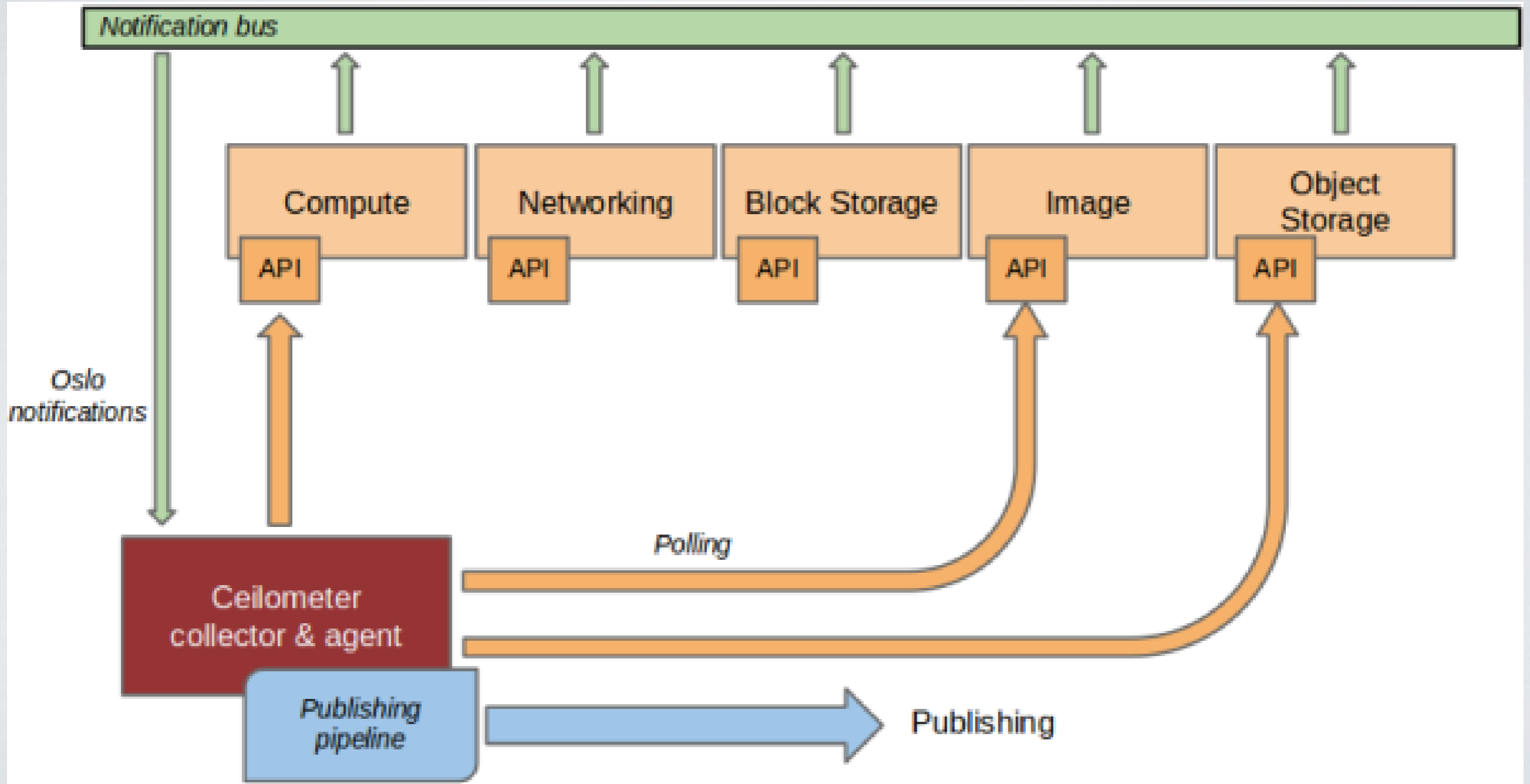
Ceilometer Workflow

- **Collect** from OpenStack components

- **Transform** if necessary

- **Publish** meters (external or internal)

- **Store** meters

- **Aggregate** samples

Billing Based On Ceilometer

- Metering

- Rating (transform usage data)

- Billing

Alarming

Set of rules or set of matching meters trigger specific action

Example1:

Heat auto-scaling based on usage data collected by Ceilometer

pre-defined CPU % utilization reached - trigger starting a new instance

Example2:

trigger alarms based on application centric data (i.e. object storage)

New in Havana

- API improvements (v2)

- new storage backends

- tighter integration with Nova

Limitations

- API limitation

- choice of database backend (currently MongoDB)

- storage of meters (keep everything or discard)

Future - Icehouse release

- further API improvements (v3): complex filtering and query, bulk requests

- expand metering coverage

- monitor baremetal

- support for hardware polling

- allow time constrained alarms

- distributed polling

- events storage (allows double entry accounting, auditability)

NEUTRON

New IN HAVANA

- Load Balancer as a Service (LBaaS) revised
  - updated API, HAProxy supported

- Firewall as a Service (FWaaS)
  - firewall rules, firewall policies

- VPN as a Service (VPNaaS)
  - site-to-site IPSec VPN connections now supported

Future improvements: Icehouse

- multiple VIPs per pool

- vendor API extension (vendor specific features)

- Heat and Ceilometer integration

THANK YOU!