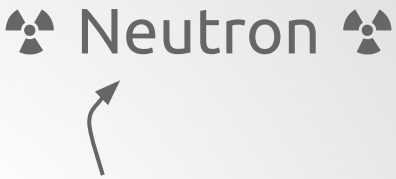


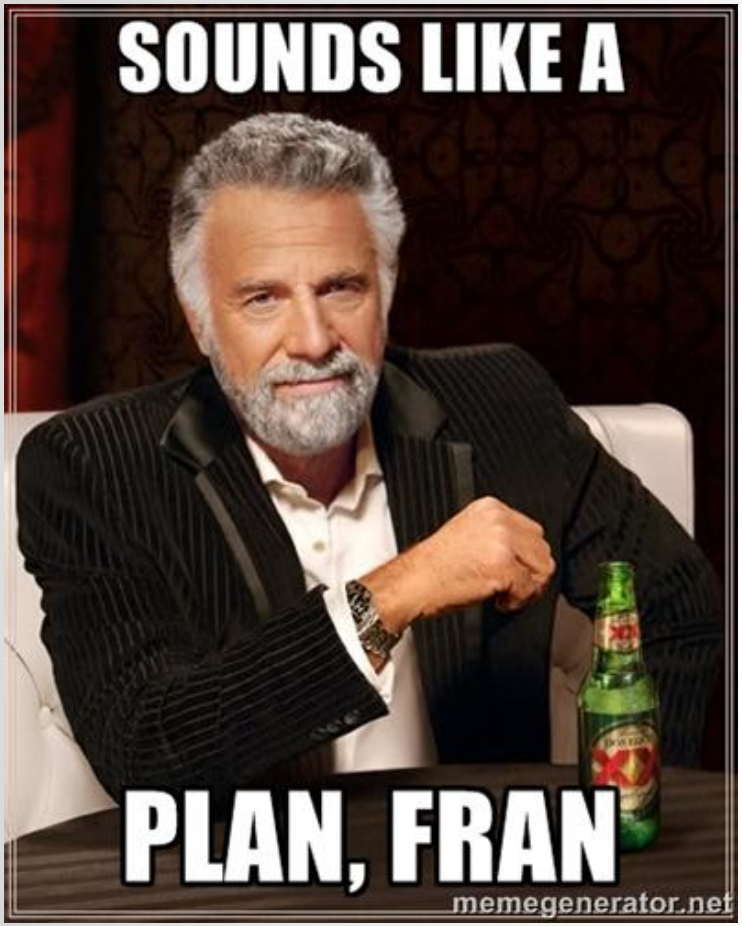
What's new in ~~Quantum~~©?

(OpenStack Networking)

Emilien Macchi
OpenStack Engineer

Edouard Thuleau
Network Engineer

♨ Menu ♨



- What's new in current release ?
- Take a ride to next release
- Network metering (with Demo)
- Q/A

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New features in Grizzly
(current stable)

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Currently in Grizzly

- Full support of namespaces
- Load-Balancing as a Service
- L3 Scalability
- DHCP Scalability + HA
- Security Groups API
- IPtables support for OVS

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Networking Namespaces

- Support in L3
- Metadata servers
- > Linux kernel 2.6.24
- > iproute2 utilities 3.1.0
- Overlapping IP

Example :

- Tenant **A** subnets : **10.0.0.0/24** and 192.168.0.0/24
- Tenant **B** subnets : **10.0.0.0/24** and 192.168.5.0/24

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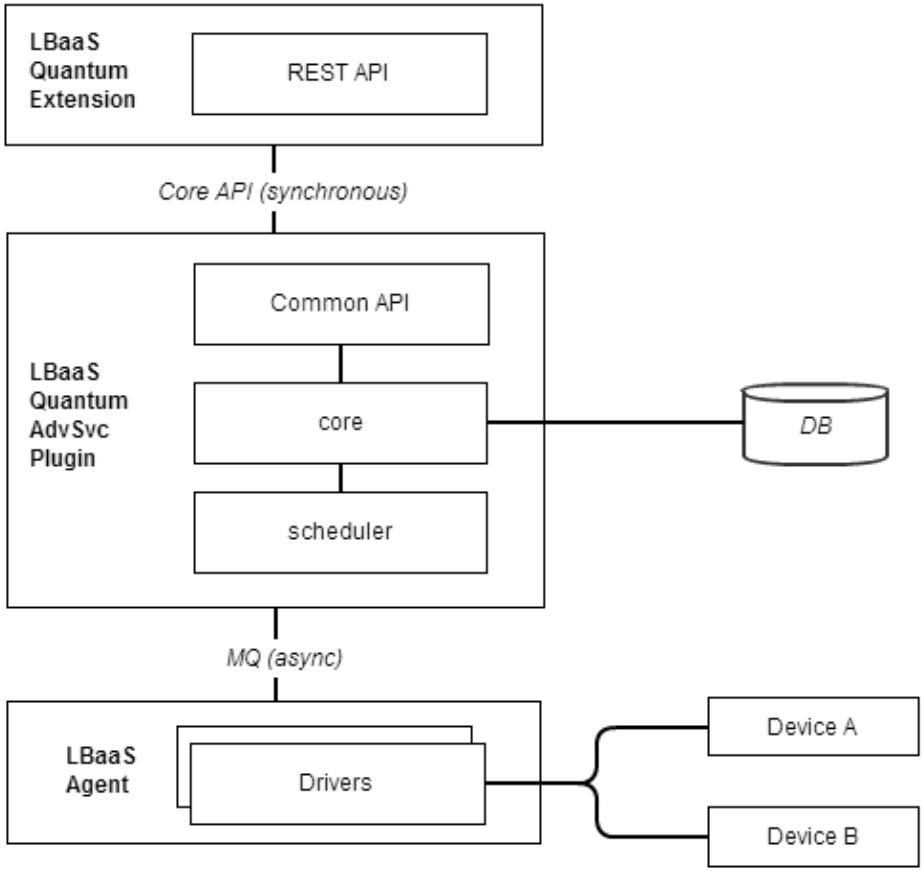
Load-Balancing

- Basic support in Grizzly
- Driver : HAproxy



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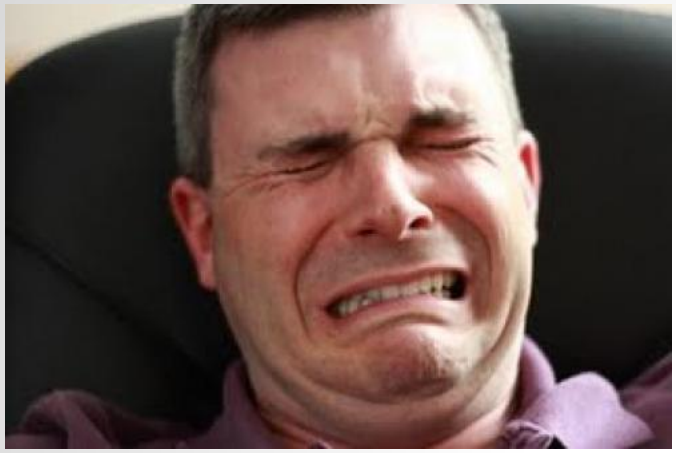
Agent Scalability



L3 Agent scales but is not HA.

DHCP Agent scales and is HA.

On the way to Havana
(Release : October 2013)

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New features in next release

- Modular L2
- Firewall as a Service
- API QoS support
- Bandwidth usage metering
- VPN as a Service
- New LBaaS drivers
- Multi-Host

New project code: **Neutron**

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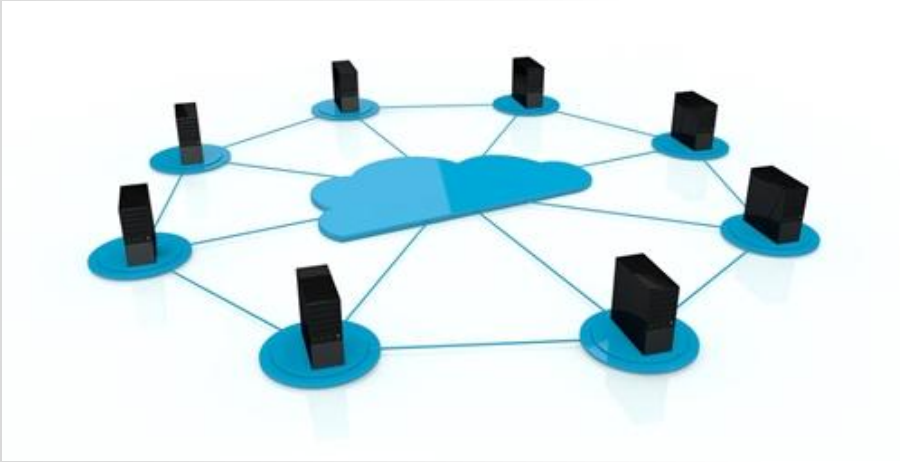
Layer 2 improvements

(contributions by Cloudwatt, Orange and eNovance)



- Modular Layer 2
- Tunneling partial mesh
- Layer 2 population

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Firewall as a Service

- Separate Firewall service
- Support of plugins
- IPtables support

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VPN as a Service

- First implementation
- IPsec Support
- Site-to-Site
- Single-Site-to-Multiple Site

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OpenStack Network Metering

(contributions by eNovance)

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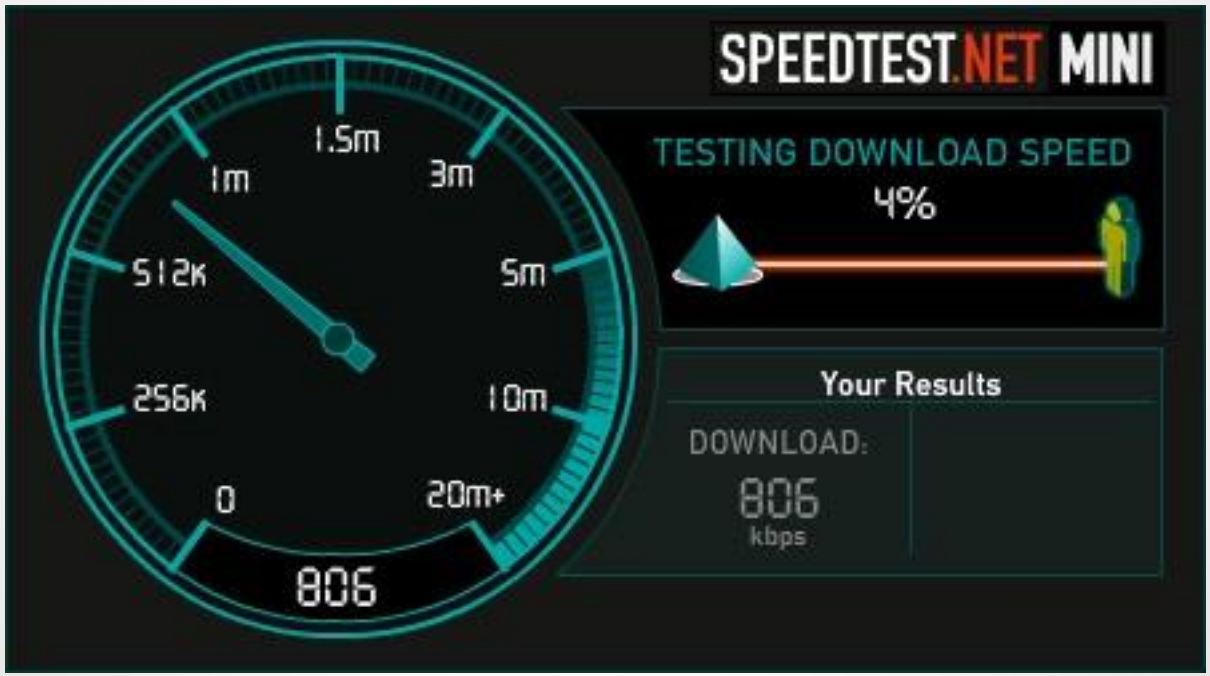
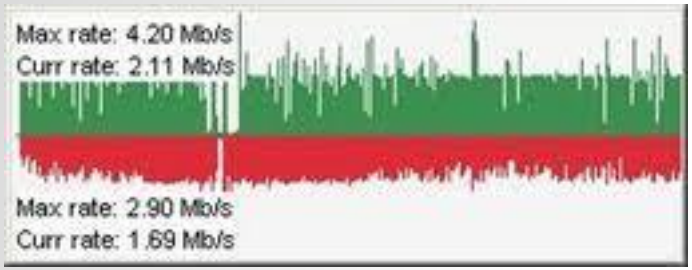
Problematic :
Internet Bandwidth is critical.



Label Bandwidth Measures



Distinguish network traffic based on their sources and destinations and classify them to tag them with different label.

Use case: Bill only traffic from Internet to VM.

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Demo !

eNovance
Multi-Cloud experts

Questions ?

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