

# Havana

## An early retrospective

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# Release management

- ♦ Integrated projects
- ♦ Common release schedule
- ♦ Managing the cycle
- ♦ Extracting roadmaps
- ♦ Improving development processes













# Havana cycle: the numbers

- ♦ 6 months
- ♦ 2 new integrated projects
- ♦ 399 implemented blueprints
- ♦ 14000+ commits
- ♦ 750+ authors



# Technical committee

- ♦ Incubation/Core update process
- ♦ Created the « integrated » concept
- ♦ No more PTL seats
- ♦ Moving to gerrit-driven governance
- ♦ Created to « programs » concept



# OpenStack programs

- ♦ Teams around integrated projects
- ♦ Common libraries (Oslo)
- ♦ Infrastructure
- ♦ QA
- ♦ Documentation
- ♦ Devstack
- ♦ TripleO
- ♦ Release cycle management



# Oslo

- ♦ New oslo.messaging library
- ♦ Convergence on oslo.db
- ♦ pbr, hacking, oslo.version, oslo.sphinx...





# Keystone

- ♦ Separation of authZ and authN data
- ♦ More granular RBAC policy rules
- ♦ Caching of data in a key-value store



# Ceilometer

- ♦ Now part of the common release !
- ♦ Alarming
- ♦ Users can post their own metrics
- ♦ API extensions (group-by, limits...)



# Swift

- ♦ Global clusters support :
  - ♦ Multi-region replication on dedicated network
  - ♦ Read/write affinity
- ♦ Performance improvements





# Glance

- ♦ Ability for groups to modify properties
- ♦ Multiple image locations
- ♦ Cinder / Sheepdog / GridFS storage



# Neutron (new Quantum)

- ♦ 88 blueprints
- ♦ Modular layer 2
- ♦ Firewall as a service
- ♦ VPN as a service



# Cinder

- ♦ Drivers :
  - ♦ Dell Equallogic, VMWare VMDK, Plain block device
  - ♦ HDS HUS, Huawei HVS, NexentaStor...
- ♦ Read-only volumes
- ♦ Refactoring of iSCSI/FC & NetApp code





# Nova

- ♦ 96 blueprints !
- ♦ Progress toward live rolling upgrades
- ♦ Improved Cells support
- ♦ Improved Cinder integration

# Heat





# Horizon

- ♦ Support for multiple API versions
- ♦ Support for Keystone v3 domains, roles
- ♦ UI for Ceilometer, Heat, FWaaS, VPNaaS





# Coming up in Icehouse: Trove

- ♦ previously-codenamed RedDwarf
- ♦ Database provisioning as a service
- ♦ Create DB, push schemas and users
- ♦ Currently supports MySQL



# New projects in incubation

- ♦ IroniC : baremetal deployment
- ♦ Marconi : queue as a service
- ♦ Savanna : data processing (Hadoop)

# Thank you !

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