

RED HAT
SUMMIT

Scalable application platform on Ceph, OpenStack and Ansible

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WHO ARE WE AND WHAT DO WE DO?

Solera Holdings is the worlds leading provider of software and services to the automobile insure claims processing industry. The Solera companies leverage each other to develop and deliver the latest technologies, market intelligence and best practices to over 75000 customers in 67 countries. Our complementary core brands provide repair estimation and valuation, vehicle history, fraud detection, salvage vehicle disposal services, data and analytics for insurer re-underwriting and much much more.

WHERE ARE WE NOW?

- “Classical” environment
- Refactoring of core services to new PaaS platform
- Greenfield development of new applications
- Exponential storage growth
- Re-thinking and designing our approach to infrastructure and developers roles in it

WHERE DO WE WANT TO GO?

- 80% of workloads on OpenStack/IaaS including our PaaS
- Majority of storage on top of Ceph (RBD, iSCSI, Cinder)
- Self-service and provisioning infra for Developers
- Redundant high performant and cost effective solutions accounting for massive growth in the next 2-3 years
- No Vendor Lock-in and future proofing to any extent possible

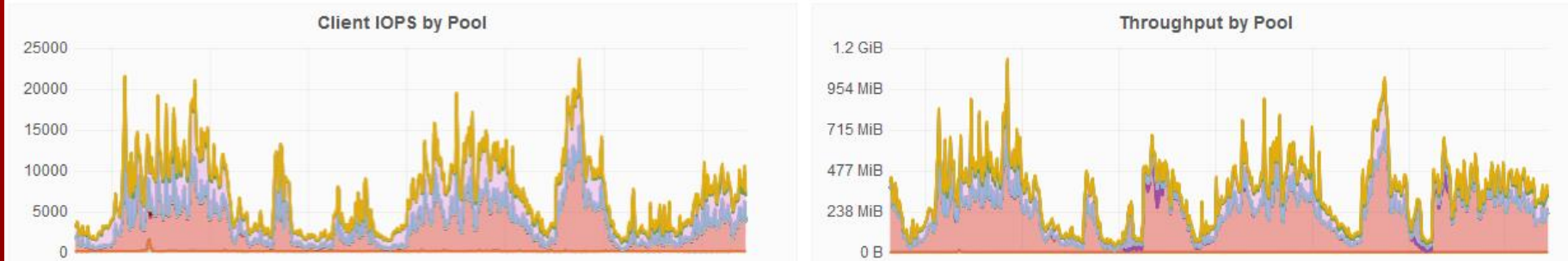
WHERE DID WE START? - Humble Beginnings

- Upstream Jewel release + CentOS 7
- Ceph-deploy + Manual configuration
- 1 Year ago 400TB capacity serving S3 and RBD
- 4 Nodes (12x8TB +3x 2TB NVMEs)
- 10gbit switches + 40gbit spines

WHERE ARE WE NOW?

- Migrated from first installation to RHCS 3.0
- Fully controlled by ansible
- 6 Nodes serving 150TB of Data with 22 million objects
- Moving 40TB of SAN workloads to RBD+ iSCSI
- 8 Nodes UK, 8 Nodes US, 6 Nodes CH

Pool Overview : All



WHERE ARE WE GOING? - (next 3-6 months)

- 100Gbit Fabric + 25Gbit switches (Cisco + Mellanox)
- 40 OpenStack hypervisors
- 11 New Ceph nodes split up into 2 clusters with 1.6PB capacity
- Consolidate S3 endpoints into multisite
- Centralize all cluster operations globally into Ansible Tower
- Infrastructure as Code approach from the beginning
- Move all Dev environments to OpenStack + Ceph
- Begin offering OpenShift with RBDs for persistent storage

WHY REDHAT?

- Industry leader
- Reliable and Consistent Service and Support
- Excellent documentation and knowledgebase
- Flexible and engaged in our success

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THANK YOU



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