

London MySQL Meetup

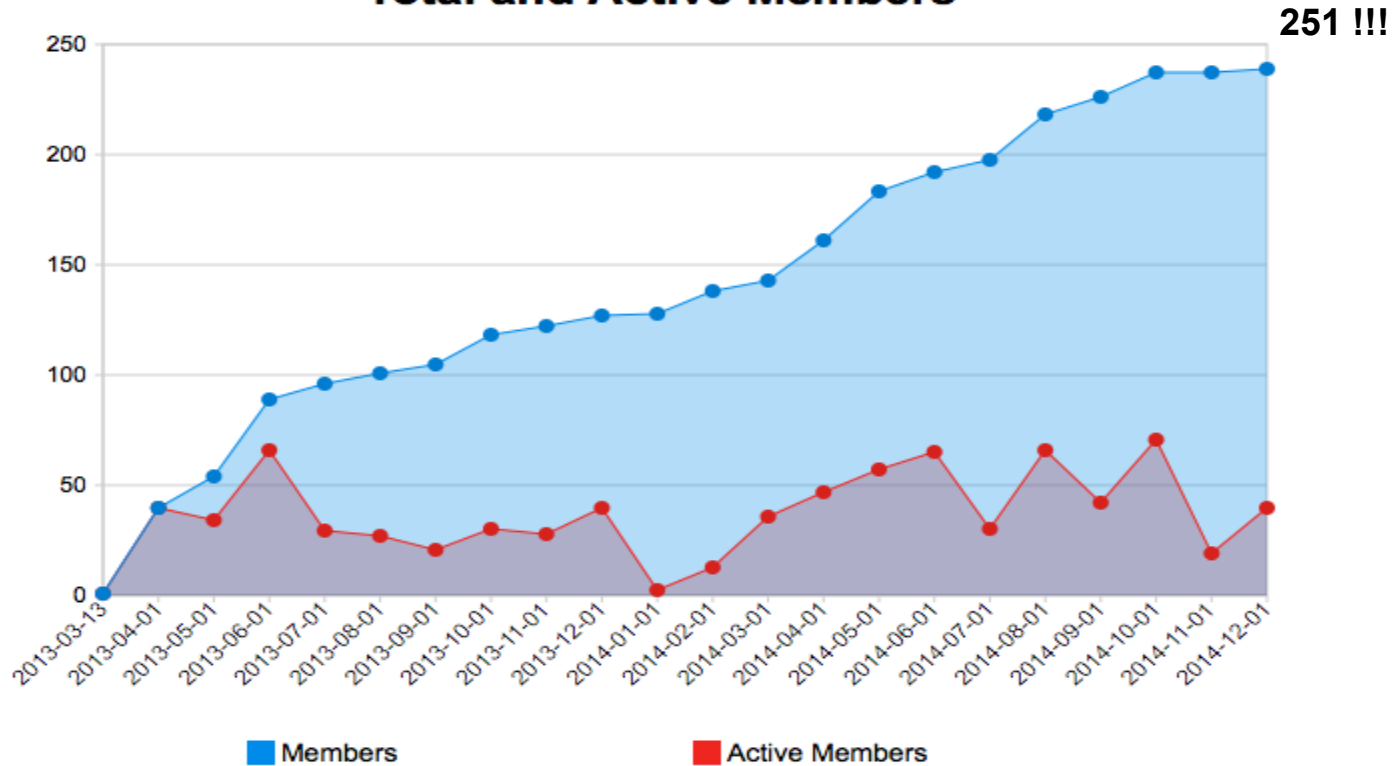
December 2014

Agenda

- Welcome
- Meetup News
- The MySQL Sprint
- MySQL in the Cloud
- MySQL and DBaaS in OpenStack
- Q&A
- The Last Pint

The Group is growing!

Total and Active Members



Meetup News

Welcome to our official sponsors!
(in alphabetical order):

- MariaDB
- Oracle
- Percona

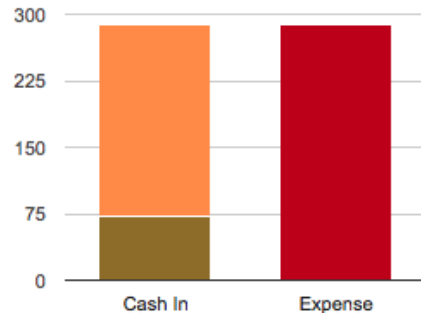
Meetup News

Let's not forget our friends:

- Canonical
- Harvey & Nash
- Just Eat.com
- ...more?...

Group View

<http://www.meetup.com/The-London-MySQL-Meetup-Group/money/>



Cash In

Membership dues	\$0.00
Meetup Events	\$0.00
Contributions	\$0.00
Sponsor payments	\$216.00
Other Income	\$72.00
Total Cash In	\$288.00
Expenses	(\$288.00)
Net	\$0.00

Next Events

February Meetup - tentative dates?

- Tue 10? - Tue 17 (half term)?

Speakers needed!

Ideas: What would you like to see/learn?

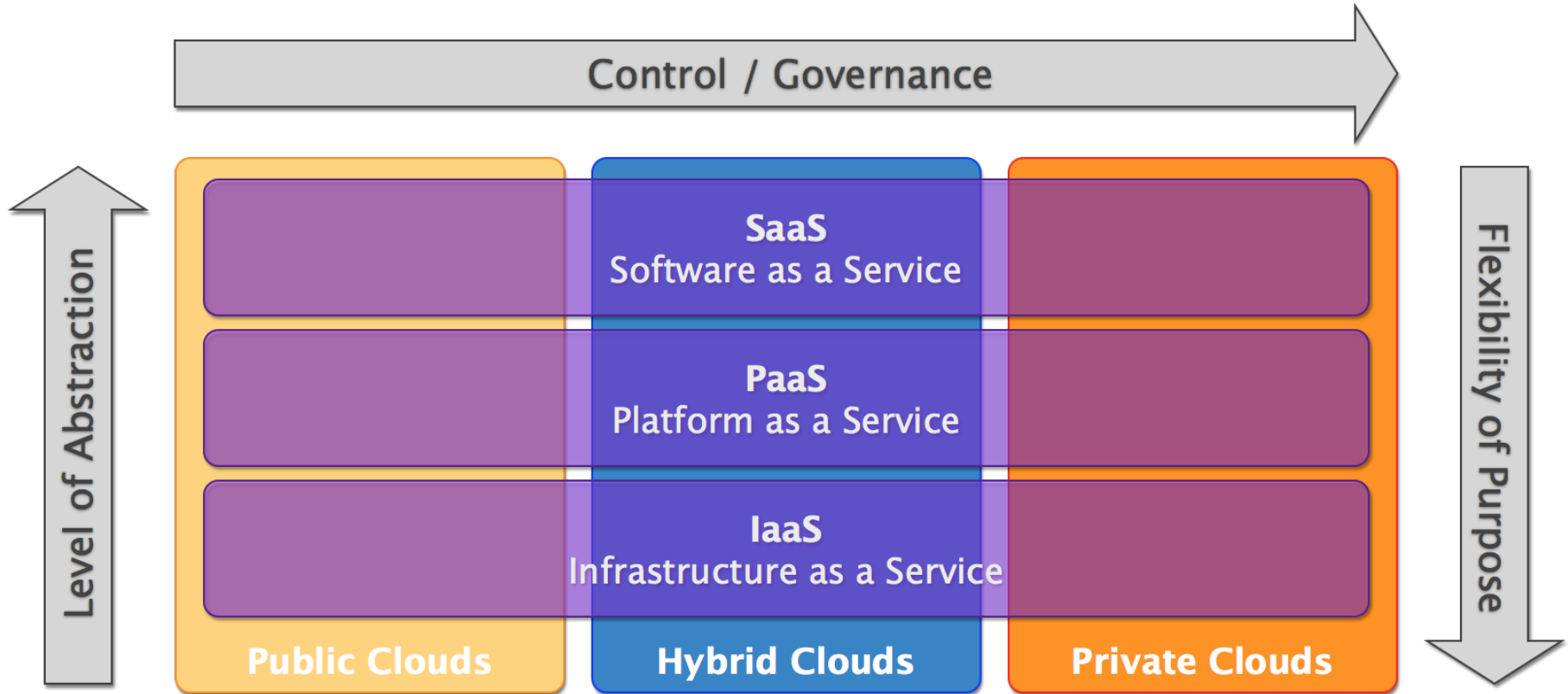


The MySQL Sprint!

MySQL in the Cloud



The Cloud Landscape



The Cloud Promise

- Agility
- Compatibility
- Elasticity
- Low Maintenance
- Multi-Tenancy
- Reduced Costs
- Reliability
- Security
- System Independence
- Virtualization

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FACT!
The Cloud
Is Not [Relational]
Database-Friendly! (*)
Or not yet...

Percona Live - 4th Dec 2012

Challenges for a MySQL DBA in the next 3 years

- *Integration with other databases - primarily NoSQL*
- *Adopt the right technology to make MySQL and the Cloud work together*
- *Integration with provisioning, administration and monitoring tools*
- *Increase/provide better security for the database and for the users' data*
- *Provide elasticity and reduce TCO*

Amazon RDS

- MySQL 5.1 to 5.6
- “Up to 5x standard MySQL”
- Up to 30k IOPS - Standard/Provisioned/SSDs
- Synchronous Replication through AZs
- MySQL Replication
- Backups and Snapshots

Amazon Aurora

- “MySQL 5.6/InnoDB Compatible - through standard MySQL Connectors”

NO MyISAM

- “Up to 5x standard MySQL”
- Part of RDS (no maintenance)
- Pay monthly (pay per use), no upfront costs
- Preview by invitation only

Pricing

	EC2	RDS	RDS Aurora
r3.large - 2vCPU - 15GB mem - Std net	(32GB SSD) \$0.175	\$0.240	\$0.290
r3.xlarge - 4vCPU - 30.5GB mem - Std net	(80GB SSD) \$0.350	\$0.475	\$0.580
r3.2xlarge - 8vCPU - 61GB mem - HiS net	(160GB SSD) \$0.700	\$0.945	\$1.160
r3.4xlarge - 16vCPU - 122GB mem - HiS net	(320GB SSD) \$1.400	\$1.890	\$2.320
r3.8xlarge - 32vCPU - 244GB mem - 10G net	(640GB SSD) \$2.800	\$3.780	\$4.640

- 1 Active Replica included in Aurora - 1 Std-by Replica included in RDS
- Storage at \$0.10/GB/Month for Aurora and EBS (SSDs), \$0.125/GN/Month for RDS
- RDS Max 3TB - Aurora Max 64TB

Aurora - More info

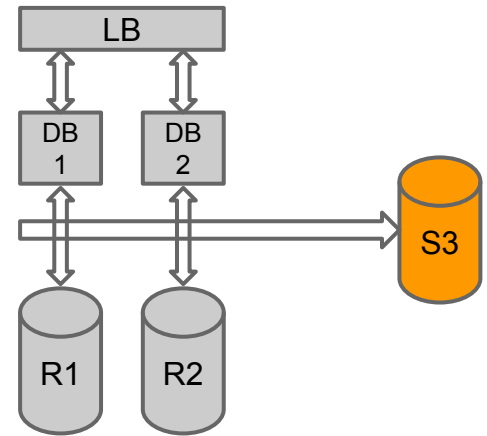
- Multi-tenant scale-out
- Use AWS services
 - S3 - Object storage for snapshots, logging & backups
 - Same EC2 instances
 - Use of VPC as for RDS
 - Use of DynamoDB similar integration with Hadoop and MapReduce
 - SWF
 - Route 53

Aurora - More info

- New Log-structured storage system
 - InnoDB only
- Logging to S3
- MySQL 5.6 compatibility
- 6M INS/minute 30M SEL/minute => MySQL 5.6 benchmarks
- 6-way replicas in 3AZs

Aurora - More info

- Disk/AZ failure tolerance and self healing
- Seconds for crash recovery
- Database cache always hot even after a restart



MySQL and DBaaS in OpenStack

