



MySQL™

MySQL Enterprise Monitor

Safe Harbor Statement

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

MySQL Enterprise Monitor: Agenda

- 1 ➤ Why MySQL Enterprise Edition?
- 2 ➤ Overview & Architecture
- 3 ➤ Installation & Configuration
- 4 ➤ Features & Benefits
- 5 ➤ Additional Info & Case Studies

A dolphin leaping out of the water, with its body arched and a spray of water around its tail.

Why MySQL Enterprise Edition?

Industry Leaders Rely on MySQL



Taking Care of Business



Web & Enterprise



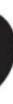
OEM & ISVs

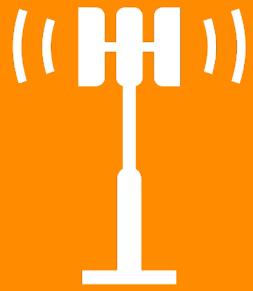


Check Point
SOFTWARE TECHNOLOGIES LTD.



Cloud





**Mobile Network
Supporting Over 800
Million Subscribers**



**2 Billion Events/Day for
Booking.com**



**IDs Processed for 1
Billion Citizens**

They Scale with MySQL



1.6 Billion Active Users



100 TB of User Data for PayPal



**850 Million Candy
Crush Game Plays/Day**

Why MySQL Enterprise Edition?

All the Database Features You Love

InnoDB
Default

Improved Throughput
Online DDL
Full Text Search
NoSQL Access

Performance

Schema

GIS

MySQL Utilities

Optimizer: Faster
Query Execution and
Better Diagnostics

Security

Partitioning

Replication

Lossless Semi-Synchronous

GTIDs

Crash Safe

Time Delayed

Multi-threaded

Multi-Source

JSON

Why MySQL Enterprise Edition?

In Addition to all the MySQL Features you Love



Insure Your Deployments



Get the Best Results



Delight Customers



MySQL Enterprise Edition

Advanced Features

- Scalability
- High Availability
- Authentication
- Audit
- Encryption
- Firewall



Management Tools

- Monitoring
- Backup
- Development
- Administration
- Migration



Support

- Technical Support
- Consultative Support
- Oracle Certifications



Overview & Architecture



MySQL Enterprise Monitor



Application

Big Fish Games is a global leader in the online games industry and distributes more games worldwide than any other online site.

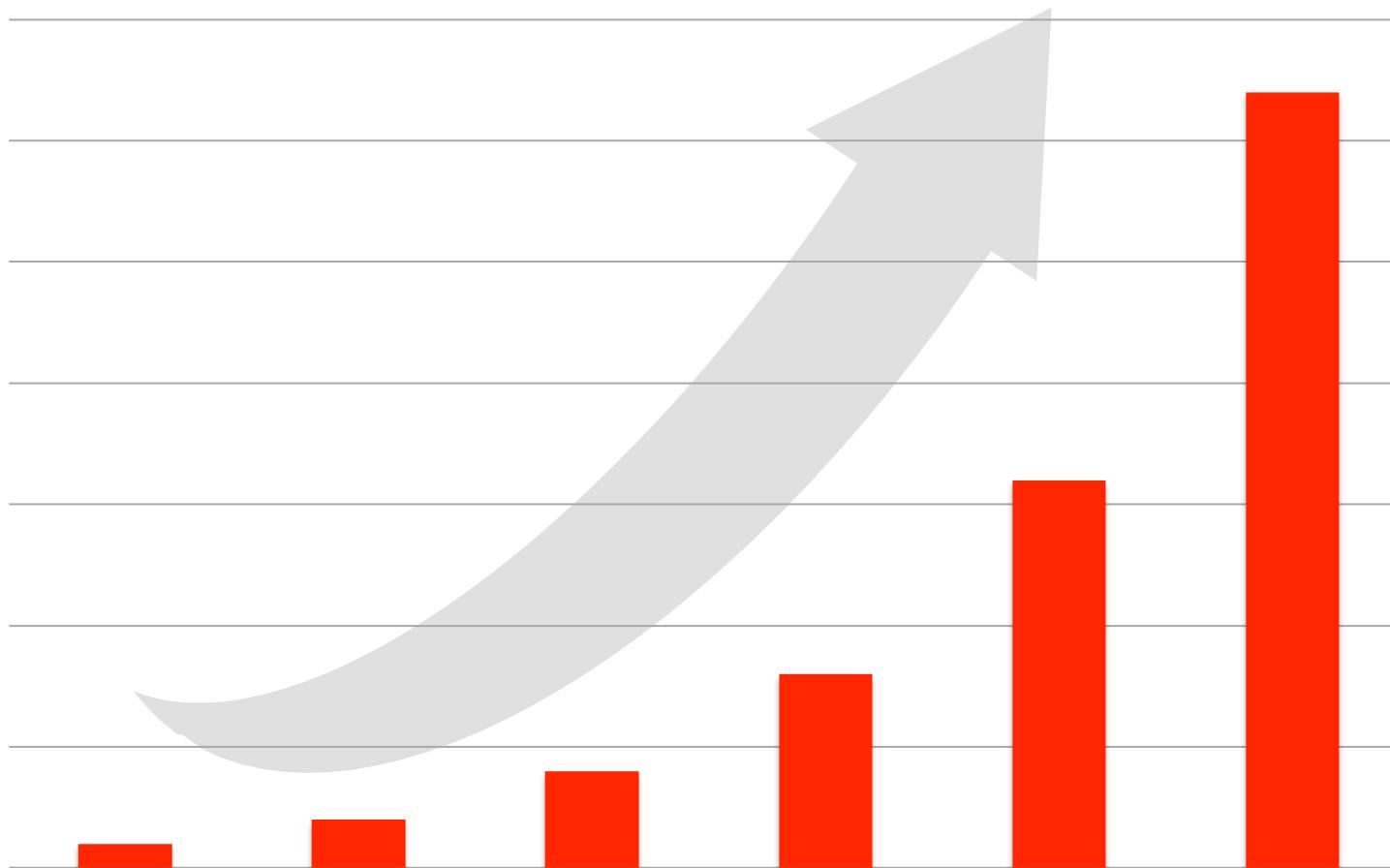
Key Business Benefit

MySQL Query Analyzer provides a consolidated view of query activities and execution details, and has enabled Big Fish Games to quickly identify poorly running queries and tackle the root causes directly in the SQL code.

Why MySQL Enterprise Edition?

"With the MySQL Query Analyzer, we were able to identify and analyze problematic SQL code, and triple our database performance. More importantly, we were able to accomplish this in three days, rather than taking weeks." -- Keith Souhrada,
Software Development Engineer, Big Fish Games

Database Application Growth



Situation

- 2.1 Billion Internet Users
- 40% Data Growth/Year
- \$1 Trillion eCommerce
- 600 New Videos/Minute
- 58 Million Tweets/Day

Requirements

- Performance
- Scale-out
- Automation

MySQL DBA Checklist

1. Ensure your production databases are available ✓
2. Monitor MySQL performance throughout the day ✓
3. Verify that MySQL replication is working properly ✓
4. Confirm that backups have completed successfully ✓
5. Monitor disk space to ensure MySQL won't run out of space ✓
6. Regularly monitor and identify blocking issues ✓
7. Verify there have been no changes to database schema ✓
8. Check OS metrics for unusual events ✓
9. Check for security vulnerabilities ✓
10. Monitor and analyze memory usage ✓

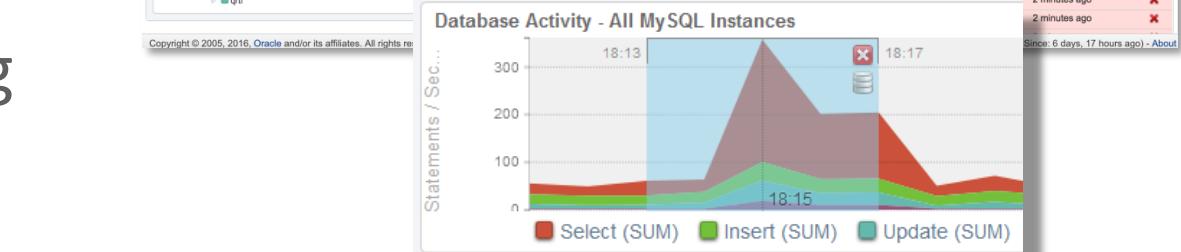
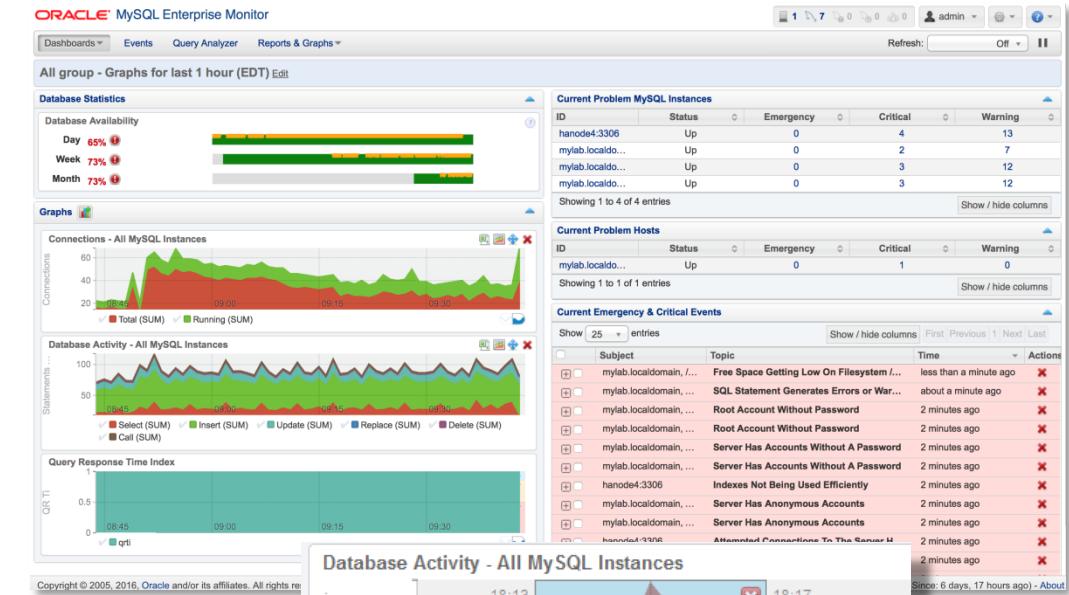
MySQL DBA Challenges

- “The database is slow. What needs tuning?”
- “What are my most expensive queries?”
- “Are indexes optimized?”
- “Is replication lag a problem?”
- “Did my last backup succeed?”
- “When will my disk fill up?”
- “When will I need more hardware to scale-out?”
- “Has my database schema changed?”
- “Are there security vulnerabilities that I need to be concerned about?”



MySQL Enterprise Monitor

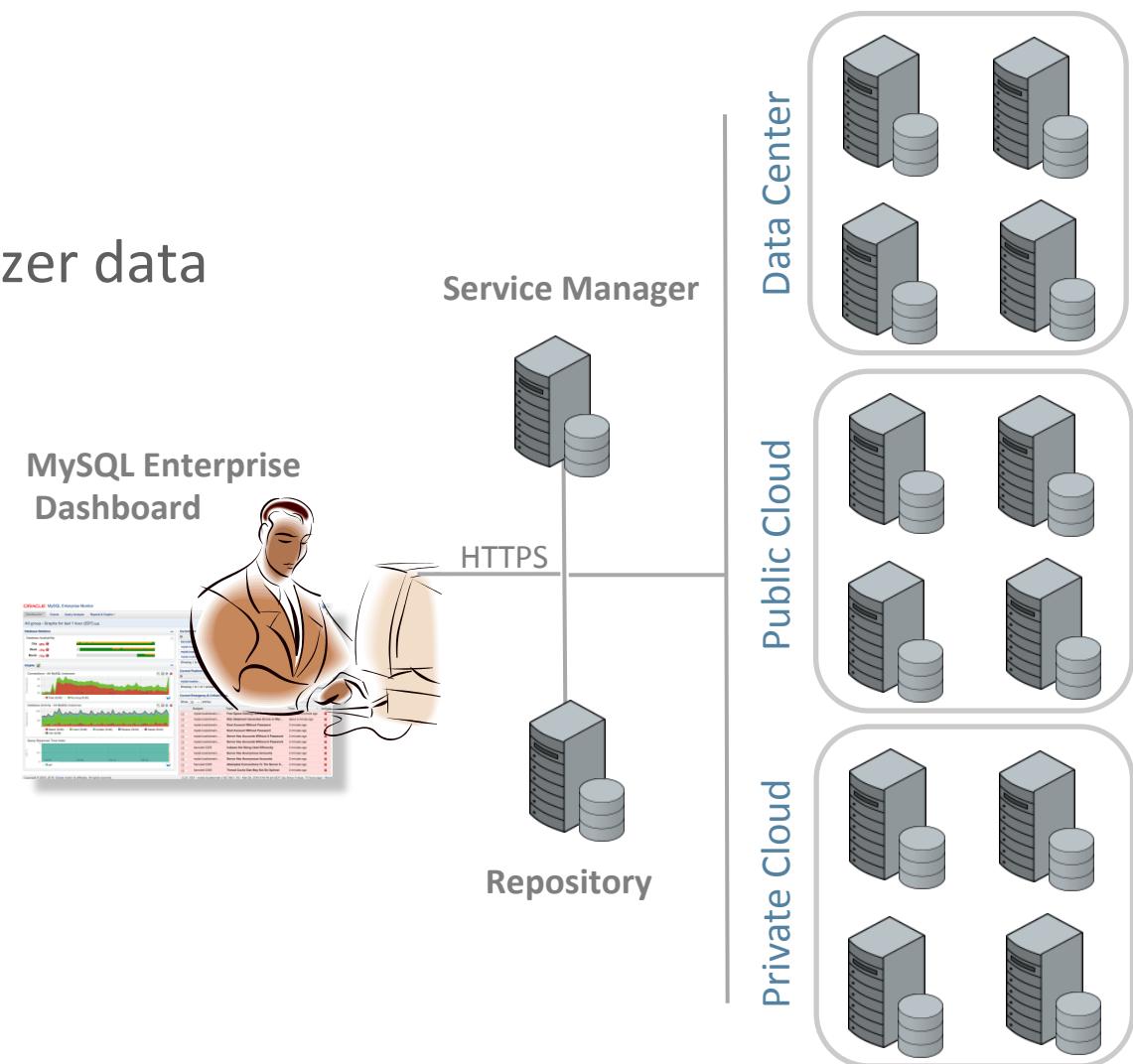
- Start monitoring MySQL in 10 minutes
- Real-time MySQL performance and availability monitoring
- Visually find & fix problem queries
- Disk monitoring for capacity planning
- Cloud friendly architecture
 - No agents required
 - Policy driven configuration
 - Easy integration with DevOps tools



	Current	Worst	Subject	Topic
[+]	!	!	mylab.localdomain, mylab.localdomain:3306	Root Account Without Password
[+]	!	!	mylab.localdomain, mylab.localdomain:3306	Server Has Accounts Without A Password
[+]	✓	!	mylab.localdomain, mylab.localdomain:3306	Average Statement Execution Time Excess...
[+]	✓	!	mylab.localdomain, mylab.localdomain:3306	SQL Statement Generates Errors or Warnings
[+]	!	!	mylab.localdomain, mylab.localdomain:3306	Server Has Anonymous Accounts
[+]	✓	!	mylab.localdomain, mylab.localdomain:3306	MySQL Instance Is Experiencing A Query P...
[+]	⚠	⚠	mylab.localdomain, mylab.localdomain:3306	InnoDB Log Buffer Flushed To Disk After Ea...
[+]	⚠	⚠	mylab.localdomain, mylab.localdomain:3306	User Has Rights To Database That Does Not...

Cloud Friendly Architecture

- MySQL
 - Performance Schema provides Query Analyzer data
 - Provides all MySQL related metrics
- Service Manager
 - Collects all MySQL related metrics
 - Collects all OS/Host related metrics
- Repository
 - Stores all historical data
- Agent (optional)
 - Only required for OS/Host metrics



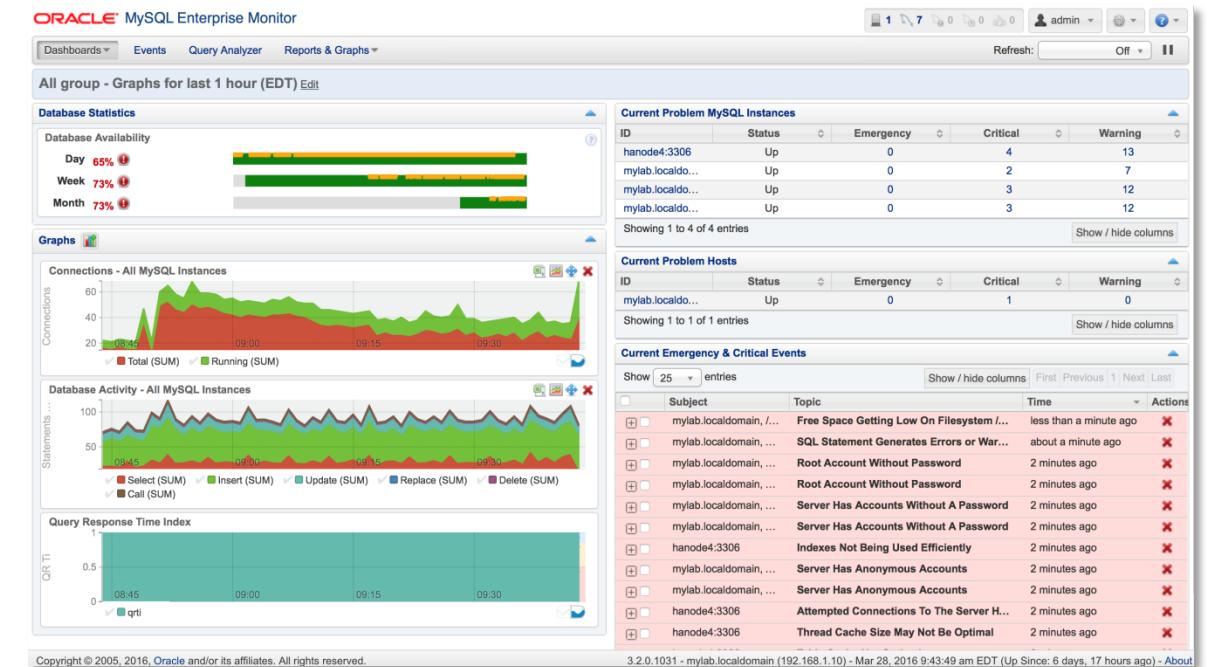
Installation & Configuration

- Install the Service Manager
 - shell> ./mysqlmonitor-3.X.X.XXXX-...-installer.bin
- Up and Running in 10 minutes
 - Auto-discovery of MySQL servers
 - Advisors are pre-configured
 - Advisors are pre-scheduled
- Customization
 - Centralized configuration dashboard
 - Advisors
 - Event handling



MySQL Enterprise Dashboard

- SLA monitoring
- Real-time performance monitoring
- Alerts & notifications
- MySQL best practice advisors

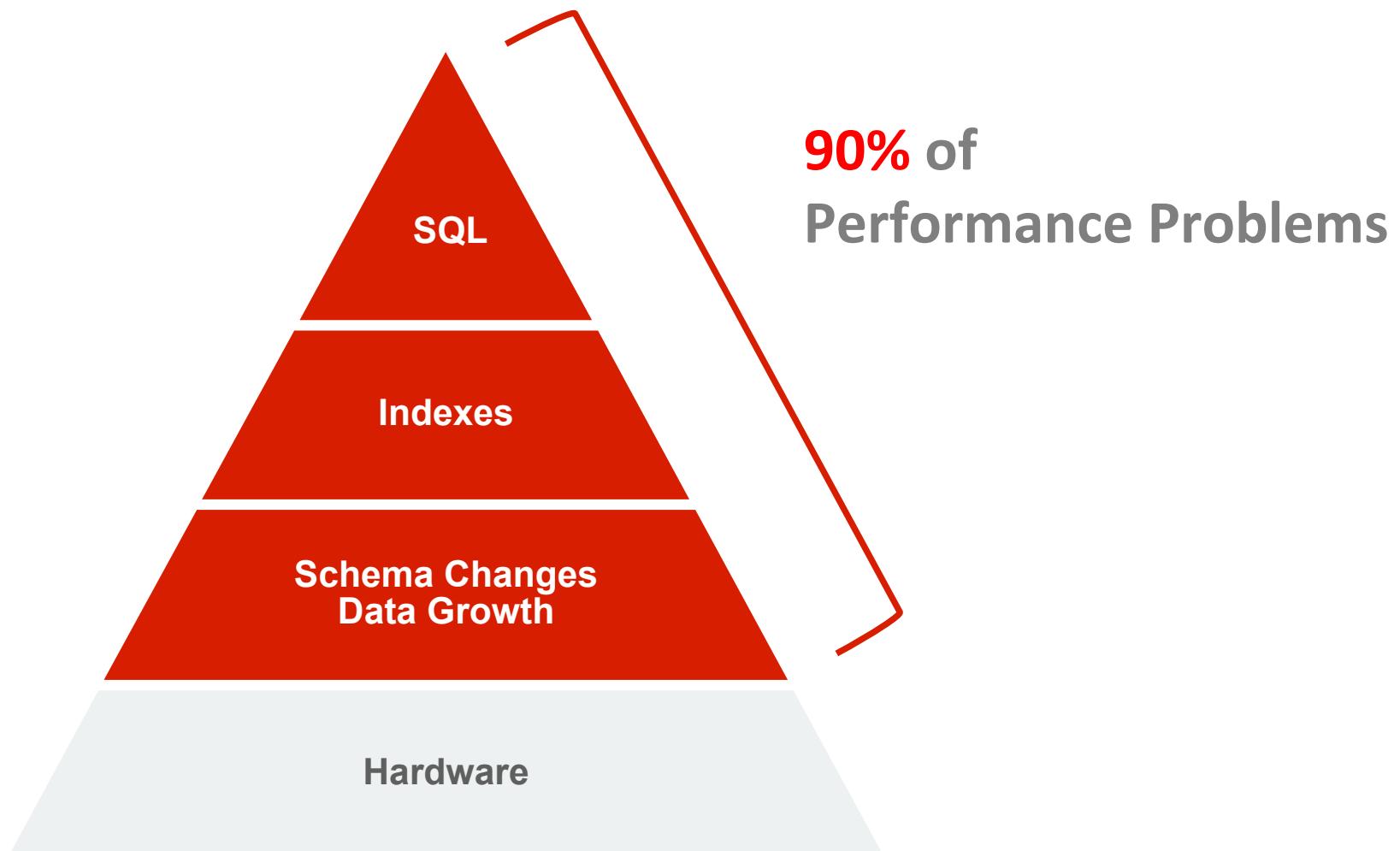


"The MySQL Enterprise Monitor is an absolute must for any DBA who takes his work seriously."

Adrian Baumann
System Specialist
Federal Office of Information Technology &
Telecommunications



Source of Database Performance Problems



MySQL Performance Schema

- Identify performance bottlenecks
- Identify problematic queries
- Get real time insight into locks
- See exactly what is happening within MySQL
- Get real time insight into MySQL internals
- Get real time insight into query executions

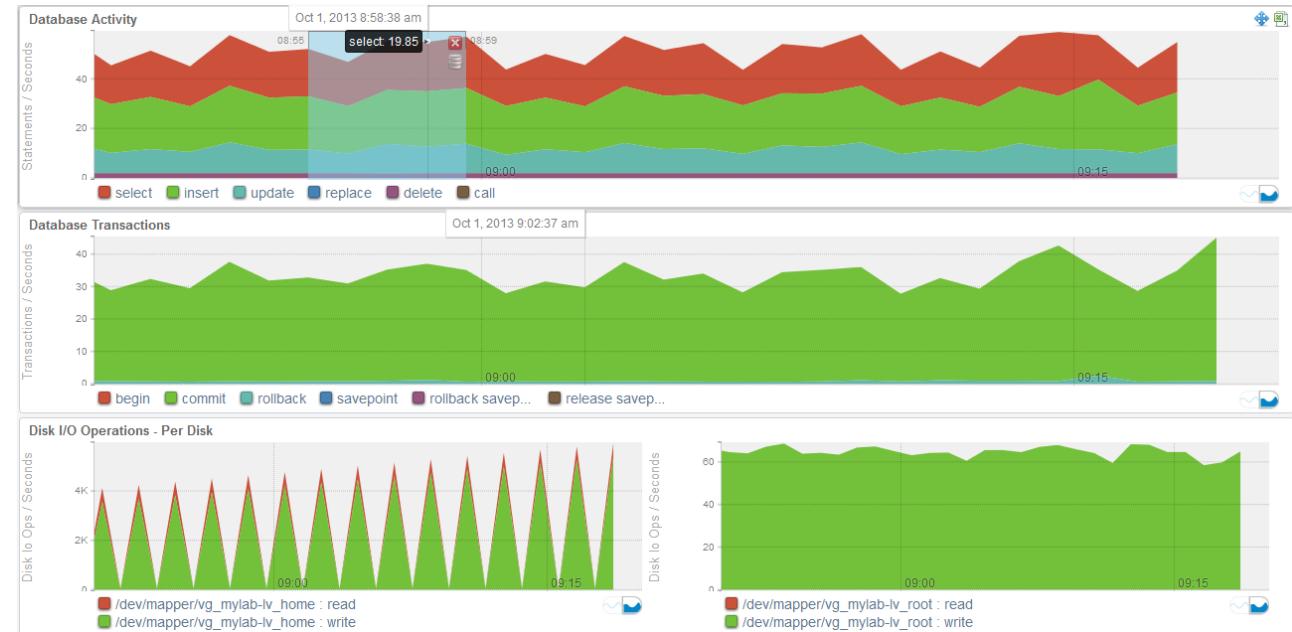
```
mysql> select * from host_summary_by_stages;
+-----+-----+-----+-----+-----+
| host | event_name           | total | wait_sum | wait_avg |
+-----+-----+-----+-----+-----+
| hal  | stage/sql/Opening tables | 889   | 1.97 ms  | 2.22 us  |
| hal  | stage/sql/Creating sort index | 4     | 1.79 ms  | 446.30 us |
| hal  | stage/sql/init            | 10    | 312.27 us | 31.23 us  |
| hal  | stage/sql/checking permissions | 10   | 300.62 us | 30.06 us  |
| hal  | stage/sql/freeing items   | 5     | 85.89 us  | 17.18 us  |
| hal  | stage/sql/statistics      | 5     | 79.15 us  | 15.83 us  |
| hal  | stage/sql/preparing       | 5     | 69.12 us  | 13.82 us  |
| hal  | stage/sql/optimizing      | 5     | 53.11 us  | 10.62 us  |
| hal  | stage/sql/Sending data    | 5     | 44.66 us  | 8.93 us   |
| hal  | stage/sql/closing tables  | 5     | 37.54 us  | 7.51 us   |
| hal  | stage/sql/System lock      | 5     | 34.28 us  | 6.86 us   |
| hal  | stage/sql/query end       | 5     | 24.37 us  | 4.87 us   |
| hal  | stage/sql/end              | 5     | 8.60 us   | 1.72 us   |
| hal  | stage/sql/Sorting result  | 5     | 8.33 us   | 1.67 us   |
| hal  | stage/sql/executing       | 5     | 5.37 us   | 1.07 us   |
| hal  | stage/sql/cleaning up     | 5     | 4.60 us   | 919.00 ns |
+-----+-----+-----+-----+-----+
```

Features & Benefits



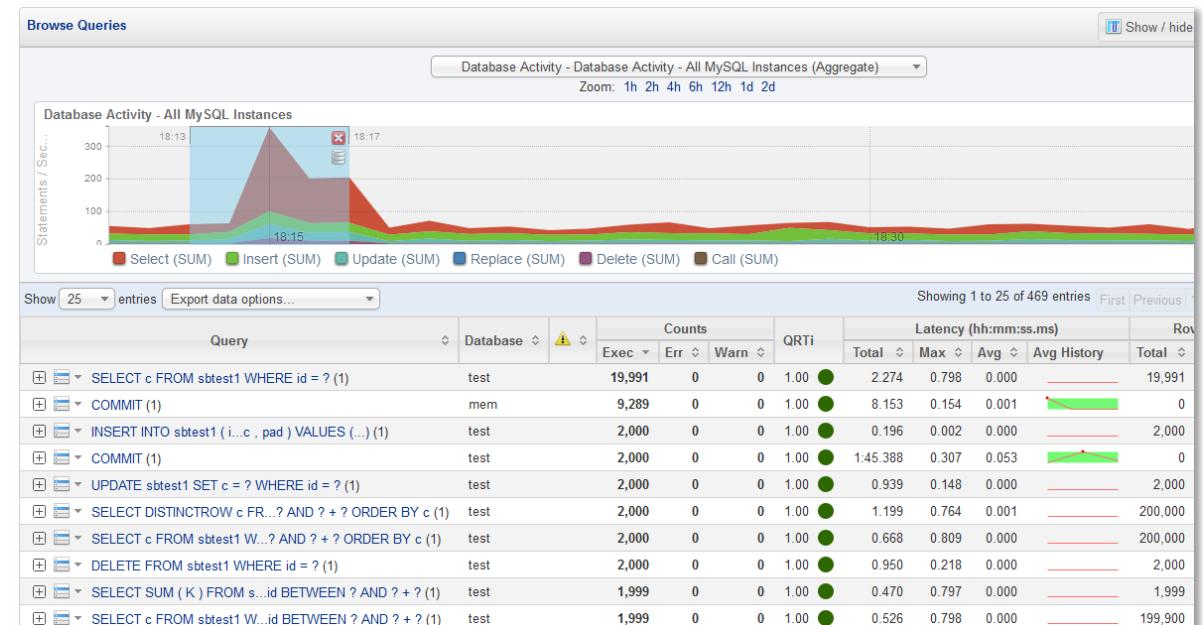
Performance Monitoring

- Monitor MySQL performance
- Monitor OS performance
- Monitor query performance
- Advice on index usage
- Alerts on performance problems



Enterprise Query Analyzer

- Real-time query performance
- Visual correlation graphs
- Find & fix expensive queries
- Detailed query statistics
- Query Response Time index (QRTi)



"With the MySQL Query Analyzer, we were able to identify and analyze problematic SQL code, and triple our database performance. More importantly, we were able to accomplish this in three days, rather than taking weeks."

Keith Souhrada
Software Development Engineer
Big Fish Games



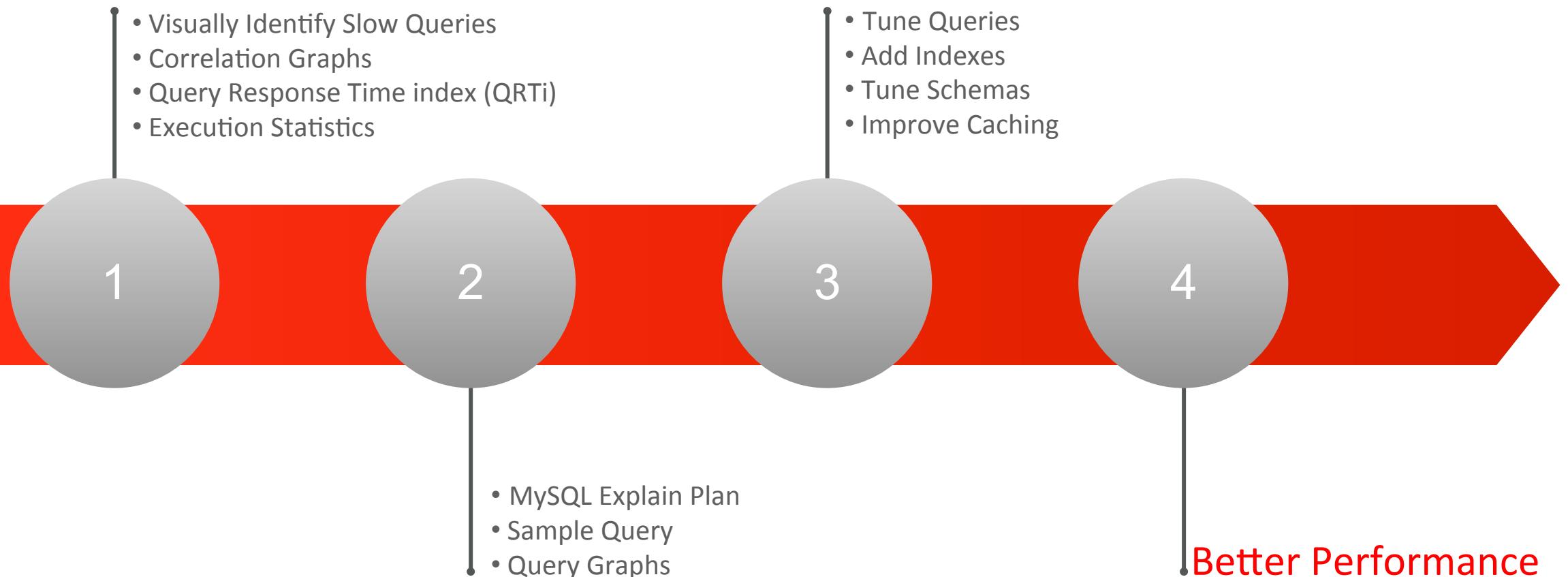
Query Response Time Index (QRTi)

- “Quality of Service” (QoS) measurement for each query
- QoS measurement for a server, group, or every instance
- Single metric for query performance

Query	Database	⚠	Counts			QRTi
			Exec	Err	Warn	
INSERT INTO sbtest1 (i...c , pad) VALUES (...)	test		161,133	0	0	1.00 ●
INSERT INTO sbtest1 (k..LUES (...) /* , ... */	test		20	0	0	0.50 ●
SELECT SUM (K) FROM s...id BETWEEN ? AND ? + ?	test		161,156	0	0	1.00 ●
SELECT DISTINCTROW c FR...? AND ? + ? ORDER BY c	test		161,160	0	0	1.00 ●
CREATE INDEX k_1 ON sbtest1 (k)	test		1	0	0	0.00 ●
SELECT c FROM sbtest1 W...? AND ? + ? ORDER BY c	test		161,157	0	0	1.00 ●
BEGIN	test		161,139	0	0	1.00 ●
CREATE TABLE sbtest1 (... = innodb MAX_ROWS = ?	test		1	0	0	0.50 ●
COMMIT	test		161,091	0	0	0.69 ●
DROP TABLE sbtest1	test		1	0	0	0.50 ●



Solving Query Performance Problems



Advantages of the Query Analyzer **over** Slow Query Log

- See query execution statistics
- Trace the query origination back to the application source code
- View the overall query performance over time
- See when the query was first introduced
- See the explain plan
- Focus on queries specific to a particular host and time period
- View query executions correlated with other performance graphs

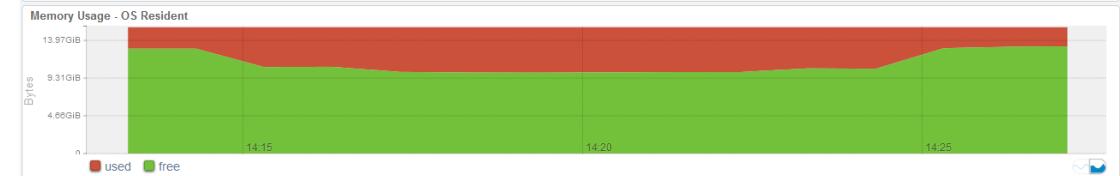
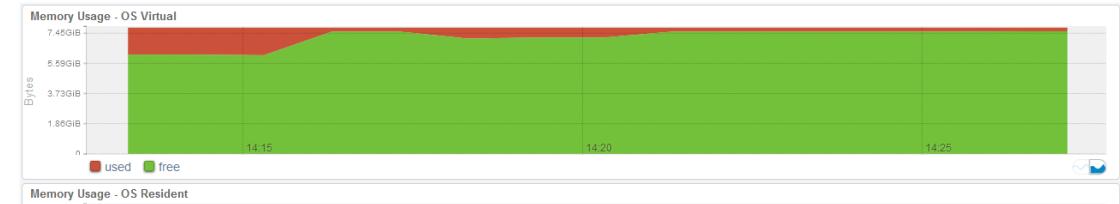
InnoDB Monitoring

- Monitor key performance metrics
 - Stay on top of locking issues
 - Get configuration advice
 - Examine buffer pool usage



Memory Usage Monitoring

- Monitor OS memory usage
- Monitor MySQL memory usage
- Advice on configuration
- Alerts on memory usage

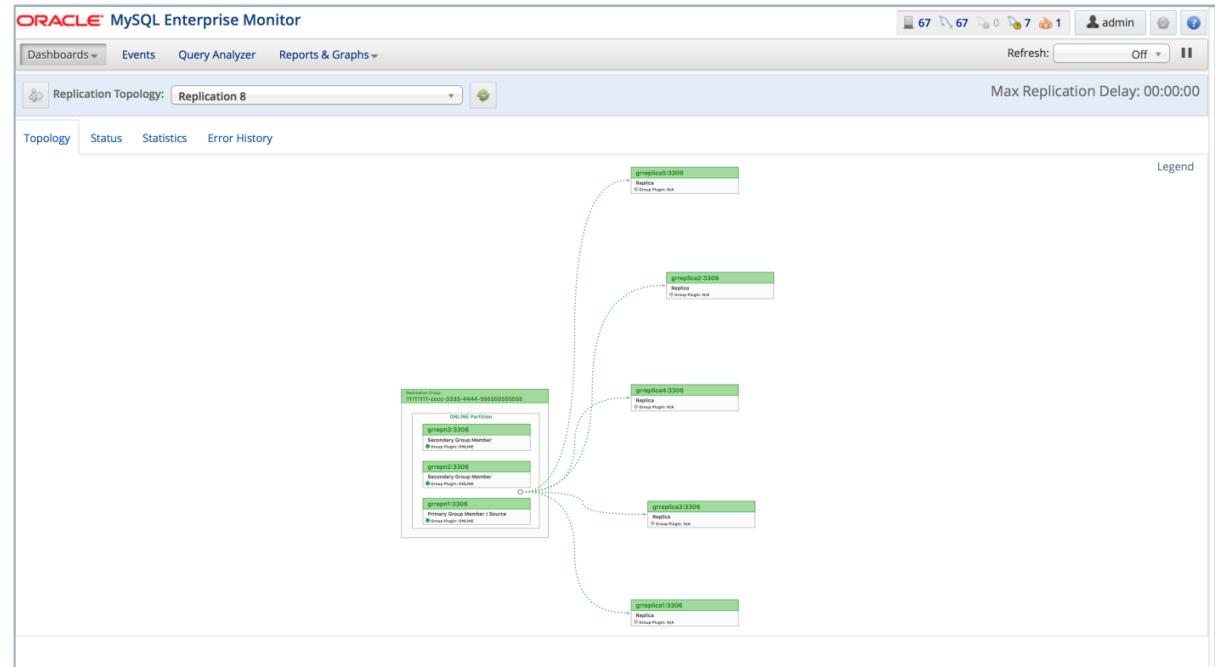


Replication Monitoring

- Replication Dashboard
- Auto-discovers replication topology
- Replication performance monitoring
- Replication advisors
- Best practice replication advice

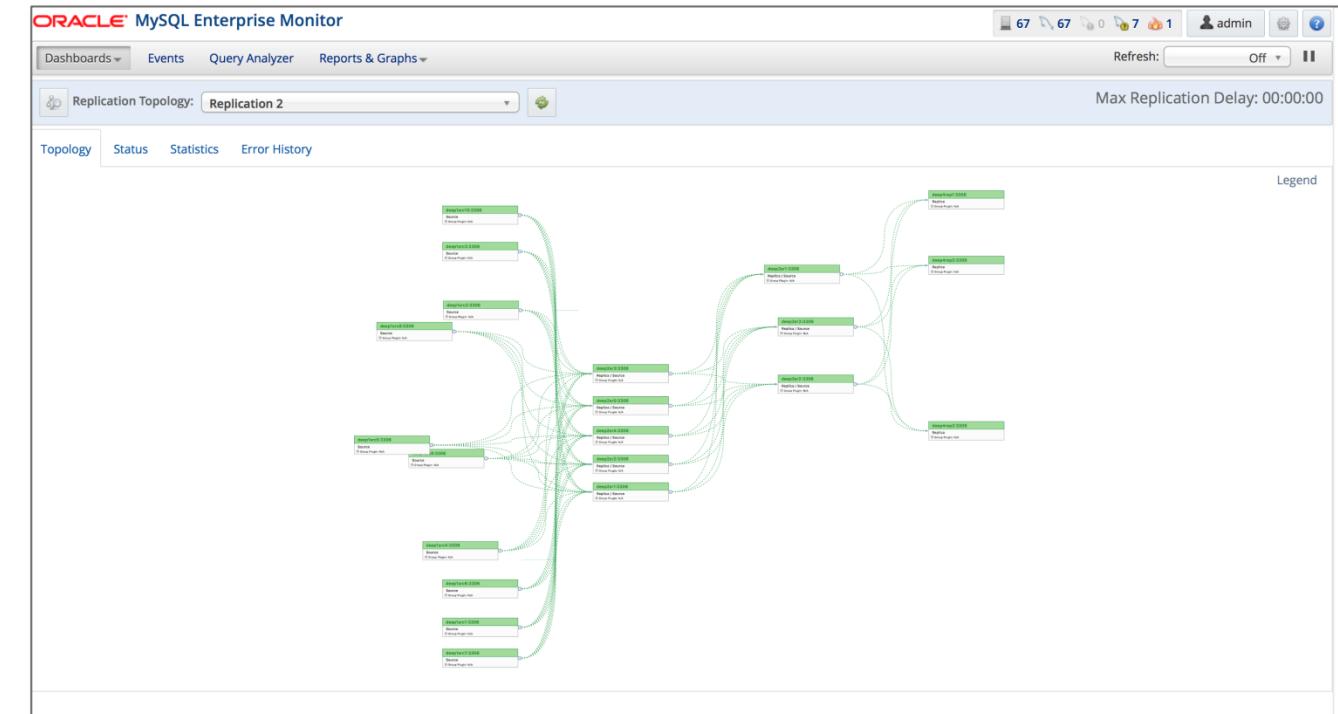
"I use the MySQL Enterprise Monitor every day to monitor and keep tabs on our MySQL databases. Quick one stop shopping for keeping tabs on them."

Wes Homer,
Sr System and Network Administrator



Replication Monitoring: Topology View

- Configuration of Replication Topologies
- Replication Channel View
- Multiple Replication Topologies
 - Master/Slave
 - Multi-Source
 - Circular
 - Ring
 - Group Replication
 - All of these mixed and matched



Replication Monitoring: Group Status & Statistics

- Binary Logging
- GTIDs
- Group Replication
- Semi-Sync Replication
- Relay Logging
- Multi-threaded Replication
- Multi-source Replication

The screenshot shows the Oracle MySQL Enterprise Monitor interface. The top navigation bar includes 'Dashboards', 'Events', 'Query Analyzer', and 'Reports & Graphs'. The main header displays 'Replication Topology: Replication 3' and 'Max Replication Delay: 00:00:00'. Below this, there are tabs for 'Topology', 'Status' (which is selected), 'Statistics', and 'Error History'. A red alert message states: 'GR:22222222-3333 : Group Replication has Members OFFLINE. Tolerant to 0 node failures. Group has Quorum.' Another message below it says: 'GR:11111111-2222 : All Group Replication Members are ONLINE. Tolerant to 1 node failures. Group has Quorum.' The central part of the screen is a table titled 'Show All entries' with columns: Instance, Member State, Fetch State, Apply State, Time Behind, Read Only, GTID Enabled, Binary Log Format, Node Type, Flow Control, View ID, Group Auto Increment, Channels, and Version. The table lists seven instances: gsr2n3:3306 (ONLINE, green), gsr1n1:3306 (ONLINE, green), gsr2n1:3306 (OFFLINE, yellow/red), gsrsource replica:3306 (N/A, grey), gsr1n2:3306 (ONLINE, green), gsr1n3:3306 (ONLINE, green), and gsr2n2:3306 (ONLINE, green). The 'Node Type' column indicates Primary Group Member, Primary Group Member / Source, Replica / Secondary Group Member, Replica / Source, Secondary Group Member, Secondary Group Member, and Secondary Group Member respectively. The 'Flow Control' column shows QUOTA for most instances and N/A for the replica source. The 'View ID' column lists 14944985257180809:4, 14944985175119170:3, 7, N/A, 14944985175119170:3, 7, and 14944985257180809:4. The 'Group Auto Increment' column shows values 0, 0, 1, 1, 0, 0, and 0. The 'Channels' column shows 5.7.1 for all instances. At the bottom of the table, it says 'Showing 1 to 7 of 7 entries'.

Best Practice Advisors

- Enforce MySQL best practices
- 14 Advisor categories
- 250+ Advisors
- Threshold-based alerts
 - Exponential moving averages
 - Rate change detection
- Expert problem resolution advice

Advisors	
<input checked="" type="checkbox"/> Edit Selected Advisors	<input checked="" type="checkbox"/> Disable Selected Advisors
<input checked="" type="checkbox"/> Create Advisor	<input checked="" type="checkbox"/> Import/Export
Administration	Configured: 26 of 26
Agent	Configured: 3 of 3
Availability	Configured: 6 of 6
Backup	Configured: 5 of 5
Cluster	Configured: 10 of 10
Graphing	Configured: 87 of 87
Memory Usage	Configured: 6 of 6
Monitoring and Support Services	Configured: 5 of 5
Operating System	Configured: 5 of 5
Performance	Configured: 23 of 23
Query Analysis	Configured: 4 of 4
Replication	Configured: 13 of 13
Schema	Configured: 17 of 17
Security	Configured: 26 of 26

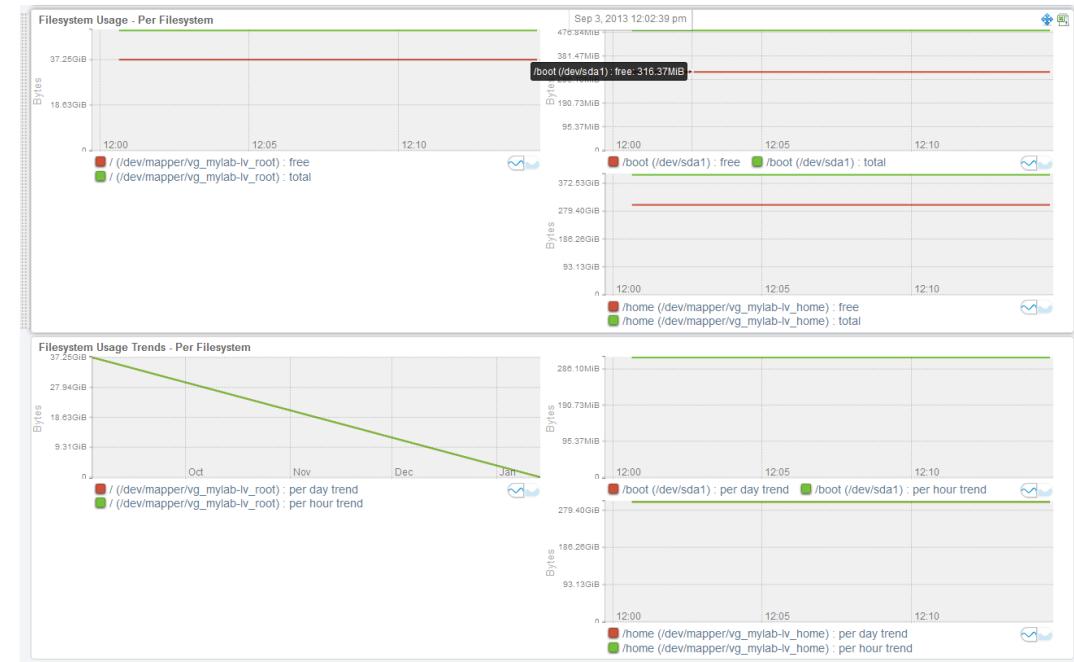
"I definitely recommend the MySQL Enterprise Monitor to DBAs who don't have a ton of MySQL experience. It makes monitoring MySQL security, performance and availability very easy to understand and to act on."

Sandi Barr
Sr. Software Engineer
Schneider Electric



Disk Monitoring

- Capacity Planning
- Forecast capacity requirements
- Projections
- Trend analysis
- Timeseries data



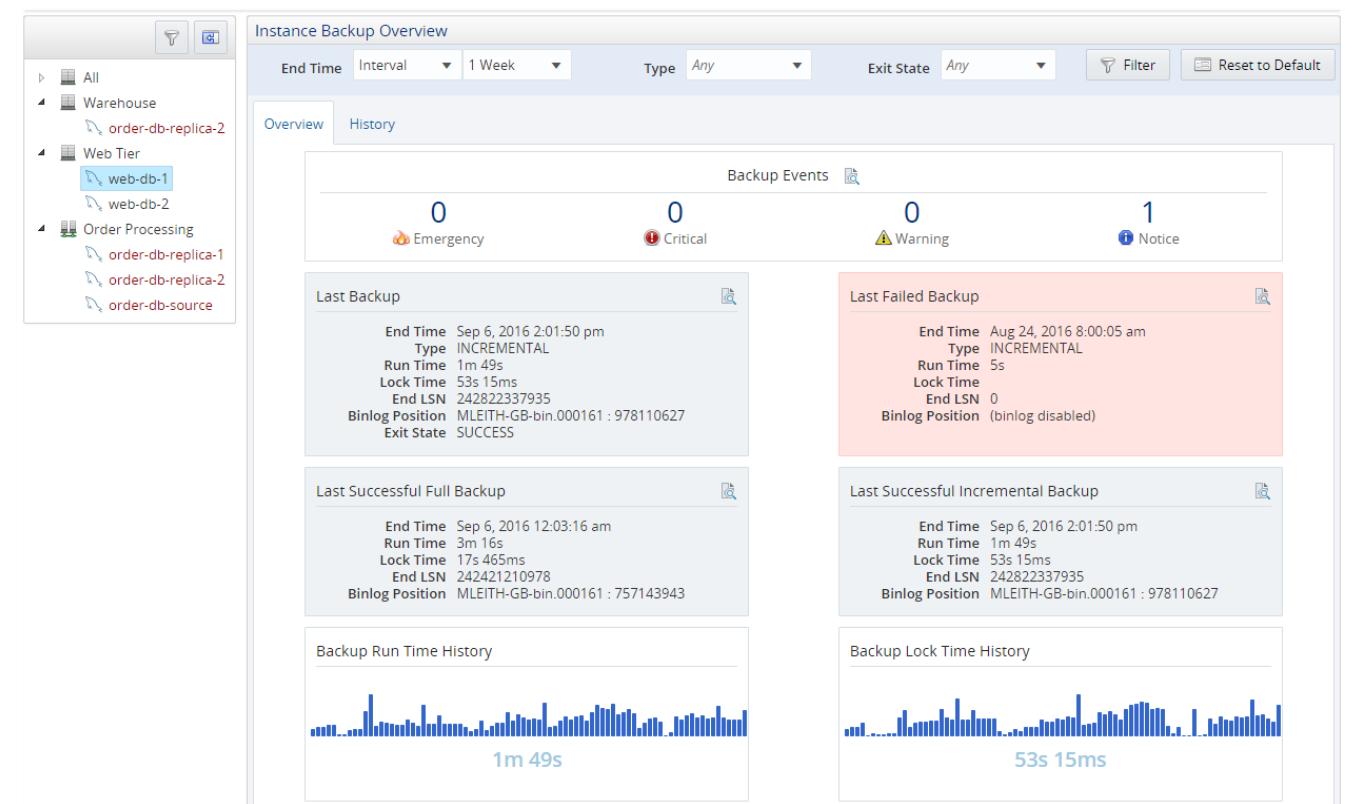
"With the monitoring dashboard and advisory rules, we can accurately predict our capacity requirements and optimize MySQL performance."

Keith Souhrada
Software Development Engineer
Big Fish Games



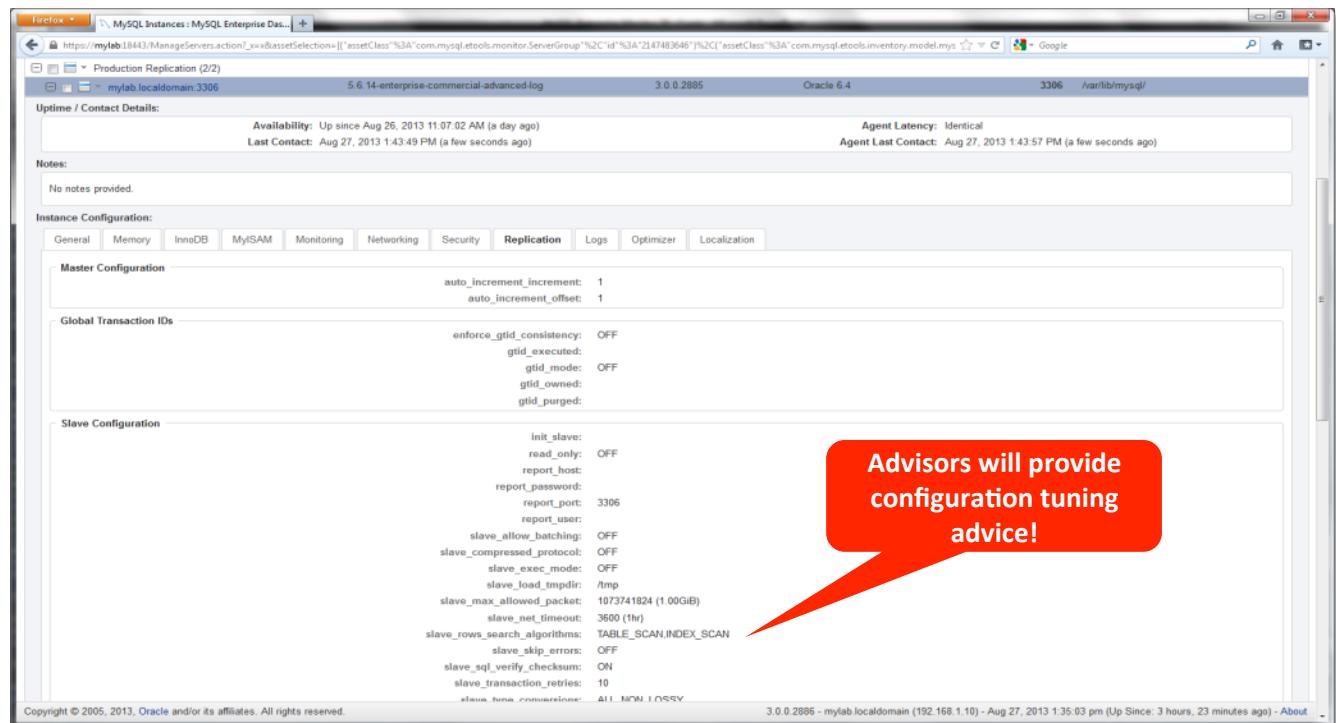
Enterprise Backup Monitoring

- Monitor backup results
- Monitor backup performance
- Ensure backups are up to date



MySQL Configuration Management

- Centralized management
- Organized by topic
- Options grouped by feature
- See host details
- See network details



Security Administration

- Account management
- Firewall management
- Audit management
- Know when privileges change
- Get advice on best practices
- Monitor access problems

The screenshot shows two windows from the Oracle Database Security Advisor. The top window is a grid of alerts:

	Current	Worst	Subject	Topic
[+]	!	!	mylab.localdomain, mylab.localdomain:3306	Root Account Without Password
[+]	!	!	mylab.localdomain, mylab.localdomain:3306	Server Has Accounts Without A Password
[+]	✓	!	mylab.localdomain, mylab.localdomain:3306	Average Statement Execution Time Excess...
[+]	✓	!	mylab.localdomain, mylab.localdomain:3306	SQL Statement Generates Errors or Warnings
[+]	!	!	mylab.localdomain, mylab.localdomain:3306	Server Has Anonymous Accounts

The bottom window is a detailed view of the second alert (Server Has Accounts Without A Password):

Topic: Server Has Accounts Without A Password
Categories: Security
Current State: Open
Auto-Closes by Default: Yes
Notes:
No notes provided.

Details:

Problem Description:
Accounts without passwords are particularly dangerous because an attacker needs to guess only a username. Assigning passwords to all accounts helps prevent unauthorized users from accessing the system.

Advice:
Assign a strong password to the following accounts on server mylab.localdomain:3306:

- '@localhost'
- '@mylab.localdomain'
- 'root'@'127.0.0.1'
- 'root'@'.'
- 'root'@'mylab.localdomain'

A strong password should be at least 8 characters long, contain lowercase and uppercase characters, numbers and symbols, and not contain words found in a dictionary.

Recommended Action:
SET PASSWORD FOR 'user_name'@'host_name' = PASSWORD('new_pass');

Links and Further Reading:
[Securing Your MySQL Installation](#)
[Securing a MySQL Server on Windows](#)

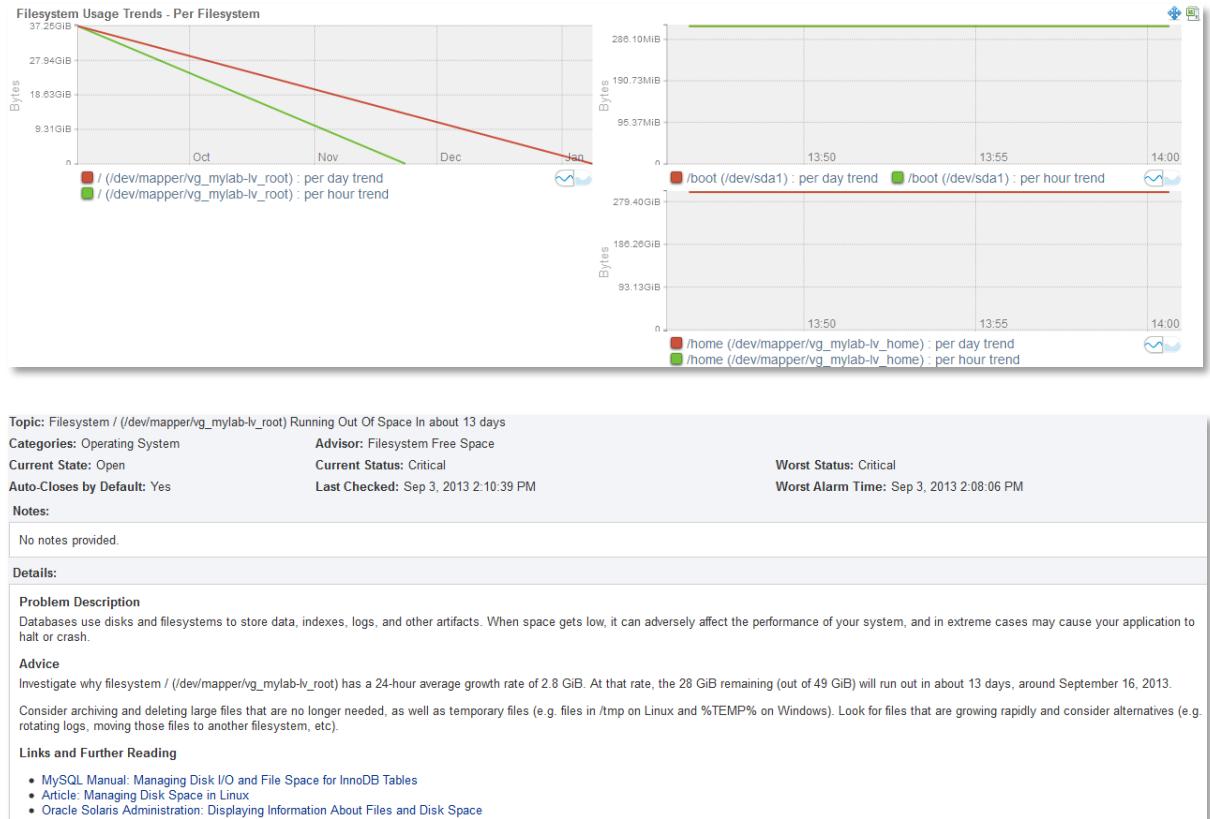
Expression:
%user% != THRESHOLD

Evaluated Expression:

- '@localhost'
- '@mylab.localdomain'
- 'root'@'127.0.0.1'
- 'root'@'.'
- 'root'@'mylab.localdomain' != "

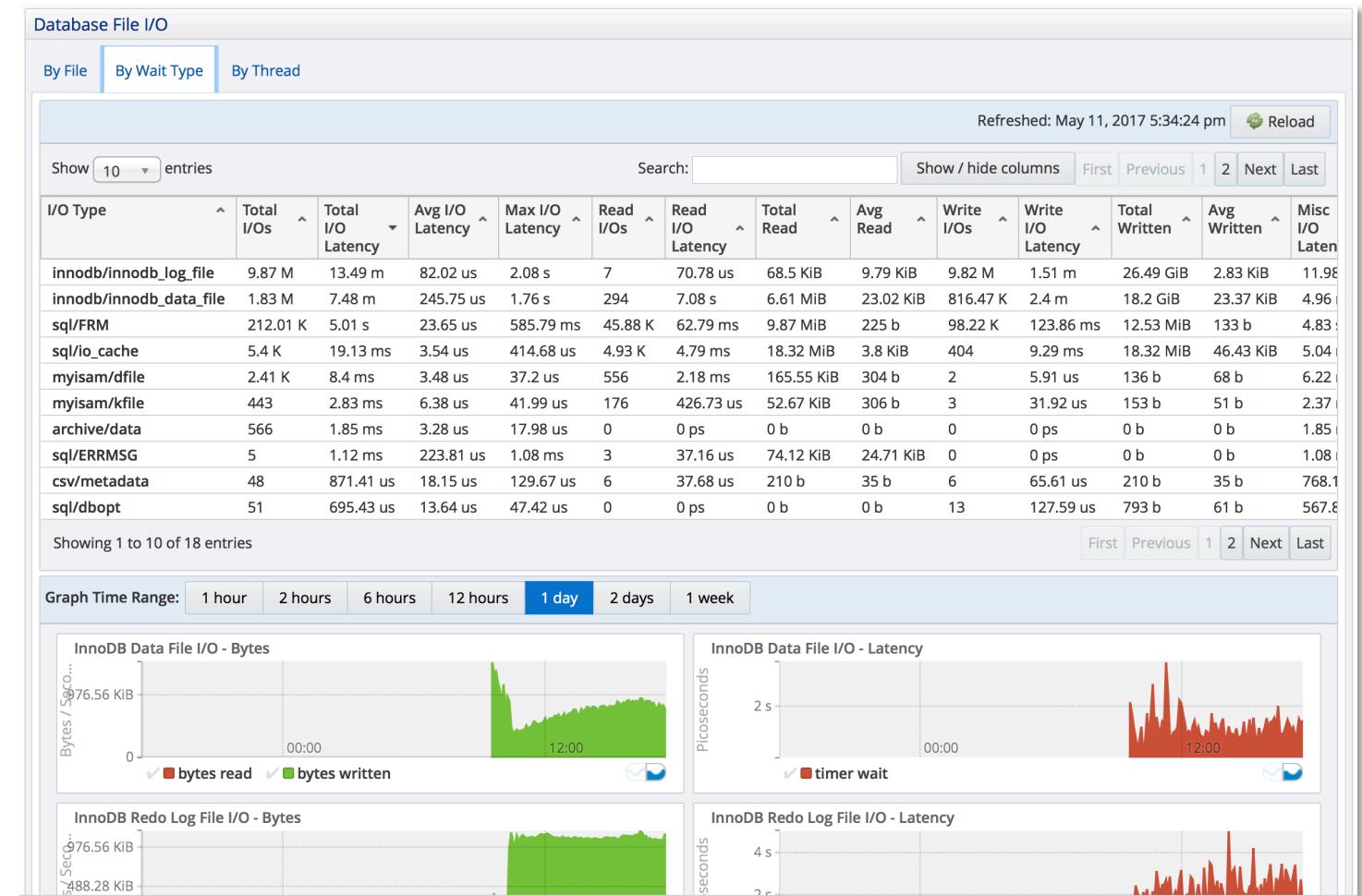
Trends & Predictive Problem Detection

- Visual trend analysis
- Identify outliers
- Head off problems
- Handle imminent capacity issues



Deep Insights: Database File IO Report

- Database activity by File
- See file IO hot spots
 - By file
 - By waits
 - By connection / thread
- Detailed breakdown of stats



Deep Insights: Lock Waits Report

- See row lock hot spots
- See blocking metadata locks
- Relate locks back to user connections and transactions
 - Understand behaviors
 - Remove bottlenecks
 - Unblock traffic

The screenshot shows a database report titled "Lock Waits Report". The table has the following columns:

Locked Table	Locked Index	Locked Type	Wait Started	Wait Age	Waiting Trx ID	Waiting Trx Started	Waiting Trx Age	Waiting Trx Rows Locked	Waiting Trx Rows Modified
'test'.t	GEN_CLUST_INDEX	RECORD	Sep 14, 2015 5:46:49 pm	5s	181998620	Sep 14, 2015 4:20:18 pm	1h 26m 36s	1	0
'test'.t	GEN_CLUST_INDEX	RECORD	Sep 14, 2015 5:46:52 pm	2s	181998745	Sep 14, 2015 4:20:22 pm	1h 26m 32s	1	0
'test'.t	GEN_CLUST_INDEX	RECORD	Sep 14, 2015 5:46:52 pm	2s	181998745	Sep 14, 2015 4:20:22 pm	1h 26m 32s	1	0

Showing 1 to 3 of 3 entries

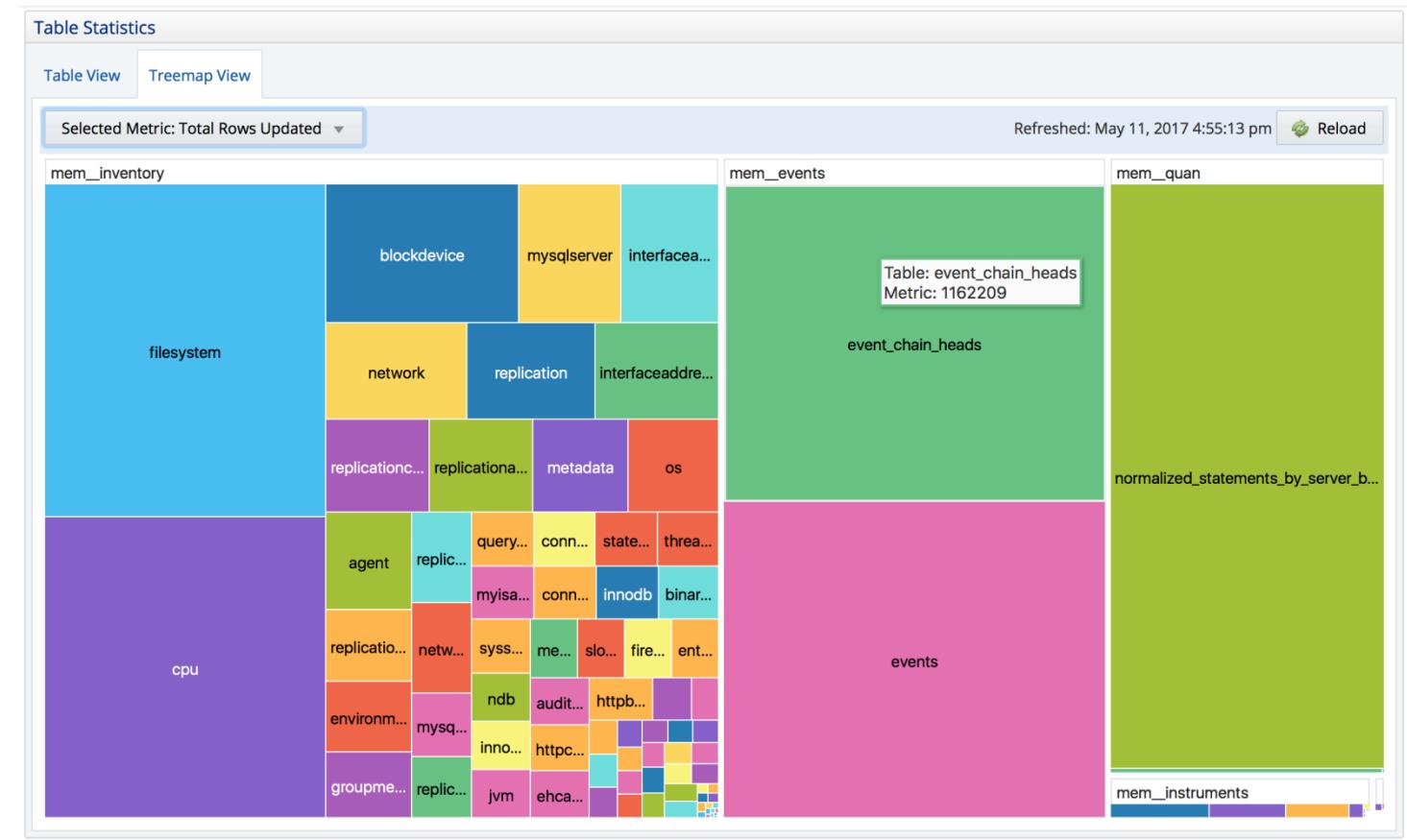
Deep Insights: Processes

- See information about all current connections
 - Including the last statement executed by idle connections!

Processes								
MySQL Processes								
Refreshed: May 11, 2017 5:50:28 pm Reload								
Show 10 entries	Search:	Show / hide columns	First	Previous	1	2	3	4
User	Database	Command	Time	Statement Latency	Current Statement	Last Statement Latency	Last Statement	
root@localhost	mysql	Query	1.29 ms	SELECT `thd_id` as `thread_id`, `conn_id`...				
sql/main			8h 11m 35s					
sql/compress_gtid_table		Daemon	8h 11m 35s					
root@localhost	mysql	Sleep	32s		113.98 us	SELECT COUNT(*) FRO		
root@localhost	mem	Sleep	8s		69.73 us	/* mem dbpool.defau		
root@localhost	mem	Sleep	8s		55.77 us	/* mem dbpool.defau		
root@localhost	mem	Sleep	8s		52.71 us	/* mem dbpool.defau		
root@localhost	mem	Sleep	8s		84.03 us	/* mem dbpool.defau		
root@localhost	mem	Sleep	8s		180.54 us	/* mem dbpool.defau		
root@localhost	mem	Sleep	8s		54.64 us	/* mem dbpool.defau		
Showing 1 to 10 of 65 entries								
First	Previous	1	2	3	4	5	Next	Last

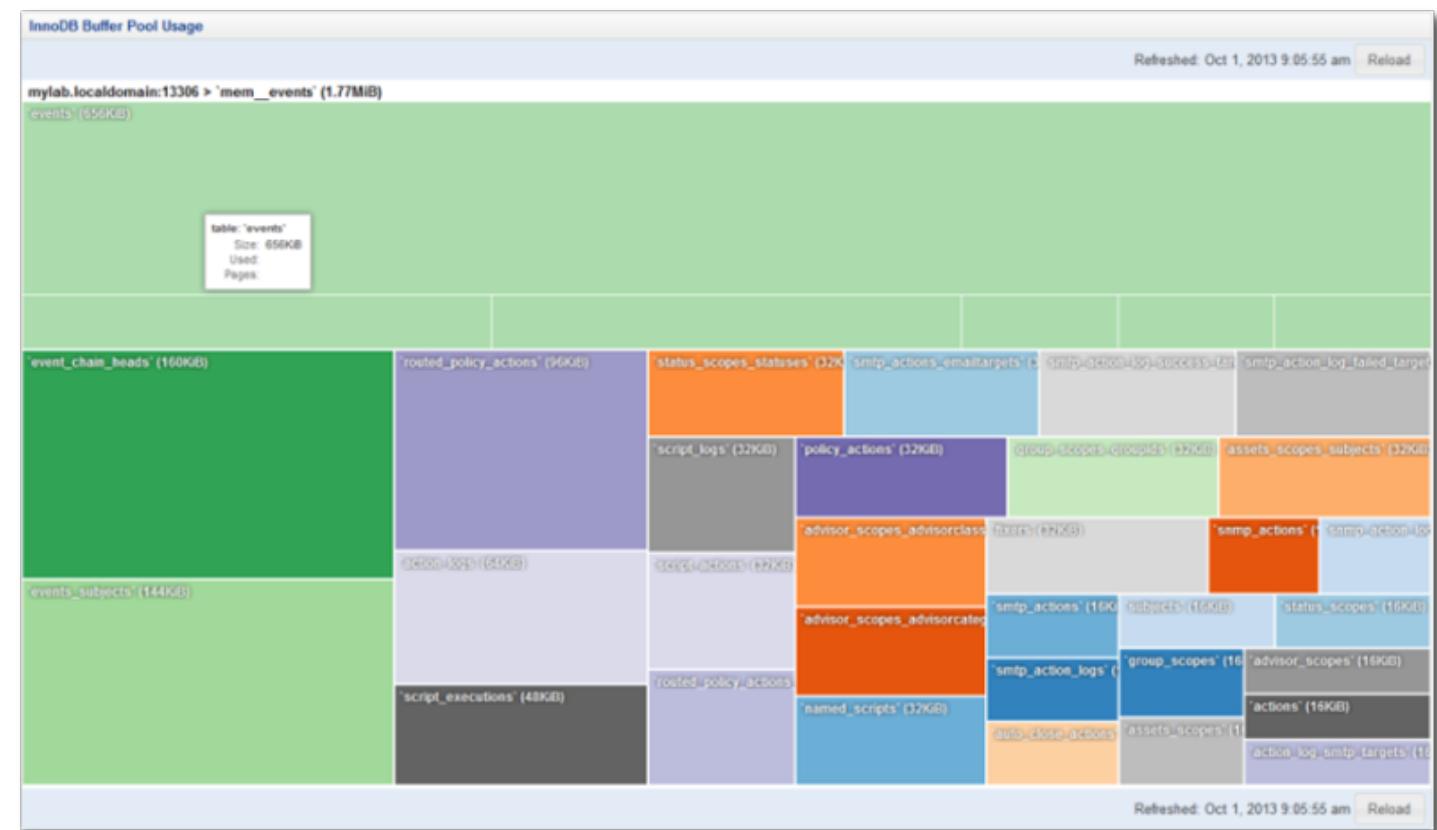
Deep Insights: Table Statistics

- See database activity by Table
 - Latency
 - Read IO
 - Write IO
 - Rows inserted
 - Rows read
 - Much more...



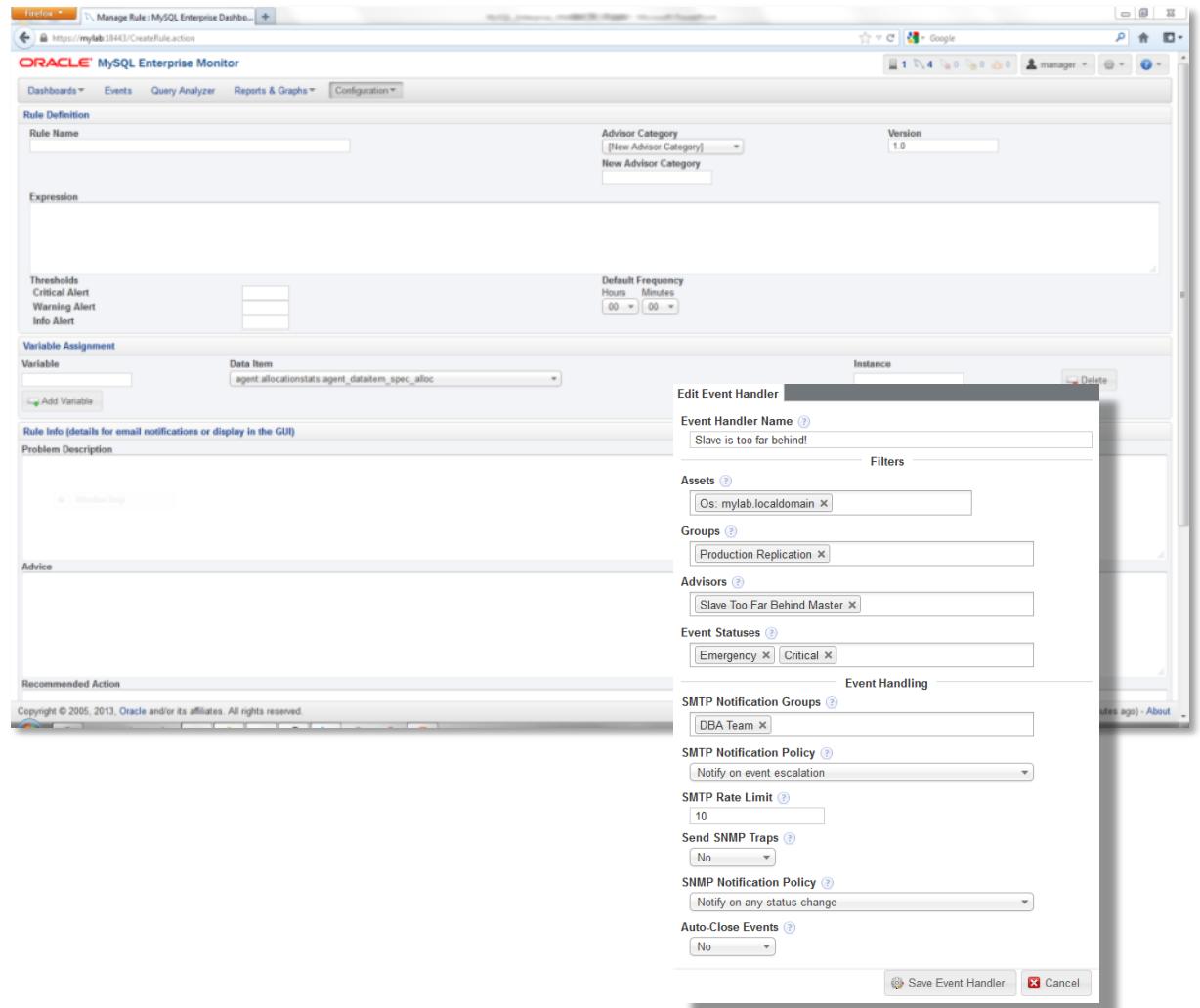
Deep Insights: InnoDB Buffer Pool Usage

- See cache usage by object
 - Schema
 - Table
 - Index



Customizable & Extensible

- Create custom
 - Monitored Asset Groups
 - Advisors
 - Graphs
 - Filters
 - Event Handlers
 - And more ...



Solving Common Performance Issues

Causes of Performance Issues	MySQL Enterprise Monitor Helps
Queries doing table scans	See these queries immediately
Excessive temporary tables on disk	See the queries generating these
CPU spikes	Find out what caused it
Disk I/O saturation	Find out what caused it
Internal locking	Get alerts when locking issues occur
Hardware problems	Get alerts for disk and network problems
Database and schema changes	Get alerts when changes are made
New queries introduced	See what queries are added and when
Poor MySQL configuration	Get advice on configuration tuning

Top 10 Performance Issues **Solved**

- ✓ Identify the most expensive queries
- ✓ Full table scans (no indexes)
- ✓ Excessive temporary tables
- ✓ Large and/or frequent filesorts
- ✓ CPU usage overload
- ✓ Disk I/O saturation
- ✓ Hardware problems
- ✓ Database and schema changes
- ✓ New queries introduced
- ✓ Poor MySQL configuration
- ✓ Internal locking issues

The Bottom Line

Performance ↑

- Performance at scale
- Monitoring and tuning

Peace of Mind ↑

- Insurance
- Immediate help if/when needed

TCO ↓

- Reduced risk of downtime
- Improved Productivity

Risks ↓

- Security & regulatory compliance
- Contact with MySQL team

DevOps Agility ↑

- Automated scaling & management
- Flexible, real-time backups

Customer Satisfaction ↑

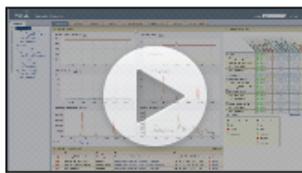
- Application performance
- Application uptime

Additional Info & Case Studies



MySQL Enterprise Monitor Demo Videos

MySQL Enterprise Edition: Demos



Installing MySQL Enterprise Monitor

See how you can begin monitoring your MySQL servers in under 10 minutes, using MySQL Enterprise Monitor.



Real-time MySQL Performance & Availability Monitoring

Learn how MySQL Enterprise Monitor enables you to manage the overall performance and health of your MySQL servers.



Performance Tuning with MySQL Query Analyzer

Learn how MySQL Enterprise Monitor's Query Analyzer allows you to quickly and easily identify the root cause of query-based performance issues on any MySQL server.



Remotely Monitor MySQL in the Cloud

Using a Cloud and VM friendly design, MySQL Enterprise Monitor allows you to remotely monitor MySQL Servers in the cloud without the need for any remote agents.

MySQL Enterprise Edition

- ▶ MySQL Enterprise Backup
- ▶ MySQL Enterprise Monitor
- ▶ MySQL Enterprise HA
- ▶ MySQL Enterprise Scalability
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<http://www.mysql.com/products/enterprise/demo.html>

Buongiorno



Mobile Internet

Content and Apps



Company Overview

Known in the worldwide mobile ecosystem for developing and managing paid apps and contents that help consumers get greater enjoyment from mobile devices.

Application

Buongiorno's platform powered by MySQL Enterprise Edition. Stores 8TB of data and handles 50K queries/sec, 15K transactions/sec.

Why MySQL Enterprise Edition?

I highly recommend MySQL Enterprise Edition; the latest version of the MySQL Enterprise Monitor is extremely useful and saves us a lot of time and efforts."

-- Carmine Giordano, DBA Manager, Buongiorno

Atos



Company Overview

International information technology services company with annual revenue of EUR 8.8 billion and 77,100 employees in 52 countries.

Application

Atos Manages Transaction Clearing for the Euronext Markets in Continental Europe (Cash and derivatives) with MySQL Enterprise Edition.

Why MySQL Enterprise Edition?

"MySQL allows us to sleep soundly at night, which was far from being the case with the old system. We deliver better results at a lower cost, and the quality of Oracle's MySQL support is exemplary." -- Vincent Cornet, DBA Support Manager, Atos

Gina Tricot



Company Overview

Swedish fashion chain with over 180 stores, and selling online in 28 countries.

Application

E-commerce application powered by MySQL Enterprise Edition (initially built on Community Edition).

Why MySQL Enterprise Edition?

"MySQL Enterprise Edition enables us to expand and grow online sales in both existing and new countries while maintaining a low TCO. It is a high performance, scalable and easy to monitor database; we're extremely pleased with it." -- **Nicklas Griphem, Manager Server & Infrastructure, Gina Tricot**

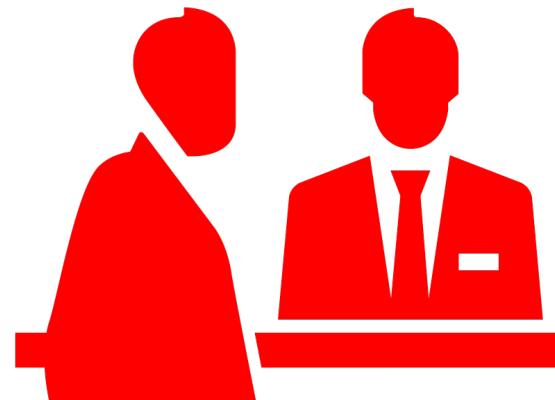
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MySQL Enterprise Edition Trial



<http://www.mysql.com/trials/>

Contact a MySQL Sales Rep



<http://www.mysql.com/about/contact/>

Thank You!



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