

# Opening the doors (and windows) of the Cathedral

Enabling an architecture of participation  
around the MySQL Server



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Lenz Grimmer

<lenz@mysql.com>

Community Relations Manager  
MySQL AB

# Introduction



**Eric S. Raymond: "The Cathedral and the Bazaar"**

**<http://catb.org/~esr/writings/cathedral-bazaar/>**

# How many of you...



**Use MySQL?**

**Visited the MySQL Bug Database?**

**Submitted a bug report to MySQL?**

**Visited MySQL Forge?**

**Submitted a project/snippet to Forge?**

**Contributed to the Forge Wiki?**

**Visited #mysql on freenode.net?**

**Visited #mysql-dev on freenode.net?**

**Submitted a patch to MySQL?**

# Open Source Company - Closed Development History



**FOSS since its inception**  
**Public bug tracking**  
**Developers recruited from  
the community**  
**Roadmap only partly  
visible/vague**  
**Code reviews performed  
internally**  
**Obstacles in contributing  
patches**  
**No direct interaction with  
developers**

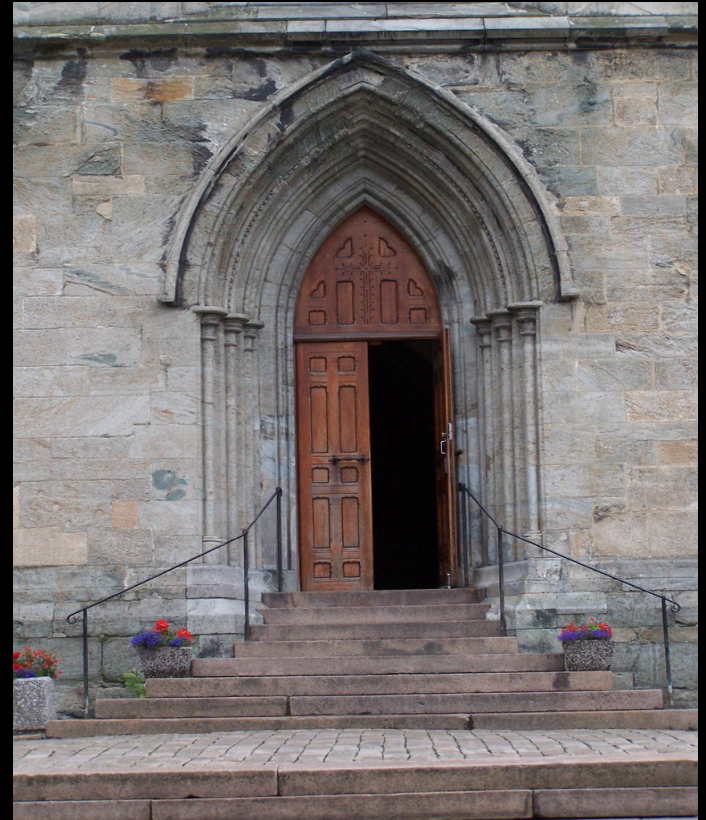




# Desire for change



**Direct feedback and  
interaction  
More Transparency  
Grow the MySQL  
developer community  
Easier to learn MySQL  
internals  
Easier to contribute to  
MySQL  
Follow the OSS spirit**



# Steps before 2007



**MySQL Bug Database**  
**MySQL Forge & Wiki**  
**Planet MySQL**  
**Quality Contributor**  
**Program**  
**Contributor License**  
**Agreement**  
**MySQL Camp I**  
**(at Google Campus)**



# MySQL Bug DB



<http://bugs.mysql.com/>

Opened Sep 2002 to replace mailing list

Bug tracking for all products

Bug screening team to verify all bugs

Transparent Workflow

Patches are attached automatically

Based on the PHP bug tracking system

Source code available!

<http://bugs.mysql.com/bzr/>

# MySQL Forge



<http://forge.mysql.com>

Project list

Code snippets

Wiki

Worklog

Planned:

Voting, commenting  
more user activity





# Planet MySQL



**RSS Feed Aggregator of MySQL-related  
blogs**

**English, German. French & Spanish**

**Archives of past entries**

**Not based on Planet Planet (own  
development in PHP/MySQL)**

# Quality Contribution Program



[dev.mysql.com/qualitycontribution.html](https://dev.mysql.com/qualitycontribution.html)

Bug reports

Test scripts

Patches

Performance

Benchmarking

Point system

Rewards



# New Steps in 2007



**Community Engineering Team**

**MySQL University**

**Google Summer of Code**

**Worklog**

**MySQL Camp**

**Heidelberg Developer Meeting**

**#mysql-dev IRC channel on freenode.net**

**Internal documentation on Forge Wiki**

**Code reviews in public**

# MySQL University



[forge.mysql.com/wiki/MySQL\\_University](http://forge.mysql.com/wiki/MySQL_University)  
Highest form of education on how to  
code on MySQL

Targeted at MySQL Employees, but open  
for anyone

Forge Wiki

Freenode IRC

(#mysql-university)

IceCast audio stream





# Google Summer of Code



<http://forge.mysql.com/wiki/SummerOfCode>

10 projects

8 mentored by MySQL AB hosts

9 delivering

Jin Chen: A Performance Analysis Tool

Charles Cahoon: MySQL Load Testing

Mayssam Sayyadian - MySQLXplorer:  
Enabling Keyword Search

Vangelis Katsikaros - Exploring MySQL's SQL  
optimizer

Warren Kenny: MySQL Auditing Software

Umair Mehmood Imam: MySQL Auditing  
Software

Andrew Dashin: MyWebER

Milos Prodanovic: IPv6 network support



Senlin Liang: Unit Testing



# Worklog



<http://forge.mysql.com/worklog/>  
Technical specifications for new features  
We need your input on contents,  
specifications, priorities and desirability

 **Search For:**  

**Look In:**

[Advanced Search ...](#)

**Recently Added/Modified Tasks**

Title	Modified	Status	Version
<a href="#">WL#3953: Log Access Denied errors for bad passwords in the error log</a>	Aug 22 @ 23:48	Code-Review	Server-5.2
<a href="#">WL#4014: Extended and Improved Discovery</a>	Aug 19 @ 20:51	Un-Assigned	Server-6.1
<a href="#">WL#896: Primary, Secondary and Tertiary Sorts</a>	Aug 16 @ 21:52	Assigned	Server-7.0
<a href="#">WL#3751: Subquery optimization: Semijoin: Inside-out strategy</a>	Aug 16 @ 21:31	In-Documentation	Server-5.2
<a href="#">WL#3750: Subquery optimization: Semijoin: First-match strategy</a>	Aug 16 @ 21:30	In-Documentation	Server-5.2
<a href="#">WL#4013: Unicode german2 collation</a>	Aug 16 @ 20:24	Un-Assigned	Server-7.1

**Most Recent Comments**

Task	Added On	By
<a href="#">WL#1042: Stream (similar to BLOB) type</a>	Aug 19 @ 09:11	Paul McCullagh
This functionality will be implemented as part of the project to provide a scalable BLOB storage and streaming infrastructure for MySQL. The <b>BLOB Streaming engine for MySQL (MyBS)</b> already provides a way to upload and download BLOB data as a stream, directly to and from a MySQL...		
<a href="#">WL#3583: BLOB Locator API</a>	Aug 19 @ 08:53	Paul McCullagh
This functionality has been implemented by the <b>BLOB Streaming engine for MySQL (MyBS)</b> , as part of the project to provide a scalable BLOB storage and streaming infrastructure for MySQL. Download and documentation is available at: <a href="http://www.blobstreaming.org">http://www.blobstreaming.org</a> The MySQL...		
<a href="#">WL#1226: Add Streamed LOAD DATA INFILE support</a>	Aug 11 @ 15:36	Andrew A
This would be an excellent addition to avoid needing to use INSERT queries for many new records when the data is arriving in real time in large quantities.		
<a href="#">WL#1075: Add support for functional indexes</a>	Jul 18 @ 15:23	Nils Meyer
Would be very useful for me in many cases. Add it soon!		
<a href="#">WL#1075: Add support for functional indexes</a>	Jul 18 @ 15:19	Scott Noyes

# MySQL Camp



<http://mysqlcamp.org>

An Unconference in BarCamp Style

MySQL devs and Community meet and discuss a wide range of topics:

Backup/Recovery

Lucene Indexing

Storage Engines

MySQL Proxy



# Developer Meeting



20-21.9.2007 in Heidelberg, Germany

Workshops

Team Exhibitions

MySQL University

Sessions

Guests meeting

MySQL developers



**MySQL**®

Developers Meeting  
Heidelberg, Germany 2007



# MySQL Internals



[http://forge.mysql.com/wiki/MySQL\\_Internals](http://forge.mysql.com/wiki/MySQL_Internals)

In-depth documentation of the inner workings of the MySQL Server

Specification of the Client/Server-Protocol, file formats, Optimizer etc.

Algorithms and Structures

Storage Engines / Replication

Coding Guidelines

# Mailing Lists



**<http://lists.mysql.com/commits>**

**Reviews / approval of code modifications**

**Comments on coding style, performance implications, other caveats**

**No code is pushed without review / approval**

**<http://lists.mysql.com/internals>**

**Discussing server internals**

**Proposing new patches**

**Debugging help**

# Public IRC



<http://forge.mysql.com/wiki/IRC>

Public channel #mysql-dev on  
irc.freenode.net

Direct contact to MySQL devs and  
community contributors

# Ecosystem



## MySQL GUI tools

<http://mysql.com/products/tools/>

MySQL Administrator

MySQL Query Browser

MySQL Workbench

MySQL Migration Tool

## MySQL Connectors

<http://mysql.com/products/connector/>

MySQL Connector/ODBC

MySQL Connector/J

MySQL Connector/Net



# MySQL Proxy



[http://forge.mysql.com/wiki/MySQL\\_Proxy](http://forge.mysql.com/wiki/MySQL_Proxy)  
monitor, analyze or transform data  
exchanged between MySQL Client & Server  
Controlled by Lua scripts

Use cases:

- load balancing
- failover
- query analysis
- query filtering and modification



# Thank you!



## Questions?



Lenz Grimmer <lenz@mysql.com>