

What's New In MariaDB

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Percona Live - May 26 ,2011

MariaDB In 2 Minutes

"MariaDB is a database server that offers drop-in replacement functionality for MySQL. MariaDB is built by some of the original authors of MySQL, with assistance from the broader community of Free and open source software developers. In addition to the core functionality of MySQL, MariaDB offers a rich set of feature enhancements including alternate storage engines, server optimizations, and patches. MariaDB is primarily driven by developers at Monty Program, a company founded by Michael 'Monty' Widenius, the original author of MySQL ..."

- mariadb.org website

MariaDB In 2 Minutes

- Oracle MySQL downstream

- Public

- worklog
- source code repos
- bugtracking
- mailing lists
- IRC
- Knowledgebase
- Build system

- Decades of combined developer experience

- 100% Free licensing

- Branch? Fork?



Monty is Swedish-speaking, so this works ...

Current Releases

5.1 Series

- First release 5.1.39 on November 15, 2009
- Latest release 5.1.55 on March 1, 2011
- Based on MySQL 5.1

5.2 Series

- First release 5.2.3 on November 10, 2010
- Current release 5.2.6 on May 12, 2011
- Based on MariaDB 5.1 (thus MySQL 5.1)

Development Branches

5.3/5.5 Series

- Based on 5.2 (thus on MySQL 5.1)
- Backports from MySQL 6.0
- Huge optimizer changes
- Subquery optimizations (Correlated subqueries can now materialize)
- Beta cycle during Q2 ... ?

5.6 Series

- Early development cycle
- Feature roadmap still incomplete

MariaDB Incrementals

- Backports, melding, pushes with MySQL, Percona etc.
- Bug fixes
- Build system
- Ports, packages and repositories
- Windows user experience
- Knowledgebase

MariaDB 5.1

- Percona XtraDB for InnoDB
- FederatedX, Aria (formerly Maria) and PBXT engines
- Pool of threads
- Test suite improvements
- Windows binaries
- libmysqld.so shared library

MariaDB 5.2

- Percona userstats
- Virtual columns
- OQgraph, SphinxSE engines
- Aria engine group commit
- MySQL 5.5 libservices backport
- Pluggable authentication API
- MyISAM segmented key cache

MariaDB 5.3/5.5

- Dynamic columns
- Subquery cache
- HandlerSocket plugin
- Multi read-range and batch key access (++joins!)
- Hash joins
- Binlog group commit

MariaDB 5.6

- Major work on GIS
 - OpenGIS compliance
 - GIS optimizer
- Replication
- Monitoring and statistics
- Intel multicore enhancements (16+ cores)
- Fulltext search engine plugin
- <http://kb.askmonty.org/v/plans-for-56>

Feature: Pool of threads

- Available in MariaDB 5.1
- DBA-defined number of reusable threads
- Big win with lots of short running queries and few locks
- Requires `./configure --with-libevent`
- Introduces new server arguments
 - `--thread-handling=pool-of-threads`
 - `--thread-pool-size=20`
- Extra port available in case of thread use saturation

Feature: Segmented key cache

- Available in MariaDB 5.2
- Remediate thread contention for mutex in MyISAM
- Other key cache variables still apply (if used)
- Variable `key_cache_segments`
 - 0 to 64 (0=off, 1 not used)
- Statistics in `KEY_CACHES` in `INFORMATION_SCHEMA`

Feature: Pluggable authentication

- Available in MariaDB 5.2
- All user authentication is done by plugins
 - `CREATE USER test IDENTIFIED VIA mysql_native_password`
 - the same as
 - `CREATE USER test IDENTIFIED BY PASSWORD`
- `socket_peercr` allows Unix socket access
- Documented API allows plugin development
 - LDAP? Kerberos? Active Directory? Bueller?

Feature: Virtual columns

- Available in MariaDB 5.2
- Persistent (stored) and virtual (generated) types
- Triggers, stored procedures etc all supported
- Indices mostly supported
- MariaDB's implementation less constrained than others
 - Server and user variables allowed in expressions
 - Float expressions allowed

Know More

Launchpad: <https://launchpad.net/maria>

- <https://launchpad.net/~maria-discuss>
- <https://launchpad.net/~maria-developers>

Other mailing lists: <http://lists.askmonty.org>

Knowledgebase: <http://kb.askmonty.org/>

Wiki: <http://askmonty.org/wiki/>

Downloads: <http://downloads.askmonty.org/>

- check package/port management for binaries

Freenode IRC: #maria

Worklog: <http://askmonty.org/worklog/>

Buildbot: <http://buildbot.askmonty.org/buildbot/>

Questions?

This presentation is a publicly
accessible Google doc!

**[http://tinyurl.
com/3zd8sjt](http://tinyurl.com/3zd8sjt)**

Thanks for coming!

Thanks Percona!

Black vodka at the after event!