What is MariaDB Server?

Colin Charles, Team MariaDB, MariaDB Corporation
colin@mariadb.com | byte@bytebot.net
http://bytebot.net/blog/ | @bytebot on Twitter

Global Top 20 Sites

1. Google
2. Facebook
3. YouTube
4. Baidu
5. Yahoo!
6. Amazon
7. Wikipedia
8. QQ
9. Google.co.in
10. Twitter

11. live.com
12. Taobao
13. Msn.com
14. yahoo.co.jp
15. Sina
16. Linkedin.com
17. google.co.jp
18. Weibo
19. Bing.com
20. yandex.ru

What is MariaDB Server?

- GPLv2 branch of MySQL with a lot of added **community** development

- Feature enhanced

- Application compatible & feature complete with MySQL

- A "drop-in replacement" (upgrade standpoint)

MariaDB Server 5.1

- You have Aria as the temporary table storage engine

- Thread pool v1

- Table Elimination - https://mariadb.com/kb/en/mariadb/what-is-table-elimination/

- Microsecond precision in processlist

MariaDB Server 5.2

- Virtual columns (only in MySQL 5.7 as generated columns)

- Pluggable authentication

- User statistics

MariaDB Server 5.3

- Optimiser, optimser, optimiser - https://mariadb.com/kb/en/mariadb/optimizer-feature-comparison-matrix/

- Many replication improvements that are only present in newer MySQL, e.g. START TRANSACTION WITH CONSISTENT SNAPSHOT

- HandlerSocket

- Dynamic columns

MariaDB Server 5.5

- LIMIT ROWS EXAMINED

- non-blocking client API

- Threadpool v2

- MySQL 5.5 base

MariaDB Server 10.0

- replication: parallel replication, GTID, multi-source replication

- engines: cassandra, connect, spider, tokudb, mroonga

- show explain + output in slow query log

- roles, pcre regex

MariaDB 10.1

- Tablespace & table encryption

- Password validation, audit plugin, authentication via Kerberos/PAM (and OpenLDAP)

- Integrated Galera Cluster

- Per query variables + statement timeouts

Why MariaDB?

- MySQL has a single owner; MariaDB has the MariaDB Foundation (not just Corporation)

- MySQL ecosystem development is at its most vibrant now than it has ever been

- Community can get features inside a shipping server with ease

- Storage engine vendors get shipping & wide distribution including testing

- Roadmaps are public on Jira

MariaDB MaxScale

- Level 7 proxy router, that understands the MySQL protocol, with a pluggable architecture

- Possibilities are endless - use it for logging, writing to other databases (besides MySQL), preventing SQL injections via regex filtering, route via hints, query rewriting, have a binlog relay, etc.

- Load balance your Galera clusters

Where is MariaDB found?

- http://mariadb.org/

- Your Linux/BSD **distribution** - it is the default in RHEL 7, SUSE Enterprise 12, openSUSE, CentOS, Fedora, OpenBSD, etc.

    - and a choice in Debian & Ubuntu

- Pivotal.io CloudFoundry, RackSpace Cloud, Azure, Amazon AWS RDS, etc.

MariaDB Server 10.2

- Window Functions

- Common Table Expressions

- Improvements to EXPLAIN FORMAT=JSON

- Faster connections

- Soon: Virtual columns with functional indexes, MySQL 5.7 JSON functionality, InnoDB 5.7, Galera 4 (?), (maybe) MyRocks

MariaDB + OpenCPS

- Open standards, open data, open source

- Open source in public sector is a good thing from cost prudence to sovereignty

- Data in databases should last beyond a lifetime

- Improve the software together, e.g. collations

- Let's work on open source best practices together!

In conclusion

- MariaDB is GPLv2 licensed, freedom guaranteed

- Its feature complete with MySQL + loaded with extras

- "Enterprise features" made open is great for users

- Its distributed everywhere

Thank you!

Colin Charles
colin@mariadb.com / byte@bytebot.net
http://bytebot.net/blog | @bytebot on twitter
slides: slideshare.net/bytebot