

Different MySQL Forks for Different Folks



Slides

<http://bit.ly/mysqlforks>

<http://joind.in/7920>

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Why do you choose software?



Why do you choose software?

Example: mind-mapping
presentation software

Why do you choose software?



Technical merit

Why do you choose software?



Technical merit
aka

“it does what I need it to do”

Requirements!



“Does not show too much of the presentation at once”

Requirements!



“Does not show too much of the presentation at once”

“Must be able to reveal each new thought”

Why do you choose software?



Pre-existing knowledge

Why do you choose software?



Values

Why do you choose software?



Values

“Sign up/sign in”

Why do you choose software?



Values

“Sign up/sign in”

No free trial

Why do you choose software?



Values

Open Source

Why do you choose software?



Values

Open Source

Open Core

Why do you choose software?



Values

Open Source

Open Core

How many non-corporate
contributors?

Values



Contribute to the ecosystem?

Values



Contribute to the ecosystem?

How easy is it for me to patch?

Values



Contribute to the ecosystem?

How easy is it for me to patch?

How easy is it for me to get a fix?

Values



Contribute to the ecosystem?

How easy is it for me to patch?

How easy is it for me to get a fix?

Vendor lock-in

Why do you choose software?



Integration with environment

Why do you choose software?



Integration with environment

Current

Why do you choose software?



Integration with environment

Current

Future

Why do you choose software?



Ecosystem

Why do you choose software?



Ecosystem

Tools

Why do you choose software?



Ecosystem

Tools

Technical Support

Why do you choose software?



Ecosystem

Tools

Technical Support

Community Support

MySQL Software



Drizzle

Oracle

Percona

MariaDB

Drizzle



Drizzle is homeopathic MySQL

Drizzle



Drizzle is homeopathic MySQL

“Drizzle is based on a micro-kernel design

Drizzle



Drizzle is homeopathic MySQL

“Drizzle is based on a micro-kernel design that aims to be as pluggable as possible.”

Drizzle Values



Docs are cc share-alike 3.0

Drizzle Values



Docs are cc share-alike 3.0

HTML only / no easy download

Drizzle Values



Docs are cc share-alike 3.0

HTML only / no easy download

Code on launchpad

Drizzle Values



Docs are cc share-alike 3.0

HTML only / no easy download

Code on launchpad

Uses bZR

Drizzle Licensing



GPLv2

Drizzle Licensing



GPLv2

BSD for
Protocol drivers, replication

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No timezones, all UTC

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No timezones, all UTC

No embedded server

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No timezones, all UTC

No embedded server

No Windows version

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No timezones, all UTC

No embedded server

No Windows version

For Oracle, Windows is the most
downloaded version

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No system database ('mysql')

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No system database ('mysql')

No stored procedures

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No system database ('mysql')

No stored procedures

No triggers, No views

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



“Fundamentally, stored procedures usually are not the correct architectural decision for

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



“Fundamentally, stored procedures usually are not the correct architectural decision for applications that need to scale.

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



“Fundamentally, stored procedures usually are not the correct architectural decision for applications that need to scale. Pushing more computation down into the database

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



“Fundamentally, stored procedures usually are not the correct architectural decision for applications that need to scale. Pushing more computation down into the database (which is the trickiest layer to scale)

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



“Fundamentally, stored procedures usually are not the correct architectural decision for applications that need to scale. Pushing more computation down into the database (which is the trickiest layer to scale) isn’t a good idea.”

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



Everything is a plugin:

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



Everything is a plugin:

Logging

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



Everything is a plugin:

Logging

Authentication

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



Everything is a plugin:

Logging

Authentication

Replication

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



Compatibility in general

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



Compatibility in general

ANSI 92 standard

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



Compatibility in general

ANSI 92 standard

INFORMATION_SCHEMA = ANSI

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



Compatibility in general

ANSI 92 standard

INFORMATION_SCHEMA = ANSI

DATA_DICTIONARY is not

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



MyISAM for temp tables only

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



MyISAM for temp tables only

InnoDB by default

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



MyISAM for temp tables only

InnoDB by default

**No MERGE, CSV,
ARCHIVE, FEDERATED**

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



-p and -P are switched

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



**-p and -P are switched
(to remove confusion)**

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



-p and -P are switched
(to remove confusion)

No UNSIGNED

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



**-p and -P are switched
(to remove confusion)**

**No UNSIGNED
(ANSI SQL standard)**

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



**-p and -P are switched
(to remove confusion)**

**No UNSIGNED
(ANSI SQL standard)**

No FULLTEXT

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



**-p and -P are switched
(to remove confusion)**

**No UNSIGNED
(ANSI SQL standard)**

**No FULLTEXT
(use Sphinx/Lucene/Solr)**

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No SET, use ENUM

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No SET, use ENUM

No TIME, use DATETIME or INT

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No SET, use ENUM

No TIME, use DATETIME or INT

INT and BIGINT only

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No SET, use ENUM

No TIME, use DATETIME or INT

INT and BIGINT only

BLOB/TEXT only

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No SPATIAL data types

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



**No SPATIAL data types
(go use Postgres)**

Gotchas

[http://docs.drizzle.org/
mysql_differences.html](http://docs.drizzle.org/mysql_differences.html)



No SPATIAL data types
(go use Postgres)

No YEAR datatype

Drizzle



Values: choice

Drizzle



Values: choice

except when there is none

Drizzle



Values: choice

except when there is none

Integration / Pre-existing knowledge

Drizzle



Values: choice

except when there is none

Integration / Pre-existing knowledge

Not a drop-in MySQL replacement

Drizzle



Contributors span several companies

Drizzle



Contributors span several companies

Very community patch friendly

Drizzle



Not forwards compatible

Drizzle



Not forwards compatible

Not backwards compatible

Drizzle



Not forwards compatible

Not backwards compatible

Vendor lock-in

Drizzle



Not forwards compatible

Not backwards compatible

Vendor lock-in

But so is sqlite...

Drizzle



“Drizzle is homeopathic MySQL”

Drizzle



“Drizzle is homeopathic MySQL”

Except is is effective....

Drizzle



“Drizzle is homeopathic MySQL”

Except it is effective....

If you want something between
sqlite and MySQL

Drizzle



“Drizzle is homeopathic MySQL”

Except it is effective....

If you want something between
sqlite and MySQL

That can't be embedded

Drizzle



Questions/feedback?

Oracle



Has the original codebase/license

Oracle



Has the original codebase/license

Not an open source company

Oracle



Has the original codebase/license

Not an open source company

“Bad” moves seem to be integration

Oracle



Has the original codebase/license

Not an open source company

“Bad” moves seem to be integration

e.g. bugs database, security bugs

Oracle



Has the original codebase/license

Not an open source company

“Bad” moves seem to be integration

e.g. bugs database, security bugs
(but not test cases!)

Oracle



Codebase is dual-licenced

Oracle



Codebase is dual-licenced

GPLv2 or

Oracle



Codebase is dual-licenced

GPLv2 or

buy your way out of it (embedded)

Oracle



Codebase is dual-licenced

GPLv2 or

buy your way out of it (embedded)

Documentation is regular copyright

Oracle



Values?

Oracle



Values?

Not an open source company

Oracle



Values?

Not an open source company

Buys a lot of companies

Oracle



Values?

Not an open source company

Buys a lot of companies

Follow processes when merging

Oracle



Values?

Downloading does not require info

Oracle



Values?

Downloading does not require info

Software

Oracle



Values?

Downloading does not require info

Software

Documentation

Oracle



Community patches welcome

Oracle



Community patches welcome

Monthly releases

Oracle



Commitment to MySQL

Oracle



Commitment to MySQL

MySQL 5.5 criticized

Oracle



Commitment to MySQL

MySQL 5.5 criticized
for nothing new

Oracle



Commitment to MySQL

MySQL 5.5 criticized
for nothing new

MySQL 5.6 lots new

Oracle



Commitment to MySQL

MySQL 5.5 criticized
for nothing new

MySQL 5.6 lots new
first version 100% under Oracle

No login requirement...



The world's most popular open source database

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Documentation

Current

Archives

MySQL Community Server

MySQL Cluster

MySQL Workbench (GUI Tool)

MySQL Proxy

MySQL Connectors

MySQL Installer (Windows)

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- Post messages in the MySQL Discussion Forums
- Report and track bugs in the MySQL bug system
- Comment in the MySQL Documentation

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No thanks, just start my download.

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No login requirement...



The world's most popular open source database

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MySQL Workbench (GUI Tool)

MySQL Proxy

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- Report and track bugs in the MySQL bug system
- Comment in the MySQL Documentation

Login »

using my Oracle Web account

Sign Up »

for an Oracle Web account

MySQL.com is using Oracle SSO for authentication. If you already have an Oracle Web account, click the Login link. Otherwise, you can sign up for a free account by clicking the Sign Up link and following the instructions.

No thanks, just start my download.

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MySQL Workbench

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Legal

Legal Policies

Your Privacy Rights

Oracle



Integration

Oracle



Integration

Pre-existing knowledge

Oracle



Integration

Pre-existing knowledge

Ecosystem

Oracle



MySQL Connect

Oracle



MySQL Connect

<http://www.oracle.com/mysqlconnect/>

Oracle



MySQL Connect

<http://www.oracle.com/mysqlconnect/>

Business

Oracle



MySQL Connect

<http://www.oracle.com/mysqlconnect/>

Business

Technical

Oracle



MySQL Connect

<http://www.oracle.com/mysqlconnect/>

Business

Technical

Virtual Developer Days

Next Virtual Developer Day



March 12th, 9 am Pacific time

Next Virtual Developer Day



March 12th, 9 am Pacific time

https://blogs.oracle.com/MySQL/entry/enhance_your_mysql_skills_with

Next Virtual Developer Day



March 12th, 9 am Pacific time

https://blogs.oracle.com/MySQL/entry/enhance_your_mysql_skills_with

Europe, Middle East, Africa

March 19th, 9 am GMT



Oracle questions/comments?

Percona



“Percona Server is an **enhanced** drop-in replacement for MySQL.”

Percona



“Percona Server is an **enhanced** drop-in replacement for MySQL.”

It's a patch set

Percona



“Percona Server is an **enhanced** drop-in replacement for MySQL.”

It's a patch set

If Oracle stops developing MySQL...

Percona



“Percona Server is an **enhanced** drop-in replacement for MySQL.”

It's a patch set

If Oracle stops developing MySQL...

Still GPLv2

Percona



Documentation still copyright Oracle

Percona



Documentation still copyright Oracle

Percona documentation is a patch

Percona



Documentation still copyright Oracle

Percona documentation is a patch

Downloading docs requires login

Percona



Documentation still copyright Oracle

Percona documentation is a patch

Downloading docs requires login

Downloading software does not

Percona



Committed to open source

Percona



Committed to open source

Committed to ecosystem

Percona



Committed to open source

Committed to ecosystem

`percona-toolkit`

Percona



Committed to open source

Committed to ecosystem

`percona-toolkit`

`percona-xtrabackup`

Percona



Percona Monitoring Plugins

Percona



Percona Monitoring Plugins

InnoDB data recovery tool

Percona



Percona Monitoring Plugins

InnoDB data recovery tool

Percona Playback

Percona



Percona Monitoring Plugins

InnoDB data recovery tool

Percona Playback

Benchmarking tools



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

23 extra INFORMATION_SCHEMA tables



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

23 extra INFORMATION_SCHEMA tables

60 extra performance/status counters



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

23 extra INFORMATION_SCHEMA tables

60 extra performance/status counters

Performance counters:
Per table



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

23 extra INFORMATION_SCHEMA tables

60 extra performance/status counters

Performance counters:

Per table

Per index



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

23 extra INFORMATION_SCHEMA tables

60 extra performance/status counters

Performance counters:

Per table

Per index

Per client



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

23 extra INFORMATION_SCHEMA tables

60 extra performance/status counters

Performance counters:

Per table

Per index

Per client

Per thread



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

23 extra INFORMATION_SCHEMA tables

60 extra performance/status counters

Performance counters:

Per table

Per index

Per client

Per thread

Per user



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Visible InnoDB Data Statistics



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Visible InnoDB Data Statistics

InnoDB data dictionary in
INFORMATION_SCHEMA



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Visible InnoDB Data Statistics

InnoDB data dictionary in
INFORMATION_SCHEMA

Replication state is transactional



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Visible InnoDB Data Statistics

InnoDB data dictionary in
`INFORMATION_SCHEMA`

Replication state is transactional

Processlist in microseconds



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Better mutex diagnostics



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Better mutex diagnostics

Finer-grained mutex locking



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Better mutex diagnostics

Finer-grained mutex locking

Visible undo segment information



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Better mutex diagnostics

Finer-grained mutex locking

Visible undo segment information

Buffer pool pre-load / faster shutdown



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Self-tuning checkpoint algorithm



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Self-tuning checkpoint algorithm

Partitioned adaptive hash search



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Self-tuning checkpoint algorithm

Partitioned adaptive hash search

DROP TABLE in background



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Self-tuning checkpoint algorithm

Partitioned adaptive hash search

DROP TABLE in background

Read-ahead improvements



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Per-table import, even with InnoDB



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Per-table import, even with InnoDB

Configurable data dictionary size



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Per-table import, even with InnoDB

Configurable data dictionary size

Configurable insert buffer size (ibuf)



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Per-table import, even with InnoDB

Configurable data dictionary size

Configurable insert buffer size (ibuf)

Configurable fast index creation



http://www.percona.com/doc/percona-server/5.5/feature_comparison.html

Per-table import, even with InnoDB

Configurable data dictionary size

Configurable insert buffer size (ibuf)

Configurable fast index creation

Error/warning log enhancements

Percona Compatibility



Drop-in replacement for MySQL

Percona Compatibility



Drop-in replacement for MySQL

Can drop MySQL back in

Percona Compatibility



Drop-in replacement for MySQL

Can drop MySQL back in
if not using Percona features

Percona Compatibility



Drop-in replacement for MySQL

Can drop MySQL back in
if not using Percona features

mysqldump if using Percona features

Percona Compatibility



Drop-in replacement for MySQL

Can drop MySQL back in
if not using Percona features

mysqldump if using Percona features

Should use mysqldump for major upgrades

Percona 5.6 vs. MySQL 5.6



No comparison yet

Percona 5.6 vs. MySQL 5.6



No comparison yet

No Percona release yet

Percona 5.6 vs. MySQL 5.6



No comparison yet

No Percona release yet

Likely end of April

Percona 5.6 vs. MySQL 5.6



No comparison yet

No Percona release yet

Likely end of April

“Percona 5.6” talk at
Percona Live: Santa Clara

Percona Live



Business

Percona Live



Business

Technical

Percona Live



Business

Technical

Blocked a conference involving **all players**

Percona Live



Business

Technical

Blocked a conference involving **all players**

(Percona, SkySQL, Oracle, Monty Program, Tokutek, etc)

<http://bit.ly/PerconaTruth>



"Emphasis on business."

<http://bit.ly/PerconaTruth>



"Emphasis on business.
We need a place where vendors,

<http://bit.ly/PerconaTruth>



"Emphasis on business.
We need a place where vendors,
both open-source and closed-source,

<http://bit.ly/PerconaTruth>



"Emphasis on business.

We need a place where vendors,
both open-source and closed-source,
can showcase their products and services.

<http://bit.ly/PerconaTruth>



"Emphasis on business.

We need a place where vendors,
both open-source and closed-source,
can showcase their products and services.
This is the hand that feeds all of us.

<http://bit.ly/PerconaTruth>



"Emphasis on business.

We need a place where vendors,
both open-source and closed-source,
can showcase their products and services.

This is the hand that feeds all of us.

It's good for Percona's business,

<http://bit.ly/PerconaTruth>



"Emphasis on business.

We need a place where vendors,
both open-source and closed-source,
can showcase their products and services.

This is the hand that feeds all of us.

It's good for Percona's business,
and it's good for everyone else's too."

<http://bit.ly/PerconaTruth>



"Emphasis on business.

We need a place where vendors,
both open-source and closed-source,
can showcase their products and services.

This is the hand that feeds all of us.

It's good for **Oracle's** business,
and it's good for everyone else's too."



Percona's values



Percona's values

are about

Percona's business



Percona's values

are about

Percona's business

(not so community-friendly
even though their software is)



Percona questions/feedback?

MariaDB



Monty Program

MariaDB



Monty Program

Monty Widenius

MariaDB



Monty Program

Monty Widenius

Unhappy about Oracle acquisition

MariaDB



Committed to open source

MariaDB



Committed to open source

MySQL fork

MariaDB



Committed to open source

MySQL fork

If Oracle stops developing MySQL

MariaDB



Committed to open source

MySQL fork

If Oracle stops developing MySQL

Still new versions of MariaDB

MariaDB



Drop-in replacement for MySQL

MariaDB



Drop-in replacement for MySQL

Future-compatible using mysqldump

MariaDB



Drop-in replacement for MySQL

Future-compatible using mysqldump

Unsure of forward compatibility

MariaDB



Merges back with Oracle monthly

MariaDB



Merges back with Oracle monthly

Sends their patches to Oracle

MariaDB



Merges back with Oracle monthly

Sends their patches to Oracle

Good community steward

MariaDB and MySQL versions



MySQL version 5.1

MariaDB and MySQL versions



MySQL version 5.1
is
MariaDB version 5.1

MariaDB and MySQL versions



MySQL version 5.1
is
MariaDB version 5.1
and
MariaDB version 5.2

MariaDB and MySQL versions



MySQL version 5.1
is
MariaDB version 5.1
and
MariaDB version 5.2
and
MariaDB version 5.3

MariaDB and MySQL versions



MySQL version 5.1
is
MariaDB version 5.1
(based on MySQL 5.1)
and
MariaDB version 5.2
and
MariaDB version 5.3

MariaDB and MySQL versions



MySQL version 5.1

is

MariaDB version 5.1

(based on MySQL 5.1)

and

MariaDB version 5.2

(features that didn't have time to go into MariaDB 5.1)

and

MariaDB version 5.3

MariaDB and MySQL versions



MySQL version 5.1

is

MariaDB version 5.1

(based on MySQL 5.1)

and

MariaDB version 5.2

(features that didn't have time to go into MariaDB 5.1)

and

MariaDB version 5.3

(radically improve subquery, join,
single-table large data set query performance)

MariaDB and MySQL versions



MariaDB version 5.5 is ???

MariaDB and MySQL versions



MariaDB version 5.5 is ???

MariaDB 5.3 plus MySQL 5.5

MariaDB and MySQL versions



MySQL 5.6 is analogous to MariaDB version ???

MariaDB and MySQL versions



MySQL 5.6 is analogous to MariaDB version ???

10.0

MariaDB and MySQL versions



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10.0

Presumably so they can have multiple versions

MariaDB and MySQL versions



MySQL 5.6 is analogous to MariaDB version ???

10.0

Presumably so they can have multiple versions

Why not make it MariaDB version 56?



<https://twitter.com/sheeri/status/302118377948856322>



Kenneth J. Jaeger @kjaeger

Feb 17

@sheeri Perhaps easy administrative modification of the reported version number would be useful, somewhat like modifying "user-agent"

Details



Sheeri K. Cabral @sheeri

Feb 17

@kjaeger That's not built-in to MySQL, you'd have to change source code. Much easier for #MariaDB to change version #s to be more sensible.

Details



Kenneth J. Jaeger @kjaeger

Feb 17

@sheeri Pretty easy to change in this file bazaar.launchpad.net/~maria-captain... on the #MariaDB side. A recompile is required is all.

Details



Sheeri K. Cabral @sheeri

Feb 17

@kjaeger Correct. So individually recompile our own MariaDB, or MariaDB could make one change and eliminate everyone doing it themselves.

Details



Sheeri K. Cabral @sheeri

Feb 17

@kjaeger Frankly I have yet to see why I'd use Maria 10 anyway, so for me personally it's a moot point.

Details



Sheeri K. Cabral @sheeri

Feb 17

@kjaeger I was trying to be helpful to MariaDB, as they may lose customers who don't want to be confused by Maria 11 being MySQL 5.7, etc.

Details



MySQL 5.1 is MariaDB 5.1, 5.2, 5.3

MariaDB 5.5 is MySQL 5.5 + MariaDB 5.3

MariaDB 10 is

MariaDB 5.5 + some MySQL 5.6 features

How do you document this?

MariaDB and MySQL versions



MariaDB 5.6 is MariaDB 5.5

MariaDB and MySQL versions



MariaDB 5.6 is MariaDB 5.5
plus some MySQL 5.6 features

MariaDB and MySQL versions



MariaDB 5.6 is MariaDB 5.5
plus some MySQL 5.6 features
Like a distribution...

MariaDB and MySQL versions



What's in MariaDB 10?

MariaDB and MySQL versions



What's in MariaDB 10?

[http://blog.mariadb.org/
what-does-mariadb-10-0-1-include-available-now/](http://blog.mariadb.org/what-does-mariadb-10-0-1-include-available-now/)

MariaDB and MySQL versions



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Merged from MySQL 5.6

MariaDB and MySQL versions



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Merged from MySQL 5.6 but improved

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Same feature as MySQL 5.6 but done differently

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In MySQL 5.6, merged from Maria 5.x

MariaDB and MySQL versions



What's in MariaDB 10?

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Merged from MySQL 5.6

Merged from MySQL 5.6 but improved

Same feature as MySQL 5.6 but done differently

In MySQL 5.6, merged from Maria 5.x

Only in Maria 10

Only in Maria 10



Multi-source replication

Only in Maria 10



Multi-source replication
(code originally from Taobao)

Only in Maria 10



Multi-source replication
(code originally from Taobao)

SHOW EXPLAIN

Only in Maria 10



Multi-source replication
(code originally from Taobao)

SHOW EXPLAIN

Faster group commit

Only in Maria 10



Multi-source replication
(code originally from Taobao)

SHOW EXPLAIN

Faster group commit
(better inter-thread communication)

Only in Maria 10



Multi-source replication
(code originally from Taobao)

SHOW EXPLAIN

Faster group commit
(better inter-thread communication)

Separation of optimizer stats and storage engines

Cassandra Storage Engine



Combine MariaDB/Cassandra data

Cassandra Storage Engine



Combine MariaDB/Cassandra data

Cassandra can read from MariaDB

Cassandra Storage Engine



Combine MariaDB/Cassandra data

Cassandra can read from MariaDB

MariaDB can write to Cassandra

Cassandra Storage Engine



Combine MariaDB/Cassandra data

Cassandra can read from MariaDB

MariaDB can write to Cassandra

SELECT, INSERT, UPDATE, DELETE

Dynamic Columns



Different sets of data for each row, same column

Dynamic Columns



Different sets of data for each row, same column

Dynamic columns in Cassandra engine

Dynamic Columns



Different sets of data for each row, same column

Dynamic columns in Cassandra engine

JSON rows

MariaDB 10 features



Per-thread memory usage

MariaDB 10 features



Per-thread memory usage
(based on a Taobao patch)

MariaDB 10 features



Per-thread memory usage
(based on a Taobao patch)

Faster ALTER TABLE w/ UNIQUE key

Directly Merged from 5.6



“Most” new INFORMATION_SCHEMA

Directly Merged from 5.6



“Most” new INFORMATION_SCHEMA
and PERFORMANCE_SCHEMA tables

Directly Merged from 5.6



“Most” new INFORMATION_SCHEMA
and PERFORMANCE_SCHEMA tables

ORDER BY...LIMIT optimization

Directly Merged from 5.6



“Most” new INFORMATION_SCHEMA
and PERFORMANCE_SCHEMA tables

ORDER BY...LIMIT optimization

Load multiple plugins with Plugin-load-add

Directly Merged from 5.6



“Most” new INFORMATION_SCHEMA
and PERFORMANCE_SCHEMA tables

ORDER BY...LIMIT optimization

Load multiple plugins with Plugin-load-add

.....nothing else?



Merged from Maria 5.x into MySQL 5.6

From Maria 5.x to MySQL 5.6



Many optimizer features

From Maria 5.x to MySQL 5.6



Many optimizer features
(there is a comparison matrix)

From Maria 5.x to MySQL 5.6



Many optimizer features
(there is a comparison matrix)

Microseconds

From Maria 5.x to MySQL 5.6



Many optimizer features
(there is a comparison matrix)

Microseconds

Binlog annotations

From Maria 5.x to MySQL 5.6



Binlog group commit

From Maria 5.x to MySQL 5.6



Binlog group commit

GIS precise

From Maria 5.x to MySQL 5.6



Binlog group commit

GIS precise

Thread pool



Is that it?



Is that it?

Sort of....



Is that it?

Sort of....

Backported from MySQL 5.6



Is that it?

Sort of....

Backported from MySQL 5.6
but further developed by MariaDB

From MySQL 5.6 to MariaDB++



Binlog checksums

Reimplemented from 5.6



Full auto-initialized timestamp/datetime support

Reimplemented from 5.6



Full auto-initialized timestamp/datetime support

Will be more with more versions

Reimplemented from 5.6



Full auto-initialized timestamp/datetime support

Will be more with more versions
10.0

Reimplemented from 5.6



Full auto-initialized timestamp/datetime support

Will be more with more versions

10.0

10.1

Reimplemented from 5.6



Full auto-initialized timestamp/datetime support

Will be more with more versions

10.0

10.1

10.2

etc

Coming up next....



MySQL Virtual Developer Day
12 Mar, 19 March

https://blogs.oracle.com/MySQL/entry/enhance_your_mysql_skills_with

Open Database Camp /
Northeast LinuxFest 16-17 March

opendbcamp.org

Questions? Comments?

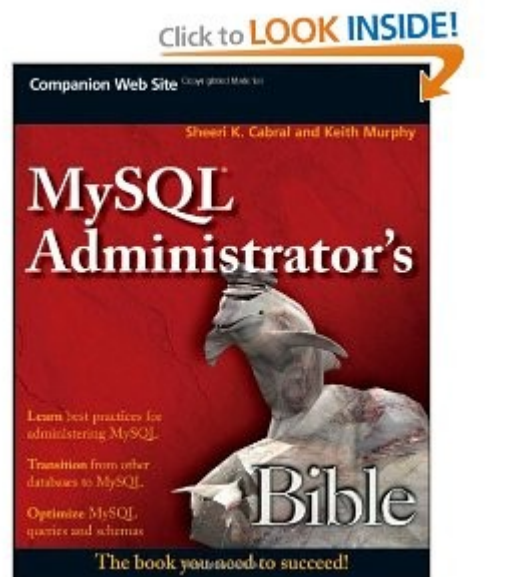
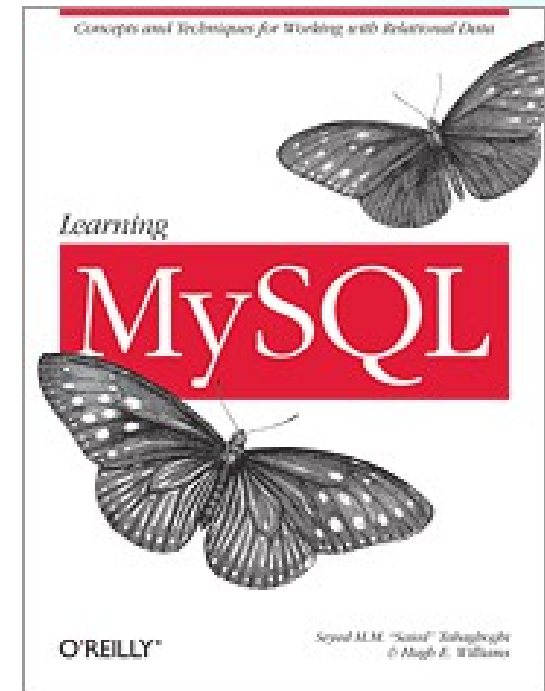


OurSQL Podcast

www.oursql.com

MySQL Administrator's Bible

- tinyurl.com/mysqlbible



planet.mysql.com

mysqlmarinate.com