

22 Reasons to move to MySQL 8

And 4 Reasons not to



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Heatwave to melt Snowflake

#1 MySQL 5.7 Goes EOL in October 2023



#2 New Development Process

Get new Features Frequently, Rather than once every 2-3 years



#3 Innodb based Data Dictionary

- Atomic, Crash Safe DDLs
- Crash Safe Grants
- Much Faster Information Schema



#4 More SQL, Better SQL

Window Functions

CTEs (Common Table Expressions)

INTERSECT and EXCEPT

LATERAL JOIN

#5 Better Security

- New Authentication Protocol
- Support for More Authentication Plugins
- Improvements to Transparent Data Encryption (TDE)
- Improvements to TLS
- Roles

#6 UTF8 Default

And Proper (MB4) UTF8 that is !💖👍😊👉

#7 All Things Indexes

Functional Indexes

Descending Indexes

Invisible Indexes

Multi Value Indexes (JSON)

Generated Invisible Primary Keys

#8 Better JSON Support



#9 Improved Optimizer

Hash Joins among
other things...



#10 Improved EXPLAIN

1

TREE Format

2

**EXPLAIN
ANALYZE**

3

**Default
EXPLAIN
Format**

#11 Better Agility

Much more DDLs supported as
ALGORITHM=INSTANT

#12 SET PERSIST

New way to control
MySQL Configuration


#13 Optimizer Hints

Number of new Hints Supported

SET_VAR to set some variables for query duration only

#14 Resource Management

Resource Groups to Prioritize or Restrict CPU Resources for some queries



#15 NOWAIT an SKIP_LOCKED

Flexible handling of
encountered row level
locks



#16 Proper AUTO_INCREMENT

Do not loose Auto
Increment Counter
value in Edge Cases

#17 Temptable Storage Engine

- Replaced aging HEAP for In Memory TMP Tables
- Supports BLOBS

Separate
Dynamically
Sized
location for
Innodb Undo
Space

#18 Undo Space

#19 Double
Write

Separate Location

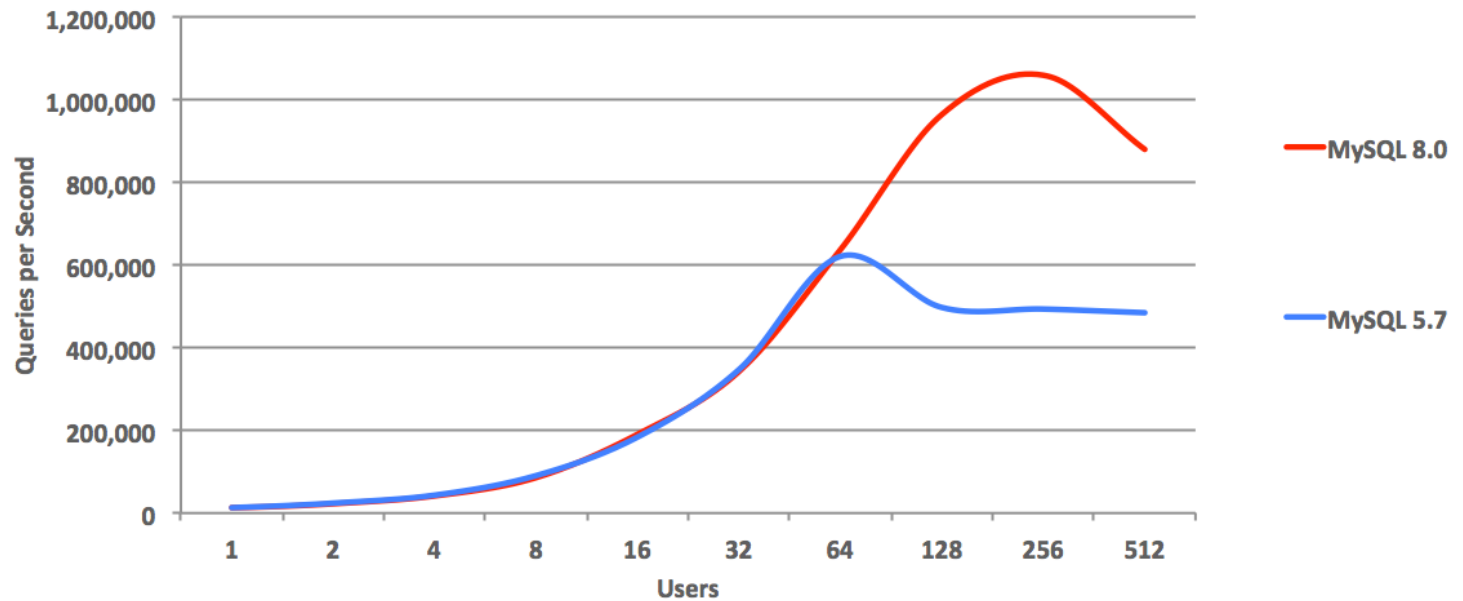
Configurable

Detect Only Option

Dynamically Sizable Online

Can be Disabled for
faster data loading

#21 Better Concurrency



#22 User Comments and Attributes

Store Meta-Data about user accounts
directly in MySQL

Why not Upgrade to MySQL 8 ?

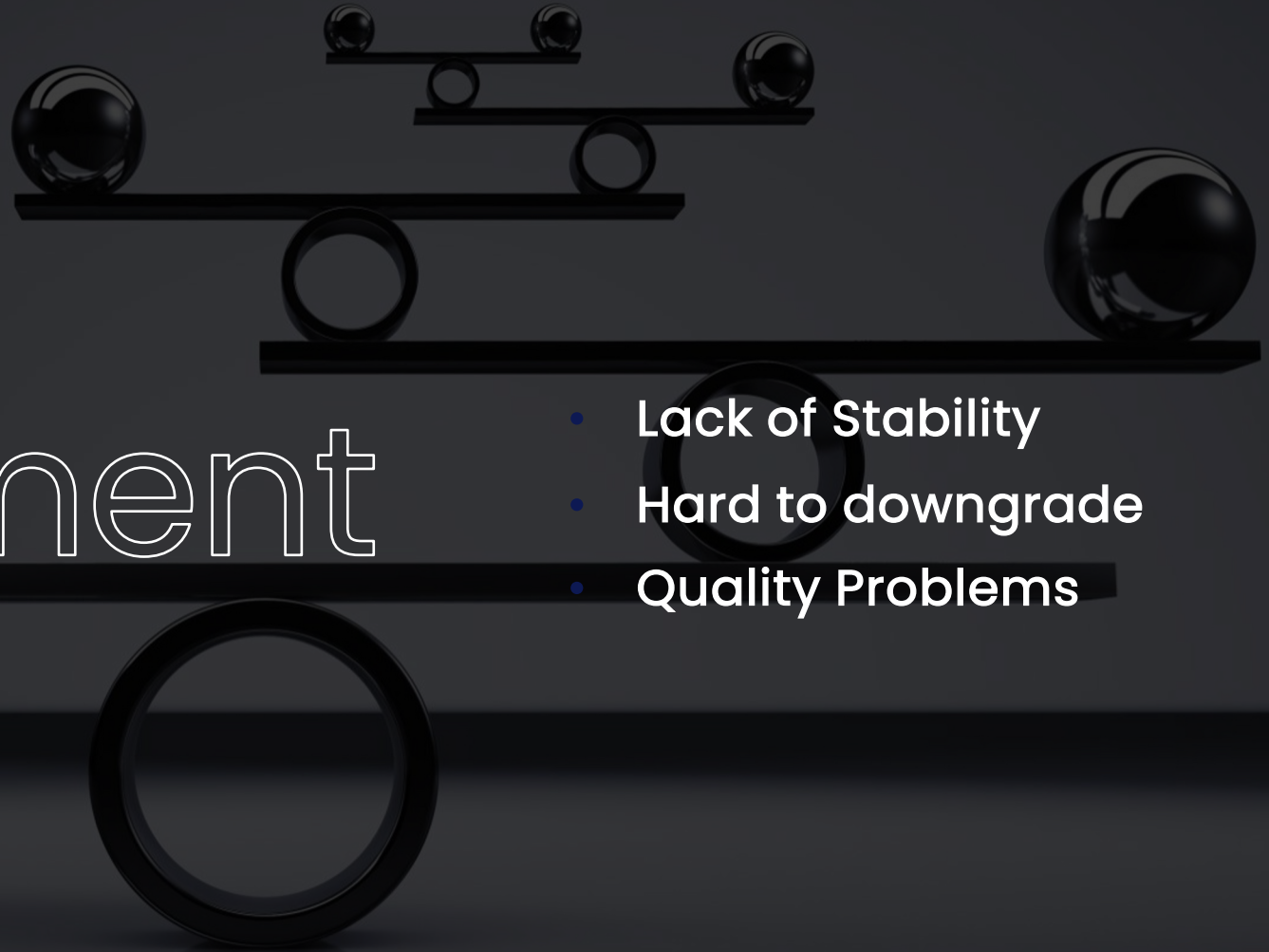




Heatwave

Is Oracle re-focusing MySQL Development on Proprietary cloud version only?

New Development Process



- Lack of Stability
- Hard to downgrade
- Quality Problems



Performance

Performance at low concurrency with simple queries perceived to be lower



Sharding

No Built In transparent
“Scale Out” Option makes
developing large scale
applications hard



Question

Know Even Better "MySQL" ?

Want to know more about Percona Software For MySQL?





Thank you, Let's Connect!

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