

MySQL & DataFlex

An introduction & progress report

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SYNERGY 2019
CRUISING TO NEW HORIZONS

MySQL & Compatibles



The Environment...

The MySQL Environment

- 3 application interface-compatible databases
 - MySQL Vendor: Oracle
 - MariaDB Vendor: Maria DB Corporation & Foundation
 - Aurora (AWS optimized MySQL)

For convenience....

- Except where necessary to discriminate them, in this presentation:

MySQL + MariaDB + Aurora = **MySQL-E**

MySQL-E - Why do we care?

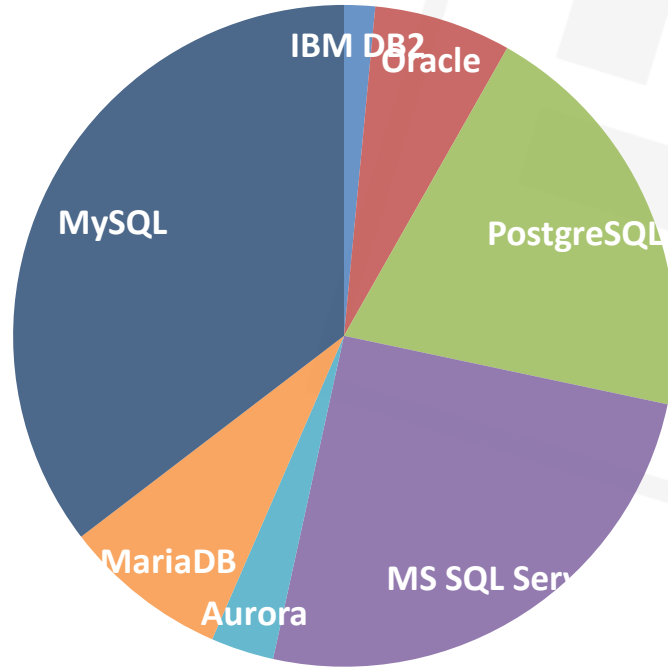
- Widely known and accepted
- Widely used for web applications
- Excellent support in the cloud
 - Amazon Web Services
 - Microsoft Azure
 - Google Cloud Services and many more...
- Reputation for competitive performance

MySQL-E - Why do we care?

- More databases opens new opportunities for Data Access, developers and users.
- The economics are very favorable...
 - Comparatively lower costs (or free) to deploy both on-premises and in the Cloud
- Reasonably low investment to add support

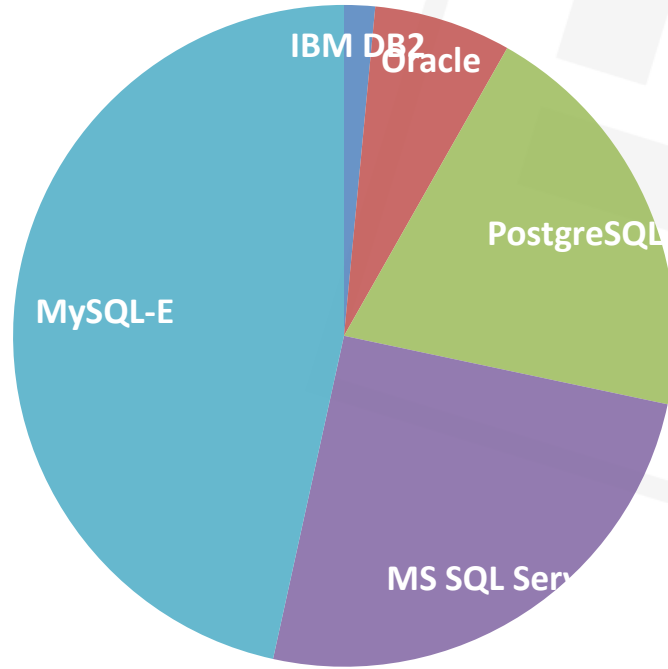
Popularity

Stack Overflow – Pro Developers' Most Popular DBMS



Popularity

Stack Overflow – Pro Developers' Most Popular DBMS



Deployment Options

	Free Version	Commercial License	Cloud Hosting	AWS RDS
MySQL	Yes	Yes	Yes	Yes
MariaDB	Yes	Subscription	Yes	Yes
Aurora	No	No	Yes	No

MySQL-E Technology? Great!

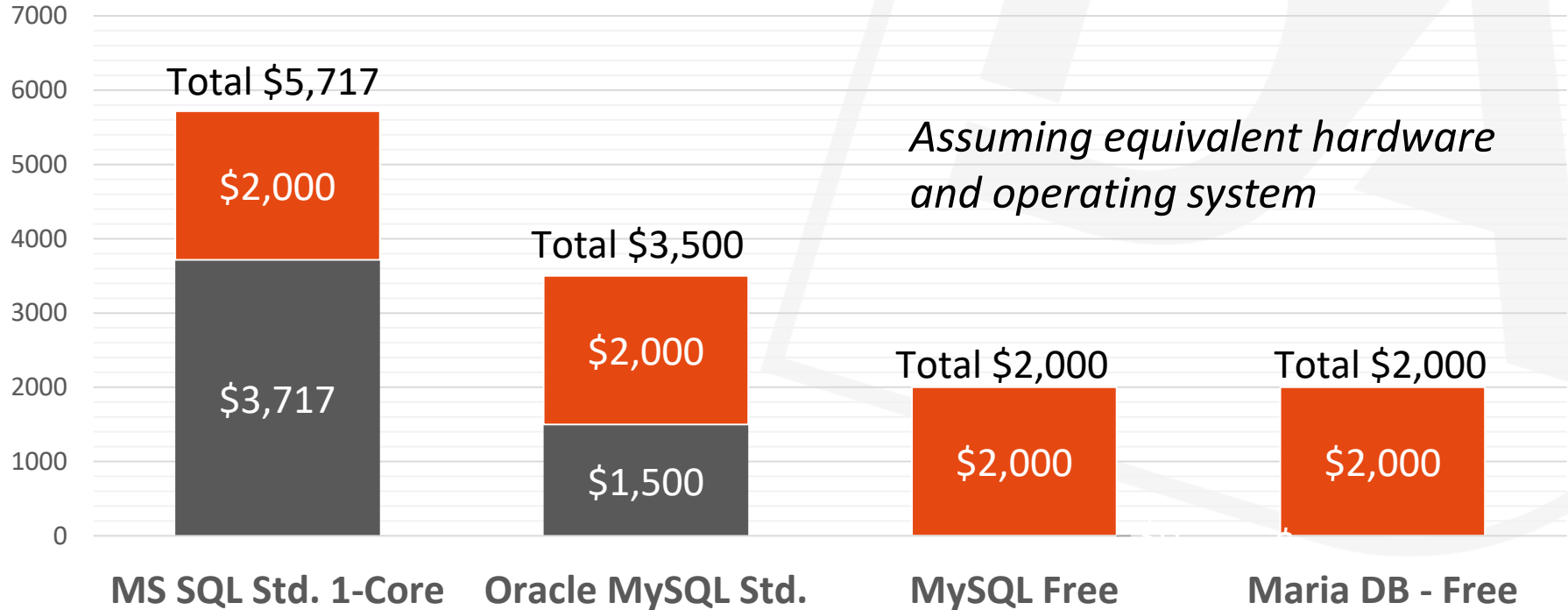
Let's look at the economics....

DataFlex deployment is a “stack” of costs

- Each component of the stack must be considered; lower costs makes DataFlex and DataFlex developers more competitive
- The software cost stack...
 - On-premise or Cloud infrastructure
 - Operating system license or cloud fee – Windows Server
 - Database license or cloud fee
 - DataFlex WebApp Server license or cloud fee

On-Premises WebApp Cost Comparison

■ Database License ■ DataFlex License



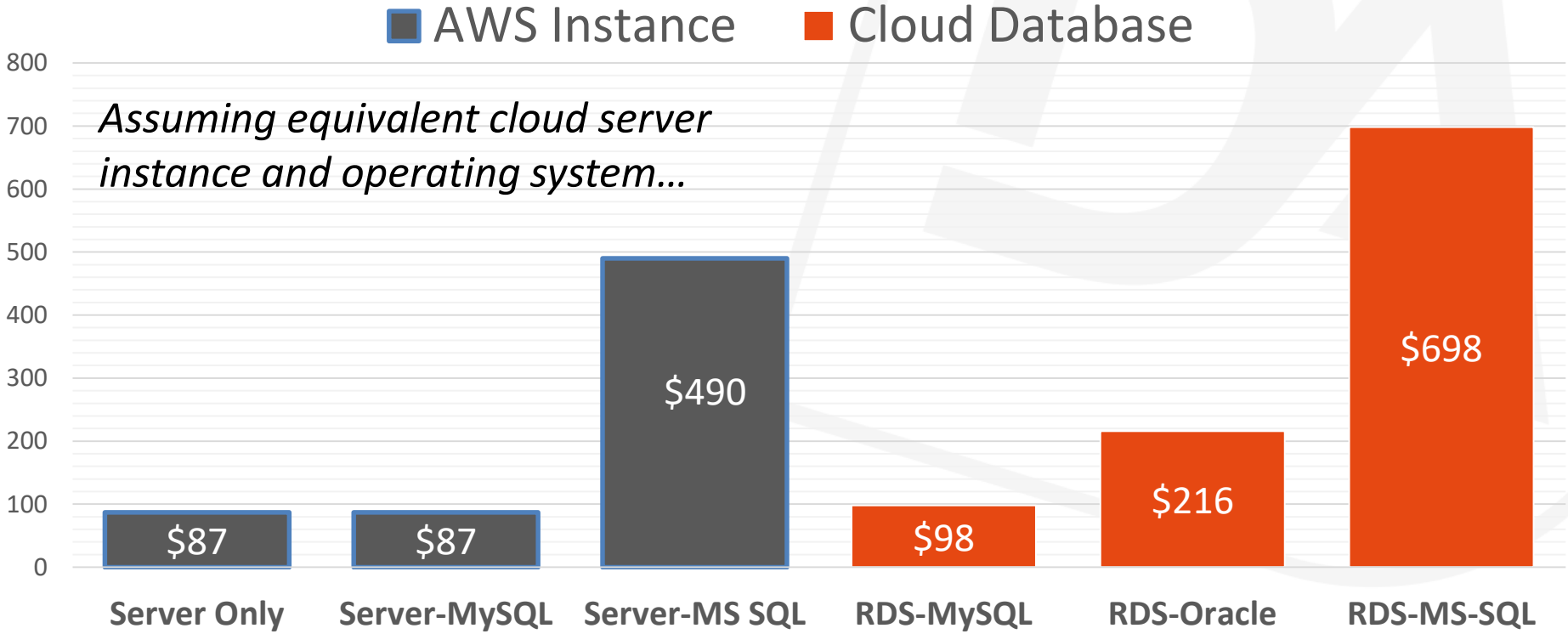
Cloud Options for Amazon Web Services

- You can deploy any of the following:
 - Server instance with user installed DBMS
 - Server instance with AWS installed DBMS
 - Database cost included with instance cost
 - Amazon Remote Data Services (RDS)
 - Fully managed, scalable, database environment
 - Backup, synchronization if needed, etc.
 - A “pure” service; no server instance to manage

AWS Cost Comparison Configuration

- Server: AWS T2.Large “EC2” instance...
 - CPU – variable
 - Memory – 8 Gb
 - Storage – not included
 - Windows Server OS
 - On-demand pricing; US market

Cloud WebApp Deployment Costs per Month



MySQL-E & DataFlex

Until DataFlex 2109/19.1

- We advised the use of ODBC for MySQL
- Created customized configurations for MySQL
- Non-optimal results on a highly desirable DBMS
- Create a dedicated driver?
- Learn more...

MySQL Research Project Goal

- To understand the feasibility, benefits and issues of using the MySQL database and its operational clones, AWS Aurora and Maria DB with DataFlex web and Windows applications.

Outcome...



MySQL-E & DataFlex

- As of DataFlex 2019/19.1, MySQL-E is supported
- Adds 3 well known, high performance DBMS to developers' deployment options
- Opens new opportunities to develop apps for existing MySQL deployments
- Big economic benefits for deployment on premise and in the cloud

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