

## Questions

Which DB engines are offered?

Performance of MySQL (MySQL Sysbench, table-size (row data): 1000000, Threads: 16)

- Read
- Write
- Read / Write

Provisioning time for a MySQL instance

Performance of PostgreSQL

Provisioning time for a PostgreSQL instance

Supported DB Versions

Troubleshooting as a Service

- Rollback
- Support

Total price for the database per month

- MySQL
- 2 vCores
- 100 GB Storage
- Frankfurt / Western Europe
- 100% active per month
- No dedicated backup

Total price for the database per month

- PostgreSQL
- 2 vCores
- 100 GB Storage
- Frankfurt / Western Europe
- 100% active per month
- No dedicated backup

Limitations:

How many simultaneous requests to the DB?

How much RAM?

How many users?

How does backup/restore work?

## AWS

### Relational DB

- MySQL
- PostgreSQL
- MariaDB
- Oracle
- Microsoft SQL Server
- Amazon Aurora

### Non-Relational DB

- Amazon DynamoDB
- Amazon ElastiCache
- Amazon Neptune
- Redis
- MemCached

### Data Warehouse / Big Data

- Amazon Redshift
- Amazon Athena
- Amazon EMR (Hadoop, Spark, HBase, Presto, etc.)
- Amazon Kinesis
- Amazon Elasticsearch Service
- Amazon Quicksight

Transactions: 62413 (1039.99 / sec)  
Transactions: 117698 (1959.19 / sec)  
Transactions: 42882 (714.51 / sec)  
226 sec  
Transactions: 1102709 (18376.33 / sec)  
Transactions: 532612 (8875.75 / sec)  
Transactions: 39611 (659.96 / sec)  
253 sec

- MySQL 8.0,5.7, 5.6, 5.5
- MariaDB 10.3,10.2,10.1,10.0
- Microsoft SQL Server 2017 RTM, 2016 SP1, 2014 SP2, 2012 SP4, 2008 R2 SP3
- Oracle 12c (12.1.0.2, 12.1.0.1), Oracle 11g (11.2.0.4, 11.2.0.3, 11.2.0.2)
- PostgreSQL 11 Beta 1,10.6,10.5, 10.4, 10.3, 10.1, 9.6.x, 9.5.x, 9.4.x, 9.3.x,9.2.x
- Amazon Aurora - compatible with MySQL 5.6.10a

yes  
yes

## Azure

### Relational DB

- Azure SQL Database
- Azure Database for MySQL
- Azure Database for PostgreSQL
- Azure Database for Maria DB
- Microsoft SQL Server

### Non-Relational DB

- Azure Cosmos DB
- Azure Table Storage
- Redis

### Data Warehouse / Big Data

- SQL Data Warehouse
- HDInsight (Hadoop, Spark, Hive, LLAP, Kafka, Storm, R.)
- Azure Databricks (Spark)
- Azure Data Factory
- Azure Stream Analytics

Transactions: 19584 (326.05 / sec)  
Transactions: 4810 (79.97 / sec)  
Transactions: 4095 (68.05 / sec)  
146 sec  
Transactions: 196708 (3275.69 / sec)  
Transactions: 46935 (781.81 / sec)  
Transactions: 6317 (104.97 / sec)  
266 sec

- MySQL 5.7, 5.6
- MariaDB 10.2
- Azure SQL Database: Microsoft SQL Server 2017
- Microsoft SQL Server 2017, 2016 SP1, 2014 SP2, 2012 SP4, 2008 R2 SP3
- PostgreSQL 10.3, 9.6.x, 9.5.x
- Azure Cosmos DB

yes  
yes

€ 98.21 / \$ 110.18

€ 139.84 / \$ 165.82

€ 104.03 / \$ 116.71

€ 139.84 / \$ 165.82

MySQL:

- max Connections: 2540

MySQL:

- max Connections: 10000

PostgreSQL:

- max Connections: 5696

PostgreSQL:

- max Connections: 1900

Backups:

- Automatic Backups.

Restore:

- Point-in-time restore

Backups:

- Automatic Backups.

Restore:

- Point-in-time restore

- Geo-restore

## Google Cloud Platform

### Relational DB

- PostgreSQL
- MySQL
- Google Cloud Spanner

### Non-Relational DB

- Google Cloud Datastore
- Google Cloud BigTable

### Data Warehouse / Big Data

- Google Cloud BigQuery
- Google Cloud Dataflow
- Google Cloud Dataproc (Hadoop / Spark)
- Google Cloud Datalab
- Google Cloud Dataprep

Transactions: 43284 (721.17 / sec)

Transactions: 89311 (1488.26 / sec)

Transactions: 28474 (474.35 / sec)

182 sec

Transactions: 1044874 (17412.16 / sec)

Transactions: 485496 (8089.14 / sec)

Transactions: 31484 (524.37 / sec)

151 sec

- MySQL 5.7, 5.6

- PostgreSQL 9.6.x

yes

yes

## IBM Cloud

### Relational DB

- Db2 on Cloud
- PostgreSQL
- MySQL

### Non-Relational DB

- Cloudant
- MongoDB
- ScyllaDB
- Redis
- JanusGraph
- etcd
- Elasticsearch

### Data Warehouse / Big Data

- Db2 Warehouse on Cloud

Transactions:4705 (78.33 / sec)

Transactions:11806 (196.52 / sec)

Transactions:3691 (61.27 / sec)

132 sec

Transactions: 65058 (1084.03 / sec)

Transactions: 63624 (1060.11 / sec)

Transactions: 2961 (49.14 / sec)

180 sec

Db2-ge

PostgreSQL

9.6.10,9.6.9,9.5.14,9.5.13,9.4.19,9.4.18

MySQL 5.7.22

Cloudant-h7

MongoDB 3.4.10,3.2.18,3.2.11,3.2.10

ScyllaDB 2.0.3

Redis 4.0.10,3.2.12

JanusGraph 0.1.1 beta

etcd 3.3.3,3.2.18

Elasticsearch 6.2.2 , 5.6.9

Db2 Warehouse-ef

yes

yes

€ 121.43 / \$ 138.75

N/A

€ 124.21 / \$ 141.81

MySQL:

- max Connections: 4000

PostgreSQL:

- max Connections: 1000

Backups:

- Automatic Backups.

Restore:

- On-demand

€ 103.04 / \$ 136.00

MySQL:

- max Connections: 151

PostgreSQL:

- max Connections: 1000

Backups:

- Automatic Backups.

Restore:

-On-demand

## OTC Cloud

### Relational DB

- PostgreSQL
- MySQL
- Microsoft SQL Server

### Non-Relational DB

- MongoDB
- Redis

Transactions: 62342 (1039.03 / sec)

Transactions: 73487 (1224.78 / sec)

Transactions: 31378 (522.96 / sec)

392 sec

Transactions: 307458 (5124.3 / sec)

Transactions: 21502 (358.36 / sec)

Transactions: 7786 (129.76 / sec)

467 sec

PostgreSQL 9.6.5, 9.6.3, 9.5.5

MySQL 5.7.20, 5.7.17, 5.6.35, 5.6.34, 5.6.33,  
5.6.30

Microsoft SQL Server 2014 SP2 SE

yes

yes

€ 298.40 / \$ 335.04

€ 312.80 / \$ 350.85

MySQL:

- max Connections: 151

PostgreSQL:

- max Connections: unlimited

Backups:

- Automatic Backups.

Restore:

- Point-in-time restore