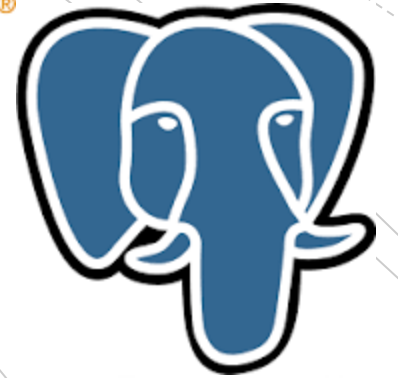


relational database



What is MySQL?

The MySQL software delivers a very fast, multi-threaded, multi-user, and robust SQL (Structured Query Language) database server. MySQL Server is intended for mission-critical, heavy-load production systems as well as for embedding into mass-deployed software.

The MySQL logo is displayed in white text on a large red circular background. The logo consists of the word "MySQL" in a stylized font, where the "M" and "S" are larger and more prominent than the other letters. The red circle is positioned on the right side of the slide, and the logo is centered within it.

MySQL

What is PostgreSQL?

PostgreSQL is an advanced object-relational database management system that supports an extended subset of the SQL standard, including transactions, foreign keys, subqueries, triggers, user-defined types and functions.



PostgreSQL

What is Microsoft SQL Server?





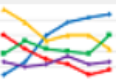







Microsoft® SQL Server is a database management and analysis system for e-commerce, line-of-business, and data warehousing solutions.



















The logo features a large red circle on the right side of the slide. Inside this circle, the text "SQLserver" is written in white. The "SQL" is in a bold, uppercase sans-serif font, while "server" is in a lowercase sans-serif font. The background of the slide is white with faint, concentric gray circles centered behind the red circle.

SQLserver

The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A large, solid red oval is positioned in the center-right of the frame. A dark gray, curved, brushstroke-like shape is located to the left of the red oval, partially overlapping its edge.

**Difference between those
three Relational data base**

Name	Microsoft SQL Server X	MySQL X	PostgreSQL X
Description	Microsofts relational DBMS	Widely used open source RDBMS	Widely used open source RDBMS 
Primary database model	Relational DBMS	Relational DBMS 	Relational DBMS 
Secondary database models	Document store Graph DBMS	Document store	Document store
DB-Engines Ranking  Trend Chart 	Score 1059.72 Rank #3 Overall #3 Relational DBMS	Score 1268.51 Rank #2 Overall #2 Relational DBMS	Score 527.00 Rank #4 Overall #4 Relational DBMS
Website	www.microsoft.com/en-us/sql-server	www.mysql.com	www.postgresql.org
Technical documentation	docs.microsoft.com/en-ie/sql/sql-server/sql-server-technical-documentation	dev.mysql.com/doc	www.postgresql.org/docs/manuals
Developer	Microsoft	Oracle 	PostgreSQL Global Development Group 
Initial release	1989	1995	1989 
Current release	SQL Server 2019, November 2019	8.0.21, 2020	12.3, May 2020
License 	commercial 	Open Source 	Open Source 

Server-side scripts 	Transact SQL, .NET languages, R, Python and (with SQL Server 2019) Java	yes 	user defined functions 
Triggers	yes	yes	yes
Partitioning methods 	tables can be distributed across several files (horizontal partitioning); sharding through federation	horizontal partitioning, sharding with MySQL Cluster or MySQL Fabric	partitioning by range, list and (since PostgreSQL 11) by hash
Replication methods 	yes, but depending on the SQL-Server Edition	Multi-source replication Source-replica replication	Source-replica replication 
MapReduce 	no	no	no
Consistency concepts 	Immediate Consistency	Immediate Consistency	Immediate Consistency
Foreign keys 	yes	yes 	yes
Transaction concepts 	ACID	ACID 	ACID
Concurrency 	yes	yes 	yes
Durability 	yes	yes	yes
In-memory capabilities 	yes	yes	no
User concepts 	fine grained access rights according to SQL-standard	Users with fine-grained authorization concept 	fine grained access rights according to SQL-standard

Relational data base