MySQL

MySQL is an open-source relational database management system. Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language.

MySQL was created by a Swedish company, MySQL AB, founded by David Axmark, Allan Larsson and Michael "Monty" Widenius.

- Original development of MySQL by Widenius and Axmark began in 1994.
- The first version of MySQL appeared on 23 May 1995. It was initially created for personal usage from mSQL based on the low-level language ISAM, which the creators considered too slow and inflexible. They created a new SQL interface, while keeping the same API as mSQL. By keeping the API consistent with the mSQL system, many developers were able to use MySQL instead of the (proprietarily licensed) mSQL antecedent.

MySQL is offered under two different editions: the open source MySQL Community Server and the proprietary Enterprise Server.

- MySQL Enterprise Server is differentiated by a series of proprietary extensions which install as server plugins, but otherwise shares the version numbering system and is built from the same code base.

Other topics associated with MySQL

- Backup (dump) and restore database in mysql — mysqldump enables you to backup all the necessary database you need, and mysql enables you to restore the dumped data on linux console.
- Display the result of a MySQL query in an HTML table — You can obtain the results of a MySQL server query using the mysqli extension.
- Essential problem solving method for MySQL query containing emoticon like '\xF0\x9F\x94\x8A S...' — You should alter table charset to use utfmb4 collate utf8mb4_unicode_ci if you face query error when the query string containing emoticon like or . Its error message will be something like SyntaxError: Non-UTF-8 code starting with '\xed' ...
- Get DB field name in PHP PDO from MySQL query result — PDO provides a method to get database field name (column name) from the query result.
- Increase max_open_files for Mysql max-connections in Ubuntu 15
- Insert a record in array into MySQL database with PHP — Technically you cannot insert array values into MySQL database table directly without understanding its data type correctly. If it's data type is all the same, you can implement it by array_keys()
- Install MySQL 5.7 on CentOS 7 — To install MySQL 5.7, you should enable MySQL 5.7 community release yum repository on your system.
- Install MySQL on CentOS 8 — When you install MySQL on CentOS 8, you will need to install other associated packages as well. It can be easily solved by @ option when you call yum command.
- Install mysql.connector for Python on CentOS 7 — MySQL Connector/Python enables Python programs to access MySQL databases, using an API that is compliant with the Python Database API Specification v2.0 (PEP 249). It also contains an implementation of the X DevAPI, an Application Programming Interface for working with the MySQL Document Store.
- Keys (i.e., column names) of the records in the result set — The mysql.connector module in Python provides functions for connecting to a MySQL database and executing SQL statements. When you execute a SELECT statement that retrieves records from a table, you can use the cursor object's description property to get the keys (i.e., column names) of the records in the result set.
- MySQL combination with Heredoc in PHP — Heredoc is one of the useful solution to secure better readability when we code SQL Query in PHP
- MySQL connection status — CLI command to check # of network connections for MySQL (port:3306)
- MySQL Query based in RegExp
- MySQL Replication for enhancing performance or backup — If you are considering securing more performance in MySQL, Replication is one of the options you can take. You may able to setup a main database for Write, and the other option you can take is to setup a replication connection between main and another MySQL server. Another server could be used for read-only.
- Query result from mysql in Python — You can get the result of a query using Pythong mysql-connector-python library
- Repair / Optimize MySQL Database
- Restore dumped MySQL data on CentOS 7 — Restoring dumped MySQL data is something painful. _restore_mysql.sh enables you to restore the dumped MySQL data easily.
- Secure and Scalable LAMP Service Architecture in AWS — LAMP means Linux + Apache + MySQL + PHP that is commonly used to develop web service for Start-ups that does not require paying license fee, because all of technologies are from open source.
- Setup MySQL 8.x on Mac — There are some differences in between Mac and Linux(CentOS) for my.cnf and some command line interfaces. There are two different approach to install MySQL on MAC: 1) Install by dmg file can download at https://www.mysql.com/downloads/ and 2) installing by brew. I will talk about the installation based on **brew** here.
- Setup MySQL connect as a data source on Google Data Studio
- Synchronous online gaming architecutre in AWS - Highly Available, Scalable & Elastic to support Millions of Players — The below architecture is intended for online mobile & games. These workloads are a natural fit for running on Amazon Web Services, due to unexpected traffic patterns & high demaning request rates.