2017-02-18 MySQL 複習筆記

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Mysql歷史
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・Mysql是目前很受歡迎的資料庫管理系統之一
　　。原本是一個開放原始碼的關聯式資料庫管理系統，原開發公司為瑞典的MySQL AB公司
　　。2008年被昇陽（Sun Microsystems）收購
　　。2009年，甲骨文收購昇陽，MySQL成為Oracle旗下產品

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MySQL關聯式資料庫管理系統（DBMS）
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・開放原始碼（Community Server）
・速度快的，可靠的，且易於使用
・主從式架構（Client/Server）
・大量的網路貢獻者，提供MySQL相關軟體

=================
安裝Mysql
=================
指令：brew install mysql

=================
啟動Mysql
=================
啟動server指令：mysql.server start
開啟mysql：sudo mysql
關閉server：mysql.server stop

```
Last login: Sat Feb 18 17:04:34 on ttys000
Mac-10:~ mac$ mysql.server start
Starting MySQL
. SUCCESS!
Mac-10:~ mac$ sudo mysql
Password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 3
Server version: 5.7.17 Homebrew

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
mysql> exit
Bye
Mac-10:~ mac$ mysql.server stop
Shutting down MySQL
. SUCCESS!
Mac-10:~ mac$
```
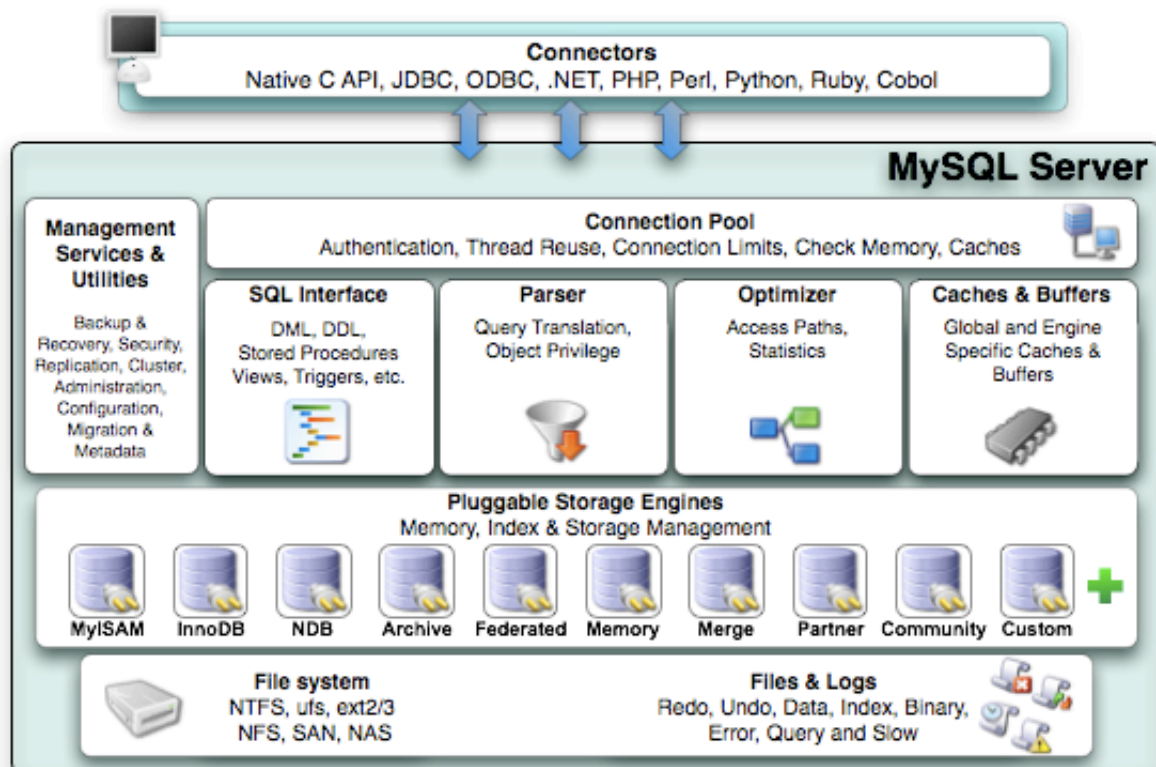
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Mysql Server

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```
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Mysql 命令
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```

- Show databases
  - 列出目前伺服器現存的所有資料庫

- CREATE DATEBASE 『DATABASE NAME』
  - 建立新的資料庫

```
mysql> create database ab104;
Query OK, 1 row affected (0.00 sec)

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| ab104              |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.00 sec)
```

- USE 『DATABASE NAME』
  - 建立新的資料庫

```
mysql> use ab104;
Database changed
```

- SHOW TABLES
  - 查看資料庫中有哪些檔案

```
mysql> show tables;
Empty set (0.00 sec)
```

```
mysql> show tables;
+-----------------+
| Tables_in_ab104 |
+-----------------+
| CUSTOMER        |
| DEPT            |
| EMP             |
| ITEM            |
| MY_EMP          |
| ORD             |
| PRICE           |
| PRODUCT         |
| SALGRADE        |
+-----------------+
9 rows in set (0.00 sec)
```

・SOURCE + 路徑 （注意：路徑不可為中文）
　　。匯入資料庫，建立資料庫中的資料表

```
mysql> source /Volumes/HSU/iii/RDB/MySQL_demobld.sql;
Query OK, 0 rows affected (0.02 sec)

Query OK, 1 row affected (0.01 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 0 rows affected (0.02 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)
```

・DESC + TABLE NAME

◦ 列出指定資料表的欄位資訊

```
mysql> desc DEPT;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| DEPTNO | int(11)     | NO   | PRI | NULL    |       |
| DNAME  | varchar(14) | YES  |     | NULL    |       |
| LOC    | varchar(13) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
3 rows in set (0.01 sec)
```

・Select ＋ 欄位名稱 from +哪個資料表
　　◦ 列出資料表資料

```
mysql> Select * from dept;
+--------+------------+----------+
| DEPTNO | DNAME      | LOC      |
+--------+------------+----------+
|     10 | ACCOUNTING | NEW YORK |
|     20 | RESEARCH   | DALLAS   |
|     30 | SALES      | CHICAGO  |
|     40 | OPERATIONS | BOSTON   |
+--------+------------+----------+
4 rows in set (0.00 sec)
```

```
mysql> select * from emp;
+-------+--------+-----------+------+---------------------+---------+---------+--------+
| EMPNO | ENAME  | JOB       | MGR  | HIREDATE            | SAL     | COMM    | DEPTNO |
+-------+--------+-----------+------+---------------------+---------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 00:00:00 |  800.00 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1981-02-20 00:00:00 | 1600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1981-02-22 00:00:00 | 1250.00 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1981-04-02 00:00:00 | 2975.00 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1981-09-28 00:00:00 | 1250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1981-05-01 00:00:00 | 2850.00 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1981-06-09 00:00:00 | 2450.00 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1982-12-09 00:00:00 | 3000.00 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1981-11-17 00:00:00 | 5000.00 |    NULL |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1981-09-08 00:00:00 | 1500.00 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1983-01-12 00:00:00 | 1100.00 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 1981-12-03 00:00:00 |  950.00 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1981-12-03 00:00:00 | 3000.00 |    NULL |     20 |
|  7934 | MILLER | CLERK     | 7782 | 1982-01-23 00:00:00 | 1300.00 |    NULL |     10 |
+-------+--------+-----------+------+---------------------+---------+---------+--------+
14 rows in set (0.00 sec)
```