

MySQL ??????????

????

```
mysql> \h
mysql> help
mysql> help <command>;
```

```
shell> perror <ErrCode#>
```

Q: [Warning] Using a password on the command line interface can be insecure

?????? scripts ????????????

???????? script ?? mysqldump ????? Home ?????

~/.my.cnf

```
[mysqldump]
user=YourDBuser
password=YourDBpass
```

TIP:

- ?? script ?? mysql ????? mysqldump ?? mysql
- ?? script ?? mysqladmin?? mysqldump ?? mysqladmin

Q: [Warning] TIMESTAMP with implicit DEFAULT value is deprecated. Please use --explicit_defaults_for_timestamp server option (see documentation for more details).

? MySQL 5.6 ??? TIMESTAMP ??????????????????????

```
Ubuntu 16.04)
/etc/mysql/mysql.conf.d/mysqld.cnf
```

```
# fixed for the WARNING below in error.log
# [Warning] TIMESTAMP with implicit DEFAULT value is deprecated. Please use
--explicit_defaults_for_timestamp server option (see documentation for more details).
explicit_defaults_for_timestamp = TRUE
```

Q: [Warning] Failed to set up SSL because of the following SSL library error: SSL context is not usable without certificate and private key

MySQL 5.7 ?????? SSL ??????????????????????

```
Ubuntu 16.04)
/etc/mysql/mysql.conf.d/mysqld.cnf
```

```
# fixed for the WARNING below in error.log
# [Warning] Failed to set up SSL because of the following SSL library error: SSL context is not usable
```

without certificate and private key
skip-ssl

Q: ????? /var/lib/mysql/ibdata1 ??????

? mysql 5.5 ?????? InnoDB ?????? DB ???????????? <????????>/ibdata1?

?????????????

- ?? DB ?????? DB ?????????? ibdata1 ??????????
- ?????????
- ??? DB ?????????????? DB ?????????? ibdata1 ??????

Ans????????? DB ?????? DB ??? Tablespace ???

?? DB ??????????????????????????

// ????? DB

```
mysqldump -u root -p --events --routines --triggers --all-databases > alldbs.sql
```

// ?? DB ??

```
systemctl stop mariadb
```

// ?? /etc/my.cnf.d/server.cnf

```
[mariadb-5.5]
```

```
innodb_file_per_table = 1
```

// ?? ibdata1 ? ib_log?

```
rm /var/lib/mysql/ibdata1
```

```
rm /var/lib/mysql/ib_logfile*
```

// ?? DB ??

```
systemctl start mariadb
```

// ??????

```
mysql -uroot -p -e "show variables like 'innodb_file%';"
```

```
+-----+-----+
| Variable_name      | Value |
+-----+-----+
| innodb_file_format | Antelope |
| innodb_file_format_check | ON    |
| innodb_file_format_max | Antelope |
| innodb_file_per_table | ON    | <==== ???
+-----+-----+
```

// ?????? DB

```
mysql -u root -p < alldbs.sql
```

TIP?

???????????????

```
mysql -uroot -p -e "show variables like 'datadir';"
```

??? foo ?????????????? Tablespace ???

```
mysql> optimize table foo;
```

???????? DB ? Tablespace ??????????????????ibdata1 ??????????????

Q: ?????ERROR 2013 (HY000) at line 190: Lost connection to MySQL server during query

Ans??

- ????????
- ?????? SWAP ????????

Q: ?? SQL statement

Ans: explain ??????

```
mysql> create table t(a int, b int, c int);
```

```
mysql> create index t_idx on t (a,b,c);
```

```
mysql> insert into t values (1, 1, 1);
```

... (load 10 more test rows like this) ...

```
mysql> explain select * from t where a=1 or b=1;
```

table	type	possible_keys	key	key_len	ref
t	index	t_idx	t_idx	15	NULL

Q: root ??????

Ans: ????? root ????????????

```
// ??? root
```

```
su -
```

```
// ?? MySQL ??
```

```
service mysqld stop
```

```
// ? --skip-grant-tables ?? MySQL
```

```
mysqld_safe --skip-grant-tables --user=root &
```

```
// ?????? mysql?????????
```

```
mysql -u root
```

```
mysql>UPDATE mysql.user SET Password=PASSWORD('') WHERE User='root';
```

```
mysql>flush privileges;
```

```
mysql>exit;
```

```
// kill ??? mysql ??
```

```
ps -ef | grep mysql
```

```
kill <mysql-pid>
// ??????? MySQL ??
service mysqld start
// ??????
mysqladmin -u root -p password 'newpass'
```

Q: ????? [ERROR] /usr/libexec/mysqld: The table 'XXX' is full

Ans: ????? my.cnf ? max_heap_table_size ??(?? 16MB)

???? Table ???

```
mysql> show table status like 'data_source_stats_hourly_cache' \G
```

```
***** 1. row *****
```

```
  Name: data_source_stats_hourly_cache
  Engine: MEMORY
  Version: 10
  Row_format: Fixed
  Rows: 124417
  Avg_row_length: 73
  Data_length: 10244096
  Max_data_length: 9278300
  Index_length: 6654260
  Data_free: 191479
  Auto_increment: NULL
  Create_time: 2014-12-24 20:34:07
  Update_time: NULL
  Check_time: NULL
  Collation: utf8_general_ci
  Checksum: NULL
  Create_options:
  Comment:
  1 row in set (0.01 sec)
```

???? Data_length ???? Max_data_length????????????? max_heap_table_size????? Table ?Max_data_length ?
???

TIPS:

??????? MySQL 5.1??? MySQL ?????????????????? <http://dev.mysql.com/doc/refman/5.1/...on-tables.html>?

?? /etc/my.cnf

```
[mysqld]
```

```
...
max_heap_table_size=64M
...
```

?? MySQL ??

```
#> service mysqld stop
#> service mysqld start
```

????Table ??

```
#> mysql -uroot -p
mysql> use caati;
mysql> show table status like 'data_source_stats_hourly_cache' \G
***** 1. row *****
      Name: data_source_stats_hourly_cache
      Engine: MEMORY
      Version: 10
      Row_format: Fixed
      Rows: 5591
      Avg_row_length: 73
      Data_length: 511232
      Max_data_length: 37113200
      Index_length: 328268
      Data_free: 0
      Auto_increment: NULL
      Create_time: 2015-03-10 14:42:02
      Update_time: NULL
      Check_time: NULL
      Collation: utf8_general_ci
      Checksum: NULL
      Create_options:
      Comment:
1 row in set (0.00 sec)
```

???? Max_data_length ?????? mysql.log ??????????

Q: ???? **[ERROR] Column count of mysql.proc is wrong**

[ERROR] Column count of mysql.proc is wrong. Expected 20, found 16. Created with MySQL 50077, now running 50152. Please use mysql_upgrade to fix this error.

Ans: ?????????????????? mysql_upgrade?????

```
# mysql_upgrade -u root -p
```

Q: ?????**Error: 1030 - Got error 28 from storage engine**

Ans????? perror ??????????

```
#perror 28
```

OS error code 28: No space left on device

????????????????

// ????????????

#mysqladmin -u root -p processlist

Q: ?? /var/lib/mysql ?????mysql-bin.00001.....?????

Ans: mysql-bin ? transaction log?? 1GB??????????

service mysqld stop

vi /etc/my.cnf

/etc/my.cnf??? log-bin=mysql-bin ?????

```
# added by alang
expire_logs_days      = 10
max_binlog_size       = 100M
```

?? mysql

service mysqld start

?????

[5.2 MySQL Server Logs :: 5.2.3 The Binary Log](#)

[12.5.1 SQL Statements for Controlling Master Servers :: 12.5.1.1 PURGE BINARY LOGS Syntax](#)

???? /var/lib/mysql ????? mysql-bin.xxxxxxx ??????? MySQL ? binary log?????????? replication??????????????
transaction log????????????????

// ?? log ????

```
mysql> show variables like '%log%';
??? log_bin
```

// ?? log ?

```
mysql> show binary logs;
???????? log ??
```

// ????? mysql-bin.000011 ??????? mysql-bin.000011 ??? binary log files

```
mysql> purge binary logs to 'mysql-bin.000011';
???????????????? show binary logs ??????
```

Q: mysqldump: Got error: 145: Table '././wp_useronline' is marked as crashed and should be repaired when using LOCK TABLES

Ans: ???

mysqlcheck -u<db_username> -p --auto-repair --databases <db_name>

NOTE:

???? Table ?????????????????????? Table ?? ok?

?? ErrCode ? 144???????????????????????????? myisamchk????????<http://dev.mysql.com/doc/refman/5.1/...am-repair.html>