xtrabackup数据备份与恢复

rhel7.5、mariadb、关闭防火墙、SELinux

[root@zabbixserver ~]# ls /opt/

libev-4.15-1.el6.rf.x86\_64.rpm

percona-xtrabackup-24-2.4.7-1.el7.x86\_64.rpm

[root@zabbixserver ~]# yum list | grep -i perl-dbd-mysql

perl-DBD-MySQL.x86\_64 4.023-6.el7 @rhel75

[root@zabbixserver ~]# yum -y install perl-DBD-MySQL perl-Digest-MD5

[root@zabbixserver ~]# rpm -ivh /opt/libev-4.15-1.el6.rf.x86\_64.rpm

[root@zabbixserver ~]# yum -y localinstall /opt/percona-xtrabackup-24-2.4.7-1.el7.x86\_64.rpm

##完全备份

[root@zabbixserver ~]# mkdir /backup

[root@zabbixserver ~]# systemctl start mariadb

[root@zabbixserver ~]# mysql -uroot -p123456 -e "show databases;"

+--------------------+

| Database |

+--------------------+

| information\_schema |

| mysql |

| performance\_schema |

| test |

| zabbixdb |

+--------------------+

[root@zabbixserver ~]# innobackupex --user=root --password=123456 /backup/mysql --no-timestamp

[root@zabbixserver ~]# ls /backup/mysql/

backup-my.cnf performance\_schema xtrabackup\_info

ibdata1 test xtrabackup\_logfile

mysql xtrabackup\_checkpoints zabbixdb

#新建两个数据库

[root@zabbixserver ~]# mysql -uroot -p123456 -e "show databases;"

+--------------------+

| Database |

+--------------------+

| information\_schema |

| mysql |

| performance\_schema |

| tarana |

| tedu |

| test |

| zabbixdb |

+--------------------+

##增量备份

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --incremental /incr01 --incremental-basedir=/backup/mysql --no-timestamp

[root@zabbixserver ~]# ls /incr01/

backup-my.cnf performance\_schema xtrabackup\_checkpoints

ibdata1.delta tarana xtrabackup\_info

ibdata1.meta tedu xtrabackup\_logfile

mysql test zabbixdb

[root@zabbixserver ~]# du -sh /backup/

38M /backup/

[root@zabbixserver ~]# du -sh /incr01/

3.1M /incr01/

##恢复准备，校验数据一致性

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --apply-log --redo-only /backup/mysql/

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --apply-log --redo-only /backup/mysql --incremental-dir=/incr01

#停止服务，删除数据库磁盘文件

[root@zabbixserver ~]# systemctl stop mariadb.service

[root@zabbixserver ~]# rm -rf /var/lib/mysql/

#恢复数据

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --copy-back /backup/mysql/

[root@zabbixserver ~]# chown -R mysql:mysql /var/lib/mysql/

[root@zabbixserver ~]# systemctl start mariadb.service

[root@zabbixserver ~]# mysql -uroot -p123456 -e "show databases;"

+--------------------+

| Database |

+--------------------+

| information\_schema |

| mysql |

| performance\_schema |

| tarana |

| tedu |

| test |

| zabbixdb |

+--------------------+

[root@zabbixserver ~]#

##多次增量备份

[root@zabbixserver ~]# rm -rf /backup/

[root@zabbixserver ~]# rm -rf /incr01/

#完整备份

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --databases='tedu' /allbak --no-timestamp

[root@zabbixserver ~]# ls /allbak/

backup-my.cnf tarana xtrabackup\_info

ibdata1 tedu xtrabackup\_logfile

mysql test zabbixdb

performance\_schema xtrabackup\_checkpoints

[root@zabbixserver ~]# du -sh /allbak/

38M /allbak/

#创建学生表

MariaDB [(none)]> use tedu

Database changed

MariaDB [tedu]> create table student(

-> id int(11) auto\_increment,

-> name varchar(50) not null,

-> primary key(id)

-> );

Query OK, 0 rows affected (0.05 sec)

MariaDB [tedu]> show tables;

+----------------+

| Tables\_in\_tedu |

+----------------+

| student |

+----------------+

1 row in set (0.00 sec)

#一次增量备份

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --databases='tedu' --incremental /incr01 --incremental-basedir=/allbak --no-timestamp

##新建teacher表

MariaDB [(none)]> use tedu

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Database changed

MariaDB [tedu]> create table teacher(

-> id int(11) auto\_increment,

-> name varchar(50),

-> primary key(id)

-> );

Query OK, 0 rows affected (0.02 sec)

MariaDB [tedu]> show tables;

+----------------+

| Tables\_in\_tedu |

+----------------+

| student |

| teacher |

+----------------+

2 rows in set (0.00 sec)

#二次增量备份

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --databases='tedu' --incremental /incr02 --incremental-basedir=/incr01 --no-timestamp

[root@zabbixserver ~]# ls /incr01

backup-my.cnf tedu xtrabackup\_logfile

ibdata1.delta xtrabackup\_checkpoints

ibdata1.meta xtrabackup\_info

[root@zabbixserver ~]# ls /incr02

backup-my.cnf tedu xtrabackup\_logfile

ibdata1.delta xtrabackup\_checkpoints

ibdata1.meta xtrabackup\_info

[root@zabbixserver ~]# du -sh /allbak/ /incr01 /incr02

38M /allbak/

404K /incr01

384K /incr02

#准备恢复数据

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --databases='tedu' --apply-log --redo-only /allbak

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --databases='tedu' --apply-log --redo-only /allbak --incremental-dir=/incr01

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --databases='tedu' --apply-log --redo-only /allbak --incremental-dir=/incr02

#验证恢复数据

[root@zabbixserver ~]# systemctl stop mariadb.service

[root@zabbixserver ~]# rm -rf /var/lib/mysql/

[root@zabbixserver ~]# innobackupex --user=root --password=123456 --copy-back /allbak

[root@zabbixserver ~]# chown -R mysql:mysql /var/lib/mysql/

[root@zabbixserver ~]# systemctl start mariadb.service

[root@zabbixserver ~]# mysql -uroot -p123456

Welcome to the MariaDB monitor. Commands end with ; or \g.

Your MariaDB connection id is 2

Server version: 5.5.56-MariaDB MariaDB Server

Copyright (c) 2000, 2017, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> use tedu

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Database changed

MariaDB [tedu]> show tables;

+----------------+

| Tables\_in\_tedu |

+----------------+

| student |

| teacher |

+----------------+

2 rows in set (0.00 sec)

MariaDB [tedu]>