

# MySQL 資料庫還原之完整 script

- 在 Master 機執行

```
#!/bin/bash
#####
# Project: BackupRecovery Action
# Branch:
# Author: Gok, the DBA
# Created: 2022-08-11
# Updated: 2022-08-12
# Note:
#####

backup_server="10.25.1.183"
backup_location=/opt/mysql
backup_time=`date +%Y%m%d%H00`
# Check the diaster happened moment, might not recover to the latest backup

backup_Ymd=`date +%Y-%m-%d`
backup_dir=$backup_location/$backup_Ymd
binlog_dir="/var/lib/mysql"
pwd=$(pwd)
key_error_syntax="delete"
# This could be delete, drop, truncate or something else; has to change before execution
# more accurate must be better, like 'DELETE FROM `user`.`user_powers`'

rm -rf $pwd/backup
mkdir -p backup
sudo scp -i ~/.ssh/gok gok@${backup_server}:${backup_dir}/${backup_time}.* $pwd/backup

files=`ls $pwd/backup`
echo ''
echo $files

# Get the latest binlog
last_binlog=`sudo ls /var/lib/mysql | tail -n -2 | grep -v index`
echo ''
echo $last_binlog

for file in $files;
do
    echo ''
    echo $file

    if [[ $file =~ "bin" ]];
    then
        echo "This binlog will not be used. The appliable one would be the $last_binlog"
    else
        echo ''
        echo 'Yes! This one should be unzip and source to the database...'

        echo ''
        echo 'unzip the dump files'
        gzip -d $pwd/backup/$file

        echo ''
        echo 'SOURCE the dump file first'
        echo mysql --login-path=gok -e "SET sql_log_bin=0; USE $(echo ${file} | cut -d - -f 1); SOURCE ${file}/*.gz;"

        echo ''
        echo 'get the error position line number in binlog'
        error_pos=`sudo mysqlbinlog --no-defaults -v $binlog_dir/$last_binlog | cat -n | grep -iw "$key_error_syntax" | head -n 1 | awk '{p`
        echo $error_pos
        error_pos_down=$((error_pos - 50))
        echo $error_pos_down

        echo ''
        echo 'get the commit position line number before error position in binlog'
        commit_pos=`sudo mysqlbinlog --no-defaults -v $binlog_dir/$last_binlog | cat -n | sed -n ${error_pos_down},${error_pos}p | grep -iw`
        echo $commit_pos

        echo ''
    fi
done
```

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        echo 're-run the current binlog until the commit position'
        mysqlbinlog --stop-position=$commit_pos $binlog_dir/$last_binlog --database=$(echo ${file} | cut -d - -f 1) --skip-gtids | mysql -u
    fi
done

mysql -u root -p1qaz@WSX -e 'SET sql_log_bin=1;'

echo ''
echo 'remove the backup directory'
rm -rf $pwd/backup

echo ''
echo ##### IMPORTANT #####
echo 'Please Check the Slave Status whether they are not Sync!'
echo ##### IMPORTANT #####

## the successful command to transfer the backup files
#sudo scp -i ~/.ssh/gok gok@10.22.1.183:/opt/mysql/2022-08-11/* /home/gok

## delete the file which name is with the particular text
# find -type f -name '*text*' -delete

```