binlog2sql安装及用法

安装 ：

参考 ：

https://github.com/danfengcao/binlog2sql

http://blog.csdn.net/zhengwei125/article/details/66972648?locationNum=6&fps=1

http://blog.itpub.net/27067062/viewspace-2135398/

http://blog.csdn.net/shudaqi2010/article/details/54412654

https://stackoverflow.com/questions/22531360/no-module-named-setuptools

https://segmentfault.com/a/1190000010141754

http://www.cnblogs.com/glon/p/6856192.html

binlog2sql简介

binlog2sql是一开源工具，其可以从MySQL binlog解析出你要的SQL。根据不同选项，你可以得到原始SQL、回滚SQL、去除主键的INSERT SQL等。

主要用途如下：

（1）数据快速回滚(闪回)

（2）主从切换后数据不一致的修复

（3）从binlog生成标准SQL，带来的衍生功能

binlog2sql安装

1、binlog2sql下载

https://github.com/danfengcao/binlog2sql

2、binlog2sql依赖包安装

python2.6+

PyMySQL==0.7.8+

wheel==0.24.0+

mysql-replication==0.9+

（1）PyMySQL-0.7.10安装

https://pypi.python.org/pypi/PyMySQL/

```
[root@node1 binlogsql]# tar -xzvf PyMySQL-0.7.10.tar.gz
[root@node1 binlogsql]# cd PyMySQL-0.7.10
[root@node1 PyMySQL-0.7.10]# python setup.py install
```

（2）wheel-0.30.0a0安装

https://pypi.python.org/pypi/wheel/

```
[root@node1 binlogsql]# tar -xzvf wheel-0.30.0a0.tar.gz
[root@node1 binlogsql]# cd wheel-0.30.0a0
[root@node1 wheel-0.30.0a0]# python setup.py install
```

（3）python-mysql-replication安装

https://github.com/noplay/python-mysql-replication

```
[root@node1 binlogsql]# unzip python-mysql-replication-master.zip
[root@node1 binlogsql]# cd python-mysql-replication-master
[root@node1 python-mysql-replication-master]# python setup.py  install
```

（4）可以通过pip安装相应的依赖包

https://pypi.python.org/pypi/pip

```
[root@node1 tools]# tar -xzvf pip-9.0.1.tar.gz
[root@node1 tools]# cd pip-9.0.1
[root@node1 pip-9.0.1]# python setup.py install
[root@node1 binlog2sql-master]# pip install  -r requirements.txt
```

3、binlog2sql安装

直接下载解压缩即可，运行相应的py脚本

```
[root@node1 tools]# unzip binlog2sql-master.zip
[root@node1 tools]# cd binlog2sql-master
```

设置别名，方便命令调用：

```
alias binlog2sql='python /tools/binlogsql/binlog2sql-master/binlog2sql/binlog2sql.py'
```

在需要提取回滚sql的数据库中创建flashback用户，10.160.9.202为安装了binlog2sql工具的服务器IP

```
mysql> create user flashback@'10.160.9.202' identified by 'Root@911';
```

```
Query OK, 0 rows affected (0.27 sec)
mysql> GRANT SELECT, REPLICATION SLAVE, REPLICATION CLIENT ON *.* TO 'flashback'@'10.160.9.202';
Query OK, 0 rows affected (0.00 sec)
mysql>
```

binlog2sql使用 ：

```
eg :
[root@MysqlRestore /root/binlog2sql/binlog2sql/binlog2sql]# python binlog2sql.py -h 10.160.9.201 -P 3306 -u flashback -pRoot@911 --start-file='mysql-bin.000532'
eg :
[root@MysqlRestore ~]#
[root@MysqlRestore ~]# more .bashrc
# .bashrc
# User specific aliases and functions
alias rm='rm -i'
alias cp='cp -i'
alias mv='mv -i'
# Source global definitions
if [ -f /etc/bashrc ]; then
        . /etc/bashrc
fi
alias binlog2sql='/srv/tool/binlog2sql/binlog2sql/binlog2sql.py'
[root@MysqlRestore ~]#
[root@MysqlRestore ~]# binlog2sql -h 10.160.9.201 -P 3306 -u flashback -pRoot@911 --start-file='mysql-bin.000316' > flashbacktest316.sql
```

使用该工具的前提

1. binlog_format为ROW，且binlog_row_image为full或noblog，默认为full。
2. 必须开启MySQL Server，理由有如下两点：
   1> 它是基于BINLOG_DUMP协议来获取binlog内容
   2> 需要读取server端information_schema.COLUMNS表，获取表结构的元信息，拼接成可视化的sql语句

该工具所需权限如下：

GRANT SELECT, REPLICATION SLAVE, REPLICATION CLIENT ON *.* TO

因为是伪装成slave来获取主的二进制事件，故无需对binlog有可读权限。

提取SQL示例

```
#  python binlog2sql.py -h192.168.244.10 -P3306 -uadmin -p123456 -dtest -ttest --start-file='mysql-bin.000028'


# python /usr/local/binlog2sql/binlog2sql/binlog2sql.py -uflashback -pflashback -dttt -tusers --start-file='mysql-bin.000034' --start-datetime='2017-07-11 15:10:00' --stop-datetime='2017-07-11 15:12:00'
```

生成回滚SQL示例

```
# python binlog2sql.py --flashback -h192.168.244.10 -P3306 -uadmin -p123456 -dtest -ttest --start-file='mysql-bin.000028'

# python /usr/local/binlog2sql/binlog2sql/binlog2sql.py --flashback -h127.0.0.1 -P3306 -uflashback -pflashback -dttt -tusers --start-file='mysql-bin.000034' --start-position=79078 --stop-position=83053

python binlog2sql.py --flashback -h127.0.0.1 -P3306 -uglon -p'123456' -dglonho -ttest --start-file='mysql-bin.000001' --start-datetime="2017-05-12 14:57:00" --stop-datetime="2017-05-12 15:04:22"


python binlog2sql.py --flashback -h127.0.0.1 -P3306 -uglon -p'123456' -dglonho -ttest --start-file='mysql-bin.000001' --start-
```

```
position=547 --stop-position=803


binlog2sql help信息 ：
[root@MysqlRestore ~]# binlog2sql
usage: binlog2sql.py [-h HOST] [-u USER] [-p PASSWORD] [-P PORT]
                     [--start-file STARTFILE] [--start-position STARTPOS]
                     [--stop-file ENDFILE] [--stop-position ENDPOS]
                     [--start-datetime STARTTIME] [--stop-datetime STOPTIME]
                     [--stop-never] [--help] [-d [DATABASES [DATABASES ...]]]
                     [-t [TABLES [TABLES ...]]] [-K] [-B]

Parse MySQL binlog to SQL you want

optional arguments:
  --stop-never          Wait for more data from the server. default: stop
                        replicate at the last binlog when you start binlog2sql
  --help                help infomation
  -K, --no-primary-key  Generate insert sql without primary key if exists
  -B, --flashback       Flashback data to start_postition of start_file

connect setting:
  -h HOST, --host HOST  Host the MySQL database server located
  -u USER, --user USER  MySQL Username to log in as
  -p PASSWORD, --password PASSWORD
                        MySQL Password to use
  -P PORT, --port PORT  MySQL port to use

range filter:
  --start-file STARTFILE
                        Start binlog file to be parsed
  --start-position STARTPOS, --start-pos STARTPOS
                        Start position of the --start-file
  --stop-file ENDFILE, --end-file ENDFILE
                        Stop binlog file to be parsed. default: '--start-file'
  --stop-position ENDPOS, --end-pos ENDPOS
                        Stop position of --stop-file. default: latest position
                        of '--stop-file'
  --start-datetime STARTTIME
                        Start reading the binlog at first event having a
                        datetime equal or posterior to the argument; the
                        argument must be a date and time in the local time
                        zone, in any format accepted by the MySQL server for
                        DATETIME and TIMESTAMP types, for example: 2004-12-25
                        11:25:56 (you should probably use quotes for your
                        shell to set it properly).
  --stop-datetime STOPTIME
                        Stop reading the binlog at first event having a
                        datetime equal or posterior to the argument; the
                        argument must be a date and time in the local time
                        zone, in any format accepted by the MySQL server for
                        DATETIME and TIMESTAMP types, for example: 2004-12-25
                        11:25:56 (you should probably use quotes for your
                        shell to set it properly).

schema filter:
  -d [DATABASES [DATABASES ...]], --databases [DATABASES [DATABASES ...]]
                        dbs you want to process
```

```
  -t [TABLES [TABLES ...]], --tables [TABLES [TABLES ...]]
                        tables you want to process
[root@MysqlRestore ~]#
```

```
wget "https://pypi.python.org/packages/source/p/pip/pip-1.5.4.tar.gz#md5=834b2904f92d46aaa333267fb1c922bb" --no-check-certificate

[root@MysqlRestore pip-1.5.4]# yum search python | grep setup

cryptsetup-python.x86_64 : Python bindings for libcryptsetup
python-setuptools.noarch : Easily build and distribute Python packages
[root@MysqlRestore pip-1.5.4]#
[root@MysqlRestore pip-1.5.4]# yum install -y python-setuptools.noarch


yum -y install git
tar -xzvf pip-1.5.4.tar.gz
cd pip-1.5.4
python setup.py install
```