Xtrabackup全量备份/增量备份脚本

本文收集了几篇关于使用 Xtrabackup/innobackupex进行mysql数据库全量和增量备份的脚本，学习之用。搜集的几篇都是转载，非本文原创。

# Xtrabackup全量备份/增量备份脚本

**全量备份脚本**

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| --- | --- |
| 1`````````  2  3  4  5  6  7  8  9  10  11  12  13 | #!/bin/bash  #Description:xtrabackup complete  #Author:created by michael  #2017-08-07 v0.1  #  USER=root  PASSWD=123456  BACKUP\_DIR=/backup/mysql/complete  DATE=$(date +"%F\_%T")  [[ -d $BACKUP\_DIR ]] || mkdir $DATE\_DIR  innobackupex --user=$USER --password=$PASSWD $BACKUP\_DIR &> /tmp/mysql/"$DATE".txt  egrep ".\* Backup created in directory.\*" /tmp/mysql/"$DATE".txt >> $BACKUP\_DIR/complete.info  rm -rf /tmp/mysql/"$DATE".txt |

**启动crond以及开机自启动crond**

|  |  |
| --- | --- |
| 1  2 | systemctl start crond  systemctl enable crond |

**授予执行权限**

|  |  |
| --- | --- |
| 1 | chmod 755 /root/script/backup\_complete.sh |

**每周六的凌晨4点整定时执行全量备份**

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| --- | --- |
| 1  2  3  4 | [root@michaelos complete]# crontab -e  crontab: installing new crontab  [root@michaelos complete]# crontab -l  0 4 \* \* 6 /root/script/backup\_complete.sh |

**增量备份脚本**

**增量备份脚本**

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15 | [root@michaelos script]# cat backup\_increment.sh  #!/bin/bash  #Description: mysql backup incremention  #Author:michael  #2017-08-07 v0.1  #  USER=root  PASSWORD=123456  BACKUP\_DIR=/backup/mysql/increment  DATE=$(date +"%F\_$T")  BASE\_DIR=$(tail -1 /backup/mysql/complete/complete.info | cut -d\' -f2)  [[ -d $BACKUP\_DIR ]] || mkdir $BACKUP\_DIR  innobackupex --user=$USER --password=$PASSWORD --incremental $BACKUP\_DIR --incremental-basedir=$BASE\_DIR &> /tmp/mysql/"$DATE".txt  egrep ".\*Backup created in directory.\*" /tmp/mysql/"$DATE".txt >> $BACKUP\_DIR/backup.info  rm -rf /tmp/mysql/"$DATE".txt |

**授予执行权限**

|  |  |
| --- | --- |
| 1 | chmod 755 backup\_increment.sh |

**每周二、四、日的凌晨2点执行增量备份**

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| --- | --- |
| 1  2  3 | [root@michaelos script]# crontab -l  0 4 \* \* 6 /root/script/backup\_complete.sh  0 2 \* \* 2,4,7 /root/script/backup\_increment.sh |

**xtrabackup全量增量备份脚本**

**全量备份脚本**

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27  28  29  30  31  32  33  34  35  36  37  38  39  40  41  42  43  44  45  46  47  48  49  50  51  52 | #!/bin/sh  # add ling    INNOBACKUPEX=innobackupex  INNOBACKUPEXFULL=/usr/bin/$INNOBACKUPEX  TODAY=`date +%Y%m%d%H%M`  YESTERDAY=`date -d"yesterday" +%Y%m%d%H%M`  USEROPTIONS="--user=user --password=123456"  TMPFILE="/logs/mysql/innobackup\_$TODAY.$$.tmp"  MYCNF=/etc/my.cnf  MYSQL=/usr/local/mariadb/bin/mysql  MYSQLADMIN=/usr/local/mariadb/bin/mysqladmin  BACKUPDIR=/backup/mysql # 备份的主目录  FULLBACKUPDIR=$BACKUPDIR/full # 全库备份的目录  INCRBACKUPDIR=$BACKUPDIR/incr # 增量备份的目录  KEEP=1 # 保留几个全库备份    # Grab start time  #############################################################################  # Display error message and exit  #############################################################################  error()  {  echo "$1" 1>&2  exit 1  }    # Check options before proceeding  if [ ! -x $INNOBACKUPEXFULL ]; then  error "$INNOBACKUPEXFULL does not exist."  fi    if [ ! -d $BACKUPDIR ]; then  error "Backup destination folder: $BACKUPDIR does not exist."  fi    if [ -z "`$MYSQLADMIN $USEROPTIONS status | grep 'Uptime'`" ] ; then  error "HALTED: MySQL does not appear to be running."  fi    if ! `echo 'exit' | $MYSQL -s $USEROPTIONS` ; then  error "HALTED: Supplied mysql username or password appears to be incorrect (not copied here for security, see script)."  fi    # Some info output  echo "----------------------------"  echo  echo "$0: MySQL backup script"  echo "started: `date`"  echo    # Create full and incr backup directories if they not exist.  for i in $FULLBACKUPDIR $INCRBACKUPDIR  do  if [ ! -d $i ]; then  mkdir -pv $i  fi  done    # 压缩上传前一天的备份  echo "压缩前一天的备份，scp到远程主机"  cd $BACKUPDIR  tar -zcvf $YESTERDAY.tar.gz ./full/ ./incr/  scp -P 8022 $YESTERDAY.tar.gz root@192.168.10.46:/data/backup/mysql/  if [ $? = 0 ]; then  rm -rf $BACKUPDIR/full $BACKUPDIR/incr  echo "Running new full backup."  innobackupex --defaults-file=$MYCNF $USEROPTIONS $FULLBACKUPDIR > $TMPFILE 2>&1  else  echo "Error with scp."  fi    if [ -z "`tail -1 $TMPFILE | grep 'completed OK!'`" ] ; then  echo "$INNOBACKUPEX failed:"; echo  echo "---------- ERROR OUTPUT from $INNOBACKUPEX ----------"  # cat $TMPFILE  # rm -f $TMPFILE  exit 1  fi  # 这里获取这次备份的目录  THISBACKUP=`awk -- "/Backup created in directory/ { split( \\\$0, p, \"'\" ) ; print p[2] }" $TMPFILE`  echo "THISBACKUP=$THISBACKUP"  #rm -f $TMPFILE  echo "Databases backed up successfully to: $THISBACKUP"  # Cleanup  echo "delete tar files of 3 days ago"  find $BACKUPDIR/ -mtime +3 -name "\*.tar.gz" -exec rm -rf {} \;    echo  echo "completed: `date`"  exit 0 |

**增量备份脚本**

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27  28  29  30  31  32  33  34  35  36  37  38  39  40  41  42  43  44  45  46  47  48  49  50  51  52 | #!/bin/sh  # add ling    INNOBACKUPEX=innobackupex  INNOBACKUPEXFULL=/usr/bin/$INNOBACKUPEX  TODAY=`date +%Y%m%d%H%M`  USEROPTIONS="--user=user --password=123456"  TMPFILE="/logs/mysql/incr\_$TODAY.$$.tmp"  MYCNF=/etc/my.cnf  MYSQL=/usr/local/mariadb/bin/mysql  MYSQLADMIN=/usr/local/mariadb/bin/mysqladmin  BACKUPDIR=/backup/mysql # 备份的主目录  FULLBACKUPDIR=$BACKUPDIR/full # 全库备份的目录  INCRBACKUPDIR=$BACKUPDIR/incr # 增量备份的目录  #############################################################################  # Display error message and exit  #############################################################################  error()  {  echo "$1" 1>&2  exit 1  }    # Check options before proceeding  if [ ! -x $INNOBACKUPEXFULL ]; then  error "$INNOBACKUPEXFULL does not exist."  fi    if [ ! -d $BACKUPDIR ]; then  error "Backup destination folder: $BACKUPDIR does not exist."  fi    if [ -z "`$MYSQLADMIN $USEROPTIONS status | grep 'Uptime'`" ] ; then  error "HALTED: MySQL does not appear to be running."  fi    if ! `echo 'exit' | $MYSQL -s $USEROPTIONS` ; then  error "HALTED: Supplied mysql username or password appears to be incorrect (not copied here for security, see script)."  fi    # Some info output  echo "----------------------------"  echo  echo "$0: MySQL backup script"  echo "started: `date`"  echo    # Create full and incr backup directories if they not exist.  for i in $FULLBACKUPDIR $INCRBACKUPDIR  do  if [ ! -d $i ]; then  mkdir -pv $i  fi  done    # Find latest full backup  LATEST\_FULL=`find $FULLBACKUPDIR -mindepth 1 -maxdepth 1 -type d -printf "%P\n"`  echo "LATEST\_FULL=$LATEST\_FULL"  # Run an incremental backup if latest full is still valid.  # Create incremental backups dir if not exists.  TMPINCRDIR=$INCRBACKUPDIR/$LATEST\_FULL  mkdir -p $TMPINCRDIR  BACKTYPE="incr"  # Find latest incremental backup.  LATEST\_INCR=`find $TMPINCRDIR -mindepth 1 -maxdepth 1 -type d | sort -nr | head -1`  echo "LATEST\_INCR=$LATEST\_INCR"  # If this is the first incremental, use the full as base. Otherwise, use the latest incremental as base.  if [ ! $LATEST\_INCR ] ; then  INCRBASEDIR=$FULLBACKUPDIR/$LATEST\_FULL  else  INCRBASEDIR=$LATEST\_INCR  fi  echo "Running new incremental backup using $INCRBASEDIR as base."  innobackupex --defaults-file=$MYCNF $USEROPTIONS --incremental $TMPINCRDIR --incremental-basedir $INCRBASEDIR > $TMPFILE 2>&1    if [ -z "`tail -1 $TMPFILE | grep 'completed OK!'`" ] ; then  echo "$INNOBACKUPEX failed:"; echo  echo "---------- ERROR OUTPUT from $INNOBACKUPEX ----------"  exit 1  fi  # 这里获取这次备份的目录  THISBACKUP=`awk -- "/Backup created in directory/ { split( \\\$0, p, \"'\" ) ; print p[2] }" $TMPFILE`  echo "THISBACKUP=$THISBACKUP"  echo  echo "Databases backed up successfully to: $THISBACKUP"  echo  echo "incremental completed: `date`"  exit 0 |

**分别基于innobackupex备份工具的mysql全量备份和增量备份shell脚本**

这是另一篇mysql全量和增量备份的脚本， 来自 [21运维](http://www.21yunwei.com/archives/5013)。

之前有过一个基于innobackupex备份mysql文章，不是很简单实用。这里是一个更为简单的脚本，可以实现分别基于innobackupex备份工具的mysql全量备份和增量备份。  
注意：  
1，线上用的时候请注意将自己的用户名和密码都设置对，这里password密码我暂时用xxxxxx代替。当然，你也可以建立专用于备份用的数据库用户并设置权限。  
2，根据情况设置一个任务计划。

**mysql全量备份脚本如下**

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15 | #!/bin/bash  #author:21yunwei  logfile="/home/mysqlbak/mysql\_full\_bak\_time.log"  backuplogfile="/home/mysqlbak/mysqlbackup.log"  mysql\_bakdir="/home/mysqlbak/"  user=root  password=xxxxxx    [ ! -d $mysql\_bakdir ] && mkdir -p $mysql\_bakdir  [ ! -f $logfile ] && touch $logfile    innobackupex --defaults-file=/etc/my.cnf --user=${user} --password=${password} --compress –-parallel=4 –-throttle=400 --stream=tar ${mysql\_bakdir} 2>&1 >> $backuplogfile  reset=$?  finishtime=`date +%Y%m%d\_%H%M%S`  [ ${reset} -eq 0 ] && echo "Mysql fullbakup finished, time: $finishtime">> $logfile || echo "Mysql fullbakup failed,please check time:$finishtime" >> $logfile |

**mysql增量备份脚本如下**

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15 | #!/bin/bash  #author:21yunwei  time=`date -d '-3 day' +%Y-%m-%d`  logfile="/home/mysqlbak/mysql\_full\_bak\_time.log"  mysql\_bakdir="/home/mysqlbak/"  user=root  password=xxxxxx  lastfullbakdir=`ls /home/mysqlbak/ |grep ${time}`    [ ! -d $mysql\_bakdir ] && mkdir -p $mysql\_bakdir  [ ! -d $logfile ] && touch $logfile    innobackupex --defaults-file=/etc/my.cnf --user=${user} --password=${password} --incremental-basedir=${mysql\_bakdir}/${lastfullbakdir} --incremental ${mysql\_bakdir}  finishtime=`date +%Y%m%d\_%H%M%S`  [ $? -eq 0 ] && echo "Mysql fullbakup finished, time: $finishtime">> $logfile || echo "Mysql fullbakup failed,please check time:$finishtime">> $logfile |