有一些ip和命令的手写格式上的问题

# 一 MySQLMTOP简介及功能

MySQLMTOP 是一个由Python+PHP开发的开源MySQL企业监控系统。系统由Python实现多进程数据采集和告警，PHP实现WEB展示和管理。MySQL 服务器无需安装任何Agent，只需在监控WEB界面配置相关数据库信息，启动监控进程后，即可对上百台MySQL数据库的状态、连接数、QTS、TPS、数据库流量、复制、性能慢查询等进行时时监控。并能在数据库偏离设定的正常运行阀值(如连接异常，复制异常，复制延迟)时发送告警邮件通知到 DBA进行处理。并对历史数据归档，通过图表展示出数据库近期状态，以便DBA和开发人员能对遇到的问题进行分析和诊断。

MySQL MTOP主要功能特性如下：

（1）.实时 MySQL 可用性监视  
数据库可用性监视和衡量让开发者和DBA们了解它们是否符合所承诺的服务水平。

（2）.实时 MySQL 状态监视和警报  
MySQL MTOP 持续监视 MySQL 的基本状态和性能信息，包括数据库连接状态，启动时间，数据库版本，总连接数，活动进程，QPS，TPS，进出MySQL数据库的流量信息。在数据库状态异常或偏离正常基准水平时发出报警邮件通知。

（3）.实时 MySQL复制监视  
MySQL MTOP自动发现您的 MySQL 复制拓扑结构，自动监视数据库的延时和binlog信息，让您可以了解所有 MySQL 主服务器和从服务器的性能、可用性和运行状况。并在问题（如从服务器延迟）导致停机前向管理员提供改正建议。

（4）.远程监视云中的 MySQL  
适合于云和虚拟机的设计，使您能远程监视您的MySQL服务器不需要任何远程代理器。

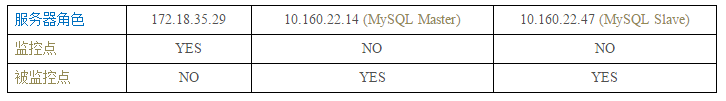
（5）.直观管理所有 MySQL 服务器  
MySQL MTOP提供一个基于 Web 的界面，可令您全面深入地了解数据库性能、可用性、关键活动等；直观地查看一台服务器、自定义的应用组或所有服务器。一组丰富的实时图形和历史图形将帮助您深入了解详细的服务器统计信息。

（6）.可视化MySQL慢查询分析  
监视实时查询性能，查看执行统计信息，筛选和定位导致性能下降的 SQL 代码。结合使用 Information Schema 可直接从 MySQL 服务器收集数据，无需额外的软件或配置。

（7）.性能监视  
监 视影响 MySQL 性能的主要指标。如查询缓存命中 率,Key\_buffer\_read\_hits,Key\_buffer\_write\_hits,Thread\_cache\_hits,Key\_blocks\_used\_rate,Created\_tmp\_disk\_tables\_rate 等信息，根据相关性能指标可以对服务器核心参数进行调整优化

# 二、环境说明

## **1、服务器角色**



## 2、系统环境

CentOS 6.2 x86\_64

## 3、环境要求

(1)、MySQL 5.0 及以上（用来存储[监控](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=%BC%E0%BF%D8&k0=%BC%E0%BF%D8&kdi0=0&luki=2&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)系统采集的数据）  
(2)、Apache 2.2 及以上（WEB [服务器](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=%B7%FE%CE%F1%C6%F7&k0=%B7%FE%CE%F1%C6%F7&kdi0=0&luki=5&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)运行服务器）  
(3)、PHP 5.3 以上（WEB 界面）  
(4)、Python 2（推荐 2.7 版本，其他版本未做测试，执行数据采集和报警任务）  
(5)、MySQLdb for python（Python 连接 MySQL 的接口）

# ****三、LAMP环境部署****

## 1 安装必备的开发包

# yum -y install ntp vim-enhanced gcc gcc-c++ flex bison autoconf automake bzip2-devel \  
ncurses-devel zlib-devel libjpeg-devel libpng-devel libtiff-devel freetype-devel libXpm-devel \  
gettext-devel pam-devel libtool libtool-ltdl openssl openssl-devel fontconfig-devel \  
libxml2-devel curl-devel libicu libicu-devel libmcrypt libmcrypt-devel libmhash libmhash-devel

## 2 .NTP服务

管理服务器上配置NTP：

vi /etc/ntp.conf

在restrict default nomodify notrap noquery（表示默认拒绝所有IP的时间同步）之后增加一行：

restrict 172.16.1.0 mask 255.255.255.0 nomodify

server 24.56.178.140 prefer

server 202.118.1.81

/etc/init.d/ntpd start

/etc/init.d/ntpd restart

echo "/etc/init.d/ntpd start" >> /etc/rc.local

客户端：

[root@m01 ~]# ntpdate NTP服务器ip

date -s "2015/12/2"

[root@web02 ~]# ntpdate 172.16.1.61

3 Dec 11:53:02 ntpdate[3809]: adjust time server 172.16.1.5 offset 0.000047 sec

cat >> /var/spool/cron/root <<EOF

###time update ###

\*/5 \* \* \* \* ntpdate 172.16.1.61

EOF

## 3 apache安装

apache快速安装过程：

yum install zlib zlib-devel -y

mkdir /application/tools -p

cd /application/tools

wget http://mirror.bit.edu.cn/apache/httpd/httpd-2.2.31.tar.gz

tar xf httpd-2.2.31.tar.gz

cd httpd-2.2.31

./configure \

--prefix=/application/apache2.2.27 \

--enable-defalte \

--enable-expires \

--enable-headers \

--enable-modules=most \

--enable-so \

--with-mpm-worker \

--enable-rewrite

make

make install

ln -s /application/apache2.2.27 /application/apache

/application/apache/bin/apachectl -t

/application/apache/bin/apachectl start

/application/apache/bin/apachectl graceful

lsof -i :80

ps -ef | grep apache

测试：浏览器访问apache服务器IP

## 4PHP安装

php快速安装

wget -O /etc/yum.repos.d/epel.repo http://mirrors.aliyun.com/repo/epel-6.repo

yum install freetype-devel libjpeg-turbo-devel libpng-devel gd-devel libcurl-devel libxslt-devel libmcrypt-devel mhash mhash-devel mcrypt libxslt-devel openssl-devel openssl -y

#yum install zlib libxml libjpeg freetype libpng gd curl libiconv zlib-devel libxml2-devel libjpeg-devel freetype-devel #libpng-devel gd-devel curl-devel -y

mkdir -p /application/tools

cd /application/tools

wget http://ftp.gnu.org/pub/gnu/libiconv/libiconv-1.14.tar.gz

tar zxvf libiconv-1.14.tar.gz

cd libiconv-1.14

./configure --prefix=/usr/local/libiconv

make

make install

cd ../

#注意要有包

tar xf php-5.3.27.tar.gz

cd php-5.3.27

./configure \

--prefix=/application/php-5.3.27 \

--with-apxs2=/application/apache/bin/apxs \

--with-mysql=mysqlnd \

--with-xmlrpc \

--with-openssl \

--with-zlib \

--with-freetype-dir \

--with-gd \

--with-jpeg-dir \

--with-png-dir \

--with-iconv-dir=/usr/local/libiconv \

--enable-short-tags \

--enable-sockets \

--enable-zend-multibyte \

--enable-soap \

--enable-mbstring \

--enable-static \

--enable-gd-native-ttf \

--with-curl \

--with-xsl \

--enable-ftp \

--with-libxml-dir

make

make install

ln -s /application/php-5.3.27 /application/php

\cp /application/tools/php-5.3.27/php.ini-production /application/php/lib/php.ini

## 5 mysql安装

mysql快速安装：

useradd -s /sbin/nologin -M -u 666 mysql

mkdir /application/tools -p

cd /application/tools

上传包

tar xf mysql-5.5.32-linux2.6-x86\_64.tar.gz

mv mysql-5.5.32-linux2.6-x86\_64 /application/mysql-5.5.32-linux2.6-x86\_64

ln -s /application/mysql-5.5.32-linux2.6-x86\_64 /application/mysql

/application/mysql/scripts/mysql\_install\_db --basedir=/application/mysql/ --datadir=/application/mysql/data/ --user=mysql

chown -R mysql.mysql /application/mysql/

/bin/cp /application/mysql/support-files/my-small.cnf /etc/my.cnf

echo 'PATH="/application/mysql/bin:$PATH"' >>/etc/profile

source /etc/profile

\cp /application/mysql/support-files/mysql.server /etc/init.d/mysqld

sed -i 's#/usr/local/mysql#/application/mysql#g' /application/mysql/bin/mysqld\_safe /etc/init.d/mysqld

chmod +x /etc/init.d/mysqld

/etc/init.d/mysqld start

# 四、Python基础环境部署

https://www.python.org/ftp/python/2.7.6/Python-2.7.6.tgz

# tar xvzf Python-2.7.6.tgz

# cd Python-2.7.6

# ./configure --prefix=/usr/local/python2.7 --enable-shared

# make && make install

# echo '/usr/local/python2.7/lib' >> /etc/ld.so.conf

# /sbin/ldconfig

# mv /usr/bin/python /usr/bin/python\_old

# ln -s /usr/local/python2.7/bin/python2.7 /usr/bin/python

为避免 [python](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=python&k0=python&kdi0=0&luki=9&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0) 版本过高，导致 yum 不可以，需做如下修改：

# vim /usr/bin/yum

由  #!/usr/bin/python  修改为  #!/usr/bin/python\_old

http://pypi.python.org/packages/source/d/distribute/distribute-0.6.28.tar.gz

# tar xvzf distribute-0.6.28.tar.gz

# cd distribute-0.6.28

# [python](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=python&k0=python&kdi0=0&luki=9&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0) setup.py install

https://github.com/farcepest/MySQLdb1/archive/MySQLdb-1.2.5.tar.gz

# tar xvzf MySQLdb-1.2.5.tar.gz

# cd MySQLdb1-MySQLdb-1.2.5

# [vim](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=vim&k0=vim&kdi0=0&luki=6&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0) site.cfg

mysql\_config =/usr/local/mysql/bin/mysql\_config……

# ln -s /usr/local/python2.7/lib/libpython2.7.so.1.0 /usr/lib64/libpython2.7.so

# python setup.py build

# python setup.py install

# 五、mysqlmtop环境部署

## 1、创建监控机数据库并授权

# mysql -uroot -e "create database mysqlmtop default character set utf8;"

# mysql -uroot -e "grant all privileges on mysqlmtop.\* to 'mtop\_user'@'%' identified by '123456';"

# mysql -uroot -e "flush privileges;"

## 2、导入SQL文件夹里的SQL文件（表结构和数据文件）

# unzip mysqlmtop\_v2.1.zip

# cd mysqlmtop\_v2.1

# mysql -uroot mysqlmtop < [sql](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=sql&k0=sql&kdi0=0&luki=8&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)/mysqlmtop.sql

# mysql -uroot mysqlmtop < sql/mysqlmtop\_data.sql

## 3、在被监控机上创建授权账号

# mysql -uroot -e "grant select,super,process on \*.\* to 'monitor'@'10.0.0.15' identified by 'monitor';"

# mysql -uroot -e "flush privileges;"

## 4、mysqlmtop配置

# cp -a mysqlmtop /usr/local/

# cp -a frontweb /data/web/[data](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=data&k0=data&kdi0=0&luki=1&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)/

# cd /usr/local/mysqlmtop/

# vim etc/config.ini



# dos2unix \*.py

# dos2unix \*.sh

# dos2unix mtopctl

# chmod +x \*.py \*.sh mtopctl

# ln -s /usr/local/mysqlmtop/mtopctl /usr/local/bin

( 注意：需要使用dos2unix命令对\*.py、\*.sh、mtopctl文件进行格式转换，否则会运行失败 )  
  
ln -s /application/mysql/lib/libmysqlclient.so.18 /usr/lib64/libmysqlclient.so.18

## 5、测试MySQL连接是否正常

# cd /usr/local/mysqlmtop && ./test\_mysql.py

MySQLDB OK!

## 6、启动监控系统

# mtopctl start

2015129154122888.jpg (410×60)

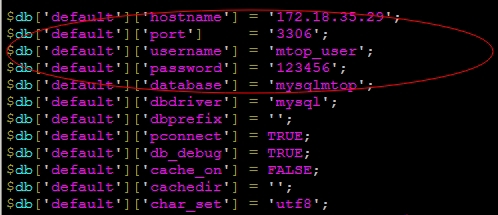
## 7、前端WEB展示层配置

# cd /[data](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=data&k0=data&kdi0=0&luki=1&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)/web/data/frontweb/

# chown -R www:www /data/web/data/frontweb

# chmod -R 750 /data/web/data/frontweb

# [vim](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=vim&k0=vim&kdi0=0&luki=6&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0) application/config/database.php



# [vim](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=vim&k0=vim&kdi0=0&luki=6&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0) /[data](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=data&k0=data&kdi0=0&luki=1&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)/web/conf/mysqlmtop.conf

<VirtualHost \*:80>

DocumentRoot /data/web/data/frontweb

ServerName mysqlmtop.test.com

DirectoryIndex index.php AddDefaultCharset UTF-8

<LocationMatch "/data/web/.\*/.php$">

Order Deny,Allow

Deny from All

</LocationMatch>

<Directory />

AllowOverride ALL

</Directory>

</VirtualHost>

# service httpd graceful

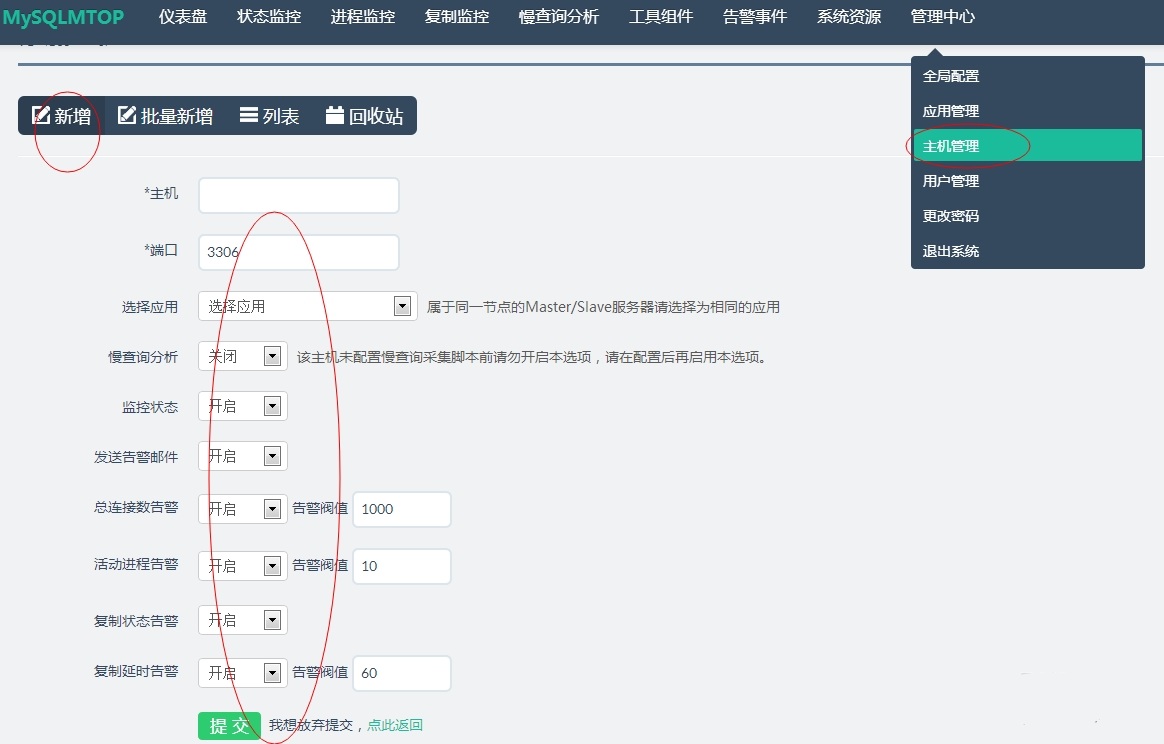
然后本地hosts绑定（172.18.35.29 mysqlmtop.test.com）  
通过 http://mysqlmtop.test.com 即可访问（初始授权账号：admin admin）

## 8、监控项设置

点击管理中心 --> 应用管理 添加应用



点击管理中心 --> [服务器](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=%B7%FE%CE%F1%C6%F7&k0=%B7%FE%CE%F1%C6%F7&kdi0=0&luki=5&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)管理 添加 MySQL 服务器







# 五、慢查询配置

## 1、在被监控服务器安装如下组件

yum install perl-ExtUtils-MakeMaker.x86\_64 -y

wget http://cpan.metacpan.org/authors/id/T/TI/TIMB/DBI-1.628.tar.gz

# tar xvzsf DBI-1.628.tar.gz

# cd DBI-1.628

# [perl](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=perl&k0=perl&kdi0=0&luki=4&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0) Makefile.PL

# make && make install

http://search.cpan.org/CPAN/authors/id/C/CA/CAPTTOFU/DBD-mysql-4.024.tar.gz

# tar xvzf DBD-[mysql](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=mysql&k0=mysql&kdi0=0&luki=10&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)-4.024.tar.gz

# cd DBD-mysql-4.024

# perl Makefile.PL --mysql\_config=/usr/local/mysql/bin/mysql\_config --with-mysql=/usr/local/mysql

# make && make install

http://search.cpan.org/CPAN/authors/id/S/SU/SULLR/IO-Socket-SSL-1.972.tar.gz

# tar xvzf IO-Socket-SSL-1.972.tar.gz

# cd IO-Socket-SSL-1.972

# perl Makefile.PL

# make && make install

wget https://www.percona.com/downloads/percona-toolkit/2.2.16/tarball/percona-toolkit-2.2.16.tar.gz

# tar xvzf percona-toolkit-2.2.16.tar.gz

# cd percona-toolkit-2.2.16

# [perl](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=perl&k0=perl&kdi0=0&luki=4&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0) Makefile.PL

# make && make install

## 2、开启 MySQL 本身的慢查询功能

slow\_query\_log = 1

slow\_query\_log\_file = /data/dbdata/slow\_query.log

long\_query\_time = 1

## 3、在被监控服务器（10.160.22.14）上添加如下 crontab 项

00 \* \* \* \* /usr/bin/pt-query-digest --user=mtop\_user --password=123456 --port=3306 --review h=172.18.35.29,D=mysqlmtop,t=mysql\_slow\_query\_review\_4 --history h=172.18.35.29,D=mysqlmtop,t=mysql\_slow\_query\_review\_history\_4 --no-report --limit=0% /data/dbdata/slow\_query.log >/dev/null 2>&1

## 4、在被监控服务器（10.160.22.47）上添加如下 crontab 项

00 \* \* \* \* /usr/bin/pt-query-digest --user=mtop\_user --password=123456 --port=3306 --review h=172.18.35.29,D=mysqlmtop,t=mysql\_slow\_query\_review\_5 --history h=172.18.35.29,D=mysqlmtop,t=mysql\_slow\_query\_review\_history\_5 --no-report --limit=0% /data/dbdata/slow\_query.log >/dev/null 2>&1

以上数据表 mysql\_slow\_query\_review、mysql\_slow\_query\_review\_history 的后缀为主机 ID，如图：



## 5、为被监控的服务器开启慢查询



## 6、效果展示



# 六、工具组件配置

## 1、在被监控服务器（172.18.35.29）上添加如下 crontab 项

\*/30 \* \* \* \* cd /usr/local/mysqlmtop; ./check\_mysql\_widget\_bigtable.py >/dev/null 2>&1

\*/1 \* \* \* \* cd /usr/local/[mysql](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=mysql&k0=mysql&kdi0=0&luki=10&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)mtop; ./check\_mysql\_widget\_hit\_rate.py >/dev/null 2>&1

\*/1 \* \* \* \* cd /usr/local/mysqlmtop; ./check\_mysql\_widget\_connect.py >/dev/null 2>&1

## 2、效果展示



# 七、资源监控配置

## 1、被监控服务器上的设置

NET-SNMP服务安装（注意版本）：  
 ftp://ftp.fi.freebsd.org/pub/FreeBSD/ports/distfiles/net-snmp-5.3.2.tar.gz

# tar xvzf net-snmp-5.3.2.tar.gz

# cd net-snmp-5.3.2

# ./configure --prefix=/usr/local/snmp /--enable-mfd-rewrites /--with-default-snmp-version="2" /--with-sys-contact="lovezym5@qq.com" /--with-sys-location="China" /--with-logfile="/var/log/snmpd.log" /--with-persistent-directory="/var/net-snmp"

# make && make install

# cp EXAMPLE.conf /usr/local/snmp/share/snmp/snmpd.conf

# [vim](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=vim&k0=vim&kdi0=0&luki=6&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0) /usr/local/snmp/share/snmp/snmpd.conf

com2sec notConfigUser 172.18.35.29 [mysql](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=mysql&k0=mysql&kdi0=0&luki=10&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)mtop

group notConfigGroup v1 notConfigUser

group notConfigGroup v2c notConfigUser

group notConfigGroup usm notConfigUser

view all included .1 80

access notConfigGroup "" any noauth exact all none none

......

服务启动：

# /usr/local/snmp/sbin/snmpd -c /usr/local/snmp/share/snmp/snmpd.conf

## 2、监控服务器上的设置

NET-SNMP服务安装：

# tar xvzf net-snmp-5.3.2.tar.gz

# cd net-snmp-5.3.2

# ./configure --prefix=/usr/local/snmp /--enable-mfd-rewrites /--with-default-snmp-version="2" /--with-sys-contact="lovezym5@qq.com" /--with-sys-location="China" /--with-logfile="/var/log/snmpd.log" /--with-persistent-directory="/var/net-snmp"

# make && make install

# cd /usr/local/[mysql](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=mysql&k0=mysql&kdi0=0&luki=10&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)mtop

# ln -s /usr/local/snmp/bin/snmpwalk /usr/bin/snmpwalk

# ln -s /usr/local/snmp/bin/snmpdf /usr/bin/snmpdf

# [vim](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=vim&k0=vim&kdi0=0&luki=6&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0) /usr/local/mysqlmtop/check\_linux\_resource.sh

host="172.18.35.29"

port="3306"

user="mtop\_user"

password="123456"

dbname="mysqlmtop"

......

# vim /usr/local/mysqlmtop/etc/config.ini

[linux\_[server](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=server&k0=server&kdi0=0&luki=3&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)]

server\_ip="10.160.22.14|10.160.22.47"

## 3 重启[监控](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=%BC%E0%BF%D8&k0=%BC%E0%BF%D8&kdi0=0&luki=2&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)服务

# mtopctl stop && mtopctl start

问题修正（否则无法获取内存信息）：

# [vim](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=vim&k0=vim&kdi0=0&luki=6&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0) /usr/local/mysqlmtop/check\_linux\_resource.sh

totalmem=`/usr/bin/snmpdf -v1 -c mysqlmtop ${ip} | awk '/Real Memory/ {print $3}'`

usedmem=`/usr/bin/snmpdf -v1 -c mysqlmtop ${ip} | awk '/Real Memory/ {print $4}'`

## 4 crontab 内容添加

\*/1 \* \* \* \* cd /usr/local/[mysql](http://cpro.baidu.com/cpro/ui/uijs.php?adclass=0&app_id=0&c=news&cf=1001&ch=0&di=128&fv=20&is_app=0&jk=1b59bf0a8e15e784&k=mysql&k0=mysql&kdi0=0&luki=10&mcpm=0&n=10&p=baidu&q=smileking_cpr&rb=0&rs=1&seller_id=1&sid=84e7158eabf591b&ssp2=1&stid=9&t=tpclicked3_hc&td=1682280&tu=u1682280&u=http%3A%2F%2Fwww%2Eth7%2Ecn%2Fdb%2Fmysql%2F201512%2F170348%2Eshtml&urlid=0)mtop; ./check\_linux\_resource.py >/dev/null 2>&1

## 5 效果展示



# 八. 总结

简单的说mtop就是一个quick view of mysql connections。但是，应用的场景较少，并且会对服务器带来一小部分压力。  
总结一下应用场景：

a. 快速的对mysql连接情况进行了解  
b. 短时间的mysql连接情况的监控  
c. 数据库瓶颈分析的初步定为

缺点：  
a. 精度低，不能抓到所有process。  
b. 在大并发时，对数据库有小幅压力。  
c. 会不断增加数据库QUERIES的数值，对今后的数据库数据分析会带来一定影响。  
d. 安装有些许麻烦。