第五章2：企业级监控实例

**案例环境：根据第五章1搭建zabbix server端；**

**一、Zabbix监控Nginx访问数据；**

**二、Zabbix监控Mysql主从复制；**

**三、**

**一、Zabbix监控Nginx访问数据；**

**案例步骤：**

* 部署Nginx服务器；
* 配置Nginx页面监控；
* 编写Nginx的监控脚本；
* 在nginx服务器上安装zabbix\_agent端并配置；
* zabbix服务端测试获取数据；
* zabbix服务器端添加监控主机nginx，配置监控项；
* 测试验证监控数据收集情况；
* **部署Nginx服务器；**

[root@nginx ~]# yum -y install pcre-devel zlib-devel

[root@nginx ~]# useradd -M -s /sbin/nologin nginx

[root@nginx ~]# tar zxvf nginx-1.12.2.tar.gz -C /usr/src/

[root@nginx ~]# cd /usr/src/nginx-1.12.2/

[root@nginx nginx-1.12.2]# ./configure --prefix=/usr/local/nginx --user=nginx --group=nginx --with-http\_stub\_status\_module

[root@nginx nginx-1.12.2]# make &&make install

[root@nginx nginx-1.12.2]# ls /usr/local/nginx/

client\_body\_temp conf fastcgi\_temp html logs proxy\_temp sbin scgi\_temp uwsgi\_temp

[root@nginx nginx-1.12.2]# cd

* **配置Nginx页面监控；**

[root@nginx ~]# ln -s /usr/local/nginx/sbin/nginx /usr/local/sbin/

[root@nginx ~]# vi /usr/local/nginx/conf/nginx.conf

47 location /status {

48 stub\_status on;

49 access\_log off;

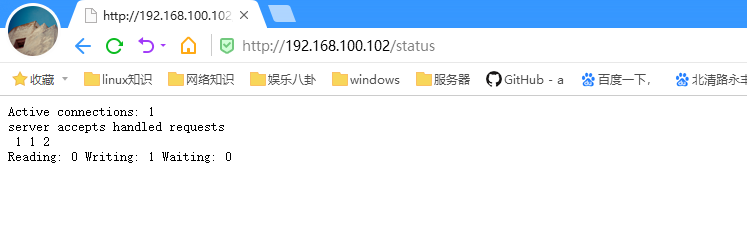
50 }

:wq

[root@nginx ~]# nginx

[root@nginx ~]# netstat -utpln |grep nginx

tcp 0 0 0.0.0.0:80 0.0.0.0:\* LISTEN 3713/nginx



* **编写Nginx的监控脚本；**

**[root@nginx ~]# vi /tmp/ngx\_status.sh**

#! /bin/bash

#date: 2018-05-04

# Description：zabbix监控nginx性能以及进程状态

# Note：此脚本需要配置在被监控端，否则ping检测将会得到不符合预期的结果

HOST="192.168.100.102" ##记得修改主机名

PORT="80"

# 检测nginx进程是否存在

function ping {

/sbin/pidof nginx | wc -l

}

# 检测nginx性能

function active {

/usr/bin/curl "http://$HOST:$PORT/status/" 2>/dev/null| grep 'Active' | awk '{print $NF}'

}

function reading {

/usr/bin/curl "http://$HOST:$PORT/status/" 2>/dev/null| grep 'Reading' | awk '{print $2}'

}

function writing {

/usr/bin/curl "http://$HOST:$PORT/status/" 2>/dev/null| grep 'Writing' | awk '{print $4}'

}

function waiting {

/usr/bin/curl "http://$HOST:$PORT/status/" 2>/dev/null| grep 'Waiting' | awk '{print $6}'

}

function accepts {

/usr/bin/curl "http://$HOST:$PORT/status/" 2>/dev/null| awk NR==3 | awk '{print $1}'

}

function handled {

/usr/bin/curl "http://$HOST:$PORT/status/" 2>/dev/null| awk NR==3 | awk '{print $2}'

}

function requests {

/usr/bin/curl "http://$HOST:$PORT/status/" 2>/dev/null| awk NR==3 | awk '{print $3}'

}

# 执行function

$1

[root@nginx ~]# chmod +x /tmp/ngx\_status.sh

* **在nginx服务器上安装zabbix\_agent端并配置；**

[root@server ~]# cat <<END >>/etc/hosts

192.168.100.102 nginx

END

[root@nginx ~]# wget -O /etc/yum.repos.d/CentOS-Base.repo http://mirrors.aliyun.com/repo/Centos-6.repo

[root@nginx ~]# yum -y install libxml2-devel libcurl-devel pcre-devel ntpdate

[root@nginx ~]# ntpdate ntp1.aliyun.com

[root@nginx ~]# tar zxvf zabbix-3.4.2.tar.gz

[root@nginx ~]# cd zabbix-3.4.2

[root@nginx zabbix-3.4.2]# ./configure --prefix=/usr/local/zabbix --enable-agent --enable-ipv6 --with-net-snmp --with-libcurl --with-libxml2

[root@nginx zabbix-3.4.2]# make &&make install

[root@nginx zabbix-3.4.2]# cp misc/init.d/tru64/zab**bix\_agentd /etc/init.d/**

**[root@nginx zabbix-3.4.2]# vi /etc/init.d/zabbix\_agentd**

**24 DAEMON=/usr/local/zabbix/sbin/zabbix\_agentd**

**:wq**

**[root@nginx zabbix-3.4.2]# chmod +x /etc/init.d/zabbix\_agentd**

**[root@nginx zabbix-3.4.2]# cd**

[root@nginx ~]# **groupadd zabbix**

[root@nginx ~]# **useradd -r -g zabbix zabbix**

[root@nginx ~]# **chown -R zabbix:zabbix /usr/local/zabbix/**

[root@nginx ~]# **vi /usr/local/zabbix/etc/zabbix\_agentd.conf**

**LogFile=/tmp/zabbix\_agentd.log**

**Server=192.168.100.101**

**ServerActive=192.168.100.101**

**Hostname=nginx**

**UnsafeUserParameters=1**

**UserParameter=nginx.status[\*],/tmp/ngx\_status.sh $1**

**:wq**

[root@nginx ~]# **/etc/init.d/zabbix\_agentd start**

**Zabbix agent started.**

[root@nginx ~]# netstat -utpln |grep zabbix

tcp 0 0 0.0.0.0:10050 0.0.0.0:\* LISTEN 14707/zabbix\_agentd

* **zabbix服务端测试获取数据；**

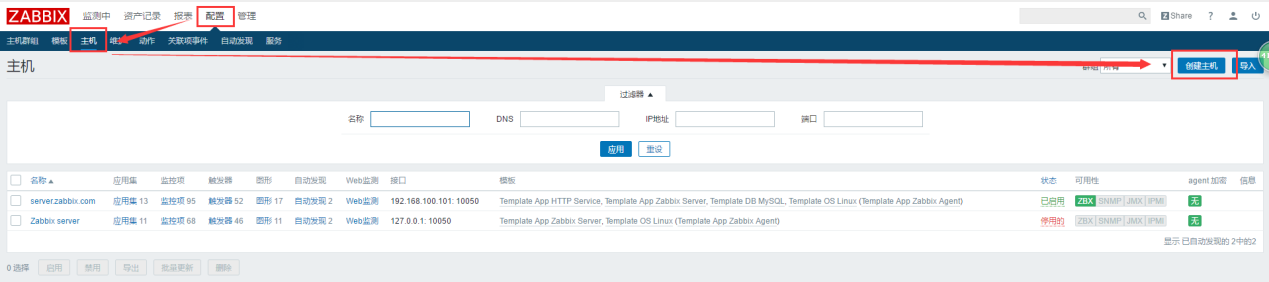
[root@server ~]# zabbix\_get -s 192.168.100.102 -k nginx.status[active]

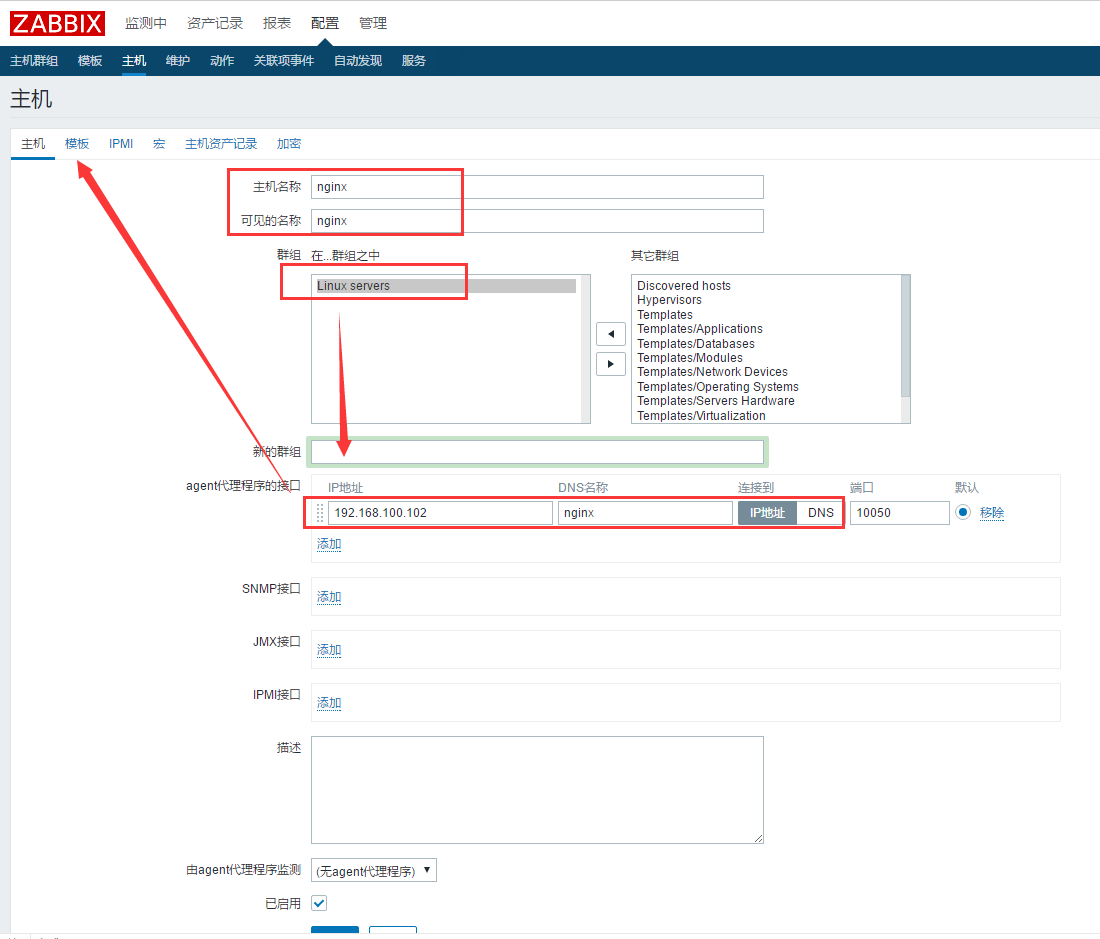
1

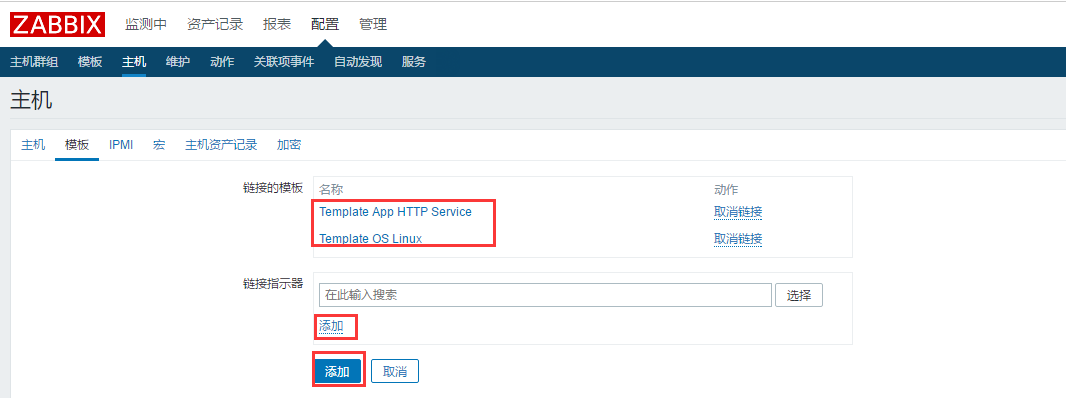
[root@server ~]# zabbix\_get -s 192.168.100.102 -k nginx.status[writing]

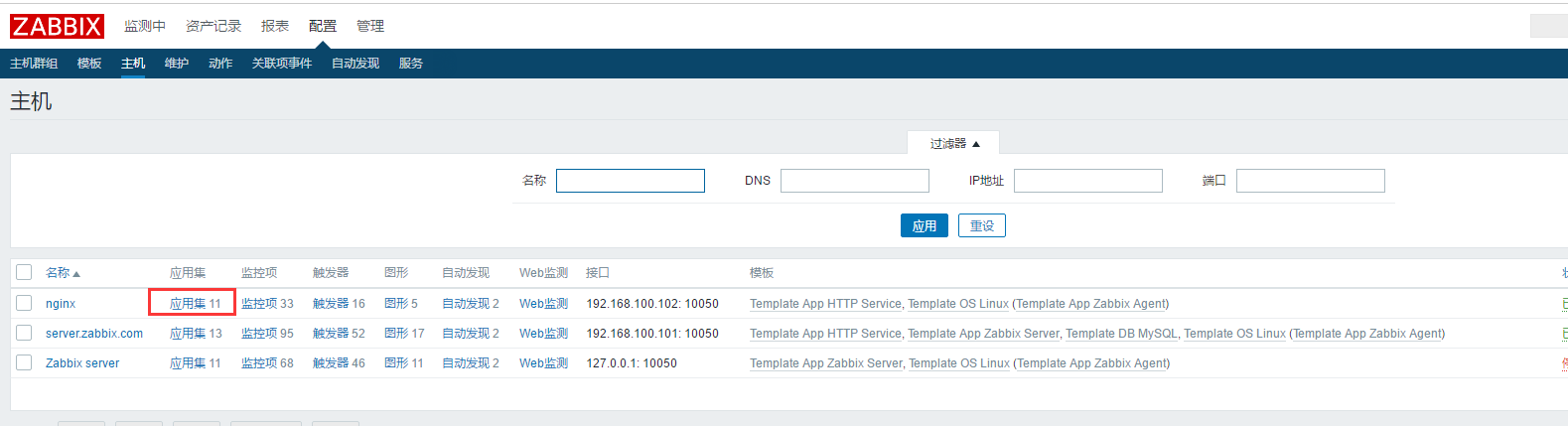
1

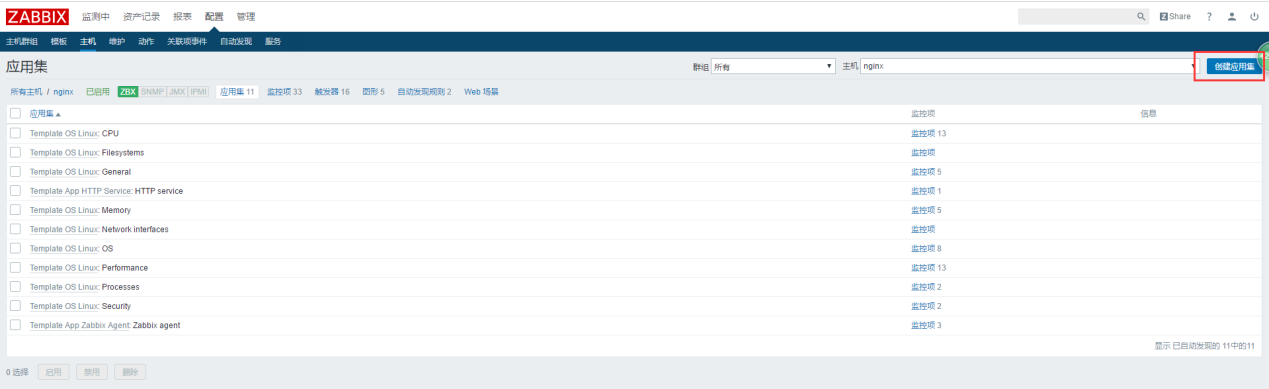
* **zabbix服务器端添加监控主机nginx，配置监控项；**



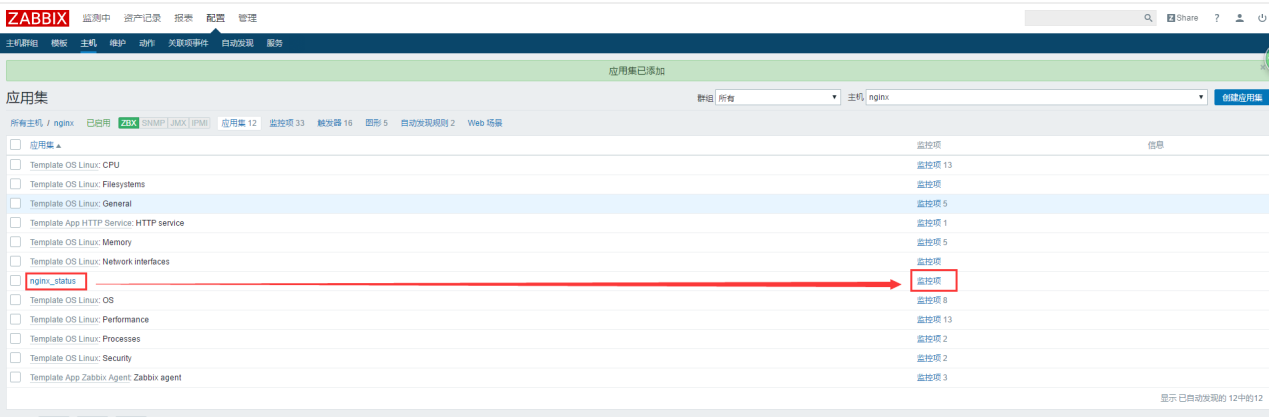


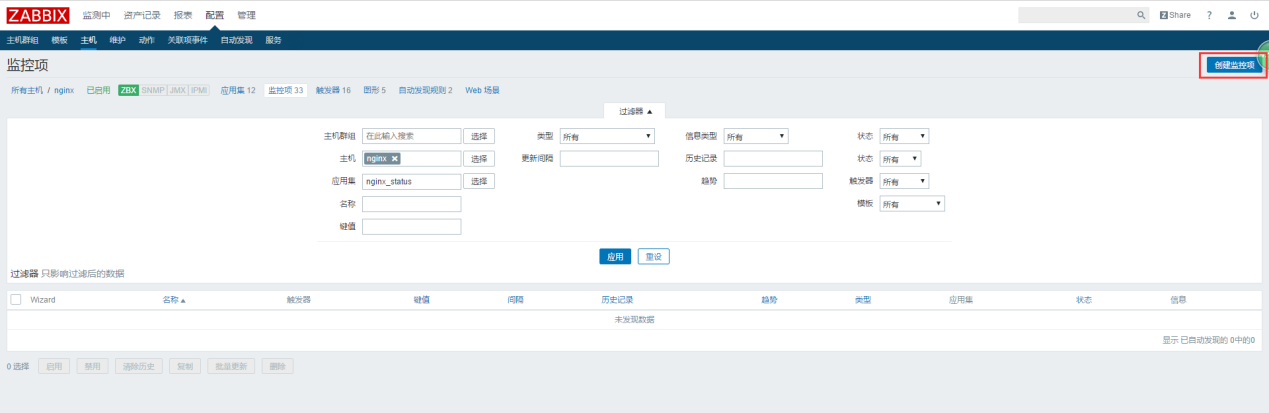


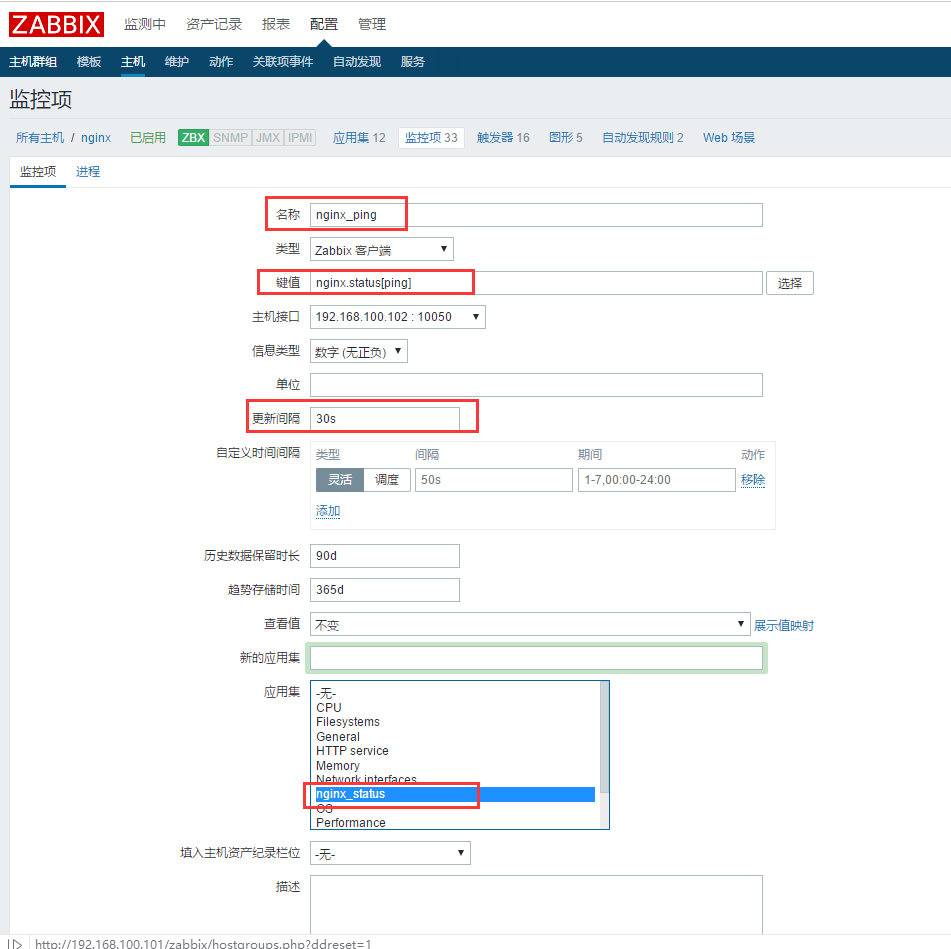


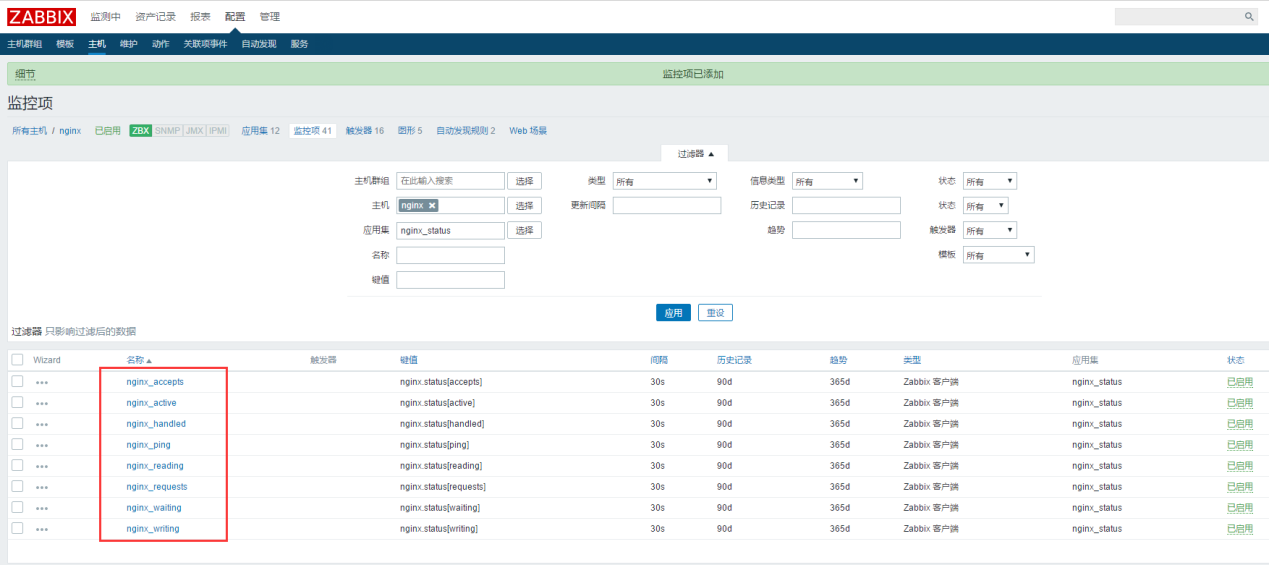


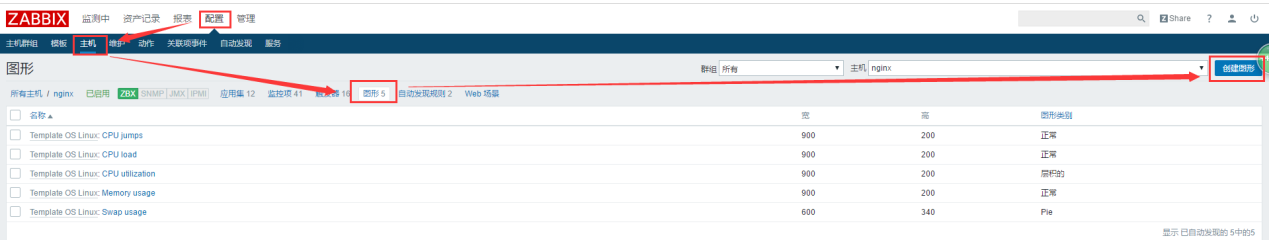


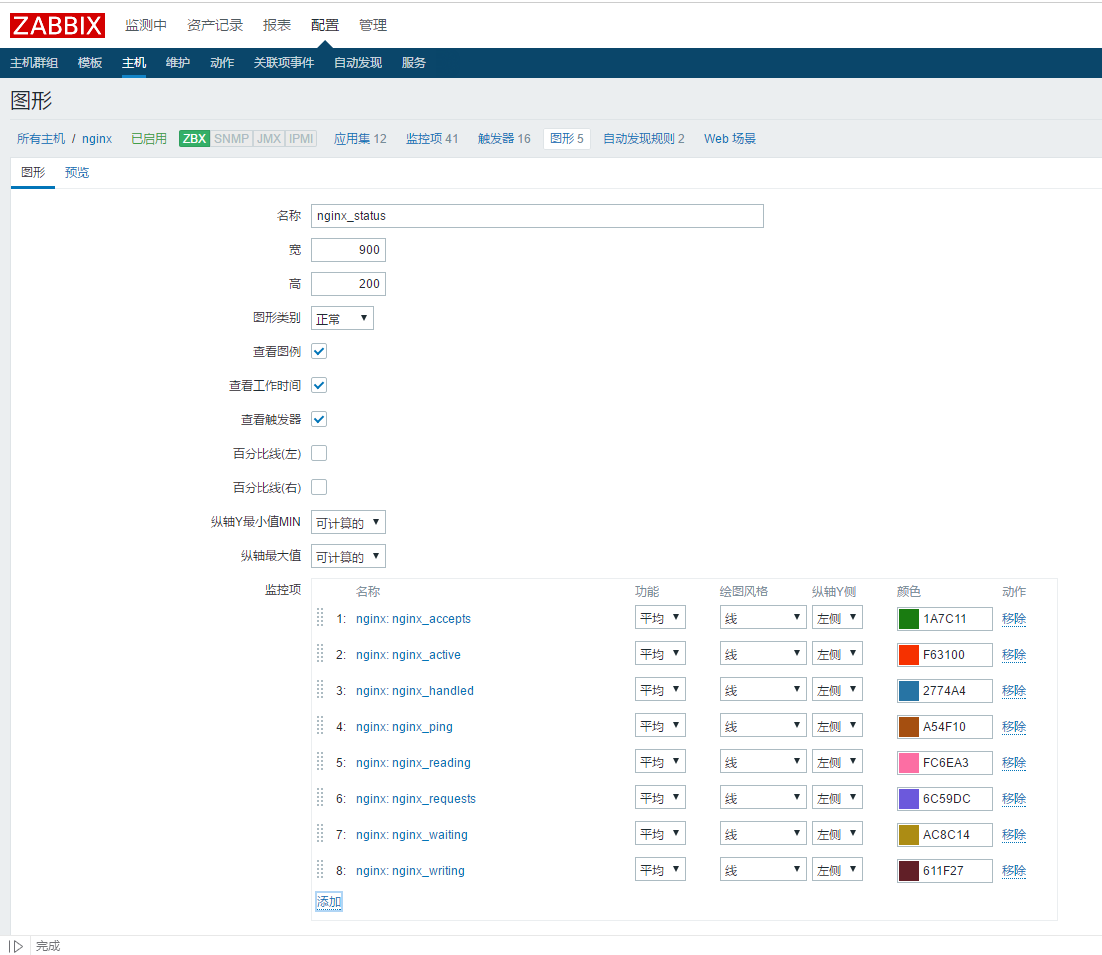




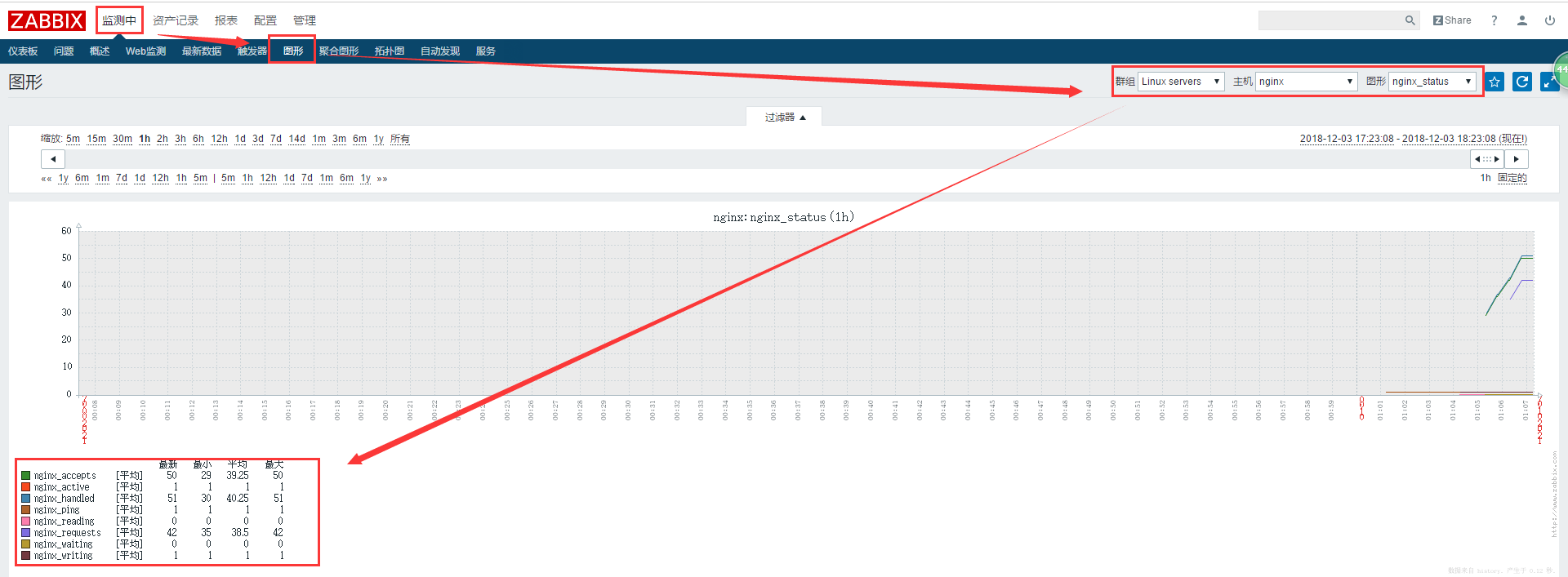








* **测试验证监控数据收集情况；**



**二、Zabbix监控Mysql主从复制；**

**案例步骤：**

* 搭建Mysql主从复制环境；
* 在slave节点上安装部署zabbix\_agent程序；
* 在zabbix 服务端配置监控mysql的slave节点的复制状态；
* 测试查看mysql\_replication复制数据；
* **搭建Mysql主从复制环境；**

[root@slave ~]# mysql -uroot -p123123

mysql> show slave status\G;

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 1. row \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Slave\_IO\_State: Waiting for master to send event

Master\_Host: 192.168.100.102

Master\_User: linuxfan

Master\_Port: 3306

Connect\_Retry: 60

Master\_Log\_File: master-bin.000001

Read\_Master\_Log\_Pos: 453

Relay\_Log\_File: relay1-log-bin.000003

Relay\_Log\_Pos: 668

Relay\_Master\_Log\_File: master-bin.000001

Slave\_IO\_Running: Yes

Slave\_SQL\_Running: Yes

Replicate\_Do\_DB:

Replicate\_Ignore\_DB:

Replicate\_Do\_Table:

Replicate\_Ignore\_Table:

Replicate\_Wild\_Do\_Table:

Replicate\_Wild\_Ignore\_Table:

Last\_Errno: 0

Last\_Error:

Skip\_Counter: 0

Exec\_Master\_Log\_Pos: 453

Relay\_Log\_Space: 1051

Until\_Condition: None

Until\_Log\_File:

Until\_Log\_Pos: 0

Master\_SSL\_Allowed: No

Master\_SSL\_CA\_File:

Master\_SSL\_CA\_Path:

Master\_SSL\_Cert:

Master\_SSL\_Cipher:

Master\_SSL\_Key:

Seconds\_Behind\_Master: 0

Master\_SSL\_Verify\_Server\_Cert: No

Last\_IO\_Errno: 0

Last\_IO\_Error:

Last\_SQL\_Errno: 0

Last\_SQL\_Error:

Replicate\_Ignore\_Server\_Ids:

Master\_Server\_Id: 1

Master\_UUID: f1f6990a-f172-11e8-b42e-000c2965c231

Master\_Info\_File: mysql.slave\_master\_info

SQL\_Delay: 0

SQL\_Remaining\_Delay: NULL

Slave\_SQL\_Running\_State: Slave has read all relay log; waiting for more updates

Master\_Retry\_Count: 86400

Master\_Bind:

Last\_IO\_Error\_Timestamp:

Last\_SQL\_Error\_Timestamp:

Master\_SSL\_Crl:

Master\_SSL\_Crlpath:

Retrieved\_Gtid\_Set:

Executed\_Gtid\_Set:

Auto\_Position: 0

Replicate\_Rewrite\_DB:

Channel\_Name:

Master\_TLS\_Version:

1 row in set (0.00 sec)

mysql> grant replication client on \*.\* to 'zabbix'@'localhost';

Query OK, 0 rows affected, 2 warnings (0.00 sec)

mysql> flush privileges;

Query OK, 0 rows affected (0.00 sec)

* **在slave节点上安装部署zabbix\_agent程序；**

[root@slave ~]# wget -O /etc/yum.repos.d/CentOS-Base.repo http://mirrors.aliyun.com/repo/Centos-6.repo

[root@slave ~]# yum -y install libxml2-devel libcurl-devel pcre-devel ntpdate

[root@slave ~]# ntpdate ntp1.aliyun.com

[root@slave ~]# tar zxvf zabbix-3.4.2.tar.gz

[root@slave ~]# cd zabbix-3.4.2

[root@slave zabbix-3.4.2]# ./configure --prefix=/usr/local/zabbix --enable-agent --enable-ipv6 --with-net-snmp --with-libcurl --with-libxml2

[root@slave zabbix-3.4.2]# make &&make install

[root@slave zabbix-3.4.2]# cp misc/init.d/tru64/zab**bix\_agentd /etc/init.d/**

**[root@slave zabbix-3.4.2]# vi /etc/init.d/zabbix\_agentd**

**24 DAEMON=/usr/local/zabbix/sbin/zabbix\_agentd**

**:wq**

**[root@slave zabbix-3.4.2]# chmod +x /etc/init.d/zabbix\_agentd**

**[root@slave zabbix-3.4.2]# cd**

[root@slave ~]# **groupadd zabbix**

[root@slave ~]# **useradd -r -g zabbix zabbix**

[root@slave ~]# **chown -R zabbix:zabbix /usr/local/zabbix/**

[root@slave ~]# **vi /usr/local/zabbix/etc/zabbix\_agentd.conf**

**LogFile=/tmp/zabbix\_agentd.log**

**Server=192.168.100.101**

**ServerActive=192.168.100.101**

**Hostname=slave**

**UnsafeUserParameters=1**

**UserParameter=mysql.replication,/tmp/zabbix\_mysql\_slave.sh**

**:wq**

[root@slave ~]# **/etc/init.d/zabbix\_agentd start**

**Zabbix agent started.**

[root@slave ~]# netstat -utpln |grep zabbix

tcp 0 0 0.0.0.0:10050 0.0.0.0:\* LISTEN 14707/zabbix\_agentd

[root@slave ~]# vi /tmp/zabbix\_mysql\_slave.sh

#!/bin/bash

/usr/local/mysql/bin/mysql -uzabbix -e 'show slave status\G' |grep -E "Slave\_IO\_Running|Slave\_SQL\_Running"|awk '{print $2}'|grep -c Yes

:wq

[root@slave ~]# chmod +x /tmp/zabbix\_mysql\_slave.sh

* **在zabbix 服务端配置监控mysql的slave节点的复制状态；**

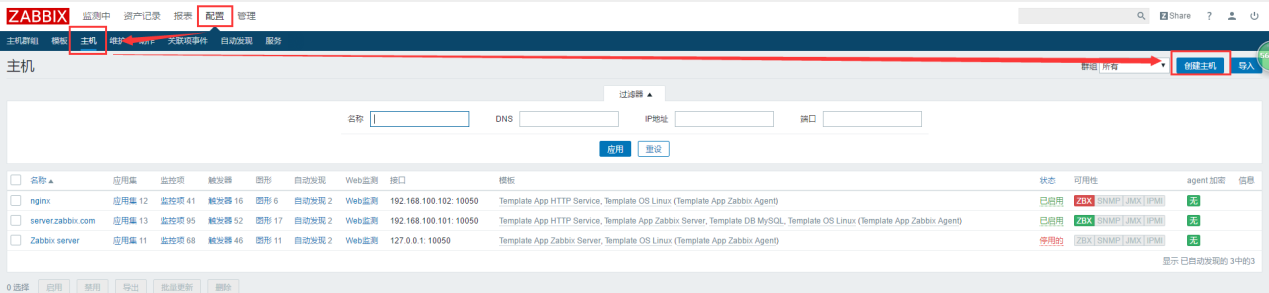
[root@server ~]# cat <<END >>/etc/hosts

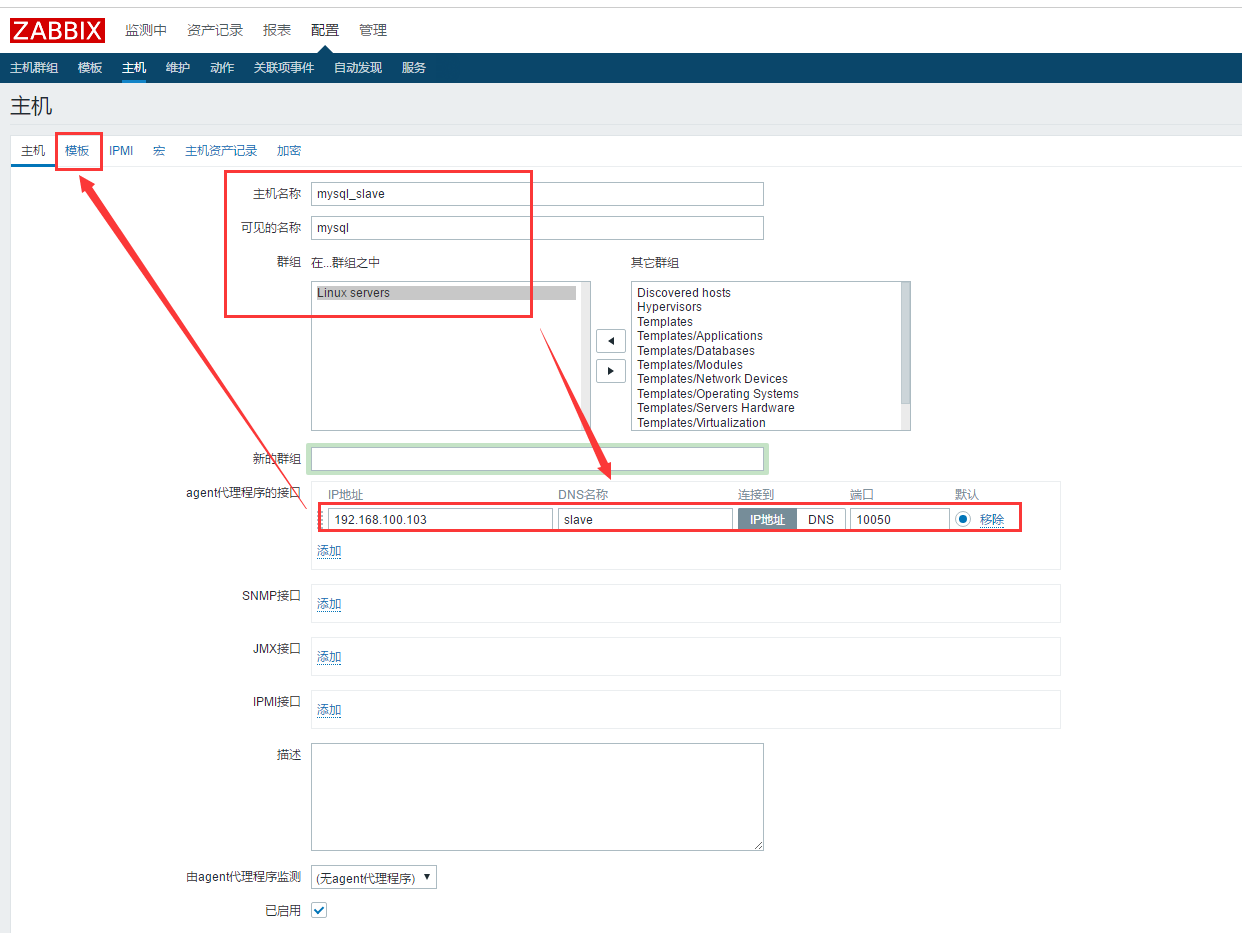
192.168.100.103 slave

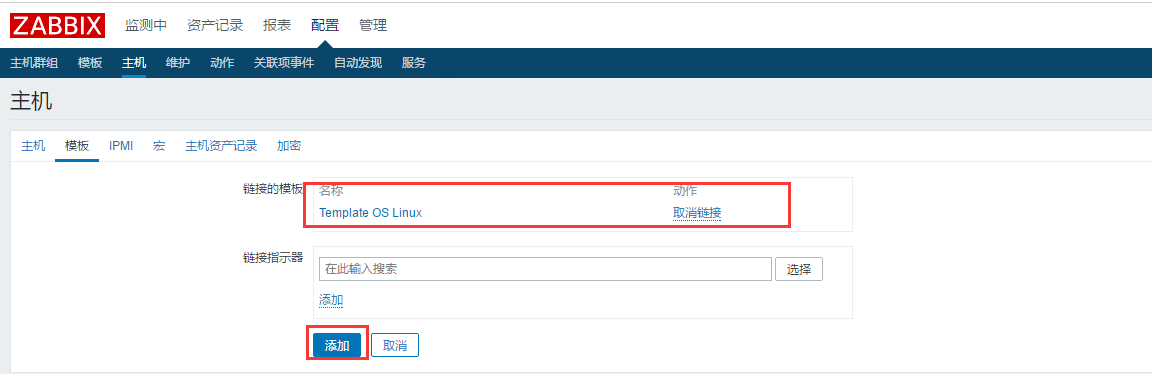
END

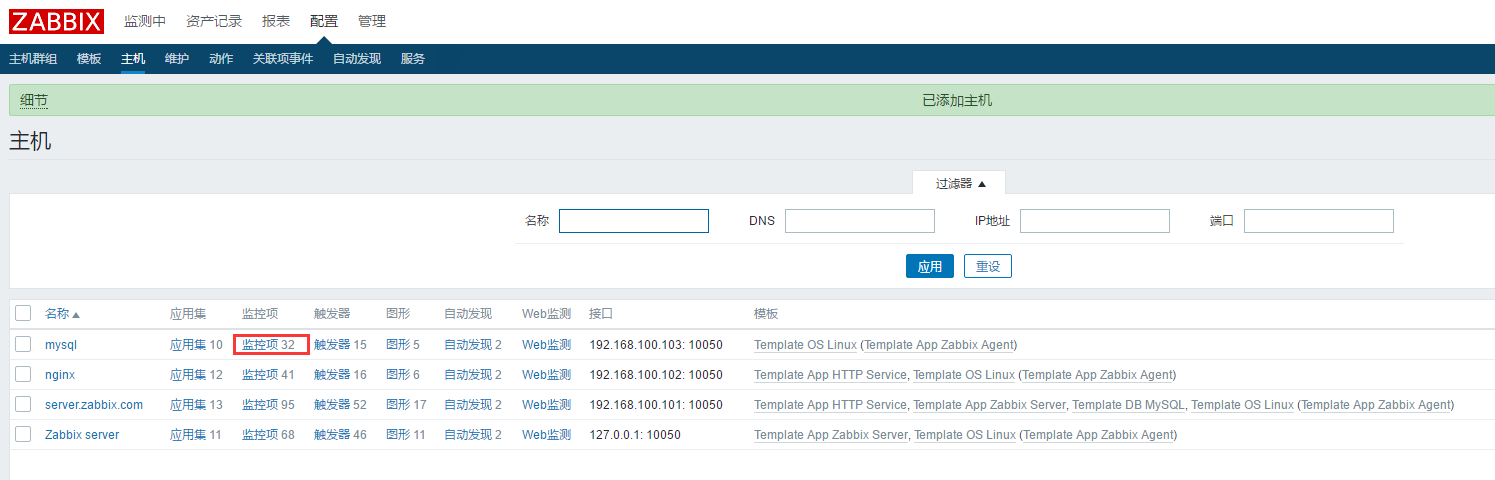
[root@server ~]# zabbix\_get -s 192.168.100.103 -k "mysql.replication"

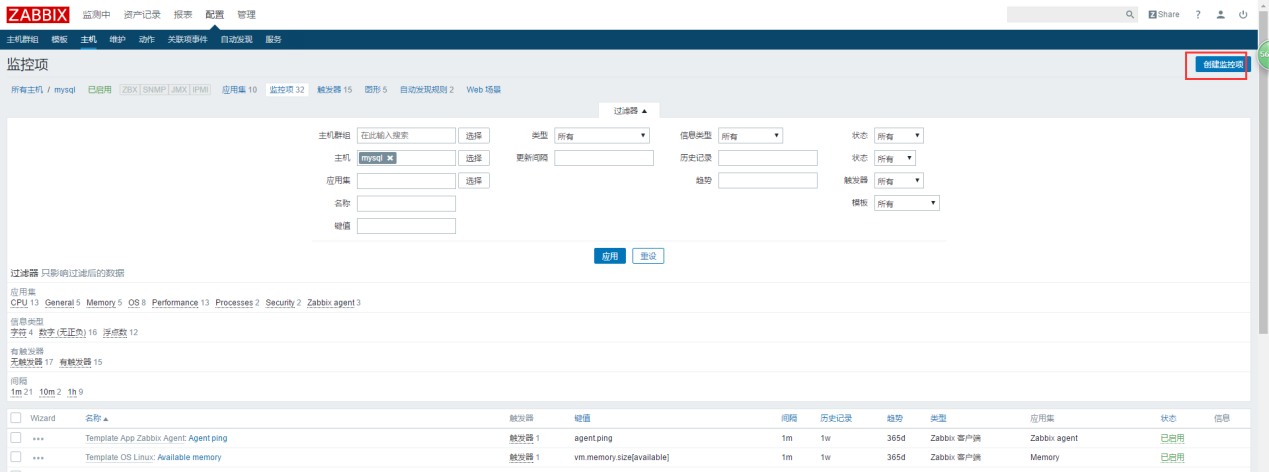
2

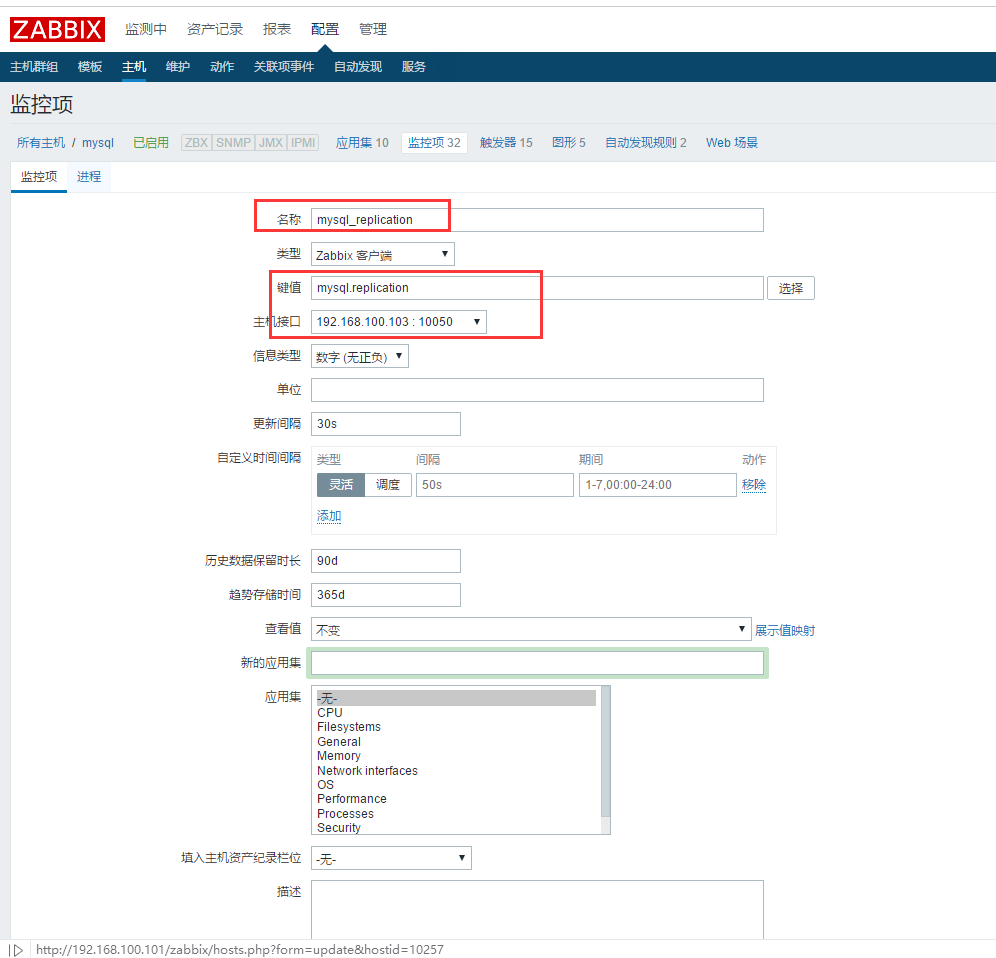


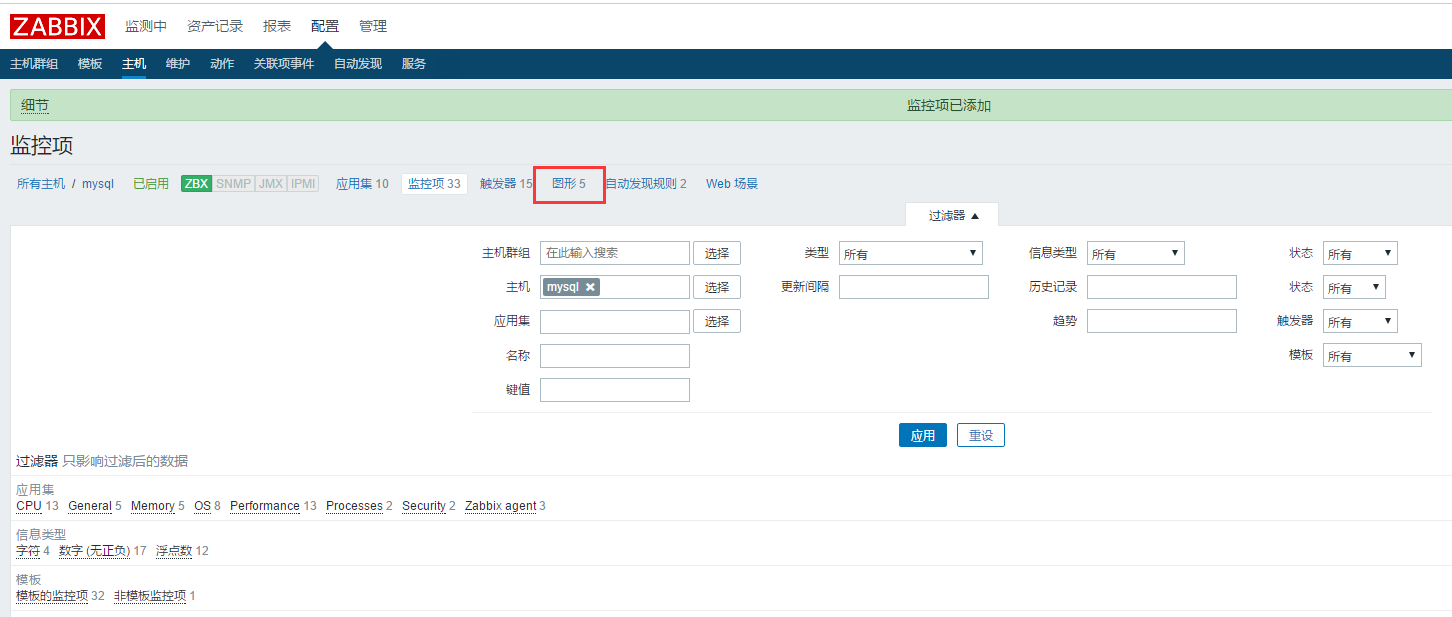


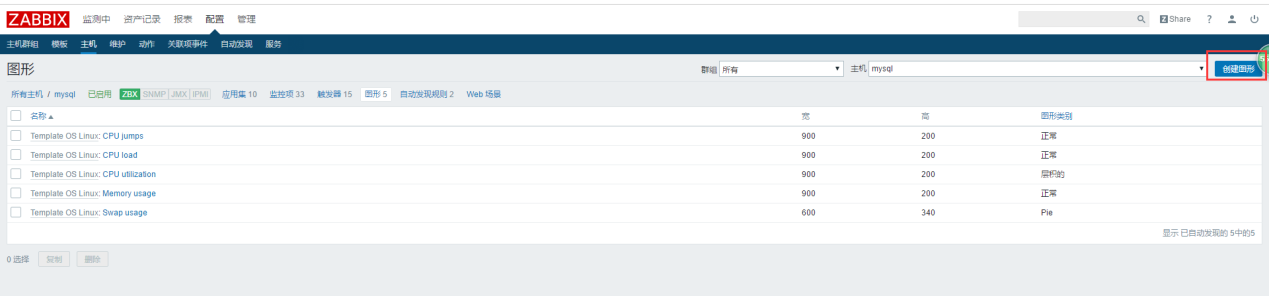


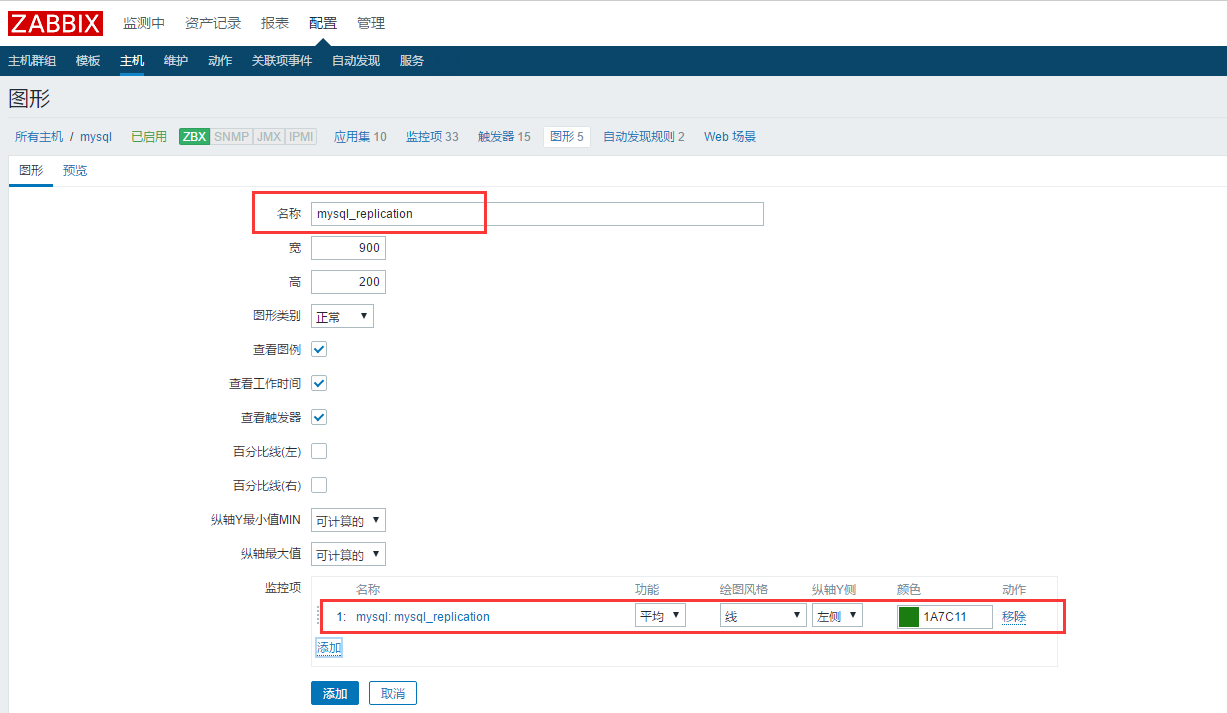




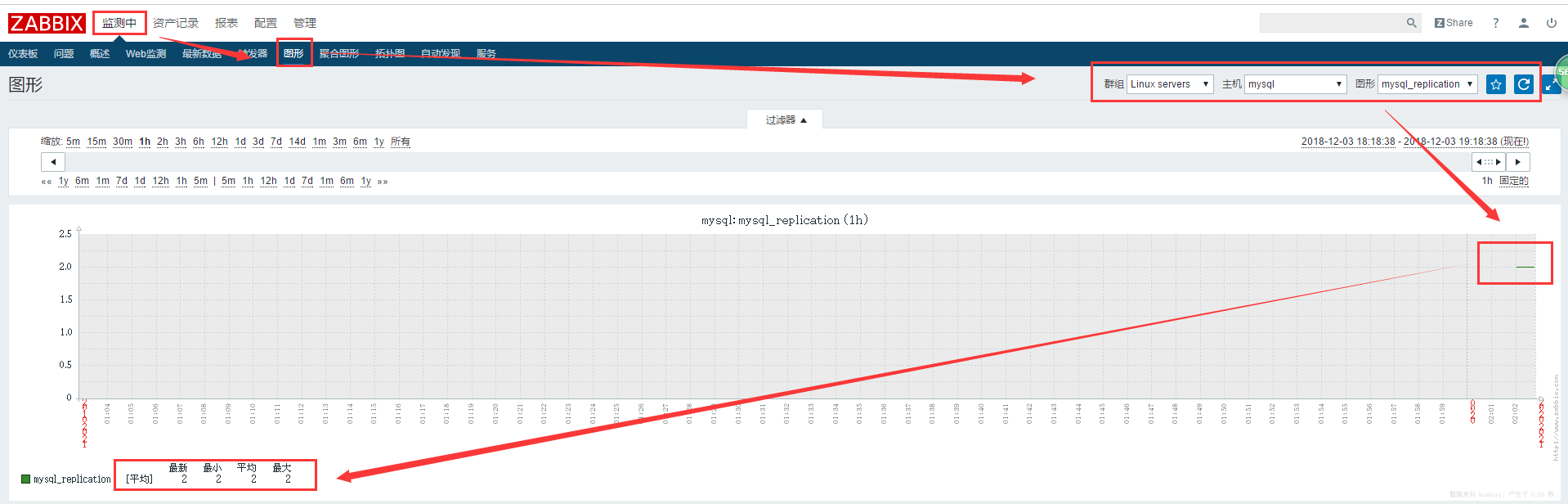








* **测试查看mysql\_replication复制数据；**



**三、**