Grafana部署Zabbix数据源（第二篇）

Zabbix是当前主流开源的企业级分布式监控系统。Zabbix特点是：安装部署较简单，且默认自带了多种监控告警模板。也具备较强的仪表盘展示功能；提供API接口，支持脚本调用；支持自定义编写插件以及监控模板。

一、安装zabbix软件包

确保防火墙、selinux已经关闭

```
# systemctl stop Firewalld
# systemctl disable Firewalld

# sed -i 's/SELINUX=enforcing/SELINUX=disabled/g' /etc/selinux/config
# setenforce 0
```

修改用户资源限制

```
# cat /etc/security/limits.conf
root soft nofile 65535
root hard nofile 65535
* soft nproc 65535
* hard nproc 65535
* soft nofile 65535
* hard nofile 65535
* hard core unlimited
* soft core unlimited
```

安装zabbix yum源

```
# rpm -Uvh https://repo.zabbix.com/zabbix/4.4/rhel/7/x86_64/zabbix-release-4.4-1.el7.noarch.rpm <https://repo.zabbix.com/zabbix/4.4/rhel/7/x86_64/zabbix-release-4.4-1.el7.noarch.rpm>
```

安装epel源，用于支持nginx

```
# yum install epel-release
```

安装zabbix相关软件包

```
# yum search zabbix
# yum -y install zabbix-*
```

或者只安装以下组件

for pkgs in zabbix-server-mysql zabbix-web-mysql zabbix-web-mysql zabbix-agent zabbix-get zabbix-web zabbix-sender zabbix-nginx-conf ;do yum -y install $pkgs;done

zabbix-agent-4.4.7-1.el7.x86_64
zabbix-get-4.4.7-1.el7.x86_64
zabbix-release-4.4-1.el7.noarch
zabbix-server-mysql-4.4.7-1.el7.x86_64
zabbix-web-4.4.7-1.el7.noarch
zabbix-sender-4.4.7-1.el7.x86_64
zabbix-nginx-conf-4.4.7-1.el7.noarch
zabbix-web-mysql-4.4.7-1.el7.noarch

二、安装mariadb并初始化导入zabbix表结构数据

安装mariadb数据库并启动
yum -y install mariadb-*
systemctl enable mariadb
systemctl start mariadb

创建zabbix数据库
create database zabbix character set utf8 collate utf8_bin;
grant all privileges on zabbix.* to 'zabbix'@'localhost' identified by 'zabbix@123';
flush privileges;
quit;

导入数据
zcat /usr/share/doc/zabbix-server-mysql-*/create.sql.gz |mysql -uzabbix -p'zabbix@123' -b zabbix

三、修改zabbix_server.conf并启动zabbix_server

# cat /etc/zabbix/zabbix_server.conf |grep -v "^#" |grep -v "^$" |grep -v grep
LogFile=/var/log/zabbix/zabbix_server.log
LogFileSize=0
DebugLevel=3
PidFile=/var/run/zabbix/zabbix_server.pid
SocketDir=/var/run/zabbix
DBName=zabbix
DBUser=zabbix

```
DBPassword=zabbix@123
StartPollers=16
StartPollersUnreachable=4
StartTrappers=10
StartPingers=8
SNMPTrapperFile=/var/log/snmptrap/snmptrap.log
CacheSize=1024M
StartDBSyncers=8
HistoryCacheSize=1024M
HistoryIndexCacheSize=256M
TrendCacheSize=1024M
Timeout=4
AlertScriptsPath=/usr/lib/zabbix/alertscripts
ExternalScripts=/usr/lib/zabbix/externalscripts
LogSlowQueries=3000
StatsAllowedIP=127.0.0.1

# systemctl enable zabbix-server
# systemctl start zabbix-server
```

四、修改nginx/php-fpm配置，将server端口配置为8080，端口配置没有特殊要求，只要未被占用都可配置。若想使用80端口，则需要注释或修改nginx.conf的server {}段配置

```
# vi /etc/nginx/conf.d/zabbix.conf

 listen          8080;
 server_name     monitor.com;
```

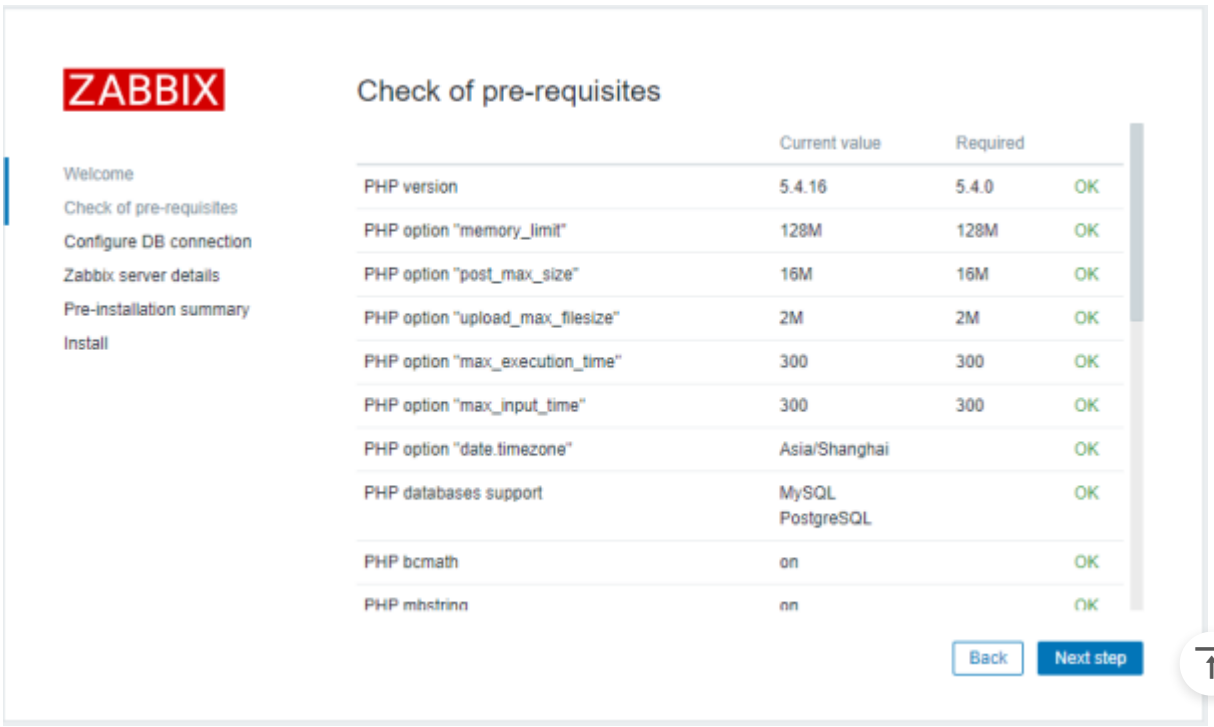
修改php时区

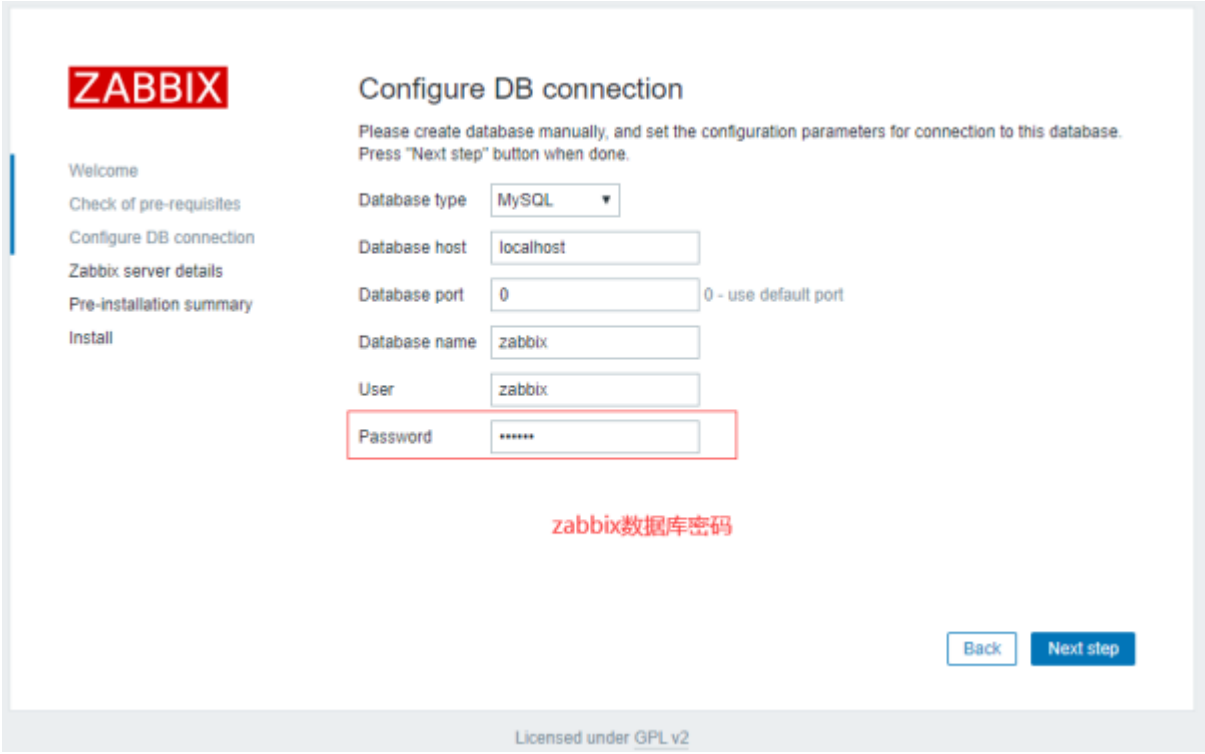
```
# vi /etc/php-fpm.d/zabbix.conf
php_value[date.timezone] = Asia/Shanghai


# systemctl enable php-fpm
# systemctl restart php-fpm

# systemctl enable nginx
```

systemctl start nginx

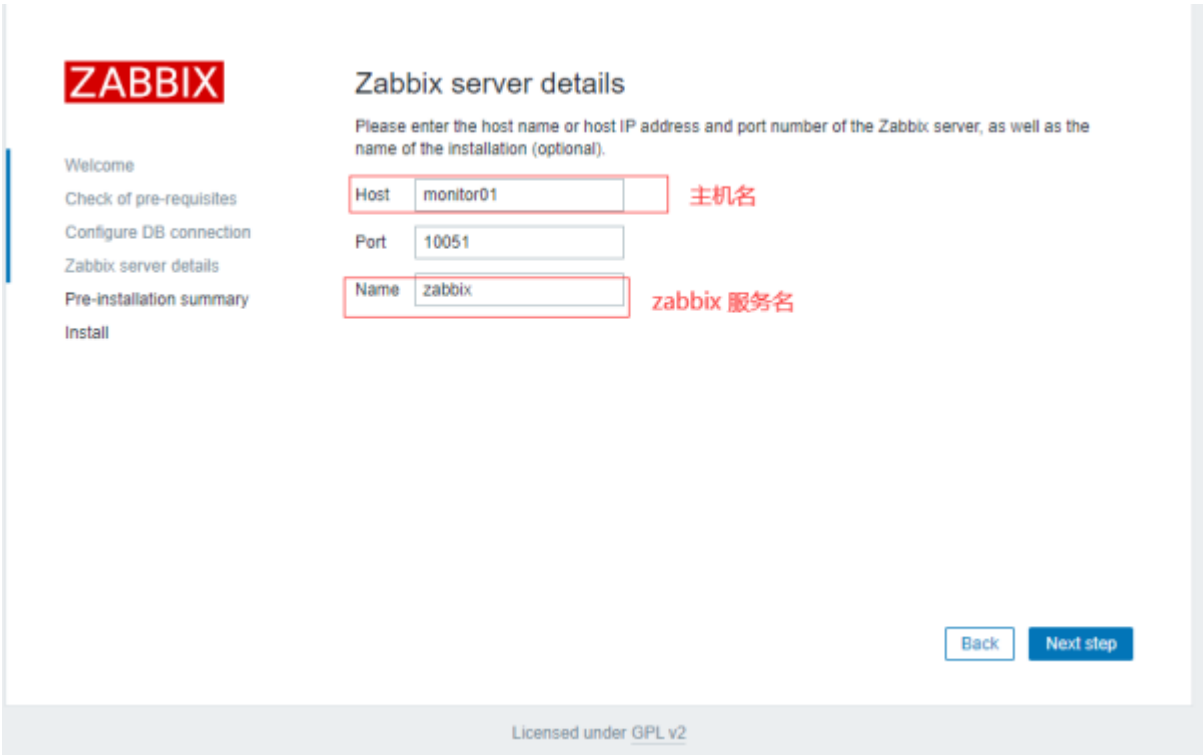
五、设置并登录zabbix系统

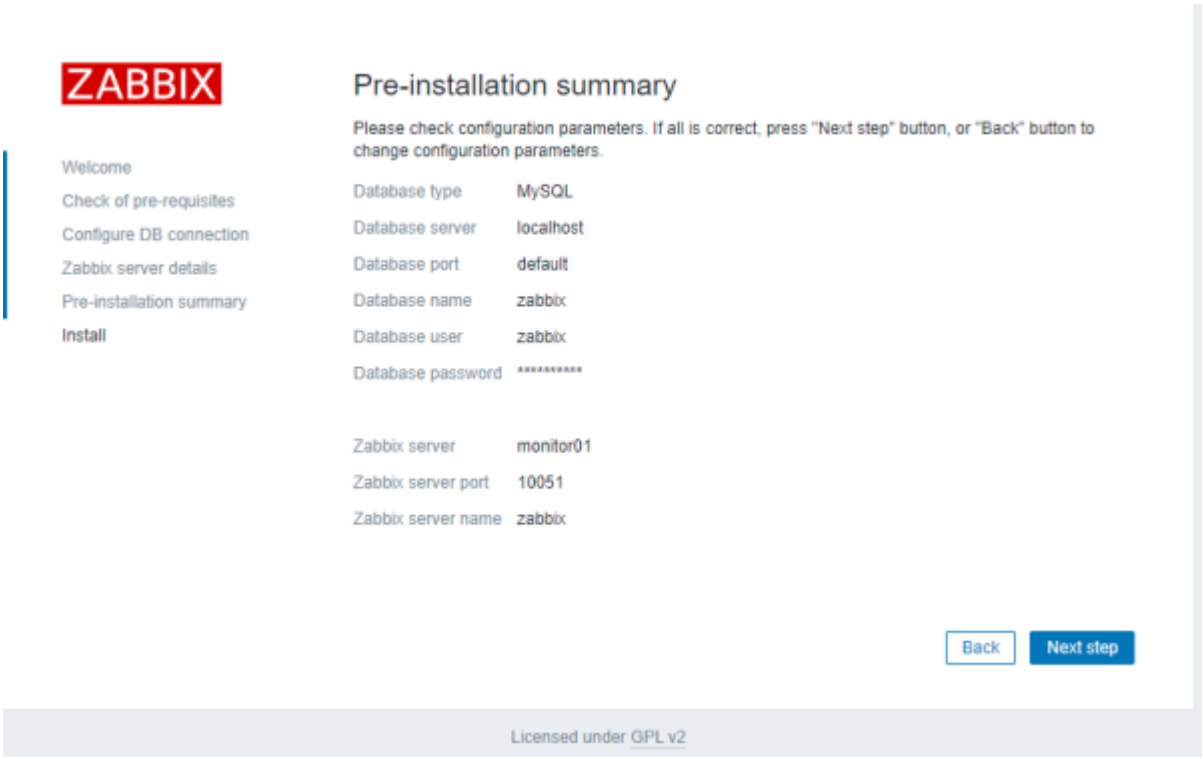
访问 http://IP:port/setup.php <http://IP:port/setup.php>

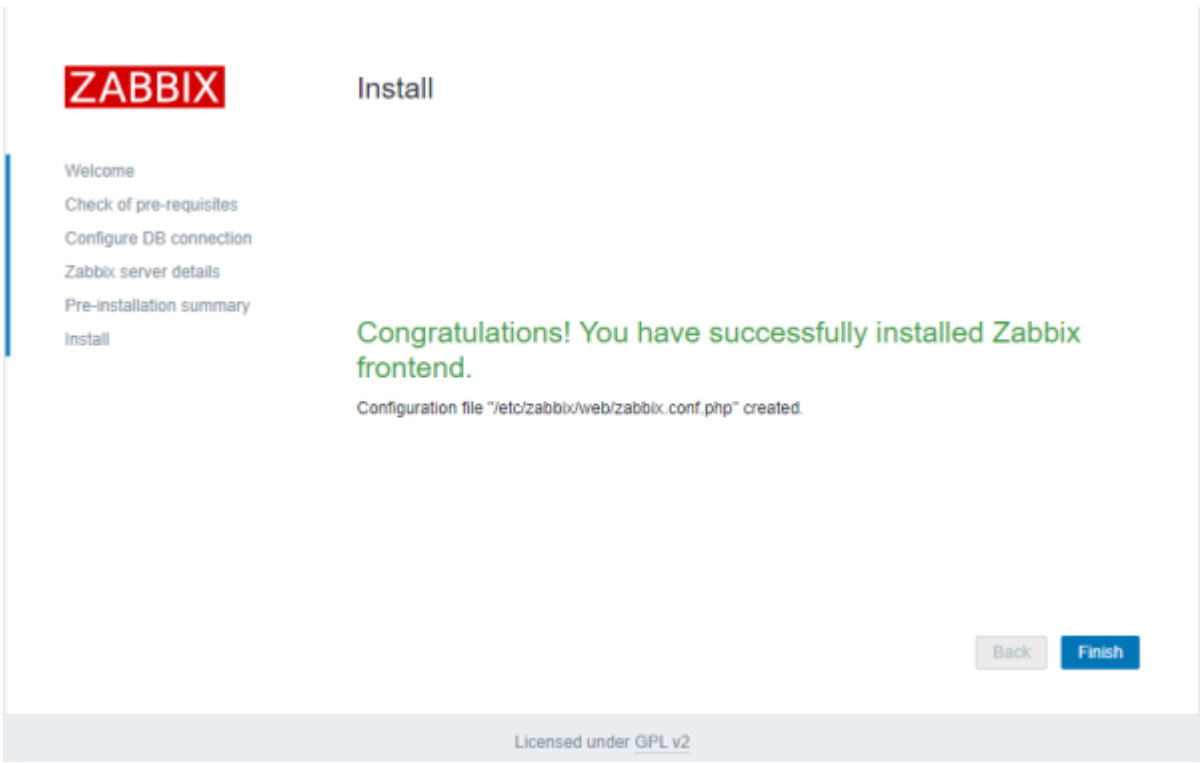


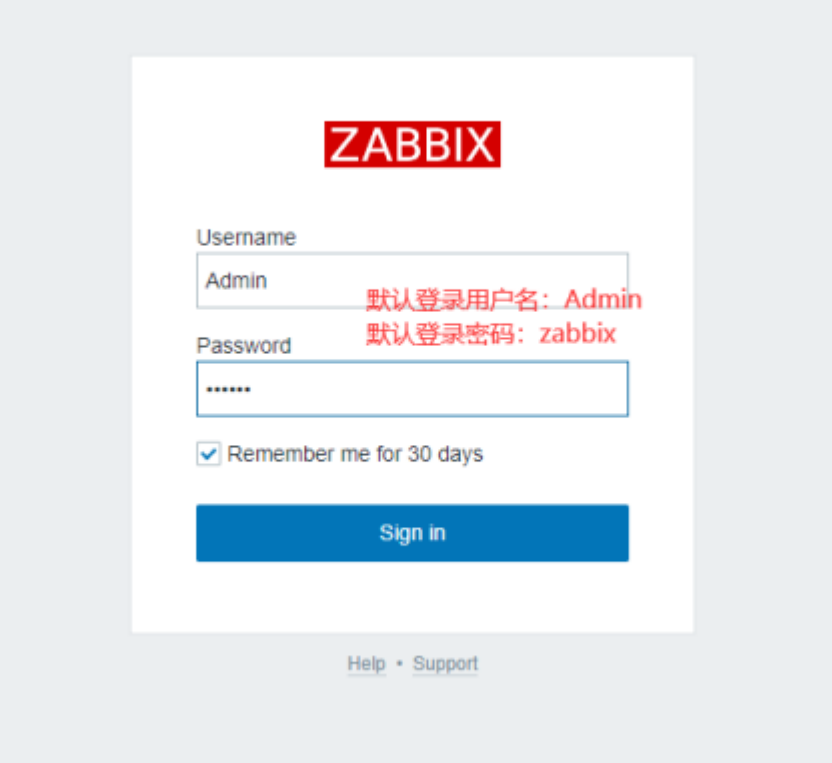


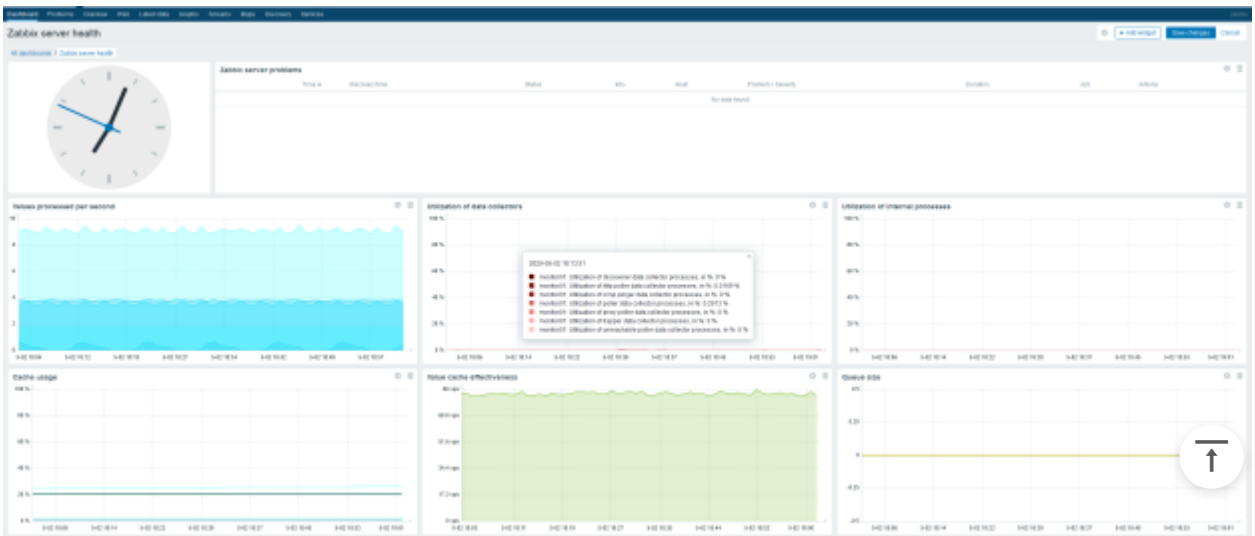
Zabbix 服务名是可选设置




ZABBIX
Welcome
Check of pre-requisites
Configure DB connection
Zabbix server details
Pre-installation summary
Install
Pre-installation summary
Please check configuration parameters. If all is correct, press "Next step" button, or "Back" button to change configuration parameters.
Database type MySQL
Database server localhost
Database port default
Database name zabbix
Database user zabbix
Database password **********
Zabbix server monitor01
Zabbix server port 10051
Zabbix server name zabbix
Back
Next step
Licensed under GPL v2

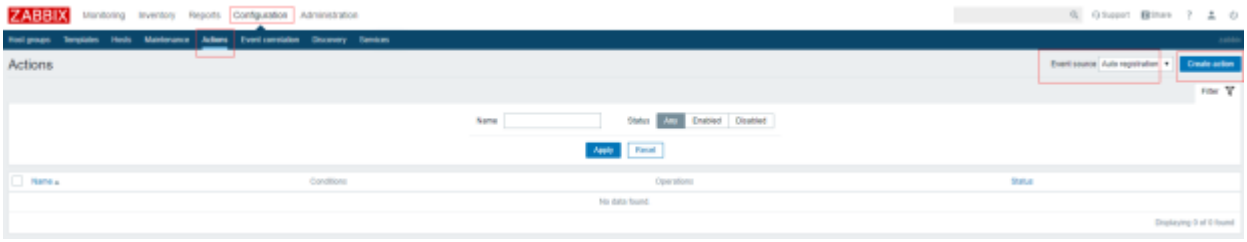

ZABBIX
Welcome
Check of pre-requisites
Configure DB connection
Zabbix server details
Pre-installation summary
Install
Install
Congratulations! You have successfully installed Zabbix frontend.
Configuration file "/etc/zabbix/web/zabbix.conf.php" created.
Back
Finish
Licensed under GPL v2



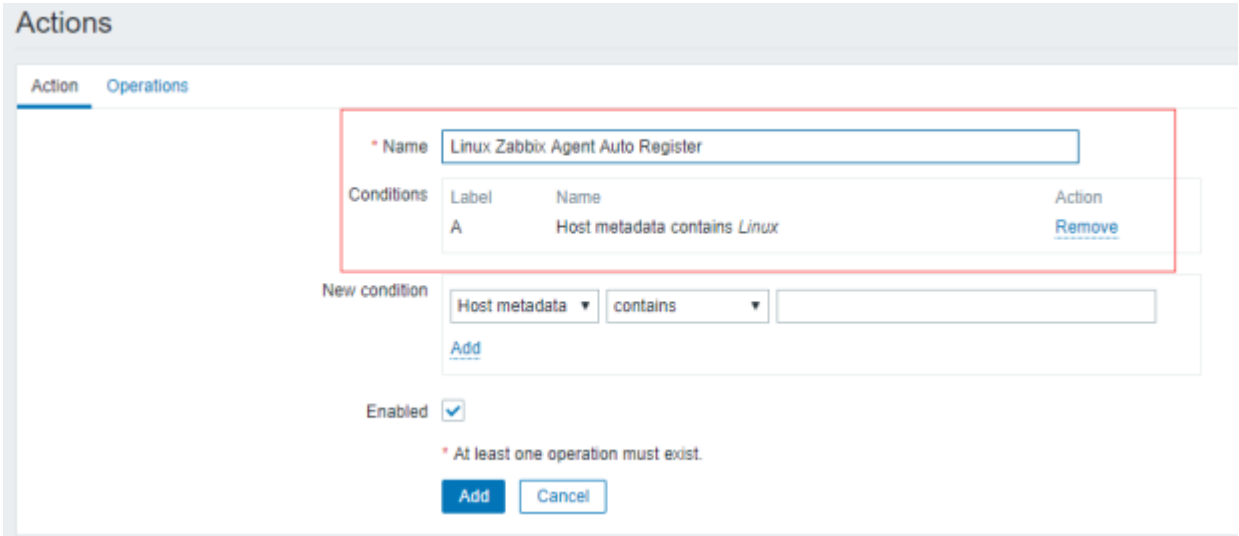


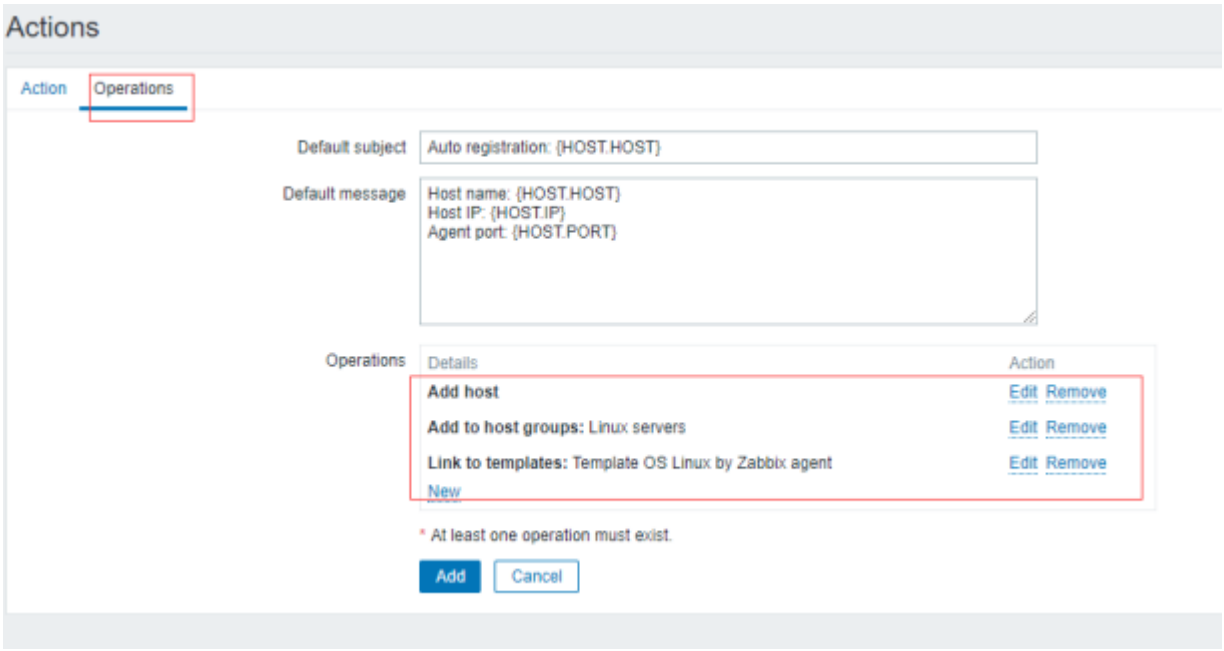
配置action，实现使安装有Zabbix Agent的Linux自动注册到Zabbix Server端。

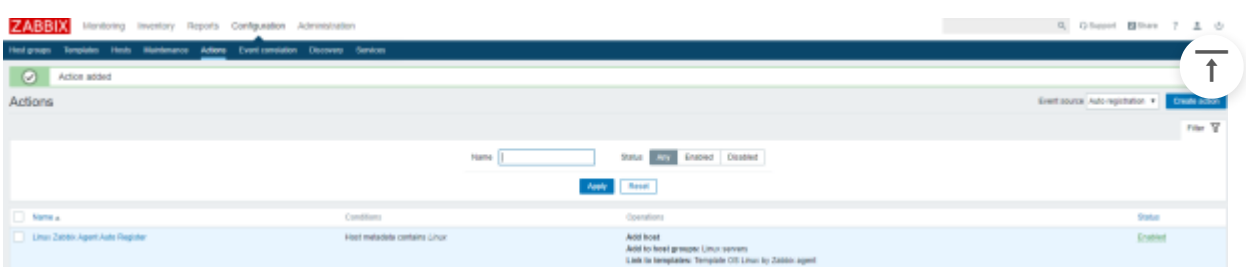
步骤：configuration>>action>>Event source（选择Auto registration）>>Create Action，我们按如下步骤来定义个action



action的名字可以自定义，如"Linux Zabbix Agent Auto Register"







六、安装zabbix-agent

rpm -Uvh https://repo.zabbix.com/zabbix/4.4/rhel/7/x86_64/zabbix-release-4.4-1.el7.noarch.rpm <https://repo.zabbix.com/zabbix/4.4/rhel/7/x86_64/zabbix-release-4.4-1.el7.noarch.rpm>

yum -y install zabbix-agent

修改zabbix-agent配置，monitor01为Zabbix Server主机的hostname，所有Zabbix agent主机上都要添加Zabbix Server主机的hostname。

sed -i "s/Server=127.0.0.1/Server=monitor01/g" /etc/zabbix/zabbix_agentd.conf

sed -i "s/ServerActive=127.0.0.1/ServerActive=monitor01/g" /etc/zabbix/zabbix_agentd.conf

sed -i "s#Hostname=Zabbix server#Hostname=$(hostname)#g" /etc/zabbix/zabbix_agentd.conf

sed -i "s#\# HostMetadataItem=#HostMetadataItem=system.uname#g" /etc/zabbix/zabbix_agentd.conf

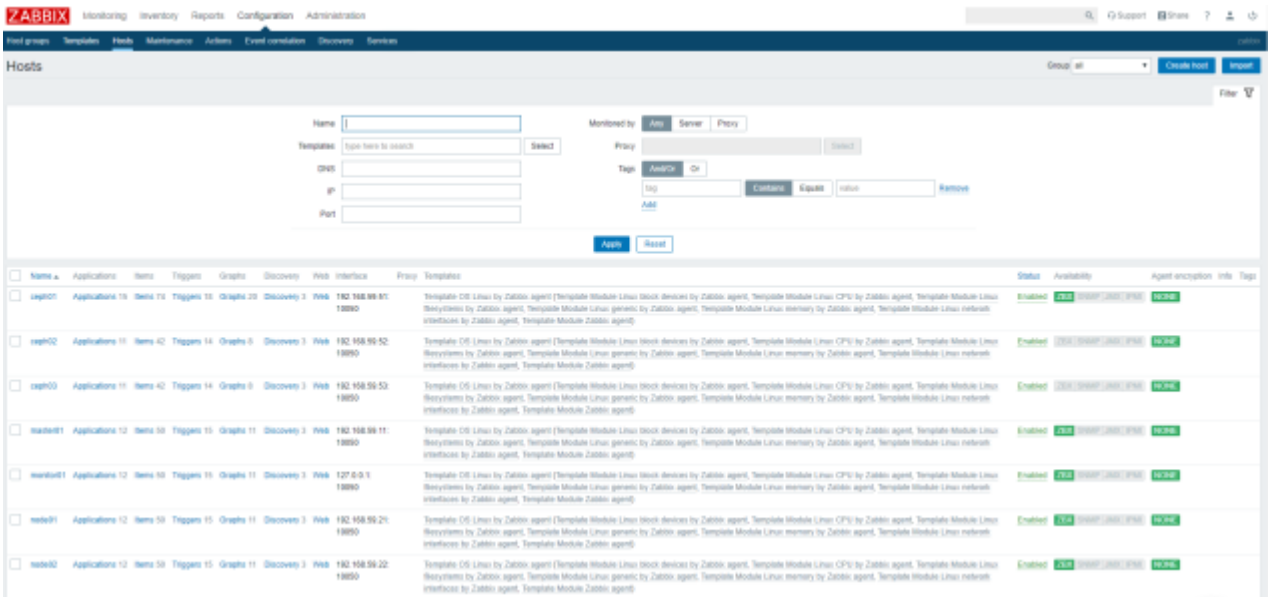
启动zabbix-agent

systemctl enable zabbix-agent

systemctl restart zabbix-agent

如果有几十上百个节点，我们就需要借助Ansible或SaltStack等批量部署工具来快速部署了。

安装Zabbix Agent后的主机会自动注册到Zabbix Server上，并且Availability显示为一绿色的 ZBX 就表示添加成功了。



由于本教程讲述的重点是Grafana的使用，Zabbix仅是为Grafana提供要展示数据的接口，所以不再重点讲述，后续在讲解Grafana使用时会再穿插讲解一些Zabbix使用技巧。