

# Grafana插件安装并接入zabbix(第四篇)

## 一、在线安装插件

如果不指定插件安装位置，则默认安装位置为/var/lib/grafana/plugins；插件安装后需要重启grafana-server。

安装插件前，我们先来看一下插件安装命令grafana-cli的使用，如下图所示。

```
[root@monitor01 ~]# grafana-cli -h
NAME:
  Grafana CLI - A new cli application

USAGE:
  grafana-cli [global options] command [command options] [arguments...]

VERSION:
  6.7.3

AUTHOR:
  Grafana Project <hello@grafana.com>

COMMANDS:
  plugins  Manage plugins for grafana
  admin    Grafana admin commands
  help, h  Shows a list of commands or help for one command

GLOBAL OPTIONS:
  --pluginsDir value      Path to the Grafana plugin directory (default: "/var/lib/grafana/plugins") [$GF_PLUGIN_DIR]
  --repo value            URL to the plugin repository (default: "https://grafana.com/api/plugins") [$GF_PLUGIN_REPO]
  --pluginurl value       Full url to the plugin zip file instead of downloading the plugin from grafana.com/api [$GF_PLUGIN_URL]
  --insecure              skip TLS verification (insecure) (default: false)
  --debug                Enable debug logging (default: false)
  --configoverrides value Configuration options to override defaults as a string. e.g. cfg:default.paths.log=/dev/null
  --homepath value        Path to Grafana install/home path, defaults to working directory
  --config value          Path to config file
  --help, -h             show help (default: false)
  --version, -v          print the version (default: false)
```

```
[root@monitor01 ~]# grafana-cli plugins
NAME:
  Grafana CLI plugins - Manage plugins for grafana

USAGE:
  Grafana CLI plugins command [command options] [arguments...]

COMMANDS:
  install          install <plugin id> <plugin version (optional)>
  list-remote      list remote available plugins
  list-versions    list-versions <plugin id>
  update, upgrade  update <plugin id>
  update-all, upgrade-all  update all your installed plugins
  ls              list all installed plugins
  uninstall, remove  uninstall <plugin id>
  help, h         Shows a list of commands or help for one command

OPTIONS:
  --help, -h    show help (default: false)
  --version, -v print the version (default: false)
```

接下来，我们来安装zabbix插件alexanderzobnin-zabbix-app，如下图所示。

```
# grafana-cli plugins install alexanderzobnin-zabbix-app
```

```
[root@monitor01 plugins]# grafana-cli plugins install alexanderzobnin-zabbix-app
installing alexanderzobnin-zabbix-app @ 3.11.0
from: https://grafana.com/api/plugins/alexanderzobnin-zabbix-app/versions/3.11.0/download
into: /var/lib/grafana/plugins

✓ Installed alexanderzobnin-zabbix-app successfully
Restart grafana after installing plugins . <service grafana-server restart>
```

我们发现，插件仍然安装到/var/lib/grafana下了，先前不是已经修改了插件安装目录到/data/grafana/plugins了么？原因是grafana-cli命令中还写了对应的环境变量，来看看/usr/sbin/grafana-cli文件，其实就是一个shell脚本，如下图所示。

```
[root@monitor01 ~]# cat /usr/sbin/grafana-cli
#!/usr/bin/env bash

# Wrapper for the grafana-cli binary
# This file serves as a wrapper for the grafana-cli binary. It ensures we set
# the system-wide Grafana configuration that was bundled with the package as we
# use the binary.

DEFAULT=/etc/default/grafana

GRAFANA_HOME=/usr/share/grafana
CONF_DIR=/etc/grafana
DATA_DIR=/var/lib/grafana
PLUGINS_DIR=/var/lib/grafana/plugins
LOG_DIR=/var/log/grafana

CONF_FILE=$CONF_DIR/grafana.ini
PROVISIONING_CFG_DIR=$CONF_DIR/provisioning

EXECUTABLE=$GRAFANA_HOME/bin/grafana-cli

if [ ! -x $EXECUTABLE ]; then
    echo "Program not installed or not executable"
    exit 5
fi

# overwrite settings from default file
if [ -f "$DEFAULT" ]; then
    . "$DEFAULT"
fi

OPTS="--homepath=${GRAFANA_HOME} \
--config=${CONF_FILE} \
--pluginsDir=${PLUGINS_DIR} \
--configoverrides='cfg:default.paths.provisioning=$PROVISIONING_CFG_DIR \
cfg:default.paths.data=${DATA_DIR} \
cfg:default.paths.logs=${LOG_DIR} \
cfg:default.paths.plugins=${PLUGINS_DIR}'"

eval $EXECUTABLE "$OPTS" "$@"
```

grafana的环境变量在多个文件中有定义，比如/etc/sysconfig/grafana-server、/usr/sbin/grafana-cli、/etc/init.d/grafana-server，个人觉得不是很友好。

使用--pluginsDir指定安装路径

```
# grafana-cli --pluginsDir=/data/grafana/plugins plugins install alexanderzobnin-zabbix-app
```

也可以直接修改/usr/sbin/grafana-cli中插件默认安装路径，就不需要再指定路径

```
# rafana-cli plugins install alexanderzobnin-zabbix-app
```

重启grafana-server

```
# systemctl restart grafana-server
```

## 二、手动下载离线安装插件

若插件安装时下载超时，可以手动下载安装

手动下载安装方式步骤如下：

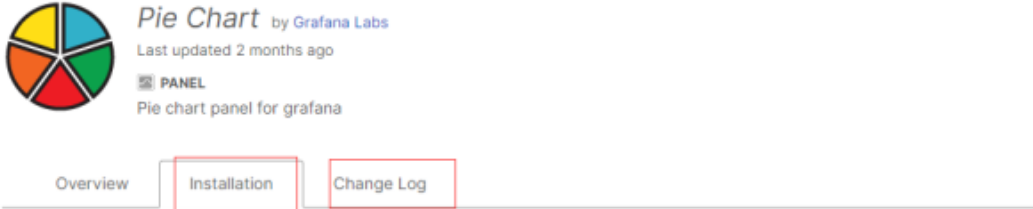
第一步：访问grafana官网 <https://grafana.com/grafana/plugins?orderBy=weight&direction=asc>  
<<https://grafana.com/grafana/plugins?orderBy=weight&direction=asc>>

第二步：查找要下载的插件，如：Pie Chart



第三步：从Installation和Change Log中分别获取到插件名和版本号，得到下载地址

All Plugins » Pie Chart



### Installing on a local Grafana:

For local instances, plugins are installed and updated via a simple CLI command.

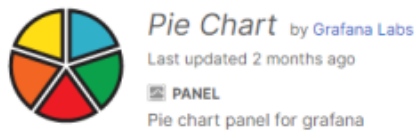
Plugins are not updated automatically, however you will be notified when updates are available right within your Grafana.

#### ① Install the Panel

Use the grafana-cli tool to install Pie Chart from the commandline:

```
grafana-cli plugins install grafana-piechart-panel
```

All Plugins » Pie Chart



### Change Log

#### [1.4.0] - 2020-02-04

- Added combine option for legend

#### [1.3.9] - 2019-09-05

- Fixed dark/light mode text font colors: #189.

则下载地址为：<https://grafana.com/api/plugins/grafana-piechart-panel/versions/1.4.0/download>

备注：其实我们使用在线安全命令时就会给出下载地址，如下图所示：

```
[root@monitor01 ~]# grafana-cli plugins install agenty-flowcharting-panel
installing agenty-flowcharting-panel @ 0.8.1
from: https://grafana.com/api/plugins/agenty-flowcharting-panel/versions/0.8.1/download
into: /var/lib/grafana/plugins
```

第四步：下载并解压到插件目录，重启grafana-server使生效。

```
# wget https://grafana.com/api/plugins/grafana-piechart-panel/versions/1.4.0/download -O grafana-piechart-panel.zip
# unzip grafana-piechart-panel.zip
```

```
# mv grafana-piechart-panel-b707cd5/ /data/grafana/plugins/grafana-piechart-panel
# systemctl restart grafana-server
```

#### 常用插件下载

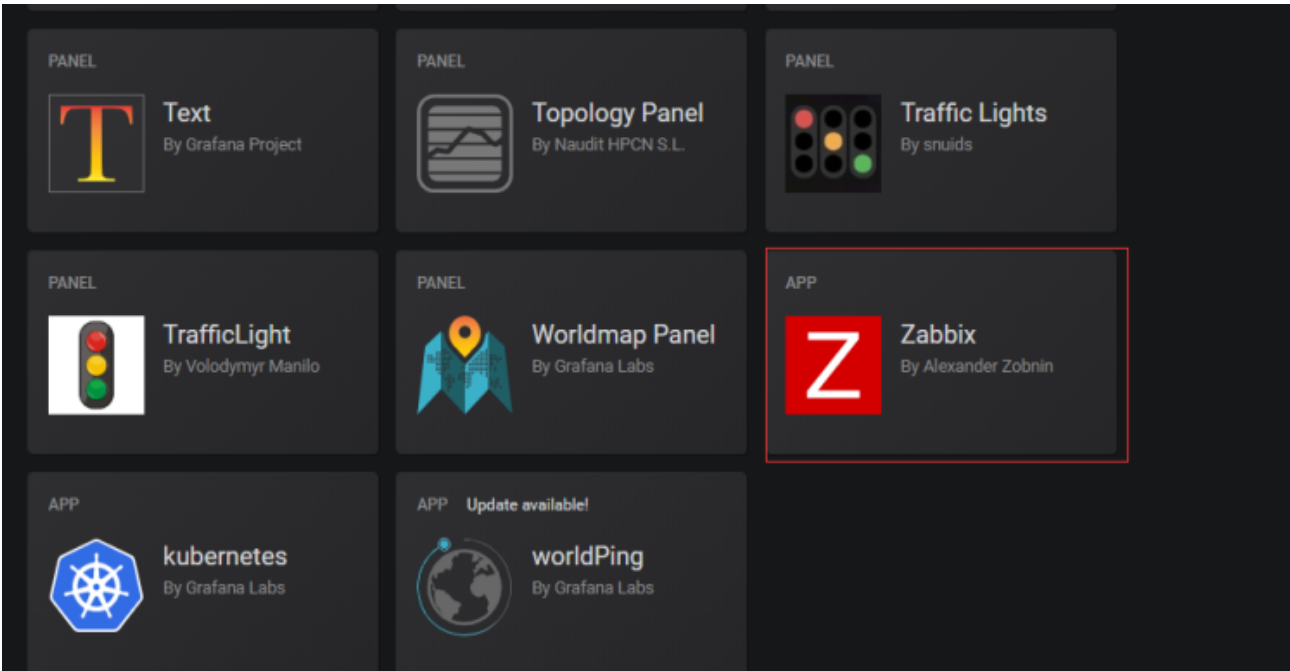
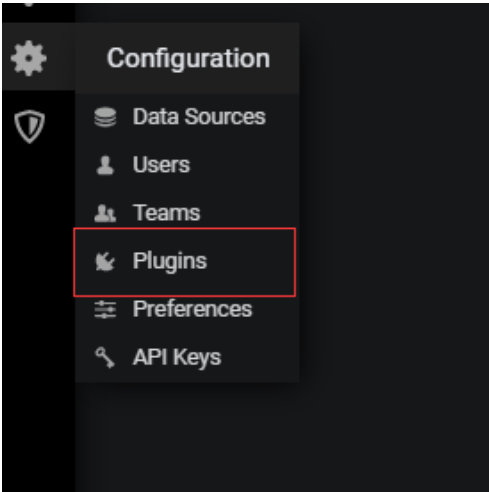
```
# grafana-cli plugins install alexanderzobnin-zabbix-app
# grafana-cli plugins install grafana-piechart-panel
# grafana-cli plugins install agenty-flowcharting-panel
# grafana-cli plugins install grafana-clock-panel
# grafana-cli plugins install pierosavi-imageit-panel
# grafana-cli plugins install jdbranhm-diagram-panel
# grafana-cli plugins install agenty-flowcharting-panel
```

```
wget https://grafana.com/api/plugins/alexanderzobnin-zabbix-app/versions/3.11.0/download
<https://grafana.com/api/plugins/alexanderzobnin-zabbix-app/versions/3.11.0/download> -O
alexanderzobnin-zabbix-app-3.11.0.zip
wget https://grafana.com/api/plugins/grafana-piechart-panel/versions/1.5.0/download
<https://grafana.com/api/plugins/grafana-piechart-panel/versions/1.5.0/download> -O grafana-piechart-
panel-1.5.0.zip
wget https://grafana.com/api/plugins/grafana-clock-panel/versions/1.0.3/download
<https://grafana.com/api/plugins/grafana-clock-panel/versions/1.1.1/download> -O grafana-clock-panel-
1.0.3.zip
wget https://grafana.com/api/plugins/pierosavi-imageit-panel/versions/0.1.3/download
<https://grafana.com/api/plugins/pierosavi-imageit-panel/versions/0.1.3/download> -O pierosavi-
imageit-panel-0.1.3.zip
wget https://grafana.com/api/plugins/agenty-flowcharting-panel/versions/0.8.1/download
<https://grafana.com/api/plugins/agenty-flowcharting-panel/versions/0.8.1/download> -O agenty-
flowcharting-panel-0.8.1.zip
wget https://grafana.com/api/plugins/snuids-radar-panel/versions/1.4.4/download
<https://grafana.com/api/plugins/snuids-radar-panel/versions/1.4.4/download> -O snuids-radar-panel-
1.4.4.zip
wget https://grafana.com/api/plugins/jdbranhm-diagram-panel/versions/1.6.2/download
<https://grafana.com/api/plugins/jdbranhm-diagram-panel/versions/1.6.2/download> -O jdbranhm-
diagram-panel-1.6.2.zip
```

### 三、配置Zabbix数据源

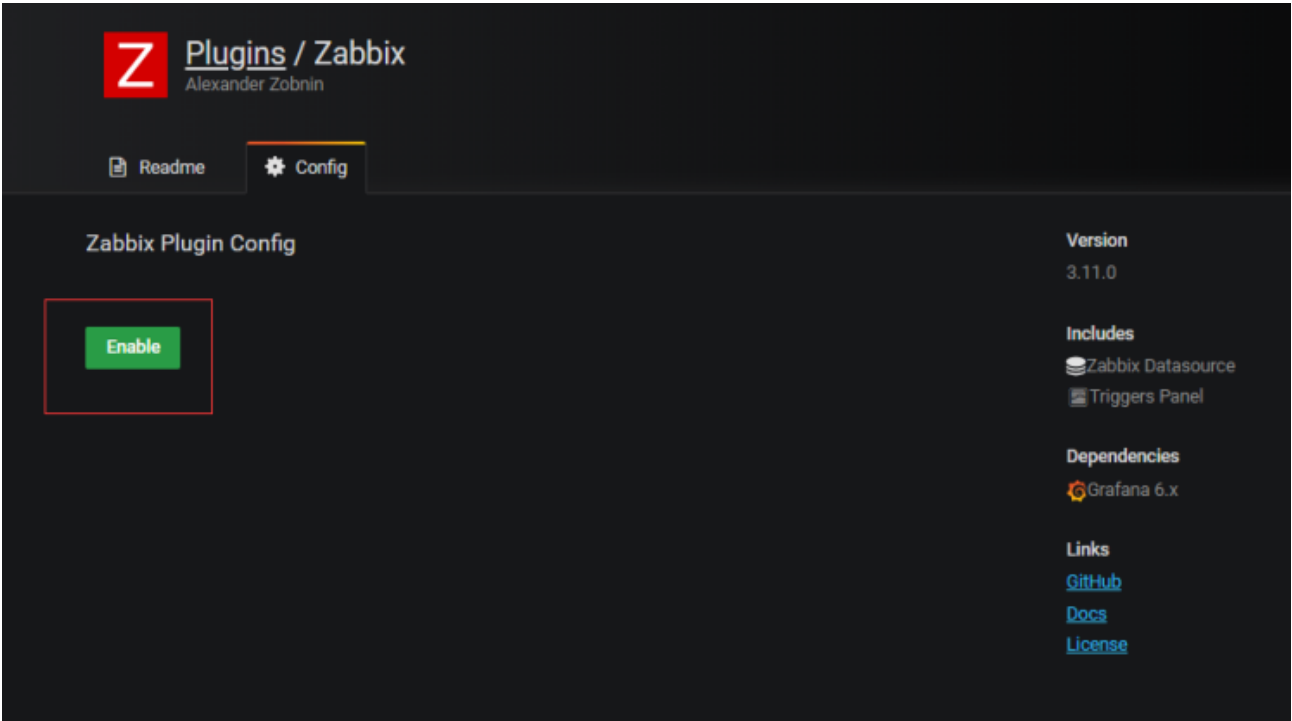
安装好alexanderzobnin-zabbix-app插件并重启grafana-server后，我们就可以在Plugins(插件)列表中看到zabbix图标，如下图所示。



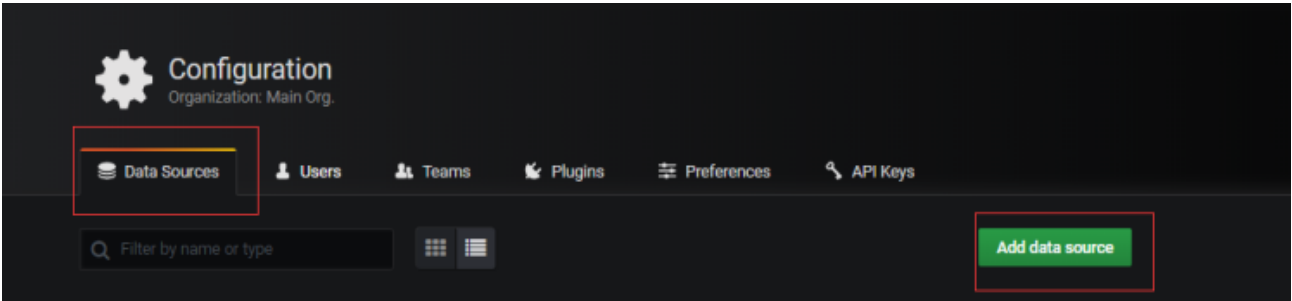


点击Zabbix图标，点击"Enable"，激活Zabbix插件，如下图所示。





完成上述Enable操作后，再回到"Data Sources" 菜单，点击"Add data source"，添加数据源，如下图所示。



在URL栏输入Zabbix的接口地址，如[http://192.168.59.250:8080/api\\_jsonrpc.php](http://192.168.59.250:8080/api_jsonrpc.php)  
<[http://192.168.59.250:8080/api\\_jsonrpc.php](http://192.168.59.250:8080/api_jsonrpc.php)>，在Useranme和Password输入Zabbix的登录用户以及密码  
(为安全起见，也可以在Zabbix中为Grafana创建只读用户) 如下图所示。



Access

Server (default)

Help?

Whitelisted Cookies

Add Name

Add

Auth

Basic auth

With Credentials

TLS Client Auth

With CA Cert

Skip TLS Verify

Forward OAuth Identity

Custom HTTP Headers

Add Header

Zabbix API details

Username

Admin

Password

••••••

Trends

Cache TTL

1h

Zabbix version

4.x

Direct DB Connection

Enable

Alerting

Enable alerting

↑

完成上述相关设置后，点击"Save & Test" 完成测试，若返回绿色状态，则表示Zabbix数据源配置成功，如下图所示。

Zabbix version4.x

Direct DB Connection

Enable

Alerting

Enable alerting

Other

Disable acknowledges for read-only users

✓ Zabbix API version: 4.4.6

Save & TestDeleteBack

