

# 说明

## 服务启动

执行`python main.py [zabbixIP]`即可启动后台服务

启动之后访问 `localhost:5000/test` 能查看到如下页面即代表服务正常



## example

### 1. 获取指定名称的host信息

在zabbix官方api文档[\[https://www.zabbix.com/documentation/4.0/zh/manual/api\]](https://www.zabbix.com/documentation/4.0/zh/manual/api)中找到查询host信息的api(host.get[主机->获取]), 可以看到请求参数为

#### 通过名称获取数据

获取所有关于“Zabbix server”和“Linux server”两个主机的数据 请求:

```
{
  "jsonrpc": "2.0",
  "method": "host.get",
  "params": {
    "filter": {
      "host": [
        "Zabbix server",
        "Linux server"
      ]
    }
  },
  "auth": "038e1d7b1735c6a5436ee9eae095879e",
  "id": 1
}
```

首先使用login()进行鉴权, 这个操作即给我们的请求参数附带了auth的值

请求参数的method为host.get,所以我们调用的时候使用`zapi.host.get()`方法即可发送相应的请求,

请求参数中使用了filter，所以在get后的括号内填入filter=xxx（填入的值为请求参数的内容，例如官方模板中为{'host':['zabbix server','Linux server']}），我们只查询名称为 BIGDATADEV\_1\_LINUXS 的Host 相关的信息所以我们填入参数{'host': ['BIGDATADEV\_1\_LINUXS']}

## 总结

method是什么，就使用zapi.xxx来调用对应的api

括号内的请求参数直接填params里边的内容即可，如params下有filter参数，就填入filter=xxx，如果还有filter2,则填入(filter=xxx,filter2=xxx)

## 代码实现

修改api.py文件，在文件最后添加如下代码

```
@app.route('/example/hostname')
def getHostName():
    login()
    hostResp = zapi.host.get(filter={'host': ['BIGDATADEV_1_LINUXS']})
    result = {
        'code': 0,
        'data': hostResp,
        'message': ''
    }

    return result
```

修改完成后重新启动main.py带上相应的zabbixIP参数即可将api暴露出来通过浏览器访问

访问链接 localhost:5000/example/hostname 即可得到返回数据

```
{
  "code": 0,
  "data": [
    {
      "auto_compress": "1",
      "available": "1",
      "description": "",
      "disable_until": "0",
      "error": "",
      "errors_from": "0",
      "flags": "0",
      "host": "BIGDATADEV_1_LINUXS",
      "hostid": "10395",
      "ipmi_authtype": "-1",
      "ipmi_available": "0",
      "ipmi_disable_until": "0",
      "ipmi_error": "",
      "ipmi_errors_from": "0",
      "ipmi_password": "",
      "ipmi_privilege": "2",
      "ipmi_username": "",
      "jmx_available": "0",
```

```

        "jmx_disable_until": "0",
        "jmx_error": "",
        "jmx_errors_from": "0",
        "lastaccess": "0",
        "maintenance_from": "0",
        "maintenance_status": "0",
        "maintenance_type": "0",
        "maintenanceid": "0",
        "name": "BIGDATADEV_1_LINUXS",
        "proxy_address": "",
        "proxy_hostid": "0",
        "snmp_available": "0",
        "snmp_disable_until": "0",
        "snmp_error": "",
        "snmp_errors_from": "0",
        "status": "0",
        "templateid": "0",
        "tls_accept": "1",
        "tls_connect": "1",
        "tls_issuer": "",
        "tls_psk": "",
        "tls_psk_identity": "",
        "tls_subject": ""
    }
],
    "message": ""
}

```

## 2. 获取某个host下指定名称的item

例如我们获取BIGDATADEV\_1\_LINUXS下的CPU idle time的值

•	BIGDATADEV_1_LINUXS	CPU (15 分钟)			
<input type="checkbox"/>		Context switches per second	2020-09-29 10:15:48	4.27 Kops	+150 ops
<input type="checkbox"/>		CPU guest nice time	2020-09-29 10:15:50	0 %	
<input type="checkbox"/>		CPU guest time	2020-09-29 10:15:49	0 %	
<input type="checkbox"/>		CPU idle time	2020-09-29 10:15:51	99.7524 %	-0.2401 %
<input type="checkbox"/>		CPU interrupt time	2020-09-29 10:15:52	0 %	
<input type="checkbox"/>		CPU kernel time	2020-09-29 10:15:53	0.0125 %	-0.0292 %
<input type="checkbox"/>		CPU nice time	2020-09-29 10:15:54	0 %	
<input type="checkbox"/>		CPU softirq time	2020-09-29 10:15:56	0.4046 %	+0.0044 %
<input type="checkbox"/>		CPU steal time	2020-09-29 10:15:56	0 %	
<input type="checkbox"/>		CPU system time	2020-09-29 10:15:57	1.4765 %	-0.0321 %
<input type="checkbox"/>		CPU user time	2020-09-29 10:15:58	1.2051 %	+5.1261 %
<input type="checkbox"/>		Interrupts per second	2020-09-29 10:15:44	801 ips	+31 ips
<input type="checkbox"/>		Processor load (1 min average per core)	2020-09-29 10:15:46	0.843	-0.0517
<input type="checkbox"/>		Processor load (5 min average per core)	2020-09-29 10:15:47	0.6769	-0.0155
<input type="checkbox"/>		Processor load (15 min average per core)	2020-09-29 10:15:45	0.5825	-0.0044

官方文档中的请求参数

Request:

```
{
  "jsonrpc": "2.0",
  "method": "item.get",
  "params": {
    "output": "extend",
    "hostids": "10084",
    "search": {
      "key_": "system"
    },
    "sortfield": "name"
  },
  "auth": "038e1d7b1735c6a5436ee9eae095879e",
  "id": 1
}
```

### 修改api.py文件

```
@app.route('/example/curValue')
def getCurValueExp():
    resultMap = {}
    hostName = request.args.get('hostName')
    itemName = request.args.get('itemName')

    login()
    # 获取hostid
    hostResp = zapi.host.get(filter={'host': [hostName]})
    hostid = hostResp[0]['hostid']

    # 查询item的值
    itemResp = zapi.item.get(output='extend', hostids=hostid,
                             search={'name': itemName}, sortfield='name')

    resultMap[hostName] = {
        itemName: itemResp[0]['lastvalue']
    }

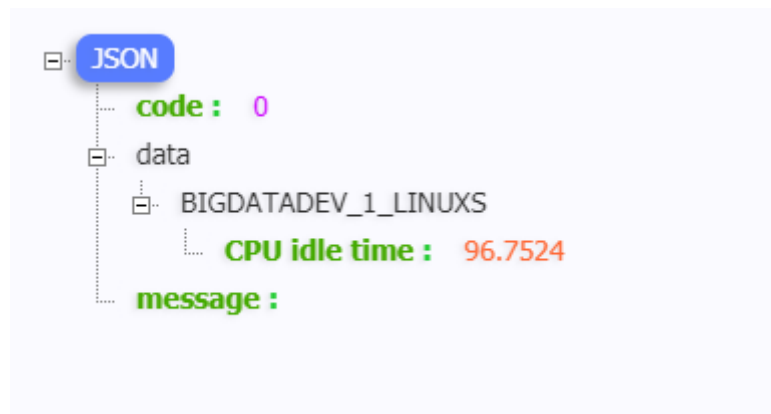
    result = {
        'code': 0,
        'data': resultMap,
        'message': ''
    }

    return result
```

访问链接localhost:5000/example/curValue?hostName=BIGDATADEV\_1\_LINUXS&itemName=CPU  
idle time

在链接后附带的参数在代码中可以通过request.args.get(参数名称)获取到

接口返回结果如下



```
{
  "code": 0,
  "data": {
    "BIGDATADEV_1_LINUXS": {
      "CPU idle time": "96.7524"
    }
  },
  "message": ""
}
```