解决学校服务器流量问题方案

Sina @偏不写作业
Github xbw12138
CSDN xbw12138

服务器版本

Ubuntu 16.04.4 LTS (GNU/Linux 4.15.0–36–generic x86_64)

问题

校园网流量不够用，使用ipv6免流量上网

解决方案

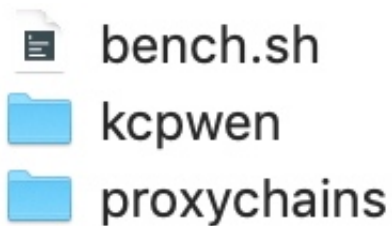kcptun + ss + proxychains

使用方法

1. 文件下载

下载后目录文件，上传至服务器

📄 bench.sh
📁 kcpwen   ▶
📁 proxychains   ▶

2. kcpwen目录介绍

config为配置文件，包含kcptun配置文件，ss配置文件

kcptun.json

此配置文件直接在使用kcptun加速的vps上获取，我们这里使用vps服务器的ipv6地址，本地代理端口为1086，需要与ss本地端口匹配，与proxychains代理端口匹配

```json
{
    "localaddr": ":1086",
    "remoteaddr": "[2001:19f0:xxxx:xxxx:xxxx:xxxx:xxxx]:29900",
    "key": "xbw12138",
    "crypt": "aes",
    "mode": "fast3",
    "mtu": 1350,
    "sndwnd": 512,
    "rcvwnd": 512,
    "datashard": 10,
    "parityshard": 3,
    "dscp": 0,
    "nocomp": false,
    "quiet": false
}
```

ss.json

```json
{
    "server":"127.0.0.1",
    "local_address": "127.0.0.1",
```

```
    "local_port":1080,
    "server_port":1086,
    "password":"xbw12138",
    "timeout":300,
    "method":"aes-256-cfb"
}
```

ipv6.py

校园网登录脚本，例如
登录 python ipv6.py login S20186184X 123456
注销 python ipv6.py logout
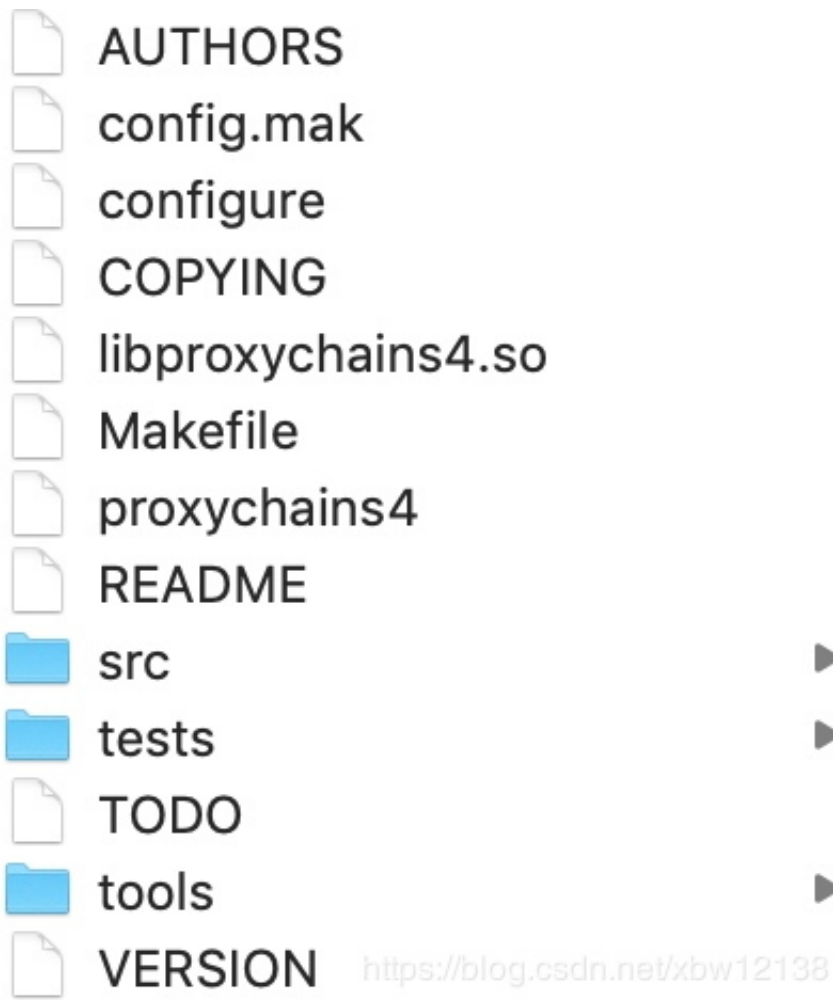
ipv6.sh

整合一键启动
./ipv6.sh
输入网关账号密码直接进行网络连接

kcptun

kcptun客户端
./kcptun -c config/kcptun.json

log

日志

3. proxychains目录介绍

AUTHORS

config.mak

configure

COPYING

libproxychains4.so

Makefile

proxychains4

README

📁 src ▶

📁 tests ▶

TODO

📁 tools ▶

VERSION

配置文件在src/proxychains.conf中配置
使用方法
./proxychains4 –q –f src/proxychains.conf wget www.baidu.com
可以使用别名代替，例如

vim ~/.bashrc
在文件最后追加

```
alias pc='/home/bowen/ipv6/proxychains/proxychains4  -q -f /home/bowen/ipv6/proxyc
hains/src/proxychains.conf'
```

source ~/.bashrc

之后就可以直接使用 pc wget www.baidu.com

4.一键启动

kcpwen/ipv6.sh

```
bowen@user-Super-Server:~$ ipv6/kcpwen/ipv6.sh
输入网关账号:S201861847
输入网关密码:▓▓ ▓▓
ipv6登录成功
网络连接成功
使用proxychains全局代理
例如
../proxychains/proxychains4 -q -f ../proxychains/src/proxychains.conf wget www.baidu.com
或者使用别名 pc wget www.baidu.com
bowen@user-Super-Server:~$
```

Code

ipv6.py

```python
#!/usr/bin/python
# -*- coding: utf-8 -*-
import requests
import os
import json
import sys

def login(username, password):
    if username == "" or password == "":
        return "请填写用户名密码"
    else:
        url = 'https://lgn6.bjut.edu.cn'
        d = {'DDDDD': username, 'upass': password,'v46s':'2','v6ip':'','f4serip':'
172.21.75.57','0MKKey':''}
        r = requests.post(url, data=d)
        r.encoding='gbk'
        if u'登录成功窗' in r.text :
            return "ipv6登录成功"
        else :
            return "ipv6登录失败"
def function(argv):
    if argv[1] == 'login':
        if len(argv) == 4:
            username = argv[2]
            password = argv[3]
            info = login(username, password)
            print(info)
```

```python
        else :
            print("请输入网关账号密码,例如 python ipv6 login S201861847 123456")
        """
        try:
            with open("ipv6.json",'r') as load_f:
                load_dict = json.load(load_f)
                username = load_dict['username']
                password = load_dict['password']
                info = login(username, password)
                print(info)
        except IOError:
            print("配置文件读取失败")
        """
    elif argv[1] == 'logout':
        url = 'https://lgn6.bjut.edu.cn/F.htm'
        headers = {
            'Accept': 'text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,*/*;q=0.8',
            'Accept-Encoding': 'gzip, deflate, br',
            'Accept-Language': 'zh-CN,zh;q=0.9',
            'Connection': 'keep-alive',
            'Cookie': 'Hm_lvt_cdce8cda34e84469b1c8015204129522=1547906203; __lnkrntdmcvrd=-1',
            'Host': 'lgn6.bjut.edu.cn',
            'Referer': 'https://lgn6.bjut.edu.cn/',
            'Upgrade-Insecure-Requests': '1',
            'User-Agent': 'Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_3) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/71.0.3578.98 Safari/537.36',
        }
        resp = requests.get(url=url, headers=headers,timeout=1)
        if resp.status_code==200:
            print("退出登录成功")
        else:
            print("退出登录失败")
if __name__ == "__main__":
    if len(sys.argv)==1:
        print("请输入参数\n1.login\n2.logout")
    else:
        function(sys.argv)
```

ipv6.sh

```sh
#!/bin/sh
work_path=$(dirname $(readlink -f $0))
cd ${work_path}
read -p "输入网关账号:" username
if [ ! -n "$username" ]
then
    echo "请输入网关账号"
    exit;
else
    read -p "输入网关密码:" password
    if [ ! -n "$password" ]
    then
        echo "请输入网关密码"
        exit;
    else
        msg=$(python ipv6.py login ${username} ${password})
        if [ "$msg" = "ipv6登录成功" ]
        then
            echo 'ipv6登录成功'
        else
            echo 'ipv6登录失败'
            exit;
        fi
    fi
fi
nohup ./kcptun -c config/kcptun.json >log/kcptun 2>&1 &
nohup sslocal -c config/ss.json >log/ss 2>&1 &

content=$(../proxychains/proxychains4 -q -f ../proxychains/src/proxychains.conf cu
rl -I -m 10 -o /dev/null -s -w %{http_code} www.baidu.com)
if [ $content != 200 ]
then
    echo '网络连接失败，请查看log日志'
else
    echo '网络连接成功\n使用proxychains全局代理\n例如\n../proxychains/proxychains4 -q
-f ../proxychains/src/proxychains.conf wget www.baidu.com\n或者使用别名 pc wget www.
baidu.com';
    exit;
fi
```