tiktok-dl-fiddler

> Using fiddler to achieve man in the middle attack that make a connection between local computer and ios device, in order to get the requests from Tiktok app and download from computers under the same WIFI network.

Contents

Environment

- Windows 10 system
- Python 3.8
- IOS device
- Fiddler

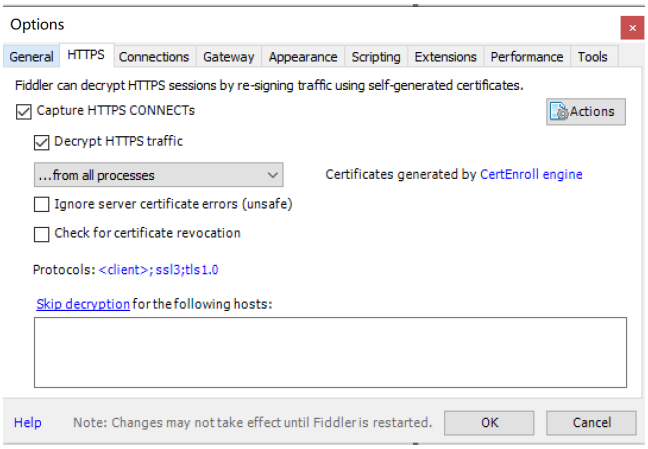
Fiddler Setup

Install

Go to Fiddler Official Website and download the latest version for Windows. After completed the download process, install `Fiddler` in your local computer.

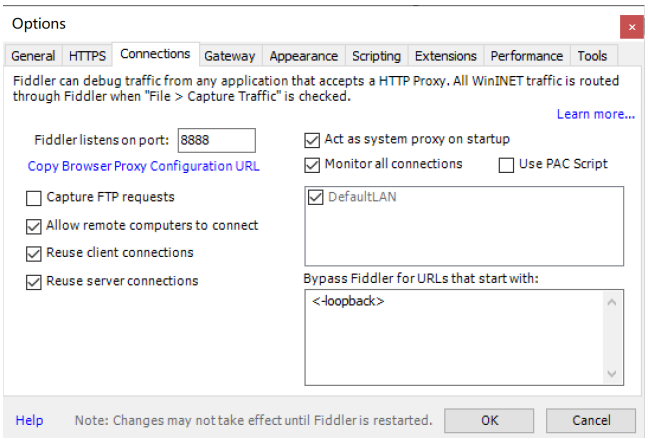
Configure

Open Fiddler, and in the menu bar click `Tools -> Options` then click the `HTTPS` tab. Configure as the following.



> Since most site are using HTTPS protocal, we need to enable the Decrypt HTTPS traffic in order to get the requests from the app

Then in `Options` panel, go to `Connections` tab and configure as the following. You can customize the port number but make the port number are same in Fiddler and your IOS device WIFI proxy.

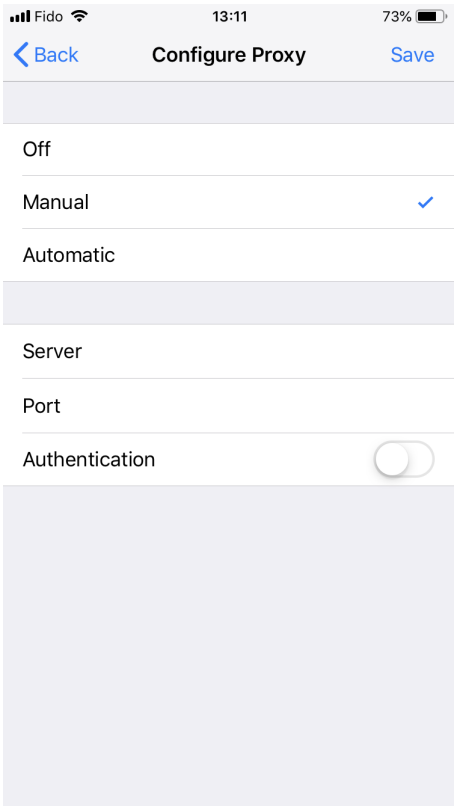


IOS Device Setup

On your IOS device, click `Settings` and then go to `WIFI`. Click the WIFI that is being used for your IOS device and local computer. Then at the bottom of the screen

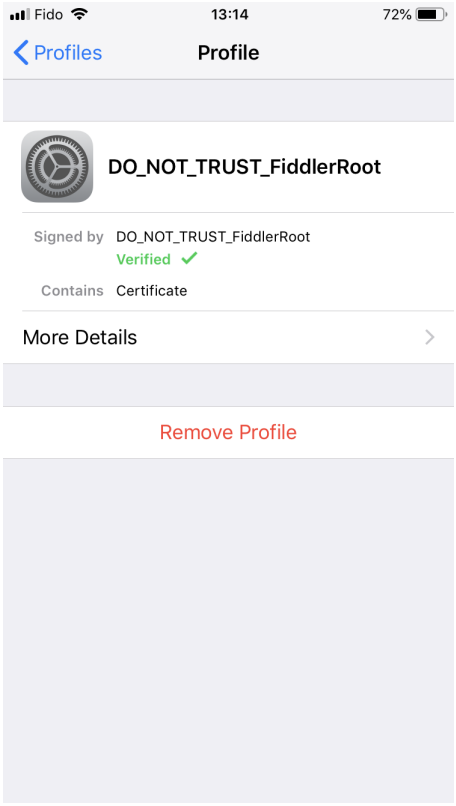
click `Configure Proxy`. Click `Manual` and enter your server and port then save.

> For server, you can type ipconfig in your command line and the IPv4 will be the address. Port we will use 8888 same as we configure in Fiddler

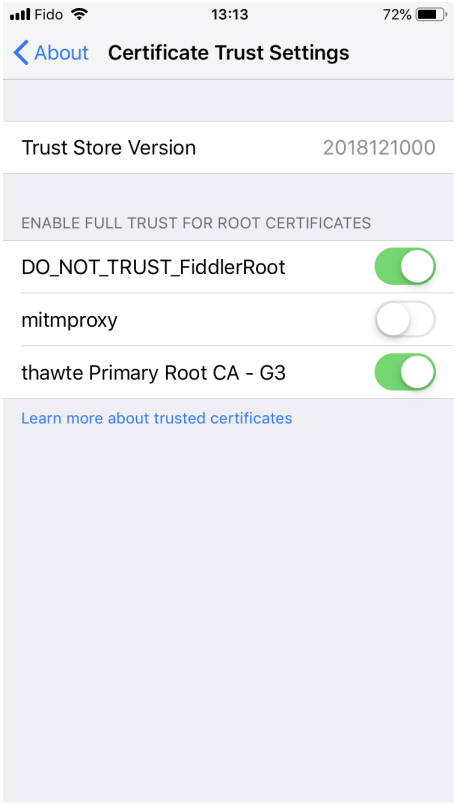


> Make sure `Fiddler` is running because the port should be listen at 8888. Now open your `Safari` on your device, and enter your server or the IP address to download the `FiddlerRoot certificate`.

Once you complete the download process, open `Settings` on your device and go to `General -> Profiles -> DO_NOT_TRUST_FiddlerRoot` and install the certificate.



Then go to `General -> About -> Certificate Trust Settings` and enable `DO_NOT_TRUST_FiddlerRoot`.



Using Fiddler

Apply Filters to URL

Once we finish the setup, we should be able to see requests that returned whenever we are using our apps on our device. For example, let's open Tittok and go to any of the user's profile. As we scroll down to load more videos, we find there are many request that return to Fiddler. However, we would like to filter that only relevant to the videos. We can see that all the videos are hosting at `api3-core-c-lq.ememv.com` with `/aweme/post/`. However, notice that this will change unpredictablly depends on Tiktok, but it make sense because none of the crawler program could work forever without modify the script.

Now, we apply filter to our requests which we only wang to see URL that contains `api3-core-c-lq.ememv.com/aweme/post/` since these includes the videos we

want. Once you click `Run Filter Now`, we will only get the relevant results on the panel.

Customize Rules for Storing Reponse

Since all the videos are stored in a json file, we want to get all the response exported in order to use python to scrap the video url. Thus, we could apply script in Fiddler.

Go to `Rules -> Customize Rules`.

onBeforeRequest

Add the following script inside `OnBeforeRequest(oSession: Session)` function.

```
if (oSession.fullUrl.Contains('api3-core-c-lq.amemv.com/aweme/v1/aweme/post')) {
  var fso
  var file
  fso = new ActiveXObject('Scripting.FileSystemObject')

  file = fso.OpenTextFile(
    // the path where you want to store everytime you make request to app
    'C:\\Users\\Yang\\Desktop\\request.txt',
    8,
    true,
    true
  )
  file.writeLine(oSession.url)
  file.writeLine(oSession.oRequest.headers)
  file.writeLine(oSession.GetRequestBodyAsString())
  file.writeLine('\n')
  file.close()
}
```

onBeforeResponse

Add the following script inside `OnBeforeResponse(oSession: Session)` function.

```
if (oSession.fullUrl.Contains('api3-core-c-lq.amemv.com/aweme/v1/aweme/post')) {
  var fso
  var file
  fso = new ActiveXObject('Scripting.FileSystemObject')

  file = fso.OpenTextFile(
    'C:\\Users\\Yang\\Desktop\\response.txt',
    8,
    true,
    true
  )
  file.writeLine('Request body: ' + oSession.GetResponseBodyAsString())
  file.close()
}
```

Now, whenever you scroll a user's profile, Fiddler will store the requests and response and export on the directory that you set.

Using Python to Download

Once we have all the response from the app, download the videos will the be easy part.

However, first we need to make the **convert the `reponse.text` to `utf-8` format**, otherwise Python cant encode properly.

Then run the `tiktok-dl-fiddler.py`, all the videos will be downloaded under the author's name folders.

```
C:\Users\Yang\PycharmProjects\Practice\venv\Scripts\python.exe C:/Users/Yang/PycharmProjects/Practice/example.py
0 0_[一只BC]_温馨提示：请勿在吃东西的时候观看本视频#元气脑洞班 @抖音小助手.mp4 下载完成~
1 1_[一只BC]_#康娜似乎吃了什么不得了的东西#元气脑洞班 @抖音小助手.mp4 下载完成~
2 2_[一只BC]_我一眼就看出你不是人！#元气脑洞班 @抖音小助手.mp4 下载完成~
3 3_[一只BC]_#和泉纱雾纱 游魂真身 ，小心不要被打哭哟 #元气脑洞班 @抖音小助手.mp4 下载完成~
4 4_[一只BC]_有没有燃到你一点点。#元气脑洞班 #充能计划 @抖音小助手.mp4 下载完成~
5 5_[一只BC]_#喵帕斯 我这无处安放的魅力啊#元气脑洞班 @抖音小助手.mp4 下载完成~
6 6_[一只BC]_这样的调音师值多少？#元气脑洞班 #喵帕斯 @抖音小助手.mp4 下载完成~
7 7_[一只BC]_天上掉下来十元钱。本来开开心心，结果——#元气脑洞班 @抖音小助手.mp4 下载完成~
8 8_[一只BC]_#康娜：我好像又吃了什么不得了的东西#元气脑洞班 @抖音小助手.mp4 下载完成~
9 9_[一只BC]_【002】康娜沙雕动态壁纸 #送你一张动态壁纸！.mp4 下载完成~
10 10_[一只BC]_我 不信你们这样都认得出来~.mp4 下载完成~

Process finished with exit code 0
```


0_[一只BC]_温馨提示：请勿在吃东西的时候观看本视频#元气脑...


1_[一只BC]_#康娜似乎吃了什么不得了的东西#元气脑洞班 @抖...


2_[一只BC]_我一眼就看出你不是人！#元气脑洞班 @抖音小助手


3_[一只BC]_#和泉纱雾纱 游魂真身 ，小心不要被打哭哟 #元气脑...


4_[一只BC]_有没有燃到你一点点。#元气脑洞班 #充能计划 @...


5_[一只BC]_#喵帕斯 我这无处安放的魅力啊#元气脑洞班 @抖音...


6_[一只BC]_这样的调音师值多少？#元气脑洞班 #喵帕斯 @抖...


7_[一只BC]_天上掉下来十元钱。本来开开心心，结果——#元气...


8_[一只BC]_#康娜：我好像又吃了什么不得了的东西#元气脑洞...


9_[一只BC]_【002】康娜沙雕动态壁纸 #送你一张动态壁纸！


10_[一只BC]_我不信你们这样都认得出来~