mitmproxy

- man-in-the-middle proxy
- Interactive, SSL-capable proxy for HTTP with a console interface.
- Intercept http communication between the client and the server for instrumentation.



Install mitmproxy

- pip install pyOpenSSL
- pip install mitmproxy==0.11.3

```
~/git/public/mitmproxy (Python)
   GET https://github.com/
       ← 200 text/html 5.52kB
   GET https://a248.e.akamai.net/assets.github.com/stylesheets/bundles/github2-24f59e3ded11f2a
       1c7ef9ee730882bd8d550cfb8.css
       ← 200 text/css 28.27kB
   GET https://a248.e.akamai.net/assets.github.com/images/modules/header/logov7@4x-hover.png?1
       324325424
       ← 200 image/png 6.01kB
   GET https://a248.e.akamai.net/assets.github.com/javascripts/bundles/jquery-b2ca07cb3c906cec
       cfd58811b430b8bc25245926.js
       ← 200 application/x-javascript 32.59kB
   GET https://a248.e.akamai.net/assets.github.com/stylesheets/bundles/github-cb564c47c51a14
         af1ae265d7ebab59c4e78b92cb.css
         ← 200 text/css 37.09kB
   GET https://a248.e.akamai.net/assets.github.com/images/modules/home/logos/facebook.png?1324
       526958
       ← 200 image/png 5.55kB
>> GET https://github.com/twitter
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[7] [i:.*] ?:help [*:8080]

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The HTTPS Problem

- Man-in-the-middle Proxy
- SSL and HTTPS is designed against MITM
- HTTPS Handle shake error due to uncertified modification via instrumentation



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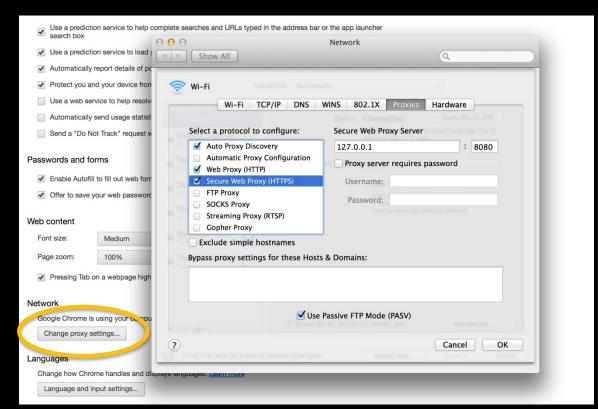


The HTTPS Problem

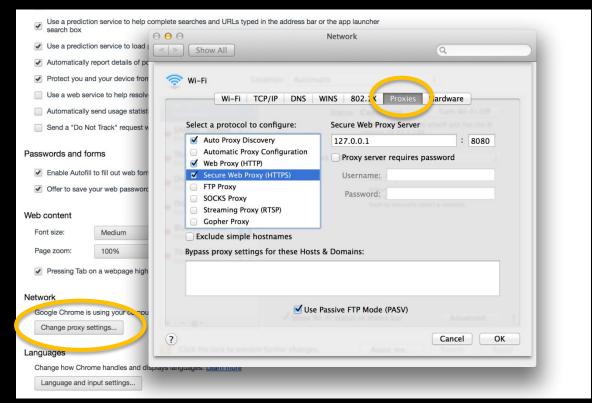
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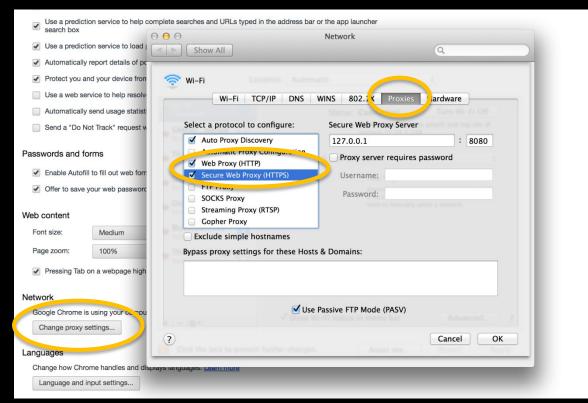
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- Then run mitmproxy in the terminal
- In browser, configure HTTP and HTTPS proxy
 - Server: 127.0.0.1 Port: 8080



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