

HTTP refresher

- Build on top of TCP
- Text protocol
- Request / Response
- Header vs content
- GET/POST/UPDATE/DELETE (REST)
- 2xx, 3xx, 4xx, 5xx
- JSON/HTML

Tooling

- Telnet / CURL
- Firefox (Inspector)
- Charles (Web Debugging Proxy)
- Postman (HTTP Requests)

Telnet / CURL

HTTP is a text protocol, can be used with sample telnet

```
telnet www.google.fr 80
GET / HTTP/1.0
```

Qwant refused non HTTPS traffic

```
telnet www.qwant.com 80
Trying 194.187.168.100...
Connected to www.qwant.com.
Escape character is '^]'.
GET /?q=hello HTTP/1.2

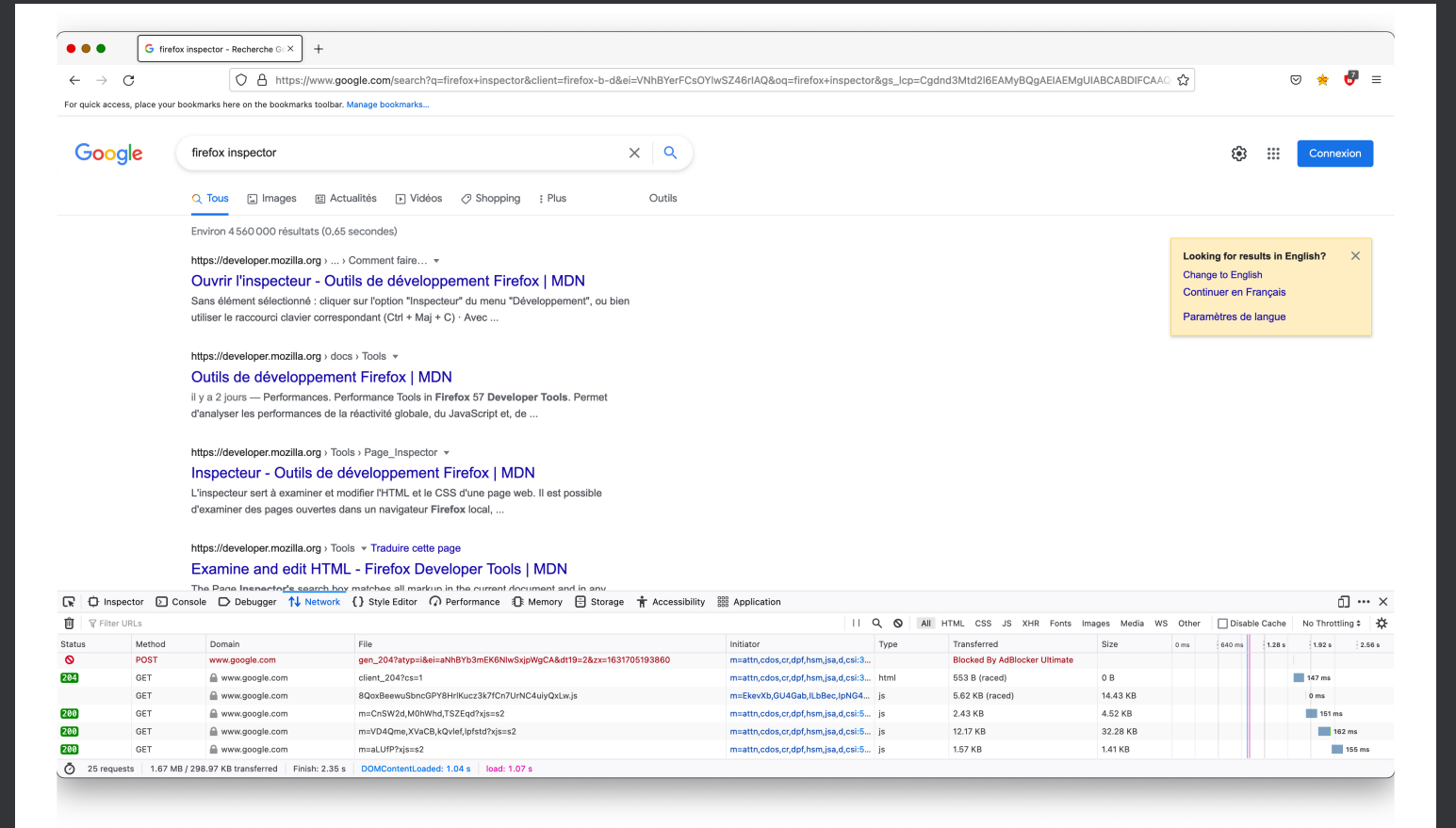
HTTP/1.1 301 Moved Permanently
content-length: 0
location: https:///q=hello
```

Try this API

- `curl -i -X GET "https://api.agify.io/?name=hugues"`
- `curl -i -X GET "https://geo.ipify.org/api/v1?apiKey=at_UIcnbgnaUVR4ZD5cm902A3opPUCTt&ipAddress=8.8.8.8"`

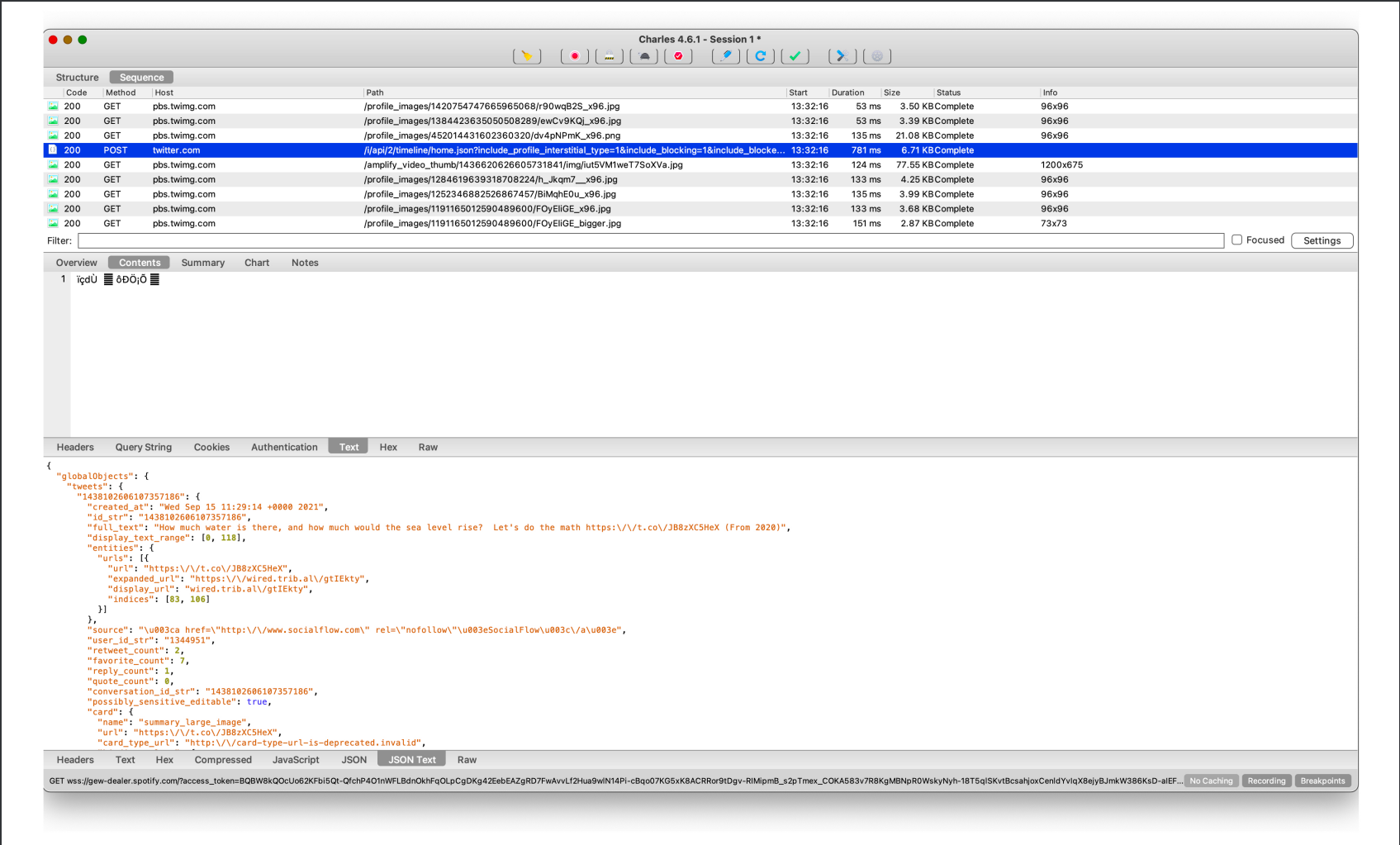
Firefox (Inspector)

- Choose Tools > Web Developer > Inspector from the Menu Bar or the equivalent keyboard shortcut.
- Right-click an element on a web page and select Inspect Element.
- Browse Facebook
 - Inspect Cookie



Charles

Charles - Web Debugging Proxy Application



Charles (Setup)

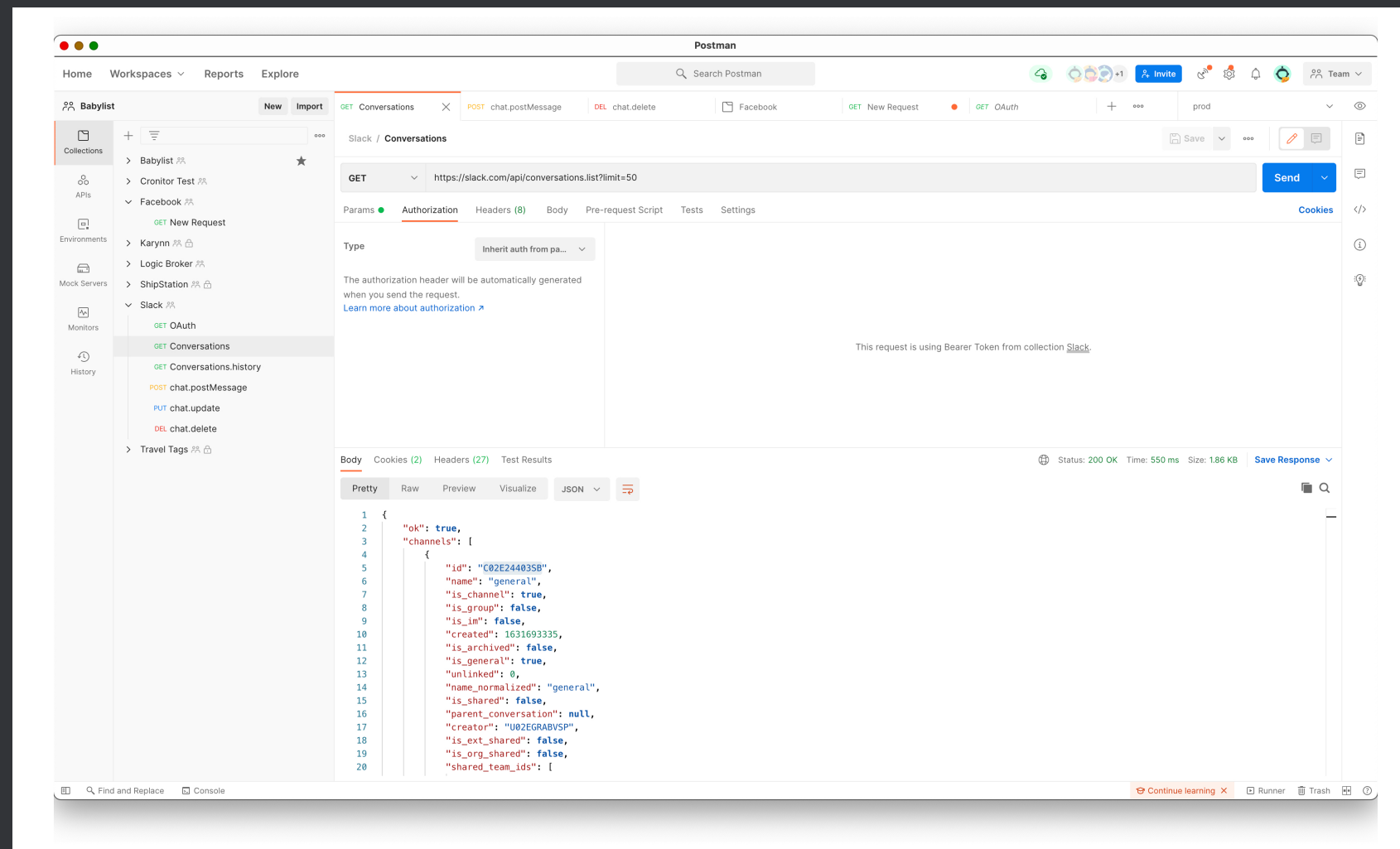
- Configure
 - SSL Certificate

```
charles ssl export charles.pem  
sudo mv charles.pem /etc/pki/ca-trust/source/anchors/  
sudo update-ca-trust
```

- Firefox Proxy
 - Inspect some web pages
 - Twitter (twitter.com/i/api)
 - Facebook
 - Google

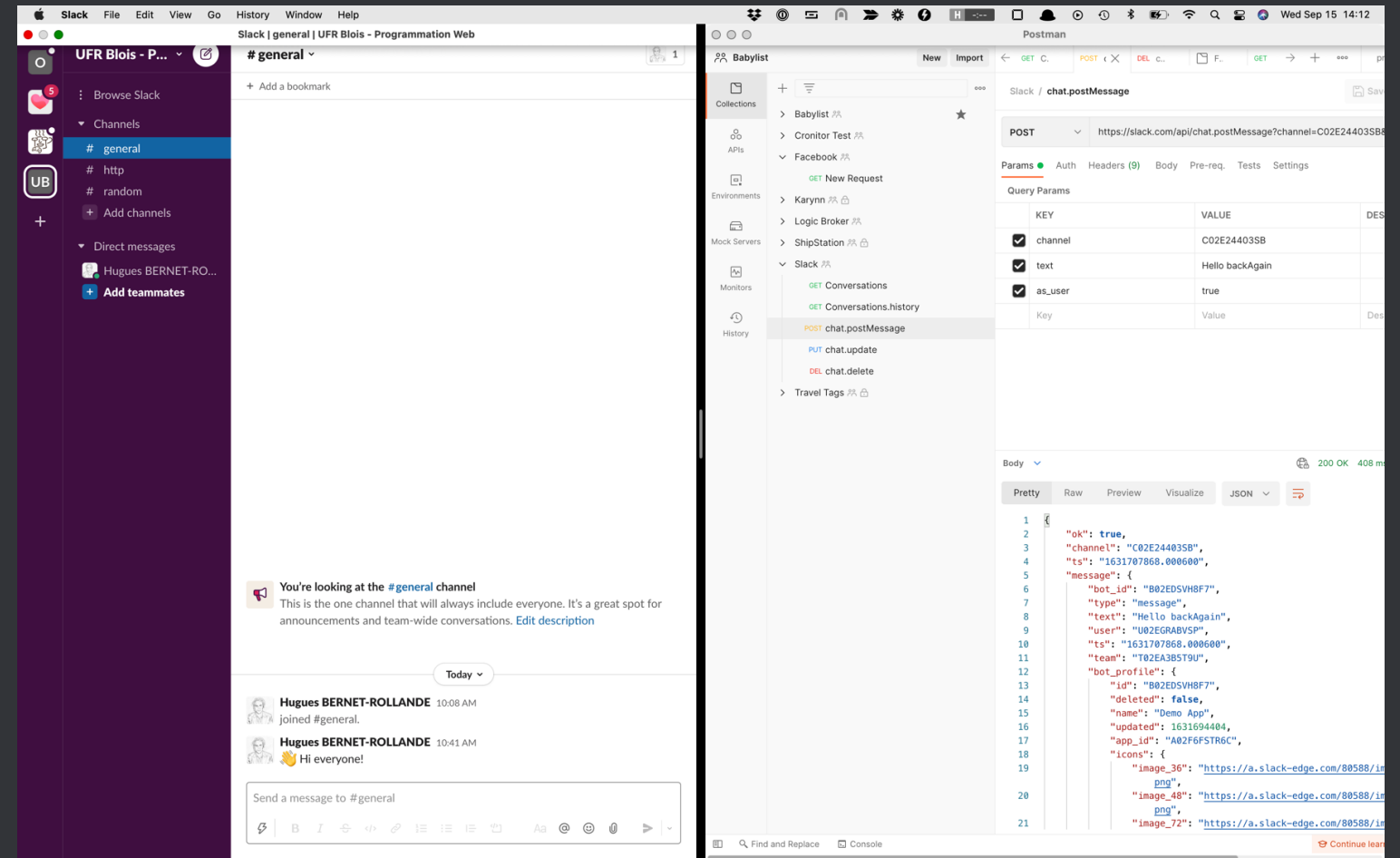
Postman

The Postman app



Slack API

- Get a list of conversations
- Get a list of messages
- Post / Edit / Delete a Message



<https://bit.ly/3Ek4I4c>

```
curl \
  --location \
  --request POST \
  'https://slack.com/api/chat.postMessage?channel=C02E24403SB&text=Hello World' \
  --header 'Authorization: Bearer xoxp-2486113197334-2492860403907-2492926538098-76ac2d6b0dcc5d6a24b3c72889355468' \
```

Facebook Graph API

- <https://developers.facebook.com/docs/graph-api/>
- <https://developers.facebook.com/tools/explorer/544715170079393/>

Exercises

Inspect sites (Charles / Firefox Inspector)

- Medium
- Twitter

Explore some API

- Twitter
- Facebook