



# Analyzing JS files

BY UNCLE RAT

# Agenda

- ▶ What is a JS files
- ▶ Show me your secrets!
- ▶ Attack strategy
- ▶ Defense mechanisms



What is a JS files



# What is a JS files



- ▶ Client side object oriented scripting language
- ▶ Makes static websites dynamic
- ▶ Can change a website without reloading it

Show me  
your secrets!



# Show me your secrets!

- ▶ New endpoints
- ▶ Hidden parameters
- ▶ API keys
- ▶ Business logic
- ▶ HTML/Javascript sinks
- ▶ Secrets/passwords
- ▶ Potentially dangerous areas in code (eval, dangerouslySetInnerHTML etc)

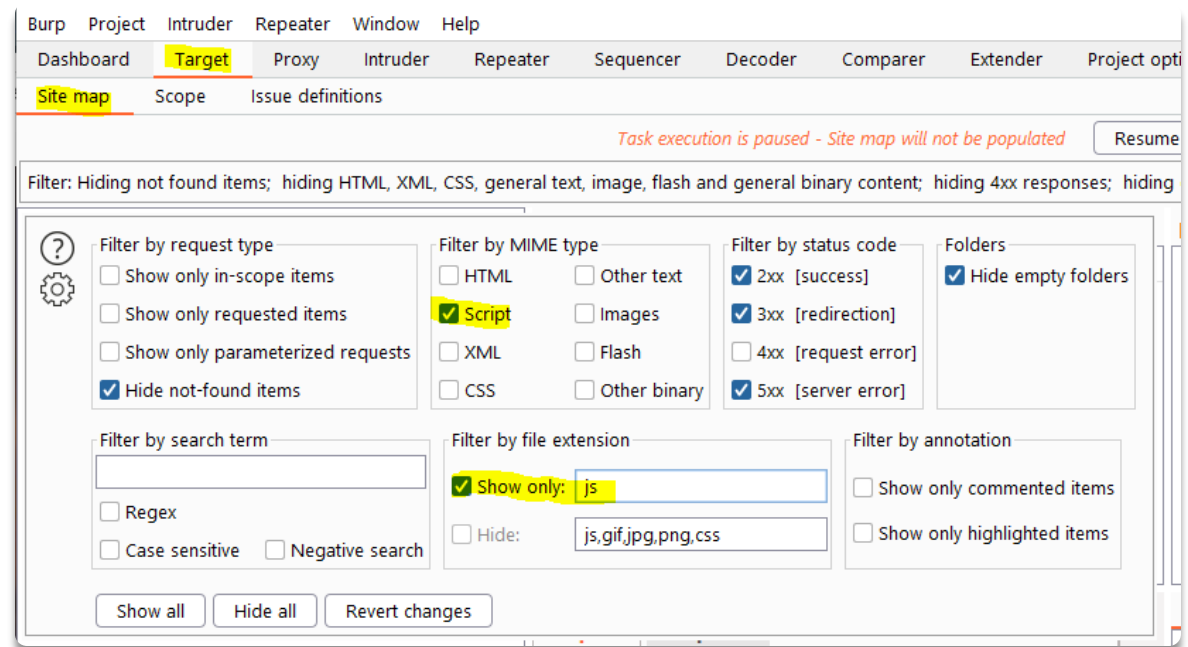


# Attack strategy



# Attack strategy – Gathering JS files

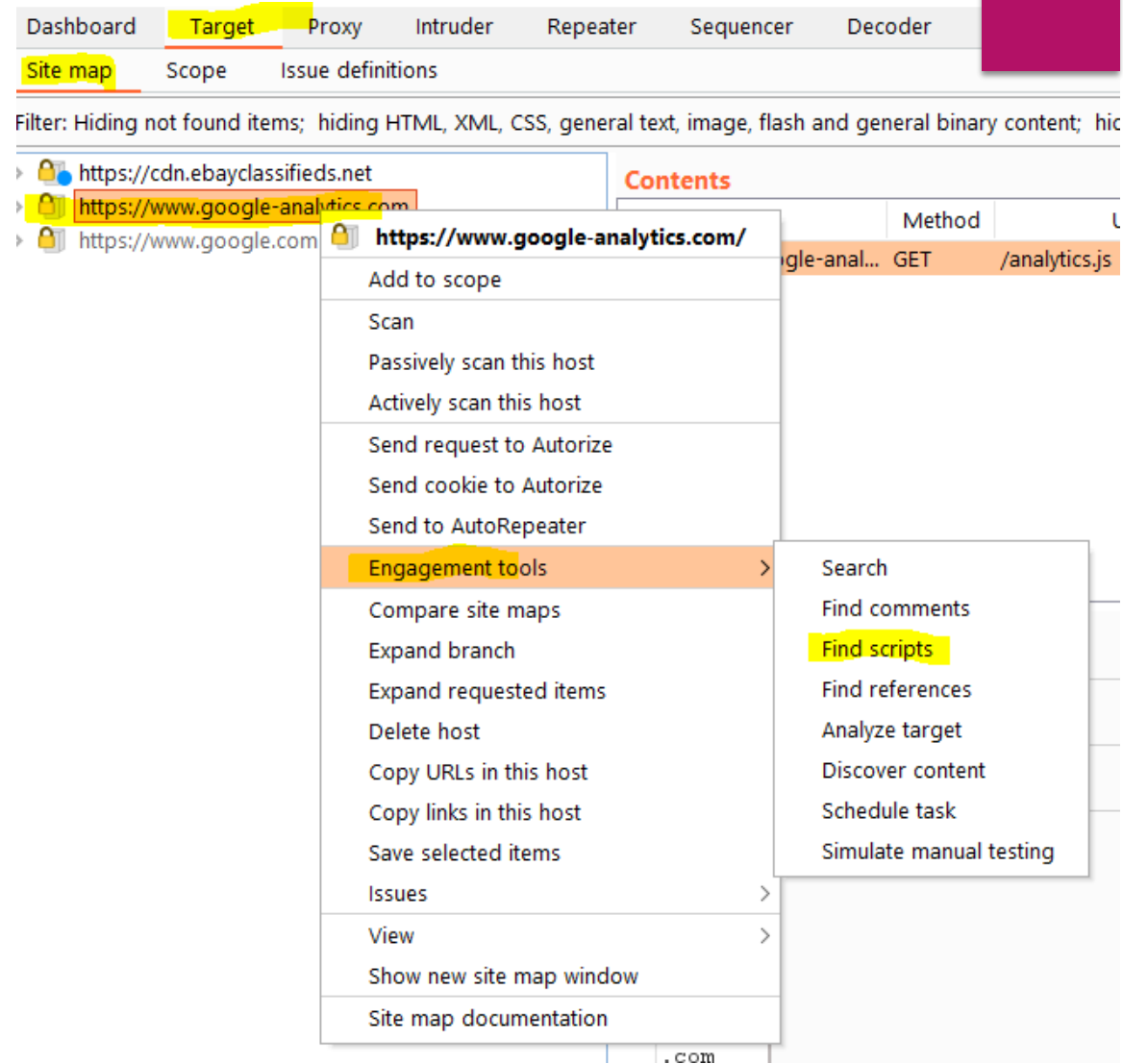
- ▶ Use burp filters
  - ▶ Explore the website with burp in the background
  - ▶ Open site map
  - ▶ Set filter





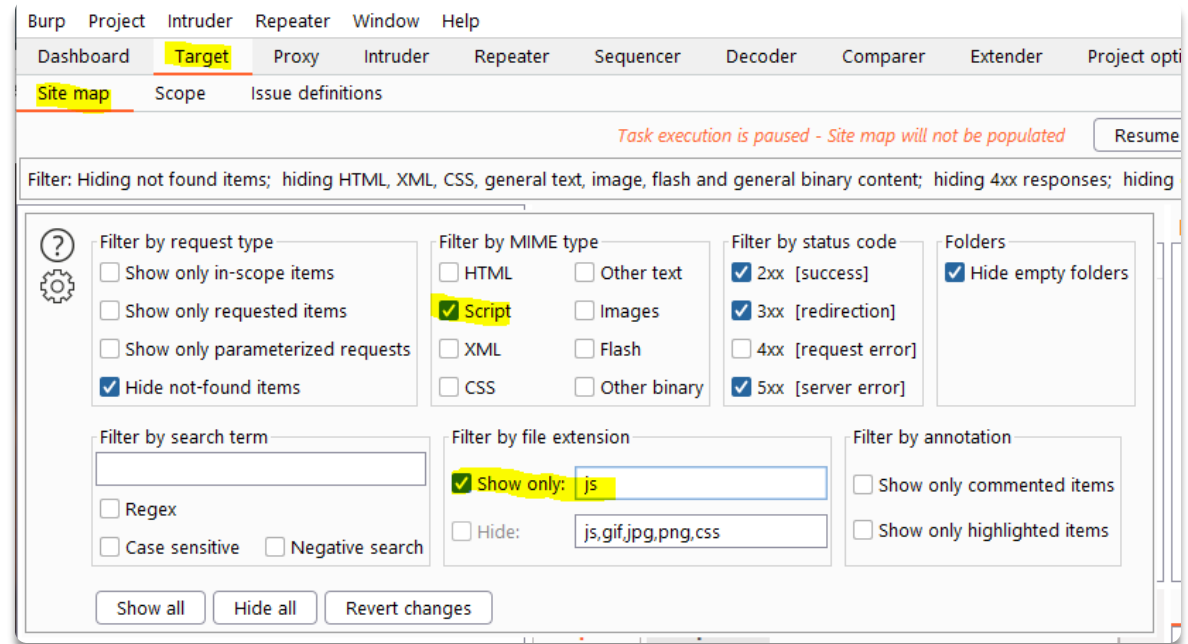
# Attack strategy – Gathering JS files

- ▶ Use burp suite PRO
  - ▶ Explore the application with burp open
  - ▶ Right click the target in site map
  - ▶ Engagement tools > Find scripts



# Attack strategy – Gathering JS files

- ▶ Use waybackmachine
  - ▶ Install waybackurls
    - ▶ go get `github.com/tomnomnom/waybackurls`
- ▶ Grep for JS files
  - ▶ `waybackurls google.com | grep "\.js" | uniq | sort`



# Defense mechanisms



# Defense mechanisms

- ▶ JS minification
  - ▶ Decompress using UglifyJS
- ▶ JS obfuscation
  - ▶ There is no one-size fits all solution
- ▶ JS chunking
  - ▶ Manual de-chunking

