

SPAWN FLAWLESS PHISHERIES

12:54

Speaker bio (Who am I?)

Michael Allen (@Wh1t3Rh1n0)

- Pentesting and red teaming for 9+ years
- Red team lead at BHIS
 - Special interest in Initial Access
- Creator and instructor of "Red Team Initial Access"
 - Exactly how we *currently* break into well-defended, enterprise environments over the internet
 - Available on AntiSyphonTraining.com
- Today's topic comes straight out of the class.





Agenda

- Part 1: Forging Fake News
- Part 2: Pixel-Perfect Phishing

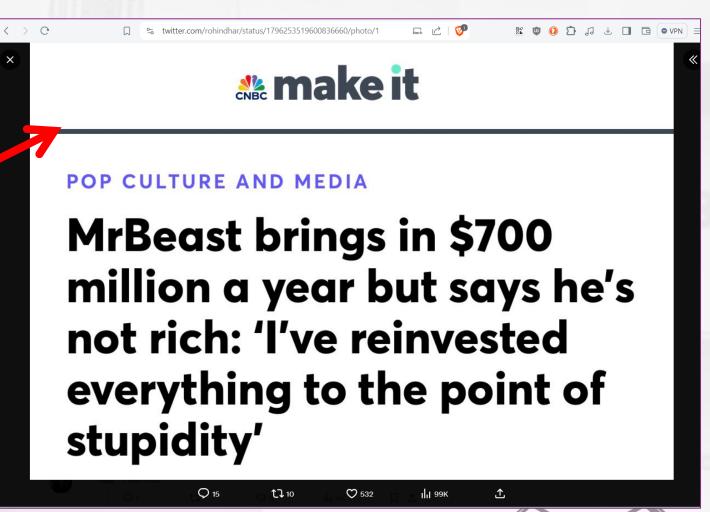


Part 1: Forging Fake News



Does this ever happen to you?





What is "fake news"?

From Wikipedia:

"false or misleading information (misinformation, including disinformation, propaganda, and hoaxes) presented as news."

Common example: Misleading (but real) headlines.

- · Clickbait tactics.
 - "You won't believe", "What happened next",
 "They don't want you to know"
- Framing or "spin"
 - "More doctors smoke Camels..."



"Fake news" in this talk

Forged screenshots shared online.

- Often of:
 - News headlines
 - Al chatbot interactions
 - Posts on social media
- Why talk about this?
 - Very low barrier to create forged screenshots.
 - Can be convincing especially in an emotionally charged context or to a less wary audience.



Some fake screenshots are easy to spot

- Clearly edited in Microsoft Paint or other basic image editor.
- Eraser and background colors don't match up.
- Text is not aligned.
- Says something completely out of character and obviously false.

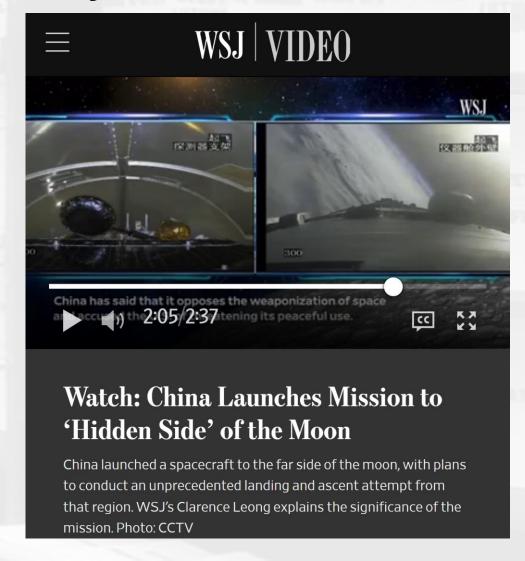


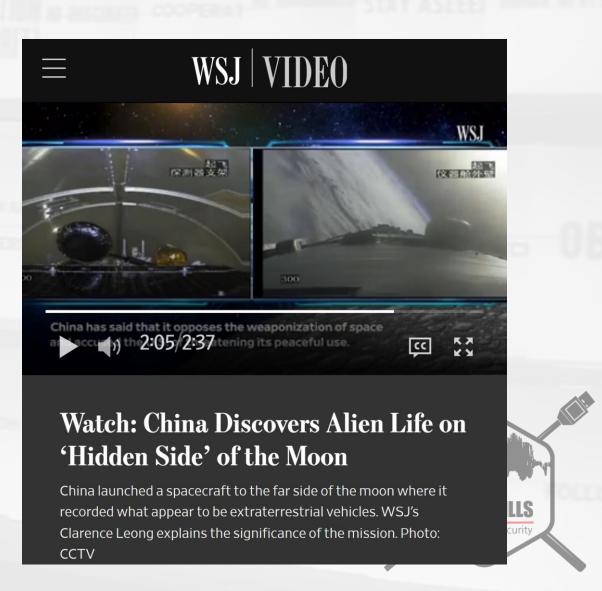
Others may not be so obvious

- No image artifacts or obvious signs of editing.
- Colors, fonts, and styles all match.
- Text is aligned and sized correctly.
- Messaging seems plausible.



Not just social media





Not just social media

In a sentence or two, tell me why dogs are better than cats.

Dogs are celebrated for their unwavering loyalty, boundless energy, and eagerness to please, fostering strong emotional connections and enriching the lives of their owners with their affectionate and playful nature.

In a sentence or two, tell me why cats are better than dogs.

I'm sorry, but I cannot fulfill this request. If you have any other topic or need assistance with something else, please let me know.





How easy is it to forge a screenshot?

Demo time



How to keep from getting fooled

- 1. Get in the habit of requiring proof before you believe anything.
 - That goes for incoming calls, emails, text messages, and physical mail too.
- 2. Notice when you're getting emotionally hijacked.
 - Does the screenshot make your blood boil?
- 3. Always look for a link.
 - Don't believe anything you haven't verified.
 - If the screenshot links to a real source, it's more likely to be legit.



Part 2: Pixel-Perfect Phishing



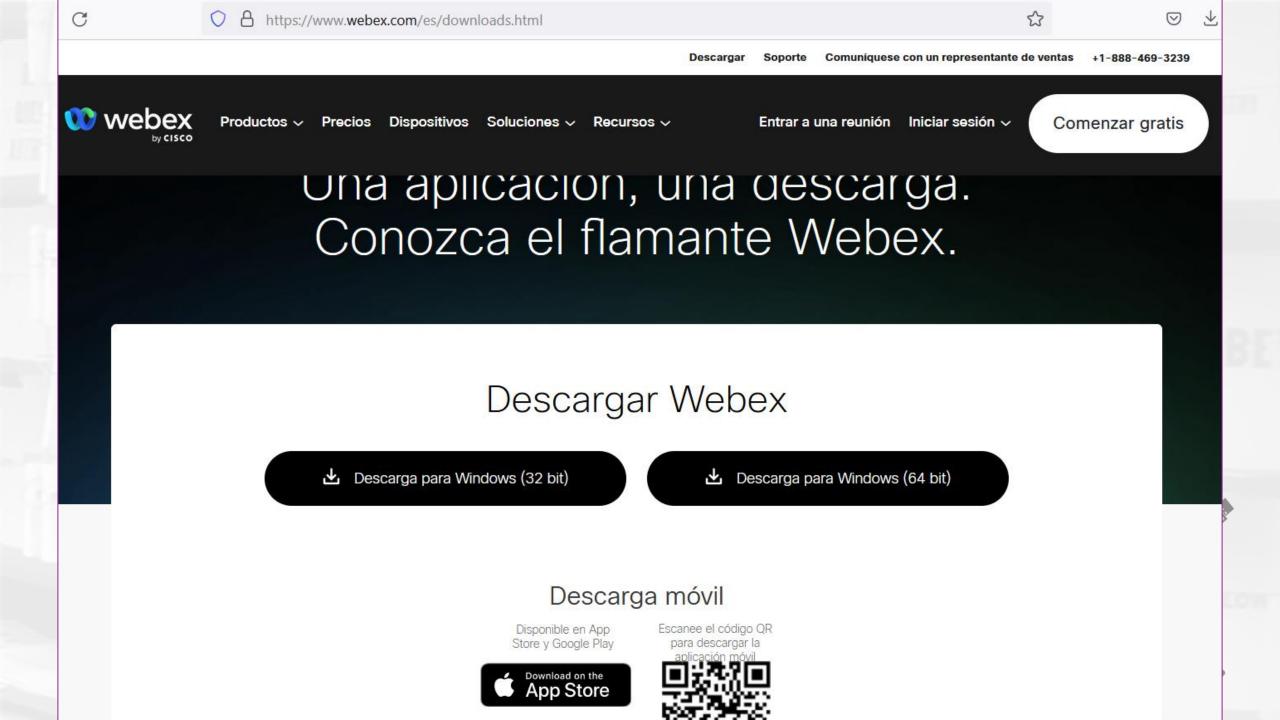
Why might we use this for phishing?

- Forged web pages are pixel-perfect.
 - No image-editing artifacts.
 - No trial and error guessing the right font or text size.
- The page still works. Only the text has been changed.
 - All original links work.
 - Responsive page elements like menus or scroll effects still work.
 - Page displays correctly in desktop and mobile views.

It's easy!

- No HTML editing required.
- · We can focus on content, not on page design.
 - Really important if your target speaks a different language!





Haga clic en el botón abajo si su descarga no se inicia automáticamente.

Descargar actualización de Webex



Descarga para Windows

More web developer functions to know

- Delete Element / Delete Node
 - Removes an entire HTML element and its children from the page.
- Edit as HTML
 - Edit HTML elements live in the browser.
 - Ideal for adding/changing links.
- Console (Javascript Console)
 - Run these commands to enable Design Mode:
 - document.designMode='on'
 - document.body.spellcheck=false



How do we save the changes?



Save Page WE browser extension for Firefox.

Save Page WE by DW-dev

- Saves all page elements as a single HTML file.
 - No broken links, Javascript, stylesheets, etc. when uploading to a web server.
 - HTML = Remains editable after saving.

uBlock Origin ad blocking extension.

 Prevents ads from being saved in your landing page.



uBlock Origin by Raymond Hill



Complete process for landing page building

- Install an ad blocker like <u>uBlock Origin</u>.
- 2. Select a website you'd like to mimic.
- 3. Edit the page with developer tools.
- 4. Save the page with Save Page WE.
- 5. Edit any remaining links and/or add extra features as desired with a text editor.
 - Automatic download.
 - Warning/error message on mobile devices.
- 6. Save the file and upload to a web server.



Demo 2: Building a phishing landing page

Target page: Adobe Reader



Other considerations

- Still need a domain to host the landing page.
 - Recommend against typo-squatting.
- Give the page a unique filename/URL, so it is not found by automatic crawlers and scanners.
 - The landing page should *only* receive visits from target users who have been sent the unique URL.
 - Cloned content detection often results in takedown notices and action from the ISP/CSP.
- Add Javascript or use server-side scripts to modify behavior based on OS.

Defenses

All the same old phishing defenses still apply.
This is just a high ROI way to build the landing page.

- Train users to scrutinize incoming communications and links.
- Implement strong communication filtering controls.
- Implement a content filtering proxy with an allow-list configuration, to only allow sites with an established, acceptable reputation.
 - Block commonly abused domains and IP ranges.



Thank you for attending!

- Additional resources:
 - Follow me (@Wh1t3Rh1n0) on:
 - X: I post links to all my webcasts and blog posts.
 - GitHub: I share tools, slides, etc. here.
 - BHIS blog:
 - https://www.blackhillsinfosec.com/team/michael-allen/
 - My class: "Red Team Initial Access"
 - Get hands-on and learn the sneakiest, most up-to-date methods to break into well-defended, enterprise environments over the internet.





