The Need For a Coherent Web Security Policy Framework

Or

Why Frankenstein's Monster Can't Rule The Wild West

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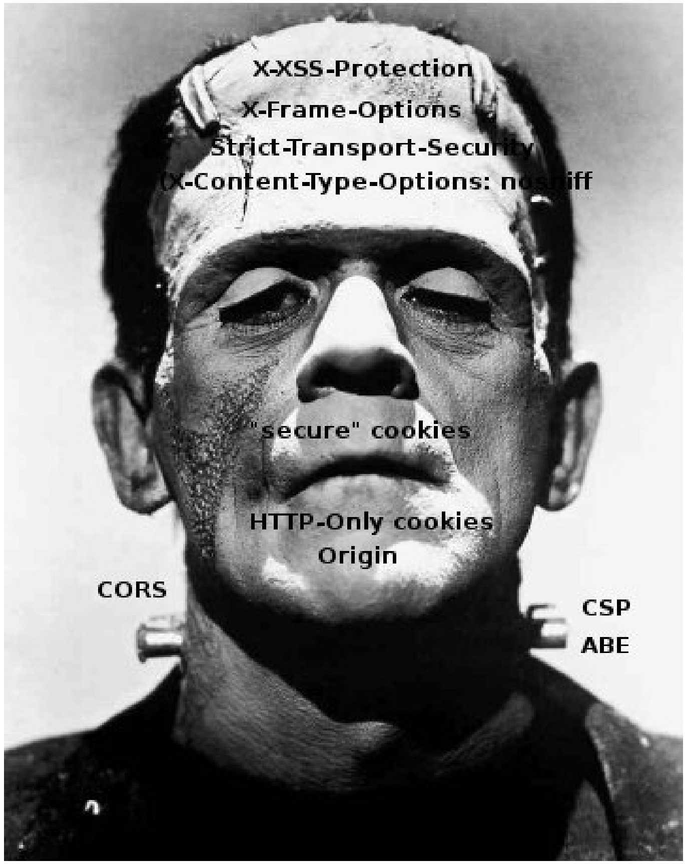
The Current State of the Web

- Current system has evolved rather than been designed

Current Security Policies Sprinkled All Over the Web

- HTTP Headers
  - Strict-Transport-Security
  - No-Sniff
  - X-Frame-Options
- Cookies
  - Secure, HTTPonly
- Meta Tags
  - Content-Type



We'd Rather Have This

http://upload.wikimedia.org/wikipedia/commons/3/33/Golden_gate2-2.jpg

We aren't Innocent

The authors of this preso helped create Strict-Transport-Security

…. Behind our shining armour of righteous indignation lurks a convicted and only half-repentant sinner ….

- Jane Harrison

We Need A Policy Framework

- The right way to set policy is via *configurable* declaration, **not** (hard) code
- Current policy mechanisms require every developer to do the right thing every time. *(This is the wrong way to do it)*
  - Set Secure and HTTPonly Flag on Cookies
  - Set Content-Encoding
  - Set Scheme to HTTPS for all links

Work in IETF

- HSTS – HTTP Strict Transport Security
- Origin definition and explicit header
- Content sniffing rules

Work in W3C

- CORS and UMP
  - Cross Origin Resource Sharing
  - Unified Messaging
- CSP -

Questions?

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