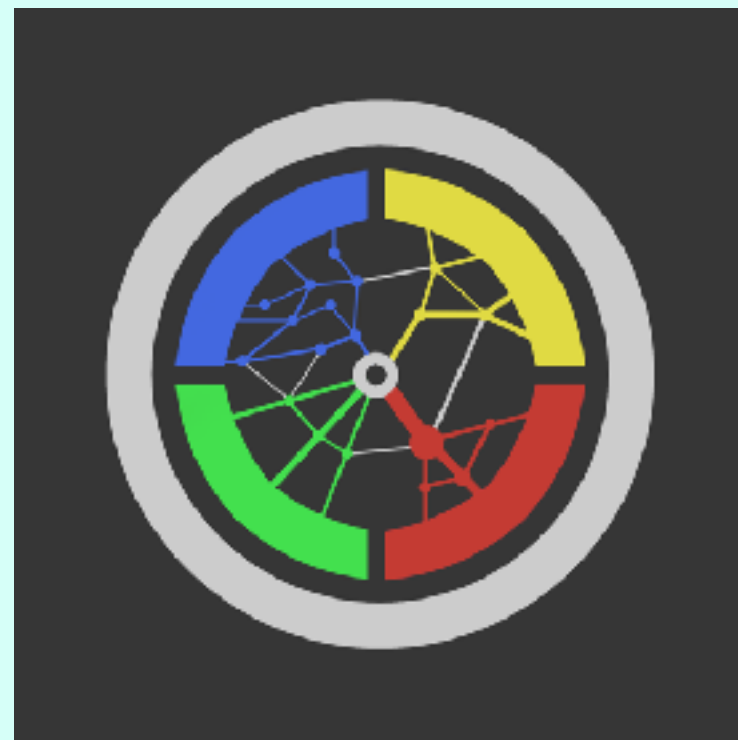


Certificate Transparency

Supporting Critical Internet Infrastructure

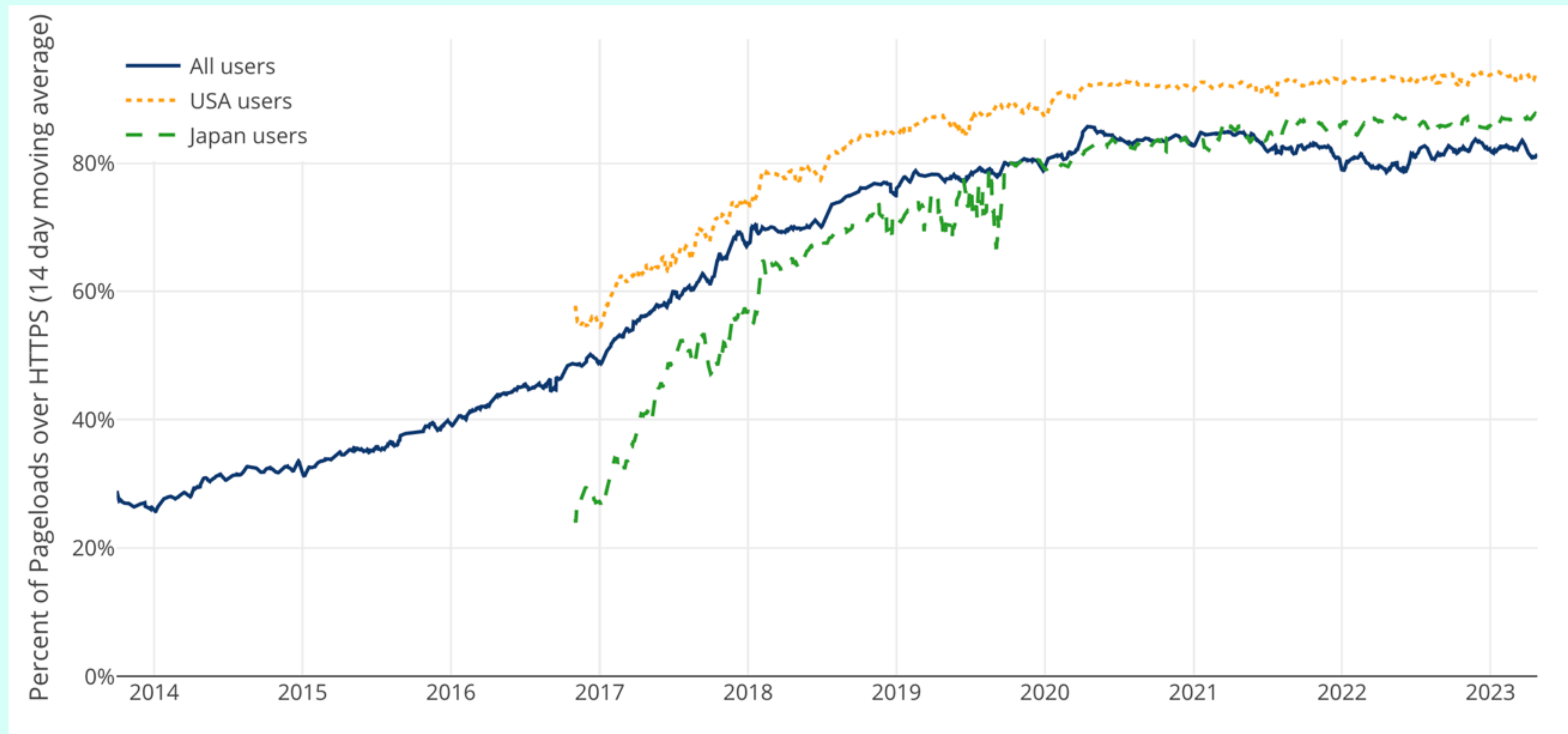
certificate.transparency.dev

Brought to you by:

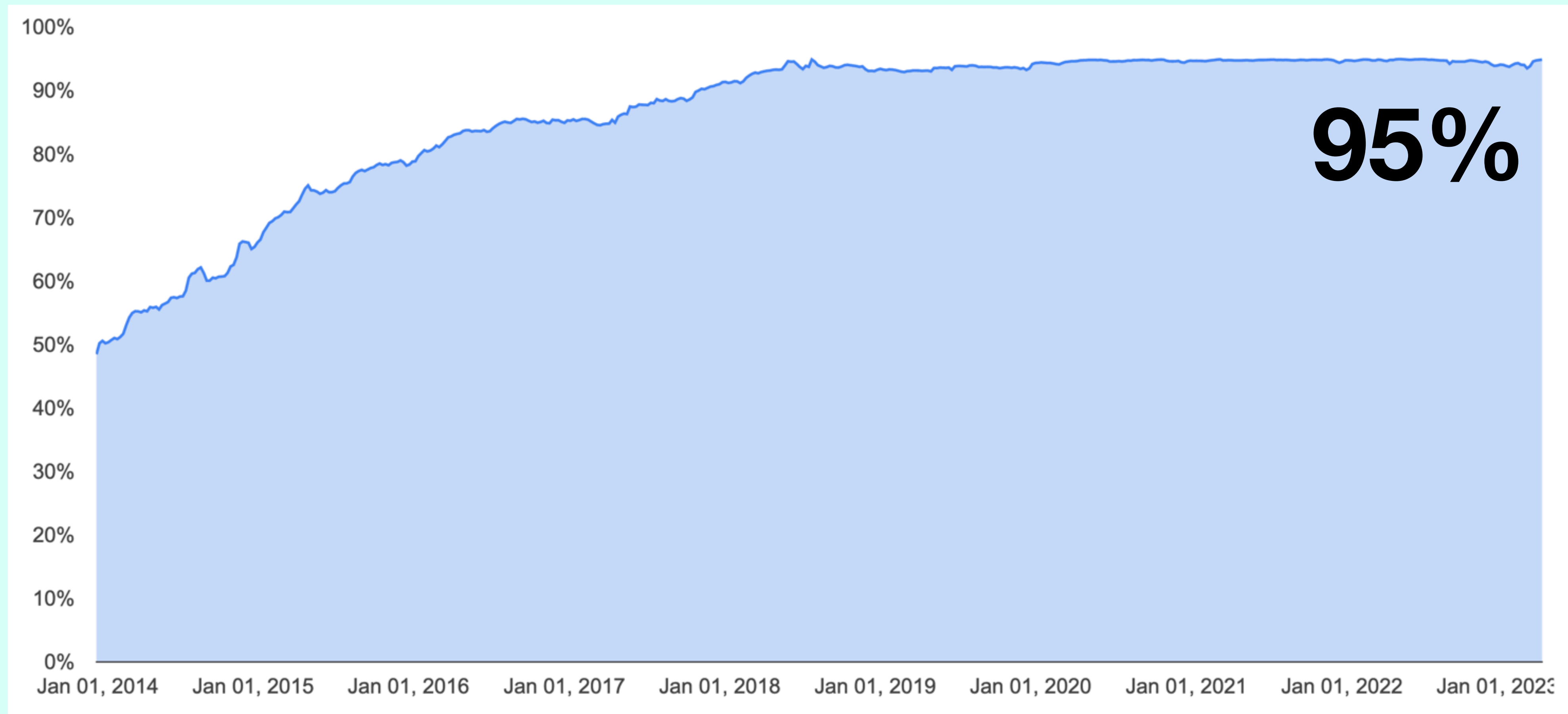


HTTP

HTTPS

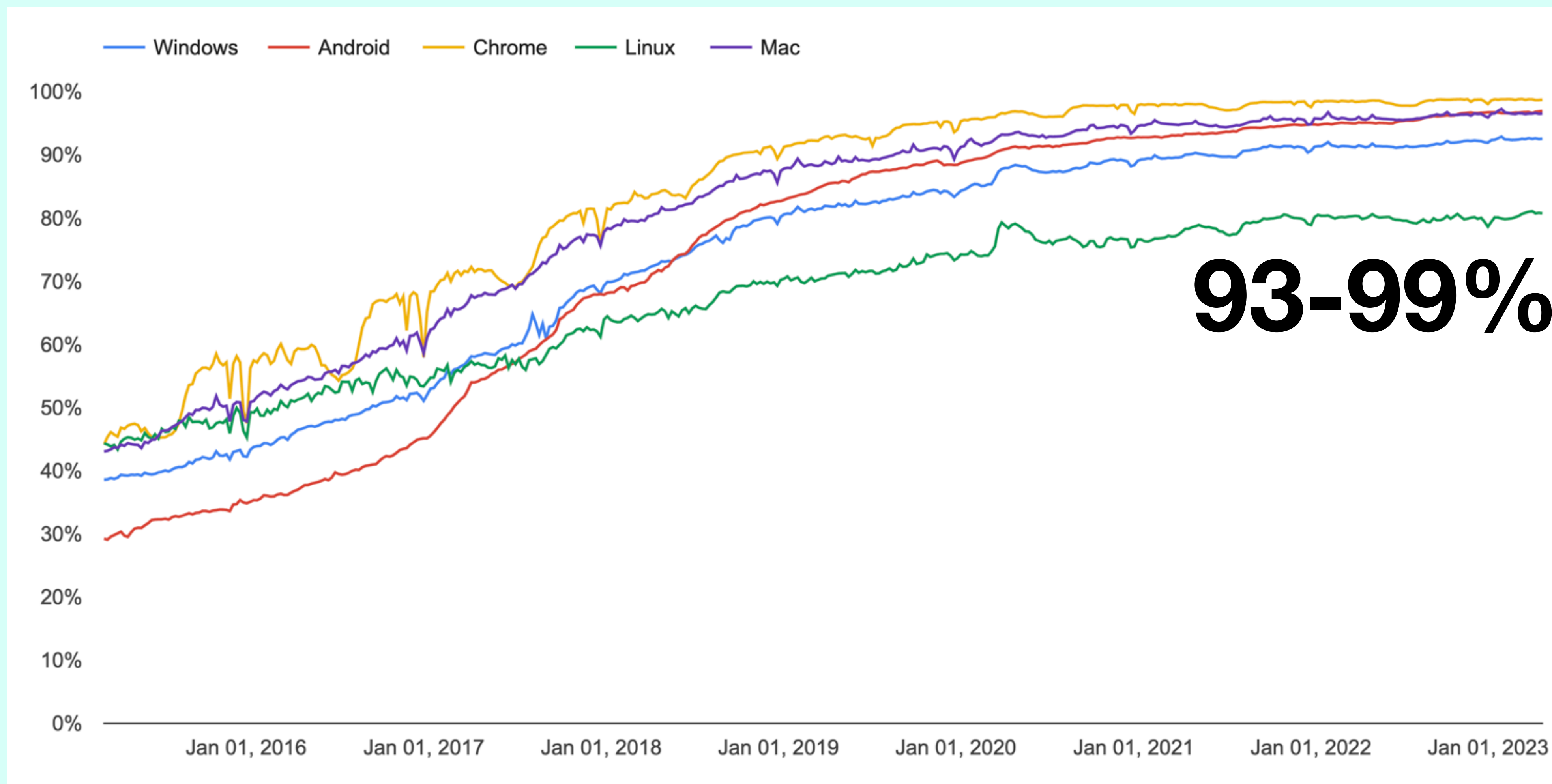


Percentage of Web Pages Loaded by Firefox Using HTTPS
Source: Mozilla



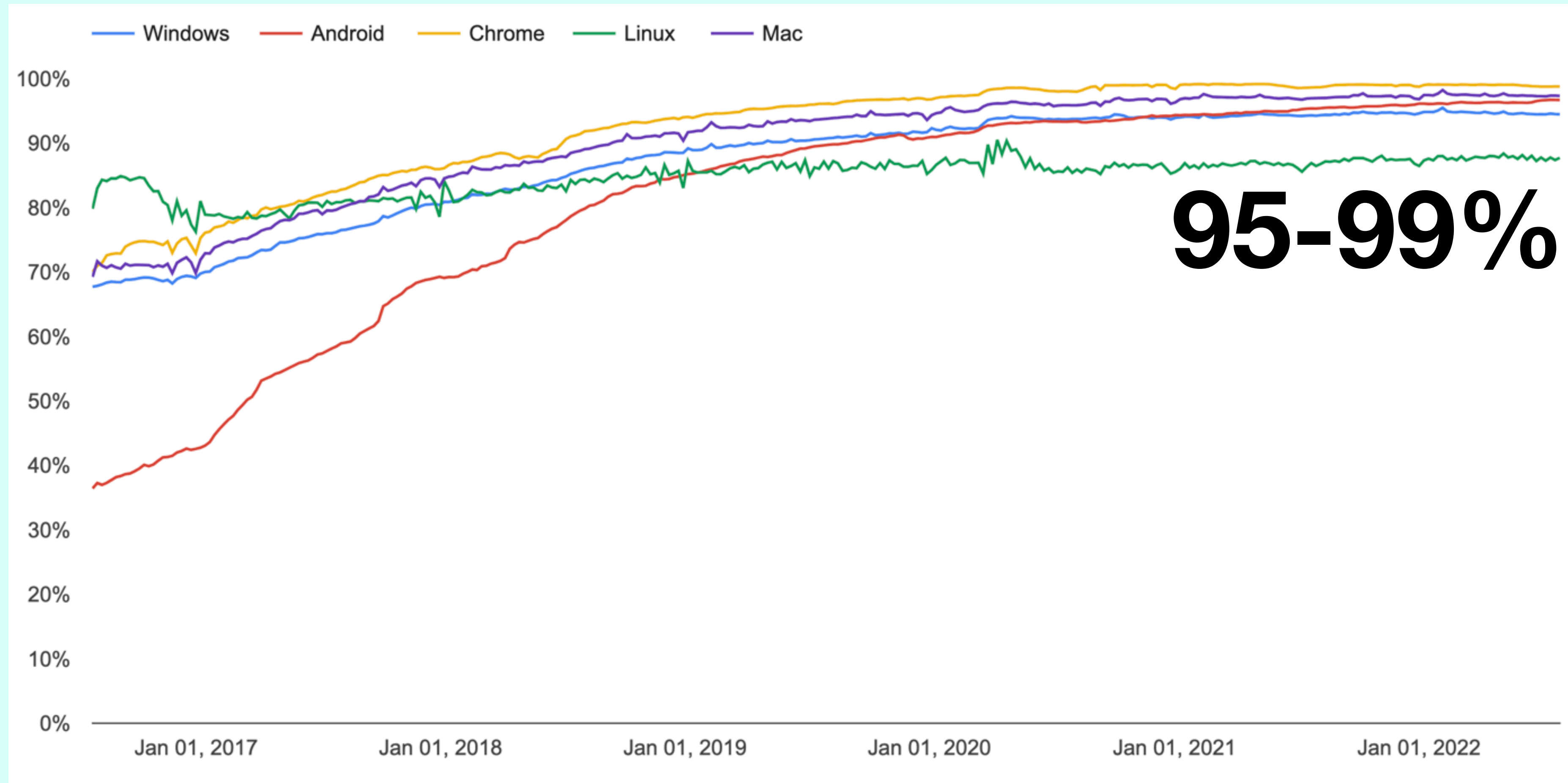
Percentage of Google's traffic encrypted with TLS

Source: Google



93-99%

Chrome page loads over HTTPS (with TLS)
Source: Google



95-99%

Chrome browsing time over HTTPS (with TLS)
Source: Google



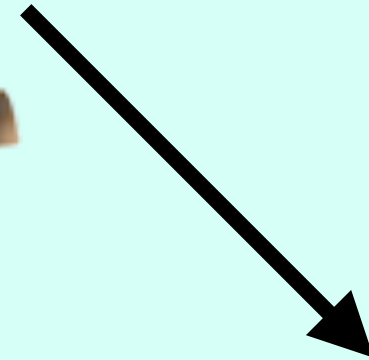
TLS



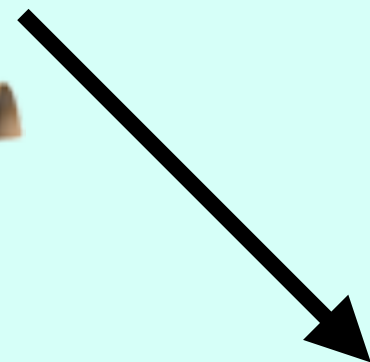
WebPKI



ISRG Root X1

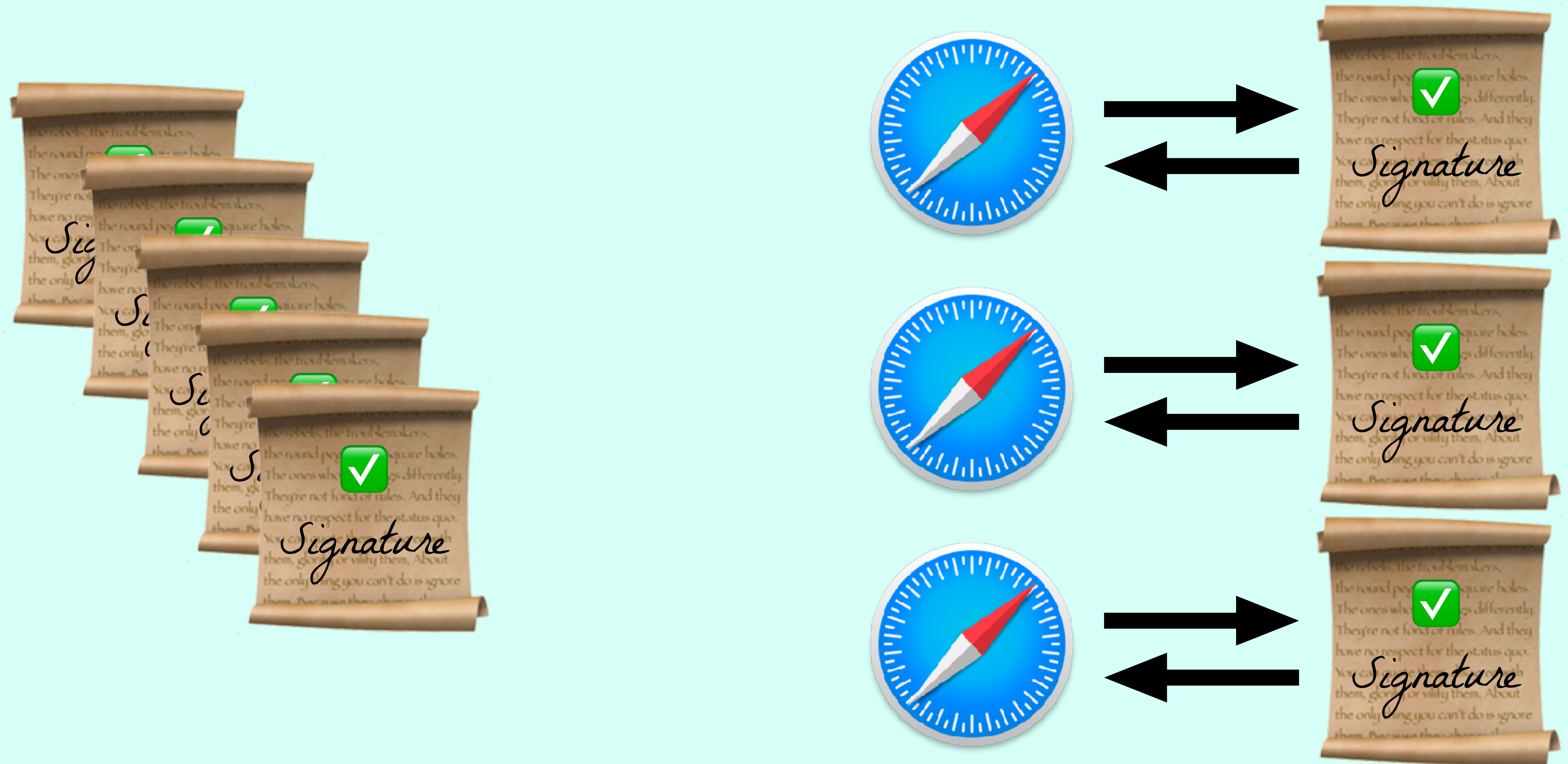


R3



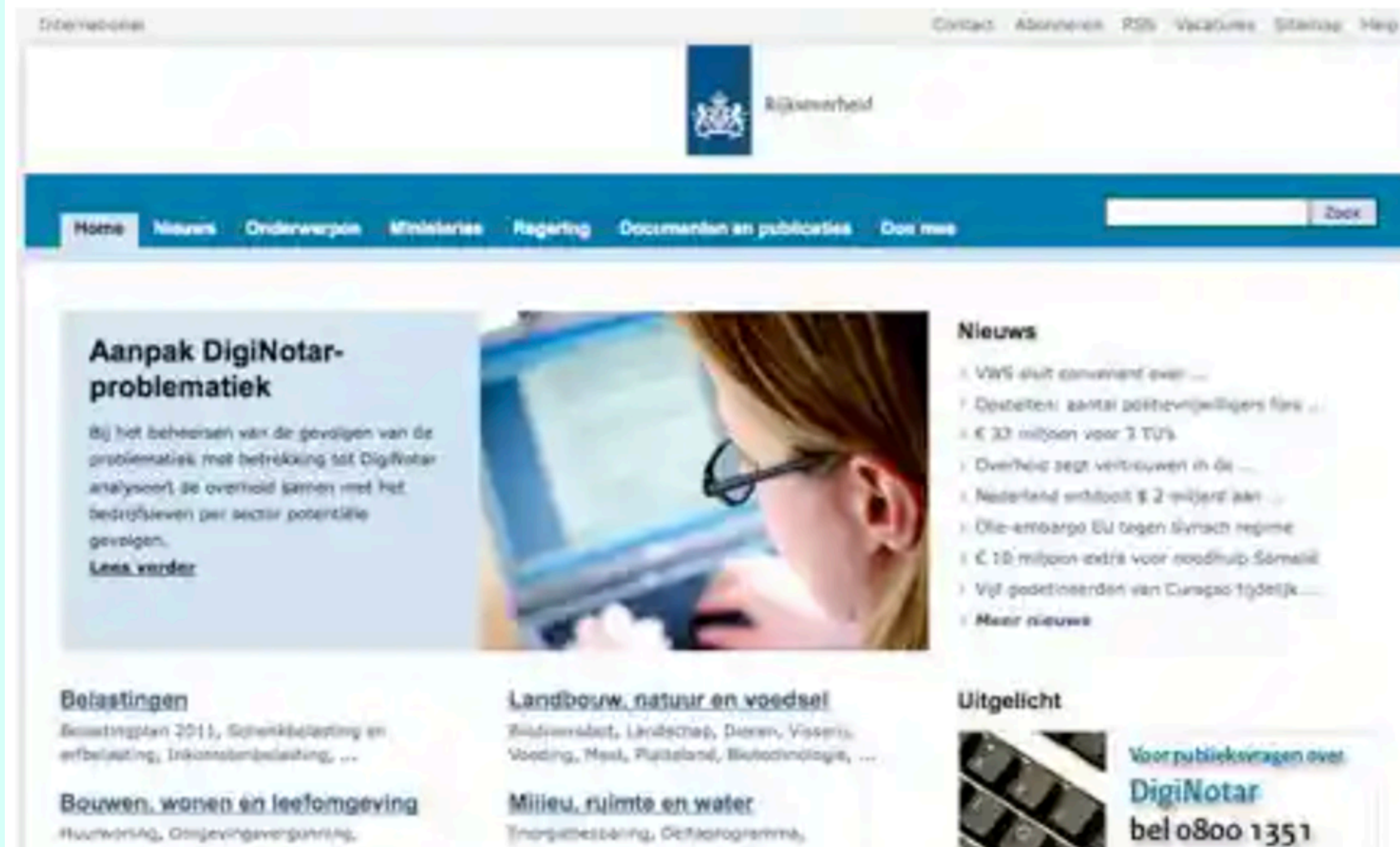
grnog.gr

RPKI vs WebPKI



DigiNotar SSL certificate hack amounts to cyberwar, says expert

Dutch government revokes certificates used for all its secure online transactions, while CIA, Google, Microsoft and others affected by hack called 'worse than Stuxnet'



📷 The Dutch government has revoked all trust in digital certificates issued by DigiNotar

Certificate Transparency

CT Log





Your connection is not private

Attackers might be trying to steal your information from **fincen.gov** (for example, passwords, messages, or credit cards). [Learn more](#)

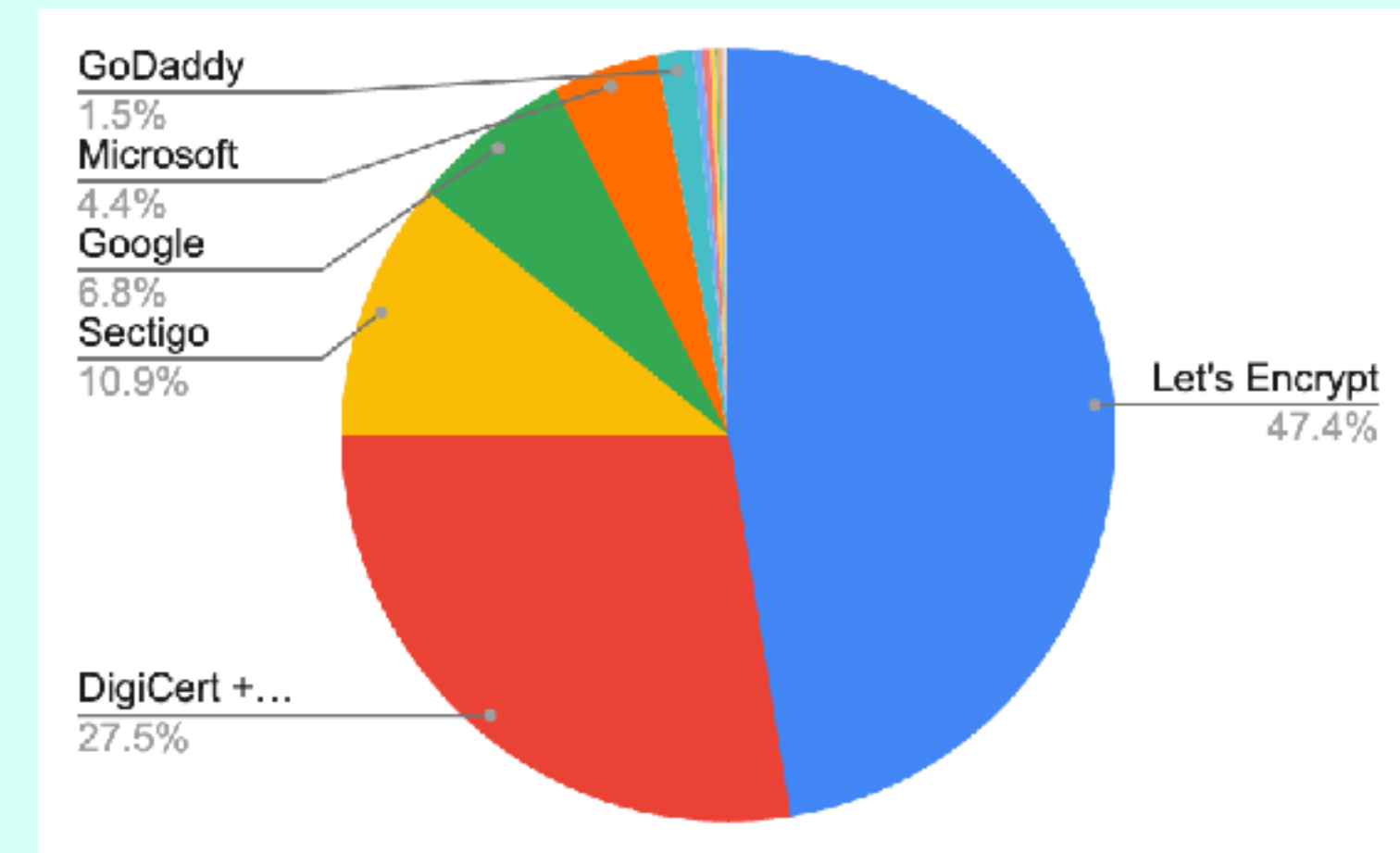
NET::ERR_CERTIFICATE_TRANSPARENCY_REQUIRED

Advanced

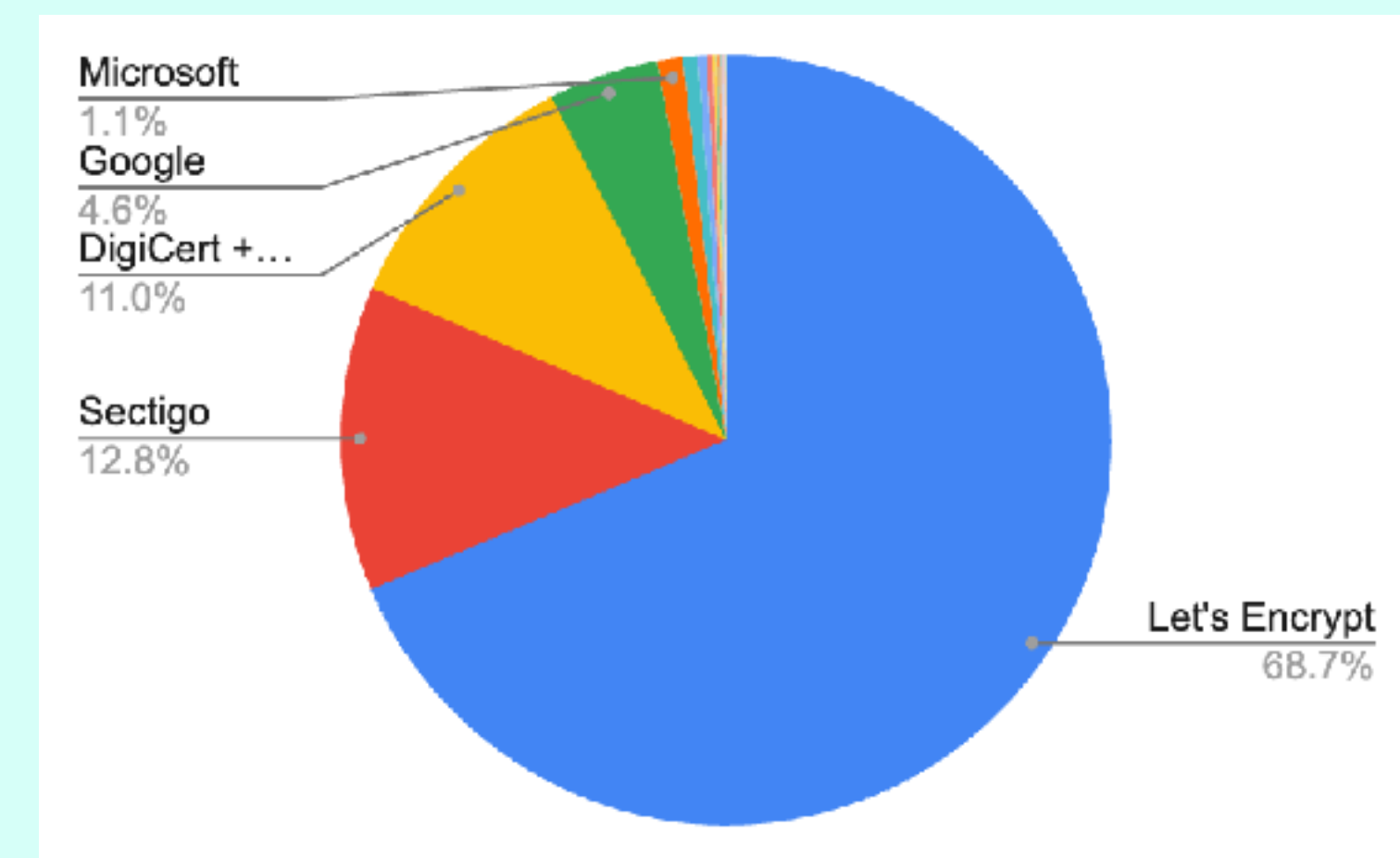
Back to safety

WebPKI Size

- Over 4.8 **B**illion Certificates in CT Logs
- Over 0.5 Billion Active / Unexpired
- Over 250,000 new certificates per hour



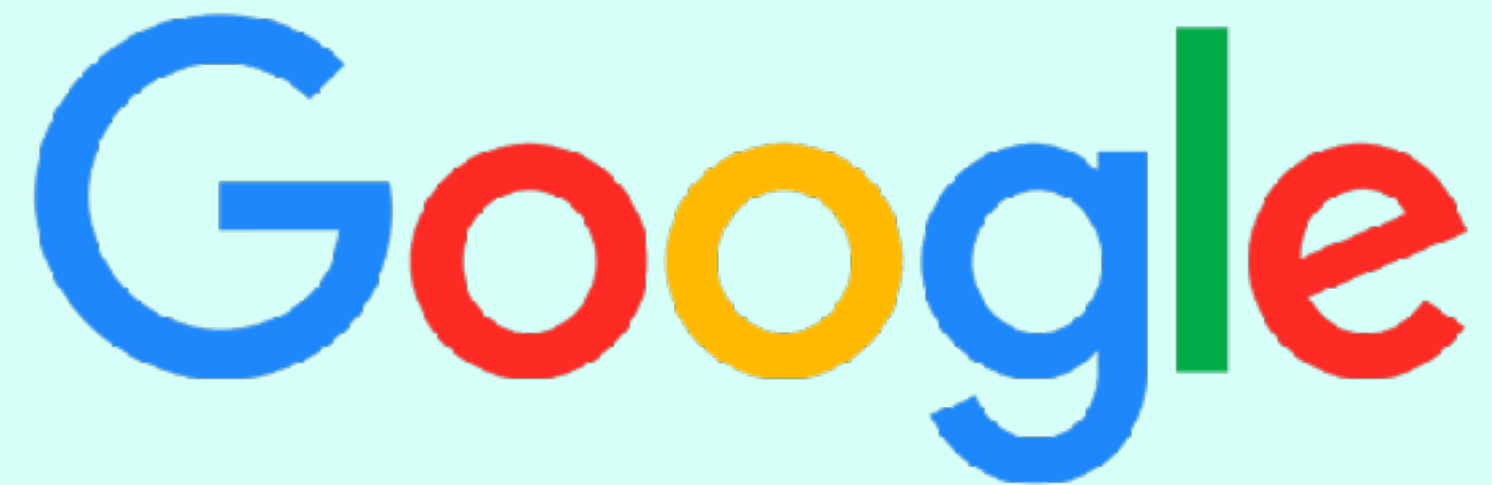
Currently Active / Unexpired



Total in Certificate Transparency



digicert®



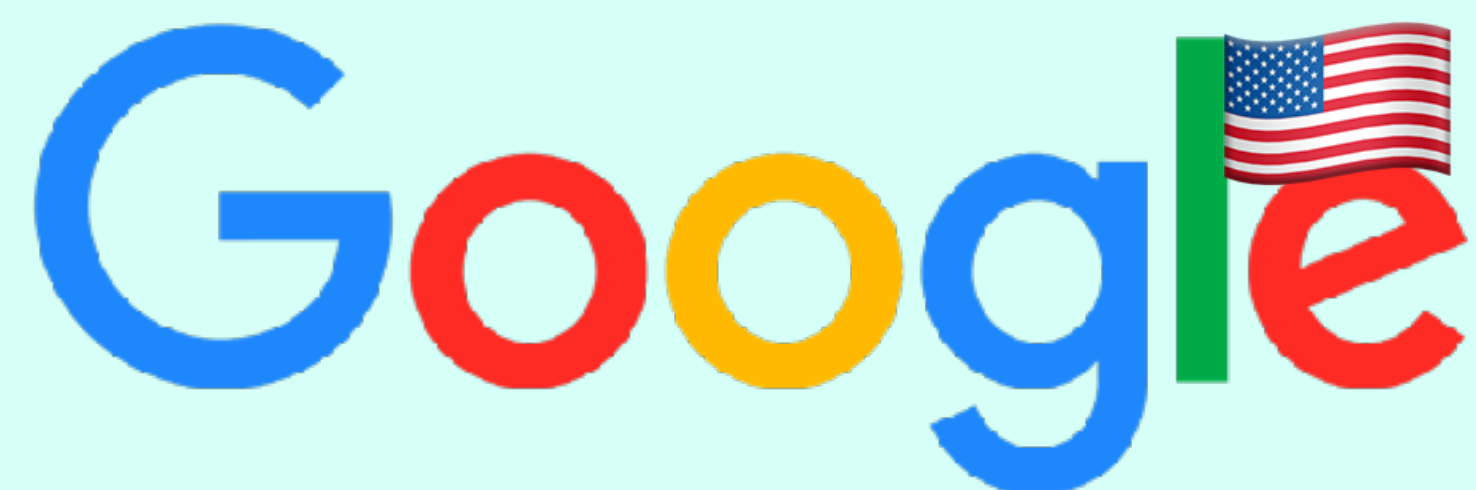
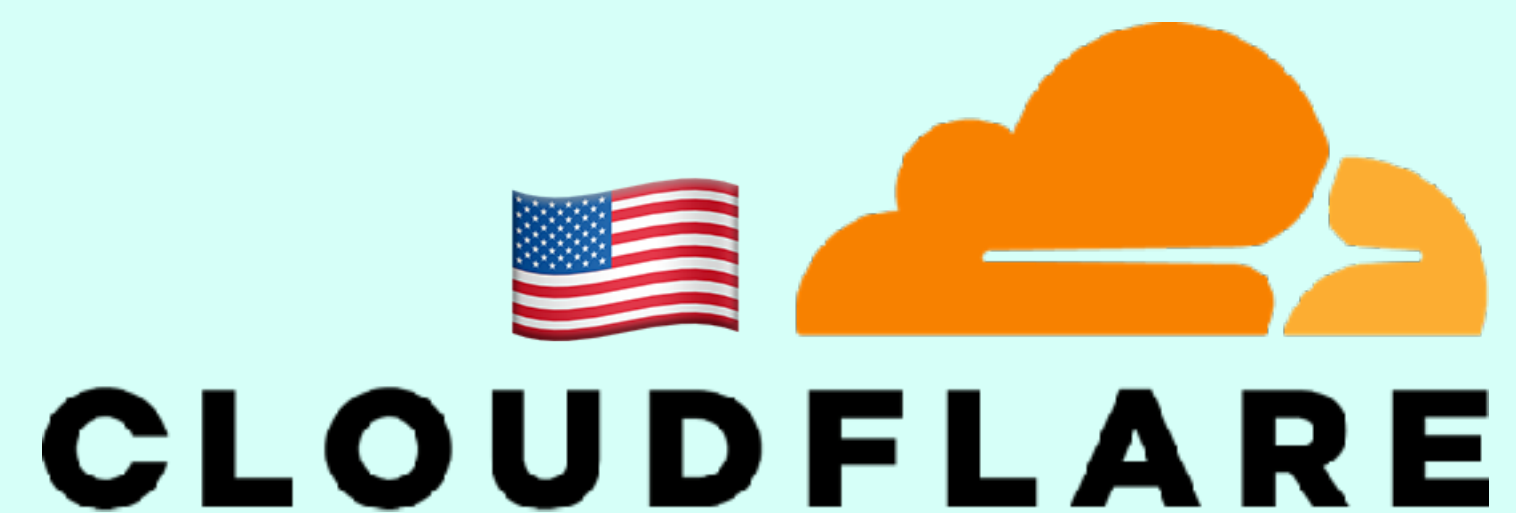
**Phil, what does it take to
operate one of these?**

Cool!



digicert®





We need more CT Logs!

Setting up a CT Log

- Apple & Google have guidelines & requirements
- You can apply like this for consideration
- You can join the community mailing list

You're not alone!

Use the mailing list, or feel free to contact morectlogs@daknob.net for discussion, help, insights, advice, or anything we can do at any phase of the project :)