
NORDIC SOFTWARE
SECURITY SUMMIT
NSSS.SE
THE SOFTWARE SECURITY REGULATION REVOLUTION
November 5, 2026
Daniel Stenberg
Deluge, Distill, Defend

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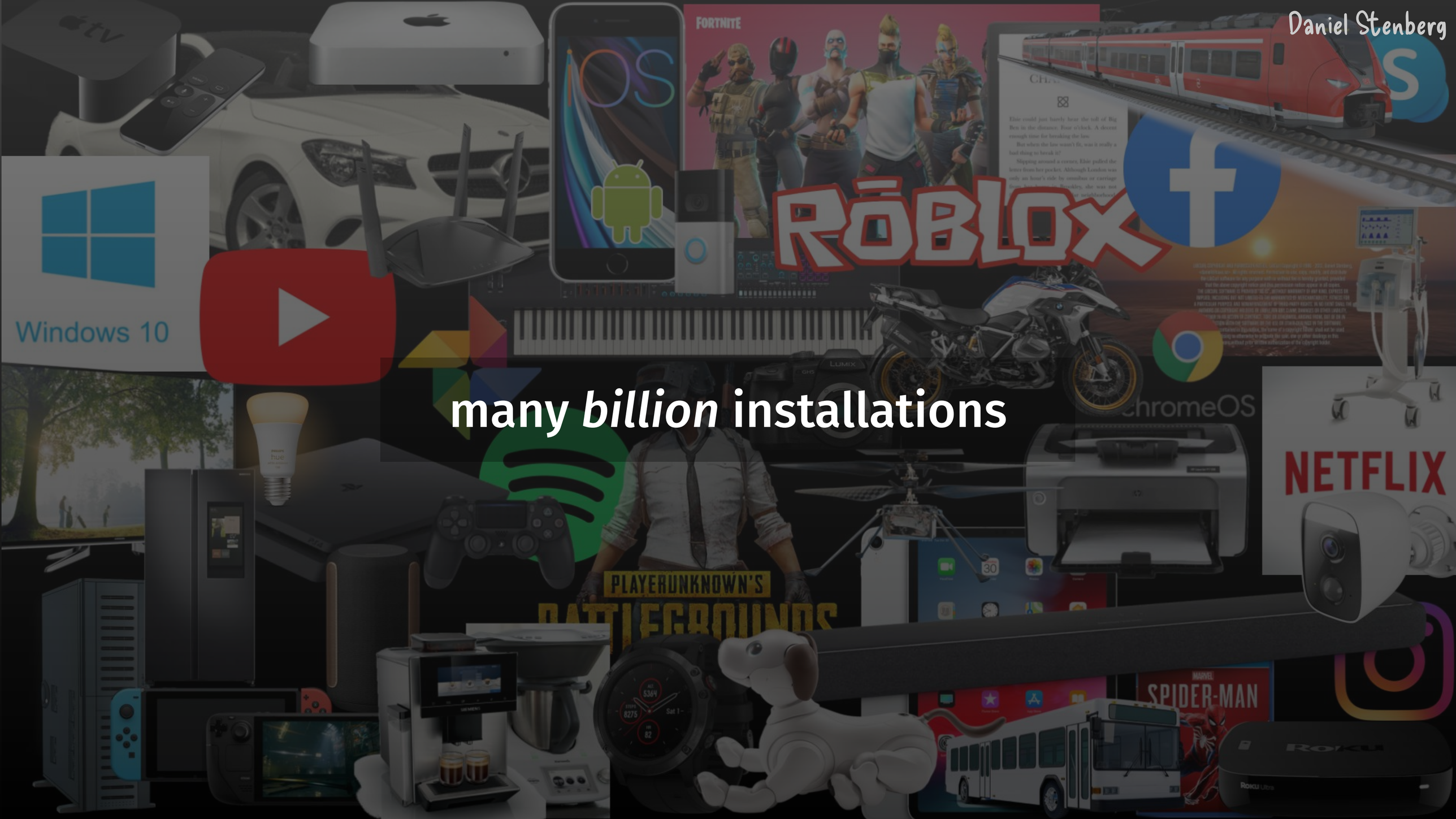
European Open Source Academy

wolfSSL

https://daniel.haxx.se

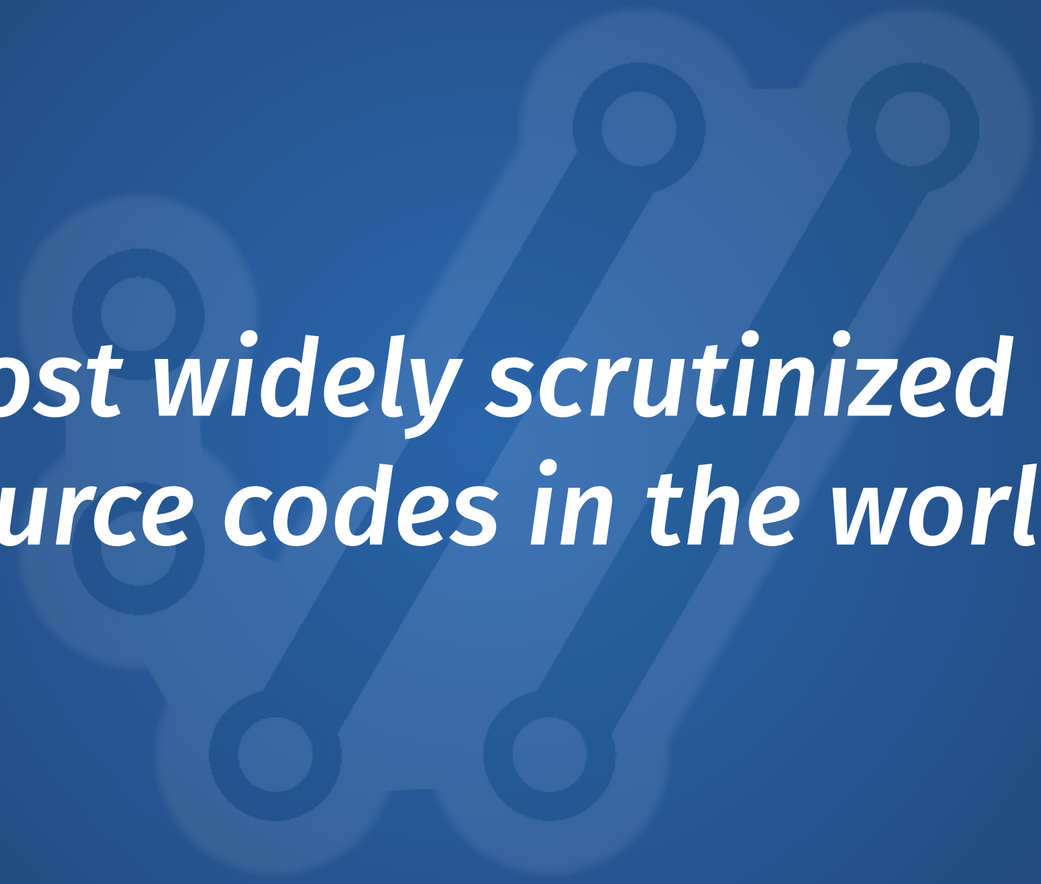
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many *billion* installations

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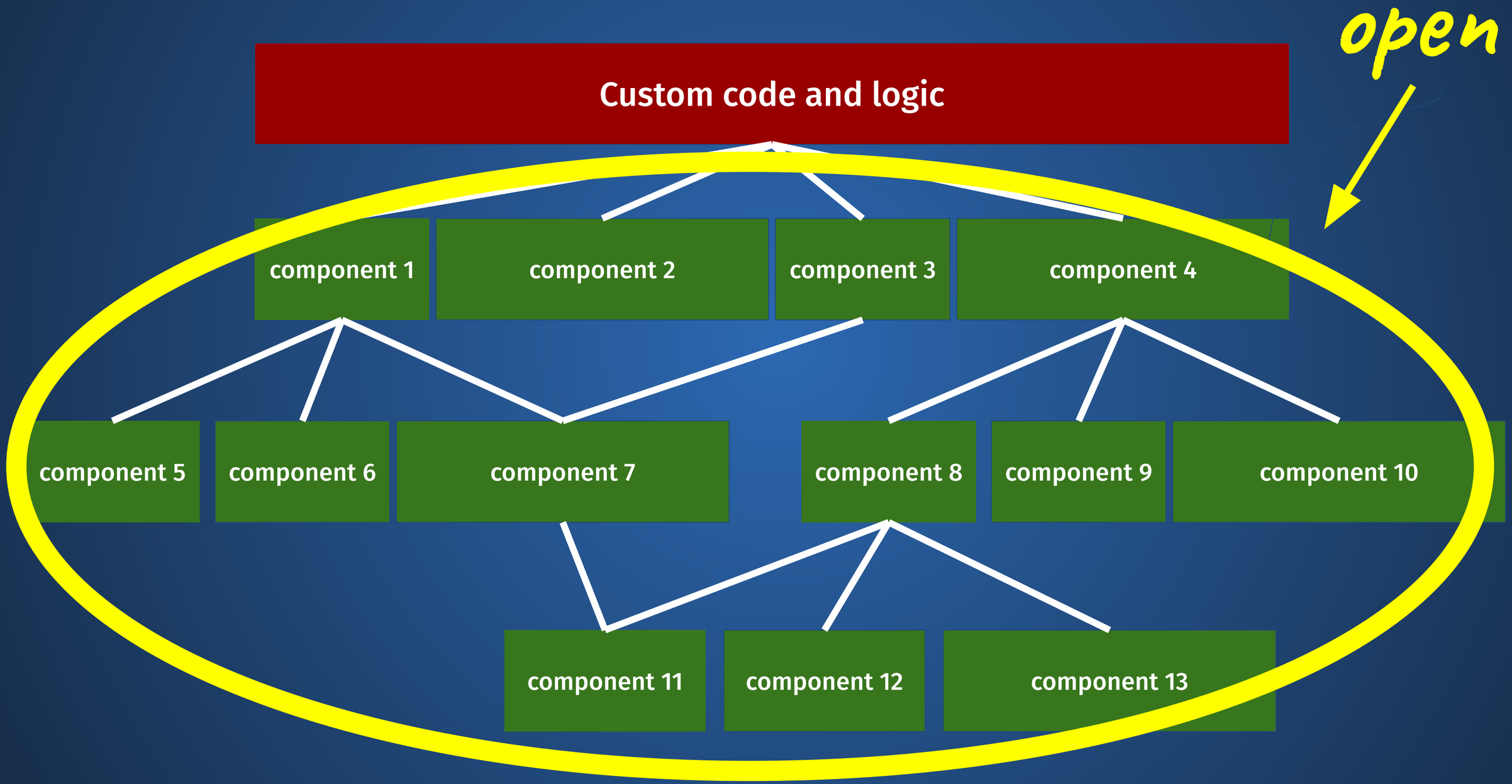
One of the most widely scrutinized and audited source codes in the world



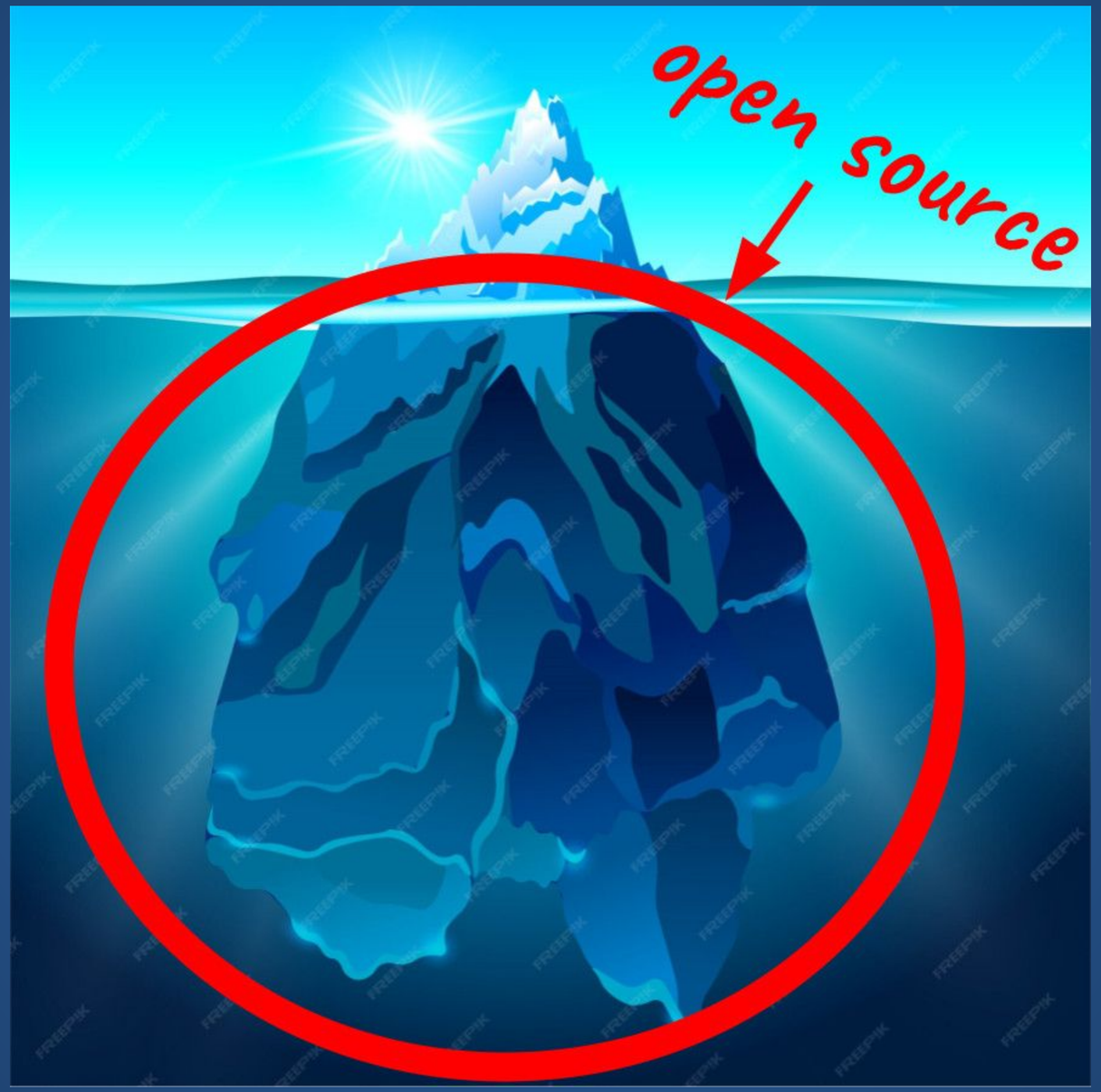
Celebrates its 30th anniversary next week

Modern digital infrastructure is built on layers and layers of Open Source

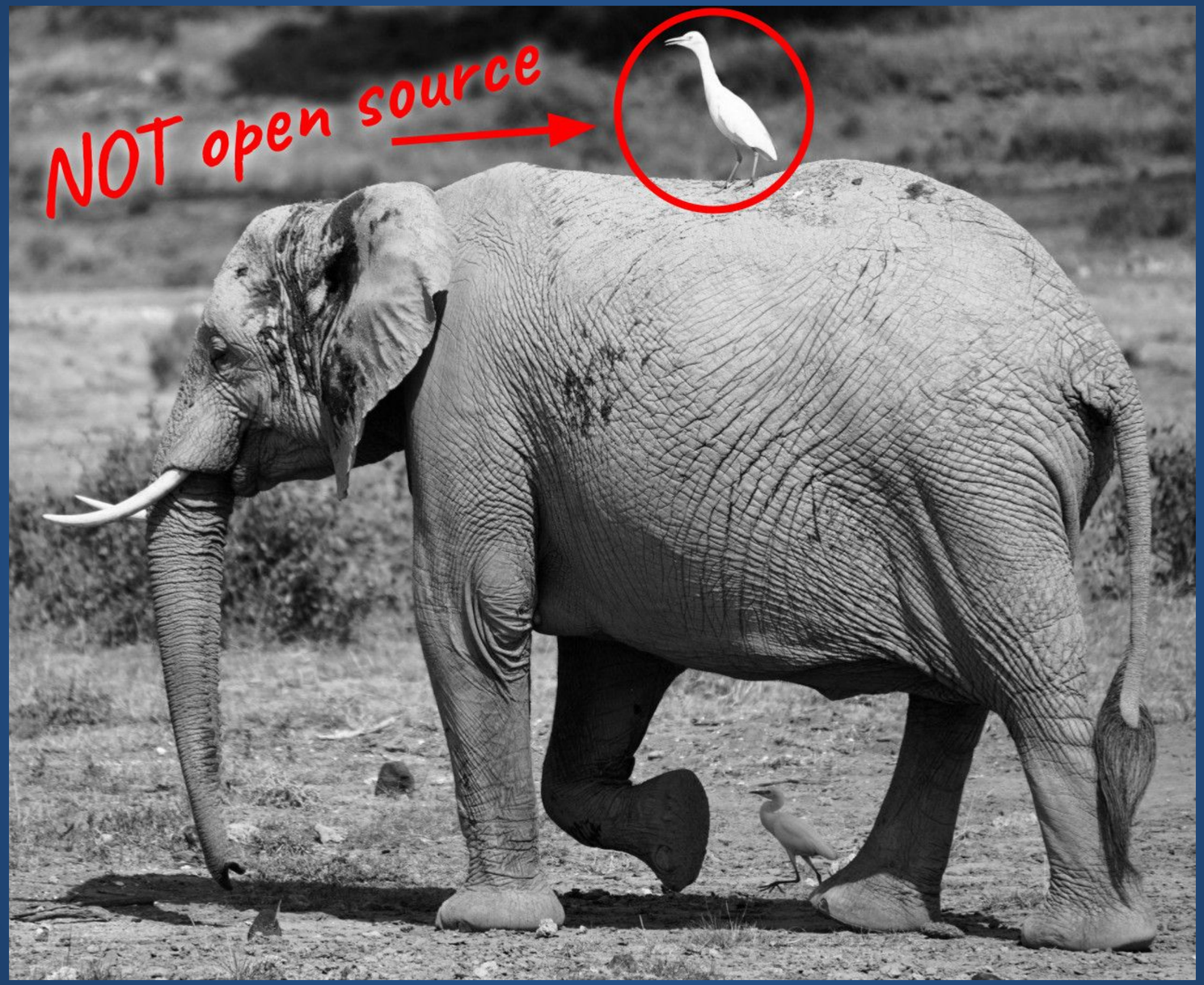
All modern software

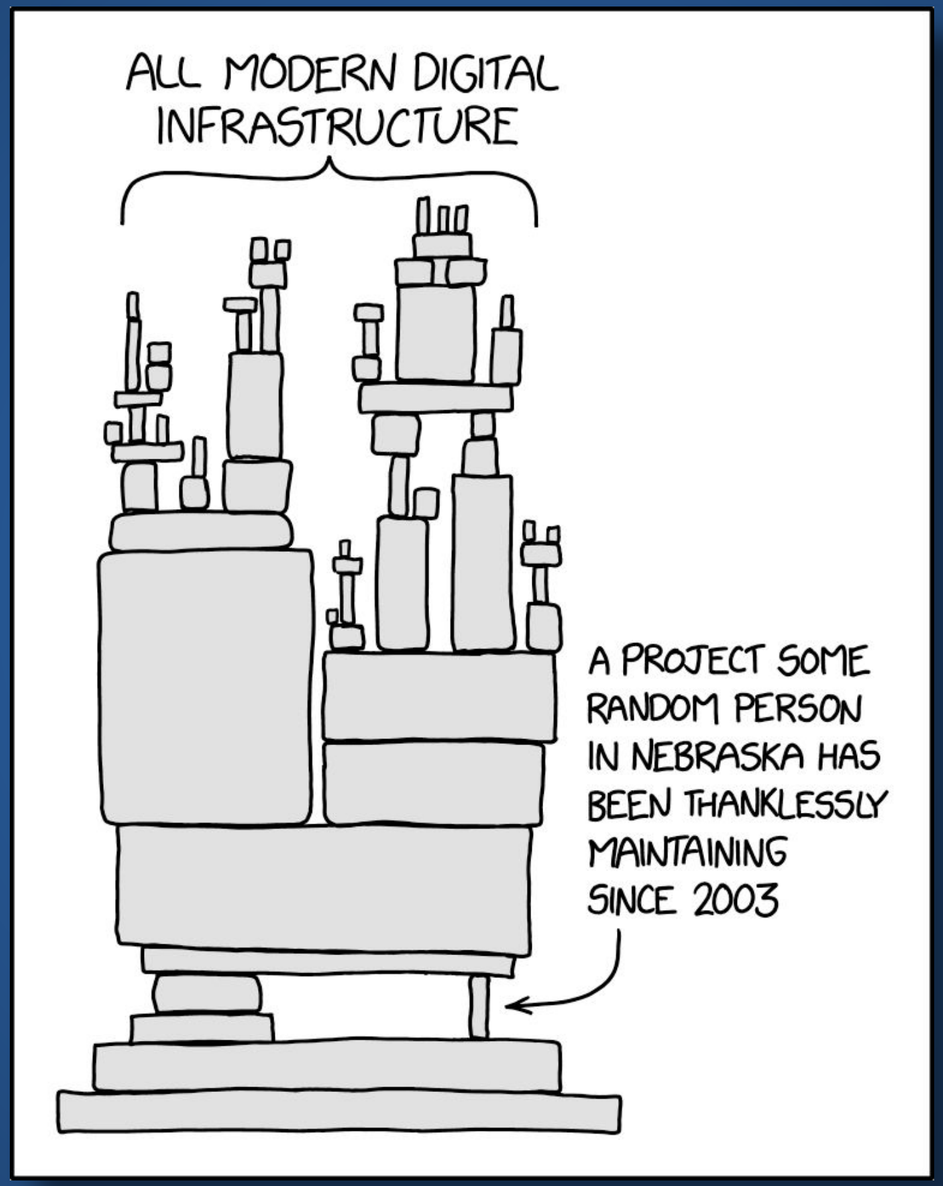


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ALL MODERN DIGITAL INFRASTRUCTURE
A PROJECT SOME RANDOM PERSON IN NEBRASKA HAS BEEN THANKLESSLY MAINTAINING SINCE 2003

Securing curl

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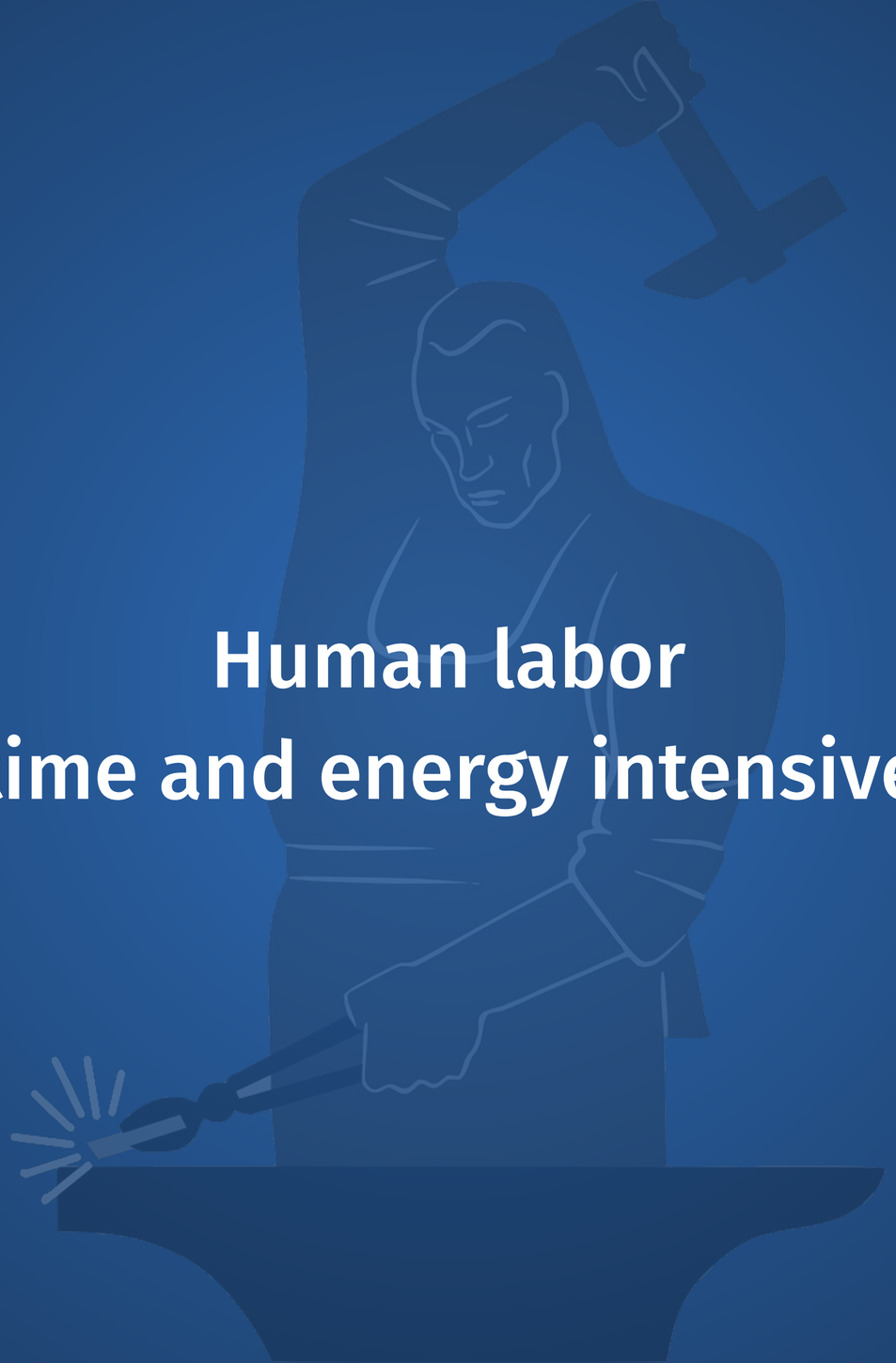
Code style	Banned functions	Complexity checks	Human reviews	Review bots	No binary blobs	REUSE compliant
No git force push	No confusable Unicode	Document everything	Many tests	*torture tests*	CI like crazy	All picky compiler options and -Werror
Valgrind and sanitizers	AI + static code analyzers	Fuzzing, in CI and non-stop	read-only CI jobs	zizmor the CI jobs	Reproducible releases	Signed releases, commits, tags
git backup on codeberg	Vulnerabilities fixed in next release	Document vulnerabilities thoroughly	Code audits	(strong) 2fa for all committers	API and ABI stability allows *always-update*	private vulnerability reporting

Everything done in the open - accessible and transparently



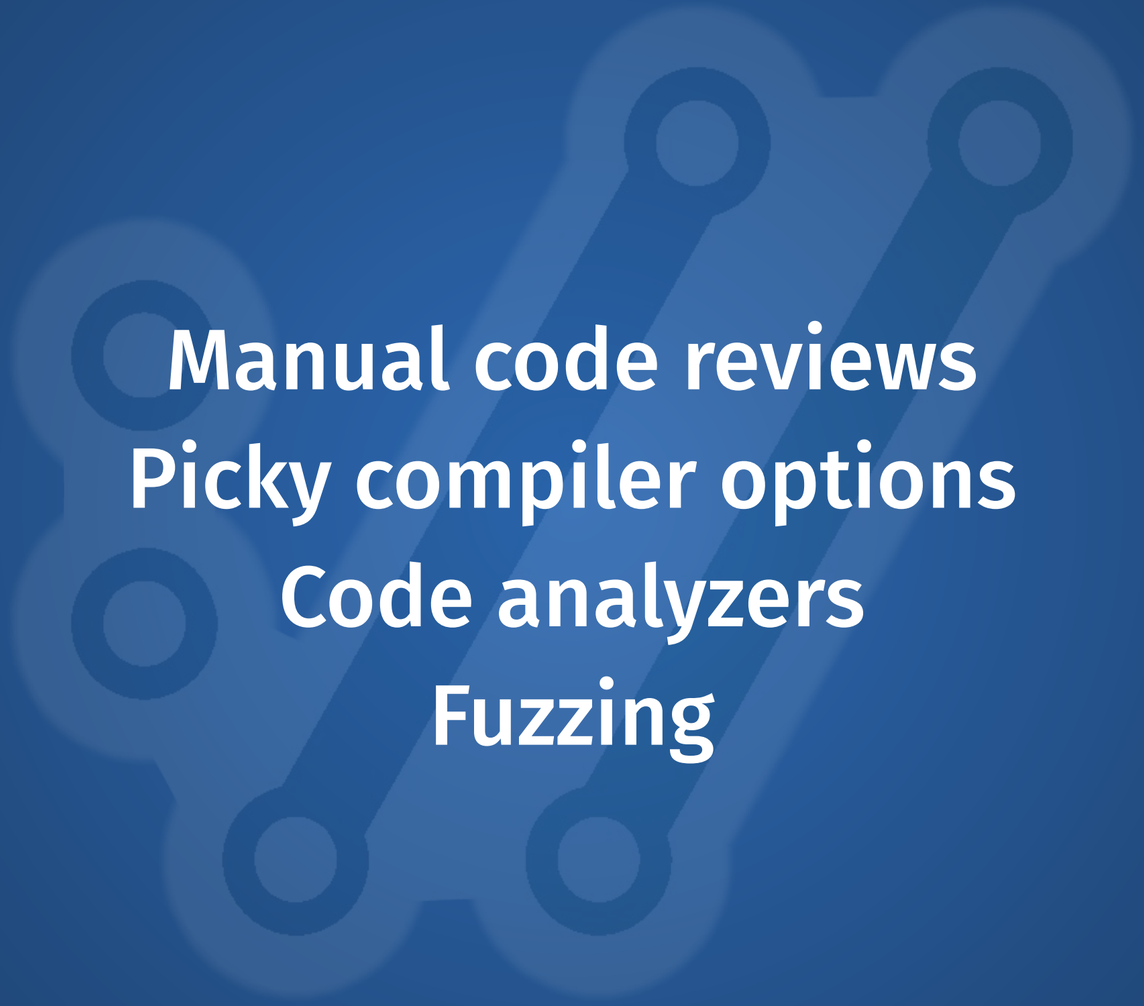
The artisanal era

Writing code



Human labor
time and energy intensive

Verifying code



Manual code reviews

Picky compiler options

Code analyzers

Fuzzing

Finding security flaws



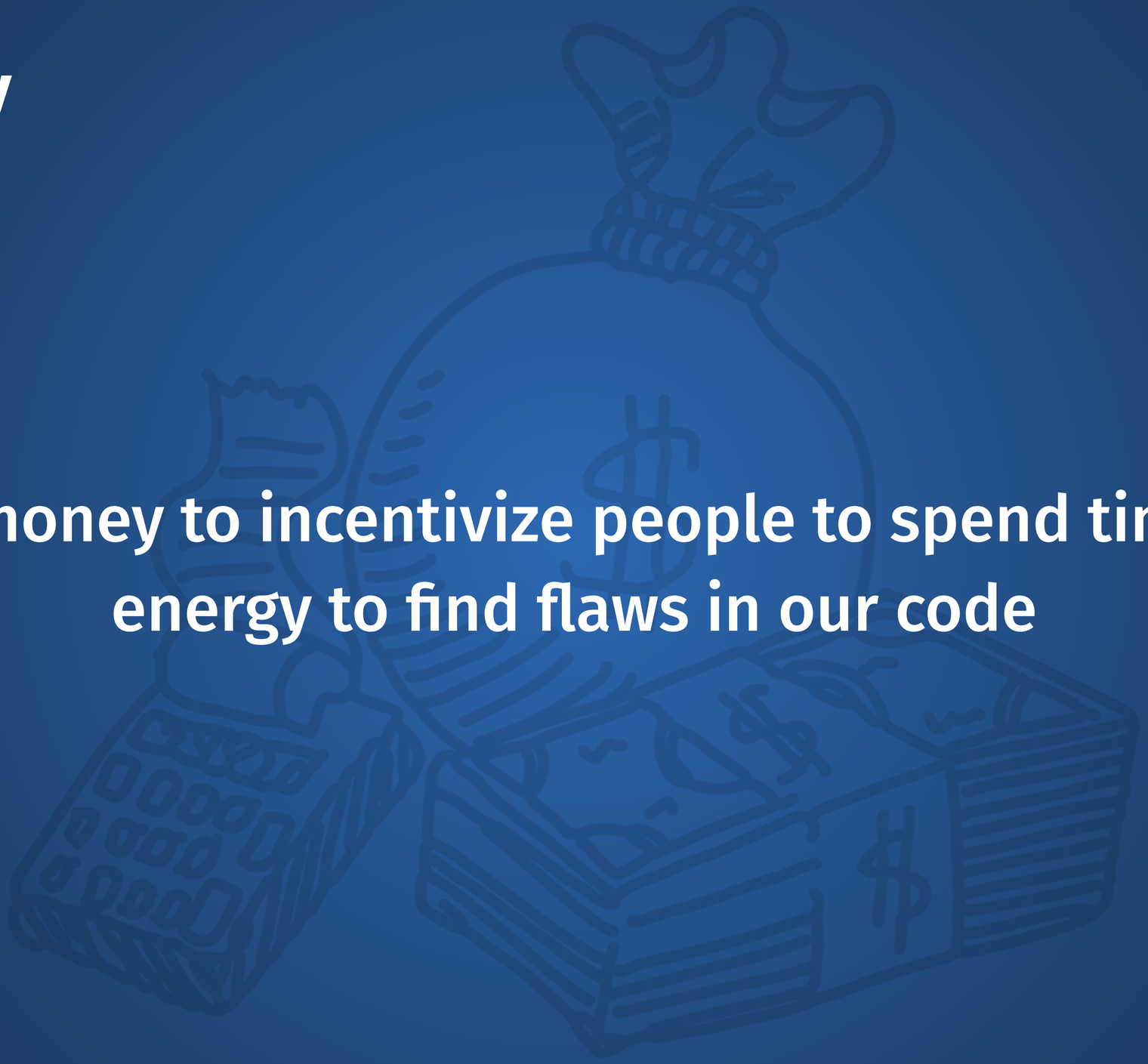
Human eyes

grepping

custom tools

time and energy intensive

Bug-bounty



Offer money to incentivize people to spend time and energy to find flaws in our code


reporter
receiver

The awakening

Generative AI

The Floodgates Open

Anatomy of a slop report

Confident tone

Overly polite

Zero substance

Hallucinated APIs

Impossible buffer overflows

Politeness covering for technical nonsense

Signal to noise bankruptcy

volume ↑

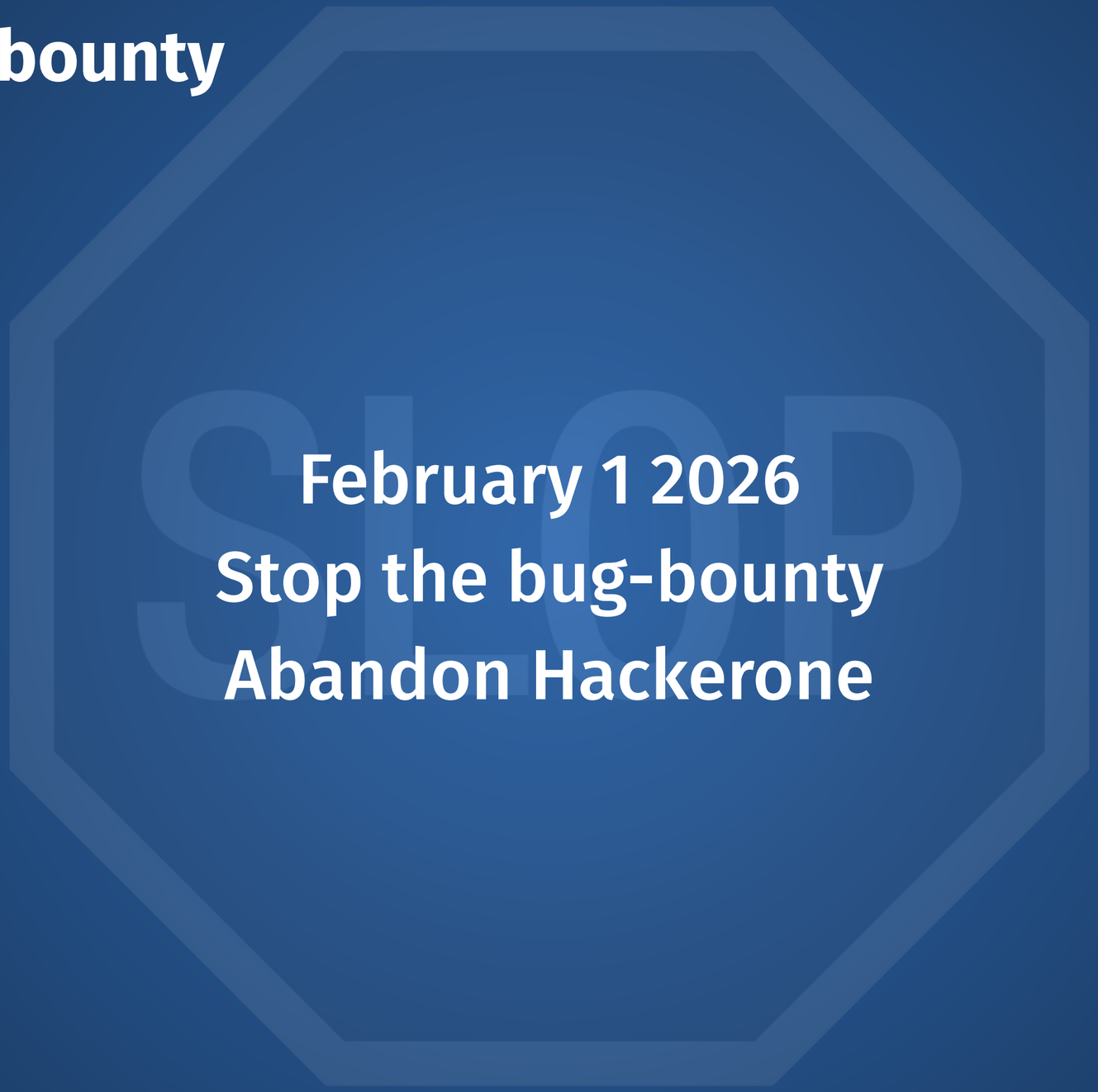
quality ↓

The mental taxation

Triaging "ridiculous levels" of reports.

The burnout of saying "This isn't real" many times a day.

Stop the bug-bounty



February 1 2026

Stop the bug-bounty

Abandon Hackerone

High-Quality Chaos

The reports are back

The rate of reports does not slow down

The quality looks fine !?

The slop rate stays low

Quality and volume

High quality in large volumes

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Bug vs Vulnerability

AI is great at finding bugs.
Still weak at understanding security context.

Duplicates

More than one person run the same tools...

Technically correct

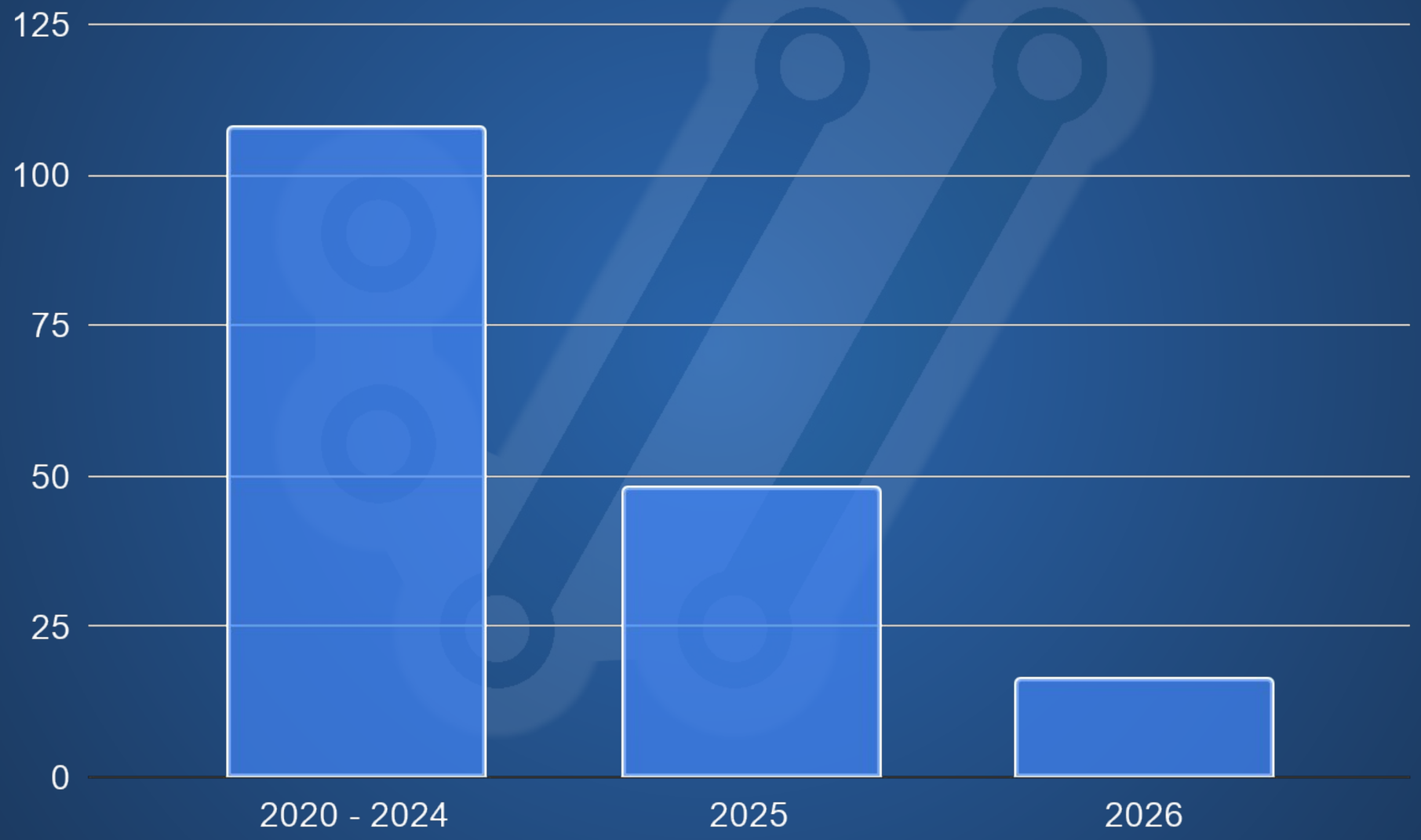
well-formatted and technically correct

Polished, professional, often wrong about security

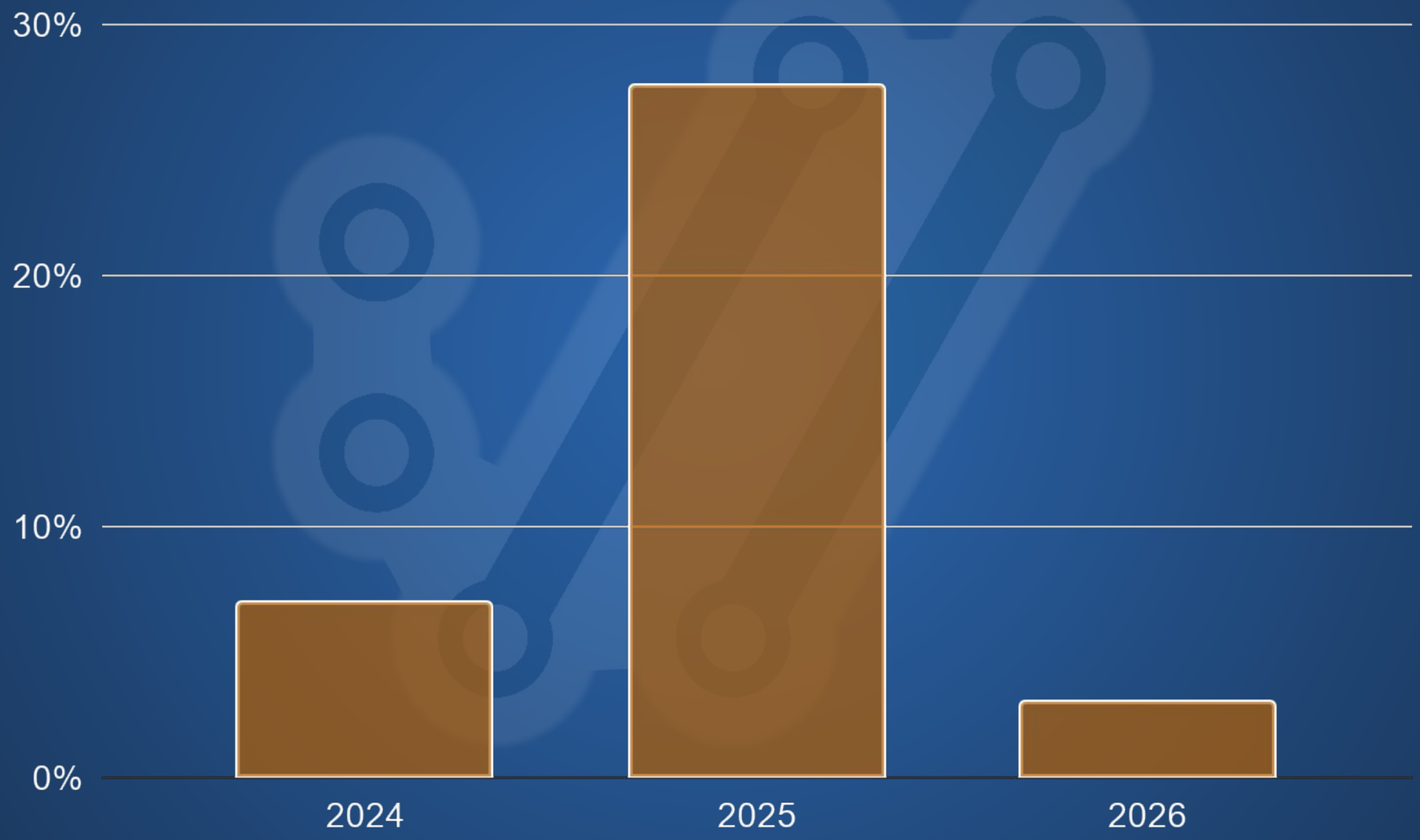
Accurate often enough

Numbers

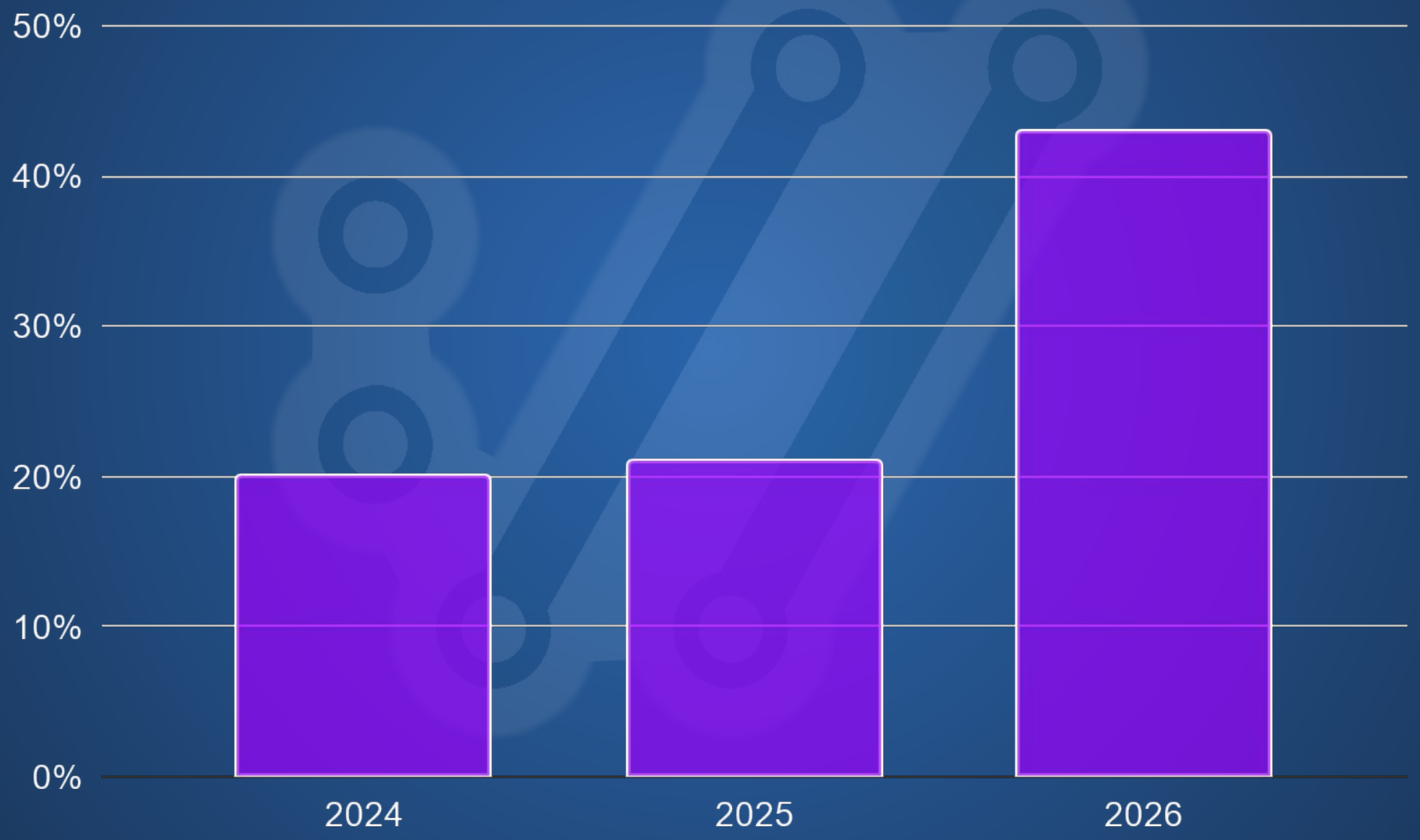
Number of hours between vulnerability reports



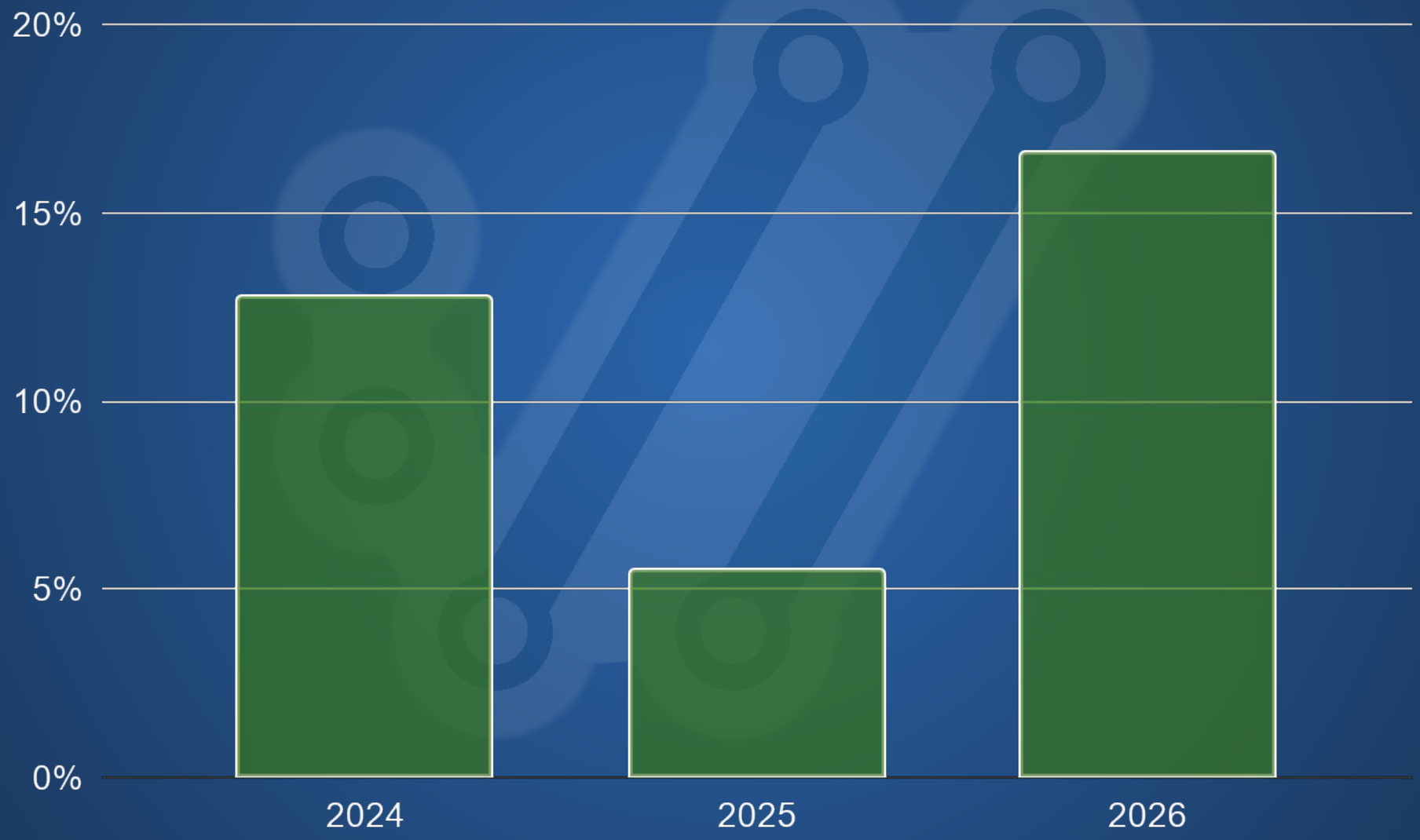
AI slop rate



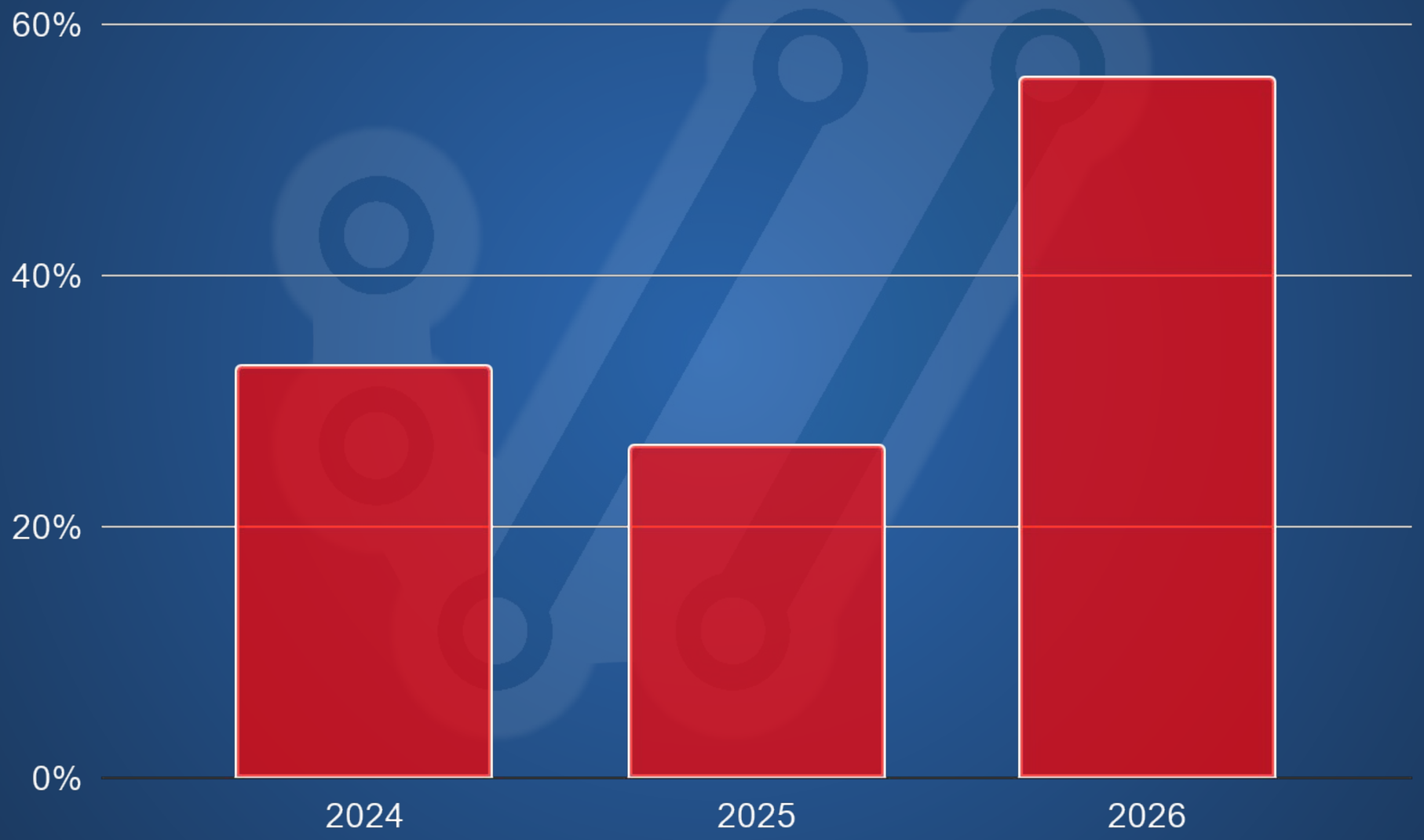
Share of reports that were bugs, not vulnerabilities



Confirmed vulnerability rate



Either vulnerability or a bug



Every report

Easy to generate

hard to process

rarely contain the right fix

Every report

Assess, understand, is it a vulnerability?

Hours *to days* per issue

Higher quality reports take more time

Once confirmed, the fix itself is *usually* quick

Improvements compared to “before”

Not restricted to “has to build”

Not restricted to specific platforms

“Sees” into dependencies

“Knows” spoken protocols

Good at spotting broken patterns

Takes comments into account

Generates patches and test cases

Builds reproducers



The drowning

Everyone

Apache httpd, BIND, curl, Django, Elasticsearch Python client, Firefox, git, glibc, GnuTLS, GStreamer, Haproxy, Immich, libssh, libtiff, Linux kernel, OpenLDAP, PostgreSQL, PowerDNS, python, Prometheus, Ruby, Sequoia PGP, strongSwan, Temporal, Unbound, urllib3, Vikunja, Wireshark, wolfSSL, ...

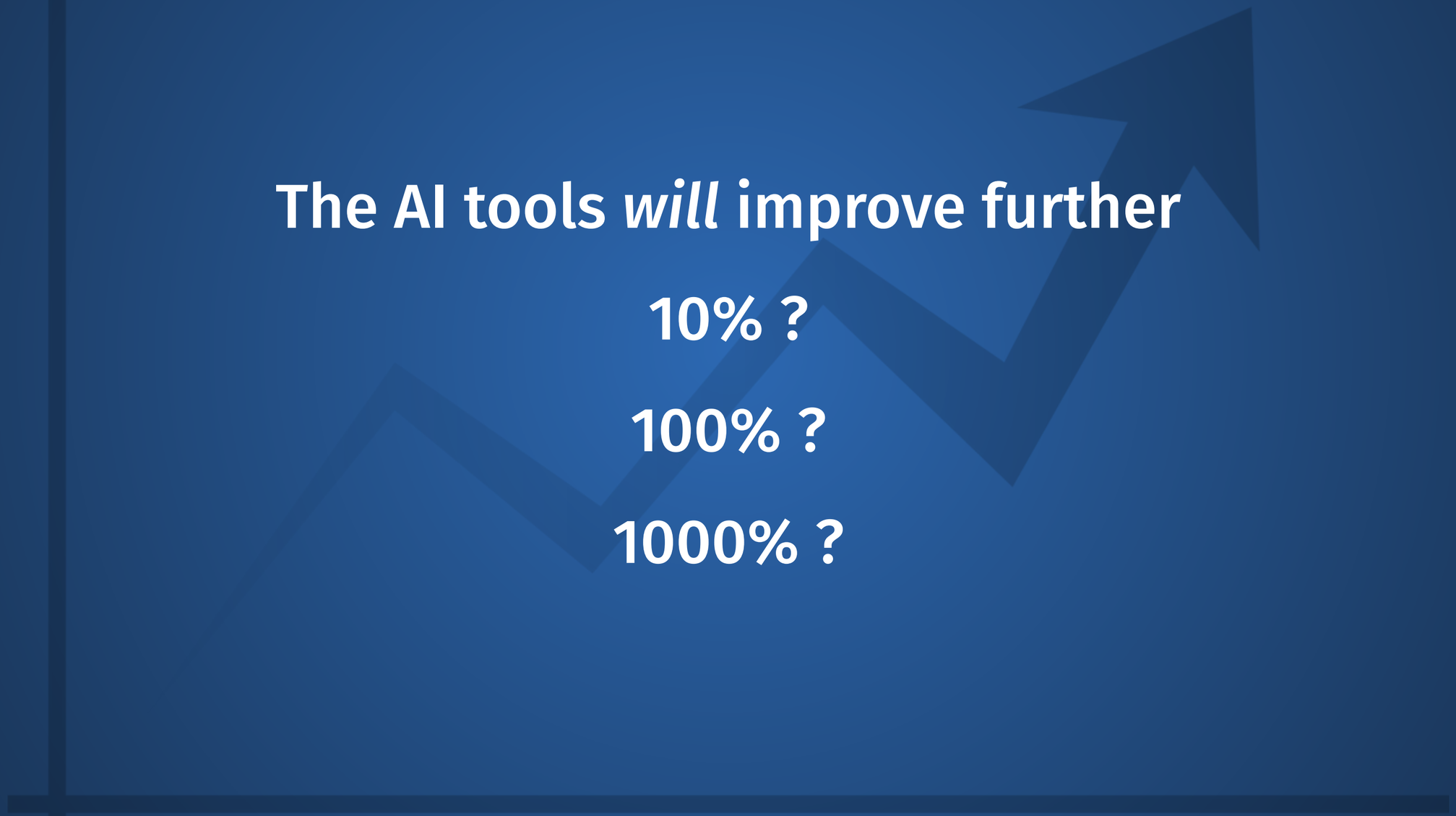
Security report overload



Understaffed

Underfunded

Overworked



The AI tools *will* improve further

10% ?

100% ?

1000% ?

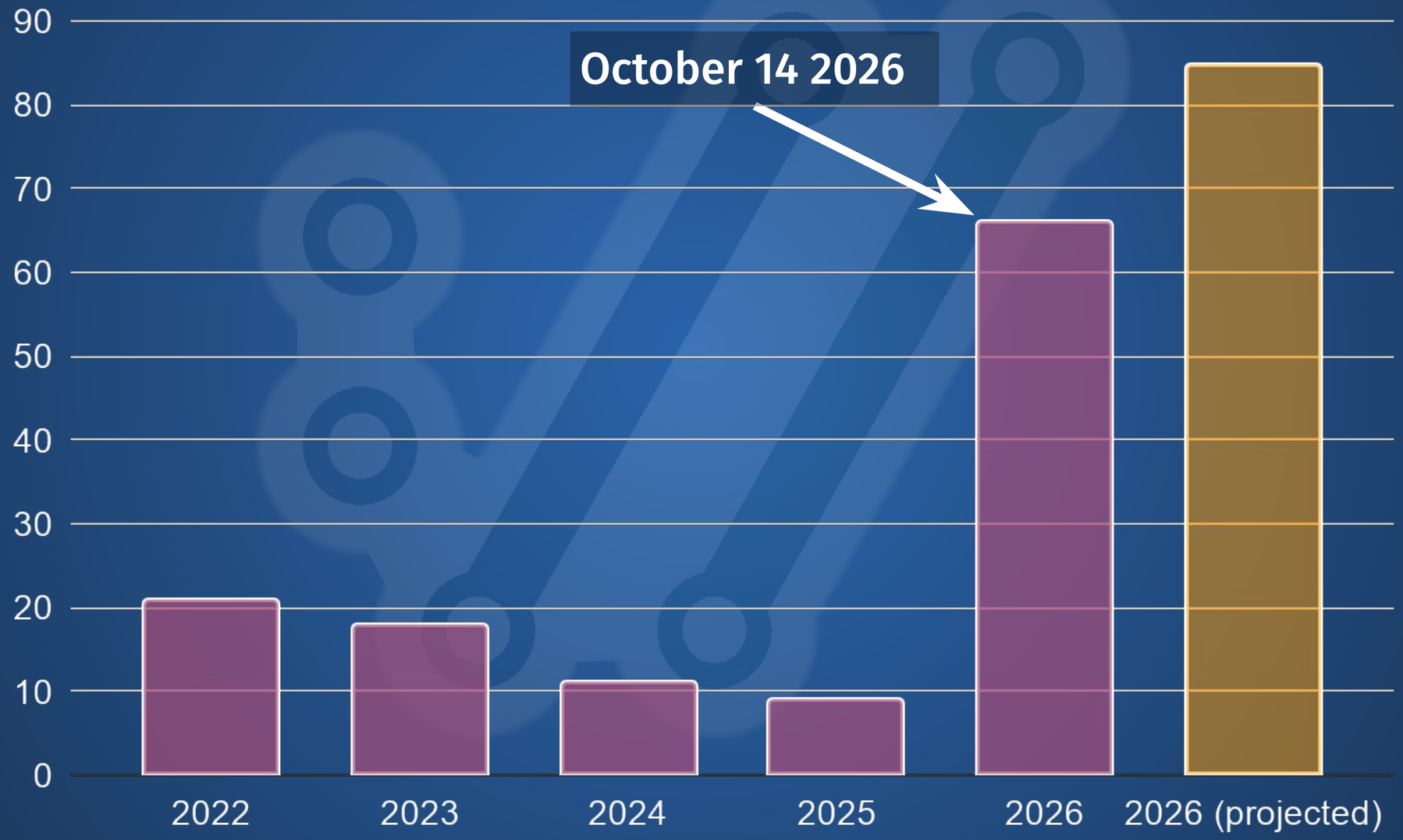
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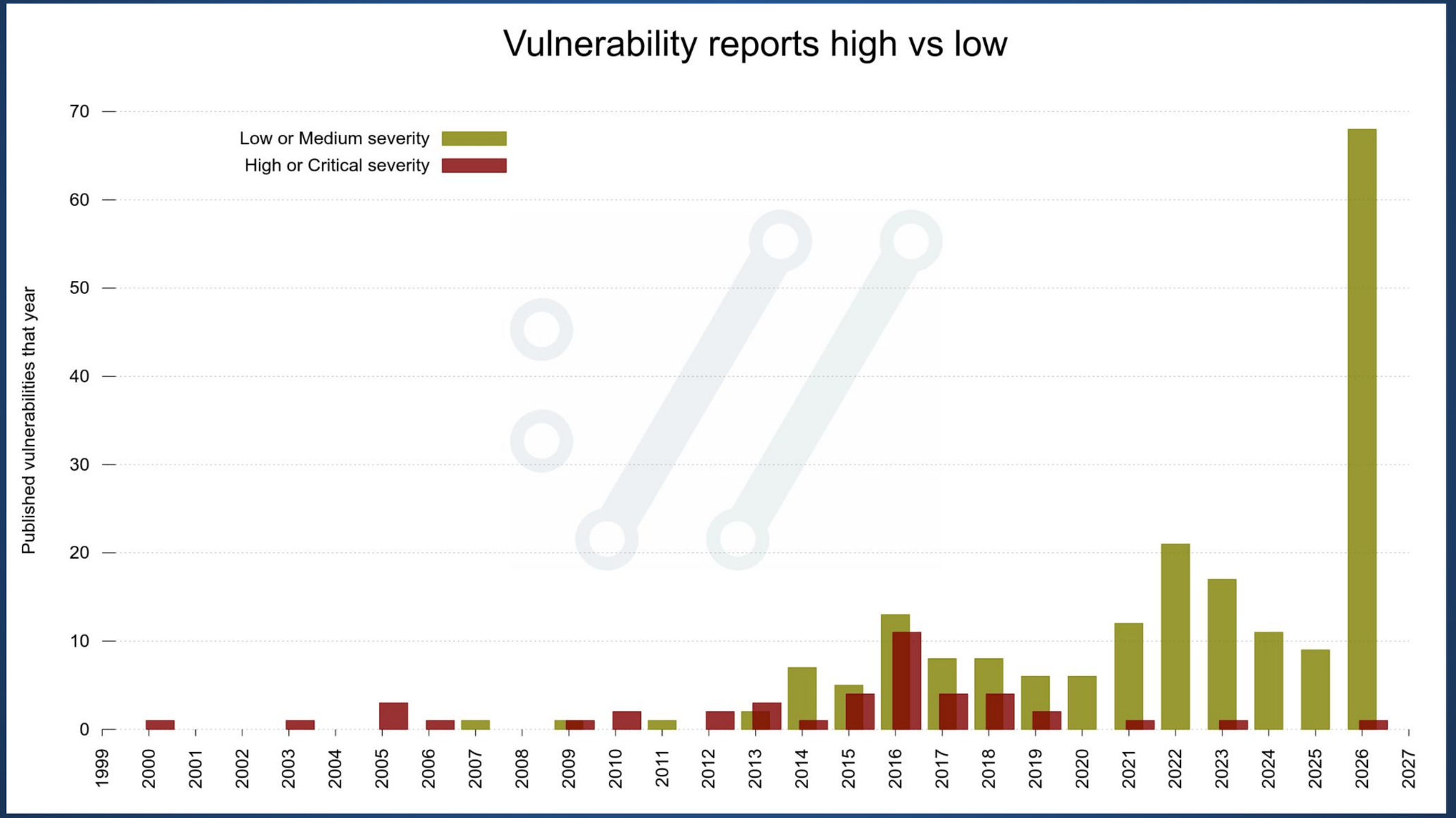


The report load will increase further

Number of published vulnerabilities



New findings tend to be less serious

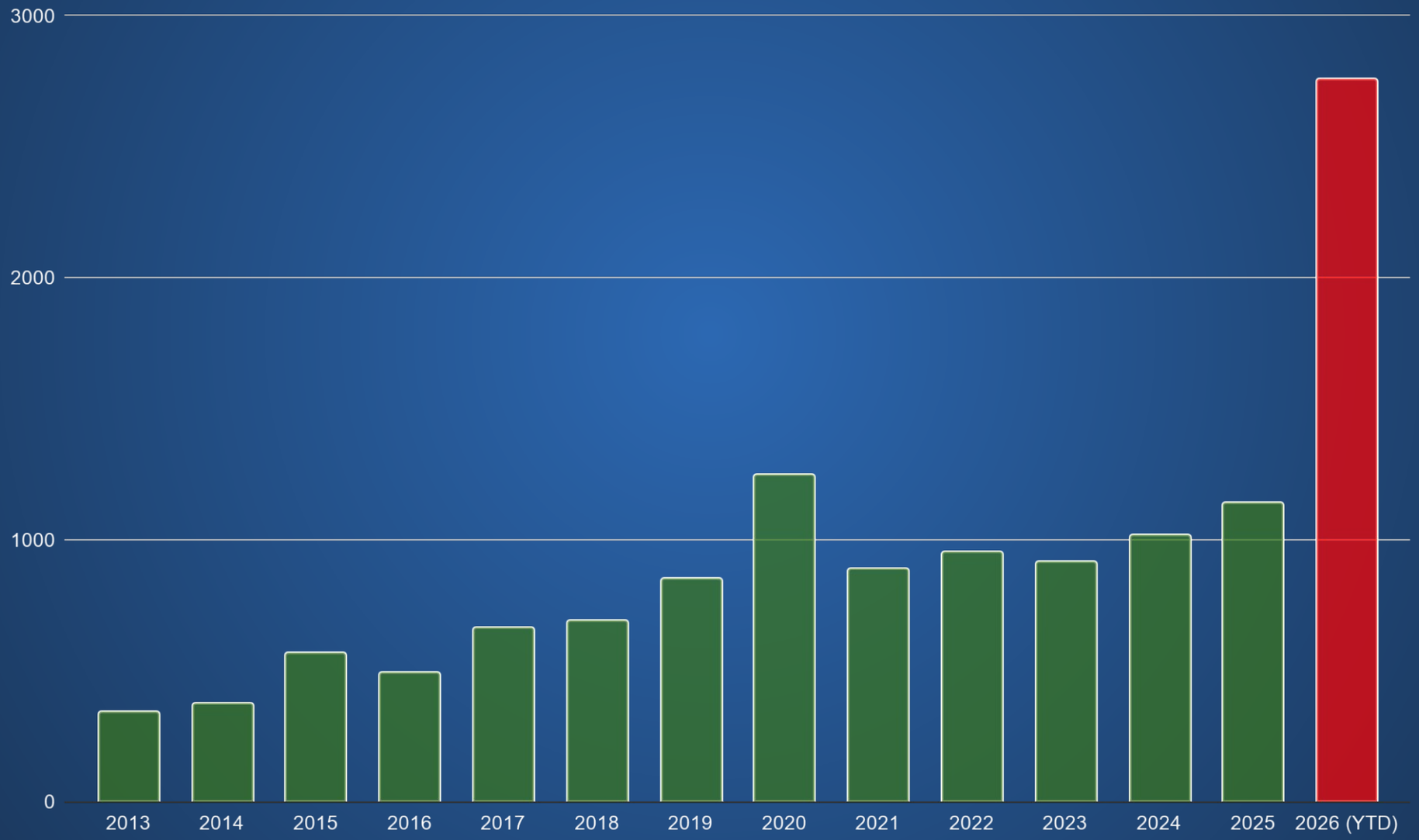


Firefox Security Bug Fixes by Month

All Sources ▪ All Severities

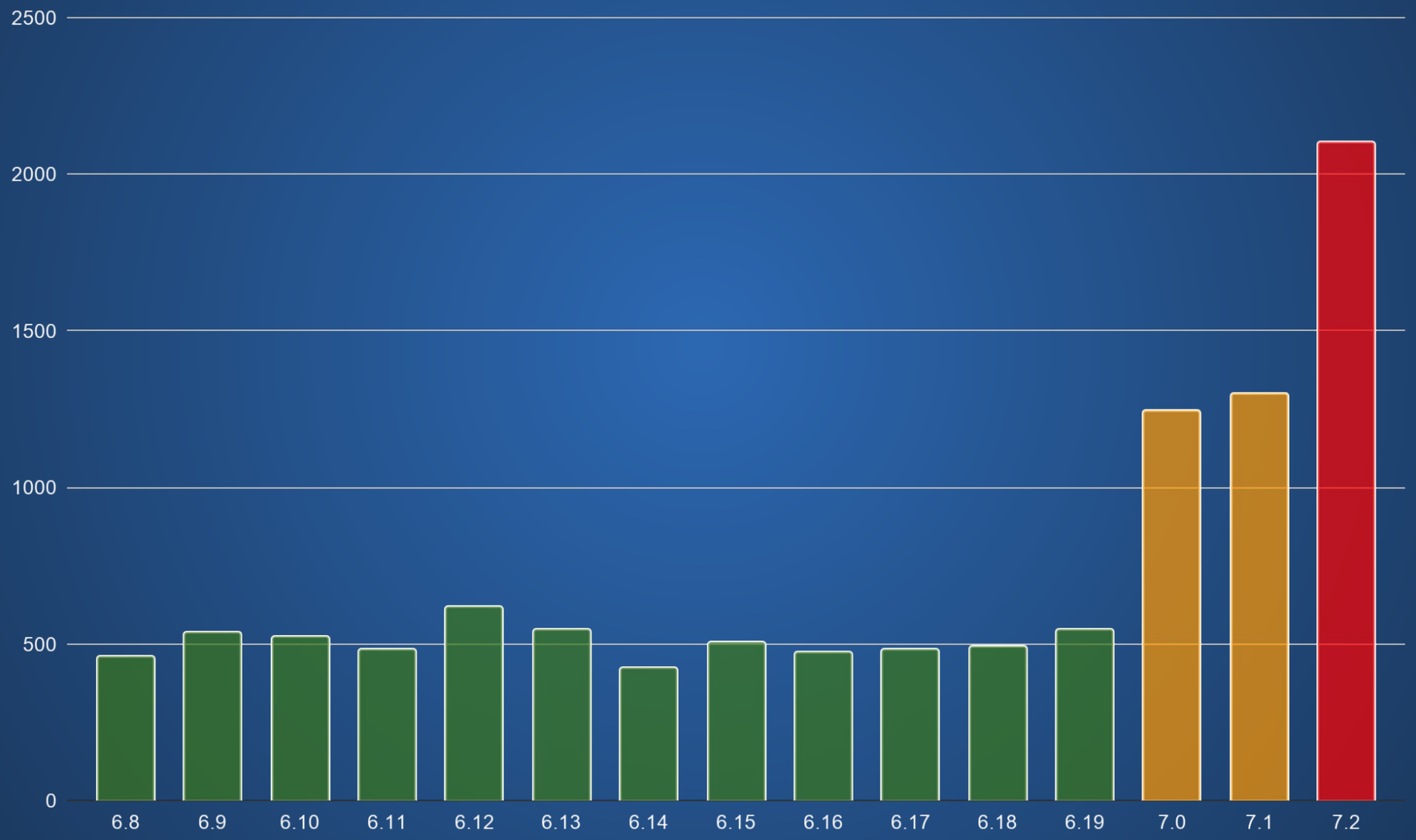


Microsoft vulnerabilities

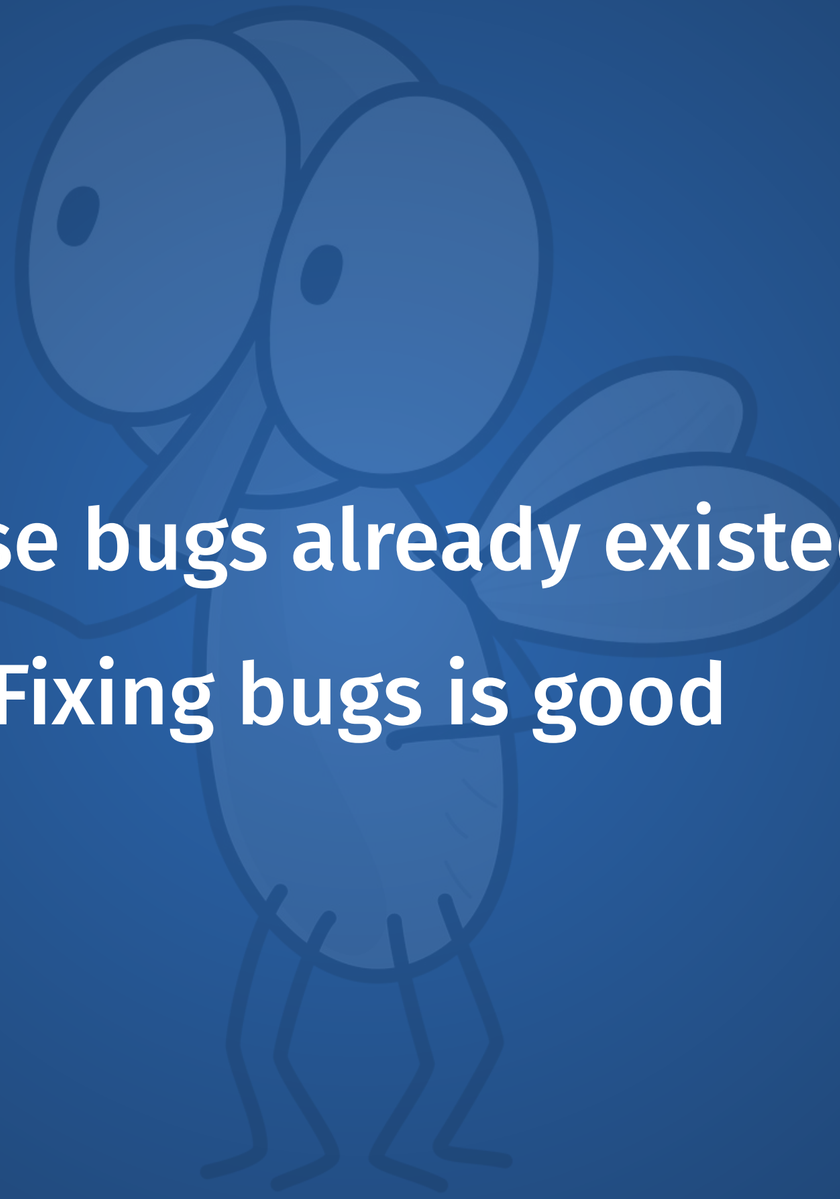


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Number of CVEs per Linux kernel release

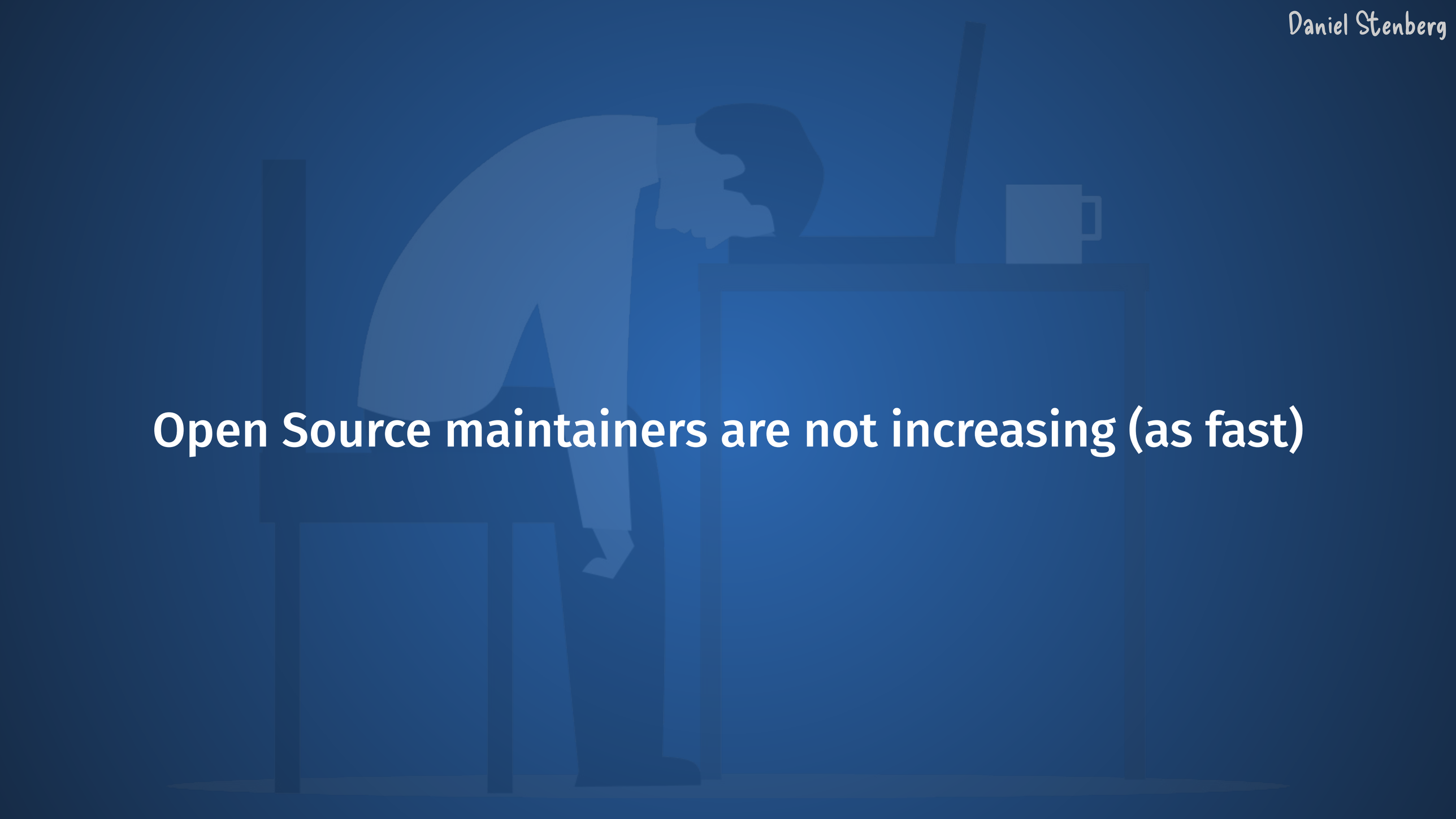


Greg Kroah-Hartman

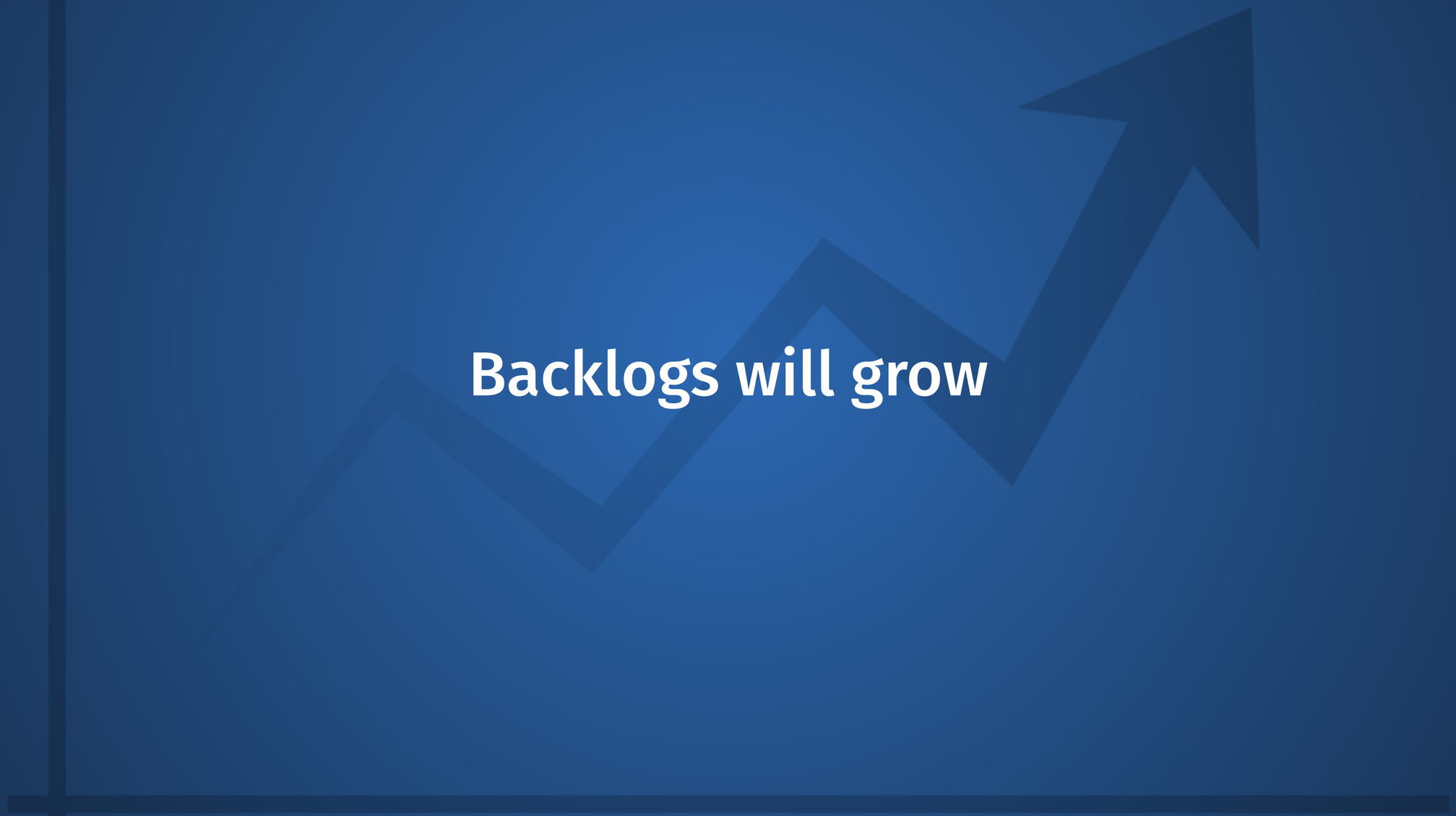


These bugs already existed

Fixing bugs is good



Open Source maintainers are not increasing (as fast)



Backlogs will grow

The secrecy contributes to the problem

the curl project now handles **LOW** and **MEDIUM** in public





more vulnerabilities will be published



Opportunity for malicious actors



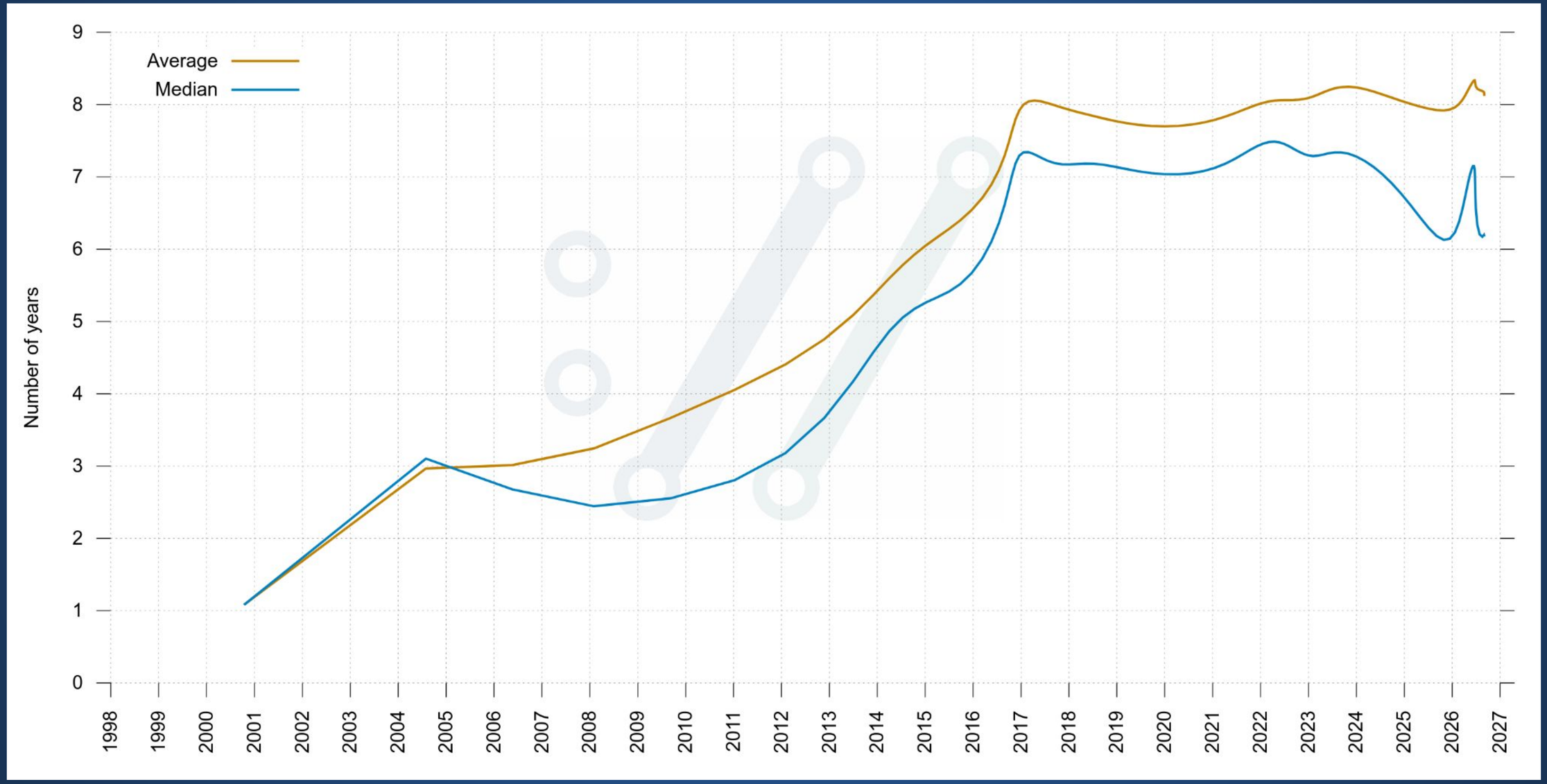
Faster release cycles?

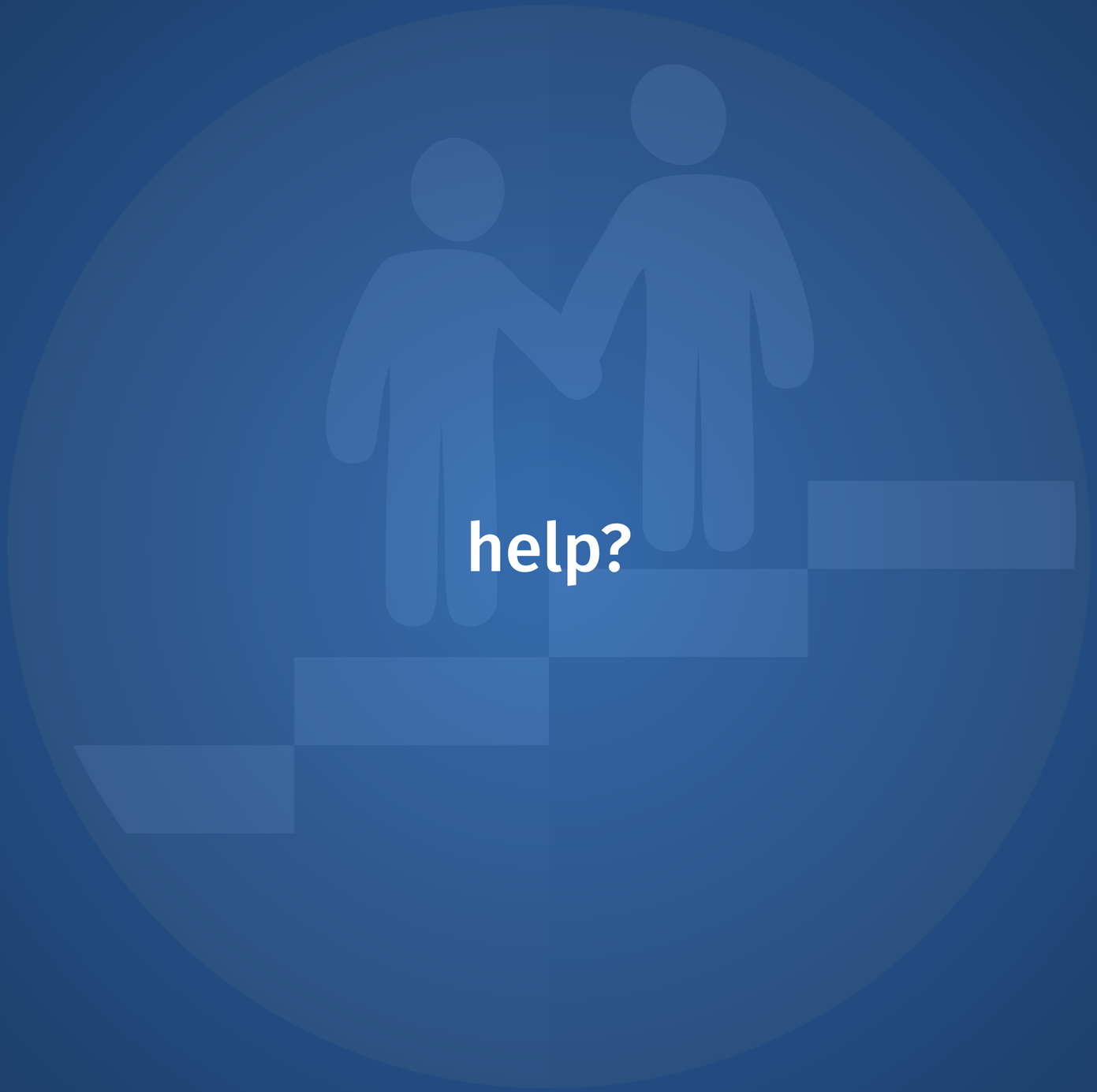


Can *you* patch fast enough?

Eventually the wave slows down?

Vulnerability age when reported





help?


QUESTIONS?

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