

The Pain of Software Vulnerability: 900 minutes of interviews in 15 minutes of presentation :)

John Speed Meyers (jsmeyers@chainguard.dev) September 12, 2023 Chainguard Labs

How much time do organizations* spend on vulnerability management?

And why is vulnerability management* so painful?

* Organizations that build or operate container-based applications.

* Identifying, triaging, and remediating known vulnerabilities in containers.

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Methodology

~10 interviews with software professionals

- All interviewees do vulnerability management as part of their day-to-day job.
- All interviewees work at organizations that build or operate containers.
- 3 pre-interviews. 9 full interviews.
- 60-90 minutes.
- Recorded. Rewatched.
- Analyzed for themes.
- Paid interviewees a flat fee.

ACKNOWLEDGEMENT: Accurately understanding how software professionals spend their time is a software engineering research holy grail. I have not found this particular holy grail :)

Some companies spend A LOT of time on vulnerability management. But not all.

| Company | Estimated # of Employees | Estimate of Total Annual Direct Staff Hours Spent on Vulnerability Management |
|-------------------------------|-----------------------------|--|
| European Logistics | 10,000s | ~20,000 hours |
| U.S. Military Organization | 100s | ~15,000 |
| Software provider | 1000s | ~1250 hours |
| Software provider | 100s | ~1000 |
| Software provider | 100s | ~1000 hours |
| Software provider | 1000s | ~200 |
| Software provider | 10s | ~100 hours |
| Software provider | 100s | ~150 |

Vulnerability Management Pain Points (a few of them)

- App developers impose "externalities" on platform team when choosing base images.
- False positives are annoying.
 Interviewees expressed interest organically in VEX.
- 3. Vulnerability management affects software consumers AND producers.

Should organizations analyze their vulnerabilities? Or try to reduce them? (Or both?)



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