



Chainguard | Chains - KTH

The safe source for opensource

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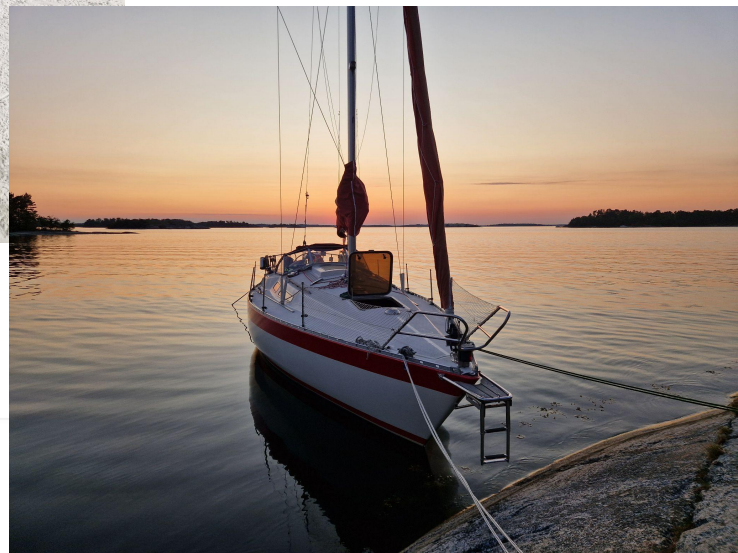
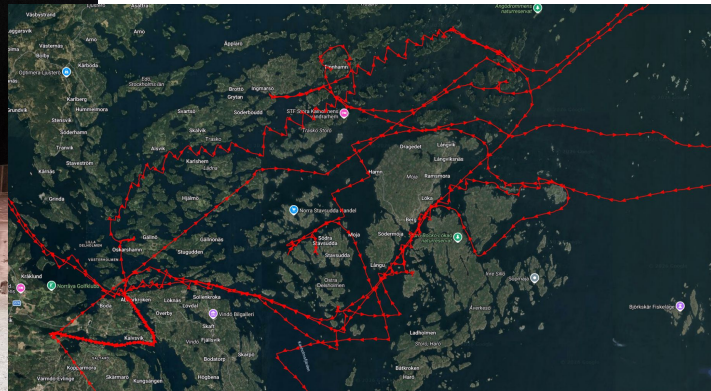
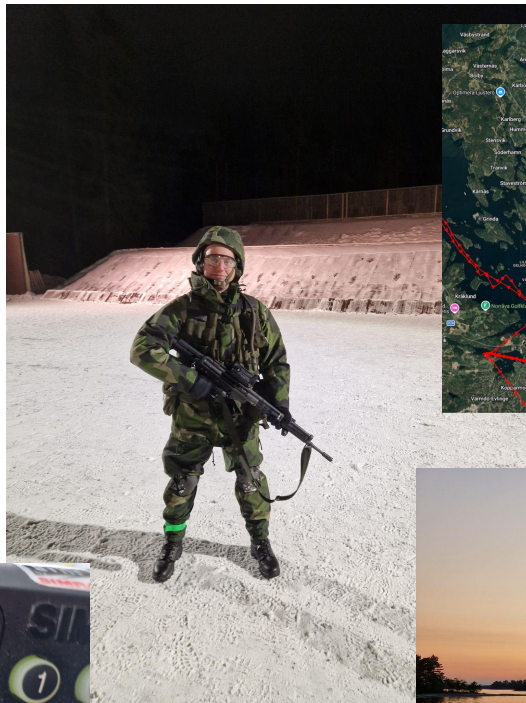
- Enterprise Sales Engineer
- M.Sc.E.E e94 Lunds Tekniska Högskola
- Open Source evangelist,
“Free as free speech, not free beer”

- Partner Sales Engineer, Broadcom
- Enterprise Sales Engineer, Sysdig
- Technical Strategist, Suse
- Senior Sales Engineer, Black Duck
- Product Manager, op5
- ...



Spare time

- Just joined the Home Guard
- Sailing boat
- Train
- Fiddle with OSS, favourite project Signal-K



Typical CI/CD pipeline

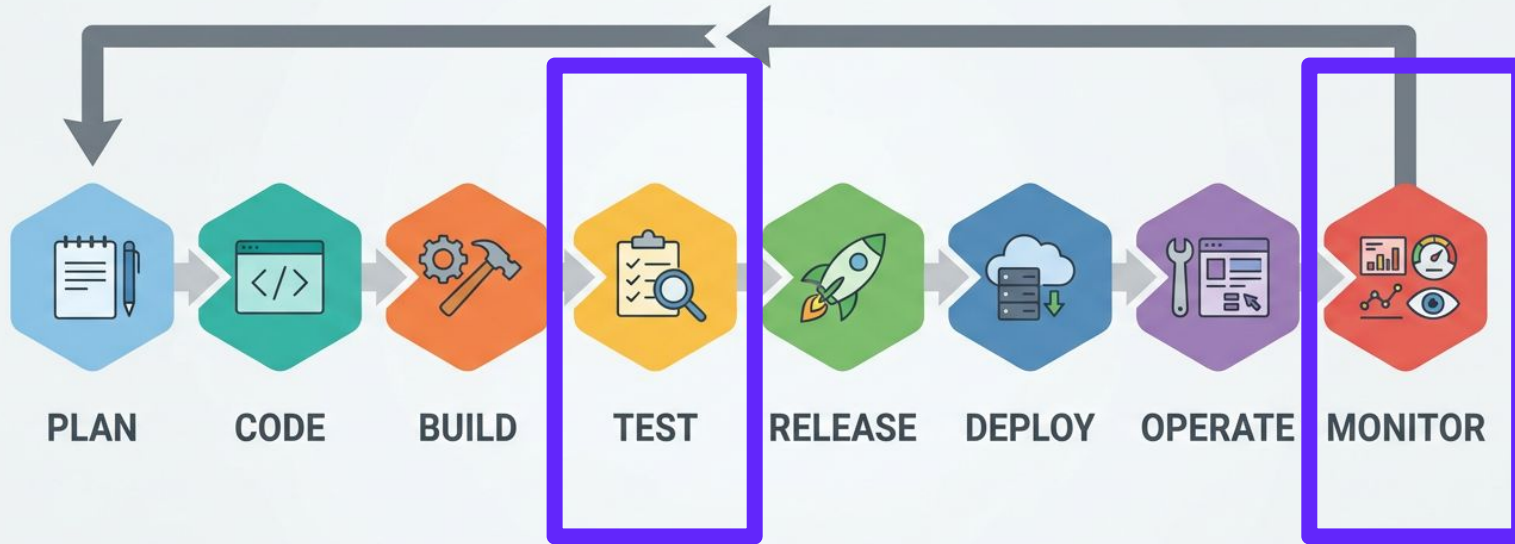


Typical CI/CD pipeline



Chainguard Secure

Typical CI/CD pipeline



Chainguard Impact

Open Source Software Has Transformed Software Development

2%
Source Code

98%
Open Source



 python  Java

 GO  C  node.js

 cilium  MariaDB

 Grafana  kubernetes

Traditional Open Source is an Insecure Foundation for Software Development

! Persistent CVEs

! Large Attack Surface

! Opaque Provenance

 python  Java

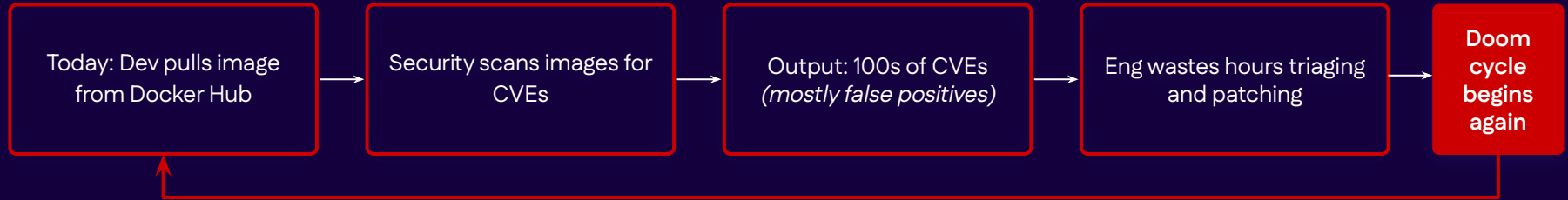
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The Status Quo for CVE Management is Deeply Broken

Today's State: The CVE Doom Cycle



The old way of building with open source isn't working

CVEs Accumulate Quickly



Patches in dependencies can take months to reach a distro update.



Free Images Fall Short



To standardize secure-by-default, you have to build and harden yourself.



Bloated Artifacts & Patching Limitations



Unnecessary attack surface. Can't patch what you can't control, waiting for a project or distro.



Malware Attacks Quickly Spread



More severe attacks on npm and PyPI (e.g. Shai Hulud). Over 500k malicious packages in a year*.



Constant CVE Triage and Patching



Start over on patching with every version upgrade + alert fatigue + testing.

Costly Golden Image Programs



Not enough engineers, automation and focus to scale. Half of your images are not "top 20", with 98% of CVEs**

Broad Zero-day & CVE Exposure



CVEs that are out of reach. Large zero-day blast radius. Undiscovered zero-days don't have a patch.

Scrambling to React to Attacks



If you're responding to malware, the damage is done. All you can do is chase the blast radius.

* Sonatype 2024 State of the Software Supply Chain*

** Chainguard The State of Trusted Open Source: December 2025

Chainguard: trusted open source for your entire stack

Customizable, reliable, compatible. Prevent attacks, eliminate CVEs and regain dev productivity.



Chainguard Libraries



100,000+ libraries



Chainguard Containers

2,300+ projects

Chainguard OS

16,000+ packages

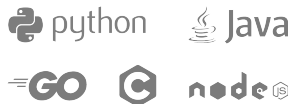


Powered by
Chainguard Factory

Chainguard Containers: Minimal, zero-CVE images

Base Images

Build and run custom apps



Application Images

Run 3rd party apps



- ❖ 2,000+ Projects, 300,000+ Image Artifacts
- ❖ Extensible and Customizable
- ❖ Helm Charts
- ❖ Signed SBOMs and Attestations
- ❖ FIPS-Validation and OS-Level STIGS

Custom Code

3rd Party Apps

Language Libraries

Toolchain / Runtime

Runtime

System

System

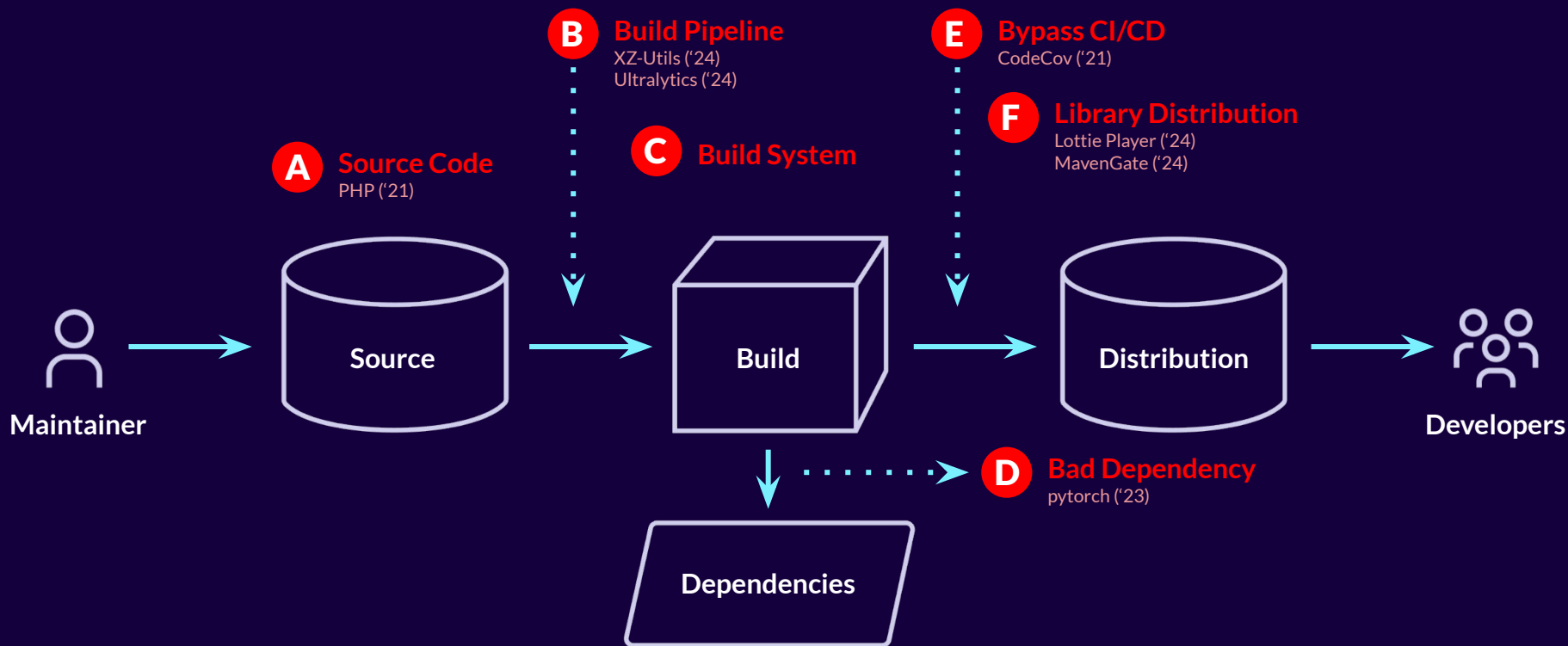
CVE Remediation SLA

7 days for Critical
14 days for High / Med / Low

DEMO

- Go App on upstream Container
- Minimize the image and CVEs

The frequency and severity of malware attacks on the open source supply chain is growing rapidly



Introducing Chainguard Libraries

A trusted, malware-resistant source of libraries – built from source, with fewer CVEs.

Malware Mitigation



Prevent the growing risk of malware attacks from pulling libraries directly from public registries.

CVE Remediation



Avoid the security risk and engineering toil from remediating CVEs across open source libraries.

Powered by Chainguard Factory

Daily Builds from Source

- ❖ Every image built from the ground up
- ❖ Every package compiled from source code
- ❖ Complete control and provenance

Rigorous testing

- ❖ Unit, security, and acceptance tests
- ❖ OSS project test harnesses and novel approaches
- ❖ Ensure compatibility

Dependency Control

- ❖ Bump versions anywhere in the dependency tree (OS, toolchain, libraries, application)
- ❖ Optimize for minimal dependencies
- ❖ Backport patches for select Python libraries

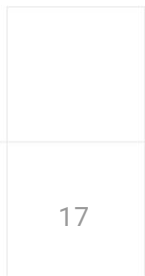
Cutting-edge Automation

- ❖ Automated and AI-based source code change detection, CVE triage, dependency bumps
- ❖ Automated rebuilds of 100,000+ packages and images for 1,800+ projects

 Chainguard

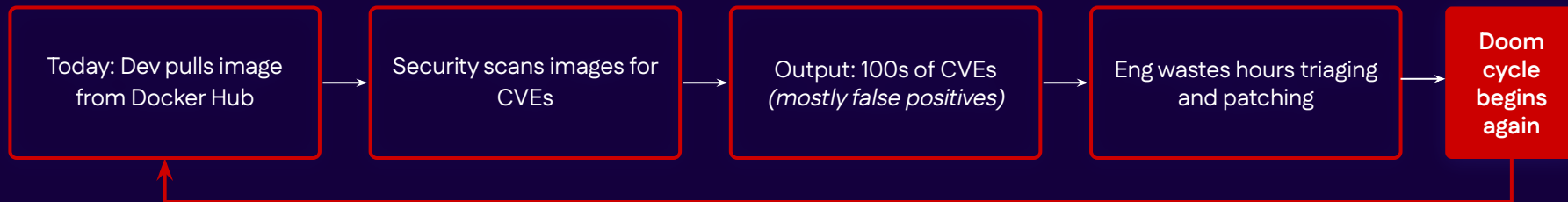
DEMO 2

- Libraries

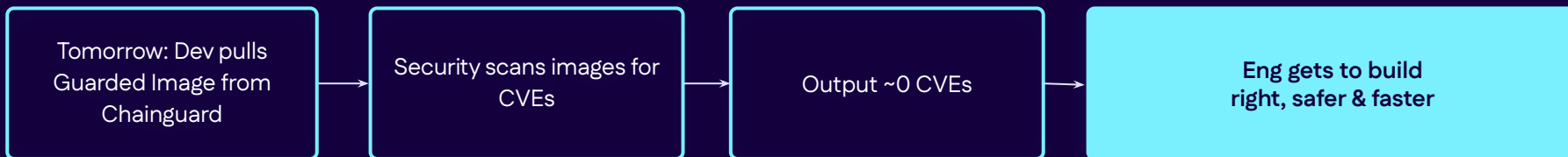


With Chainguard, ~~Shift Left~~ Start Left to Build Right

Today's State: The CVE Doom Cycle



Future State: Empower Developers to Innovate with Joy



Thank you!

chainguard.dev

Test it out:
5 Free Images!

