

OPNFV CI/CD Transformation

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Why are we talking about transformation?

- › Reduce complexity
- › Optimize hosting costs
- › Modernize tools - [LFN Infra-WG Recommendation](#)
- › Deliver the best possible community experience
- › A transformation of OPNFV CI/CD is *manageable*

Recommended Tools

GitLab + GitLab CI

- › Strategic
 - › GitLab partnering with LF for resource and support donations
 - › Improved visibility as an open source community through GitLab
 - › OPNFV qualifies for the top level service plan as an open source community
- › Technical
 - › Improved CI/CD language & UI (Ex: [cross-project](#) builds)
 - › Build in [package repository](#) and [Docker registry](#)
 - › Integrated [static code](#), [dependency](#), and [license scanning](#)

GitLab CI Proof-of-concept

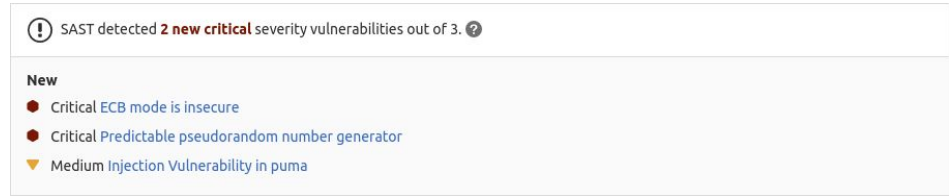
Replicated Functest tox [verification](#) and container [builds](#) pushing to GitLab container registry.

Included examples:

- > Security scanning
- > [Dependency scanning](#)
- > [License scanning](#)

Proof-of-concept Results:

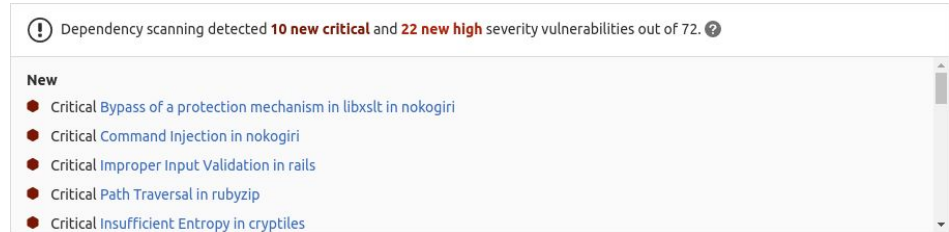
- > 50% reduction in time-to-verify
- > 33% reduction in CI code



! SAST detected **2 new critical** severity vulnerabilities out of 3. ?

New

- Critical ECB mode is insecure
- Critical Predictable pseudorandom number generator
- ▼ Medium Injection Vulnerability in puma

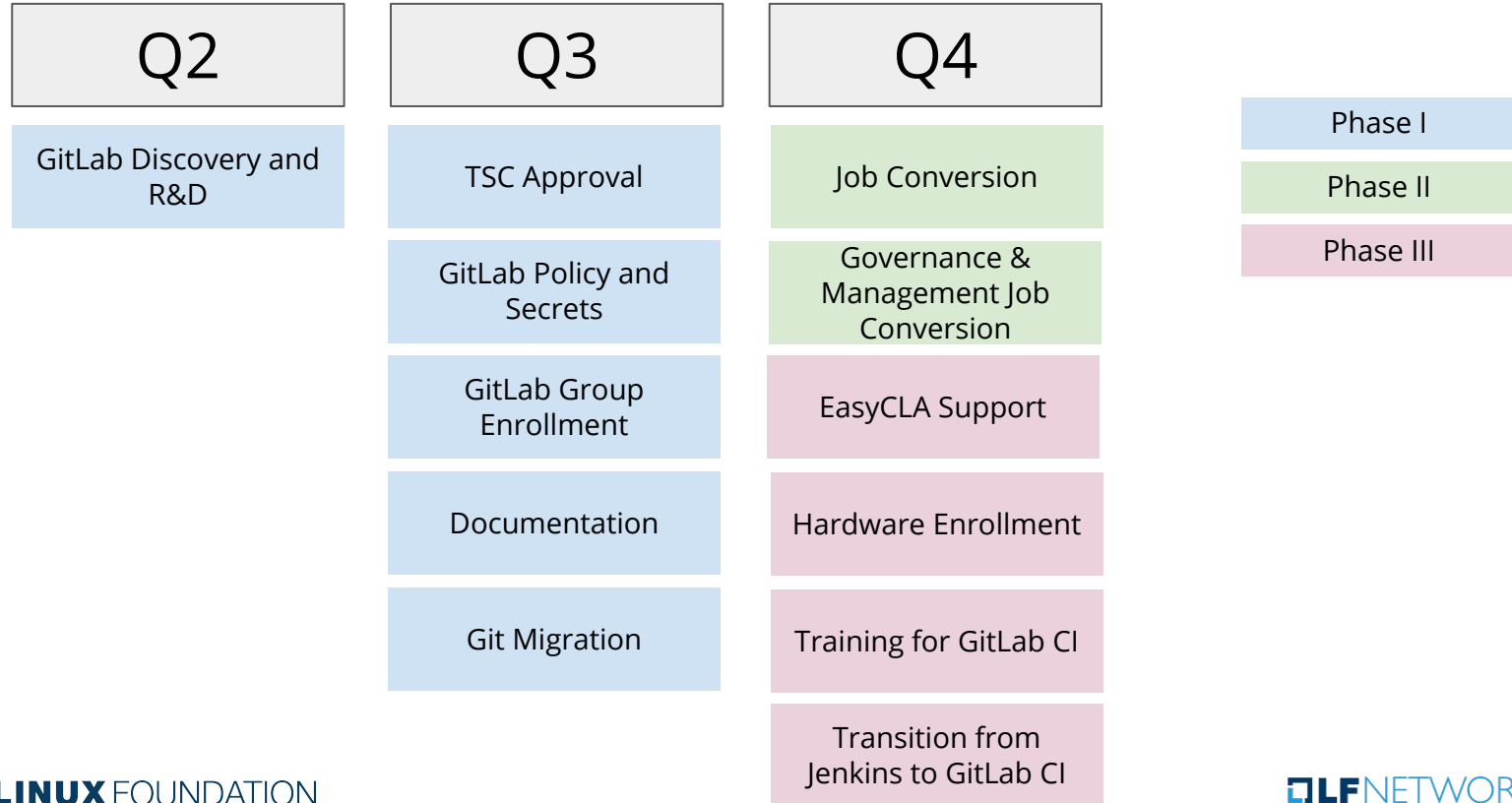


! Dependency scanning detected **10 new critical** and **22 new high** severity vulnerabilities out of 72. ?

New

- Critical Bypass of a protection mechanism in libxslt in nokogiri
- Critical Command Injection in nokogiri
- Critical Improper Input Validation in rails
- Critical Path Traversal in rubyzip
- Critical Insufficient Entropy in cryptiles

Roadmap / Migration Plan



Decision

- › Does the TSC agree to the recommendation to migrate to GitLab + GitLab CI?

Appendix

Comparison of CI SaaS Providers

- › Link to [research](#)