
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

CANONICAL ubuntu

PRT049

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Ubuntu and beyond: Securely managing open source on AWS

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aws

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Canonical, the publishers of Ubuntu

We believe that open source is the base for innovation and inclusion and enables others to build and create innovation around the world



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Ubuntu: Desktop and server

2004: Ubuntu 4.10 was released!

2005: Ubuntu server first release

2012: Official AWS partners

Today: All major Public Clouds, desktop, development, AI/ML, IoT, Robotics, Telco, research, LTS containers



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Managing OSS:
1. The Open-Source challenge

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99%

of analyzed enterprise application codebases contain open-source software

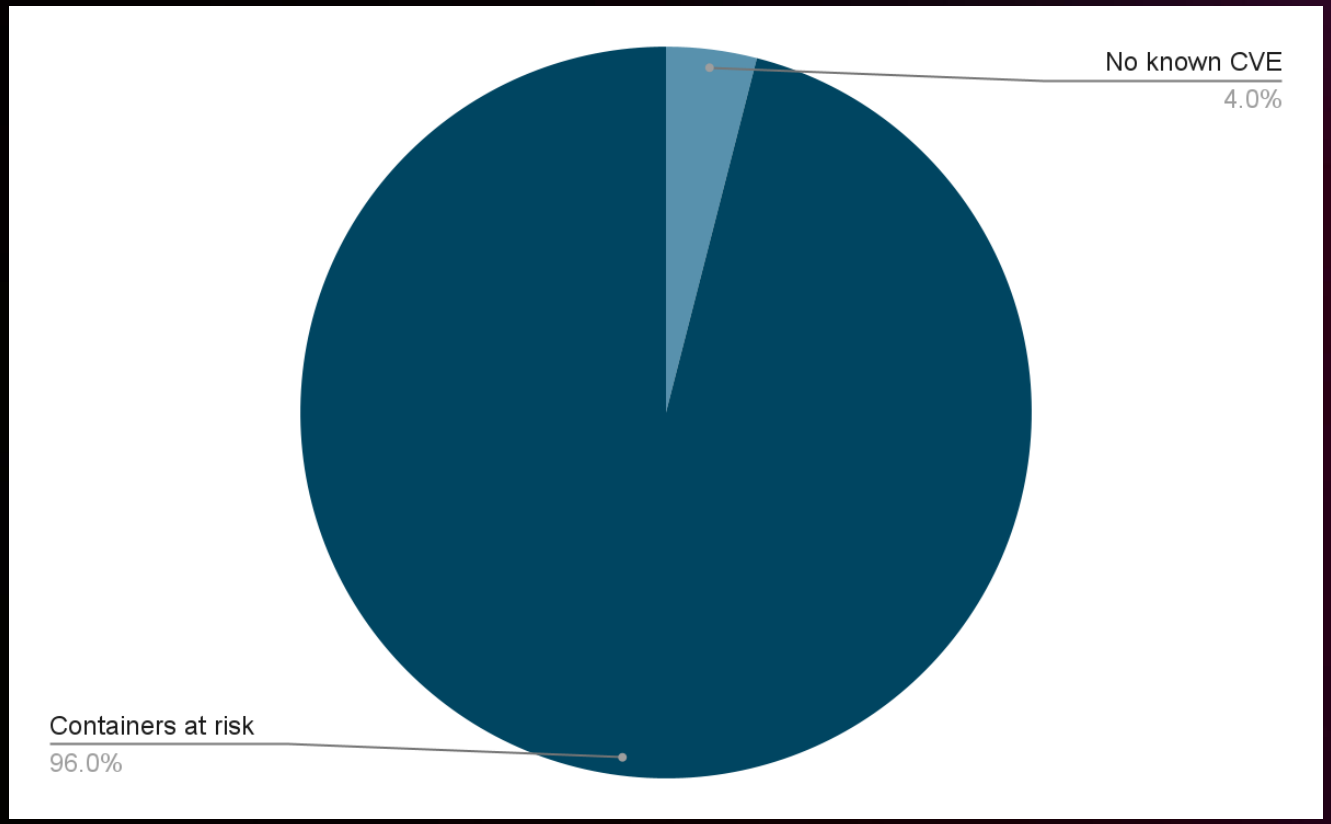
75%

of the codebases audited in 2019 contained at least one vulnerability

Synopsys - Open Source Security risk analysis 2020

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Including containers



96% of third-party container applications deployed in cloud infrastructure contain known vulnerabilities

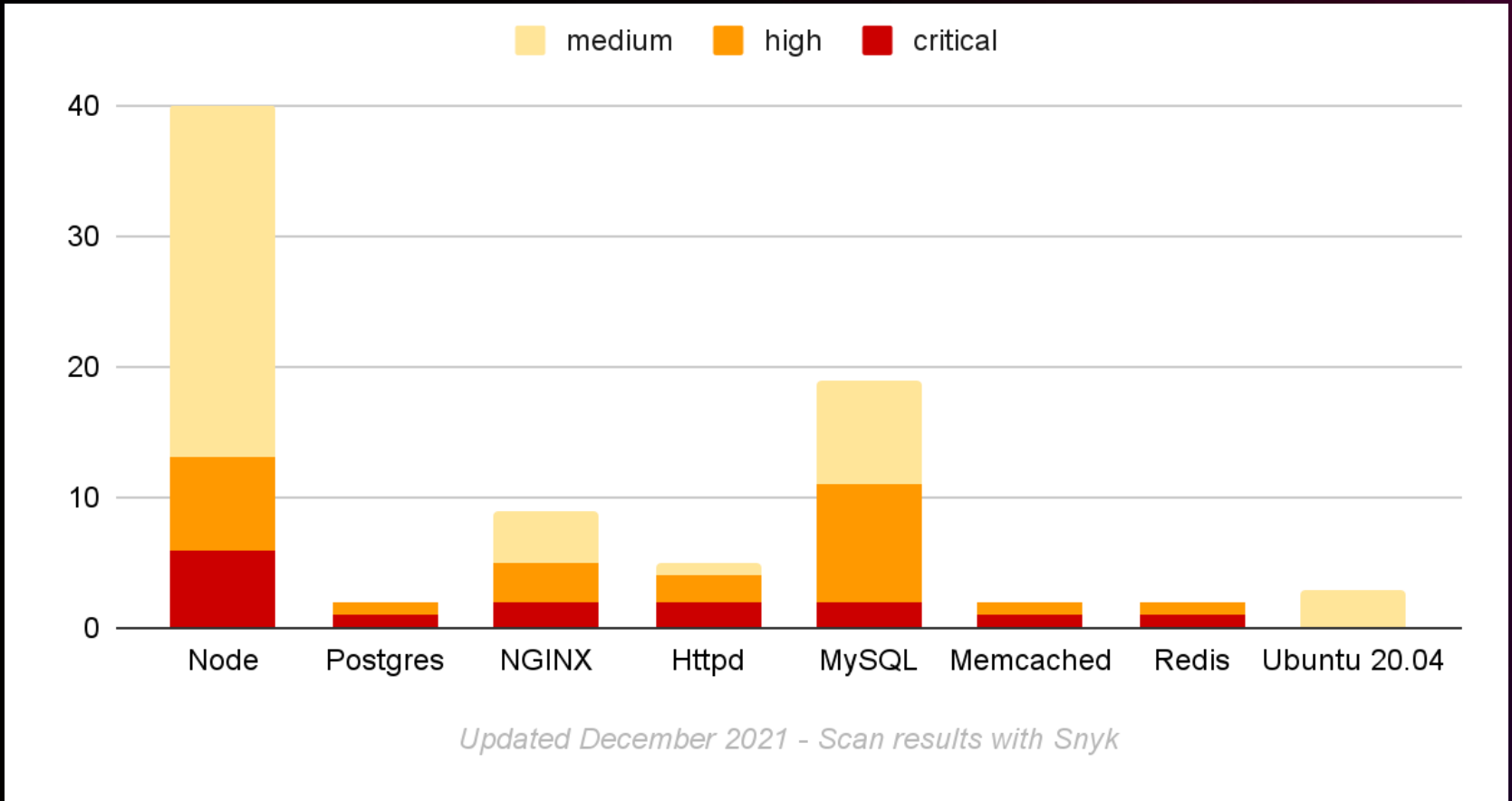
(source: Unit 42 / Zdnet, September 2021)

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Managing OSS:
2. Maintenance and support

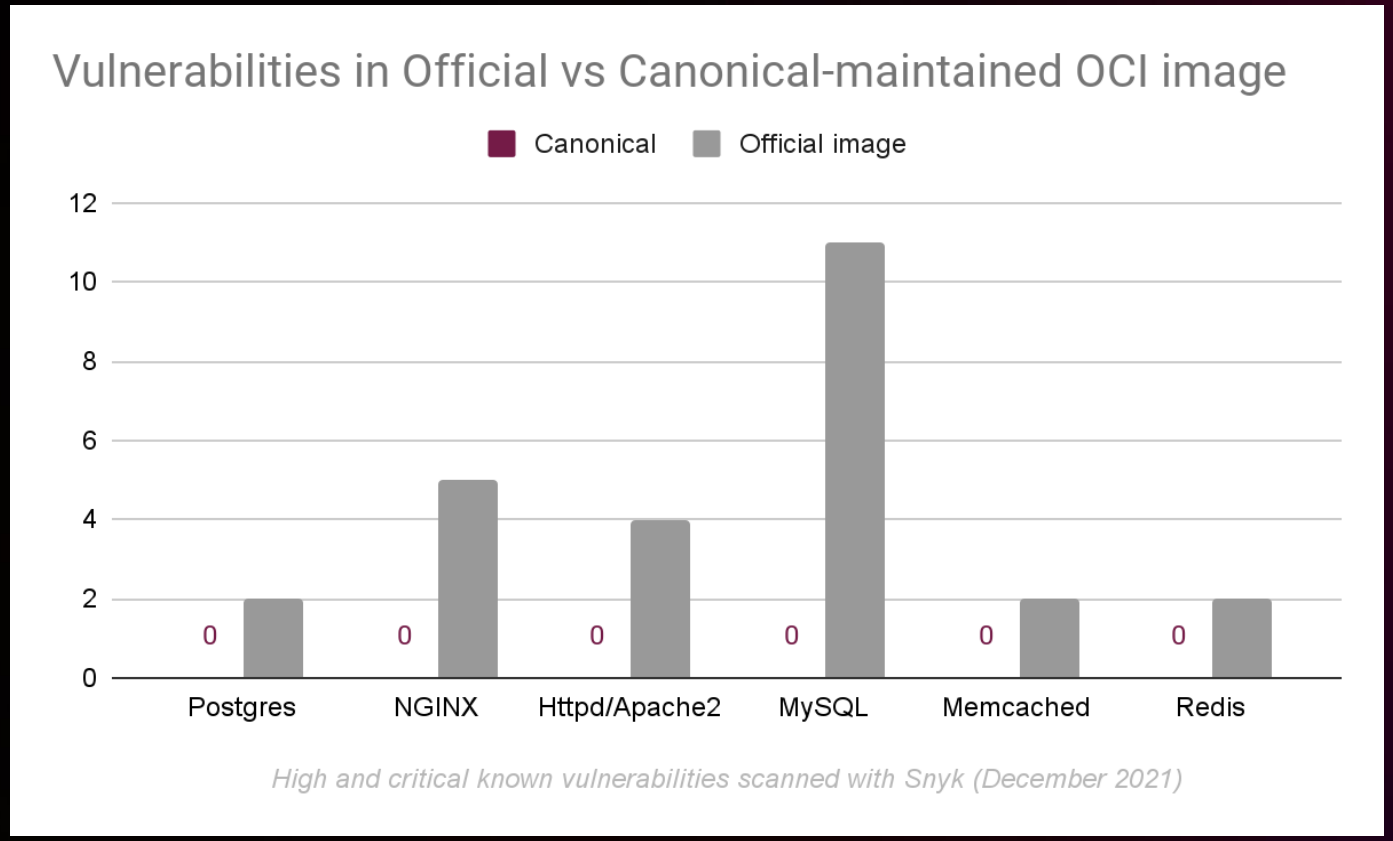
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Frequent Docker container security issues



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What about container apps?



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Maintenance

- How fast are fixes distributed?
- How long is your vendor supporting the version you are using?
- Are the release cycles known and committed?
- Does the vendor provide extended support?

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Maintenance

- How are you keeping track of updates?
- How are you applying them?
- How are you planning major version upgrades?

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Support

“If there's something strange
in your neighborhood,
who you gonna call?”

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Managing OSS:
3. Compliance, certifications and good practices

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Compliance, certifications, and good practices

Some industries require specific certifications: FIPS, FedRAMP, HIPAA, PCI, and ISO

Follow industry standards: hardening guidelines such as CIS and DISA-STIG are good references

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Introducing Ubuntu Pro

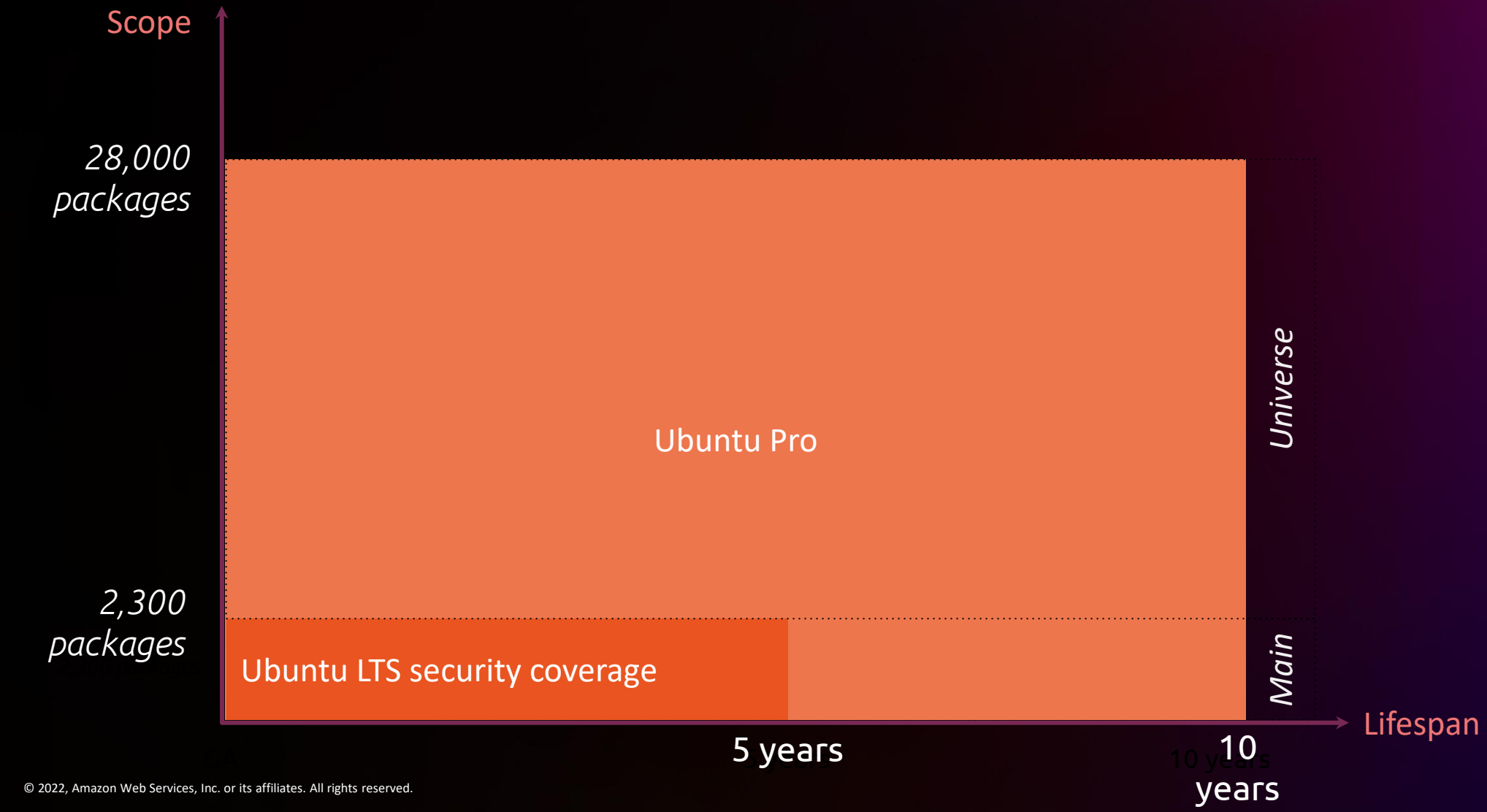
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Ubuntu Pro extended support model



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Ubuntu Pro extended support model



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Commonly used supported apps

Egress







Runtime











Message





Data













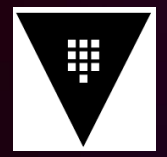
Observability and utilities











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10 years of partnership with AWS

- Co-engineered with AWS to provide the best experience on AWS
  - Optimized kernels
  - Cloud-init, tooling, and integrations
  - Available as native product
- Available on EC2, EKS, and other services
- Certified to run in every instance type from day 1
- AMD64 & Graviton supported
- LTS container images available on ECR Public Gallery



- Public Sector
- AWS Outposts Ready
- AWS Graviton Ready
- AWS Marketplace Seller

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Ubuntu at AWS



Amazon Elastic Compute Cloud (Amazon EC2)



AWS Outposts



Amazon Elastic Kubernetes Service (Amazon EKS)



Amazon Elastic Container Service (Amazon ECS)



Amazon Elastic Container Registry (Amazon ECR)



AWS Marketplace



Amazon WorkSpaces



Amazon Inspector



AWS Systems Manager

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Wrapping up: Managing OSS

- Provenance
- Support and maintenance
- Monitoring and updates (the less sources are better)
- Leverage on premium tools (compliance and good practices)

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Questions?

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Please complete the session survey in the **mobile app**

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