

# Navigating the CVE Crisis:

# The State of Vulnerability Disclosure

Our vulnerability disclosure ecosystem is under unprecedented pressure.

# **Meet Jerry Gamblin**

A security researcher, builder, and hacker, Jerry Gamblin is a passionate advocate for robust vulnerability management. He is an industry-recognized visionary who applies hands-on expertise to solve complex security challenges through code and strategic communication. His work focuses on developing innovative open-source solutions to ensure digital resilience in an evolving threat landscape.

- Speaker at leading industry conferences.
- Founder of RogoLabs, an open-source venture focused on creating tools for vulnerability intelligence.
- Creator of open-source projects like cve.icu, cveforecast.org, and cnascorecard.org which are designed to bring clarity to vulnerability data.
- Author and contributor to numerous cybersecurity publications and a widely featured blogger and security researcher.







Examine CVE funding issues, NVD backlogs, and CISA's evolving role in our traditional ecosystem.



#### **Global Alternatives**

Explore rising players like ENISA and alternative vulnerability databases across the galaxy.



#### **Navigation Strategies**

Chart your course through this fragmented landscape with actionable guidance.



# The Perfect Storm: Multiple Systems Under Pressure

#### **CVE Funding Crisis**

Near-critical resource shortage threatens program stability and consistency.

#### **NVD Backlogs**

Analysis delays create widening vulnerability windows for organizations.

#### **Volume Explosion**

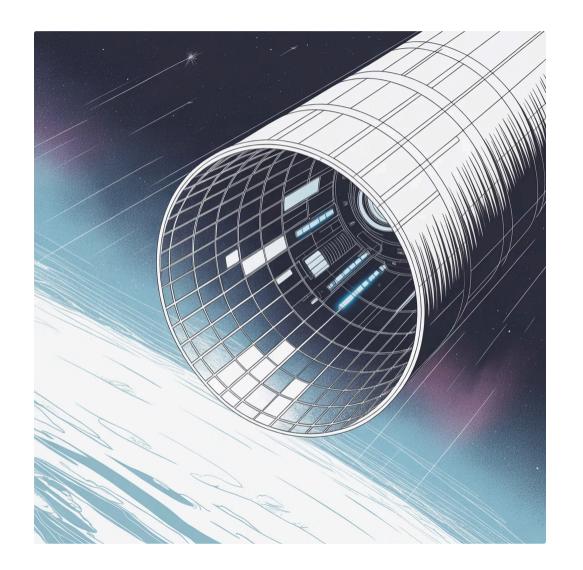
Exponential growth in vulnerabilities overwhelms existing infrastructure.

# **CVE Program: Mission Critical Systems Failing**

#### The Foundation We Depend On

CVE serves as the universal identifier system that powers vulnerability management across the industry. When this foundation shakes, everything built on top becomes unstable.

- Industry-wide dependency on CVE IDs
- Critical for compliance frameworks
- Essential for tool integration



# The Funding Crisis

#### **Resource Constraints**

Inadequate funding threatened operational continuity and forced difficult prioritization decisions across the program.

#### **Assignment Inconsistencies**

Reduced capacity led to delays and quality variations in CVE assignments, impacting downstream users.

#### **Cascading Effects**

Problems rippled through the entire vulnerability management ecosystem, affecting tools and processes.



NVD: Houston, We Have a Backlog

15K+

120+

40%

**Unanalyzed CVEs** 

Vulnerabilities waiting for enrichment and scoring

Day Delays

Average time from publication to analysis completion

**Coverage Gap** 

Vulnerabilities lacking complete CVSS scoring

# CISA: Adapting to Fill the Void



#### **KEV Catalog**

Known Exploited Vulnerabilities list provides critical prioritization data



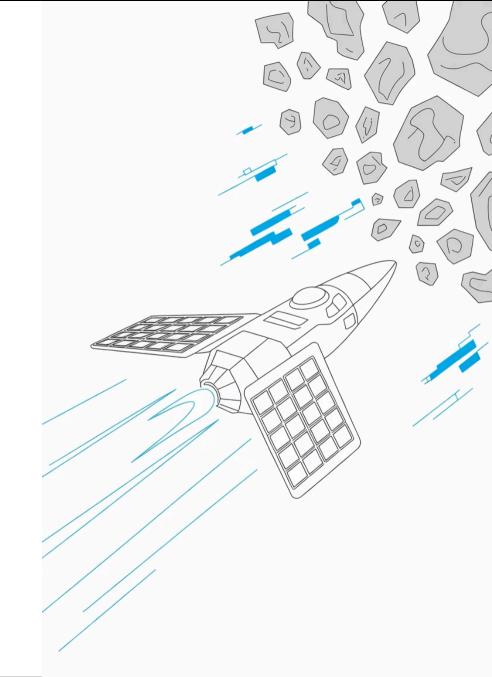
#### **Direct Advisories**

Independent vulnerability alerts bypass traditional channels



#### **Industry Coordination**

Enhanced communication with vendors and security community



# **Impact on Security Professionals**

1

#### **Increased Workload**

Manual research and validation required to fill data gaps left by delayed or incomplete vulnerability information.

2

#### **Prioritization Struggles**

Without timely CVSS scores and enrichment data, risk assessment becomes significantly more challenging.

3

#### **Trust Erosion**

Inconsistent data quality forces teams to seek alternative sources and validation methods.



# New Players Enter the Galaxy

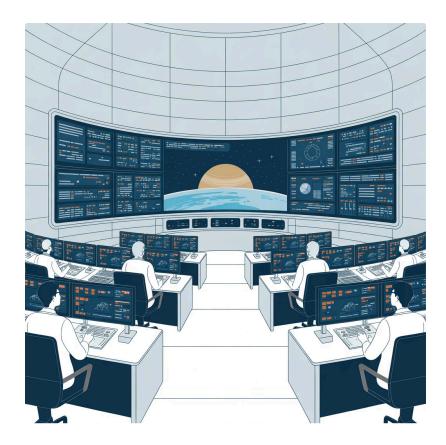
As traditional systems struggle, innovative alternatives emerge to fill critical gaps in vulnerability intelligence.

# **ENISA: Europe's Rising Star**

#### **Strategic Mandate**

EU Agency for Cybersecurity positions itself as a key coordinator for European vulnerability management efforts.

- Threat landscape reporting
- Cross-border coordination
- Strategic guidance for member states
- Industry collaboration initiatives



ENISA provides a regional alternative that complements but sometimes diverges from UScentric approaches.

#### The Alternative Database Constellation



#### **Commercial Solutions**

Platforms like Vulners and VulnDB offer enhanced data, faster updates, and commercial-grade reliability.



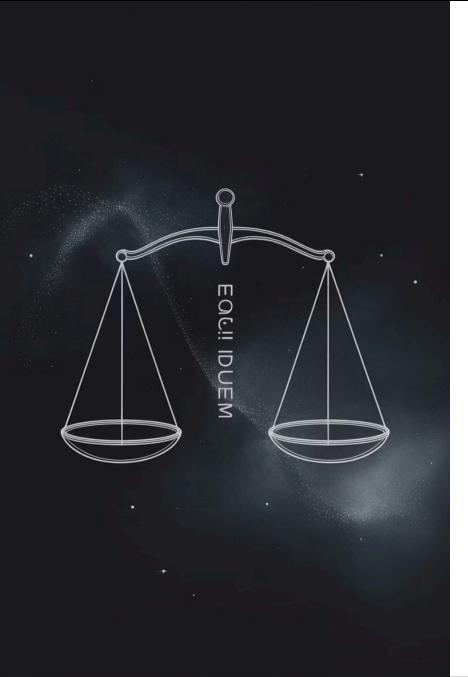
#### **Open Source Initiatives**

OSV.dev and GitHub Advisories provide community-driven vulnerability intelligence with developer focus.



#### **National CSIRTs**

Country-specific computer security incident response teams offer localized intelligence and rapid response.



# Comparative Analysis: Strengths vs. Weaknesses

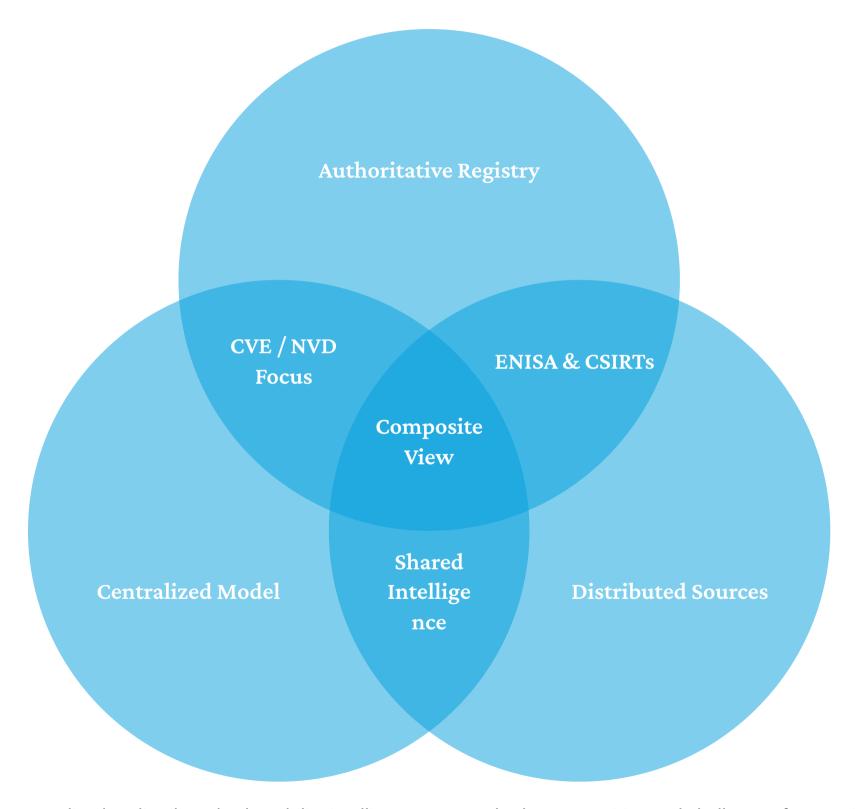
#### Advantages

- Faster publication and analysis
- Specialized domain coverage
- Enhanced contextual information
- Reduced dependency on single source
- Innovation in data presentation

#### Challenges

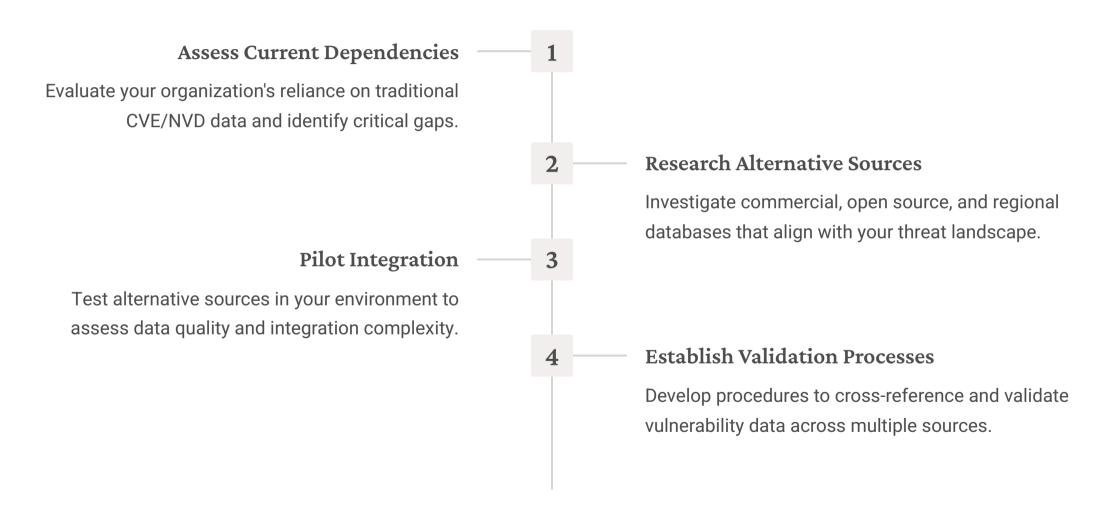
- Data quality inconsistencies
- Potential commercial bias
- Integration complexity
- Cost considerations
- Lack of standardization

# The Fragmenting Universe



The shift from centralized to distributed vulnerability intelligence creates both opportunities and challenges for practitioners.

## Mission Planning: Diversify Your Intelligence Sources



#### Prioritization in the New Era

#### **Context Over Scores**

Focus on exploitability data and threat intelligence rather than relying solely on CVSS ratings.

#### **KEV Integration**

Leverage CISA's Known
Exploited Vulnerabilities catalog
for immediate prioritization
guidance.

#### **EPSS Adoption**

Incorporate Exploit Prediction Scoring System data for probability-based risk assessment.



## **Tools for the Multi-Source Reality**

Data Aggregation Platforms

Implement tools that can collect and normalize vulnerability data from multiple sources automatically.

**Correlation Engines** 

3

Deploy systems that can identify relationships and duplicates across different vulnerability databases.

**Quality Scoring Mechanisms** 

Establish metrics to evaluate and weight the reliability of different vulnerability sources.

### **Future Mission Trajectory**

**Reform Potential** Traditional systems may stabilize with increased funding and modernization efforts. **AI Integration** Automation and machine learning will accelerate vulnerability analysis and dissemination. **Federated Models** 3 Collaborative frameworks may emerge to standardize and coordinate global vulnerability intelligence.

## **Key Takeaways for Your Mission**

#### Embrace the Multi-Source Reality

The days of single-source vulnerability intelligence are ending. Diversification is now a necessity, not a luxury.

#### **Context Beats Convenience**

Prioritize exploitability and threat intelligence data over traditional scoring methods for better risk assessment.

# Prepare for Continued Evolution

The landscape will keep changing. Build flexible processes that can adapt to new sources and methods.



# Safe Travels, Space Rangers

The vulnerability disclosure ecosystem is evolving rapidly. By understanding these changes and adapting our approaches, we can navigate this complex landscape and maintain strong security postures despite the challenges.

Remember: In this new reality, adaptability and diversification are your most valuable navigation tools.