The National Vulnerability Database: VulnCon Update

Ms. Tanya BREWER

NVD Program Manager

Mr. Matthew SCHOLL
Chief, Computer Security Division/ITL

April 10, 2025



NVD – the 10,000-Meter View





Since Last VulnCon...





- NIST explored creating a consortium for the NVD
- NIST re-affirmed its support for the NVD going forward
- NIST put a new analysis team and development team in place for the NVD
- The NVD established a new Mission Statement

Since last VulnCon...





- Internal systems and workflows now ingest, utilize, and allow search of ADP data
- Made a PoC CPE tool that should lead to automation of CPE enrichment efforts
- Overhauled our internal vuln console for improvements/efficiencies for enrichment

Since last VulnCon...

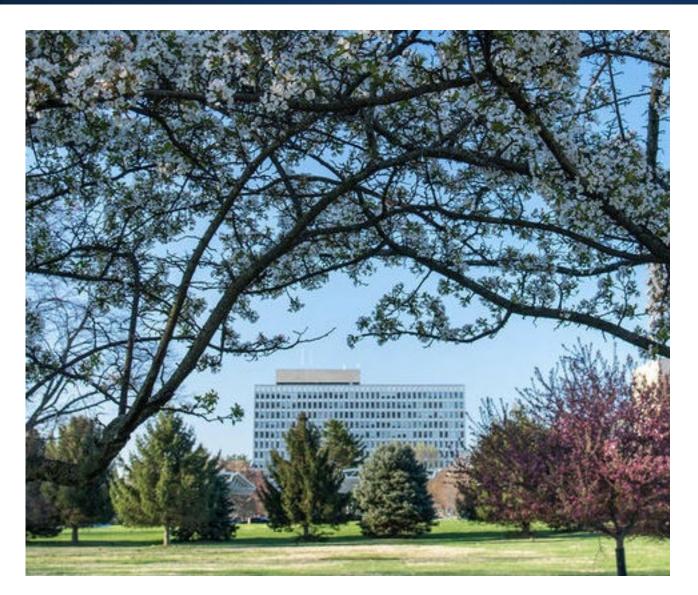




- The NVD Vuln API was given a major overhaul, greatly improving stability and performance
- The Vulntology has been further built out

The NVD's New Mission Statement





To increase the amount and usefulness of freely accessible, baseline cybersecurity vulnerability information with the foundational goal of better enabling vulnerability awareness, defense, management, and vulnerability-related academic pursuits.

How We Meet This Mission



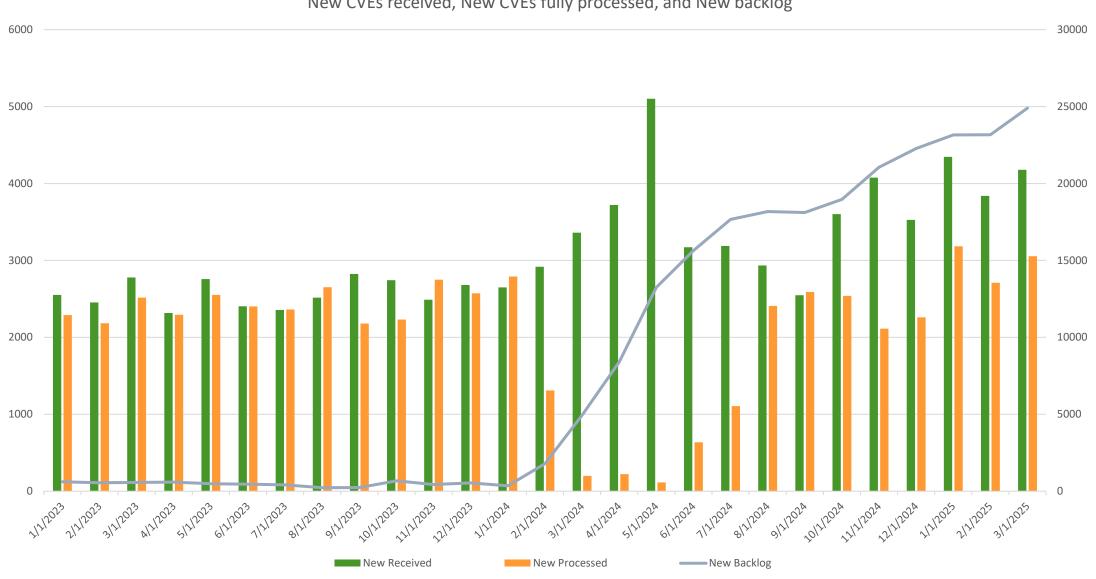
The NVD serves multiple purposes for various groups within the vulnerability management ecosystem:

- We enrich and aggregate existing vulnerability information;
- We provide that information to large and small data consumers via both human-friendly and machine-automatable interfaces;
- We work with data providers to improve source information; and
- We collaborate with external groups to refine and curate existing standards and systems.

Some Trends To Be Aware Of



New CVEs received, New CVEs fully processed, and New backlog



Things happening before the next VulnCon... NIST



- Beginning an update of the CPE Specifications
- Changing NVD analysis to be "gap filling"
- Overhauling our internal CPE console
- Creation of a public-facing CPE Console
- Beginning an update of our web content

Things happening before the next VulnCon... NIST





- Creating an internal tool PoC for automating CWE selection of Linux **Kernel CVEs**
- Exploring AI/ML capabilities to automate pieces of our analysis process
- Updated our search engine so you can now filter by CNA or ADP





THANK YOU

CONTACT US

nvd.nist.gov

nvd@nist.gov

@NISTcyber