

Exploring CVE and NVD Database:

Learn how to search and analyze vulnerabilities using the CVE (Common Vulnerabilities and Exposures) and NVD (National Vulnerability Database) databases.

Step 1: Visit the CVE Database (MITRE):

1. Go to: <https://cve.mitre.org>
2. Click on **Search CVE List**.
3. In the search bar, enter a known vulnerability. Example:
CVE-2021-44228 (Log4Shell)
4. Explore the CVE entry:
 - CVE ID
 - Description
 - Affected products
 - References (vendor advisories, blog posts)

Step 2: Explore the Same CVE in the NVD Database:

1. Go to: <https://nvd.nist.gov>
2. Search for the same CVE ID: **CVE-2021-44228**
3. Review the following:
 - CVSS v3 Score and vector string
 - Attack vector, complexity, and privileges required
 - Exploitability and impact metrics
 - Published and last modified dates
 - Optional: View in JSON or XML format

Step 3: Compare the Two Sources:

Element	CVE (MITRE)	NVD (NIST)
Description	Yes	Yes
CVSS Score	No	Yes
Impact Analysis	No	Yes
Links to Fix/Advisory	Yes	Yes
Search Capabilities	Basic	Advanced filtering

- CVE provides the unique ID and brief vulnerability description.
- NVD adds severity scores, attack metrics, and risk analysis.
- Both are essential tools for vulnerability scanning & patch management.