CVSS SIG Past, Present & Future

Current events with the FIRST CVSS SIG

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Agenda

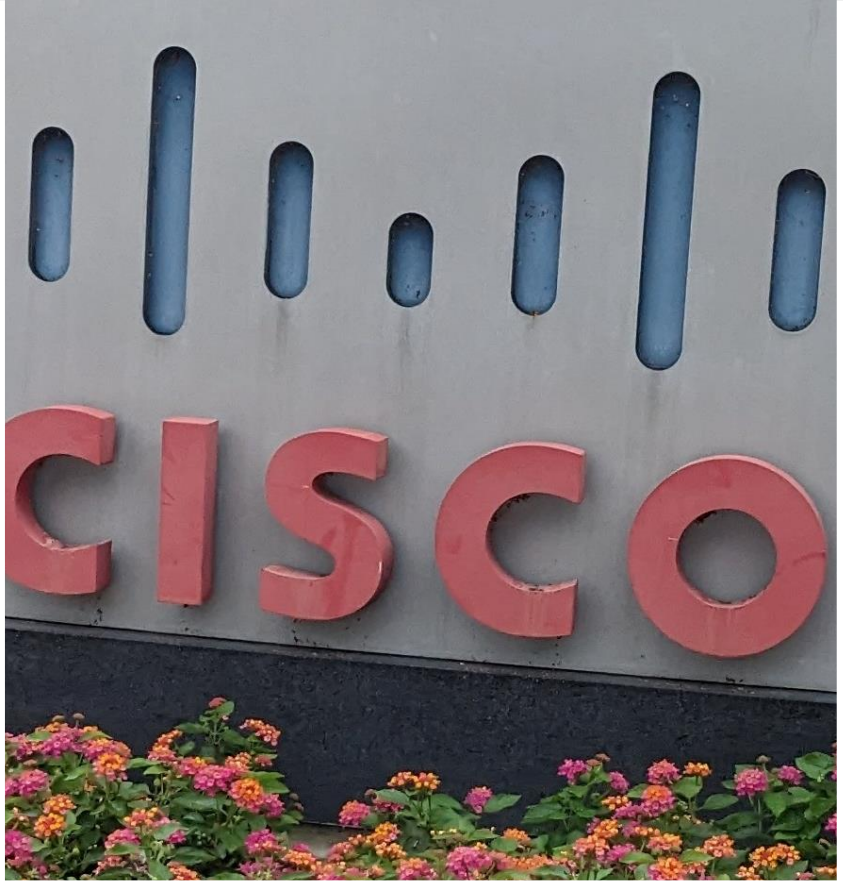
1. Introduction
2. History
3. Current SIG Business
4. Future Plans
5. Resources

CVSS

COMMON VULNERABILITY SCORING SYSTEM

Chairs

- Dale Rich
- Nick Leali



whoami – Nick Leali

FIRST CVSS SIG

Develop and document CVSS

Representation of a vulnerability's severity

Common Vulnerability Scoring System (CVSS)

Specification Document	User Guide	Examples	FAQ	Calculator and other tooling

The Vulnerability Assessment Ecosystem

CVSS

Severity of a vulnerability

Zero to ten scale

Captures the potential impact

EPSS

Probability of exploitation

0% to 100% scale

Guides focus of response efforts

SSVC

Prioritize handling of a vulnerability

Qualitative assessment of required response

Takes into account the specific organization’s needs

What is new with

v4.0?

CVSS v4.0 Recent History

Public Comment Period

Public Comment Period Pros and Cons

Positive Aspects	*Negative Aspects*
Officially Reviewed	Time Consuming
Error Corrections	Mildly Ego Bruising
FAQ Document	No Massive Adjustments
Tooling Development	Must respond to each comment

CVSS Presently

SIG Growth and Change

- New Members
- Providers and Consumers
- More diverse voices

- A Changing Conversation
  - Increased Focus on Usability
  - “Affordable Security”
  - Supply Chain
  - Making CVSS Easier

CVSS SIG Current Business

The Topics of Today

CVSS Adoption

Awareness

Chicken and egg problem

- Vendors to provide scores
- Customer need to provide them

Planned organizational adoption

- A few other public commitments

Are you and how long will you include v3.x scores?

- Current providers have both
- Can or should we coordinate around this?

CVSS Adoption

Part 2: Tooling

Calculator work

- Calculation is not simple algebra

CVSS helper libraries

- Review ongoing
- Post on FIRST.org

Data sources

- Updates soon

Vulnerability Management platforms

- Vendor outreach

CVSS Adoption

Part 2: Ease of Use

- CVSS in general is hard
- Requires mature program
- How can we ease adoption?
- How can we socialize the standard in general?

Documentation Updates

Examples

- Continued updating and evolution
- Taking requests
- Help wanted

FAQ

- Update as necessary
- Much of this came from the public comment period

User Guide

The Standard

Guidance

How vendors are thinking about subsequent system

- Known unknowns
- Reasonable best guess
- Avoid altogether

Supplemental metrics

- Some or all

How can we help consumers with threat and environmental metrics?

- Are organizations considering implementation plans

Future of CVSS

Near future, drive adoption and ease of use.

Further out, think about standard revision.

Future of CVSS

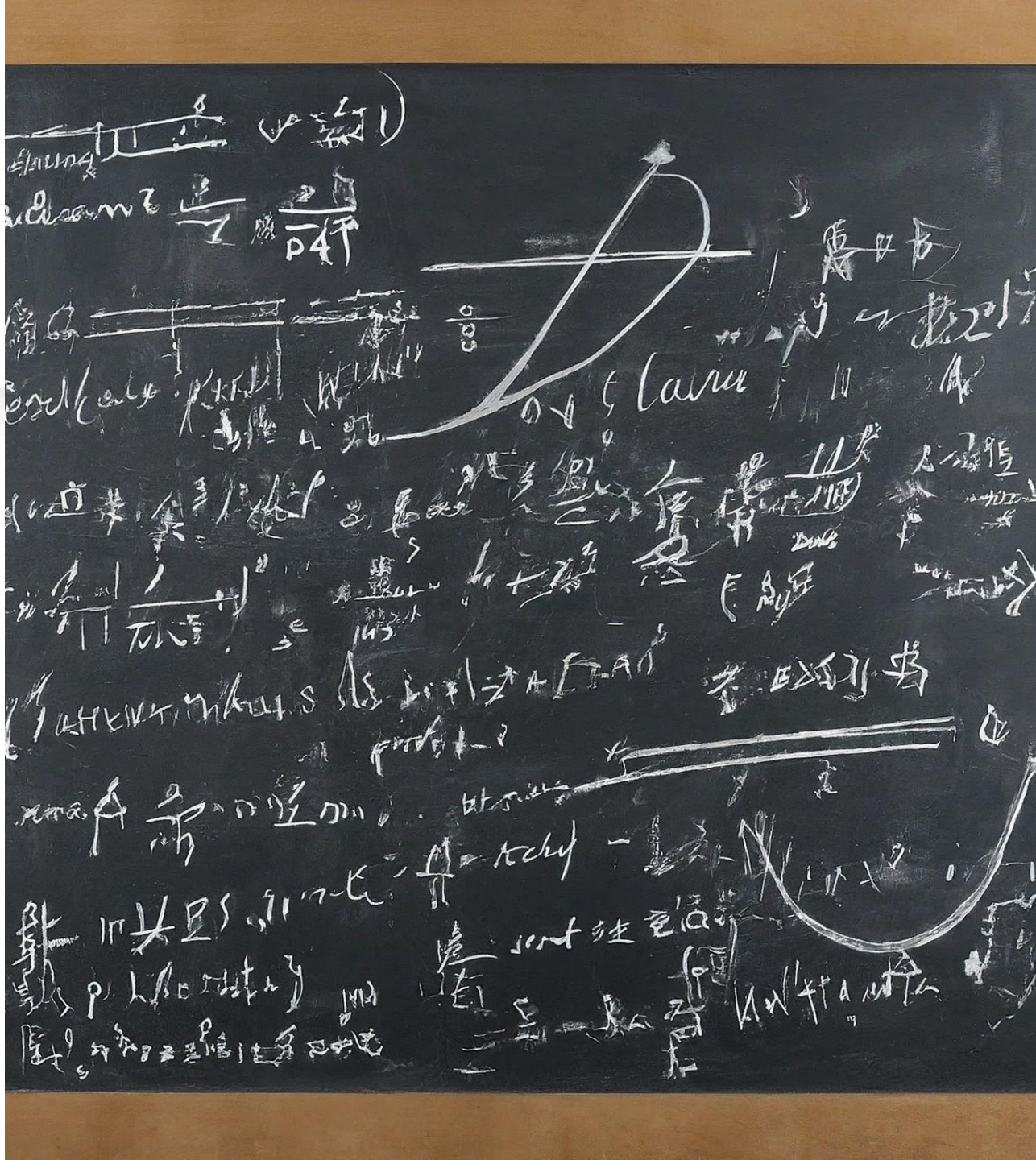
- Ease of Use
  - Complexity, relating to adoption
  - Documentation Updates
  - Socializing CVSS benefits
- V4.1
  - Attack Complexity weakness
  - User Interaction clarification
- V5.0
  - The Math
  - Reachability
  - Automatable expansion
  - Exploit Maturity expansion
  - New Supplemental Metrics
  - And more

The Math

- Discussions around refining the numeric scores.
- Is the number important?

Stated problems:

- Broad concerns about change
- Further distinguish scores
  - Some metrics feel less important
- Crossing qualitative boundaries
  - Some outliers



Questions?

Thank you!

Additional Resources

- CVSS v4.0 Training
  - https://learn.first.org/catalog/info/id:126,cms_featured_course:1
- CVSS Feedback
  - cvss@first.org
- CVSS Tooling
  - https://github.com/FIRSTdotorg/cvss-v4-calculator

CVSS v4.0 Site

https://www.first.org/cvss/v4/

- CVSS Documents
  - https://www.first.org/cvss/v4.0/specification-document
  - https://www.first.org/cvss/calculator/4.0
  - https://www.first.org/cvss/v4.0/user-guide
  - https://www.first.org/cvss/v4.0/examples