

## Collaborative Learning Discussion 2 -> Summary Post

Common Vulnerability Scoring System (CVSS) scores to be more transparent and justified was presented by Spring et al. from Carnegie Mellon University. Some elements of the CVSS computation, including the type of measurement and the conversion of that measurement to a numerical value, are disputed. They enquire as to how the weighting and importance of each metric were determined. According to Spring et al., CVSS scores only reflect the severity of a vulnerability; however, the security community may require additional information, such as the risk posed or the required reaction time, in addition to the severity.

They focus on concerns with operational scoring, for example, that have been discussed in the cybersecurity community for more than ten years as areas of unhappiness. The authors also recommend user and scoring studies, as well as a particular scoring rubric, as final techniques and practises to improve CVSS scores. They do not, however, provide an example formula to generate or describe the results, nor do they recommend a particular criteria to use when rating any software. (Northern, B.; Burks, T.; Hatcher, M.; Rogers, M.; Ulybyshev, D. VERCASM-CPS, 2021)

The purpose of CVSS characteristics is to determine the technical seriousness of a vulnerability. The risk that a weakness or vulnerability poses to them or how soon they should react to a weakness are what people seem to be interested in instead. If so, CVSS must be modified or a new system must be adopted by the community.

Combines the technical CVSS rating with the danger of exploitation. checks a variety of intelligences to get a score that is more thorough. reduces the number of High and Critical vulnerabilities to lessen the patching burden.(J. Spring, E. Hatleback, A. Householder, A. Manion and D. Shick, March-April 2021)

### References:

Northern, B.; Burks, T.; Hatcher, M.; Rogers, M.; Ulybyshev, D. VERCASM-CPS: "Vulnerability Analysis and Cyber Risk Assessment for Cyber-Physical Systems." Information 2021, 12, 408.  
<https://doi.org/10.3390/info12100408>

J. Spring, E. Hatleback, A. Householder, A. Manion and D. Shick, "Time to Change the CVSS?," in IEEE Security & Privacy, vol. 19, no. 2, pp. 74-78, March-April 2021, doi: 10.1109/MSEC.2020.3044475.