

# Capstone Assignment – CVSS Calculator

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## Overview

This assignment will enable the student to become familiar with Common Vulnerability Scoring System Calculator (CVSS) processes and incorporate this and their basic knowledge of vulnerability assessments to create a CVSS score for a scenario. CVSS scores are commonly used in vulnerability assessment throughout the industry and are common in Cyber Alerts, CVE bulletins, and threat assessments. Understanding how these scores are made and how they are used is a key piece of understanding when assessing threat and vulnerability within your own systems.

## Objectives

- Demonstrate knowledge of vulnerabilities, attack surfaces and impacts
- Demonstrate basic understanding CVSS Scoring and how scores are computed
- Understanding of provided scenario and the threats it poses
- Create a new CVSS Score
- Demonstrate knowledge to create a report based on this CVSS score

## Assignment

Review the scenario provided. **Adobe Acrobat Buffer Overflow Vulnerability (CVE-2009-0658)** which details what the vulnerability being described is. Additionally, links are provided for further information. Also provided is a sample CVSS Calculation that details what a typical CVSS score looks like. The breakdown of how the calculation is created is also included.

After reviewing the scenario and references (and you are welcome to retain copies of for future references if ever needed), your tasking will be to create a CVSS Score and assessment report:

- Open the CVSS Calculator using the link provided.
- Review the CVE (**CVE-2009-0658**) using the link provided.
  - The subject of what the vulnerability is, has been provided in the scenario document. Review this document fully and investigate the CVE using all links provided (NVD, CVE etc)
- Referencing IS required and you must list your sources when referencing the CVE.
- Use the supplied links to the CVSS Calculator you will need to complete the following:
  - Base Score Metrics
  - Temporal Score Metrics
  - Environmental Score Metrics
  - Overall Score Metrics
- The CVSS Metrics blocks have multiple stages, and these will need to be explained in detail as you complete each one.
- Each metric calculation should specify which part of the CVE applies to that calculation metric.

- Provide yourself with credit by listing your name on the title page.
- Save the CVSS Block individually as screenshots with a filename *Firstname\_Lastname\_CVSS-Title* using your name details, for example, **John\_Smith\_CVSS-Base Score**.
- Each scoring metric should have its own screen shot from the CVSS Calculator
- Allowable formats are .ppt and .pdf.
- Submit the compiled screenshots into one document via the appropriate submission field.
- Should you be required to make a further submission, you will be permitted to do so.

## CVSS Score

The CVSS Score should be briefed by the OVERALL Scoring Metric, which is a combination of all previous metrics into a final score to describe the vulnerability. You will be required to explain this score in detail, as you would when briefing a senior cyber security staff member.

## The Brief

A briefing should be created to simulate what you would be presenting to a senior cyber security staff member (CISM, CISO etc). This briefing should be concise and to the point. Adding in technical information that is pertinent to the score you came up with will be a key metric for success, as well as a description of each scoring metric and how it effects the overall scores. It is recommended to create the briefing in PowerPoint, and then upon completion saving as a pdf. An example briefing has been provided.

## Automatic Rejection of Submissions

Your CVSS Capstone submission will be rejected, without further review, if the requirements listed below are not followed. You will receive an email and/or notification of the submission being rejected which may or may not include the reasons why. You will be able to resubmit, if rejected.

To ensure your CVSS Briefing is not rejected, please adhere to the following:

- The CVSS must have your name on the title page.
- The CVSS may must have a its own title – not that of the template.
- Save the file using the convention of *Firstname\_Lastname\_CVSS-Title*
- The file either be saved in .ppt or .pdf formats.
- Do not miss or fail to add the overall score and description of that score
- MUST include an assessment. If no assessment is provided that is an automatic failure.
- MUST include sources and citations where appropriate.