

Risk Assessment

1. Objective

The objective of this practical is to calculate **Annual Loss Expectancy (ALE)** and visually represent risk using a **5x5 risk matrix**.

2. ALE Calculation

ALE was calculated using the standard risk formula:

$$ALE = SLE \times ARO$$

Given Values

- **SLE (Single Loss Expectancy):** 10,000
- **ARO (Annual Rate of Occurrence):** 0.2

Calculation

$$ALE = 10,000 \times 0.2 = 2,000$$

This indicates an expected annual loss of **2,000 units** due to the identified risk.

3. Risk Matrix

A **5x5 likelihood vs impact matrix** was created to visually assess risk severity.

- Likelihood scale: Very Low → Very High
- Impact scale: Very Low → Very High

The analyzed risk was classified as **High** based on its likelihood and impact.

4. Conclusion

This practical demonstrates how organizations quantify and prioritize risks to make informed cybersecurity investment decisions.