Welcome to

1. Overview of Computer Security

KEA Kompetence Computer Systems Security 2019

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Slides are available as PDF, kramse@Github

1-overview-computer-security.tex in the repo security-courses

Plan for today

Subjects

- Confidentiality, Integrity and Availability
- Cost-Benefit Analysis
- Risk Analysis
- Human Issues
- Access Control Matrix

Exercises

- Risk Analysis
-

Reading Summary

Bishop chapter 1: An Overview of Computer Security

Bishop chapter 2: Access Control Matrix

Confidentiality, Integrity and Availability

Cost-Benefit Analysis

Risk Assessment

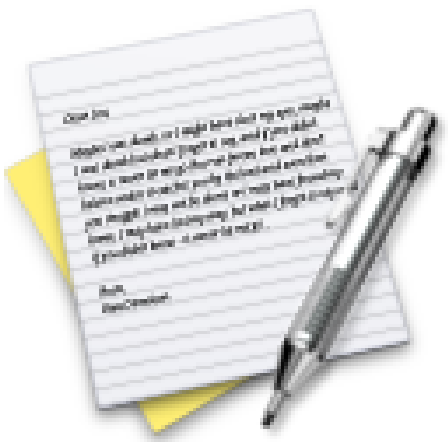
https://en.wikipedia.org/wiki/Risk_assessment

Quantitative Risk Assessment

> In quantitative risk assessment an annualized loss expectancy (ALE) may be used to justify the cost of implementing countermeasures to protect an asset. This may be calculated by multiplying the single loss expectancy (SLE), which is the loss of value based on a single security incident, with the annualized rate of occurrence (ARO), which is an estimate of how often a threat would be successful in exploiting a vulnerability.

Quote from `https://en.wikipedia.org/wiki/Risk_assessment`

Exercise



Now lets do the exercise

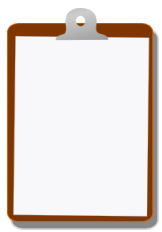
Risk Assessment 101

which is number **4** in the exercise PDF.

Human Issues

Access Control Matrix

For Next Time



Think about the subjects from this time, write down questions

Check the plan for chapters to read in the books
Most days have less than 100 pages, but some days may have more!

Visit web sites and download papers if needed

Retry the exercises to get more confident using the tools