Risk Assessment in Layered Solutions

Commercial Solutions for Classified (CSfC), Risk Analysis

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Problem Statement

To develop a meaningful method of combining risk assessments for individual security Mechanisms in a risk assessment for the overall Layered Solution.

Results and Conclusions

Function and Class-based Approach to Combining Risk Assessments:

- Promotes modularity and “ease of use”.
- Allows for scalability of risk assessment in Layered Solutions.
- Applicable to Layered Solutions in any Information System

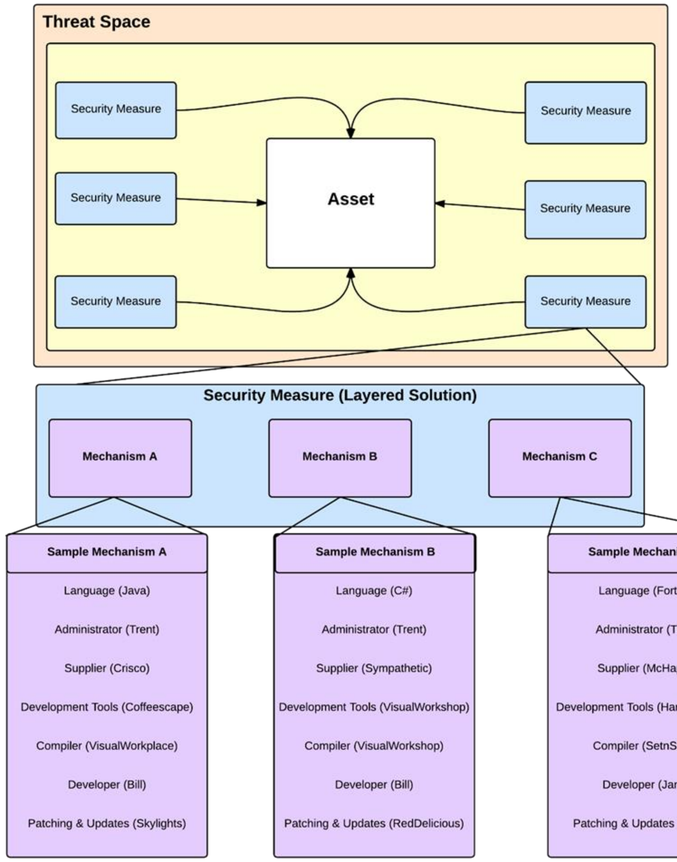
Future Directions

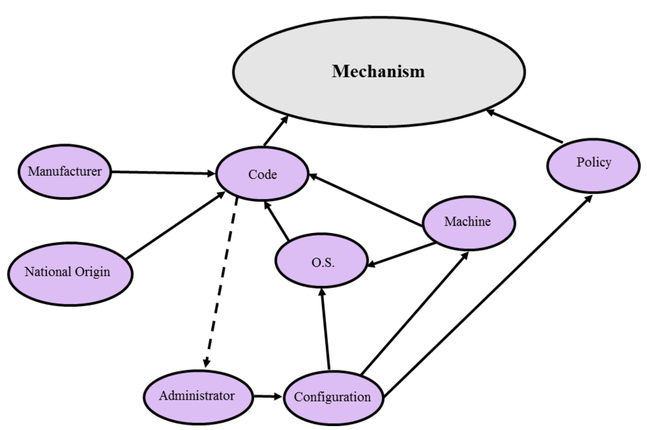
Birthday Paradox

This phenomenon could also exist in cascading vulnerabilities amongst the Mechanisms presented in our model.

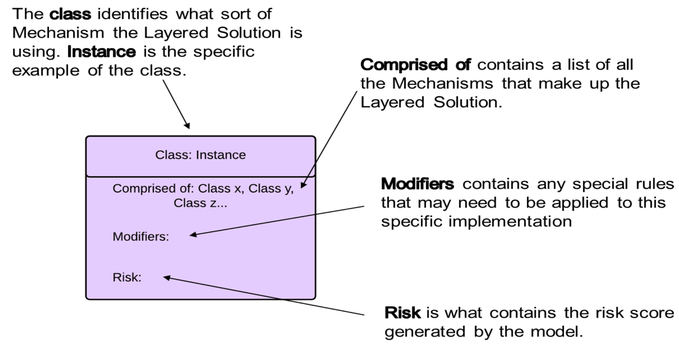
Evaluation of Risk

It is possible to represent the risk analysis assumptions as more than simple percentages. In theory, Bayesian scores can be utilized for the assessment of risk at The Security Critical Attribute Object proportion of our model.

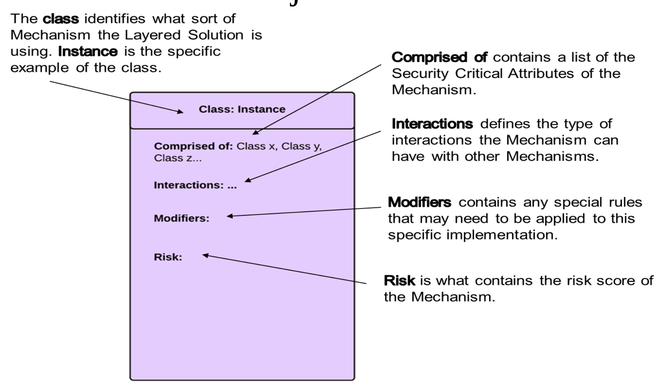




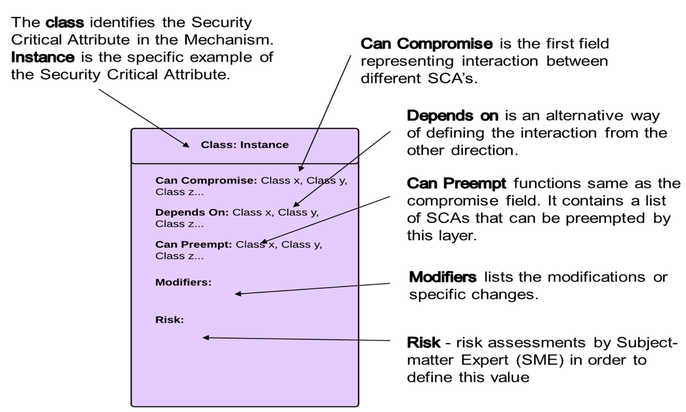
The Layered Solution Object



The Mechanism Object



The Security Critical Attribute (SCA) Object



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