



Evaluation paradigm selection according to Common Criteria for an incremental product development

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ASIDS Project

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Motivation

- Common Criteria Certification
 - Gaining trust in products through certification
 - Various different evaluation paradigms
- Fast changing requirements of the market
 - Agile/Incremental product development techniques
- How to combine these two worlds?

Common Criteria Evaluation Paradigms

- Common Criteria Assurance Continuity [1]
- Delta Evaluation [2]
- Composite Evaluation [3]
- Composed Evaluation [4]

Use cases

- Use case 1:
 - 1 developing company
 - 1 evaluation facility
 - Delta Evaluation

- Use case 2:
 - 1 developing company
 - n evaluation facilities (Interchanging all kind of evidences)
 - Delta Evaluation

Use cases

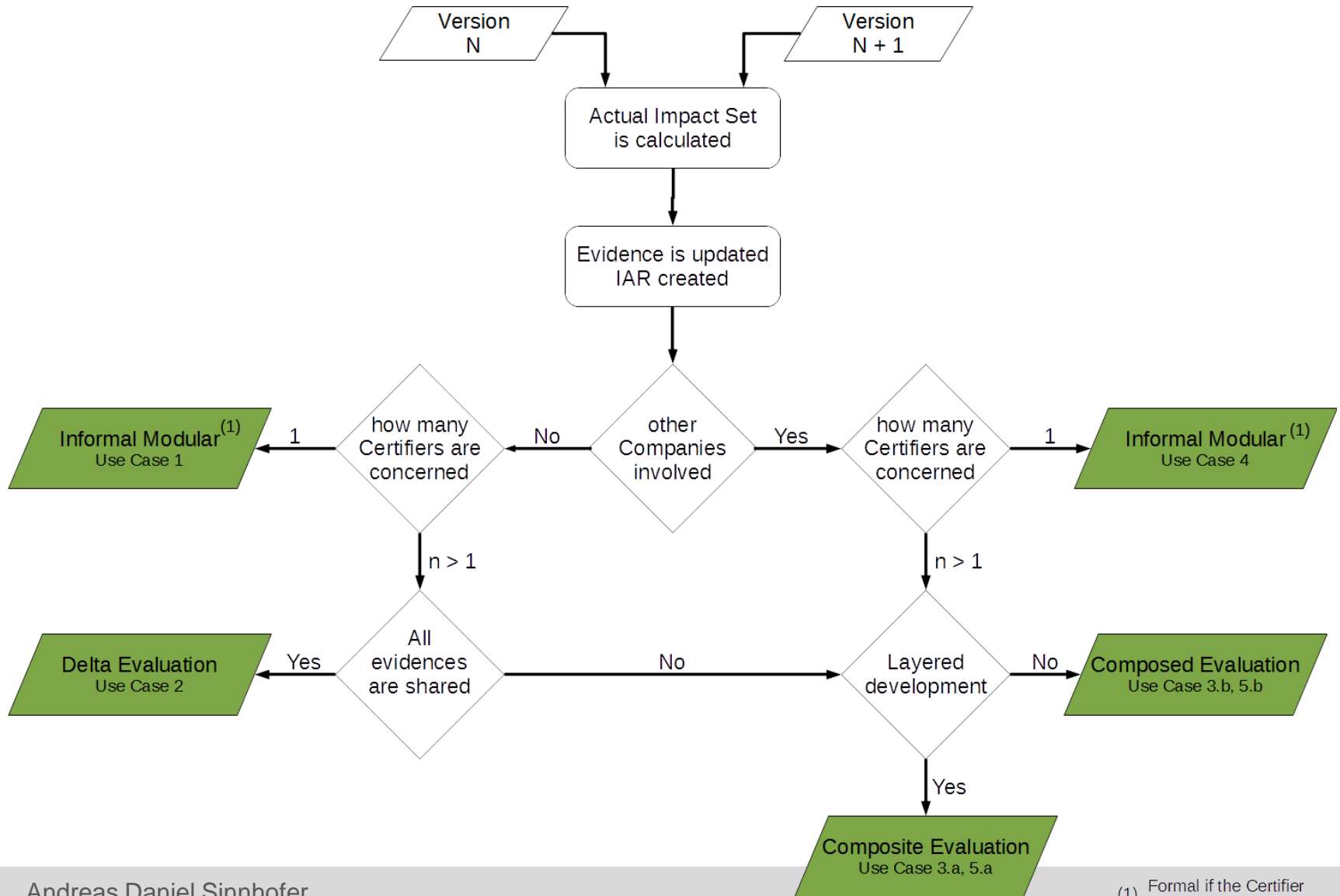
- Use case 3:
 - 1 developing company
 - n evaluation facilities (not interchanging all evidences)
 - Composite / Composed Evaluation

- Use case 4:
 - n developing companies
 - 1 evaluation facility
 - Delta Evaluation

Use cases

- Use case 5:
 - n developing companies
 - n evaluation facilities
 - Composite / Composed Evaluation

Selection Scheme



Conclusion

- Identification of the appropriate evaluation paradigm
 - Providing guidance for developers and sponsors of CC evaluation processes
 - Enables early integration of the evaluation facility
 - Maximizing the reuse of previously generated evidence
 - Minimizing evaluation costs

Thank you!

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References

- [1] Common Criteria. Assurance Continuity CCRA Requirements. Version 2.1 (June 2012)
- [2] Common Criteria Information Statement. Reuse of Evaluation Results and Evidence. (October 2002)
- [3] Common Criteria Supporting Document. Composite product evaluation for Smart Cards and similar devices Version 1.2 (April 2012)
- [4] Common Criteria for Information Technology Security Evaluation. Part 3 Security assurance components. Version 3.1 Revision 4 (September 2012)

Additional Information – Security Model

