SIEM approach for a higher level of IT security in enterprise networks

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Outline

- Motivation
- Approach and Architecture
- Demonstration (Video)
- Conclusion

Motivation

Small and medium enterprises (SME)

- IT-Security requirements changed rapidly, especially due to mobile devices
- Most times only individual solutions implemented
- Not a sufficient security strategy

Security Information and Event Mangement (SIEM) Systems

- Solution integrating many information sources
- Can detect more complex attacks and offer better security
- Expensive deployment and maintenance
- → Not really applicable in SME

Our Contribution

- SIMU: A system providing many SIEM-like capabilities with focus on SME environments

SIMU in a Nutshell

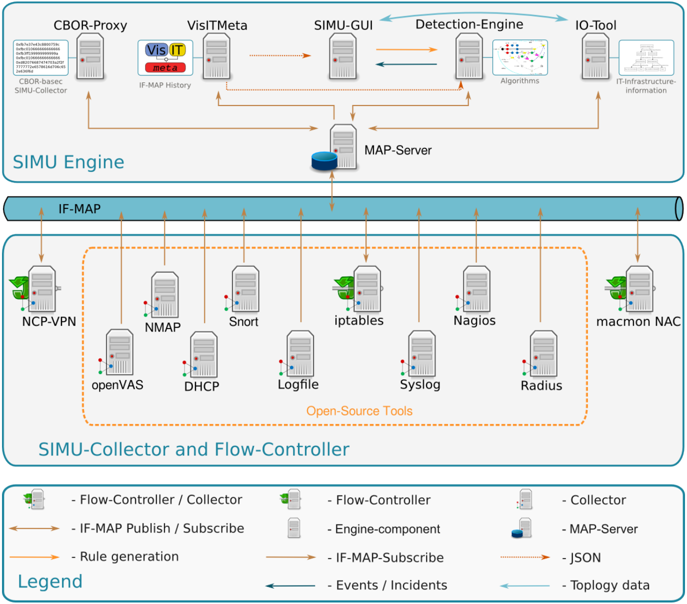
Data integration based on the IF-MAP specification

- Open specification to allow the exchange of information between arbitrary network components
- Homogeneous data format
- Many collecting and consuming clients (based on common and open source solutions)
- One central server

Automated Analysis and Reaction

- Central examination of the homogeneous data
- Possibility for automated enforcement
- Documentation and incident reporting

SIMU Architecture



Short demonstration

Video

Conclusion

Summary

- Integrated security management not easily available for SME - but needed!
- SIMU: SIEM-like system, especially for SME environments
- IF-MAP as the foundation
- Graph-based pattern matching for incident detection
- Ticket management and graph visualization for incident handling
- Possibility for automated actions

Thank you for your attention!

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Further information:

`http://simu-project.de` `http://trust.f4.hs-hannover.de`