Object-Oriented Systems Engineering Method (OOSEM)

Summary

Sanford Friedenthal
safriedenthal@gmail.com

OOSEM Topics

- OOSEM Overview
- Method
  - Setup Model
  - Analyze Stakeholder Needs
  - Analyze System Requirements
  - Define Logical Architecture
  - Synthesize Candidate Physical Architectures
  - Optimize and Evaluate Alternatives
  - Manage Requirements Traceability
  - Integrate and Verify System
- Summary

OOSEM Summary

- OOSEM is a model-based systems engineering method that supports the system specification and design process
  - Flowdown of requirements, structure, behavior, and parametrics
  - Provides a way to deal with system design and development complexity using separation of concerns as a fundamental tenet
    - Black box, white box
    - Logical, physical
    - Distribution
    - Operational system, Enabling systems
    - …

OOSEM Summary (cont.)

- A well thought out incremental development plan to achieve the modeling objectives and scope within project constraints is critical to success
  - Tailoring OOSEM and modeling guidelines
  - Artifact maturity milestones
  - Tool infrastructure
  - Staffing and training
- OOSEM includes the following activities
  - Setup Model
  - Analyze Stakeholder Needs
  - Analyze System Requirements
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  - Optimize and Evaluate Alternatives
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