



# Applying AADL with the EDICT Tool Suite

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# Outline

- WW Technology Group
- EDICT Tool Suite
- EDICT AADL Demonstration
- EDICT AADL Support Summary
- EDICT MBSE Benefits Summary



# WW Technology Group

- Established in 1994
- World-class model-based engineering tools, design, analysis, and consulting services that enable DoD and commercial users to deploy time- and mission-critical systems on schedule and with superior performance and dependability
- Leading edge fault-tolerant architecture and model-based engineering technologies
  - Virginia Class ship control system and Ohio Class upgrade X-by-wire fault-tolerant architecture



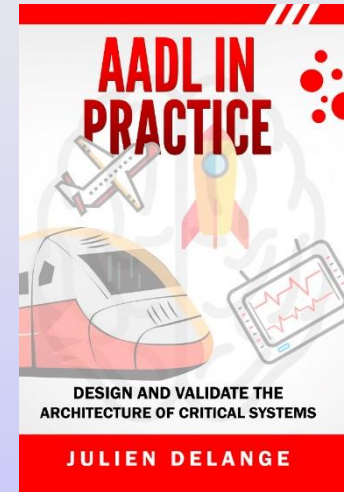
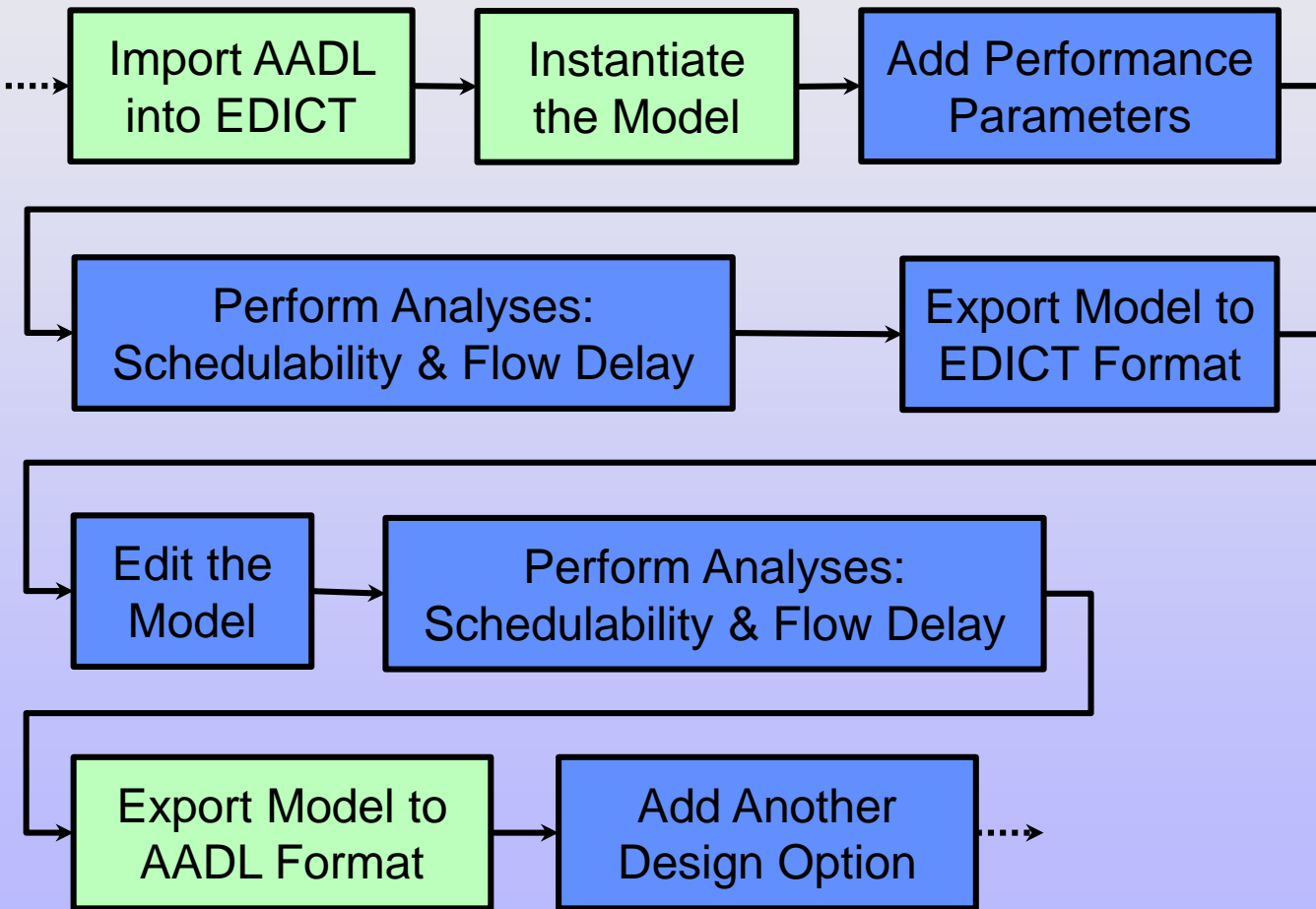


# EDICT Tool Suite

- Extensible MBSE tool
- Modeling
- AADL Support
- Analyses
  - Performance
  - Safety
  - Error Handling
  - Security
  - Dependability
- Integrated Standards
  - Architecture Analysis and Design Language (AADL)
  - ARINC 653 (Avionics Application Standard Software Interface)
- Platform
  - Eclipse
  - OSATE



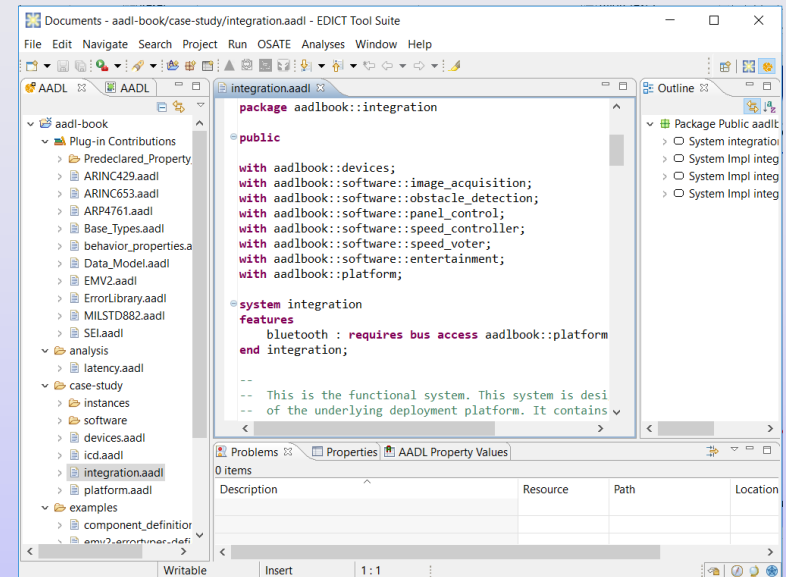
# Demonstration: Self-Driving Car





# EDICT AADL Support Summary

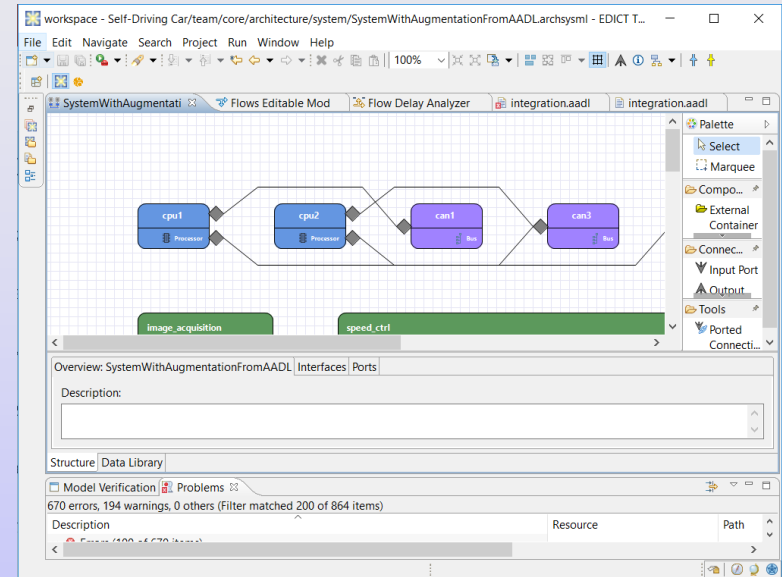
- OSATE integration
- Full standard compliance
  - AADL Core
  - Behavior Annex
- Import AADL
- Textual editing
- Graphical editing
- Export AADL





# EDICT MBSE Benefits Summary

- Efficiency
  - Easy learning curve
  - Multi-platform deployment
  - Version control for team collaboration
- Quality
  - Requirements traceability
  - Safety, dependability, security, information assurance (IA) and data and error propagation analyses
- Extensibility
  - Third-party tool integration via Eclipse



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