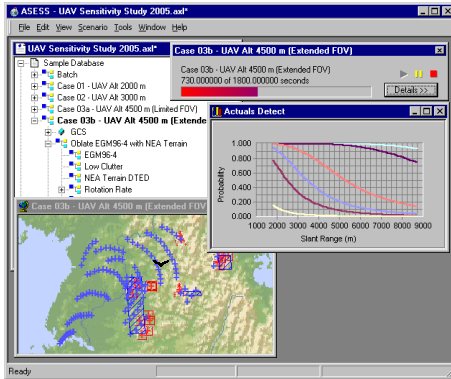


Introduction to the Advanced Subsystem, Element and System Simulation

ASESS



You Will Learn How To

- Exploit the ASESS framework
- Develop scenarios
- Select the appropriate model
- Execute sample scenarios
- Capture simple metrics
- Take advantage of HLA interoperability

Course Benefits

The Advanced Subsystem, Element and System Simulation (ASESS) is a desktop analytic tool that supports the evaluation of subsystems, elements, systems, and system of systems across the entire life cycle, from concept definition to user training.

In this course, participants will be introduced to the ASESS framework and its application. During extensive hands-on sessions, participants gain practical experience developing scenarios and applying best practices.

Who Should Attend

This course is valuable for analysts and decision makers who are evaluating systems, subsystems, or system of systems.

Course Length

4.5 Day Course
Monday thru Friday (half-day)

Course Content

INTRODUCTION AND OVERVIEW

- Analysis capability
- Behaviors simulated
- Entities simulated
- Natural environment
- Interoperability

ASESS FUNDAMENTALS

- Framework
- Model types and subtypes
- Elements
- Rule Sets

SCENARIO DEVELOPMENT

- Navigation of hierarchical tree
- Model and element properties
- Maps and geosets
- Searching

SCENARIO EXECUTION

- Execution control
- Batch execution

RESULTS

- Capturing results
- Filtering data
- Viewing results
- Charts and Graphs

REFERENCE

- Online reference
- Searching reference

GENERAL MODELS

- Analysis manager models
- Element name models
- Element type name models
- HLA interface models
- Output observer models
- Observer models

BASIC MOTION MODELS

- Move models
- Start models
- Converge to engagement solution models
- Converge to impact solution models
- Equations of motion models
- Guidance models
- Aerodynamic heat rate models
- Disperse models
- Deploy models

BASIC SENSOR MODELS

- Detect models
- Discrimination models

RULE SET MODELS

- Rule Set models
- Rule models
- Action models
- Likelihood models
- Allocate Weapons models
- Element Manager models

ENVIRONMENT MODELS

- Earth models
- Atmosphere models
- Earth rotation models
- Gravity models
- Terrain models
- Clutter type models
- Terrestrial coordinate system models
- Inertial coordinate system models

MATHEMATICAL MODELS

- Integration models
- Random number generators
- Distribution models
- Interpolation models

INTEROPERABILITY

- Overview of HLA
- Agile FOM capability

Live Demo

Through live demonstrations, participants observe various analysis scenarios, including:

- Space Assets
- Flyout Table Generation
- Footprint Generation
- Air and Missile Defense
- UAV Sensor Study

Hands-On Training

An essential element of the course is the use of extensive hands-on exercises. Under the guidance of an expert instructor, you gain experience:

- Developing scenarios
- Creating new models and elements
- Selecting the appropriate model
- Executing scenarios