

THE UNIFIED MODELING GAP

Three worlds. Three clocks. No shared language.

Why no single simulation environment spans moving platforms, sensor tracking, and engagement decisions — and the mathematics that finally connects them.



TRANSPORT Where things move

Orbits, routes, schedules — continuous physics on a continuous clock



TRACKING What sensors believe

Fusing noisy, intermittent observations — probability math on sensor-event time



KILL-CHAIN What deciders do

Find→track→engage sequencing — rules & decisions on decision-epoch time

Different data, different math, different clocks — today's best tools each master one world and cannot see the other two.

THE FIX — TWO PIECES OF MATHEMATICS



DEVS — a common event language

Every domain behavior — physics, probability, or decisions — becomes an event-driven building block with typed ports. The math guarantees verified blocks stay correct when you snap them together (“closure under coupling”).



EFSUT — start from the question

Each stakeholder question becomes an executable test frame that decides which models to connect and at what detail — so you build the smallest simulation that answers it, and accredit it against that exact question.



Plug-compatible models

Swap or add models without rebuilding



One run, every scale

Single satellite to whole theater, no hand-offs



Trust you can audit

Every result traces to its question and model