



U.S. ARMY
RDECOM

Systems of Systems Analysis (SoSA)

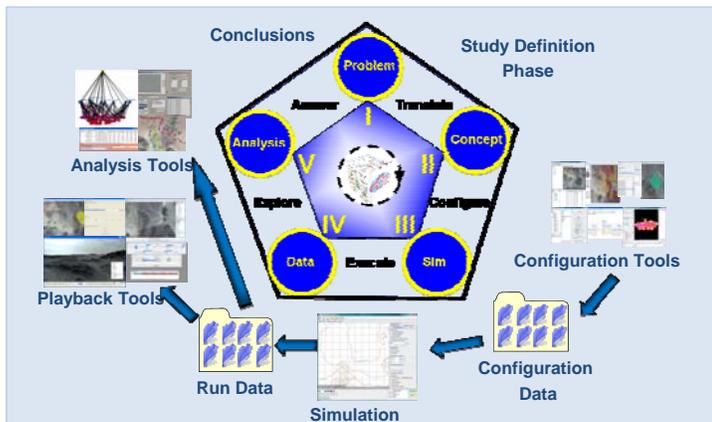


S&T Campaign: Assessment & Analysis *Assessing Mission Capability of Systems*

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Objective

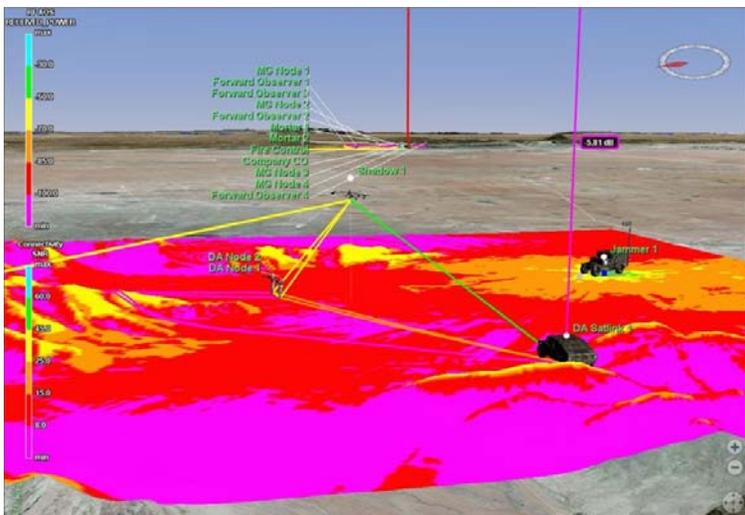
- Assess mission impacts of new or revised technology, tactics, or threats by modeling small-unit combat at an engineering level of detail
- Agent-based, decision-driven architecture and flexible, variable fidelity treatment of phenomena distinguish this from typical combat simulations



The SoSA Process

Challenges

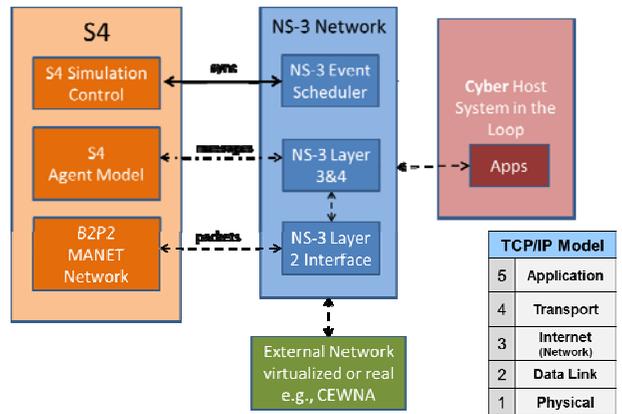
- Need to balance advantages of flexibility with those of standardization (rapid re-use, configuration control ...)
- Want best methods and strategies for quality control of software and experiments of complex systems



Terrestrial, Airborne, Satellite Communications Links During Jamming

ARL Facilities and Capabilities Available to Support Collaborative Research

- Computing hardware and visualization rooms at Physical Science Laboratory/New Mexico State University and White Sands Missile Range
- Engineering-level combat modeling expertise and threat effects for ballistics, electronic warfare, and cybersecurity



Complementary Expertise/ Facilities/ Capabilities Sought in Collaboration

- Mathematical or analytical expertise in modeling complex issues at multiple levels of abstraction or fidelity
- Recent experience in:
 - Small-unit tactics
 - Visualization
 - Cybersecurity
 - Communications
 - Electronic Warfare
 - Robotics
 - Autonomous Vehicles

