Army simulation and command and control federations have become large, complex distributed systems that integrate with a variety of legacy and current simulations, and real command and control systems locally as well as globally. As these systems continue to become increasingly more complex so does the data that initializes them. This increased complexity has introduced a major problem in data initialization coordination which has been handled by many organizations in various ways. Service-oriented architecture (SOA) solutions have been introduced to promote easier data interoperability through the use of standards-based reusable services and common infrastructure. However, current SOA-based solutions do not incorporate formal governance techniques to drive the architecture in providing reliable, consistent, and timely information exchange. This dissertation identifies the need to establish governance for common data initialization service development oversight, presents current research and applicable solutions that address some aspects of SOA-based data service governance, and proposes a governance reference model for development of SOA-based common data initialization services (G-SOA) in military simulation and command and control federations.

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The public is welcome to attend.