



Initial Discussion on JDEP Requirements

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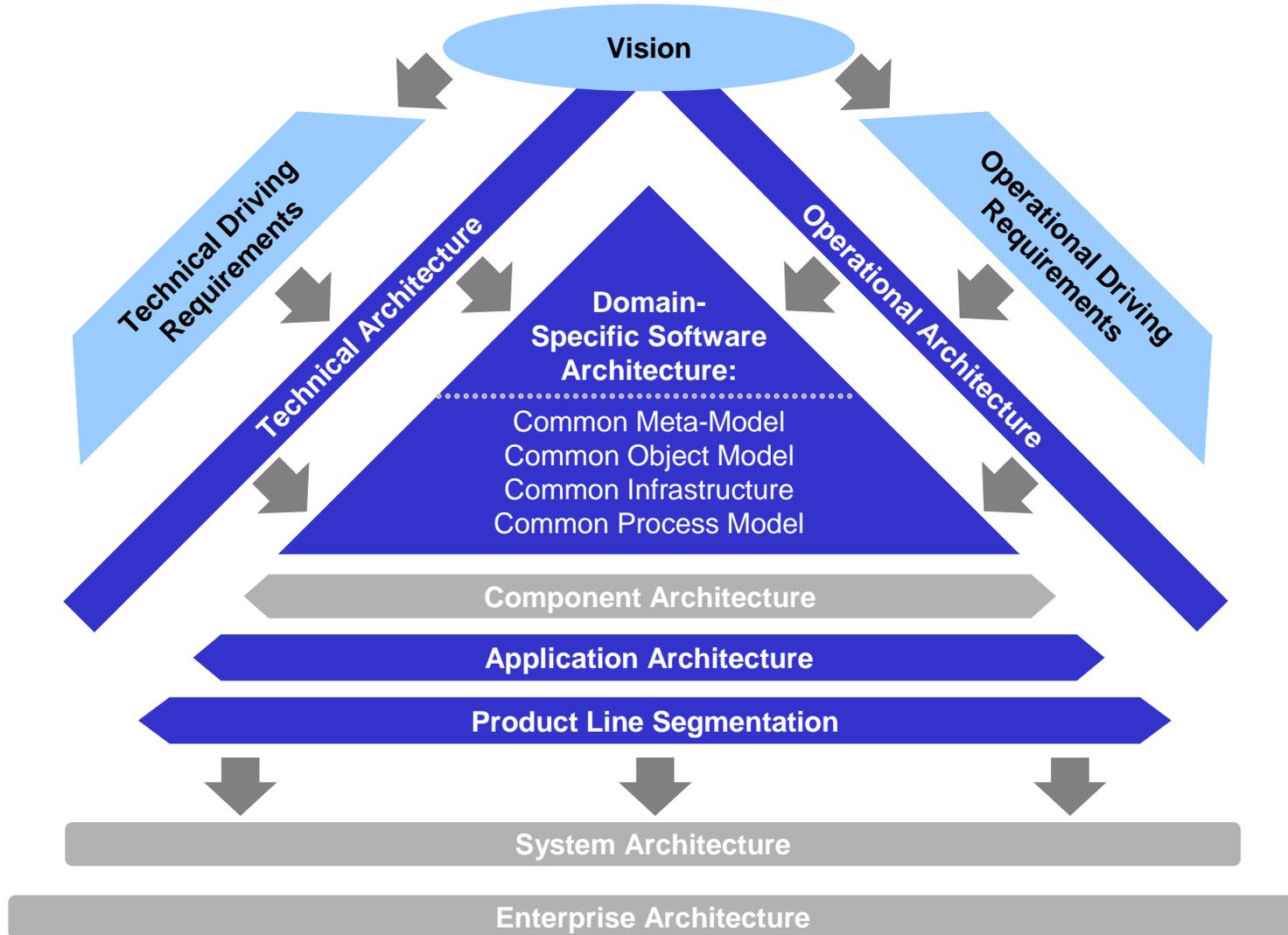
JDEP Technical Framework



- **Data Transport Capability**
 - Leverage and extend existing DoD networks
- **Technical Architecture for JDEP Events**
 - Data Elements and Definitions
 - Data Exchange Software
 - Definition of Compliance
- **Simulation Resources (employed as needed)**
 - Synthetic Environmental Effects Generation (Terrain, Weather, EMI, etc.)
 - Other Blue Force Systems Generation (Behaviors, Communications, Sensors, etc.)
 - Threat Generation (Behaviors, Communications, Sensors, etc.)
- **Process to Plan, Conduct, & Analyze Events**
 - Repository of Data Definitions, Interfaces, and Tools for Reuse
 - Persistent Data Archive for Post-Event Analysis
 - Supporting Tools



JDEP Technical Framework Design Drivers





JDEP Vision



Improve the **interoperability** of **weapon systems, platforms,** and **C2** within and across the Services by providing the capability to **create environments** to support engineering, development, integration, testing, evaluation, and certification in a replicated battlefield environment, leveraging Service and Joint combat system engineering and test sites



JDEP Technical Driving Requirements



1. Interoperability

- The characteristic of a suite of independently-developed components, applications, or systems that implies that they can work together, as part of some business process, to achieve the goals defined by a user or users.

2. Reusability

- The characteristic of a given component, application, or system that implies that it can be used in arrangements, configurations, or in system-of-systems beyond those for which it was originally designed.

3. Composability

- The ability to rapidly assemble, initialize, test, and execute a system from members of a pool of reusable, interoperable elements.
- Composability can occur at any scale — reusable components can be combined to create an application, reusable applications can be combined to create a system, and reusable systems can be combined to create a system-of-systems.



JDEP Operational Driving Requirements



- A. **JDEP must support the Joint Vision 2010/2020** by providing the foundation for experimentation, development, integration, testing, certification, & training.
- B. **JDEP must support the development of new warfighting systems and operational doctrine**, through all phases of the acquisition process, from concept to warfare.
- C. **JDEP must support rapid configuration and re-configuration**, so that integration events can be executed in a cost-effective manner.
- D. **JDEP must support easy integration with modeling and simulation** to advance the DoD's Simulation-Based Acquisition concept.
- E. **JDEP must be gradually deployable** and support interacting with systems that have yet to be made JDEP-compliant.
- F. **JDEP must support a wide variety of warfighting domains**, including but not limited to Land Combat, Air Combat, Sea Combat, Space Combat, Air & Missile Defense, Littoral Warfare, and Information Operations.