Utility of the DI2E Reference Architecture

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Questions for the Audience

• Do you have a reference architecture?

• What use is a reference architecture?

• How do you assess:
  – Completeness?
  – Program alignment?
  – Policy conformance?
What is DI2E?

DI2E fits within the Intelligence Mission Area of the DoD Enterprise Architecture

Office of Undersecretary of Defense (Intelligence) Defense Intelligence Enterprise

Show of hands:
Who has heard of DI2E?

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DoD Enterprise Architecture (EA)
Taxonomy of DoD Architectures

• Mission Architecture:
  – Two wheeled transportation providing outdoor driving experience

• Reference Architecture:
  – Transportation will be optimized for off-road experience by being able to jump hills and transit logs 6” in diameter

• Solution Architecture:
  – Here’s how Yamaha does it...
Question 1

Is your program:

Maintainer of a reference architecture?

A solution architecture constrained by a reference architecture?
Question 2

What use is an Reference Architecture?

Provides left and right lateral limits:

a. Things that can be reused
b. Guidelines for building
c. Dependencies
d. Critical interfaces

Provides common vocabulary and frame of reference
DI2E Architecture

**DoD Guidance**
- DoD IEA
- Joint Publications
- UJTL
- JCA
- JCSFL
- DISR

**DI2E Reference Architecture**
- Part of the DI2E Framework
- Reference Architecture Document (Rules, Principles, Patterns)
- Operational Mission Threads
- Activity Decomposition (OV-5a)
- Capability Taxonomy (CV-2)
- Technical Profiles
- StdV-1 (Standards)

**Solution Architectures**
- Systems
- System Interfaces (SV-1)
- Systems-External Services Matrix (SvcV-3a)
- Information Support Plan (ISP)
- System Data Flows Matrix (SV-6)
- System Standards (StdV-1)

**Architectural Components**
- Architecture Overview (AV-1)
- Operational Concept Graphic (OV-1)
- Activity Model (OV-5b)
- Event-Trace (OV-6c)
- Event-Trace to Services Matrix (SvcV-5)
- Capability to Services Mapping (CV-7 + SvcV-4)
- DIV-2 Data Viewpoint
- Software Components
- Data Stores
Question 3

How do you assess:

Alignment to the Reference Architecture?

Conformance?

Completeness?
DI2E Assessment Methodology

Step 1: DI2E Annual Data Call
• Send us your architecture artifacts
• Send us additional documentation (ISP, accreditation package)

Step 2: Assessments
• Compare solution architectures to Reference Architecture
• Does the solution architecture align to mission activities?
• Interoperability Assessments: DI2E Plugfest, Enterprise Challenge, Stormforce, etc.

Step 3: State of the Enterprise Report:
• Summarize annual assessments
• Report year-over-year trends
Questions?

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