DI2E Framework Standard Brief
The Defense Intelligence Information Enterprise (DI2E) is one of two components of the Defense Intelligence Enterprise (DIE) that:

- Transforms collected intelligence data for further analysis
- Provides analysts to ability to Integrate, evaluate, interpret and predict the operational/physical environment
- Enables better situational awareness to military and national decision makers

**DI2E** is not a Program of Record nor a new architecture, but rather, is composed of the EXISTING technology infrastructure, software and services within the JIOC, DCGS, and Tactical enterprises to include National and International Partner capability within USDI oversight and acts as a bridge between the DoD Joint Information Environment (JIE) and IC Information Technology Environment (ITE).
Encourage Efficiencies and Enterprise Service Sharing through reuse of contract acquisition language

Move to Open Business Models to tap into extensive capability while lowering the barrier to contribute

Choose acquisition approaches that incentivize traditional (e.g. award fee, incentive fee for service reuse, etc.) and non-traditional participation (shared risk)

Avoid previous business model and licensing pitfalls; leverage DoD and IC lessons learned

Move toward Open Business Model and Enterprise Approach to Acquisition
Defining DI2E Framework

**Standard Acquisition**
- Individual systems designed to address their own needs
- Software components “hard-wired” together
- Vendor lock-in
- Not Compatible
- Not Reusable
- Not Interoperable

**Improved Acquisition** (DI2E Framework)
- Componentizing to enterprise-grade
- Compatible
- Reusable
- Interoperable
- Separating data, apps, core services, visualization, etc.
- Enables a true service-oriented architecture (SOA)

**Benefits to the BA Portfolio**
- Greater Reuse
- Improved Agility and Speed to Market
- Cost Savings
- Enhanced Interoperability
- Assured Tiered Accountability

**DI2E Framework: A New Acquisition Model Driving Greater Efficiency, Reuse, and Interoperability**
DI2E Framework Objectives

- Reduce Duplicative Development
- Reduce Timelines for Capability Delivery
- Provide Agility for Changing Requirements
- Increase Enterprise-Wide Information Sharing
- Optimize Use of Declining Resources
- Align with JIE and IC ITE

The DI2E Framework goal of enterprise consolidation directly aligns with the Government-wide initiative to move towards a more efficient, effective, and cost-conscious methodology of doing business.
DI2E-F Architecture Focus

Joint Architecture Reference Model (JARM)

1. Facilities
2. Fiber/Cable Infrastructure
3. Networks
4. Computing and Storage Platforms (HW and OS)
5. Applications and Content Enabling Software
6. Frameworks and Content Structure
7. Applications and Content

DI2E-F
Focus: Common Services, Framework and Reuse
Driver: Interoperability; Agility; Lower cost

- Facilities
- Network
- Server/Storage
- Operating Sys
- Virtualization
- Infrastructure APIs Interfaces (I/F)
- Platform as a Service (PaaS)
- Platform as a Service (IaaS)
- Database Mgmt
- Middleware (App Svr, workflow, portals)
- Data
- MetaData
- Applications
- Data & Mission Services
- Mission/Business API I/Fs
- Presentation Components

Driver: Interoperability; Agility; Lower cost
**ADMIN (APPLICABLE TO ALL R&R'S):**
- PARTICIPATE/CONTRIB/RESPOND TO MTG/TEM'S
- DEVELOP PRESENTATIONS
- DEVELOP T&E CHECKLISTS SPECIFIC TO R&R SUB MATTER
- COORDINATE ACTIVITIES W COE AND STAKEHOLDERS

**DOCUMENTS QA OF COE**
- OVERALL COE METRICS & MODS

**CLOUD SCALABILITY & ACCESS**
- CLOUD-BASED SERVICE ARCHITECTURE MGMT
- CLOUD PROVIDER COORDINATION

**SVC INVENTORY COORD**
- SVC ASSESSMENT COORD
- SVC DEV
- LEGACY DECOMP
- STAKEHOLDER COMM
- Schema/XML/SA Architect Mgmt

**FRAMEWORK SVC INTEGRATION**
- STAKEHOLDER COMMUNICATIONS
- DEVELOPER COORDINATION

**STOREFRONT LIFECYCLE**
- SWASe MGMT
- OWF MGMT
- STAKEHOLDER SUPPORT

**COE**
- TECHNICAL MGMT
- • ATOMIC/SVC TEST
  • COORD W/SWASe EVAL CENTERS
  • CHECKLIST VALIDATION
  • CONFORMANCE VALIDATION

- • TEST BED MGMT
  • PLATFORM
  • SW MGMT
  • FACILITIES
  • CAPACITY MGMT

- • DATA COUNCIL/COI COORD
  • SOURCE DECONFLICTION
  • DATA LAYER SOURCE ALIGN

- • C&A
  • CODE ASSESSMENT/VALIDATION
  • STAKEHOLDER COORDINATION
  • C&A DOCUMENTATION

**DII2E Framework PMO**
- DII2E FRAMEWORK PM
- • GOVERNANCE
  • PRIORITIES
  • RESOURCING

- • CONFERENCE PLANNING & SPT
  • CBS INTELINK/WIKI/SHAREPOINT MGMT
  • STAKEHDR COMM INTERFACE

- • ACQUISITION DOC & COORD
  • FINANCE
  • SVC ADOPT/BUY/CREATE COORD
  • SVC DEV ACQ LIFECYCLE
  • SUPPLY CHAIN MGMT

- • EPFM MGMT
  • CM REPOSITORY
  • TEST BED CM
  • DII2E FRAMEWORK
  • DEV PROCESS
  • METRICS & REUSE

- • OPM MGMT
  • CM REPOSITORY
  • TEST BED INT
  • DII2E FRAMEWORK INT
  • SWASe EVAL
  • DEV GUIDEBOOKS
  • MANAGE RIP/SDK/PROF/SHEMA

- • SERV MGMT
  • SW MGMT
  • FACILITIES
  • CAPACITY MGMT

- • CLOUD PROVIDER COORDINATION
  • CLOUD-BASED SERVICE ARCHITECTURE MGMT
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DI2E Framework Center of Excellence

- Enterprise Grade Services
- Guidebooks
- Reference Implementation
- Support to Developers
- Conformance Testing
- Integration Support
- Standards/Specs
- Service Lifecycle Management
Google Process

Google Store

Developer “x”

Application “x”

Use Software Development Kit (SDK)

Use

Develop

Publish

InstalledOn

Uses

Uses

Test

Compatibility Check with Android OS and HW

Test Tools

Android Virtual Device
DI2E Framework Process

**DI2E Store**

- IC AppMall
- DI2E Guidebook
- DCGS, JIOC-IT, Others

**DI2E Testing**
- Virtual Test bed
- Service Specs & Stds
- Conformance
- Governance Compliant
- Service Interoperability
- IC ITE and DOD JIE Alignment

**DI2E Supports Service Life Cycle Mgmt**
- Conformance
- Compliance
- Configuration Mgmt
- Compatibility

**DI2E Supports Development**
- APIs, APIs, APIs
- DI2E Test Harness
- Documentation
- Componentization
- Packaging
- COE Support

**Application “x”**

**Feedback and Contribution**

**Use**

**Publish**

**Same Process, Different Business Model**

UNCLASSIFIED
Step 1: Componentization

1. In a tightly coupled Software design, a coder builds new and unique interfaces “as needed” to directly access DBMS, security, map, etc.

2. To properly decouple, the coder Needs a standardized interface to Directly access DBMS, security, map, etc.

3. DI2E provides the methodology for the way the government codifies, documents and packages “Glue ware”.

Productizing the Standard Interfaces for Proper Decoupling
Leveraging and Molding Existing Information to Document an Enterprise Component

"The DI2E-F Guidebook"
Step 3: Packaging

Multiple Packaging Methods for Different Consumers

- Software Code
- Component
- VM Images
- Centralized Service

Programmer

Architects

SWASe Services

Network

Consuming POR

Less Desirable

More Desirable
1. Autonomy –
   a. Government Program Offices will have the autonomy to integrate, modify, change the Service to meet their requirements

2. Funding –
   a. For new services or changes to existing services (DI2E Governance)

3. Assistance –
   a. Implementation Team to assist with integration
How to Participate

Intelipedia Unclassified:  https://www.intelink.gov/wiki/DI2E_Framework
Intelipedia SIPRNet:    https://www.intelink.sgov/wiki/DI2E_Framework
Intelipedia JWICS:       https://www.intelink.ic.gov/wiki/DI2E_Framework

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Questions