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(U) DIA TASK FORCE DATA
The CIO’s Approach to Data Transformation & Governance

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Data Changes the World

Increased availability of data fundamentally changes the nature of the world, and of intelligence

- Information drives action in all industries and parts of society
- Billions of sensors around the world
- Adversaries’ actions are more detectable, earlier, and so are ours...

The “air gaps” from intelligence to action are disappearing

- Radical shifts in the definition of intelligence “products”
  - The evolution of “sensor fusion” towards predictive models
- Requires organizing data around a “pivot” (target, place, etc)
- Blurred lines between tasking, collection, processing, exploitation, and analysis
The Immediate Challenges

Defense Intelligence is facing significant challenges

- Data is **not discoverable** to all users that need it
- Data is **not organized** to be useful at an IC enterprise scale

DIA must have effective practices to manage data

- Requires infrastructure and policy to support current acquisition, processing, exploitation activities
- Involves integrating security and content tags
- Demands quality management standards; measuring value is key
- Entails repeatable data development and integration

Cultural shift from “silo” behavior to enterprise

- Silos compete for talent and capacity
- Enterprise level transparency is a must to align efforts and enforce data standards
“You can’t get to the moon by climbing successively taller trees”

-Mo’s Law of Evolutionary Development
Task Force Data Background

Mission:
- Establish the requirement for an enduring capability to maximize DIA’s relevance through effective data management and exploitation

Scope:
- Prioritize Mission Data v. Business Data
- Start at DIA HQ, then COCOMs
- Solutions to include Service Intel Centers

Drivers:
- Ensure compliance with law and policy
- Capitalize on modern technology
  - IC ITE and “the Cloud”
  - Analytic Modernization
  - Object Based Production
- Minimize risk of insider threat
- Maximize financial efficiency and effectiveness of IT capability

Approach:
- Expose Expert Practices
- Document Process
- Converge on Best Practices
- Recommend Enterprise Strategy and implementation
- Establish Enterprise Data Governance framework
Task Force Data Governance

Key Tasks

• Understand holdings and their intelligence value
• Develop roles and responsibilities of data stewards
• Establish and empower advocates for DIA access to external data
• Institute corporate data decision making processes
  – Represent Defense interests in the IC and for ICITE
  – Enforce compliance with the law, policy, and regulation
  – Communicate information of common concern
  – Establish vision, set and scrub policy, set procedures and processes to implement and enforce

Create and maintain enterprise data architecture (blueprint) across data lifecycle
Our Vision – Enhancing Data Value through Governance

At present, if an analytic effort needs to exploit a new data source, they must independently facilitate the acquisition and sustainment of the data, figure out where to store it, how to secure it, and what to do with it. This is a process that can take months.
"Successful integration requires a Global IT infrastructure through which the IC can rapidly and reliably share intelligence with those who need it."

- James R. Clapper,
  Director of National Intelligence
IC ITE Data Management Strategy: Goals and Objectives

Goal 1 – Enhance Intelligence Integration

Goal 2 – Maximize Information Utility

Goal 3 – Protect Information

Goal 4 – Support IC-Wide Records Management
DIA CIO IC ITE Transition planning

DoDIIS App Engine

ICGC Data, Utility, & Storage

DTE

C2S

DoDIIS HSC

Rehost

Refactor

Revise

Rebuild

Replace

SaaS

PaaS

IaaS

Based on Gartner “Five Options for Migrating Applications to the Cloud: Rehost, Refactor, Revise, Rebuild or Replace” by Jeff Woods

Existing Systems

New Systems
DIA CIO Capability Service Board (CSB)

Each Community of Interest (COI) has CSB voting representation.

CSB provides Enterprise Governance over Data & IT Transitions.

No data, applications or capabilities transition to Cloud without CSB Governance.

App Owners (COIs)

- Facilitates CSB/ASIB process for migration planning & COI decisions
- Forges relationships with cloud providers
- Analyses best track for data and apps migration
- Helps app owners optimize mission capability

Traditional IT

DoDIIS HSC (Private Virtualization)

DoDIIS App Engine

C2S

ICGC
The DIA CIO Mandate for Data

Recognize that the data lifecycle is a joint *Mission and CIO* responsibility

- **Manage data as an IC Enterprise Asset** – *maximize its value*
- Build to Share – applies to data as it does IT
- Focus on Discovery (Find) & Retrieval (Access) – uses may vary, but core functions are shared
- Assure access by authorized users – **NOT** by the network the data lives on
- Shift to data services – separate data from apps
- Transform from data wrangling to data science – “less time gather, more time eating”

Enterprise IT and ICITE will enable modernization

- Collaborate across the data lifecycle to enable operations
- Embrace a partnership across Defense Intelligence and IC
QUESTIONS ?