MACE Pilot Effort

• Emerged from JIEDDOs Counter IED Operations Integration Center Net Centric Initiatives
  – Deployed the first interoperable, data sharing federation in the DoD, facilitating data discovery, across Service and Agency boundaries to defeat the IED threat

• A need emerged to enable the broader DOD and Federal Community to achieve the same interoperability and net centric success
Introduction – What we need

We need the right information to do our jobs...

...but we do not have a way to easily share and discover information across Service and Agency boundaries; this prevents us from becoming predictive!
The Problem

Information is stored...
The Problem

And not available to...
Effect

...Preventing you from “Connecting the Dots”...
To address this critical problem ASD NII established the MACE

• Mission
  – Protect the Nation by leveraging the power of information to achieve cross Agency interoperability, collaboration and shared awareness

• Goals
  – Achieve greater levels of situational awareness and enable more accurate and timely decision making across the DoD and Federal Agencies
  – Accelerate the interoperability, policy and security advancements needed to meet the future security and integration challenges that the US will encounter in the coming years
Breaking Down the Barriers

...So that information can be shared and updated by...

Agents  Operators  Analysts

...from across the DoD and Homeland Defense Stakeholder Community

- e CLOUD
- Shared Applications / Shared Data
- Security / Authorization / Authentication
Transforming stove-piped data and application services into a shared knowledge enterprise based on blended DOD, DHS and DOJ data standards...
eCLOUD:

Any data set can be integrated...

Peta-Byte Class Data Centers

Data Warehousing
Business Intelligence 2.0

Analytics

...and access controlled to specific users, organizations or communities of interest....
MACE
Integrating Partners

DHS Operations
DHS Critical Infrastructure Protection (CIP)
Customs and Border Protection (CBP)
Alcohol, Tobacco, and Firearms
Joint Interagency Task Force – South
ASD NII / DOD CIO
DCGS Management Office (DMO)
United States Air Force (ESC)
DIA
USSOCOM
US NAVY
US ARMY

Emerging Partners
NORTHCOM / CENTCOM / NGA / EPIC / CN COI / White House / NMCC
Customize Your User Experience: Gadget Based Browsers

Knowledge Driven Operations

Query: Type, Time, Spatial, Complex

Workflow Automation

User Customized Automated Metrics Reporting

Predictive Enterprise Analytics

Automatic Enterprise Entity Extraction and Association
The committee is aware that the office of the Assistant Secretary of Defense for Networks and Information Integration sponsored a program intended to break down interagency information stovepipes and promote greater information sharing among the Department of Defense and its partners. The Multi-Agency Collaboration Environment (MACE) is an innovative effort to address many of the information sharing problems identified by the 9/11 Commission which continue to plague the U.S. Government. MACE provides a unique proving ground for federated information sharing architectures and techniques. Equally important, the contracting paradigm for MACE is a radical departure for the Department, and offers a potential future standard that leverages Darwinian principles in support of information systems program management. The committee plans to closely monitor the progress of MACE, and encourages the Department to make greater use of this capability.

Information is the critical enabler in today's fight.
...On multiple security domains to expand enterprise federations
MACE Enables

...transforming information into action
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Multi-Agency Collaboration Environment
MACE

DCGS Integration Backbone (DIB)
MACE Provides the DCGS Integration Backbone for the DMO and the Services

THE PROBLEM
Accessing and using data from disparate data sources wastes a significant amount of time that could be spent on analysis and fusion.

THE SOLUTION
The DIB provides a common interface that exposes data and allows analysts to retrieve information with a single query. The DIB uses a hub and spoke methodology for sharing data within a Community of Interest.

DIB-based federation facilitates seamless, direct sharing and coordination of ISR and operations across organizational domains.
## DIB Development Overview

<table>
<thead>
<tr>
<th>Feature</th>
<th>DIB v1.2</th>
<th>DIB v1.3</th>
<th>DIB v1.3.1</th>
<th>DIB v2.0</th>
<th>DIB 3.0</th>
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</thead>
<tbody>
<tr>
<td>Date Released by MET CCB (DMO shipped)</td>
<td>Dec 07</td>
<td>Apr 09</td>
<td>Sep 09</td>
<td>Oct 10</td>
<td>May 11 (Projected)</td>
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<td>Developed by</td>
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<td>Government Insight into Development</td>
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<td>PoR Requirements Change Flexibility</td>
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<td>High</td>
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### Legacy Contractor Effort
- Proposed 13.6 M for 2.0

### MACE Selection
- MACE Accomplished 2.0 delivery at 5 M

### MACE Effort
## DIB Key Feature Summary

<table>
<thead>
<tr>
<th>Feature</th>
<th>V1.2</th>
<th>V1.3</th>
<th>V1.3.1</th>
<th>V2.0</th>
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<tbody>
<tr>
<td>Catalog Record Storage Format</td>
<td>DCGS Internal</td>
<td>DoD Standard</td>
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<td>Multi-Catalog Search</td>
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<td>System Integrator Documentation</td>
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<td>Catalog Query &amp; Result Formats</td>
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<td>Oracle 11G</td>
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*DIB v2.0 will include PL3 functionality; product type certification documentation and effort planned for DIB v2.1*