AFCEA
Aberdeen Maryland Chapter Luncheon
September 17th, 2013

COL Charles A. Wells
Project Manager, DCGS-A

Public website: dcgsa.apg.army.mil
Facebook:  www.facebook.com/dcgsa
Before There Was DCGS-A...
- Uncommon Networks
- Delayed Stovepiped Intel
- Lack of Fusion
- Lack of Situational Awareness
- Disconnected from Reachback

ISR Sensor Surge
• Tripled Human Sensors
• Quadrupled Aerial Collection Hours per Month
• Document & Media Collection
• Tactical Biometric Collection
• Text Databases Explode

Data in Silos
Disparate Workstations
Fusion in Commander’s Head
Disconnected from Reachback

DCGS-A to Cloud

All Source Analysis System 2001
Information Dominance Center
Project Morning Calm
Joint Intelligence Operations Capability-Iraq/Afghanistan 2005
DCGS-A 2007

Comms & Down Links
Processing
Tagging Security
Exploitation & Analysis Tools
Tactical Operations Center (TOC)
With DCGS-A
+ Common Enterprise Framework
+ Common Data Ingestion and Tagging
+ Common Analysis/Exploitation
+ Ability to Manage Data
+ Advanced Analytics
+ Common Understanding at All Echelons
+ Reliable Reachback to IC

ISR Sensor Surge
- Tripled Human Sensors
- Quadrupled Aerial Collection Hours per Month
- Document & Media Collection
- Tactical Biometric Collection
- Text Databases Explode

Opportunities:
- Expand Access, Enable Reach
- Fusion
- Situational Understanding
Supporting 30K Intel Soldiers

- 3 Regional Hubs: Ft. Bragg; Darmstadt; Ft. Shafter
- 5 Theater Brains: CENTCOM (GA); SOUTHCOM (TX); EUCOM/AFRICOM (GE); PACOM (HI); USFK
- 9 Corps Headquarters
- 33 Division Headquarters
- 138 Brigade Combat Teams

Supporting Our Combatant, Army, Joint, Coalition Partners Daily
DCGS-A Software

• **DCGS-A (Griffin) (FY 11-14)**
  - In Operation Enduring Freedom – Afghanistan Today
  - Fielding Around the World Now

• **DCGS-A (Hunte) (FY 13-16)**
  - Increases Ease of Use and Functionality
  - Starting to Field in Support of Next-Deployers to OEF

• **DCGS-A (LITE)**
  - Pilot Supporting U.S. Army Special Operations In Africa

• **DCGS-A Cloud (IC ITE)**
  - Pilot to Integrate and Align DCGS-A into the IC Cloud

*Soldier Requirements + Industry Best of Breed + IC Open Standards*

*Constantly Evolving - Integrating Improved Capabilities for our Soldiers*
DCGS-A Intelligence Fusion Servers (IFS)
Software version 3.1.6 (Griffin)

- Intelligence Fusion Server
- Collects and stores all the SECRET and TOP SECRET Intelligence Products at all Echelons
- Portable Multi-Function Workstation is the Laptop for Intelligence Processing
- Visualization Tool for the Commander’s Intelligence Picture

- Current Baseline – FDD‘2012
- Supporting All Army Units in OEF, Joint SOF, MEF, IJC, Globally
- Incorporated RT-RG Capabilities
- Integrated HUMINT Collection and Analysis Capabilities
- Increased GEOINT Capabilities
- Included Biometrics Analysis
- Unified Joint ISR Sensor Processing and Analysis

Consists of the Following:
- Blade Server
- Intel® Xeon® processor
- IFS fielded 1023 to Maneuver Battalion, Brigade, Division, and Corps
- Units on 3.1.5 / Older Baselines Being Upgraded

Creates, Collects and Stores all the Intelligence Products at All Echelons of the Army and Connects Soldiers to the Intelligence Enterprise
DCGS-A Intelligence Fusion Servers (IFS)
Software version 3.1.7 (Hunte)

- Intelligence Fusion Server
- Collects and Stores all the SECRET and TOP SECRET Intelligence Products at all Echelons
- Portable Multi-Function Workstation is the Laptop for Intelligence Processing
- Visualization Tool for the Commander’s Intelligence Picture

Ease of Use and Visualization Enhancements
- Introduces IC Widget Framework
- Upgraded Operating System Stability
- Included Additional Full Motion Video tools

Consists of the Following:
- Blade Server
- Intel® Xeon® processor
- IFS fielded 1023 to Maneuver Battalion, Brigade, Division, and Corps
- NET/Fielding to Next Deployers
- Refresh in Place Units
- Theater Brains / QRF / RAF Deployers

Creates, Collects and Stores all the Intelligence Products at All Echelons of the Army and Connects Soldiers to the Intelligence Enterprise
**Inputs**
- National, Strategic, and Tactical Data Feeds

**Outputs**
- All intelligence products for Commanders Decision making process
- Shares network diagrams with entire intelligence community

**Consists of:**
- High-performance Blade Server
- Fielded 38 Laptops and 5 Intelligence Fusion Servers to 10th SFG (A)
- Potential Army-wide impact – Company Decreased manpower and footprint cost

"Learnable" Interface and Increased Processing Speed at User Level, and Total Federation With Intelligence Enterprise
Why Army Intelligence Needs the Cloud

- Precision Search
- Recall

Failed System

Enabled By Cloud

- "Google" type search
- Works on Internet because can do Page Rank for relevance (popularity)

Precision

Focus of our present Cloud-enabled Analytics

Complex Boolean Searches

Present military systems

Works on Internet because can do Page Rank for relevance (popularity)
Analyze All the Data, All the Time

With the Cloud, we do not have to filter to get a sub-set / working set

Analysis over the entire corpus – follow the analytic threads **without** re-loading data
The Army’s On-Ramp to the IC Information Technology Enterprise (ICITE)

- Faster, Handles more Data. Sub-second Response for Millions of Records, 600+ Data Sources
- Commercial Cloud Technology with Military Grade Security
- Integrates Dozens of Stove-piped Capabilities into One Global Enterprise
- Saves Money, Reduces Support Footprint

Inputs
- National, Strategic, and Tactical Data Feeds

Outputs
- Connects the Army to the Intelligence Community (IC)
- All intelligence products for Commanders Decision
- Collection Management
- Target Nomination
- Enemy Courses of Action
- Situational Templates

Consists of:
- Pilot test site at Fort Gordon, GA
- Integration Lab at Fort Belvoir, VA
- Regionally Aligned Cloud Nodes
- User Developed Cloud Interface Based directly on Soldier Input

Soldier Informed, Industry Built – 80+ Industry Partners Are The Industry Leaders In Cloud Technology
Recent DCGS-A Milestones

- Achieved 2 Major Acquisition Milestones last year
  - **Milestone C – March 2012**
  - **Full Deployment Decision - December 2012**

- DCGS-A has fielded capability to deployers since 2008
- Every Corps, Division, and Brigade deploying to OEF has DCGS-A
- DCGS-A is used world-wide for counter-insurgency, decisive action, continuing and emerging operations
- DCGS-A received a ‘Big 5 Award’ from C4ISR Magazine for capability deployed to OEF
The majority of DCGS-A capabilities are provided by commercial products and solutions (both hardware and software)

Numerous Industry partners contribute competitively

Multiple Silicon Valley partners

DCGS-A builds to an open architecture, and is fully compliant with Intelligence Community and Army standards

DCGS-A conducts Industry Days routinely to bring competitive solutions into the program – constant, open communication with Industry

- August 29th DCGS-A Innovation Showcase
- Over 560 attendees; 80+ Companies; 48 Demonstrations

Major releases of DCGS-A every 18-24 months
DCGS-A Efficiencies

- Results of detailed 90-Day Study
- **Key Recommendations:**
  - Transition to "Green Suit Tier-1" Maintenance
  - DCGS-A Software Optimization Plan:
    - *Standardize to single software baseline*
    - *Software capability review/consolidation*
    - Pilot "Demand Model" for software distribution
DCGS-A: Without It, Our Soldier’s Lives Are At Risk…
Without It, Our Army Does Not Operate…