

DCGS-A

Distributed Common Ground System - Army

DCGS-A Information Sharing Across Domains and Organizations

***AFCEA-GMU C4I Center Symposium – Critical Issues
in C4I***

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What Does Distributed Common Ground Systems – Army (DCGS-A) Deliver ?



- ◆ **Historically, every sensor had its own, unique ground system to receive, store, and process data.**
 - Created intelligence-sharing challenges
 - Focus on analyzing intelligence related to a single Intelligence discipline (Signal Intelligence, Imagery, etc.)

- ◆ **DCGS-A Changes The Paradigm!**
 - *Single system receives data from all sensors*
 - National – Aerial – Terrestrial – The Soldier
 - Intelligence easily shared
 - Army-wide – Jointly – with Coalition Partners
 - Multi-disciplined Intelligence Analysis
 - Signal – Imagery – Human Intelligence
 - Fuse into a common product to support analysis

***Better Analysis – Increased Collaboration
Timely, Informed Critical Command Decisions***





DCGS-A Technology Focus Areas

- **Ease of use**
 - Single Common Baseline
 - Intuitive user interfaces
 - Streamlined workflow based upon analytic process
 - Training
(Computer Based Training / Embedded Training)
- **Actionable intelligence to the edge**
- **Node to node (cloud) data synchronization / content management**
- **Knowledge management**
- **Entity extraction from unstructured information (entities, activities, relationships between them)**
- **F3EAD**
(Find, Fix, Finish, Exploit, Analyze, Disseminate)
 - Aided target recognition (technology and TTP)
 - Combat assessment





DCGS-A Engagement with Industry

- ◆ **DCGS-A has partnered with both OGAs and Industry in the Ozone Widget Development by:**
 - Making the DCGS-A Ozone Development environment available as a free download on DISA's Forge.mil:
 - <https://project.forge.mil/sf/projects/dcgsozone>
 - Making all of the common infrastructure (help, query, results, map, and DIB) widgets freely available to the DoD enterprise through the Forge.mil site
 - Holding Training classes that have included both DCGS-A Staff, OGA Staff, and Industry Partners
 - Supporting the Forge.mil site and Ozone Google Group with insight into our implementation
 - Participating in the Government Open Source Software (GOSS) meetings for steering the overall Ozone Roadmap

- ◆ **DCGS-A Standard Cloud architecture supports an open integration environment:**
 - Designed around a Modular Open Systems Architecture (MOSA) to allow industry to easily integrate capabilities without relying on stove pipe approaches
 - Includes all manner of integration from core infrastructure, data integration, analytical tools, and visualization.

- ◆ **The Tactical Cloud Integration Lab (TCIL) effort has been stood up as a "proving ground" for new Cloud/Ozone capabilities targeted for inclusion in the DCGS-A Standard Cloud (DSC). This includes:**
 - Providing public meetings for understanding DSC's Cloud Architecture
 - Inviting Industry Partners to both propose and integrate capabilities onto the DSC Reference Hardware available in the TCIL
 - Providing a public website with technical information on the TCIL and DSC efforts
 - Plans are in place to stand up a TCIL Cloud node on an unclassified domain and provide VPN access to external parties





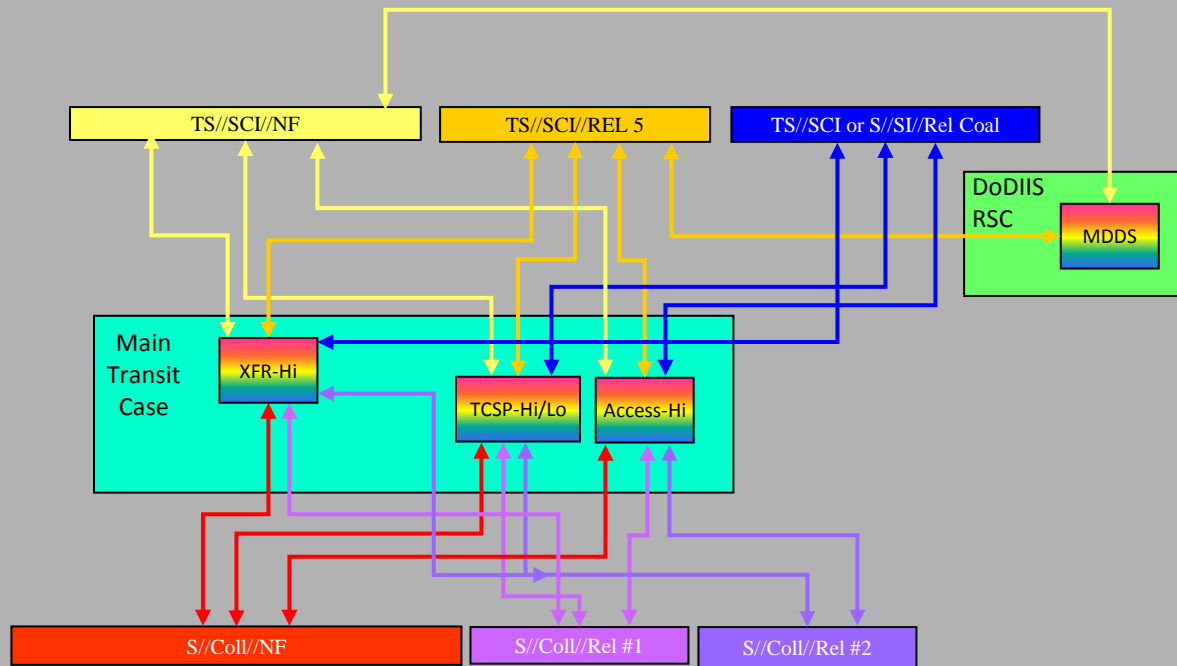
DCGS-A Cross Domain Solution Selection Criteria

- Must be on the UDCMO Baseline List (currently ~30 CDS of all types – most are transfer)
- Open architecture – non-proprietary OS, i.e., an OS that runs on multiple h/w platforms, e.g., Solaris x86, RH SE Linux
- Operates on current CHS equipment set (X86)
- Tactical Friendly (able to operate in bandwidth constrained scenarios and support RT/NRT transfers)
- Meets DCGS-A Specific Requirements
 - multiple document type transfer capability
 - bi-directional
 - certified for TSABI and SABI
 - ease of use
 - sustainable (current OEM, CM, dev planned)




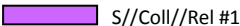

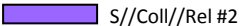

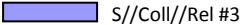




Cross Domain Solution Suite Logical Data Flow



Legend

 TS//SCI//NF	 TS//SCI or S//SI Rel Coal
 TS//SCI//REL5	 S//Coll//Rel #1
 S//Coll//NF	 S//Coll//Rel #2
 Unclassified	 S//Coll//Rel #3

TCSP – Tactical Communications Support Processor (record messages)

