

DISDI PORTAL – CURRENT & FUTURE TECHNICAL ISSUES

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Overview

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1. Portal Background & Requirements
2. Current Capabilities
3. Near Term Plans
4. Meeting Net-Centric Objectives
5. Future Spirals

DISDI Viewer - Strategic Installation Picture

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The screenshot displays the DISDI Portal 2.0 web application interface. The main window shows a satellite map of an airfield with overlaid infrastructure layers. The interface includes a top navigation bar with service selection (Army, Navy, Air Force, Marine Corps), a left-hand 'Layers' panel with a tree view of map data, and a bottom status bar with units and coordinates.

Layers Panel:

- Worldwide DoD Footprint
- DoD Site Locations (all)
- Air Space
 - Military Training Route
 - Runways
 - Special Use Airspace - High Alt.
 - Special Use Airspace - Low Alt.
- Sea Space
 - Navy Training Ranges
- DoD Site Infrastructure Layers
 - Air Force
 - Accident Potential Zones (BRAC 2005)
 - Airfield Surface Area (more info)
 - Airfield Surface Centerline
 - Buildings/Structures (more info)
 - Fence Line (more info)
 - Floodplains (100 Year) (BRAC 2005)
 - Gate Line (more info)
 - Installation Area (more info)
 - Military Range Area (more info)
 - Noise Zones (BRAC 2005)
 - Railroad Centerline (more info)
 - Road Area (more info)
 - Road Centerline (more info)
 - Shoreline (more info)
 - Surface Water Body (more info)
 - Surface Water Course (more info)

Map Labels: APZ1, APZ2, CZ

Status Bar: DISDI Portal Ready | Area Units: Acres | Dist Units: Miles | 0 0.4 0.8 1.2 1.6 mi | -117.93137, 34.91620 | LL / WGS84

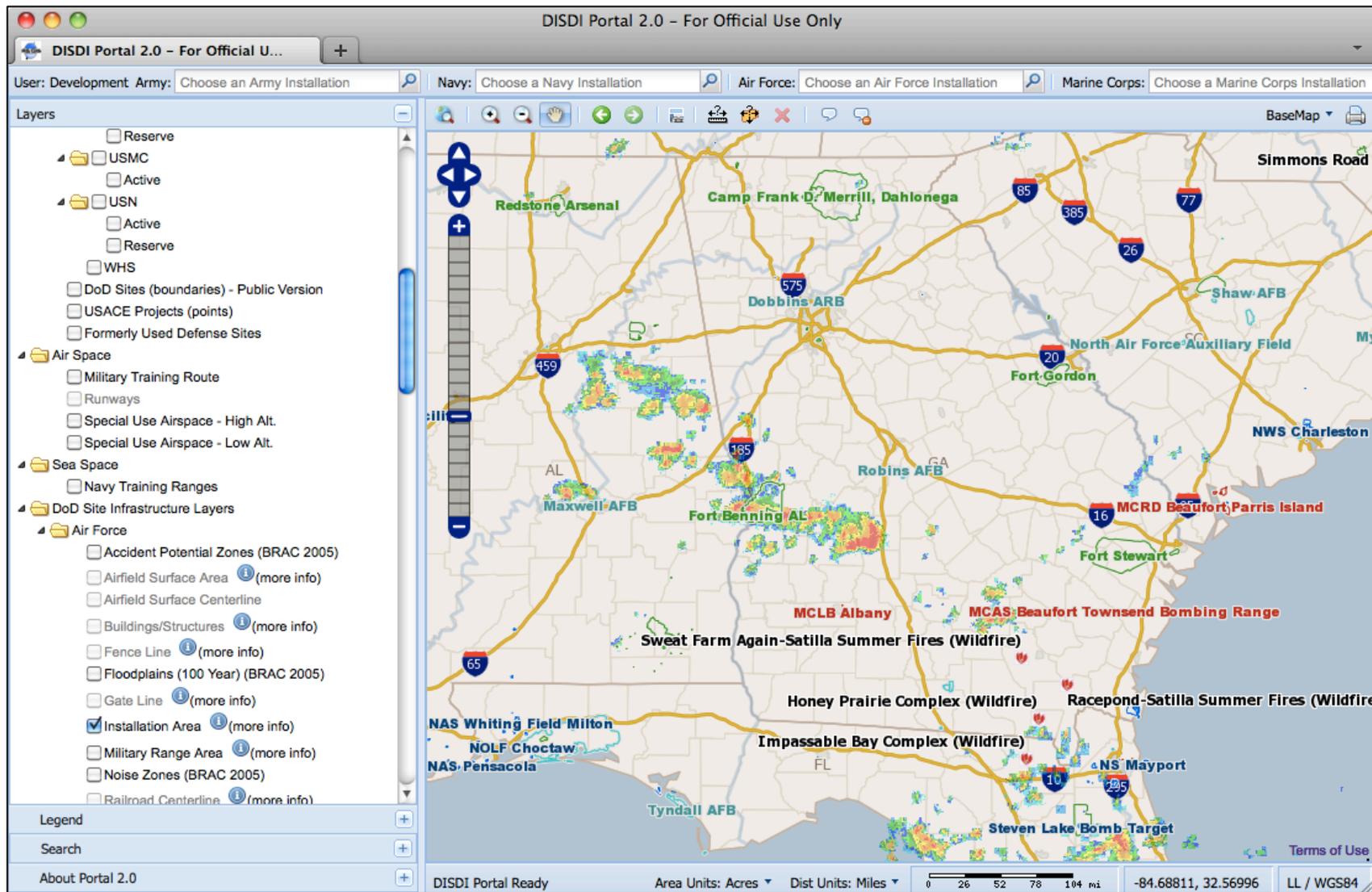
DISDI Viewer - Installation Footprint and Potential Family Support Service Demand

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The screenshot displays the DISDI Portal 2.0 web application interface. The title bar reads "DISDI Portal 2.0 - For Official Use Only". Below the title bar, there are search fields for "User: Development Army", "Navy", "Air Force", and "Marine Corps". The main interface is divided into a left-hand "Layers" panel and a central map area. The "Layers" panel includes a list of map layers with checkboxes, such as "Railroad Centerline", "Road Area", "Shoreline", and "Surface Water Body". A folder named "DoD Family Support Programs and Services" is expanded, showing sub-layers like "Military Population", "Active Military Personnel", and "Exchange Services". The "Military Population" layer is checked. The map area shows a satellite-style view of Georgia with various cities and counties labeled. A scale bar at the bottom indicates distances in miles (0, 13, 26, 39, 52 mi). The status bar at the bottom shows "DISDI Portal Ready", "Area Units: Acres", "Dist Units: Miles", and coordinates "-83.44666, 33.68778".

DISDI Viewer - Installation Footprint, Active Wildfires, and Precipitation Intensity

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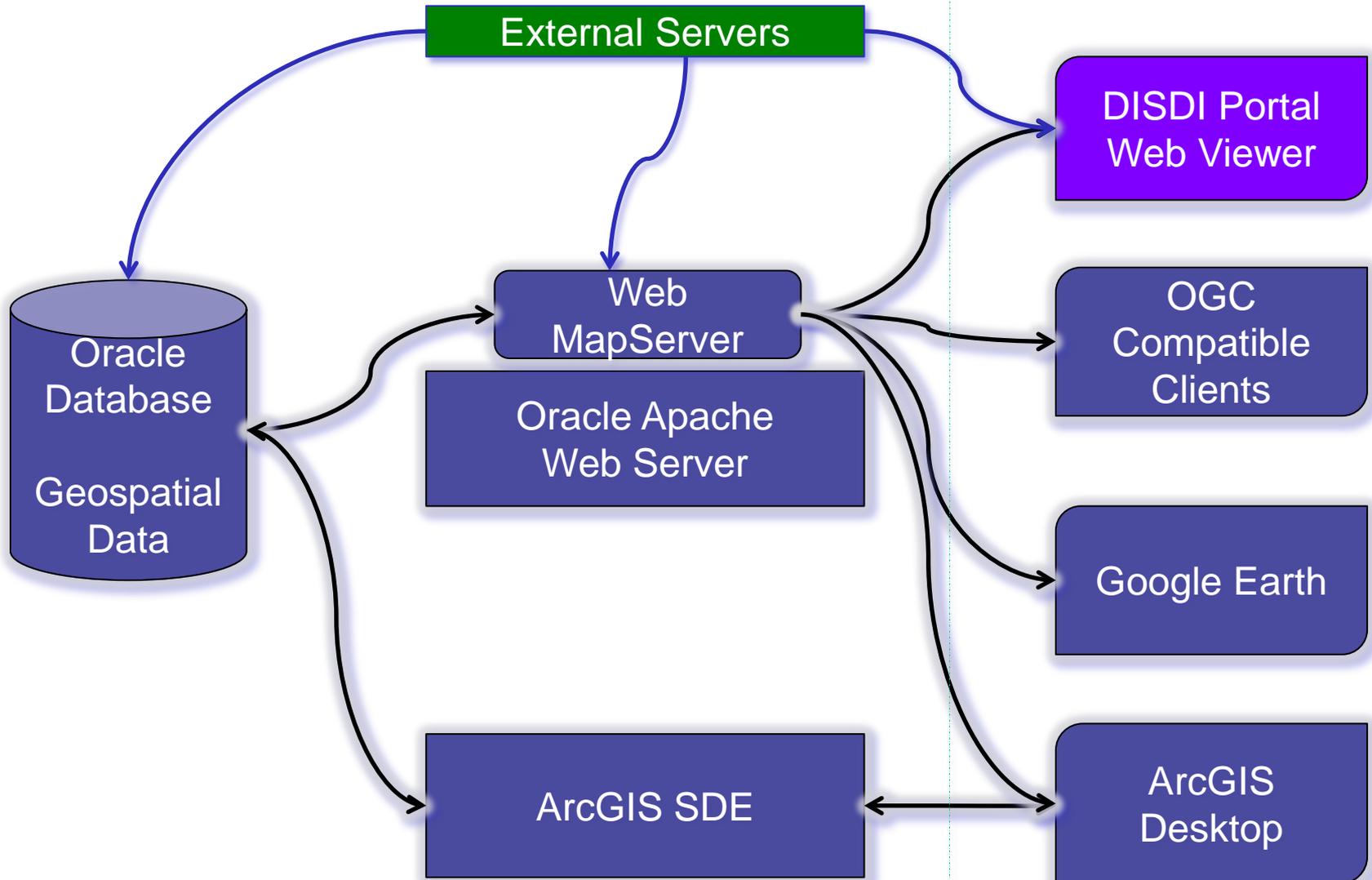


Are We Meeting Our Requirements?

“To provide ***authoritative, cost-effective*** defense installation geospatial information and services for fact-based decision making across the DoD spectrum of operations.”

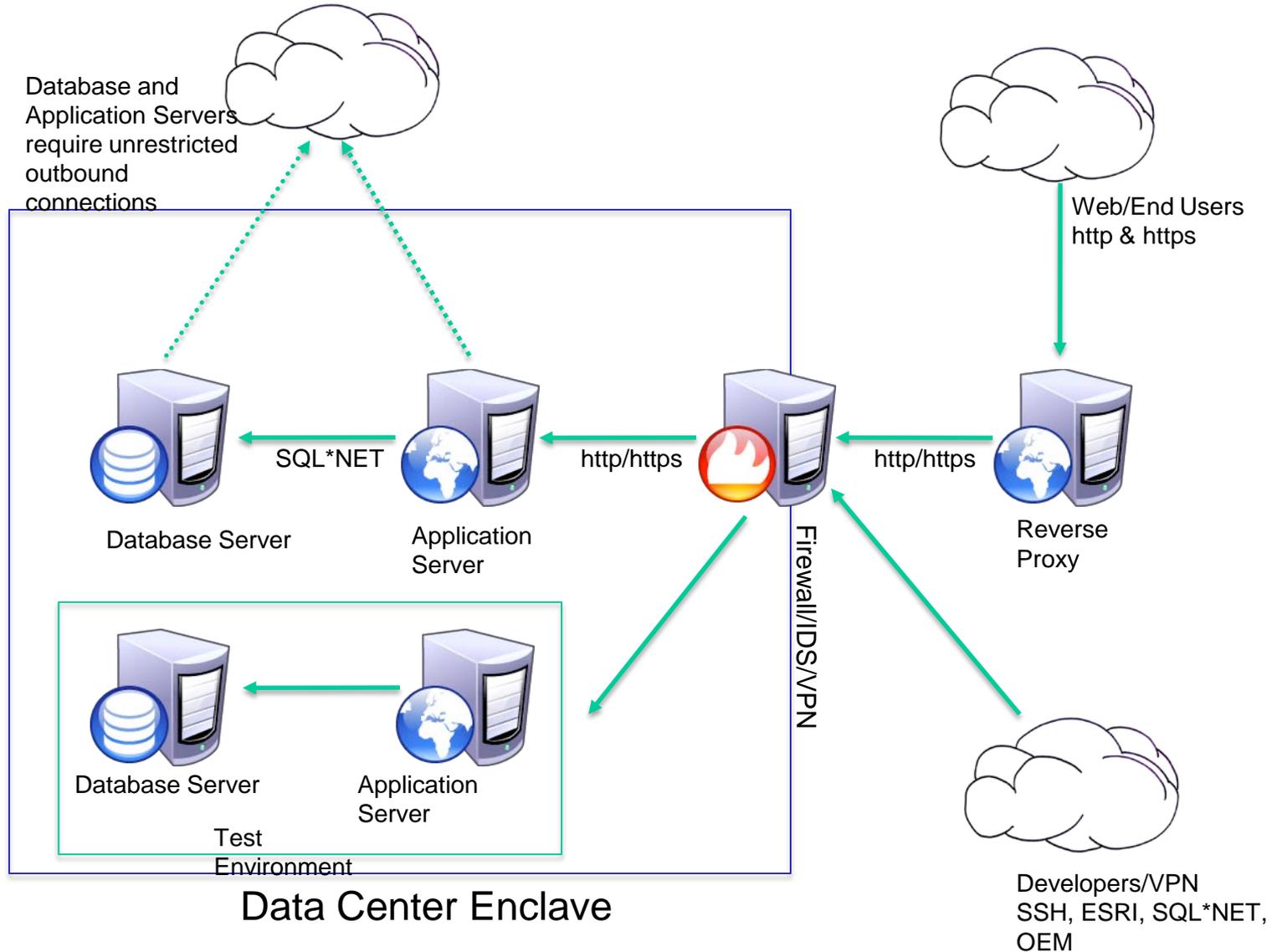
“The DISDI comprises a ***federated*** mission capability of the **people, policies, and practices** necessary to acquire, steward, and share installation, environmental, and range geospatial data assets for defense, federal, and national goals.”

DISDI Portal Architecture



DISDI Server & Security Environment - FY12

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Enhancements to DISDI Portal

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COE IT Infrastructure

Layers

Legend

Search

Print Map

Map Title:
Gages in Current Flood Condition

Layout:
Letter Landscape USACE

Resolution:
300 dpi

Scale:
1:8,192,000

Rotation:
45

COE IT Infrastructure

Layers

Legend

Search

Print Map

Map Title:
Gages in Current Flood Condition

Layout:
Letter Landscape USACE
Letter Landscape USACE
11x17 Landscale USACE
Letter USACE Complex

Scale:
1:8,192,000

Rotation:
45

Create PDF

RI AR Off SV Off OV Off TF

DISDI Portal KML/Z Services

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The screenshot displays a Google Maps interface with a satellite view of the Washington, D.C. area. A pop-up window is open over the location of Bolling AFB, providing the following information:

Bolling AFB	
Site Name	Bolling AFB
Installation	BOLLINGAIR
Installation Name	FORCE BASE
RPSUID	1499
Installation Code	BXUR
Site Code	BXUR0001
Service	AF Active
Joint Base	N/A
BRAC Site	NO
City	Washington, D.C.
State/Territory	District of Columbia
County	United States

The interface also shows a search bar, a 'Places' sidebar with 'DISDI Services' selected, and a 'Layers' sidebar with 'Primary Database' and 'Borders and Labels' checked. The map includes various markers and labels for locations like National Naval Medical Center, Walter Reed AMC, and Andrews AFB.

DISDI Viewer: Other improvements

- Secure Layers - Can limit viewing of data layers to a subset of users (admin interface to control) – Requires authenticated access (username or CAC)
- Improved curved line labeling
- GeoPDF's can be used as raster data layers
- Improved Oracle GeoRaster support
- External data to be loaded to Oracle (eg ogr2ogr) can come from URL

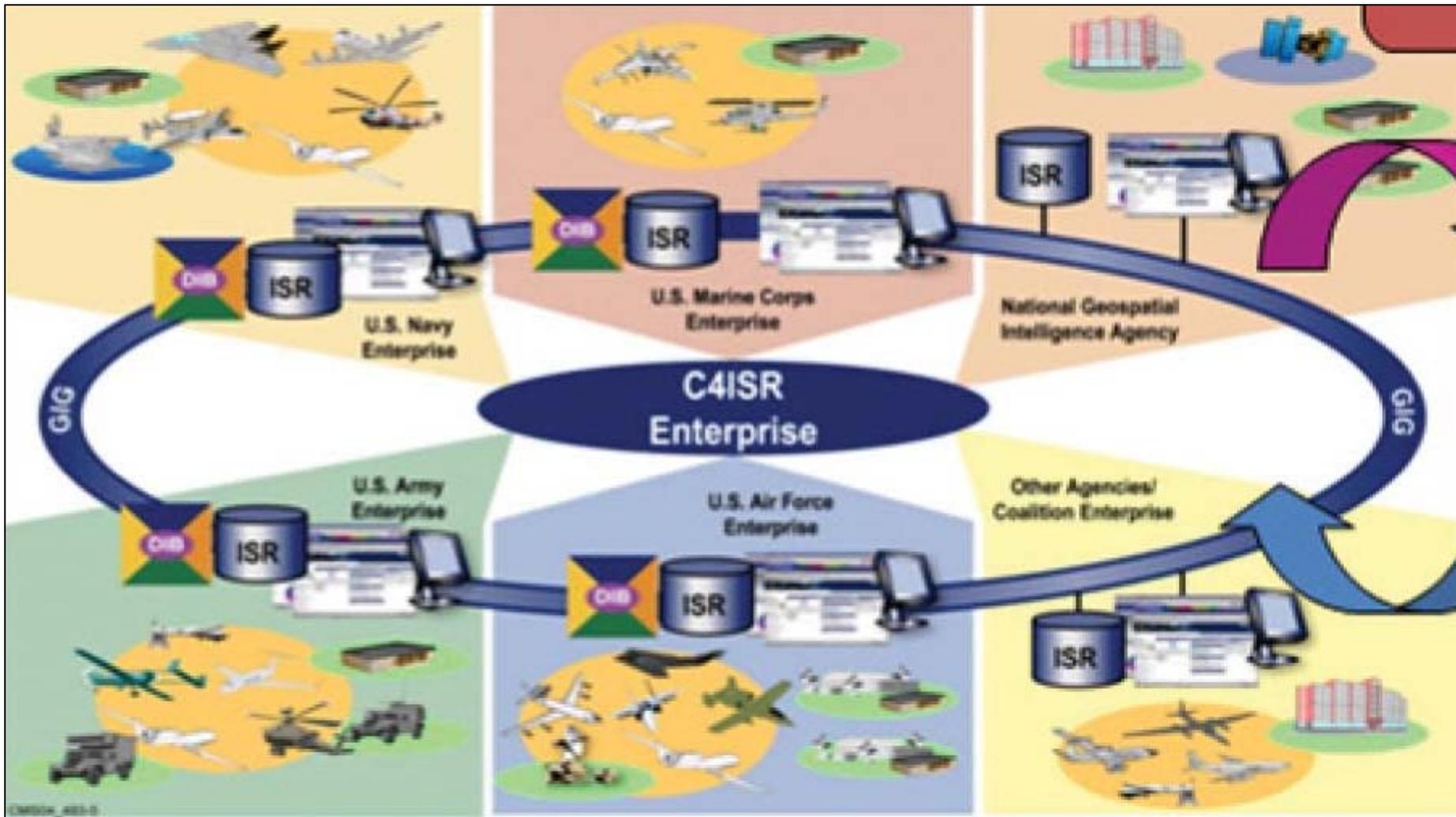
DISDI Net-Centric Vision

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Using the Global Information Grid (GIG), DISDI develops standards and policy to enable the sharing and interoperability of high-quality geospatial data at all levels of installation management. DISDI—comprised of people, policies, and practices—ensures that I&E's ***geospatial information infrastructure is aligned with DoD's net-centric data sharing strategies and business transformation goals.***

Joint System Interoperability

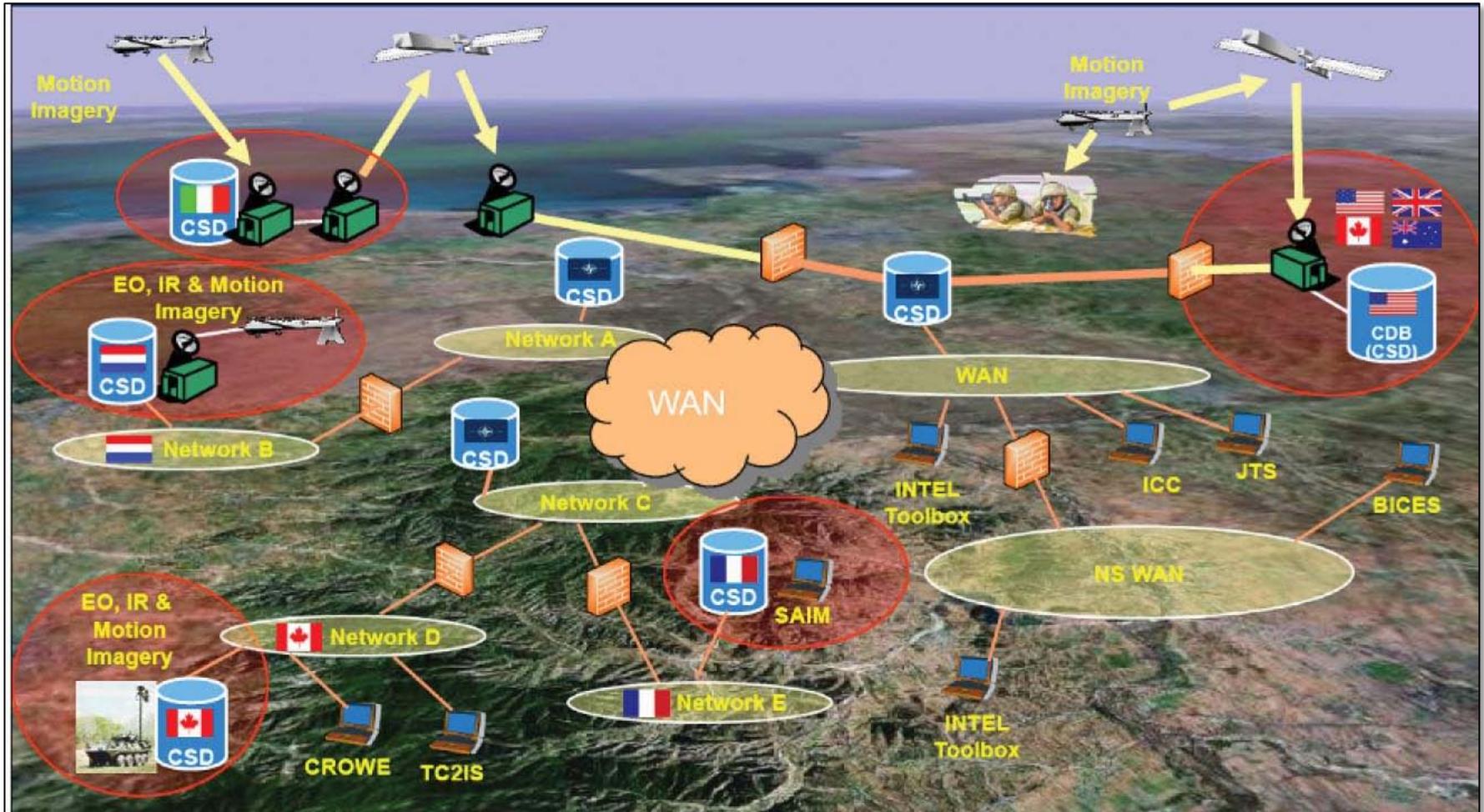
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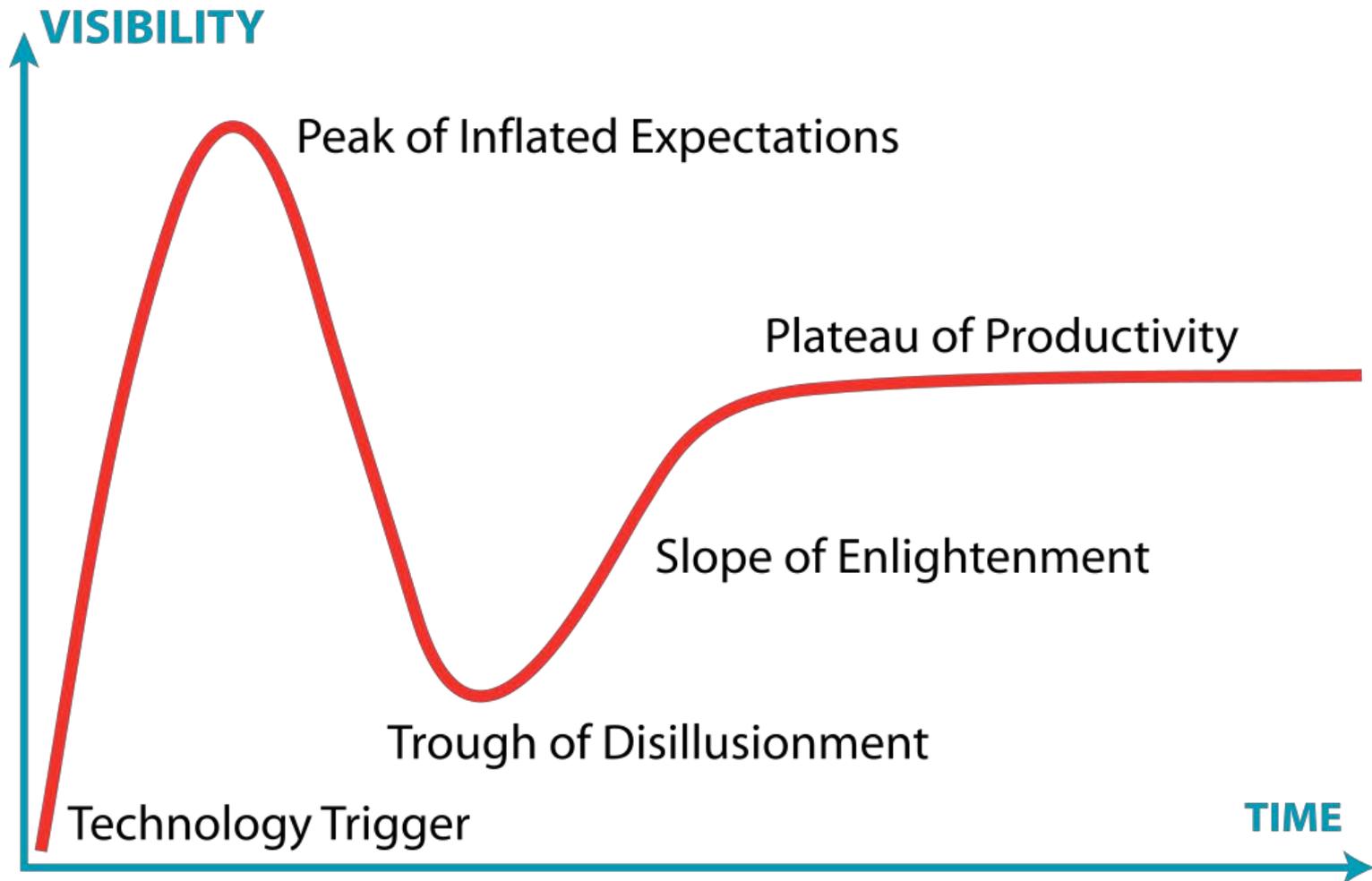
Warfighter Network Interoperability

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Gartner “Hype” Cycle

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Open Geospatial Consortium released WMS version 1.0.0 in April 2000

Is Security Architecture Inhibiting Effective Use of Web Services?

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5/25/2011

Sharing Web Map Services (WMS) Across DoD Networks

1. Purpose:

The purpose of this document is to outline the issues and potential solutions to sharing Web Map Services between DoD Networks (i.e. Army, Air Force, USMC, Navy, etc). Web Map Services (WMS) provide a standard protocol for applications to consume georeferenced map images in formats such as JPEG, PNG, or GIF. Developing a solution to easily consume and publish these WMS's across networks would allow the communities to share information more effectively and efficiently.

2. WMS Overview:

At a high level, a Web Map Service can really be thought of as any other REST-based web service. It runs on standard HTTPS / SSL protocol, accepts GET/POST requests, and returns a response. Really the only major "difference" is that the responses are typically of type image/jpeg (although GetCapabilities does return an XML response), and that other verbs like PUT and DELETE are not really used.

What this means is that if we solve the sharing problem with WMS, we might be able to also share other REST-based services with one another. Also, if others have already solved the problem of sharing REST-based web services, than we could ping them to help with our solution.

DISA Net Centric Services

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Service Category	Service Name	In Use	Could	Should
Collaboration	Defense Connect Online (DCO)	No	Yes	Yes
Content Delivery	GIG Content Delivery Service (GCDS)			
Content Delivery	Enterprise File Delivery (EFD)	No	Yes	No
Content Discovery	GIG Content Delivery Services (GCDS)	No	Yes	No
Content Discovery	Enterprise File Delivery (EFD)			
Service Oriented Architecture Foundation (SOAF)	Enterprise Messaging			
Service Oriented Architecture Foundation (SOAF)	Enterprise Service Management (ESM)			
Service Oriented Architecture Foundation (SOAF)	Service Discovery			
Service Oriented Architecture Foundation (SOAF)	Service Security			
Metadata Discovery	Metadata Registry (MDR)	No	YES	YES
Metadata Discovery	Enterprise Data Source Registry (EADS)	No	YES	YES
People Discovery	Joint Enterprise Directory Service (JEDS)	No	TBD	TBD
User Access/Portal	Defense Knowledge Online (DKO)			

Work to Make Web Services Work

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- Document Current Architecture with Respect To Security & Capability
- Identify Technical and Policy Concerns Preventing Real-Time Integration
- Demonstrate Effective Integration

Work To Make Data Snapshots Work

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- SDSFIE 3.0 Common Installation Picture
- Reduce Time & Effort to Produce CIP Updates
 - Yearly
 - Quarterly
 - Monthly
- Use Net-Centric Services to Advertise and Integrate Snapshots
- Demonstrated Effective Integration

DISDI will continue to provide authoritative, cost-effective defense installation geospatial information and services for fact-based decision making across the DoD spectrum of operations

Questions?