



Department of Defense
Installations and Environment Business Management Area
Data Interoperability

Case Study: Location

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Location – A Fundamental Enterprise Challenge

Acquisition, Technology and Logistics

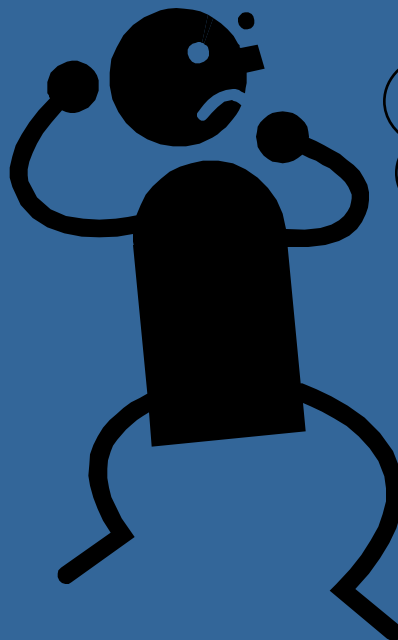
Where am I?



Where's my stuff?

What's around
me?

**Absolute
versus
Relative**





Challenges Today

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- Association of people and equipment to location
- Many different sources of location data/standards
 - GEOLOCs
 - DoDAACs
 - Installation Codes
 - DMDC location codes
 - UICS
- Data integration
 - Accuracy problems
 - Costly
 - Timely



Policy Drivers for Change

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- **Department of Defense Directive (DoDD) 8320.2, Data Sharing in a Net-Centric Environment**, December 2, 2004
“Data interoperability shall be supported by making data assets understandable and by enabling business and mission processes to be reused where possible.”
- **Under Secretary of Defense for Acquisition, Technology and Logistics, Policy for Unique Identification (UID) of Real Property Sites and Assets**, May 11, 2005
“Real Property UID will enable real property data linkage across business mission areas to achieve the AT&L vision of linking real property, personal property, and people – any place, any time, any where.”
- **DoDD 8320.03, UID Standards for a Net-Centric Department of Defense**, March 23, 2007
“Develop and promulgate policy guidance for defining, implementing, and maintaining location UID standards...”



Solution

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- Real Property Accountability Enterprise Transformation
 1. Business Process Re-engineering
 2. Business Enterprise Architecture
 3. Process Model
 4. Data Model
 5. Information Model
 6. System Changes
 7. Commercial Off The Shelf (COTS)
 8. Real Property Unique Identifier (RPUID)
 9. Installation Geospatial Information and Services (IGI&S) Integration



Business Process Re-engineering

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Warfighter Mission Area

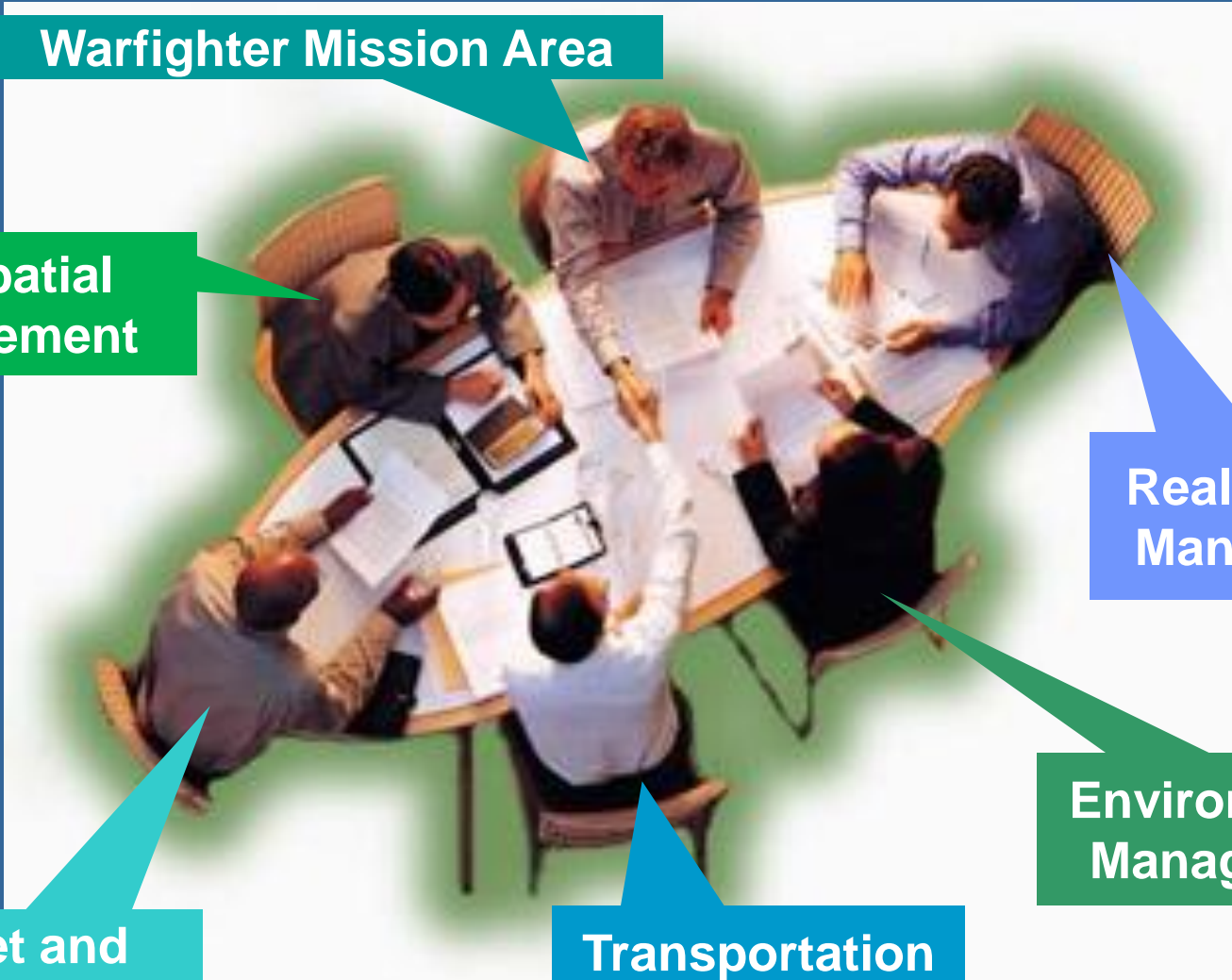
Geospatial Management

Real Property Management

Environmental Management

Budget and Financial Management

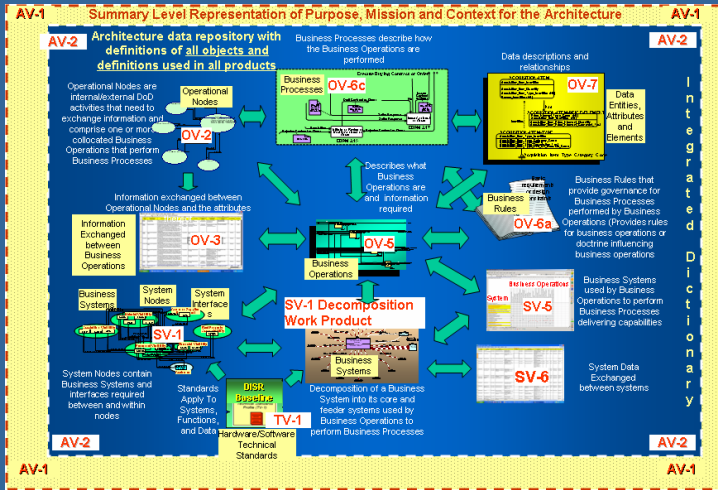
Transportation Management



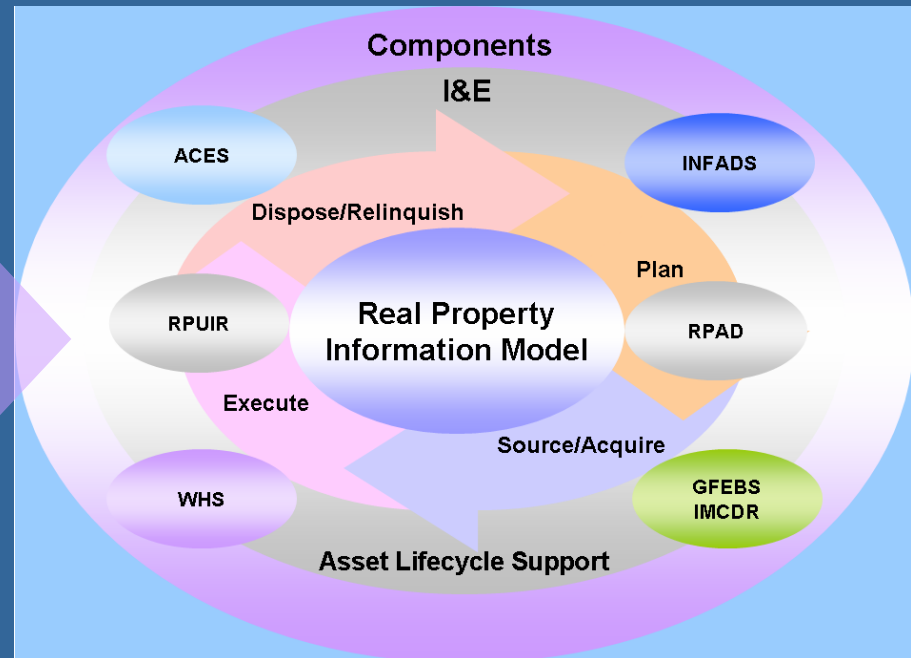
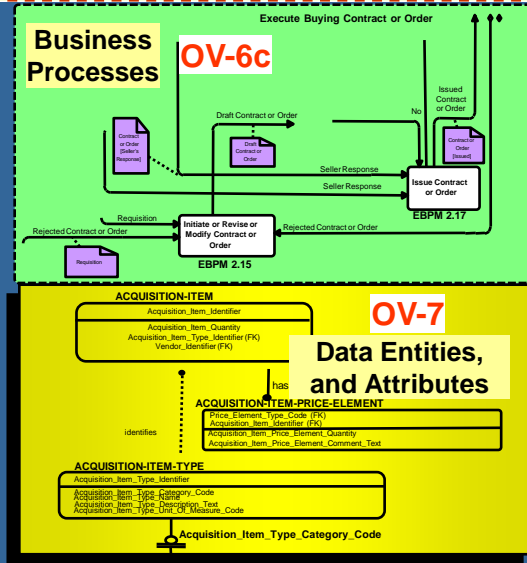


DoD Business Enterprise Architecture (BEA)

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- The OV - 6 captures the basic functional business rules that govern the use of data
- The OV - 7 provides enterprise exposure of real property data entities and attributes
- The OV-6/7 artifacts provide the core resources for the development of an Information Model
- The Information Model provides the “bridge” from static BEA artifacts to Net-Centric “run-time” environment

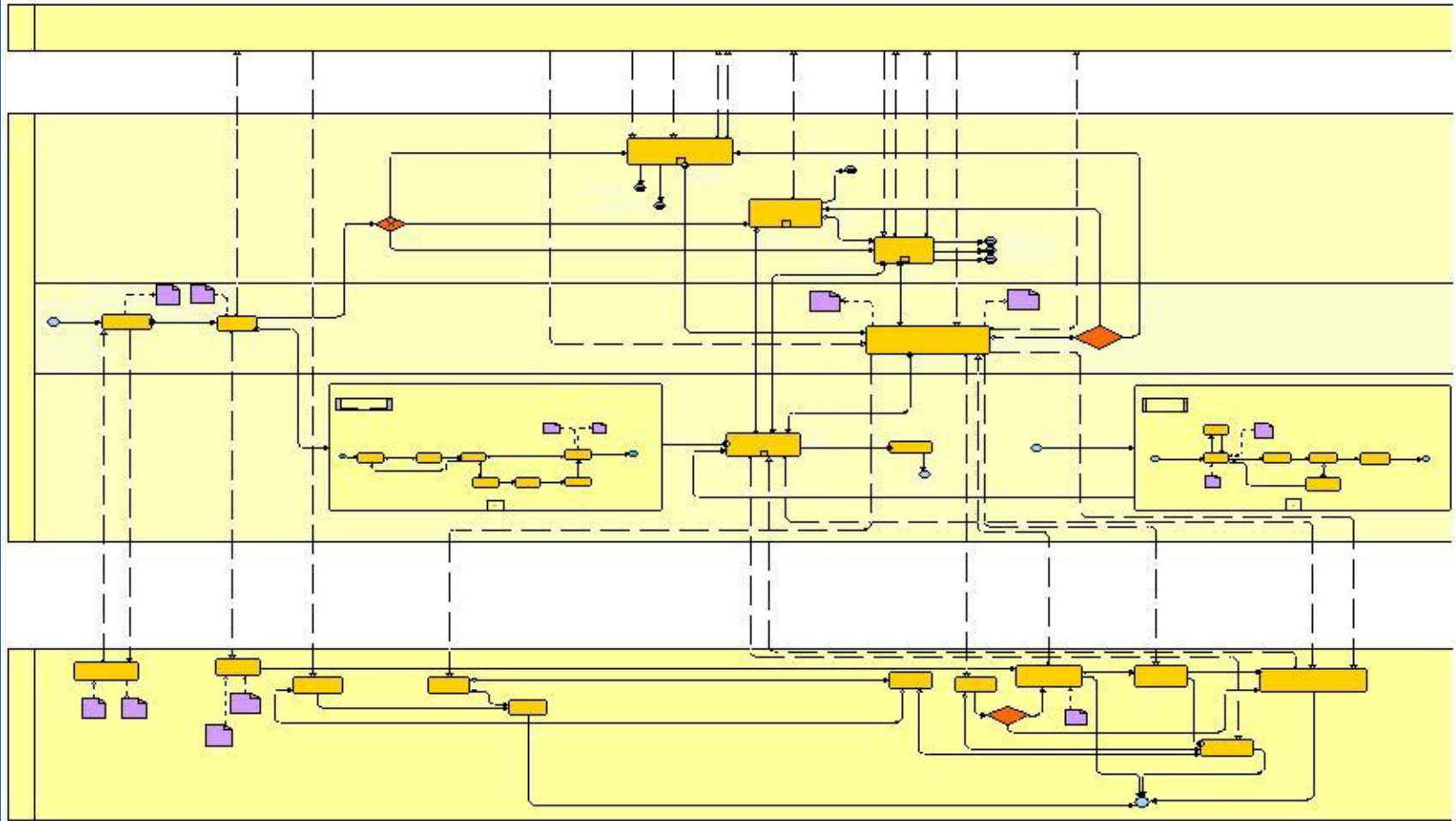




Business Process Modeling

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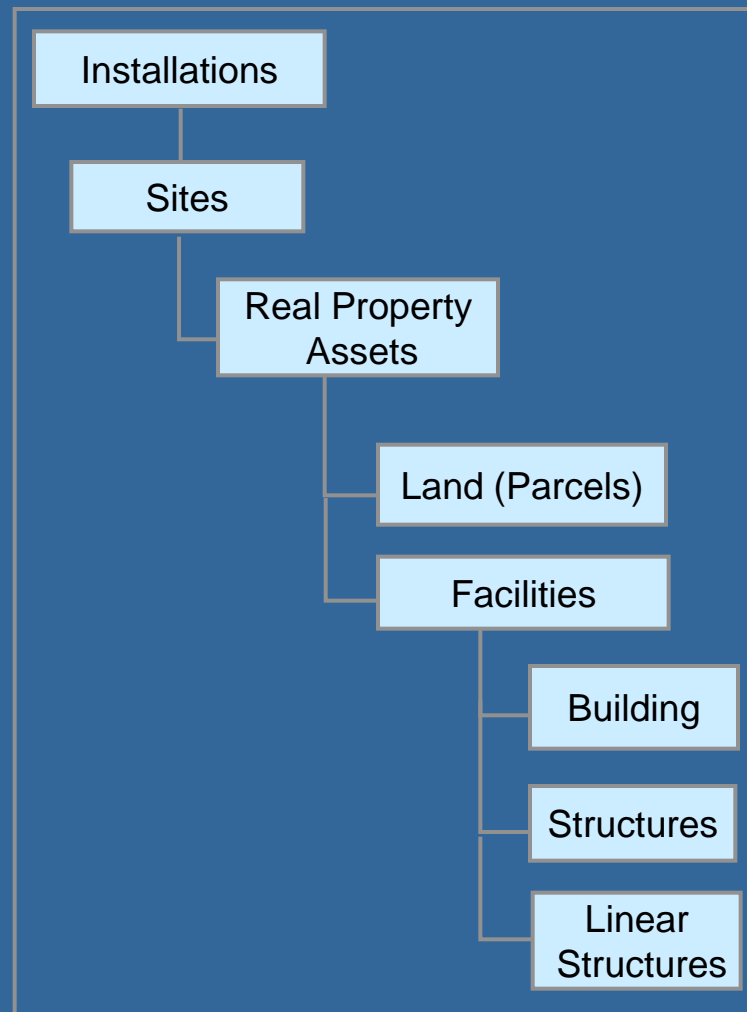
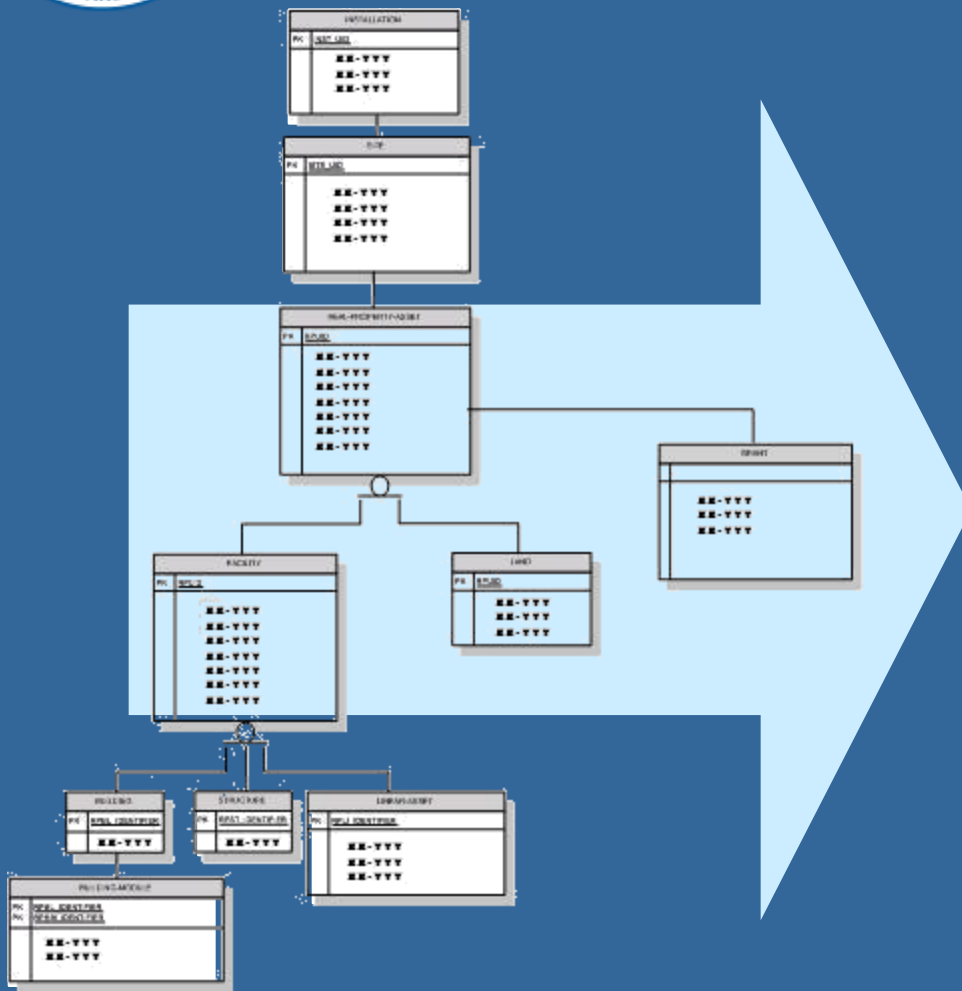
DRAFT REAL PROPERTY ASSET ACCOUNTABILITY AND VALUATION





Conceptual Logical Data Model

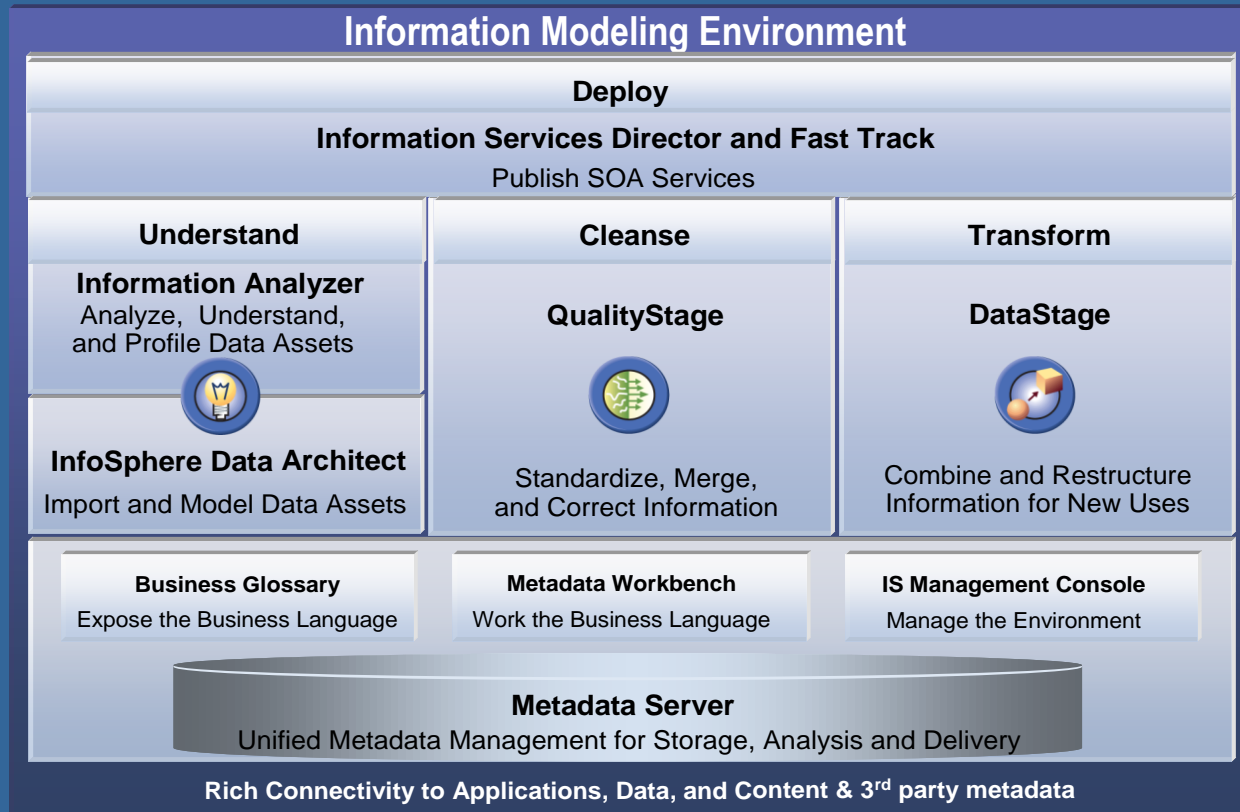
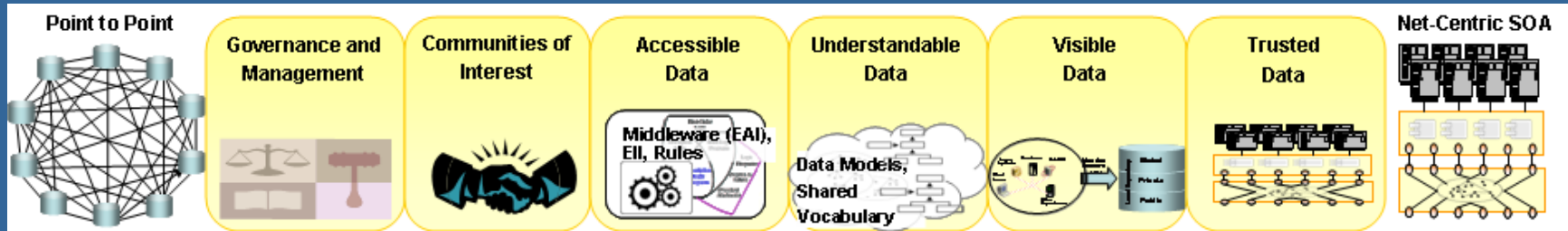
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Information Model

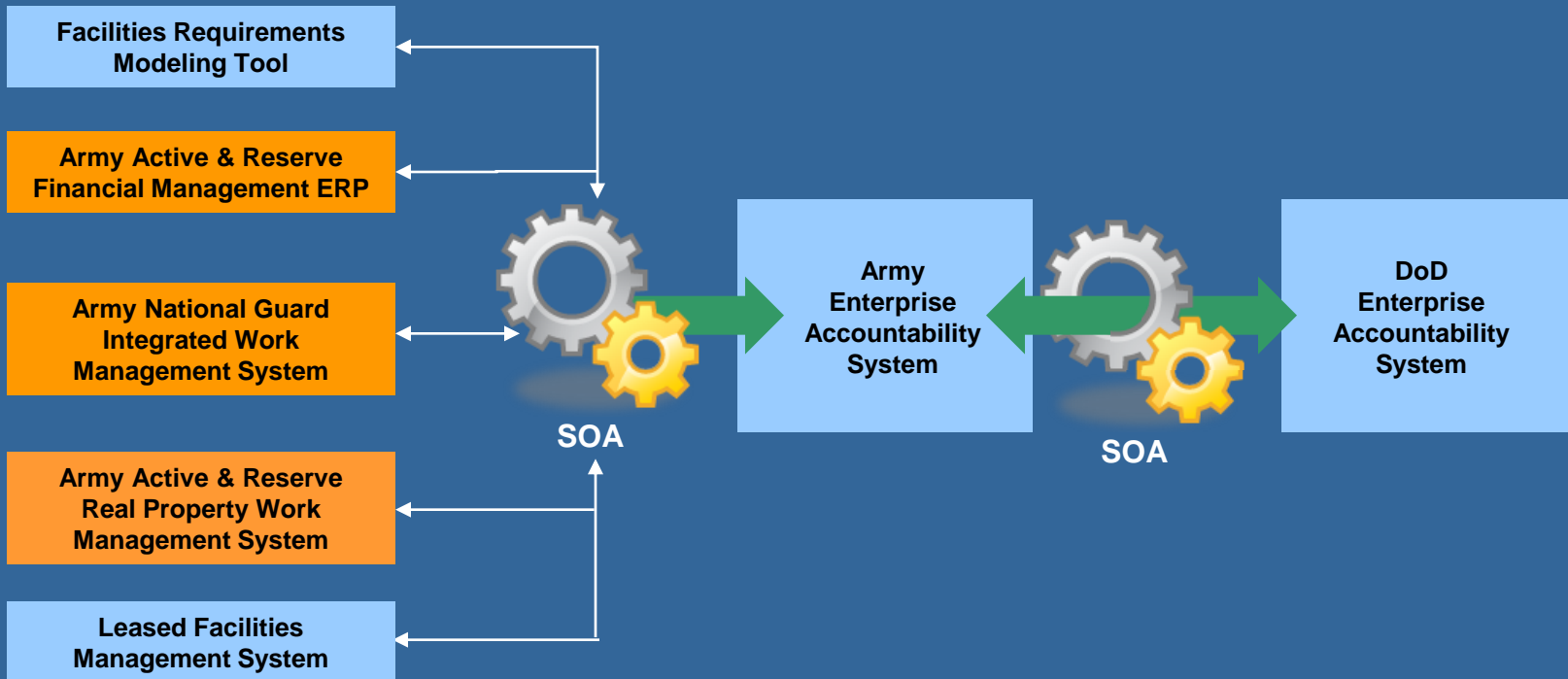
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Example: U. S. Army

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ERP - Enterprise Resource Planning

SOA - Service Oriented Architecture

■ Commercial Off the Shelf (COTS)



Geo-enabling the DoD Business Enterprise

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DoD Business Enterprise Priorities

Financial Visibility

Acquisition Visibility

Material Visibility

Personnel Visibility

Common Supplier Engagement

Real Property Accountability

Core Business Mission Area Capabilities

Real Property Inventory

Real Property Acceptance

Environmental Liabilities

Sites and Land Parcels
Dover AFB, DE

- Site Boundaries
- Land Parcels (owned)
- Land Parcels (non-owned)

- RPI Sites
- RPI Land Parcels
 - Owned land parcels
 - Less-than-fee surface rights (non-owned lands)
- RPI Outgrants
- RPI Disposals

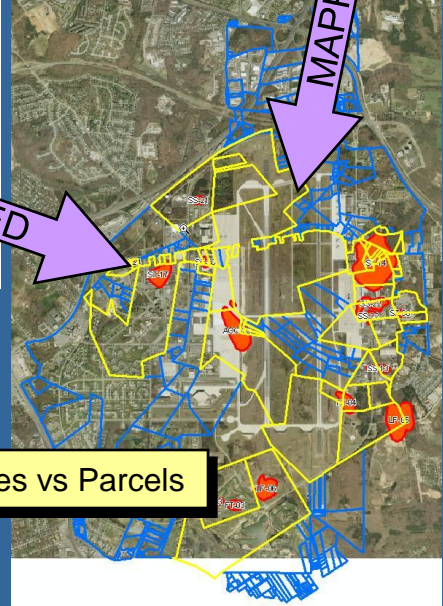
e.g., Cleanup Sites vs Parcels

MAPPED

MAPPED

MAPPED

MAPPED





Building Blocks

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Installation

- Composed of one or more sites
- Managed by a single Military Service

Site

- Composed of one or more land parcels and/or facilities
- A contiguous area of land
- More than 5,500 sites worldwide (as of 9/30/2008)

Asset

- Either individual facility (e.g., building, structure, linear structure) or land parcel
- Over 539K facilities on over 29M acres
- Approximately 2.2B square feet of building space
- Over \$700B plant replacement value
- Active Federal Assets as of 9/30/2008

Installation



Site A

Site B

Site ...

Buildings



Linear Structures



Structures



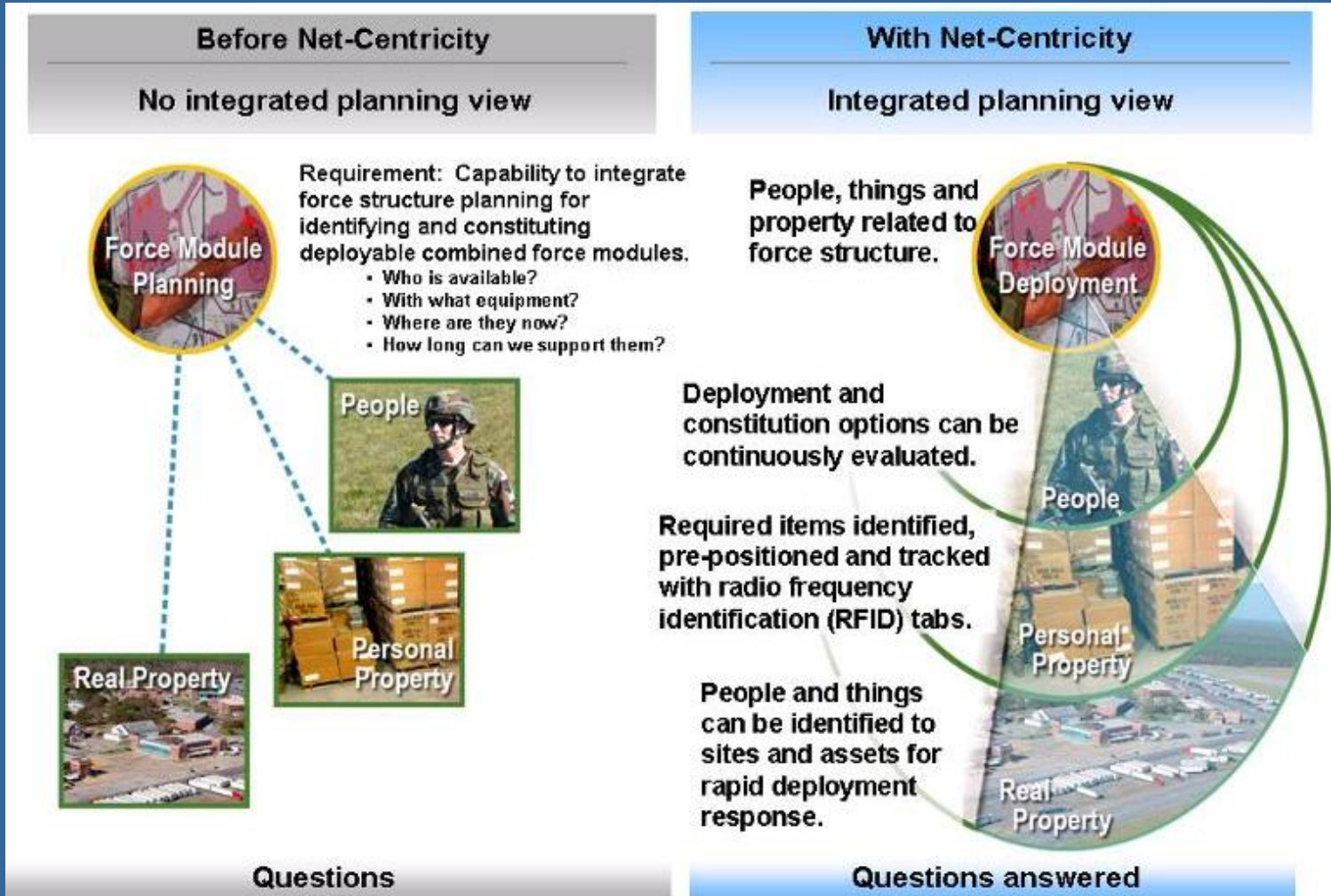
Land Parcels





UID – Integrated Situational Awareness of People, Places, and Things

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DoD's Real Property Unique Identifier Registry (RPUIR)

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- Functions
 - Generates and maintains Real Property Unique Identifiers and Site Unique Identifiers
 - o Includes change histories
 - Provides secure interfaces with Component systems, thus core real property information is maintained at the authoritative source
 - Maintains core set of real property data elements:
 - o Name
 - o Address
 - o Reporting components
 - o Operational status codes
- Status
 - o Development initiated in 2006
 - o Full Operational Capability in 2007



Systems Accessing RPUIR

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- Real property accountable systems for the Army, Navy, Air Force, and Washington Headquarters Services
- DoD's system for reporting real property information
- TRICARE Management Activity logistics system
- Defense Property Accountability System
- Comptroller's military construction database
- More to come...



Our To-Be Vision

Acquisition, Technology and Logistics

