



# **DoD CIO's Areas of Focus**

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# DoD CIO's Areas of Focus

- Joint Regional Security Stacks
- Cloud Computing & Data Center Consolidation
- Mission Partner Environment
- Mobility
- Cyber Basics
- Business Process & Systems Review
- Pentagon IT Consolidation
  - Joint Base Pentagon





# Modernization Objectives

- **More Secure**
  - Mission commanders understanding network posture
  - Network operators and defenders with shared situation awareness
  - Consistent IT architecture to enable resiliency and defensibility
  - Safe sharing with widest array of mission partners
- **More Effective**
  - Timely and secure access to data and services regardless of location or device
  - Access to information/services in the face of network disruption, degradation, or damage
  - End-to-end trustworthy connections between user and systems
  - Rapid and dynamic capability evolution to meet mission needs across all operational scenarios
- **More Efficient**
  - Reduce duplication of effort across Components, increase IT ROI, and reduce total IT operating costs
  - Consistent IT architecture to support faster fielding of new IT capabilities
  - Budget transparency for DoD IT expenditures





# CIO's Areas of Modernization

- **Network Modernization**
  - Optical Carrier Upgrades
  - Multiple Protocol Label Switching (MPLS)
- **Cyber Security Architecture**
  - Joint Regional Security Stacks (JRSS)
  - Joint Management System (JMS)
  - Perimeter, Network, Data, Endpoint Security
- **Enterprise Operations**
  - JIE Management Network
  - Enterprise Operations Centers
- **Computing Environment**
  - Data Center Consolidation / Designation
  - Commercial Cloud / Cloud Access Point
  - milCloud
- **Enterprise Services**
  - Unified Capabilities
  - Common IT apps
  - Defense Enterprise E-mail
  - Collaboration Capabilities
- **Mission Partner Environment**
  - Coalition/Partner Info Sharing
  - Mission Partner Gateway
- **Identity & Access Mgt (IdAM)**
  - Dynamic Access and Entity Discovery
  - Activity Monitoring
- **Mobility**
  - Defense Mobile Unclass Capability (DMUC)
  - Defense Mobile Classified Capability (DMCC)

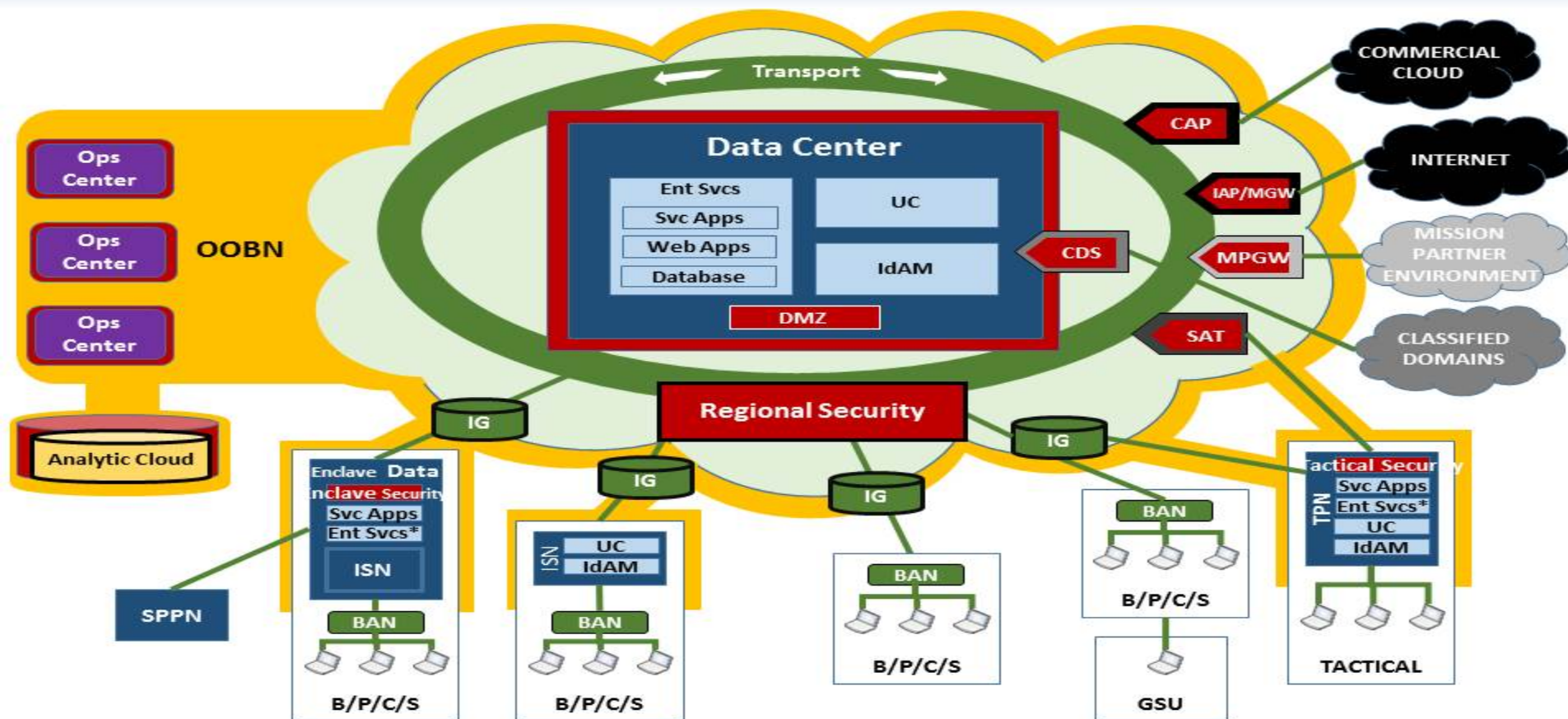


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# Joint Information Environment Framework



## JIE CYBERSECURITY

### JIE CAPABILITIES

JRSS	Joint Regional Security Stack
UC	Unified Capabilities
Ent Svcs	DoD Enterprise Services (*Extended)
IdAM	Identity and Access Management
Svc Apps	DoD Component Applications
DMZ	Demilitarized Zone

## JIE GATEWAYS

IAP	Internet Access Point
MGW	Mobility Gateway
MPGW	Mission Partner Gateway
CDS	Cross Domain Solution
SAT	Satellite Communications Gateway
CAP	Cloud Access Point

## JIE ORGANIZATIONS

Operations Center

## JIE TRANSPORT INFRASTRUCTURE

IG	Installation Gateway
BAN	Base Area Network
MPLS	Multiprotocol Label Switching

## JIE DATA CENTER & NODES

CDC	Core Data Center
IPN	Installation Processing Node
ISN	Installation Service Node
TPN	Tactical Processing Node
SPPN	Special Purpose Processing Node
GSU	Geographic Separated Unit







# Joint Regional Security Stacks (JRSS)

- Addresses immediate need to **defend the cyber warfighting domain** & resolve JIE ICD gaps
- **Shrinks attack surface**
  - From ~1000 disparate ingress points to 50 ingress points (U&C networks)
- Achieves a **standard network security architecture**
- Accelerates achieving a **standardized Command and Control** platform for the Joint Information Environment
- JRSS suite fielded is an enabler of global **synchronized** network operations



**JRSS Value Proposition = Security + Network Modernization + Cyber SA**



# Cloud Computing

## Accelerate adoption of commercial clouds

- DoD CIO Memo "*Updated Guidance on the Acquisition and Use of Commercial Cloud Computing Services*," December 15, 2014
- DoD Cloud Security Requirements Guide (SRG) v1, release 1, January 12, 2015
  - [http://iase.disa.mil/cloud\\_security/Pages/index.aspx](http://iase.disa.mil/cloud_security/Pages/index.aspx)

## Promoting cloud adoption -- approved solutions:

- **Level 2 (Unclassified, Low-Impact):** 26 approved commercial cloud services with more on the way
- **Level 4/5 (Controlled Unclassified Information):** milCloud and one commercial cloud solution with more on the way
- **Level 6 (Secret):** milCloud

## Cloud Access Point

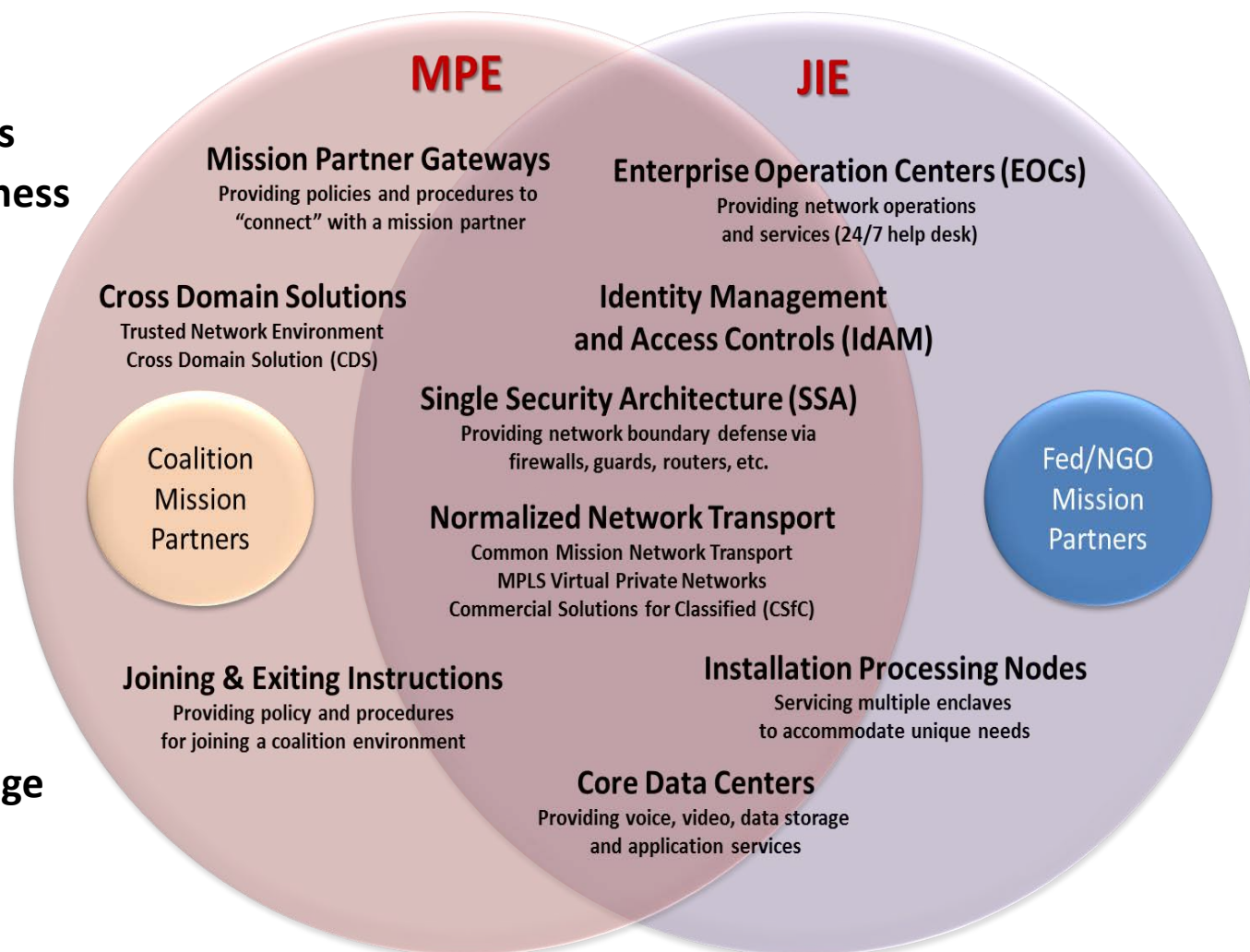




# Mission Partner Environment

## Top Requirement for Regional Commanders

1. Chat
2. Voice
3. E-Mail w/attachments
4. Geo-Situation Awareness (aka: "COP")
5. Video (VTC & FMV)
6. Directory / GAL
7. Web & Web Base File Sharing
8. File Share
9. Access Control
10. Office Automation
11. Print
12. Organizational Message Service (OMS)
13. Language Translation





# DoD Enterprise Mobile Device Management (MDM) Evolution

**Good**

**Pilot**

Apple iOS

DMUC MDM

Apple iOS    Samsung Android    Windows Mobile (Pilot)

## Next-Gen MDM:

- Platform-Agnostic



BB OS7

**BlackBerry**

Distributed-BES 5

BB OS7

**BlackBerry**

Enterprise-BES 5

BB OS7    +    BB 10

**BlackBerry**    **BlackBerry**

Enterprise-BES 10    Enterprise-BES 12

TBD

2011

2013

2014 - 2015

2016+

## MDM Capabilities

- Registration
- Provisioning

- Policy Management
- Configuration

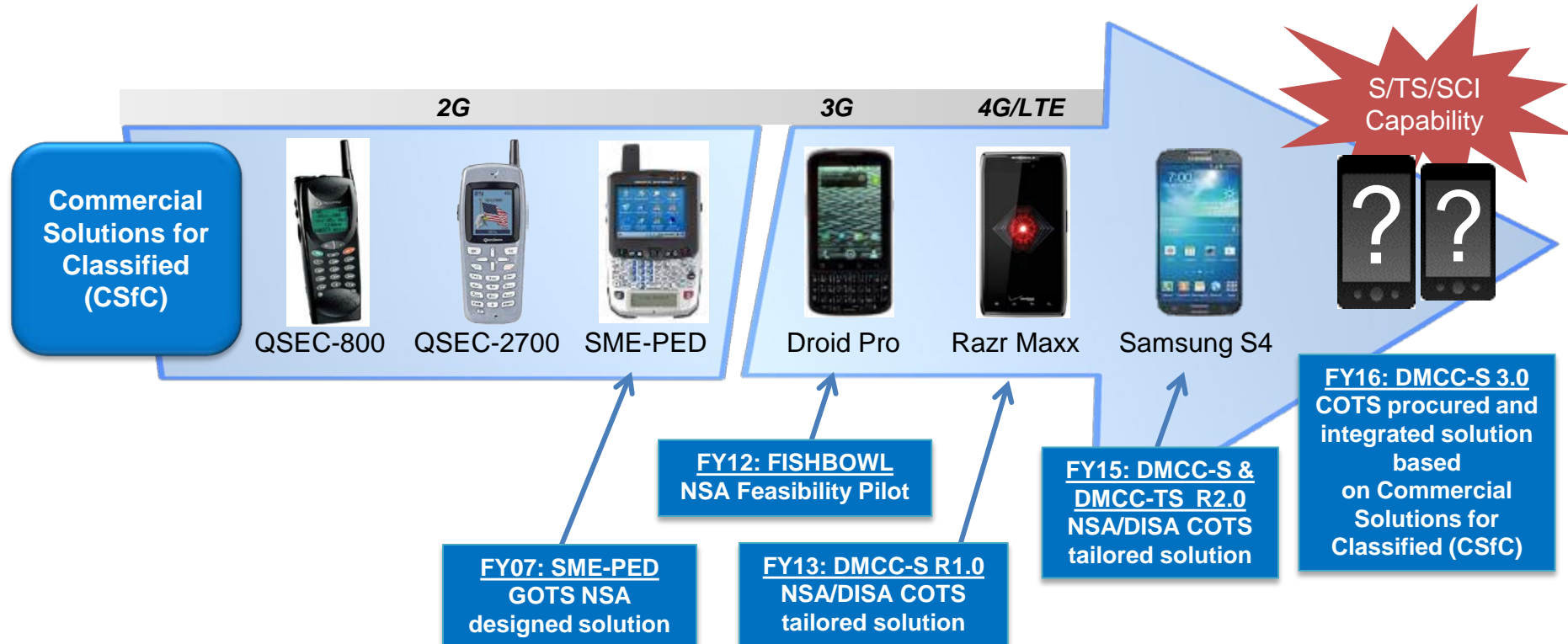
- Over-the-Air (OTA) Updates



# DoD Mobility Classified Capability (DMCC)

## GOTS Based Solutions

## COTS Based Solutions



DMCC-S – DMCC Secret Device  
DMCC-TS – DMCC Top Secret Device (Voice Only)

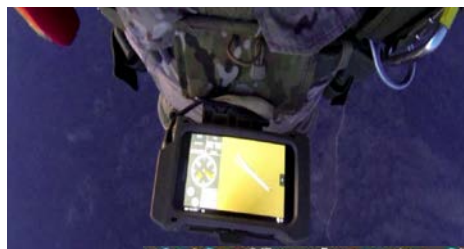




# Applying Mobility Everywhere



Combat Training Centers



Android Tactical Assault Kit (ATAK)



Training

Logistics



Army Field Inspection Tool

Tactical

Operations



Air Force Electronic Flight Bag

Tailored Applications Demonstrate the Advantages of Adapting to Military Needs



# Cyber Basics

- Simple concepts...always been a challenge
  - Why?
- Passwords/credentials
- Patching
- Operating Systems







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# How You Can Help

- Help us communicate openly, transparently, flexibly across government and industry
- Help us successfully drive cultural change across the Department's worldwide workforce
- Help government focus on communicating requirements to industry for creating solutions



