
DHS Mobile Use Case Development

Mobile Virtual Program Management Office

June 2014



Homeland
Security

Purpose

To understand DHS's mobile needs across the entire Department.

Mobile Use Cases look at “who needs access to what, where, why, and when.” The basis for mobile use cases aligns with work from the Digital Government Strategy Milestone Action 9.1 Mobile Computing Decision Framework (MCDF).

- **Who:** follows previous DGS 10.2/9.1 work for Public, Partners, State Local Tribal Territorial, Federal Employee, and National Security Systems. Specific for DHS we include which Component.
- **What:** looks at the type and sensitivity of data, device characteristics, and applications.
- **Where:** includes the location of the users and where the information is being requested/accessed from.
- **When:** is 24/7 or hours of operations.
- **Why:** includes the business function or need for mobile devices.

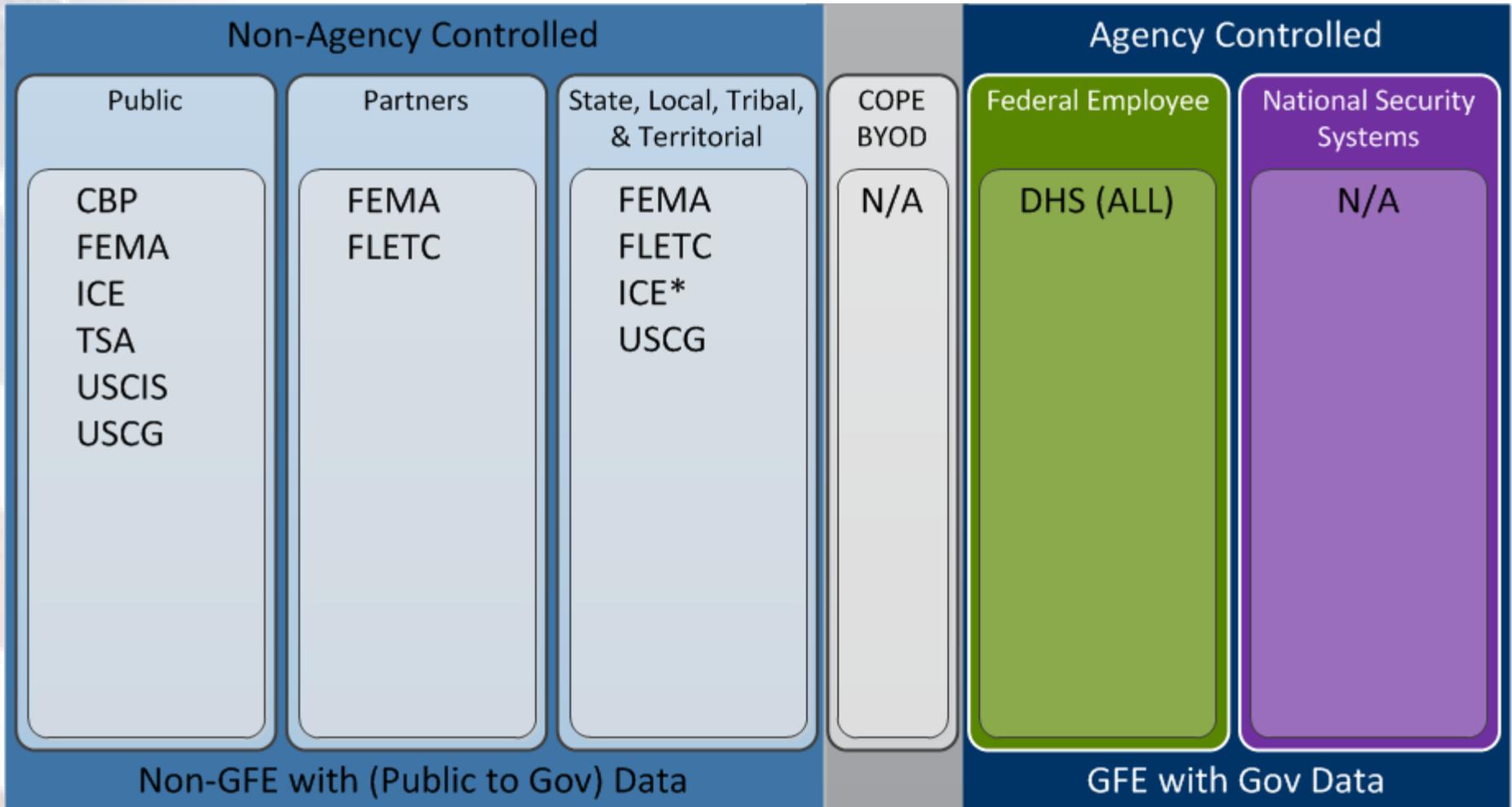


Background

- DHS Mobile Use Case collection from June to December 2013
- Correspondence with all DHS Components
CBP, FEMA, FLETC, HQ, ICE, NPPD, OIG, S&T, TSA, USCG, USCIS, USSS
- Questionnaire used combines original Digital Government Strategy work, Milestone Action 10.2 (Q&A Methodology) and 9.1 (Mobile Computing Decision Framework), and inputs from stakeholders (CISO, ESDO, ITSO, S&T)
- Findings comprise responses, research, and analysis
- Use Case defines “who needs access to what, where, when, and why”



DHS Mobile Users



**To be verified*



Data Sensitivity and Data Types

Data Sensitivity:

FOUO (all), **CVI** (NPPD). **LES** (CBP, FLETC, ICE, USCIS), **PCII** (NPPD), **PII** (CBP, FEMA, FLETC, ICE, USCIS), **SSI** (TSA), **Public** (Public-facing apps)

Data Type:

- **Aviation:** Flight publications; GPS & weather info; navigational charts; arrival & departure procedures
- **Cargo:** Cargo manifest information; targeting/cargo hold data
- **Emergency Management:** Maps; situational awareness data; hazard information; incident guides; photos
- **Facility & Asset Management:** Facilities, environment, property data
- **Individuals/Conveyances:** Biographic & biometric data; vehicle information; border crossing history; targeting data, screening results
- **Law Enforcement:** Investigation notes/photos; case history; evidence chain of custody; criminal history; immigration violation history
- **Training:** Student information, learning content, instructor evaluation scores/notes
- **Transportation/Infrastructure Security:** Screening SOPs; compliance reports; Rules/Regulations; critical infrastructure & site info



DHS Mobile Mission Needs (1 of 2)

Component use case responses are categorized by the Functional Areas of the DHS Enterprise Business Architecture

BA

Benefits Administration - Administer Immigration & Naturalization Benefits, Conduct Customs and Exchange
USCIS

DA

Domain Awareness - - Homeland Security Risk Assessments, Threat & Vulnerability Analysis, Monitor & Communicate Risks and Threats
ICE, NPPD, OIG, TSA, USCIS, USSS

IM

Incident Management - Incident Preparedness & Planning, Response/Command & Control, On-Site Incident Response, Recovery & Restoration Assistance
FEMA, FLETC, TSA, USCG

LE

Law Enforcement - Conduct Investigations, Control Seized Assets/Materials, Manage Detainees
CBP, ICE



DHS Mobile Mission Needs (2 of 2)

SCR

Screening – Enroll, Vet, Verity & Adjudicate Party; Conduct Physical Screening/Scanning, Confirm Benefits, Confirming Admissibility Status, Confirm, Enforce over 400 Customer Laws

CBP, TSA

SEC

Securing - Control Area of Responsibility, Enforce Access Controls, Manage Transportation Conduits, Mitigate Risks, Build Foreign Capability

CBP, TSA, USCG

EMS

Enterprise Mission Services - Information Sharing, Train Operators and First Responders, Conduct Homeland Security R&D, Regulate Performance & Provide Oversight, Partnership Management & Outreach

OIG, S&T, TSA, Public Apps: CBP, FEMA, ICE, TSA, USCG, USCIS

EBS

Enterprise Business Services - Manage Agency Workforce, Manage Agency Legal Affairs, Property/Asset Management

FLETC, ICE, TSA

EIT

Enterprise IT Services – Provide IT Communications, IT Infrastructure, Manage Enterprise Systems/Services, Manage IT Security

FLETC, ICE, NPPD, TSA, USCG



DHS Mobile Use Cases (1 of 4)

	Public	Partners	State, Local, Tribal, & Territorial
IM Incident Management		<p>FEMA: Good Client, Emergency Manager App FLETC: Tablet, Mobile Learning Platform (Content Delivery & Update), Collaboration & Email (HSIN)</p>	<p>USCG: GPS, Camera, Browser, Voice, Mobile App Version of Emergency Response Handbook (Incident Guide, Job Aids, Forms)</p>
EMS Enterprise Mission Services	<p>CBP: Airport Wait Times App, Border Wait Times App FEMA: FEMA App ICE: Child Sex Offender App TSA: My TSA App USCG: Boat Essentials App; Health, Safety, & Work-Life Apps USCIS: myUSCIS, myUSCIS Business, eVerify Apps</p>		

Non-GFE with (Public to Gov) Data



DHS Mobile Use Cases (2 of 4)

Federal Employees

BA

USCIS: Scanner (tied to Camera), GPS, Document reader, Tablet form factor

Benefits Administration

DA

ICE: Location Services, Apps (Geo)
OIG: Secure Voice & Text, Apps (Voxer)
NPPD: Camera, GPS, mobile version of vulnerability assessment apps
TSA: Video Conference, Document Management/Update/Synch
USCIS: GPS/Location Services,
USSS: Secure communications

Domain Awareness

IM

FEMA: GPS, Maps, Messaging, Camera, Apps (Emergency Manager)
FLETC: Mobile Learning (Content Creation & Mgmt), Collaboration & Email (HSIN), Apps (Rubicon student eval)
TSA: GPS, Audio/Video Record, Doc Mgmt & Update (SharePoint), Apps (RealityVision, Hazmaster G3)
USCG: GPS, Camera, Apps (Emerg Resp Handbook/Incident Guides, Job Aids, Forms)

Incident Management

GFE with Government Data



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DHS Mobile Use Cases (3 of 4)

Federal Employees

EMS

OIG: Camera, Scanner, Word Processing, PDF Viewer
S&T: SMS Messaging, SharePoint, S&T Portal Access
TSA: Audio, Video, PDF Reader, Document Download/Synch, Apps (Office Productivity, Integration with PARIS)
CBP, FEMA, ICE, TSA, USCG, USCIS: Public Facing Apps

Enterprise Mission Support

EBS

FLETC: GPS, Maps, Apps (EAM/Asset Mgmt, EVS/Env & Safety, Facility)
ICE: Apps (Training, Student Evaluation/Scores)
TSA: MS/PDF Document Reader, SharePoint Access, Congressional Quarterly subscription)

Enterprise Business Services

EIT

FLETC: Guest Wireless Network
ICE: Camera, GPS, PDF/JPEG/RTX Doc Viewer, eSign Docs, Apps (Office Productivity, Access to Backend Systems), USB computer
NPPD: Office productivity suite, Web-based tools/apps
TSA: Tablet, Mobile Access to Online IT Project Documents
USCG: Office Productivity, Document Version Control
USCIS: Smartphone replacement for BlackBerry; Tablet replacement for Laptop, Business justified apps

Enterprise IT Services

GFE with Government Data



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DHS Mobile Use Cases (4 of 4)

Federal Employees

LE

CBP: Camera, Fingerprint Scanner, Doc Reader, License Plate Reader, Apps (e3 Lite, ELMO-border)
ICE: Camera, GPS, Video Conference, Fingerprint Scanner, Apps (Office Productivity; EDIE; Mobile Access to: Case Mgmt, Detainee Locator, & Electronic Health Record Systems)

Law Enforcement

SCR

CBP Person: Camera, Fingerprint Scanner, Travel Doc Rdr, License Plate Rdr, Apps (Inspection, ELMO-border, Immigration Advisory)
CBP Cargo: Tablet, Apps (CERTS, ACE/ACE Tracer, TECS, IDENT, ATS, Reference Manuals)
TSA: Camera, Printing, Checklists, Doc Mgmt & Update (SharePoint), Apps (Office Prod, Access to PMIS, COTS apps)

Screening

SEC

CBP: Camera, Fingerprint Scanner, Doc Reader, License Plate Reader, Apps (e3 Lite, ELMO-border)
TSA: Camera, GPS, SharePoint, Apps (Office Productivity, Drawing, IRIS web app)
USCG: GPS, Weather (Display on Maps), Secure Doc Storage & Update, Apps (Electronic Flight Bag)

Securing

GFE with Government Data



Enterprise Mobility Business Case

DHS Science & Technology partnership with the Mobile vPMO to:

- Build upon mobile use case development
- Conduct follow-up interviews and deep dives
- Find impactful research areas

Goal: “Better understand capabilities and efficiencies gained through mobility”



Capability Gaps in the DGS Challenge Areas (1 of 3)

Mobile Device Management

- Remote wipe
- Integrated acquisition and management of devices and service plans
- Connection profiles and bandwidth limitations
- Device specific peripherals (e.g. biometric capture)

Mobile Application Management

- Cross-platform applications
- Enterprise applications (productivity suite, pdf viewer)
- Application programming interfaces or reusable methods to access backend data or systems
- Mobile apps for functions such as inventory management and tracking



Capability Gaps in the DGS Challenge Areas (2 of 3)

Identity and Access Management

- PIV authentication solutions that work across different mobile OS platforms and devices
- PIV solutions that do not require use of a PIV card reader
- Options for multi-user authentication to a device
- Single Sign-on
- Identity and Access Management for SLTT and partners

Data

- Integrated solutions for document storage, management, synchronization and version control
- Secure file transfer (e.g., secure methods for sharing data through cloud services)
- Secure voice
- Secure text messaging



Capability Gaps in the DGS Challenge Areas (3 of 3)

Other

- Push to talk radio capability
- Long-life batteries
- Quick recharge or operator swappable batteries



Potential Research Area

Issue 1: Mobile PIV Authentication Method

- Total Number of Impacted Use Cases: 46
- Risk Area: Enterprise Data Access
- Mobile Security Technology: Mobile Authentication Solutions.
- Assessment: PIV authentication solutions are emerging, but cannot be implemented until standards are finalized. Medium to high level of effort, mature fielded solutions do not exist.
- Recommendation: Excellent candidate for S&T investment – impacts greatest number of use cases, Components and users.



Potential Research Area

Issue 4: Secure Document Management/File Sync and Share Solution

- Total Number of Impacted Use Cases: 18
- Risk Area: Data at Rest, Data Loss
- Mobile Security Technology: Secure Mobile Content Sync & Share
- Assessment: There are a number of products for content management, distribution and syncing. All claim to be mature and implemented by numerous organizations. According to USCG's experience, these products may not be well integrated with MDM solutions.
- Recommendation: This would be a good area for S&T investment; also an opportunity for an enterprise offering.



Impact Area

Standard Suite of User Productivity Software

- Total Number of Impacted Use Cases: 21
- Risk Area: N/A
- Mobile Security Technologies: Not applicable.
- Assessment Options are available for different mobile OS platforms. Some Components have opted to use Windows tablets and reuse existing MS Windows licenses.
- Recommendation: Not an area for S&T investment.



Impact Area

Consolidated Mobile App Platform/Cross-Platform Apps

- Total Number of Impacted Use Cases: 20
- Risk Area: App Enterprise Data Access
- Mobile Security Technology: App Wrapping, Containerization, Mobile Virtualization
- Assessment: App Wrapping and Containerization solutions are mature and available; no S&T investment needed. Approaches such as MobileIron's AppReflect could address bandwidth limitations of virtualization approaches and is being funded by S&T through the Advanced Mobile Proof of Concept. Mobile Virtualization might be useful for some mobile apps, but is not suited for high risk apps.
- Recommendation: Not an area for S&T investment at this time. Technology exploration in this area would be more appropriately addressed by the Enterprise System Development Office and guided by the Applications and Services Council.



Impact Area

Single Sign On to Applications and Networks

- Total Number of Impacted Use Cases: 15
- Risk Area: App Enterprise Data Access
- Mobile Security Technology: Integrated with Mobile Authentication Solutions
- Assessment: Unlikely to be an area for S&T investment; being addressed through other ICAM Enterprise Single Sign on initiatives.



Questions

The Mobile Virtual Program Management Office (MVPMO) would like to thank all DHS Components that participated in the DHS Mobile Use Case Development and Enterprise Business Case effort.



Backup



Device Features & Apps: Federal Employees (Pg. 1 of 2)

- Voice, email, contacts, calendar, browser access assumed

BA USCIS: Scanner (tied to Camera), GPS, Document reader, Tablet form factor

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SCR CBP Person: Camera, Fingerprint Scanner, Travel Doc Rdr, License Plate Rdr, Apps (Inspection, ELMO-border, Immigration Advisory)
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Device Features & Apps: Federal Employees (Pg. 2 of 2)

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EIT **FLETC:** Guest Wireless Network
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TSA: Tablet, Mobile Access to Online IT Project Documents
USCG: Office Productivity, Document Version Control
USCIS: Smartphone replacement for BlackBerry; Tablet replacement for Laptop, Business justified apps



Device Features & Apps

- Component responses for device features and application needs specific to Public, Partner, State, Local, Tribal and Territorial.

IM

FEMA SLTT & Partners: Good Client, Emergency Manager App

FLETC SLTT & Partners: Tablet, Mobile Learning Platform (Content Delivery & Update), Collaboration & Email (HSIN)

USCG SLTT: GPS, Camera, Browser, Voice, Mobile App Version of Emergency Response Handbook (Incident Guides, Job Aids, Forms)

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