Enterprise Mobility Management (EMM) – More Than Just Voice and E-mail

AFNIC Enterprise Services

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Agenda

- Evolution of AF Mobile Workforce
- Key Industry Terms
  - Mobile Device Management (MDM)
  - Mobile Content Management (MCM)
  - Mobile Application Management (MAM)
- End User Capabilities
- Enterprise Mobility Management (EMM)
- Future of EMM
- AFNIC Customers
- Other MAJCOM Use Cases
- Points of Contact
AF mobility has evolved over last two decades

- Mobile data/voice convergence began in early 2000s
- Laptops with remote access expanded mobility to include access to shared drives, .mil websites, and AF/DoD applications
- More-capable cell/Wi-Fi phones & tablets brought office-type functionality to AF users to bridge the connectivity gap
- AF adapted with changes through adoption of EMM; now evolving further by leveraging cloud technology
Secure Management and Distribution of business critical apps, workflows, and processes

Enterprise Mobile Management (EMM)

- Mobile Device Management (MDM)
- Mobile App Management (MAM)
- Mobile Content Management (MCM)

Cross-Platform Control and Visibility Support:
- Supports both COPE** & COMO*** use cases
- Securely Access, Edit, Store, and Share business content from: SharePoint, OneDrive, Box, etc.

Notes: *Depicts areas of future EMM support.
**COPE: Corporately Owned Personally Enabled
***COMO: Corporately Owned Mission Only
Mobile Device Management (MDM)

- BlackBerry Unified Endpoint Management (BUEM)
  - Provides device level protection by applying and ensuring compliance with required Security Technical Implementation Guide (STIG) settings

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Mobile Content Management (MCM)

- Mobile Content Management extends the enterprise by enabling collaboration more efficiently and securely.

- Share large files to permissioned users across any device or platform.

- Collaborate in digital workspaces in real time with multiple users.

- Access, edit, annotate and share files on desktop, mobile and the web.

Security

Collaboration

Mobilization
Managed Apps
- Managed applications can span the native and container sides of the device

ISV Partner Apps
3rd party mobile apps
- Dynamics SDK – A single secure platform for 3rd party developers
- 100+ Dynamics apps offered by ISV partners

Personal Enablement
- Corporate data kept securely on the managed side enabling personal enablement

BlackBerry Apps
BlackBerry provides the best user experience supported by the best mobile security
- Work – enterprise grade email which simplifies key tasks
- Access – a secure browser for any device

Custom Apps
Software Development Kits (SDKs) to enable faster, more secure, easily integrated app development
- Dynamics SDK – A single secure platform for internal developers
**End User Capabilities**

**WORK**
All-in-one email, calendar, contacts, docs

**ACCESS**
Intranets, corporate web apps, CAC enabled Websites

**CONNECT**
Instant messaging and file share

**NOTES**
Note-taking

**TASKS**
Organized to-do list

- Integrated solution
- UI designed for less clicks
- Integrates with Microsoft solutions
- Corporate data secured enabling personal enablement

Notes: *Depicts areas of future EMM support.*
End User Capabilities

Content Delivery

- Work
  - Email
- Docs (COPE)
  - Individual Content Manager
- Workspaces (COMO)
  - Bulk Content Manager

Collaboration Tools

- New
- Edit
- Annotate

SmartOffice for BlackBerry
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**AFNET EMM**

**Cloud Hosted Enterprise Services (CHES)**

- SharePoint
- Skype for Business
- Office 365
- OneDrive

**Corporately Owned**

- Personally Enabled (COPE)

**Mobile Device Mgmt. (MDM)**

**IM & Presence**

**Enterprise Mobility Management (EMM)**

**Secure Browser**

**Mobile Content Management (MCM)**

**Mobile Mission Kit (MMK)**

**Combat Air Force (CAF)**

**Electronic Flight Bag (EFB)**

**Corporately Owned Mission Only (COMO)**

**Mobility Air Force (MAF)**

*Providing MDM protection and mail synchronization services to ~22K COPE devices*

*Potential AFNET EMM Case*
Integrate AF EMM into additional O-365 Cloud Offerings

- Mobile chat (Skype for Business), Cloud user data storage (OneDrive), and collaboration (SharePoint Online)

Move AF EMM Platform to Cloud or EITaaS

- Currently AF EMM infrastructure hosted in AF APCs w/h/w & s/w owned/operated by AF
- Short/Mid-Term Goal: leverage cloud infrastructure; reduces AF hardware footprint; AF still retains software configuration/support
- Long-Term Goal: fully leverage industry for EMM under EITaaS to eliminate need for AF to provide capability
• MAJCOM Use Cases
  • Currently Committed: 81K with 36K provisioned
    • Mobile Devices for Senior Leaders (22K) – All Commands

  • Air Mobility Command (AMC)
    • Use Case(s): Electronic Flight Bag (EFB)
    • Device Count: 18,000

  • Air Combat Command (ACC)
    • Use Case(s): EFB
    • Device Count: 13,000

  • Air Education and Training Command (AETC)
    • Use Case(s): EFB
    • Device Count: 3,500

  • Air Force Material Command (AFMC)
    • Use Case(s): EFB
    • Device Count: 300

  • Air Force Global Strike Command (AFGSC)
    • Use Case(s): EFB
    • Device Count: 3,000
AFNet Customers

- **MAJCOM Use Cases**
  - **Currently Committed:**
    - Air Force Reserve Command (AFRC)
      - Use Case(s): EFB/Mobile Mission Kit (MMK)
      - Device Count: 6,700
    - Air National Guard/National Guard Bureau (ANG/NGB)
      - Use Case(s): EFB
      - Device Count: 5,000
    - Pacific Air Force (PACAF)
      - Use Case(s): EFB
      - Device Count: 1,000
    - United States Air Force Europe (USAFE)
      - Use Case(s): EFB
      - Device Count: 1,000
Potential AFNet Customers

• Additional MAJCOM Use Cases
  • Known Potentials: 41K Devices
    • Air Force Special Operations Command (AFSOC)
      • Use Case(s): EFB
      • Device Count: 3,000
      • Currently Using: Air Watch
    • Air Combat Command (ACC)
      • Use Case(s): eTools
      • Device Count: 13,000
      • Currently Using: MobileIron
    • 25th Air Force
      • Use Case(s): Intel
      • Device Count: 9,000
      • Currently Using: MaaS360
    • Headquarters Air Force/Staff Air Force (HAF/SAF)
      • Use Case(s): eTools Lite
      • Device Count: 16,000
      • Currently Using: Apple Configurator 2
Other Use Cases

- Known Unknowns:
  - Security Forces
  - Mission Support Squadrons
  - Personnel
    - Active
    - Retired
  - Civil Engineering
  - Medical
  - Finance
  - Mission Planning
  - USAF Potential Growth: 125,000 – 500,000

- Anywhere you see info referenced is a candidate
- Device capabilities are ever-growing to enable composition
Points Of Contact

- **Functional Lead:** Mr. Matthew Moore, DSN 692-7484
- **AFNIC:**
  - Program Manager: Mr. Dennis Polansky, 779-5844
  - Project Lead: Mr. Caldwell Roberson, 779-6436
- **COPE MAJCOM Leads**
  - AMC - SMSgt Chad Warner, 779-6927
  - ACC - Maj. Eric Thonvold, 575-5939
  - AFGSC - Lt. Col Daniel Henderson, 781-3373
  - AFMC - Mr. Chris Straka, 787-2009
  - AETC - Ms. Julie Barrow, 487-6727
  - AFSOC - Maj. Thomas Goble, 579-2291
  - AFRC - Maj. Clifton Linde, 497-1213
  - AFDW - Mr. William Schulz, 612-0887
  - PACAF - TSgt James Keammerer, 315-447-5018
  - USAFE - MSgt Roberto Alanis, 314-487-0507
Points Of Contact (cont.)

• **COMO MAJCOM Leads**
  • Mobility Air Force (MAF)
    • Maj. William Street, 576-7109
  • Combat Air Force (CAF)
    • Lt. Col Timothy Saxton, 575-1603
  • AFRC (MAF / CAF)
    • Mr. Robert Nethaway, 497-1129
  • AETC (Training)
    • Mr. Michael Kilbourn, 487-4434
  • AFGSC
    • Maj. Wayne Johnson, 781-3456
Cyber Engineering and Integration Excellence
Enterprise Mobility Management (EMM)
A comprehensive term used to describe the people, processes, and technology in place to provide secure and reliable access to AF mobile devices.

Mobile Device Management (MDM)
Cross-Platform Control and Visibility Support: iOS, Android, Win 10, BlackBerry, KNOX Supports both COPE** & COMO*** use cases

Mobile Content Management (MCM)*
Securely Access, Edit, Store, and Share business content from: SharePoint, OneDrive, Box, etc.…

Mobile Application Management (MAM)*
Secure Management and Distribution of business critical apps, workflows, and processes

Notes: * Depicts areas of future EMM support.
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Mobile Device Management

• BlackBerry Unified Endpoint Management (BUEM)
  • Provides device level protection by applying and ensuring compliance with required STIG settings
  • Access to gov’t data protected via secure container

• Corporately Owned / Personally Enabled (COPE)
  • Device passcode restrictions, control of biometrics, managed vs. unmanaged data, etc.

• Corporately Owned / Mission Only (COMO)
  • Similar device protection to COPE
  • Customizable protection profiles
    • Mobility Air Force (MAF) / Combat Air Force (CAF)
• BlackBerry UEM hosted Enterprise App Store
  • Managed Apps (COTS / GOTS) pushed to device
    • Required / Optional
    • Native app store removal possible on supervised devices
  • GOTS App hosting platform
    • GTIMS, Mobile Mission Kit (MMK)
• Developing comprehensive app approval process for apps intended to be hosted on AFNET EMM
  • Leverage AFNIC Software and Application Certification Assessment (SACA) team
  • Software Certification Memo
Mobile Content Management

• **BlackBerry Docs (COPE)**
  • View, create, and edit docs via mobile app.
  • Future integration w Cloud hosted SharePoint & OneDrive

• **BlackBerry Workspaces (COMO)**
  • Protects content “outside the firewall”
  • Securely manages info distribution when delivered to mobile device
    • Digital Rights Mgmt, Access to Web browser w/ no license
  • Pilot testing underway with ACC, AMC, USAFE, PACAF and AFRC.
  • Initial deployment late Jun 18, full operational use Oct 18. Designed to initially support 50K devices.
• AFNIC Led Major EMM Upgrade Project in 2017 with modernize Enterprise Mobility Platform
  • Provides secure web browsing, AFNet/cloud email, SharePoint access, document editing/posting, device agnostic support, etc.

• Supporting 22K Sr Leaders world-wide

• Currently expanding capability to support warfighter missions
  • ~15K Mobility Air Forces EFBs supported; 18K expected
  • 13K Combat Air Forces EFBs; migrations on-going
  • Projecting 20-35K devices from other functional communities moving over within next 3-6 months
Use Case: EFB (COMO)

- **Overview**
  - **Electronic Flight Bag (EFB) – Corporately Owned Mission Only** - is a mobile tablet (iOS today) that replaces ~120 lbs of paper for flight crew members.
  - **Government data resides in both managed and native applications; device configuration tightly controlled**
    - **Documents include:**
      - Official government regulations
      - Flight Information Publications (FLIPs)
      - Tech Data
      - Normal & Emergency Procedures
      - Training Material
      - Crew Departure Papers
      - Up to 6,000 files per crew member
      - 30,000-40,000 files in complete library
      - Significant portion of data updated every 30-90 days
  - **Custom application development supporting**
    - Forms automation
    - Weight and Balance assistance
**Project Objective**

Modernize aging Good for Enterprise (GFE) solution with BlackBerry Unified Endpoint Management (BUEM) and collapse various disparate mobile solutions in use today.

**Stakeholders**
- AFLCMC
- 561 NOS
- 83 NOS
- All MAJCOMs

**Issues / Risks**
- BlackBerry UEM 12.9 "QF" install issues
  - BlackBerry provided resolution, ASI schedule in coord.
  - Impacts to ACC DEP EFB device provisioning

**Dependencies**
- N/A

**Key Discussion Points**
- 21,641 COPE devices provisioned
- 15,804 EFB devices provisioned
- GFE app removed / services disabled on 68/70 servers.
- Focused on continued support for MAJCOM functional communities (EFB / eTools)

**Project Status**

On Track

**Project Team Leads**
- IPL: Caldwell Roberson
- PM Support: Jared Yungvirt
- Design Lead: Sameep Sanghavi
- Test Lead: Rick Quigley
- Ops Lead: MSgt Joseph Barnes
- SME: Shane Smith

**Legend**

On Track
At Risk
Late or High Risk
Complete

**Resources:**

- **Manpower:**
- **HW/SW:**
- **Facilities:**
- **Contracts:**
- **Processes:**
Use Case: EFB (COMO)

- Use Cases Within a Use Case
  - Mobility Air Force (MAF) vs. Combat Air Force (CAF)
  - Training vs. Real World
  - Distinct Mission Requirements
  - Configuration Differences
    - Camera
    - Wi-Fi Profiles
    - Custom App Layouts
    - App Groups
    - Different Device Enrollment Programs
    - Different Volume Purchase Programs