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

AFNIC Enterprise Services

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UNCLASSIFIED

PIP COMBAT COMMAND

THE PARCE NETWORK INTEGRATION CO



- Evolution of AF Mobile Workforce
- ACC Sight Picture
- 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 w/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 w/changes through adoption of EMM; now evolving further by leveraging cloud technology











Mobility enables every ACC priority

1. Improve Readiness

- Enhance & robust training experience
- Simplify & automate routine actions

2. Build Leaders

- Synchronize & enrich team collaboration
- Expand information delivery reach & speed

3. Bring the Future Faster

- Enable on-demand sensor deployment
- Develop telemetry for AI/ML applications
- Encourage innovation



Enterprise Mobility NOT prioritized in ANY program

1. No Program assigned to mobile capabilities

- Vague guidance about use of personal devices
- No synchronized program management
- No sustained corporate funding

2. No integrated mobile architecture identified

- No desired end-state or CONOP defined
- No cohesive policies and standards established

3. Minimal cybersecurity for mobile capabilities

- No tools to enhance cybersecurity for home users
- Few personnel monitoring mobile endpoints
- Few tools identified to secure mobile endpoints



Transition from Ad-Hoc Services to Evolving & Sustained Capabilities

Integrity - Service - Excellence



Key Industry Terms



AFNIC 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



Mobile Content Management extends the enterprise by enabling

Mobile Content Management (MCM)



AFNIC





Board of Dir.

Analysis doc

ecutive analysis doc

Share large files to permissioned users across any device or platform

collaboration more efficiently and securely

Collaborate in digital workspaces in real time with multiple users

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



AFNIC Mobile Application Management (MAM)

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 todo list

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Notes: *Depicts areas of future EMM support.

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



End User Capabilities





AFNET EMM





- Corporately Owned, Personally Enabled (COPE)
 - iOS, Android, Samsung DeX
 - MDM
- Corporately Owned, Mission Only (COMO)
 - Electronic Flight Bags
 - MDM and MCM
- Number of Devices
 - Mobile Devices Total: 56,000
 - COPE Devices: 24,000
 - COMO (EFBs): 28,500

Goals for EMM:

- To deliver a device agnostic, cloud-based solution providing alternative desktop capabilities for a mobile enabled workforce.
- Transition the Air Force's server infrastructure to a cloud hosted environment, aligning with industry trends and best practices.

- Kanban
 - Task management methodology via JIRA



- 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 (24K)– 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













- 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

Other Use Cases

- Functional Lead: Capt Justin Hawkins, DSN 575-5464
- AFNIC:
 - Program Manager: Mr. Dennis Polansky, 779-5844
 - Project Lead: Capt Steve Laurence, 779-5399

• 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





Questions?



Key Industry Terms

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. **COPE: Corporately Owned Personally Enabled ***COMO: Corporately Owned Mission Only

- 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

- 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. <u>Stakeholders</u> • AFLCMC • 561 NOS • 83 NOS • All MAJCOMS		prise nified and bile - 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				Project Status			
					 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) 			ed abled on or (EFB /	On Track Regs. Plan Design Test Field Project Team Leads IPL: Caldwell Roberson PM Support: Jared Yungvirt Design Lead: Sameep Sanghavi Test Lead: Rick Quigley Ops Lead: MSgt Joseph Barnes SME: Shape Smith			
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Actual Schedule			BUEM 12.9 "O" series		•	iOS 12 Rel	2 Apple ease					
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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