Meeting the Readiness Challenge

Mobile Solution for the Warfighter

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Topics to be Covered

- Mobile Engine
- Integrating Weapon System Platforms & SAP
- Integrating IETMs and SAP
- Standard Format for Data Exchange
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mySAP Mobile Business solutions enable SAP to offer innovative and successful end-to-end business solutions for mobile devices.

**Mobile Access**
- Focus on the entire user experience to advance adoption, reduce training costs, and optimize gains.

**Mobile Applications**
- Provide tools which span multiple systems and include a broad range of processes, information and knowledge.

**Mobile Technology**
- Technology infrastructure to support applications in connected and disconnected environments.

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mySAP Mobile Business Architecture

**Device**

- Online Applications
- Offline Applications
  - **SAP Mobile Engine**
  - **Mobile Client**

**Server**

- **SAP Web Application Server**
  - R/3 Enterprise
  - SRM
  - ...
  - non-SAP
  - PLM
SAP Mobile Engine is a ... 

- platform-independent **runtime** for mobile applications
- strong mechanism for **data synchronization** between mobile devices and ERP backends
- central **administration & deployment** tool for mobile applications
Runtime - Key features

- **Platform-independent**
  - Java-based framework
  - J2SE and J2ME support
  - Local browser or Java UI

- **Open standard programming models for all situations**
  - JSP 1.1
  - pure Java (AWT, J2ME midlets)

- **Extensive toolkit**
  - Specialized API for mobile application development
  - Native driver support (scanner, printer, infrared etc.)
  - Database support
Data Synchronization – Key features

- Ensured, encrypted, compressed data transfer
- Support of any connection type
  - GSM / GPRS
  - WLAN / LAN
  - Cradle
- Two synchronization modes
  - Generic Synchronization
  - Smart Synchronization
- Multiple backend support
  - regardless of SAP release
  - SAP and 3rd party systems
Smart Synchronization vs. Generic Synchronization

- **Generic Synchronization**
  - Call of any SOAP request or SAP function module

- **Smart Synchronization**
  - Full-blown data replication middleware
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Condition of Weapon System drives Logistic Requirements & Responsiveness

UH-60 DELTA MIKE reports a malfunction during its in-flight to Brackett Airbase

AVUM

Stock query

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Potential Mobile Solution Architecture

Smart Distribution Scenario

1. Weapons Platform
2. Identity
   Inventory
3. MIMOSA Universal Translator
4. Mobile Engine Applications
5. SAP Back End
6. Directly from the Platform into SAP!
Communication between the W/S and SAP

Weapon System Data Bus

- Measuring devices & actuators
- Bus Monitoring Tool
- Weapon System Condition
- Maintenance activities
- Supply activities

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Mission: Develop and Encourage Adoption of Open Information Standards For Operations & Maintenance
MRO Technology Integration Summary

Supply Chain Mgmt

Process Control & Process Mgmt

Enterprise Resource Planning (ERP) System

Asset Advisory Management

Maintenance Work & Parts Mgmt

PLANT MEASUREMENTS / INSPECTIONS

- Control System
- CBM System
- CMMS System

Operations to Promise Order Guarantees
Optimize Supply Chain
Optimize TCO/ROA Decisions
MIMOSA Collaboration For OpenO&M™

Army CECOM Collaborative Telemaintenance Project

NAVSEA-TOSA Program
- MIMOSA Member
- Joint Services Demonstration Project Under Discussion

National Institute of Building Sciences (NIBS)
- Reciprocal Memberships
- Facilities Management Standard Development
- Joint Demonstration Project Under Discussion

ISO
Technical Committee 108
Sub-Committee 5

Accredited Standards Committee S2

MIMOSA + EPC = OpenO&M™
Army Platform Information Exchange Maps

MIL STD 3008
- Logistics Data
  - Cost Data
  - PM Checks & Svc (PMCS)
  - Parts Requisitions
- Logbook Data
- Army Platform Data
- Army Specific Data
  - Ammunition Accounting Data
  - Tech Manual & IETM Error Tracking
  - Personnel Data

MIMOSA
- Extensible Platform Component Hierarchy & Attribute Information
- Extensible Diagnostic Type & Results Information
- CBM+ Information
  - Platform Condition Information
    - Vibration
    - Imagery/Thermography
    - Trendable Numerics
    - Lab Analysis
      - Fluids
      - Gases
      - Solids

= Army Platform Information Solution