



Title: uMobility Introduction, Installation, and Configuration

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Day I uMobility and FMC Overview

1. FMC – Introduction - 1 Hours
 - a. What is FMC?
 - i. Traditional View of FMC
 - ii. Varaha View of FMC
 - b. Components of FMC
 - i. PBX, Wi-Fi, Cellular
 - ii. Single mode vs Dual Mode
 - c. PBX Features (Mobile Desk) Features
 - i. Basic calls
 - ii. VoIP Calling
 - iii. Call waiting, 2 lines support
 - iv. Call hold/unhold
 - v. Call transfer
 - vi. Voicemail, MWI
 - d. Mobility features
 - i. Modes of Operation
 1. Single Mode
 2. Dual Mode
 - ii. Single Mode Operation
 1. Single number reach
 2. Enterprise dialing
 - iii. Dual Mode Operation
 1. VoIP calling
 2. Call move and hand offs
 - iv. Comparison with other approaches
 1. When is it "VoIP" ?
 2. SNR vs Forwarding?
 - e. Break – 10 Min
2. Overview of Technologies 1 Hour
 - a. Devices - Smartphones
 - i. Market direction
 - ii. iPhone, iPod Touch, iPad
 1. Platforms
 2. Prospects/Limitations

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- iii. Blackberry
 - 1. Platforms
 - 2. Prospects/Limitations
- iv. Android phones
 - 1. Platforms
 - 2. Prospects/Limitations
- v. Symbian and WM
 - 1. Platforms
 - 2. Prospects/Limitations
- b. Networks
 - i. Cellular networks
 - 1. Overview
 - 2. CDMA
 - 3. GSM
 - 4. 3G Data networks
 - ii. Wi-Fi networks
 - 1. Overview

Break - 10 Minutes

- 3. uMobility – 1 Hour
 - a. Universal mobility – Vision to product
 - b. uMobility components
 - c. Deployment configurations
 - d. Single mode/dual mode
 - e. Upsell opportunities with uMobility
 - i. PBX components
 - ii. Service Opportunities

Exam! - 15 Minutes

Lunch and emails – 1 Hour

- 4. Customer use cases - 1 Hour
 - a. Healthcare – Pyam
 - b. Retail - Large Home Improvement store

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- c. Warehouse – Steel warehousing operation
 - d. Manufacturing – Cable manufacturing plant
 - e. Road Warrior – Telecommunication Company
 - f. International traveler – Mobile Professional
5. Customer Engagement – 0.5 hours
- a. Prospects and Activities
 - b. Qualified customer activities
 - c. Trial tricks
 - d. Barriers elimination
 - e. Closing

Need for site survey

I need coffee

6. uMobility tools at your fingertip 2 Hours
- a. uMobility portal overview
 - i. Marketing and Sales portal
 - ii. Operations portal
 - iii. Boilerplate
 - b. ROI xls tool
 - c. Device support and staying current
 - d. Project plan
 - e. Pricing services

Beer Hour

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Day II TECHNICAL SALES – PRE

1. Operating System Linux – 1.5 Hours
 - a. Brief overview
 - b. Xterm windows, commands : ls, rpm, cd
 - c. RedHat Linux versus CentOS
 - d. Standard components
 - a. Database
 - b. Web server
 - c. Media Handler
 - e. Services
 - a. Status and monitoring

2. Protocols 2 Hours
 - a. Session Initiation Protocol (SIP)
 - b. Realtime Protocol (RTP)
 - c. Transport selection (UDP/TCP)
 - d. SIP Overview
 - i. Why SIP?
 - ii. Text-based, background
 - iii. Line/Trunk Side
 - e. Call Flows
 - i. Message details
 - ii. Impact of wireless
 1. Retransmissions and delay
 2. Packet loss
 - iii. SIP tracing

3. 802.11/Wi-Fi/Cellular Networks 1.5 Hours
 - a. Nature of wireless
 - i. Weather, obstructions, frequency issues
 - b. Cellular standards (GSM/CDMA) and impact on devices
 - i. Cell size/power/etc.
 - c. 802.11 (Howard 802.11 data)
 - i. a, b, g, n and impact on devices
 - ii. 802.11 QoS/best practices for VoIP over WLAN

4. Systems Engineering 2 Hours

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- a. Connectivity
- b. Deployment engineering
 - i. Proxy versus SIP server
 - ii. Domains
 - iii. SBC/FW/ALG
 - iv. Address and port mapping
 - 1. Port usage (Guide)
 - v. VPN Access
- c. Cellular standards (GSM/CDMA) and impact on devices
 - i. Cell size/power/etc.
 - ii. Optimal Routing
- d. Site Survey
 - i. Overview of the site survey document
 - ii. Check list

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Day III TECHNICAL SALES – POST

1. PBX Readiness
 - a. User Provisioning in PBX
 - b. Connectivity, basic calling, features
2. uMC server Verification
 - a. Logging in
 - b. Basic connectivity
 - c. Service status
3. uMC Installation
 - a. Overview
 - b. Hardware
 - c. Site survey to network diagram
4. uMobility Configuration
 - a. Configuration
 - b. Configuration verification –
 - i. What did I miss?
 - ii. What can go wrong?
 - iii. Verification scripts
 - c. Making/receiving calls

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5. uMobility Server Operations and Administration
 - a. User provisioning
 - i. Starting check list
 - ii. Bulk provisioning
 - b. Client Installation and Configuration
 - c. Over-the-air installation (OTA)
 - i. OTA debugging
 - d. uMobility System Administration
 - i. Events
 - ii. Alarms
 - iii. Logs
 - iv. Debug logs
 - e. uMC System Data Back-up and Restore
 - f. uMC Client/Server Troubleshooting
 - g. Proxy and use of proxy
 - h. Diagnostics
 - i. Reserve Pool

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Day IV Hands On

1. PBX Configuration
 - a. SIP hardware
 - b. SIP ports (licenses)
 - c. Reserve pool
 - d. Pilot number
 - i. Hunt group
 - ii. Maximum lines
 - e. Verification
2. Lab
 - i. uMC installation
 - ii. License installation
 - iii. uMC provisioning
 - iv. Client Software upload
 - v. User(s) provisioning
 - vi. OTA
 - vii. User testing

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