

LinqUs Device Management

Introduction

Agenda

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Introduction

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Solution Overview

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TAC Overview

MNO Challenges for Data Services

Manage Complexity

- Control support costs
- Provide the best user experience



symbian

palmsource™

Microsoft

Stimulate Service Adoption

- Service promotion
- Service discovery



Manage Brand

- Make service portfolio and brand visible on any device
- Device personalization
- Non subsidized devices

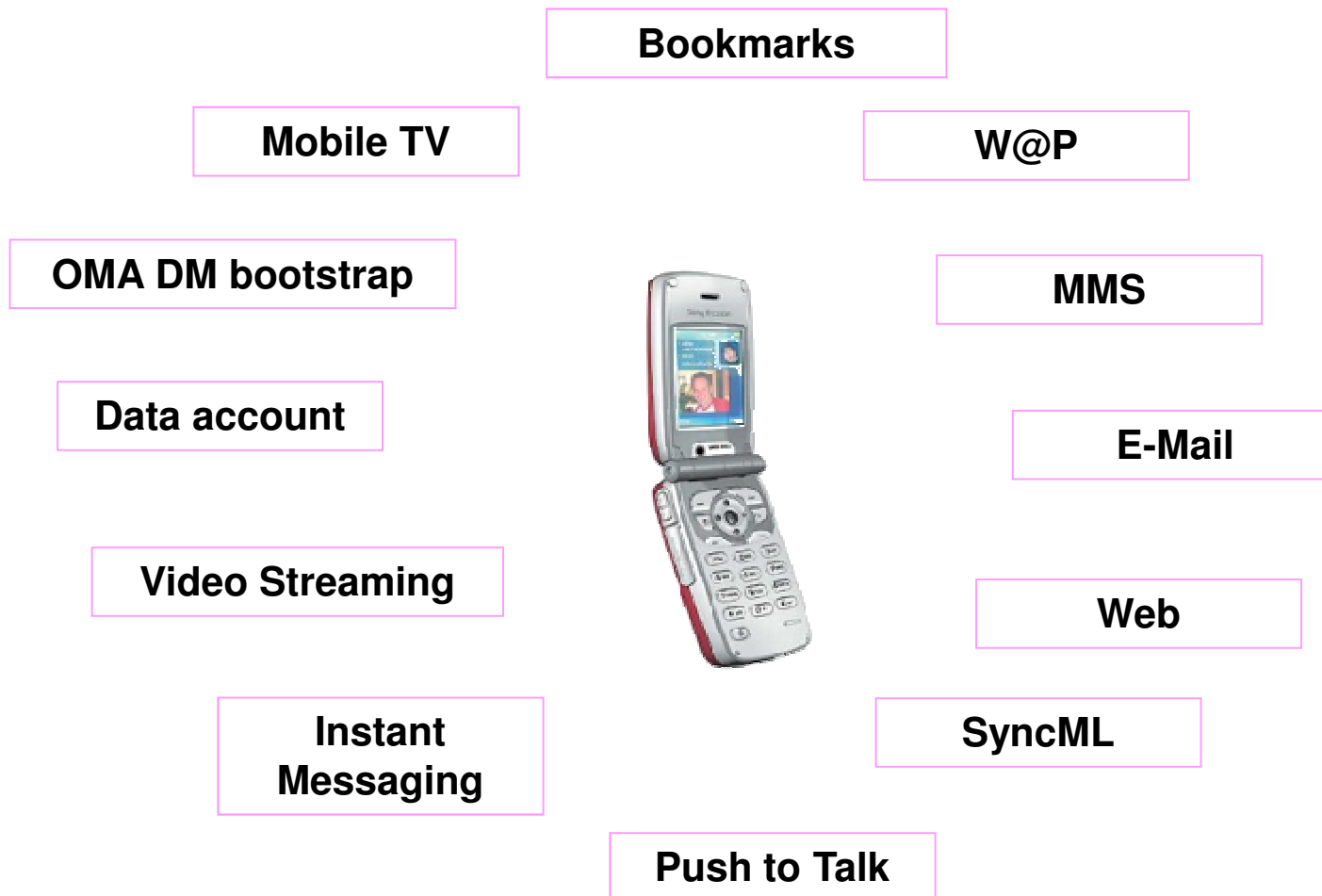


Mobile = New Services Gate



Accessing all services required
handsets to be set up accordingly

New Technologies for new services



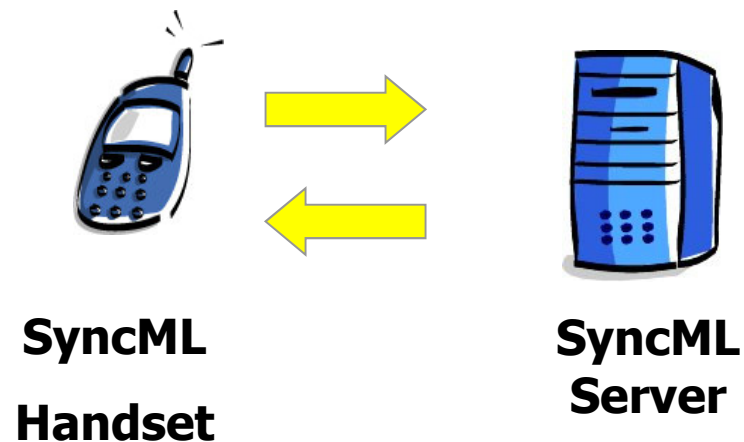
Data Account Service

- ★ Used by **smart phones**.
- ★ Provide **connection to a data source**
- ★ Billing based on amount of data transferred
- ★ Available on **GSM (CSD) & GPRS** networks



SyncML Data Service

- ✦ Synchronize **contacts, calendar and tasks data** with the **SyncML Server**
- ✦ Available on **GSM (CSD) & GPRS** networks.



POC Service

- ★ **Push-to-talk Over Cellular** is an “always on” **voice connection**
- ★ Similar to **talkie-walkie**
- ★ To call groups by pushing a **key**
- ★ Available on **GPRS** network only



Instant Messaging Service

- ✦ Allow to exchange **text messages** and **multi-media clips**
- ✦ Available on **GPRS** network only



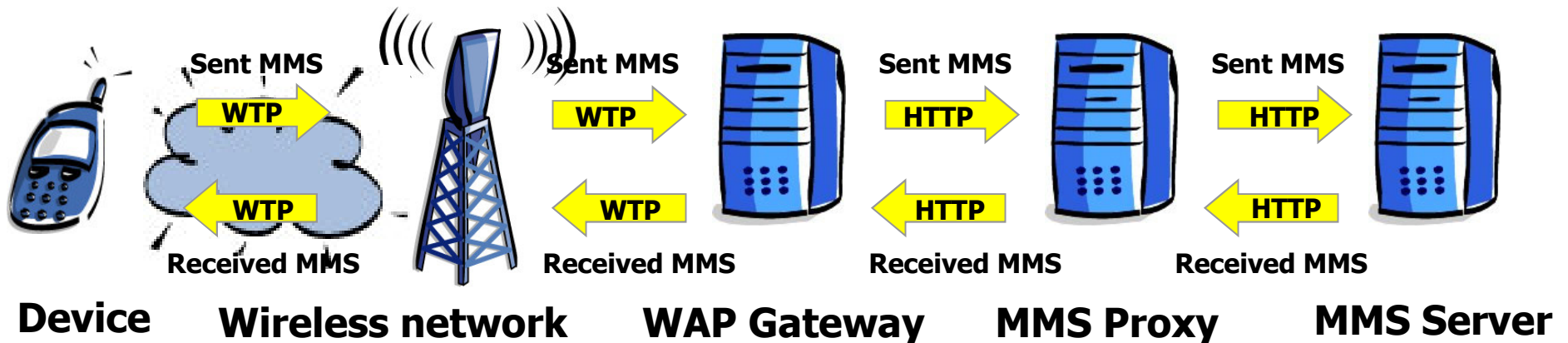
Video Streaming Service

- ★ **Display video** on mobile handsets
- ★ Use a streaming **channel** over a GPRS bearer



MMS Service

- ✦ Allows to send and to receive multimedia messages
- ✦ Based on the WAP service over GPRS or CSD network



- ✦ MMS proxy
 - accesses to the MMS server and other mailing systems
 - responsible to format the message
- ✦ MMS Server
 - stores and forwards messages as an SMSC

Parameters for MMS

- ✧ Parameters provided in setting sets
- ✧ Settings to send or receive picture messages over GPRS

Service connection name	gemaltomms
Data bearer	GPRS
Access Point Name	mms
Username	mms
Password	mms
Prompt for password	no
Gateway IP address	312.8.10.199
Homepage	http://mms.server.com/mmsc
Connection mode	continuous or temporary
Authentication/security	normal
PPP Authentication Type	PAP

DM – Remote Configuration Solution



**LinqUs
DM platform****✦ LinqUs Device Manager V5.0****✦ Supports most popular mobile handsets :**

- 2400+ models
- 85+ Manufacturers

✦ Full GSMA TACs list Identified**✦ Provides OTA provisioning of service settings :**

- | | |
|--------------------------|---------------------|
| ▪ Bookmark | ▪ Instant Messaging |
| ▪ Data over GPRS and CSD | ▪ Push To Talk |
| ▪ Email | ▪ Video Streaming |
| ▪ MMS over GPRS and CSD | ▪ Mobile TV |
| ▪ WAP over GPRS and CSD | ▪ Web |
| ▪ OMA DM Bootstrap | ▪ SyncML |

✦ Efficient upgrade SLA

- Up to 20 new handsets per month
- Custom handsets implemented on demand

**LinqUs
DM platform**

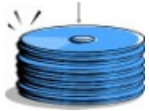
- ✦ **Supports all major legacy and standard protocols :**
 - Nokia Smart Messaging
 - WAP provisioning
 - Smart card provisioning
 - OMA Client provisioning
 - ...
- ✦ **Open platform to optimize the product integration in Operator's back end environment**
 - Customizable Web interfaces for administrator, Customer Care and Self-Care
 - Open Java and SOAP APIs
- ✦ **Fully scalable architecture to grow with Operator's business needs**
- ✦ **Deployable on Gemalto LinqUs Suite**

DM History

- ✧ 2002 First GemConnect Device Manager Product : v1.0
 - Only 3G Handsets (5 handsets) and Only Motorola, LG, Handsets.
- ✧ 2004 Evolution of GemConnect Device Manager : v2.1
 - Add new Library Swapcom
 - Mass Campaign Management
 - Automatic Device Detection SIM based
- ✧ 2006 Second Generation of the product : v2.2
 - Automatic Device Detection Network based
 - Add new library WDS
- ✧ 2007 Product enhancements : v4.0
 - Pre-configured handset Management
 - New User Creation Template
 - Management of Supported, Non Supported and Non Data handsets
- ✧ 2009 Naming Management: v5.0
 - Referent/Variants vs Standalone handset Management
 - Full GSMA TACs list Identification
 - Hot Library Upgrade

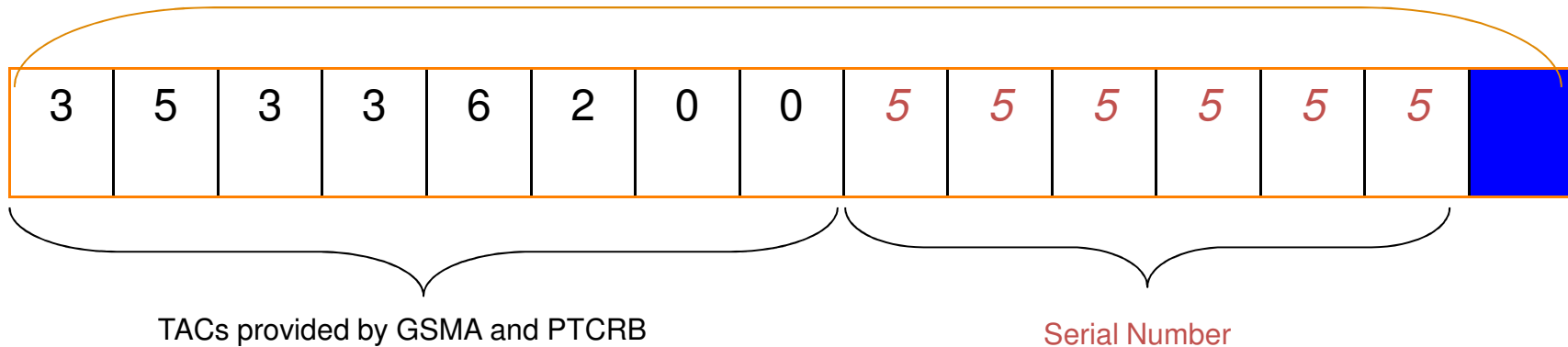


IMEI



To know your IMEI, enter *#06# on your handset

International Mobile Equipment Identifier



Type Approval Code(s)	Manufacturer	Model
35336200	NOKIA	7200
35336299	NOKIA	7200
35336300	NOKIA	7200
35336399	NOKIA	7200

General Rules for TAC:

- 1 TAC identifies a specific handset model
- 1 handset model can be linked to several TACs

Gemalto TAC Classification

✧ Gemalto divides the TACs in the following categories:

- **Identified:** part of the GSMA and PTCRB TACs lists and identified formally by Gemalto. Those TACs are further divided in:
 - **Supported:** The handset associated is supported by the current library
 - **Not supported:** The handset associated is not supported by the current library
 - **Non Data:** The handset associated don't allow remote configurations.
- **Not Identified:** The TAC is part of the GSMA and PTCRB TACs list but the name associated can not be identified as a handset model. For example:
 - "01161100|TG-11|Telular Corp|GSM 1800,GSM 1900,GSM 900,GSM850 (GSM800)" is used to send security and fire alarms signals using the GSM network.
- **Not found in GSMA:** not part of the GSMA and PTCRB TACs lists. Some of them can even be declared as suspicious to allow a segmentation of the corresponding subscribers.

Gemalto TAC Rules

- ✧ We always have:

$$\text{IDENTIFIED} + \text{NOT IDENTIFIED} + \text{UNKNOWN} = 100\%$$

- ✧ For 1 specific library, we have:

$$\text{NON DATA} + \text{SUPPORTED} + \text{NOT SUPPORTED} = \text{IDENTIFIED}$$

- ✧ Finally Reftac reports generated by Gemalto for one customer database and one library show the percentage of each category as well as the list of most frequent handsets not supported, TAC unknown ... All this information is used every month by Gemalto to improve our deliveries.

