The SyncML Road Ahead –

Application Development and Device Management

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Outline

- SyncML today
- SyncML as a key enabler in application development
- SyncML Device Management

Story Sofar…

- SyncML Initiative founded by key industry players with focus to develop an open technology for universal data synchronization
- Incorporation and a more flexible organization structure in 200
- Active contribution of Sponsor and Promoter members has focused on delivering
  - Specifications for data synchronization
  - Interoperability testing tools and events
  - Reference implementations
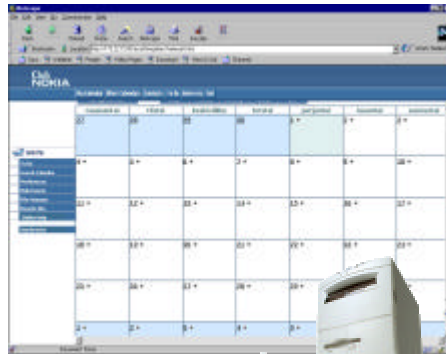
… And Deliverables

- 1.01 Specifications out in 2000, version 1.1 to be out in 1Q2002

- SyncML 1.01 specifications supported by key industry forums

- Commercial interoperable products exist: Over 21 servers, and 36 clients

- By end 2001, there were over 650 companies worldwide in the SyncML community

- This year, there will be millions of SyncML enabled devices in the market
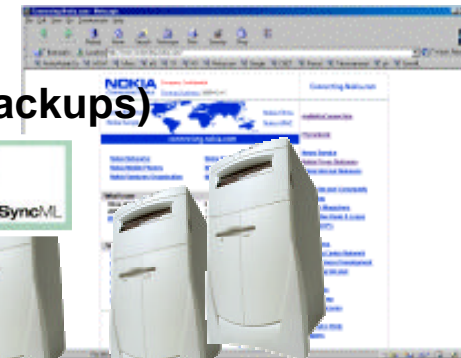
Next Frontiers

- Application development
  - What comes after PIM?
  - Role of SyncML
- Device Management
  - A natural application area of SyncML technology
  - Enables direct and indirect benefits
- Further projects

SyncML Enabled Services

Intranet

- **Company calendar**
- **Company databases**
- **Mail server**
- **Company files**
- **Own files (docs, backups)**

Internet

- **Internet addressbook**
- **Internet calendar**
- **Internet mail, etc**
- **Images (MMS)**

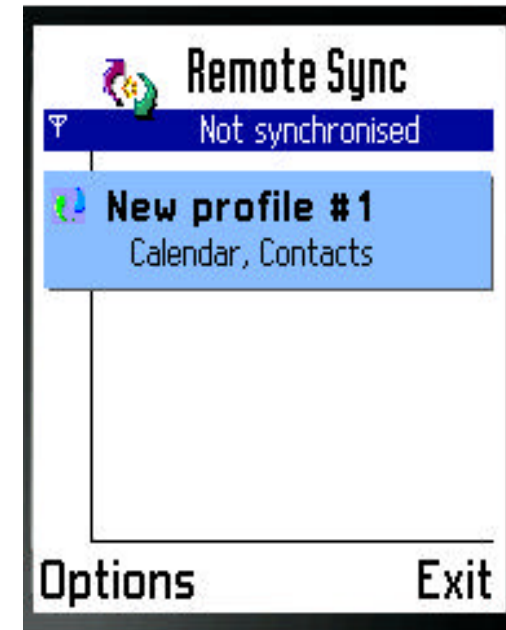Remote

Local

PC

- **Calendar**
- **Contacts**
- **Docs, Files**

Key Interaction Modes of the Applications in the Mobile Internet

SyncML

- Browsing
  - WAP content
  - Internet content, ...
- Call
  - Voice and video calls, ...
- Messaging
  - Short messaging
  - Instant messaging
  - Chatting, ...
- Synchronization
  - Personal information management
  - Corporate applications, ...

Why Synchronization?

SyncML

- Local databases and operations on them are coming commonplace

- Having your data always updated is (becoming) a competitive advantage

- Cooperation of networked parties/applications sets a direct demand for a seamless solution

- Handsets are not "always on"
  - Constant connections are expensive
  - Network coverage is not universal
  - User experience can be unsatisfactory

Synchronization is a key enabler for interactive networked applications

Why SyncML?

- Open technology benefits all stakeholders
  - Application developers
  - Operators and service providers
  - Handset manufacturers
  - Customers
- Correct qualities
  - Robustness
  - Expandability
  - Transport independency
  - Security
- Wide enough industry backing
  - True interoperability
  - Sufficient device volumes
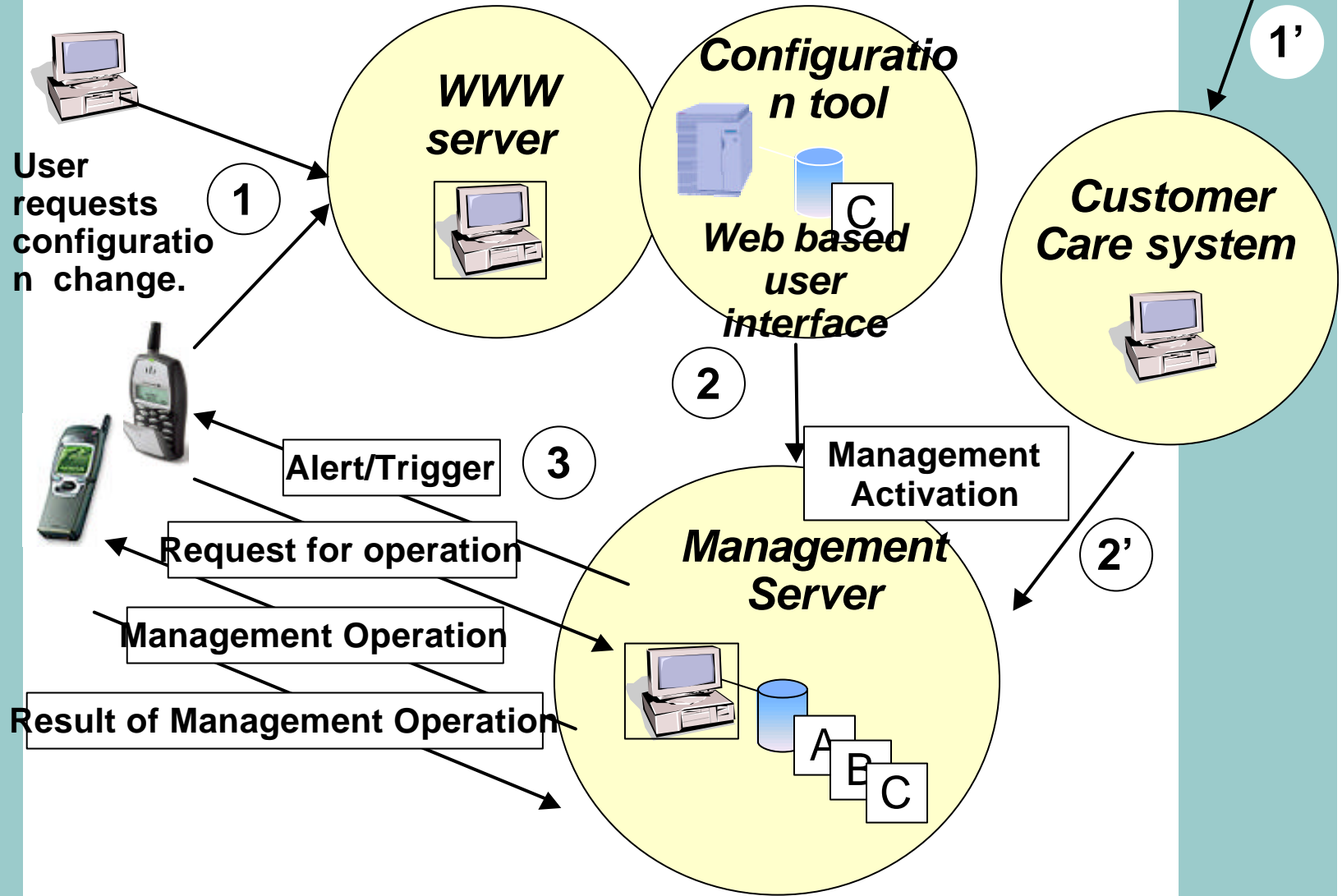
Further Development

- Reference implementations enable convenient kick-start of vertical applications
- Further cooperation with client and server manufacturers will enable advanced service concepts
  - New content types
  - Vertical applications with generic SyncML engines
- SyncML Initiative is a natural forum for discussion
  - Relevant parties participating
  - New content types in Objects group
  - Interoperability requirements in SIC

Device Management

SyncML

- Networked devices' internal complexity will increase along with their increased functionality.
  - Example: WAP settings in a device
- The complexity can be alleviated by somebody remotely carrying out the difficult tasks on behalf of the end-user
- These remote actions are loosely called Device Management

A Typical Device Management Scenario

SyncML

WWW server

Configuration tool

Web based user interface

C

Customer Care system

1'

User requests configuration change.

1

2

3

Alert/Trigger

Management Activation

2'

Request for operation

Management Server

Management Operation

Result of Management Operation

A
B
C

SyncML Device Management

- The next application area of SyncML technology
- SyncML technology will enable remote
  - Parameter manipulation
  - Configuration
  - Content delivery
- SyncML takes into account market requirements for interoperability and security

User Scenario Examples

- New device or service purchase
- Advertising
- Helpdesk problem configuration
- Backup / Restore
- High volume configuration

Beneficiaries of SyncML Device Management

- Operators and service providers
  - Only one solution needed
  - Enhanced service level
  - Increased service uptake
  - Decreased customer care costs
- Corporations
  - Improved management of mobile devices
  - Enhanced mobile working efficiency

- Application developers
  - A standardized tool for application configuration and content delivery
- Handset manufacturers
  - Only one solution to be supported in the handsets
- Customers
  - More functioning devices, applications, and services
  - Enhanced customer experience

All parties benefit from an open solution.

Call for Action

- SyncML 1.1 specifications include SyncML Device Management, and are public in 1Q2002
- Start planning and implementing SyncML Device Management in your
  - Handsets, PDAs
  - Device management servers
  - Network infrastructure
  - Service offerings
  - Customer care interfaces

Summary

- SyncML is the protocol of choice for data synchronization

- SyncML serves as a key enabler in development of interactive networked applications

- Market demand for SyncML Device Management exists. You must start implementation ramp-up now in order not to miss the train.

For further information –

www.syncml.org