Converged Messaging Over IMS/IP

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Agenda

- Market Trends and Challenges
- Converged Messaging
- Converged Messaging and IMS/IP
- Benefits
P2P Messaging Traffic Is Increasing

Source: Strategy Analytics, January 2006
The Emergence of IMS/IP

- Proliferation of converged offering
- Common IP architecture over multiple bearers *(Cellular, Wi-Fi, Fixed)*
- Diminishing barriers for introducing Internet applications to mobile networks
End User Perspective

- Complexity of multiple messaging services and technologies
- Need for a simple & intuitive user experience
- Increasing community-based usage patterns
- Expect “Internet-like” messaging experience
Operator Challenges

**Increase Revenues from Existing and New Messaging Services**
- Intuitive user experience
- Interoperability between handsets, platforms & operator networks

**Increase Loyalty**
- Compete with independent service providers
- Provide services differentiation

**Reduce Costs**
- Holistic and common messaging delivery platform
- Implement solutions that support hybrid networks (2G, 3G, IMS/IP, Fixed...)

The Foundation for Converged Messaging
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What Is Converged Messaging?

Converged Messaging Is About:

- Improving the User Experience
- Interworking between Messaging Services
- IMS/IP Messaging

Evolutionary Approach
Messaging Today

A different user interface for each messaging service

Legacy Handset Clients & Network Servers

SMS
IM
MMS
Video Share
Email
Voice Message
VM

SMS
IM
MMS
Video Share
Email
Voice Message
VM

Legacy Handset Clients & Network Servers

Messaging services are fragmented

Recipient
The Message Broker routes messages according to presence attributes, preferences, network and device capabilities.

A smart messaging hub used for interworking between messaging services and across protocols.

Pre-IMS/IP Converged Messaging

Legacy Network Servers

SMS
IM
MMS
Video Share
Email
VM

Legacy Network Servers

SMS
IM
MMS
Video Share
Email
VM

Sender
Recipient

Preferences and device capabilities
From Silos to IMS/IP Messaging

**Experience**
- SMS: Push
- V^2^M: Pull
- MMS: Push
- IM: Session
- PoC: Session
- Email: Pull

**Media**
- SMS: Text
- V^2^M: Voice/Video
- MMS: Multimedia
- IM: Text
- PoC: Voice
- Email: Multimedia

**Network**
- SMS: Signaling
- V^2^M: Signaling+IP
- MMS: IMS/IP/signalling
- IM: Signaling+IP
- PoC: IP
- Email: Signaling+IP

**From Silos to IMS/IP Messaging**
From Services to Experiences

Session (conversations)
- Initiator expects instant response from “B-party”
- An agreement between parties has to be achieved prior to messaging exchange
  Examples: Chat, PoC, Instant Messaging… Voice Call

Push (immediate)
- Initiator expects the message to immediately show on recipient’s handset
- Usually sender is aware of recipient’s availability
- If the recipient is not available, the message is kept in the network until he/she becomes available
  Examples: SMS, MMS, Push Email, Offline IM

Pull (mailbox)
- Recipient pulls the message at his/her convenience
  Examples: Email, Voicemail
Converged Messaging Client: Simple and Intuitive

A single user interface for all messaging experiences while hiding the technologies

 Sender

 Legacy Handset Clients

 Recipient

 Converged IP Messaging

 Converged Messaging Client

 Converged Messaging Client

 A single user interface for all messaging experiences while hiding the technologies
IMS/IP Converged Messaging

Single UI for all messaging experiences

Converged Messaging Server

Broker

Presence

Preferences and Device Capabilities

SMS

IM

MMS

VideoShare

Email

VM

Legacy Network Servers

SIP/IP Converged Messaging Broker

IMS-C

Bob IMS/IP User

Alice IMS/IP User

Single UI for all messaging experiences

Messaging Services Continuity Is a MUST!
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Converged Messaging and IMS/IP

Converged Messaging maximizes IMS/IP value by providing:

- Personalization
- Communication Flexibility and New Capabilities
- Enhanced Fixed-Mobile Convergence (FMC)
- Reduced Operators Costs
The user can now have...

- A single identity for messaging across devices
- A single Address Book across devices
- Several identities per context
- A single bill for all services
Single Device – Multiple Identities

Home Identity

Work Identity

Temporary Identity

A single device and user interface for all identities
Multiple Devices – Single Identity

IMS/IP

Register

Chat Invitation

Register

Register

COMVERSE
Hi Alice, I am sending you the address for tonight's party.

Thanks. Did you tell Sara?

Yes.

Did you buy a present?

Yes, I bought it with John. He's next to me. Want to see?
Continuity Across Terminals

1. Patrick sends a text message to Ann
2. Ann replies in “conversation” mode, Patrick’s Avatar is displayed
3. Patrick receives the message in his Inbox and replies
4. The conversation is displayed on a PC client and Ann replies
Sara sends live video she’s taking
Notification is sent, with Identity
Dan accepts
Video is streamed live
Dan is watching the World Cup
Sara sends live video she’s taking
Notification is sent, with Identity
IP Converged Messaging: OMA Work Item

- Comverse together with Orange-FT and O2 initiated talks on the concept of a IP Converged Messaging work-item in Nov, 2005

- Converged IP Messaging (CPM) is a global messaging framework which accommodates different user-experiences such as deferred and immediate messaging, session-based messaging, and half/full-duplex conferencing

- It aims to consolidate common functionalities of existing messaging services and provide new features introduced by the convergence of communications brought by SIP-based technologies

- CPM enables the creation of a “global messaging community” rather than “silo-communities” based on messaging technology

- Work on the development of the Requirements Document is being supported by operators, e.g. Sprint, Cingular, and vendors, e.g. Lucent, Nortel, alike and is planned for completion in beginning of 2007
Market Trends and Challenges

Converged Messaging

Converged Messaging and IMS/IP

Benefits
Converged Messaging Key Values

**Improved Messaging User Experience**
- Optimal usage of existing handset capabilities
- Evolves to a converged client for all types of messages

**Interworking between Messaging Services**
- Optimal delivery method based on the recipient’s device and network capabilities, presence status, and preferences
- Improves messaging interoperability

**IMS/IP Messaging Including Legacy Support**
- Leverages operators’ existing messaging services and infrastructures
- Standards-based solutions enabling messaging between IMS/IP users and interoperability between IMS/IP-based networks and non-IMS/IP based networks

**Evolutionary Approach**
- Helps build your messaging offering both technically and in the eyes of the end user
Converged Messaging Meets Operator Challenges

Increase Revenues from Existing and New Messaging Services
- Ensure message delivery across HSs & platforms
- Message optimized to recipient’s capabilities
- Single intuitive and user-friendly experience

Increase Loyalty
- Leverage user information for messaging
- Operator-branded user experience
- Introduce community-based offerings

Reduce Costs
- Single IP messaging server
- Support for hybrid networks
Thank You