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MSF Technical Committee Meetings

Shanghai, China. April 1-3

Dublin, Ireland. July 8-10

Other events

Spring VON.x,
March 17-20, San Jose, California

IEC Sofnet 2008,
April 28-May 1, London, UK

NXTcomm 2008,
June 16-19, 2008, Las Vegas

MSF – We Make Next Generation Networks *Work*

Editorial Thoughts

I have written several articles about IMS in the past and always tried to strike a balance between glasses being half empty or full argument. It's easy to point to the 'half empty' complexity of the specification, the time taken to roll out commercial services, and the fact that service and application innovation comes primarily from the Internet. So, as a writer it's easy to conclude (all too easy) that IMS will be overtaken by events.



Achieving interoperability on a global basis is a huge task, as I subsequently learnt, but looked at through media ideas it simply means that the kit matches the spec so everything works. Well, so it should.

Right now I'm starting to see articles indicating the need for IMS to support interfaces to service providers' operational support and office support systems. That would seem to be a significant issue and maybe somebody would like to address it so that it can be covered in another issue. More significant is the impression that IMS is not ready for services beyond voice, but that looks set to change.

At the Mobile World Conference a group of key operators announced a joint effort to facilitate the evolution of mobile communication towards rich communication. This involves agreement *'upon a set of features originating from profiled IP Multimedia Subsystem (IMS) standards as well as implementation guidelines with the intention of having interoperable rich communication services available in 2008.'* In addition, this initiative will continue to drive testing and interoperability in a multi-operator environment.

We need more of these glass filling up nicely stories and GMI 2008 will provide a great opportunity since it will cover IPTV, Location Management, Quality of Service and Service Oriented Architecture. These areas are clearly outside the remit of the Internet.

These scenarios are covered in this issue, but not in language that the media will understand. This task probably falls outside the remit of the MSF, but those Multimedia Services have arrived and there is a clear and pressing need to promote them.

Seen on the Web: IMS has had some bad press recently for various reasons. However, the tallest mountains are the highest to climb, but offer the biggest reward when you get to the top.

Please send MSF inputs to bob.emmerson@melisgs.nl.

GMI 2006: what we achieved

GMI 2006 was a groundbreaking event: the first international, multivendor validation of IMS. It validated the core capabilities of IMS: unrestricted roaming across multiple network types, with consistent services and no performance penalties. More specifically, unrestricted roaming and the elimination of the boundaries that once separated fixed, mobile, and wireless networks. This is the essence of FMC.

Equally important, GMI demonstrated that IMS ensures that this unfettered movement neither disrupts nor degrades the Quality of Service (QoS) of whatever value-added service a subscriber is using.

GMI 2008: what we'll be doing

Two years ago GMI 2006 was the largest IMS test event ever. GMI 2008 will be even bigger, not only in terms of the number of carriers involved, but also — and more significantly — many more services will be tested. It will be a true multiservice event.

GMI 2008 will build on previous GMI events and seek to validate the MSF R4 architecture, which will support multiple access networks, both wireline and wireless. The architecture is based on IMS along with components such as call agents / softswitches for handling earlier VoIP infrastructures. The related interface reference points within the MSFR4 architecture are documented as MSF Implementation Agreements, which are based on, and are endorsements of, the relevant 3GPP and ETSI TISPAN specifications.

GMI 2008 will be an industry showcase that will:

- ⊙ Show how IMS can help carriers achieve a key goal; the flexible deployment of best-of-breed products as they evolve their networks
- ⊙ Show how those products can be marketed in more cost effective ways
- ⊙ Display the global interoperability of the MSF architecture as referenced in the Release 4 architecture document
- ⊙ Demonstrate an end-to-end network scenario that can be managed to specific quality standards.

Six key scenarios have been defined. They will form the basis of the GMI 2008 event:

- ⊙ Scenario 1. End-to-End session control across the GMI 2008 test networks. This will demonstrate end-to end session establishment, control and tear down across the networks comprising all supported access types
- ⊙ Scenario 2. End-to-End QoS. This builds on the previous scenario. It adds the components that enable QoS in both the access networks and the MSF R4 core. The QOS related components and interfaces are based upon the TISPAN R2 specifications for RACS and NASS
- ⊙ Scenario 3. In this case we add IPTV as a specific application that runs in the scenario 2 environments. The plan is to cover both IMS-based and non-IMS based IPTV delivery, the later being included to reflect/recognise the current status
- ⊙ Scenario 4. Location also builds on the scenario 2 environment. It adds the components that enable location-based services and capabilities. Physical location is becoming a hot NGN topic. This scenario

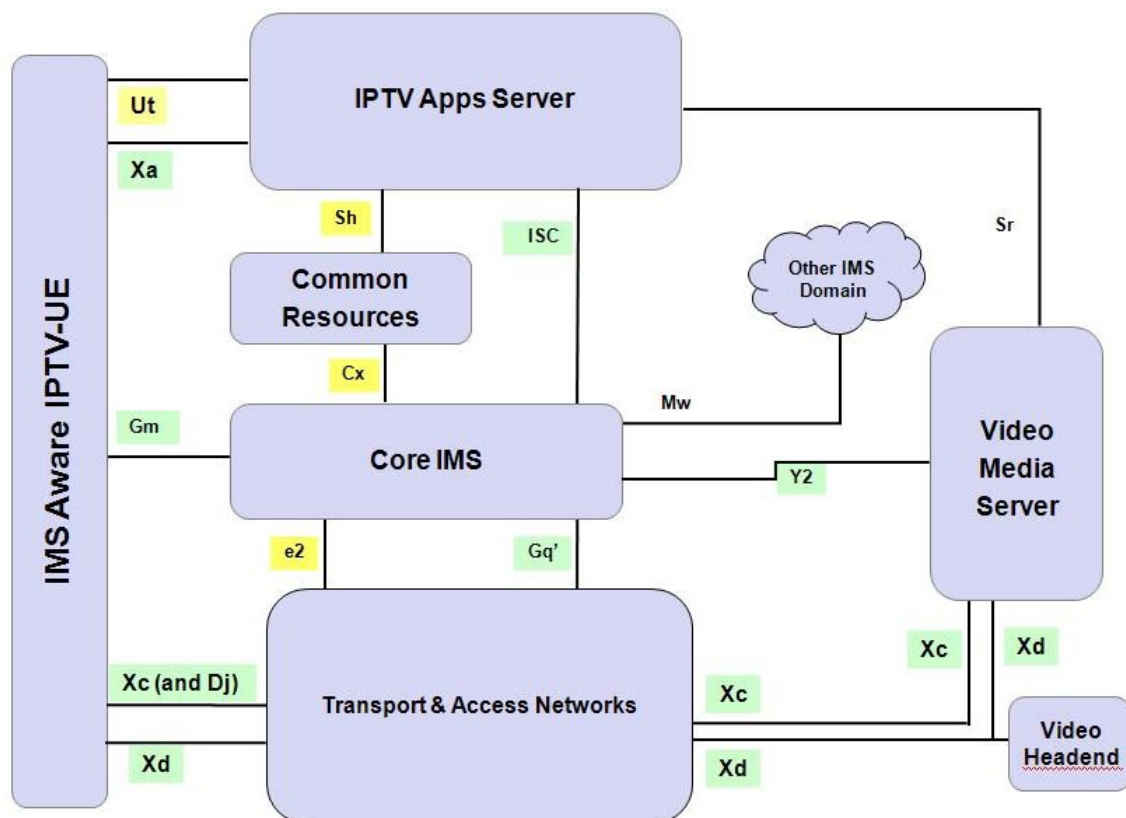
incorporates work done in TISPAN NASS and IETF that enables precise location information to be ascertained and used in situations such as Emergency Call, Location based routing and Prioritised Call Queuing

- ⊙ Scenario 5. SOA (Service Oriented Architecture) based services. In this case we add a SOA service layer on top of the combined infrastructure of scenarios 2, 3 and 4. This will show how the IMS-core will be able to access Web based services, thereby enabling software developers to create applications in much shorter timeframes. The focus of these SOA services is based on four enablers: Third Party Call Control, Presence, Short Messaging and Location
- ⊙ Scenario 6. Management. This scenario is based around performance management of the IPTV service and remote management of the IPTV CPE devices.

We should have detailed information on these scenarios in the next issue. 1) End-to-end session control; 2) End-to-end QoS; 4) Location-based services; and 6) Management.

3) Adding IPTV

This scenario outlines the test plans for priority video services that judiciously utilize the MSF QoS infrastructure. Seven service scenarios have been defined including MSF IPTV UE authentication and registration:



Msf2008.139.01

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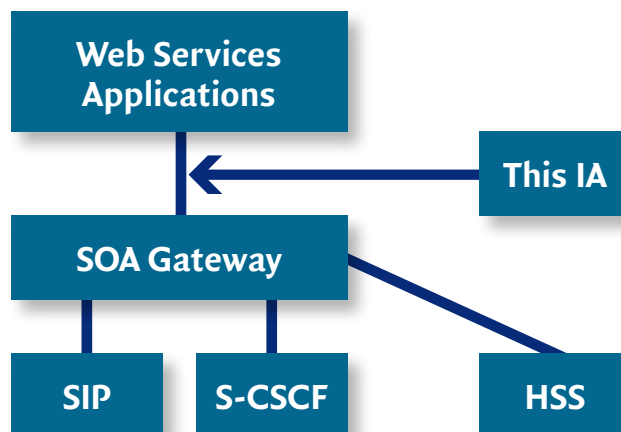
The MSF IMS-IPTV Physical Architecture for GMI 2008. Implementation Agreements for the Interfaces have a green background.

- 1) Service selection and service provider discovery (alternatively get service from the default service provider)

- 2) Receive and display traditional broadcast service with traditional advertising, with and without program guide
- 3) Register and browse the content or video-on-demand (COD/VOD) service
- 4) Receive VOD service with traditional and/or intelligent (smart or context or profile sensitive) advertisement
- 5) Receive Instant Message (IM) and phone calls during reception and display of broadcast or VOD service. Make sure that the video stream pauses when the call is picked up and resumes (from where it stopped) when the call ends
- 6) Receive and display network-based, personal digitally recorded video, with and without advertisement, and with and without program guide
- 7) Run QoS and QoE measurements for each of the above scenarios.

5) Service oriented architecture

This Implementation Agreement (IA) defines a profile for the interface between the SOA gateway and Web Services Applications. The intent is for this interface to include a range of APIs, however the initial focus will be on Parlay X APIs.



As illustrated, GMI 2008 will include a Web Services application layer with an API interface providing access to SIP functionality.

The IA defines APIs for the following services:


Third party call control; Short messaging; Location; Presence; Audio call

This scenario focuses on third party call control, which allows an application to initiate and manage a call between two endpoints.

Using the third party call control Web service, an application can invoke a click-to-call Web service on the SOA Gateway to initiate a call between any two parties through IMS. Possible applications include: click-to-call functionality on a Web portal; email signature Call Me card; corporate application integration (e.g. enabling a corporate directory).

The third party call control API is based on the Parlay X Web Services standard (version 2.1), as defined





in ETSI ES 202 391-2. The Web service interface defined in this IA supports the following methods: makeCall; getCallInformation; cancelCall; endCall; makeCall’.

The makeCall method sends a request to the Web service interface to initiate a voice call between two specified endpoints. The request must include the originating URI and the endpoint URI. If the makeCall method is successful, the SOA Gateway returns a call identifier that can be used to identify the call.

A \$300 Billion Opportunity

That figure comes from ABI Research. They are forecasting \$300 billion in extra revenue over the next five years. Major operators such as Sprint, Verizon and British Telecom (BT) will increasingly deploy IMS across their networks in a quickening tempo starting this year.

‘Until recently IMS was mainly the province of fixed-line operators,’ says senior analyst Nadine Manjaro, ‘but now it is essential to the success of mobile and fixed operators who are losing revenue from traditional sources. IMS enables rapid development and deployment of new services.’

Some firms – notably Verizon and BT – are facilitating this process by offering an open IMS interface allowing third-party developers easy access, as a way of ensuring a flow of new applications. This means faster testing and deployment of services, which will be critical to their success.

‘Operators are forced to look at IMS and similar solutions because they need to start generating more revenue,’ notes Manjaro. ‘With recent moves by Sprint, Verizon and AT&T to offer less profitable flat rate services as a way to fight subscriber churn, that need becomes more acute.’

One impediment to IMS’s success in the past has been the difficulty of proving the business case for it. But ABI Research suggests that planners were incorrectly considering IMS as a service rather than a platform. In fact IMS supports multiple services, and it takes several of them to make a valid business case. To use the hackneyed phrase, there has been a paradigm shift in operators’ strategic thinking.

Details at: www.abiresearch.com/products/market_research/IMS


Short takes

Ericsson has announced an agreement with Beijing Netcom, a branch of China Netcom, to provide the company with a Command Supporting System based on Ericsson’s IMS solution for the Olympic Games. China Netcom is the official fixed-telecom service partner and under the agreement, Ericsson will be the sole supplier and systems integrator for an IMS platform that will enable personal multimedia communication.

The agreement is an extension of a contract signed between Ericsson and Beijing Netcom in April 2007 to build the first commercial IMS network in China.

Alcatel-Lucent has signed a multi-year agreement with MTS Allstream, a wholly owned subsidiary of Manitoba Telecom Services, one of Canada’s leading national communication solutions providers. The focus is on the upcoming deployment of an IPTV service that will be based on the company’s Triple Play Service Delivery Architecture (TPSDA) and Microsoft Mediaroom IPTV and multimedia platform. MTS Allstream currently has the largest installed base of telco digital TV subscribers in Canada and was one of the first providers in the world to launch this type of service.





Alcatel-Lucent has also been selected by Sydfyns Intranet, a Danish FTTH service provider and a subsidiary of power utility Sydfyns Elforsyning. The agreement covers the delivery of a fully integrated, end-to-end triple play solution for the delivery of advanced triple play and business services such as multiple IPTV, video on demand (VoD) and managed firewall applications. Earlier wins include: Portugal Telecom, Vodafone Portugal, Kenya Data Network, Denmark's NRGi Fibernet and Sweden's Fiberdata in 2007.

Members in the news

In future issues of this newsletter we shall be doing short interviews with MSF members who have made a particularly significant contribution to the program. So, watch this space and get in touch with Bob Emmerson if you would like to be included.

