

Project Achievements



Use Cases for Interconnected Testbeds and Living Labs

NetLab developed a platform of interconnected IP Multimedia Subsystem (IMS) testbeds from three EU countries and studied Living Labs and their potential interconnections to testbeds. NetLab project was designed to tackle their interoperability, scalability, complexity and mobility aspects as well as security and QoS requirements, coupled with validation in large scale testing environments.

Main focus

NetLab sustained research and experimentations that allowed to reach convergence and interoperability of different test beds, protocol variants and services based on IP Multimedia Subsystem (IMS). The choice of IMS was considered to be a key factor by the project for obtaining a sustainable and future generic interconnection proof test bed where the user can discover and select the network and services used to perform his/her tests. Particular emphasis was placed on interoperability of the test beds, the interconnection and sharing of software tools, the experimentation and validation of protocols and services and also in providing trusted access to services.

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Approach

The NetLab project demonstrated and experimented in real life the INTERCONNECTION of IMS platforms from different countries, and implement use cases related to different access networks; at the same time showing IMS service portfolio possibilities for non-technical people:

- ◆ Selected applications/use cases were tested and documented
- ◆ IMS interconnection & roaming was working, test cases documented
- ◆ IMS tests & open source tools documented



NetLab

Project ID: CP5-018

Start Date: 1 July 2008

Closure date: 28 December 2010

Partners:

DIMES - Digital Media Service Innovations, Finland

Ericsson Network Services, S.L., Spain

Octopus Network, Finland

Slovak Telekom, Slovakia

Slovak University of Technology in Bratislava, Slovakia

Software Quality Systems, Spain

Telefónica I+D, Spain

Universidad Carlos III de Madrid, Spain

University of Turku, Finland

Co-ordinator:

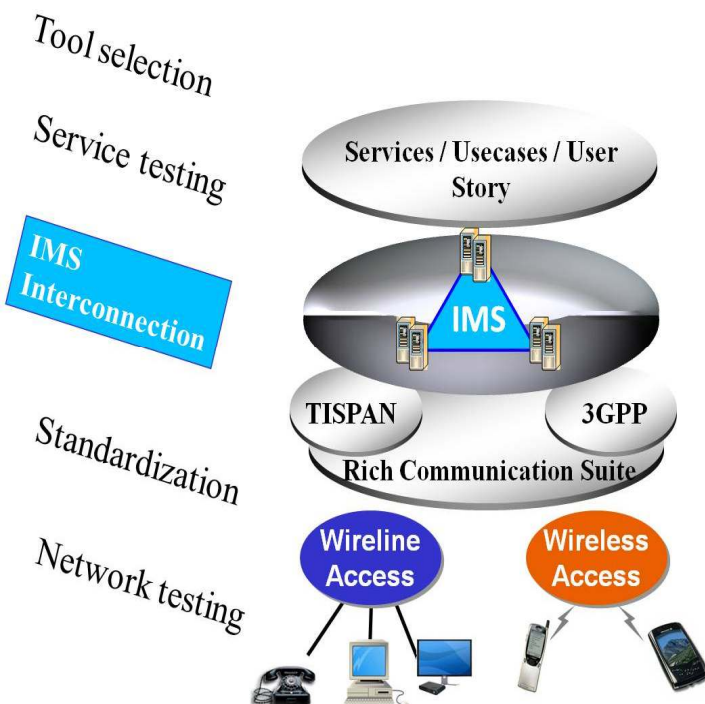
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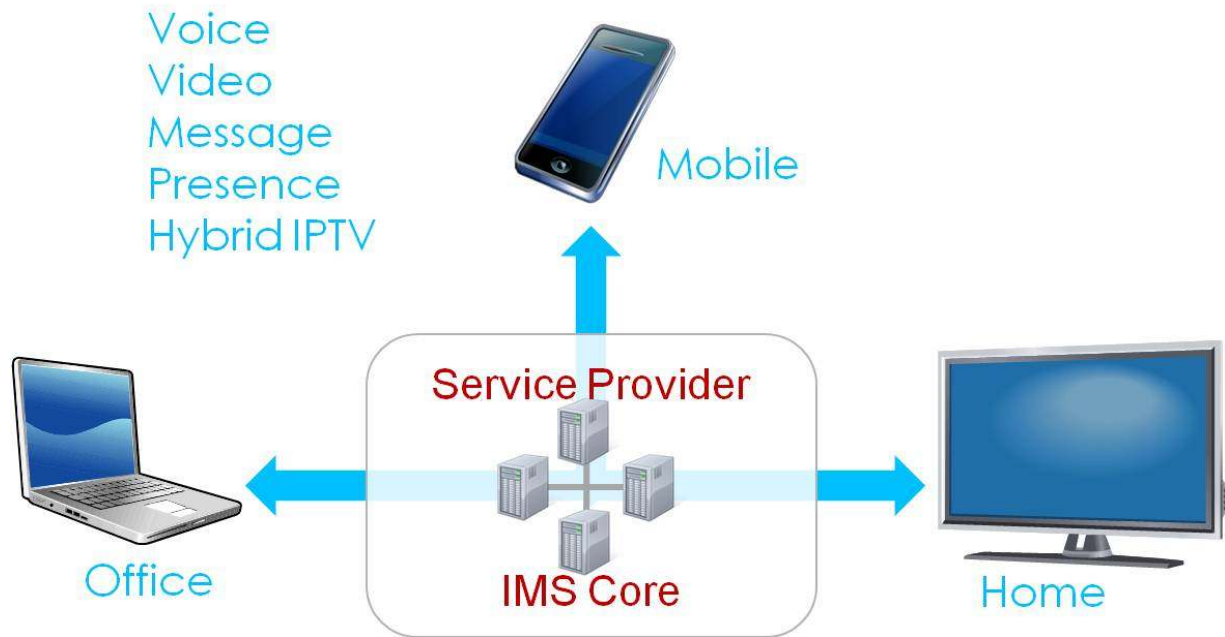
DIMES

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Project Website

www.celticplus.eu/Projects/Celtic-projects/Call15/NETLAB/netlab-default.asp





Achieved Results

To demonstrate interconnection various applications were used such as IMS roaming for voice (Mid Term Review) and the more demanding IP-TV application at the final review. The interworking of IMS cores was further tested using different IMS capable end devices.

By implementing several service use cases and performing interoperability testing within the network infrastructure of interconnected test beds, based on IMS cores, the project produced knowledge and

information on IMS software compatibility and conformity not available anywhere else. In practice project has encountered several interoperability and functional problems with different IMS cores, routers, networks etc. Most of them have been solved, sometimes project had to find other solution.

The combination of the two worlds of technological requirements and the end-user testing between test-beds and living labs was experimented and defined for future exploitation as a part of selected use cases and deliverables.

Impact

At medium term time scale the success of IMS will clearly depend on the interworking capabilities and on how well this standard is compatible and can be implemented. Toward this goal, the project has contributed substantially in real test-beds to make interconnection between IMS cores happen that are provided by different vendors (typically Ericsson, Nokia *Carrier Grade IMS core*, and Open IMS by Fraunhofer).

There is one totally new product developed based on the NetLab project results and three products have been improved using the results of the project. This leads to expected 10x return of investment (RoI) within the next 3 years among some industrial project partners.

About Celtic

Celtic is a European research and development programme, designed to strengthen Europe's competitiveness in telecommunications through short and medium term collaborative R&D projects. Celtic is currently the only European R&D programme fully dedicated to end-to-end telecommunication solutions.

Timeframe: 8 years, from 2004 to 2011

Clusterbudget: in the range of 1 billion euro, shared between governments and private participants

Participants: small, medium and large companies from telecommunications industry, universities, research institutes, and local authorities from all 35 Eureka countries.

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Major project outcomes:

Dissemination

- 34 publications
- 27 presentations at conferences/fairs

Exploitation

- 1 new product
- IMS – DVB-H interconnection demonstration
- 20 contributions to ETSI TISPAN standards