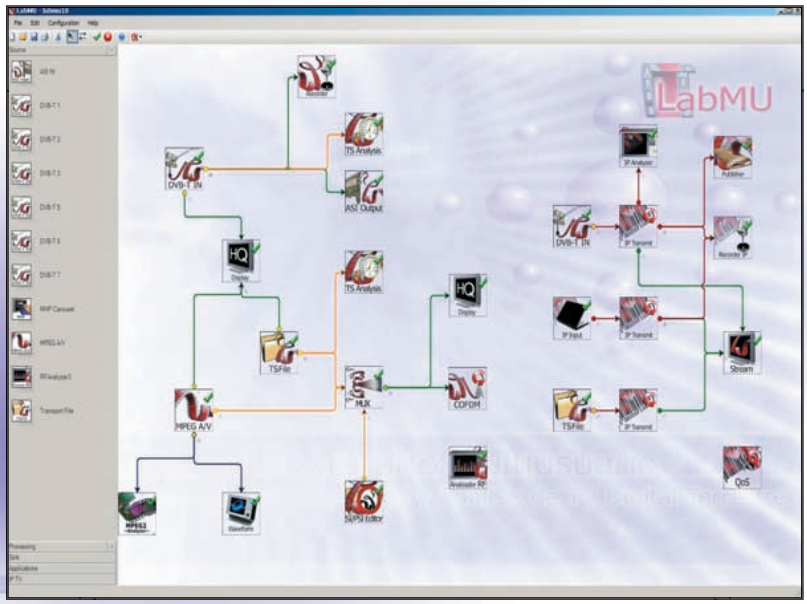
LabMU

Xpertia Soluciones Integrales

LabMU is the groundbreaking Multiuser Digital TV Laboratory designed to get the most out of your training or investigation environments, by optimizing the accessible resources and users with limited budgets.
LabMU provides a unique Digital TV environment, managed and controlled by means of a revolutionary, friendly and visual Graphical User Interface.
Universities, Technical Schools, Companies and Investigation Institutions will benefit from the ease of use, intuitive operation, reduced hardware, simultaneous user operation and modularity of LabMU, which can be adapted to any budget and expanded to as many users as desired.



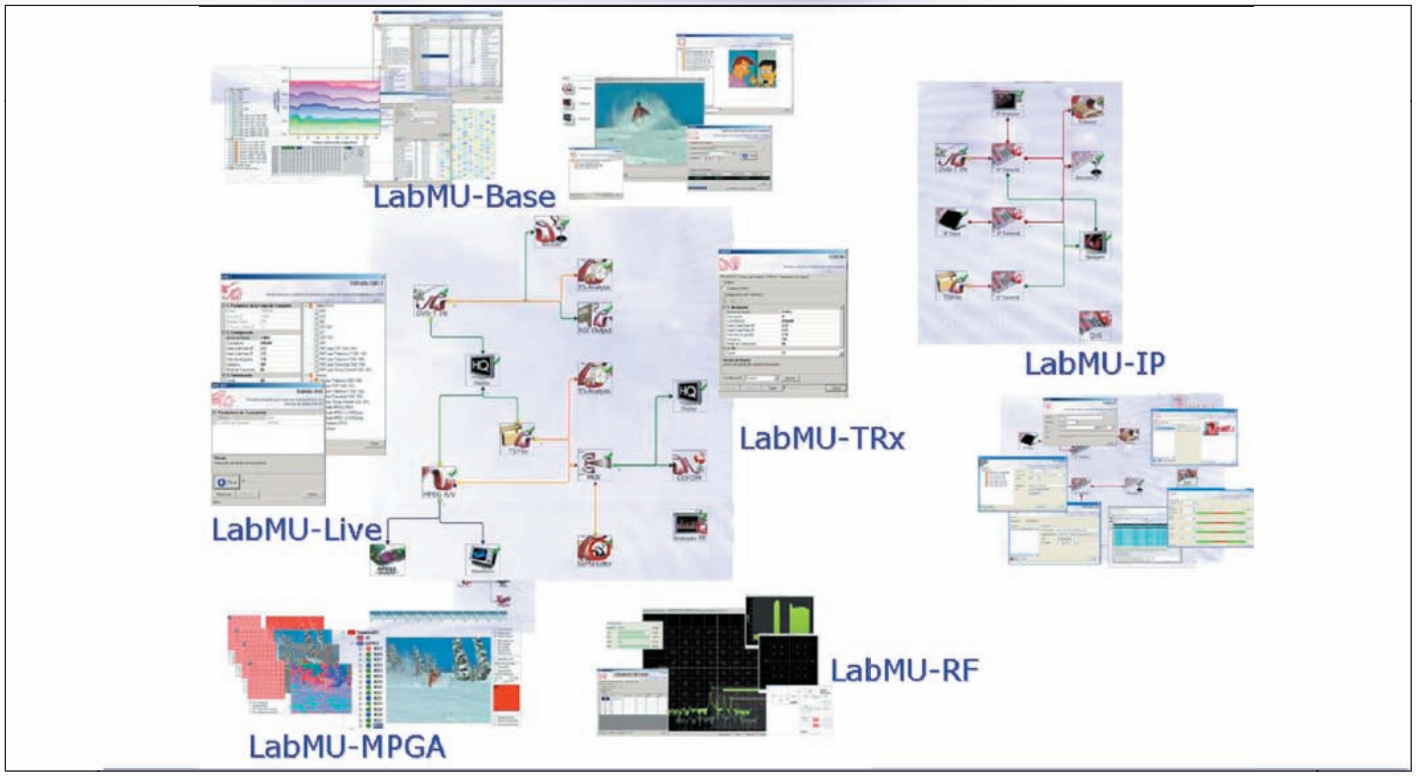
Key benefits

- Fully simultaneous multiuser operation.
- Adjustable to suit low budget training environments.
- Modular, scalable and flexible configurable environment.
- Reduced amount of hardware needed.
- Unique, friendly and fully visual application.
- Client/server architecture that allows multiple simultaneous access to the system and optimizes hardware use
- Specially designed to suit DTV technical training environments.

Features

- DTV services reception.
- TS recording from live sources.
- Real time and off line TS analysis with SI/PSI interpreter, packet dump, PID map, bitrate real time analysis.
- Intuitive and fully graphical multiplexing of TS and SI/PSI editing.
- Baseband and COFDM modulated TS transmission to DVB-T networks.
- RF analysis of COFDM signals: constellation, spectrum diagram, impulse response, and quality/level indicators (C/N, MER, BER, PER).
- Display of services in DVB-T transmissions.
- TS file playback: baseband or COFDM modulation.
- Full TS tree interpreter for real time sources and file sources.
- MPEG file sources in program stream format.
- MPEG video visual analysis available through VISUALmpeg analyzer.
- Integrated Waveform Monitor for baseband video analysis.
- MPEG2 and H.264 video encoding using Mainconcept Reference Encoder.
- Channel Simulation option for DVB-T channels.
- IPTV network setup in simultaneous multiuser mode.
- IP streaming of services from real time sources and file sources. Multicast, Unicast, and RTSP.
- IP traffic analysis of multicast, unicast, or RTSP streams.
- Recording of IPTV services.
- Use of IPTV sources.
- QoS module for recreation of real conditions in IPTV transmissions.
- Real time inputs: DVB-T. ASI, and IP.
- Real time outputs: ASI, COFDM, IP.

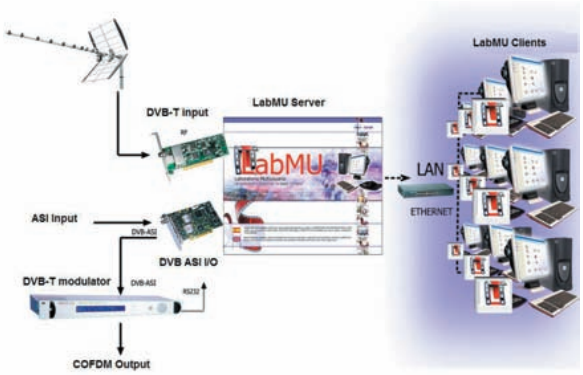
LabMU



Available options

- **LabMU-Base:**
  Basic configuration of the system. All functionalities available from file sources.
- **LabMU-Live:**
  Allows operation with live sources (DVB-T and ASI) and baseband transmission.
- **LabMU-MPG:**
  MPEG2 and H.264 encoding of user content.
- **LabMU-MPGA:**
  MPEG visual analysis of MPEG2 and H.264 video sequences.
- **LabMU-WF:**
  Waveform monitor and vectorscope for MPEG2 content.
- **LabMU-TRx:**
  Allows COFDM modulation of Transport Streams stored in the system.
- **LabMU-RF:**
  Enables RF analysis of COFDM modulated signals, with option of channel simulation.
- **LabMU-IP:**
  Transmission, analysis, reception, display of contents in an IPTV environment.
- **LabMU-MHP:**
  Generation of OC for transmission of user interactive applications.
- **LabMU-HD:**
  Use of HDTV contents in LabMU.

System Architecture



Server

- Linux based.
- PCI cards for live sources.
- Communication with external devices through ethernet, RS232 and USB.
- IP based communication with client applications.

Client

- Windows based.
- .NET environment.
- Minimum PC requirements: Core 2 Duo @2.6GHz.
- IP based communication with server.
- Simultaneous operation from several client PCs.