

## CASE STUDY - EMBEDDED SYSTEMS

# The state of the art fiber-optic measurement instrument

HERMES SoftLab acted as a part of the new product development team for a major vendor and contributed the embedded software solution for one of the most sophisticated optical network test instruments.

### The challenge

A few years ago, the fiber-optic networks and the communication speeds that they provide were only possible in a very vivid imagination. Today, they have become a popular reality, causing previously unmet maintenance and testing challenges.

The pace with which they grow has to be met with supporting instruments, which have to be reliable and user-friendly.

### The solution

The HERMES SoftLab solution for an Optical Time Domain Reflectometer, a fiber-optic network test instrument, helped it to become the best seller in its category, with an award winning user interface.

For the new generation OTDR, our team of embedded systems specialists took part in the development of:

- Operating system
- Graphic environment
- Help
- Communication interfaces
- Printing and report generation subsystem

### Target environment

- Microcontroller is MIPS
- Real Time Operating System VxWorks
- Zinc graphics environment for VxWorks
- Communications: TCP/IP, USB, RS-232

### Development technology

- Tornado 2 IDE
- GNU gcc cross-compiler
- Windows NT
- Microsoft Visual C/C++



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