

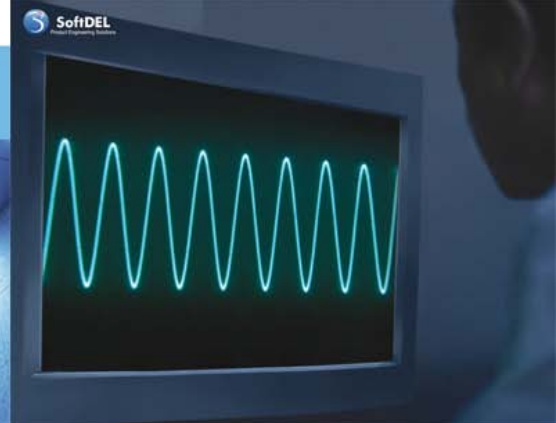


factory &
process automation
solutions

building automation
solutions



SoftDEL



test & measurement
solutions

Partner to global industrial product companies for control & connectivity based engineering solutions.

BACnet Test Laboratory

The Customer

BACnet International (BI) is an organization that encourages the successful use of BACnet protocol in building automation and control systems through interoperability testing, educational programs, and promotional activities. BI members include companies involved in the design, manufacturing installation, commissioning, and maintenance of control equipment that uses BACnet protocol for communication, as well as other interested parties.

The BTL is an organization within BI that includes the BTL working group and the BTL Manager. The BTL maintains an official listing in print and at its web site of those products tested and authorized to display the "BTL" mark. BTL authorizes display of the BTL mark on and with a product or products that have successfully completed the BTL's tests.

Customer Need

The need of BACnet international was to setup an efficient, comprehensive, economical certification process that the industry manufacturers can use to bring BTL certified products to the market.

SoftDEL Solution

SoftDEL put together the framework for certification testing of BACnet devices. This framework includes Hardware lab setup, 3 test platforms, Interoperability testing ability, network infrastructure to support multiple physical media and network layer testing (TCP/IP, MS/TP).

Phase I : Automated & Manual Testing Tool Enhancement

SoftDEL enhanced and updated the automated python based scripting engine of BACnet International's VTS/BITS tool.

Phase II : Lab Setup

Power: The lab can support multiple power sources: 230V AC, 120V AC, 24V AC and 24V DC.

Networking: TCP/IP and MS/TP based networking with 3 parallel sub-nets to simultaneously test devices for MS/TP and TCP/IP compatibility as well as to test routing between TCP/IP and MS/TP networks.

Interoperability: Pre-certified BACnet devices with multiple profiles to be used to test and certify vendor and device interoperability.

Monitoring: Parallel workstations running test monitoring tools and to initiate automated and manually run tests.

Phase III : ISO Certification

The lab follows ISO17025:2005 processes and will be formally certified in December 2009. This enables the lab to now process and certify devices slated for the European markets.

Impact

- Efficient, Flexible, Economical certification & testing process to allow more device manufacturers to ensure compliance with the standard.
- Higher acceptance of BACnet in the Building Automation industry