

## Major BACnet projects using Sauter's know-how

### BACnet station

- University Library, Rostock, Germany
- Research Centre, Jülich, Germany
- Research Centre, Karlsruhe, Germany
- Exhibition Centre, Nuremberg, Germany
- Ludwig Maximilians University, Martinsried, Munich, Germany
- Technical University, Darmstadt, Germany
- Administration Centre, Wiesbaden, Germany
- Viysia Bank, Bagalore, India
- Boodang Subway, Seoul, Korea

### BACnet client, management level

- Technical University, Darmstadt, Germany
- Administration Centre, Wiesbaden, Germany
- Swiss Federal Institute of Technology, Zurich, Switzerland
- St. James' Hospital, Leeds, England
- Ayun Tambiento, Benidorm, Spain
- Pompeu Fabra University, Barcelona, Spain
- Sassari Yacht Club, Italy
- Viysia Bank, Bagalore, India
- Boodang Subway, Seoul, Korea
- Moevenpick Hotel, Istanbul, Turkey
- T.C. Ziraat Bank, Istanbul, Turkey

**Recognised competence from Sauter:  
BACnet as a worldwide ISO standard.**



**Passed the test!**

Sauter's BACnet stations have been successfully tested at WSPLab in Stuttgart and are now certified to bear the BTL logo.

BACnet has been the worldwide ISO standard 16484-5 for open communication in the building automation industry since October 2003. The European test laboratory for European BACnet equipment is the WSPLab in Stuttgart (also recognised worldwide). For

Sauter, however, everything had already started, as usual, some time before. We have implemented over 100,000 BACnet data points since 1997 – experience which helps to reassure a project's investors.

**Sauter has been convinced of BACnet's qualities for a long time. Which will certainly reassure the customers.**

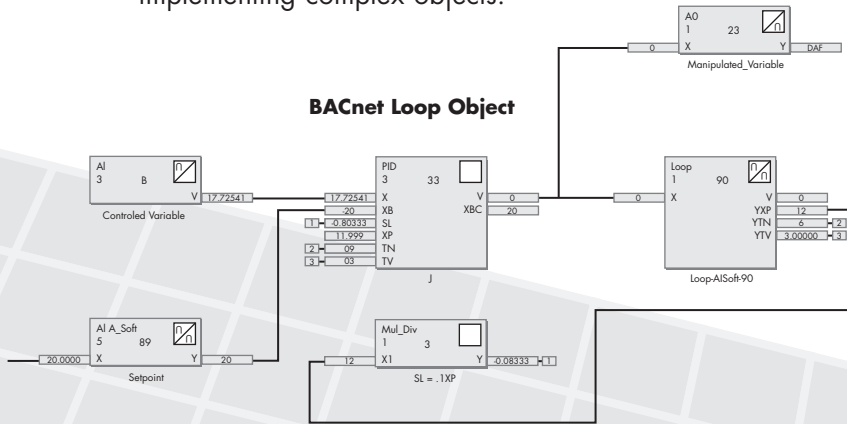
**Openness with full functionality**

The first BACnet projects had the task of providing the management level with process data from the automation stations. But that wasn't enough for us. Having gained positive experience from projects completed up to 2002, we took BACnet's object-orientated beginnings a stage further by implementing complex objects:-

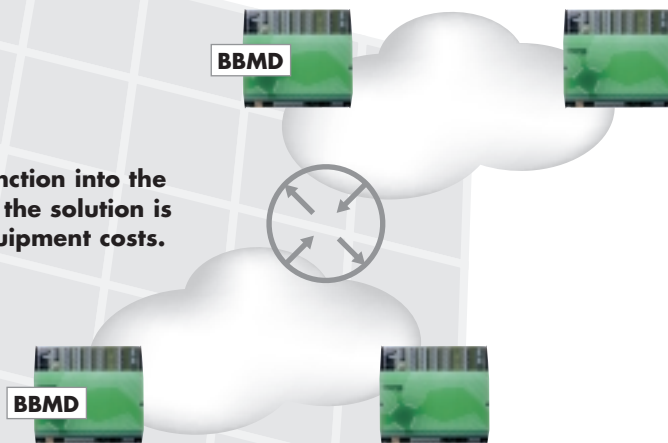
- Trendlog (records and portrays historical data)
- Schedule (time programme)
- Calendar (for special days/periods and special programmes)
- Loop (control loop)

**Using existing network structures**

Typical projects for BACnet are building complexes that are spread over a large area and constructed or refurbished over a period of several years. In such cases, the existing network is normally used for data transmission, which is provided and serviced by the operator himself. BACnet uses network management services to broadcast to all subscribers, but these services cannot be processed by standard Ethernet routers in order to link different networks. The solution is called BBMD (BACnet Broadcast Management Device).



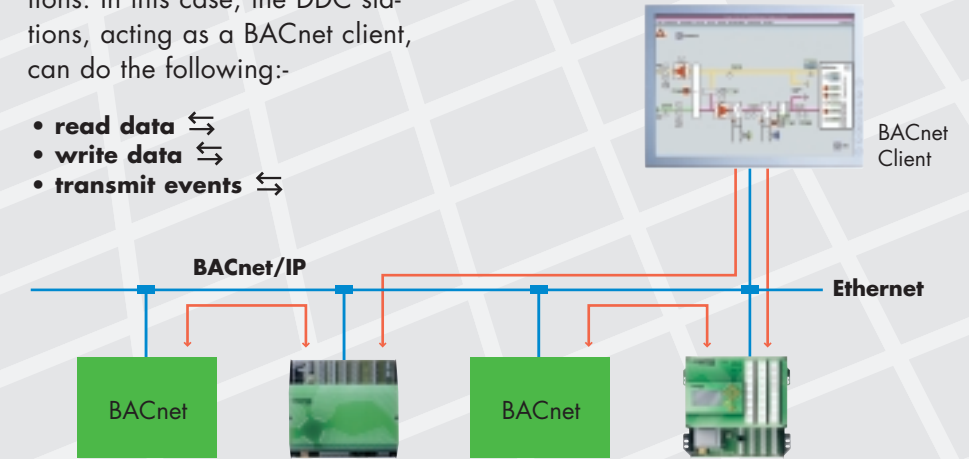
By integrating the BBMD function into the BACnet automation station, the solution is simpler and reduces the equipment costs.



**Automation station as BACnet server and peer-to-peer data exchange**

Automation stations can be employed as a BACnet server, and there are now so-called peer-to-peer services available for data exchange between the DDC stations. In this case, the DDC stations, acting as a BACnet client, can do the following:-

- read data ⇄
- write data ⇄
- transmit events ⇄



**Connecting to the past and opening up for the future**

The older EY2400 system and the present EY3600 system can be connected via proprietary communication. In addition, a native BACnet client is provided in the Sauter management level. So existing systems are retained and the project is opened up for the future.

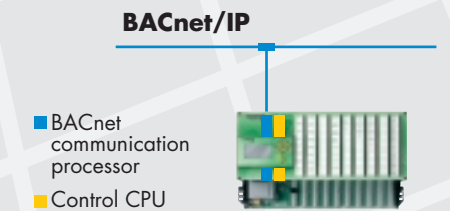
**BACnet Operator Workstation (B-OWS) novaPro Open, native BACnet Client**

- Schedule/Calendar
- Trendlog
- Alarm management



**Fusion of company solutions and BACnet**

Existing objects can always be opened up for BACnet by fitting a BACnet communication processor. Using a double-processor solution like this, the performance



of a powerful 32-bit central unit becomes available for both local automation and BACnet communication. The amount of work involved is identical for both solutions, i.e. automation stations with BACnet technology do not cause any additional labour costs.