



**BS**

## **BACnet stack | Embedded**

The be-all and end-all for developing  
BACnet-compliant applications



## BACnet stack | Embedded

*The functional scope of the BACnet Stack | Embedded is suitable for the development of BACnet servers according to all common profiles such as: B-SS, B-SA, B-ASC, B-AAC ... etc. Datalayer: IP, Ethernet, MS/TP and BACnet/SC. It supports developers in the implementation of BACnet-compliant applications that run on embedded applications. The time that this saves in the development process usually amounts to several months.*

*The stacks from CS-Lab as well as our services take the pressure off both manufacturers and developers alike, who need to implement the communication standard, and this makes their work a whole lot easier. Of course, every revision to the standard is implemented into the software stack. The current revision, Revision 22, with the brand-new security infrastructure Secure Connect (BACnet/SC), is already available for programming.*

## DISCOVER FUNCTIONS

### **BACnet-compliant routines for operation**

Routines of the BACnet stack | Embedded for micro-controllers take over the standard-compliant operation of the BACnet protocol. BACnet Protokolls.

### **Convenience:**

The development of standard-compliant applications is made much easier.

### **Flexibility:**

Automation stations can be programmed in the same way as miniature devices (e.g. heat meters).

### **Many details are automatically processed:**

This enables the functionality of the BACnet objects to be implemented as an object database. In addition, various mechanisms and fallbacks for obtaining values from field devices have been built into the code.

### **Powered by MBS**

With the BACnet stack | Embedded for microcontrollers, CS-Lab is continuing the functionality and reliability of the MBS software.

### **Protocol Revision 22**

The CS-Lab BACnet stack | Embedded for microcontrollers supports Protocol Revision 22.

### **Typical device profiles**

Ideal for the implementation of: e.g. B-SS, B-SA, B-ASC, B-AAC-Profile ... etc.

### **Target hardware**

The BACnet stack | Embedded is intended for modern microcontroller systems, such as: 32-bit Arm Cortex-M4 or similar

### **Implementation without an operating system**

The BACnet stack | Embedded can be implemented without an operating system. Cooperation with typical real-time systems, such as Keil RTX, ThreadX or similar, is also possible.

## **TECHNICAL DATA**

### **Protocol conformity**

Combined with correct implementation by the user, the BACnet stack | Embedded for microcontrollers ensures accurate implementation of the BACnet protocol. BACnet Protokolls.

### **Integrated object database**

The BACnet stack | Embedded for microcontrollers provides you with ready-to-use solutions for all supported standard object types. High-level API for setting and calling ‚property values‘ and getting feedback on changes.

### **Implementation language**

Stack and API are implemented in standard C.

### **Static memory assignment**

All memory resources for the BACnet stack | Embedded for microcontrollers are assigned at the reset time.

### **System resources tailored to the required functions**

Macros control the optional functions in great detail. Code and memory resources are only issued for the configured product features.

## **SERVICES**

### **Stack source code available**

The complete C source code is included and will be delivered after the signing of a licence agreement with non-disclosure agreement (NDA).

### **Training**

All licence models include one day of training at CS-Lab in Krefeld

### **Optional:**

#### **Pretesting Services**

Pretesting according to BTL in preparation for your certification.

#### **Maintenance contract and product support**

(e.g. regular updates).

#### **Additional development services**

We also offer individual development services for the BACnet stack | Embedded – from the initial idea to completion.

## BACNET STACK | EMBEDDED DATALAYER

- IPv4, IPv6, BACnet/SC
- Ethernet
- BACnet MS/TP

The functional scope of the stack is suitable for the development of BACnet servers according to profile:

z.B. : B-SS, B-SA, B-ASC, B-AAC ... etc.

The current revision 22 with the brand new security infrastructure Secure Connect ( BACnet / SC ) is already available for programming.

## LICENCE MODELS

The BACnet stack has been created for the development of BACnet-standard-compliant applications. The complete C-source code is only issued upon signature of a non-disclosure agreement (NDA). All licence models include one day of training at CS-Lab in Krefeld.

### Library Leasing p.a.

The programme library is available for use for a limited period of time.

### Library Buyout

The programme library is available for use on a permanent basis.

### Source Buyout

The source code is permanently available for use.

## OPEN-SOURCE SOFTWARE LICENCES

CS-Lab Software may contain open source software. A list of the possible software and the license conditions for the software packages can be found at: [http://www.cslab.de/open\\_source\\_informationen](http://www.cslab.de/open_source_informationen)

You would like to buy the BACnet stack?

No problem.

We will be pleased to take your order by email :

Buy now

or by telephone:  
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