

# **BACnet stack | Linux (Posix)**

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



## **BACnet stack | Linux (Posix)**

The functional scope of the BACnet stack | Linux (Posix) is suitable for the development of BACnet servers and clients according to all common profiles such as: B-BC, B-SS, B-SA, B-ASC, B-AAC, B-OD, B-OWS, B-AWS ... etc. Datalayer: IP, Ethernet, MS/TP and BACnet/SC. It supports developers in the implementation of BACnet-compliant applications that run on embedded applications. – this applies to both 32-bit and 64-bit 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 23, 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 | Linux (Posix) take over the standard-compliant operation of the BACnet protocol.

#### **Convenience:**

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

#### Flexibility:

Large control systems can be programmed just like automation stations or small devices (such as heat meters).

#### **Bandwidth:**

Implementations for a wide range of operating systems are available, from old Windows systems to various Linux versions.

#### 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 23**

The CS Lab BACnet stack | Linux (Posix) supports Protocol Revision 23.

#### Typical device profiles

Ideal for the implementation of: e.g. B-BC, B-SS, B-SA, B-ASC, B-AAC, B-OD, B-OWS, B-AWS ... etc.

#### Auto-fallback

For reading out arrays element by element without time-consuming intervention in the source code

### **TECHNICAL DATA**

#### **Backup & Restore**

Backup and restore devices with just one "click".

#### **CoV** registration

Automatic value change of data points, eliminating complex programming of value changes.

#### **Integrated object database**

The BACnet stack | Linux (Posix) provides you with ready-to-use solutions for all supported standard object types. External BACnet service requests to objects and their properties can be fulfilled without interaction. High-level API for setting and calling ,property values' and getting feedback on changes.

## Implementation language

Stack and API are implemented in standard C.

## **SERVICES**

#### **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 | Linux (Posix) Controller – 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 and clients according to profile: e.g B-BC, B-SS, B-SA, B-ASC, B-AAC, B-OD, B-OWS, B-AWS ... etc.

The Linux (Posix) version is provided in Complete, Server, and Client versions and is available as follows:

## **LICENCE MODELS**

The BACnet stack has been created for the development of BACnet-standard-compliant applications. The complete C-source code is issued upon the signature of the licence agreement. 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: <a href="http://www.cslab.de/open\_source\_informationen">http://www.cslab.de/open\_source\_informationen</a>

You would like to buy the BACnet stack?

No problem.

We will be pleased to take your order by email:

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or by telephone: +49 21 51 72 94-0

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