

EIB Driver for Linux

The EIB Driver for Linux is optimized for application in visualizations, even with high data volumes.

Implementation Notes

- Implementation of the "small EIB profile", i.e. on link layer level every connect is followed by a disconnect.
- Own performant¹ process image.
- The most important API functions are:
 - RBU: Read Buffered (reading from the process image²).
 - RNB: Read Non Buffered (reading directly from the EIB/KNX).
 - LIS: listener (log-on for datagram triggered output, e.g. for alarms).
 - WRI: Write (writing directly to the EIB/KNX).
- Self-learning process image due to a permanently active Bus Monitor mode.
- The process image is designed for the storage of 32 K group addresses.
- 30 parallel client connections and 35,000 listeners possible via the API.
- Process connection: serial port, TP-UART
- Client communication: TCP, routable
- Further, a frame rate management is available in order to avoid EIB/KNX overload by the EIB Driver for Linux.
- Utilization of modifiers, i.e. which physical address has made the last change to the group address?
- Utilization of a quality statement³ concerning the current value of a group address in the process image.

Licensing

The EIB Driver for Linux is offered within two different licensing models. Common to both licensing models is their binary distribution.

EIB Driver for Linux Platform License

The EIB Driver for Linux Platform License requires a one-time lump sum payment and includes the following:

- EIB Driver for Linux for unlimited use in systems and products of a specific customer under a specific kernel version and a specific processor family.

- EIB Driver for Linux SDK including headers, libraries, a simple example of a C-program and documentation.
 - The API implementation is written in C.
 - An API implementation in Java (JNI) is available as an option by agreement.

EIB Driver for Linux (Standard License)

In the standard version the EIB Driver for Linux is delivered with a license requiring single licensing. This license is limited to the computer, on which the EIB Driver for Linux is installed.

- EIB Driver for Linux for the exclusive use on one single system.
- Separately licensed EIB Driver for Linux SDK including headers, libraries, a simple example of a C-program and documentation.
 - The API implementation is written in C.

Supported Kernel Versions

The kernel versions⁴ currently supported are:

- 2.2 with pthreads
- 2.4 with LinuxThreads or NPTL
- 2.6 with NPTL or LinuxThreads

Supported Platforms

The platforms⁵ currently implemented are:

- i386 and compatible (kernel 2.2, 2.4 and 2.6)
- ARM (kernel 2.4, only LinuxThreads)
- SDK also for: Windows 9x, NT 4.0, 2000, XP, Vista

Options and Accessories

- A demo version of the EIB Driver for Linux (i386) and the EIB Driver for Linux SDK (i386) is available for download:
 - <http://disch-systems.de/dl/eib-driver.html>
- EIB Driver for Linux (Standard License, i386):
 - <http://disch-systems.de/EDRV00/1L001.html>
- EIB Driver for Linux SDK (Standard License, i386):
 - <http://disch-systems.de/EDRV00/2LSDK.html>
- TP-UART Interface for direct connection to the serial port of a PC:
 - <http://disch-systems.de/TPUART/1P002.html>

Related Link

- FAQ's concerning the EIB Driver for Linux (Standard License, i386) and the EIB Driver for Linux SDK (Standard License, i386):
 - <http://disch-systems.de/faq/eib-driver.html>

¹ for example, with a 3GHz Pentium IV with kernel 2.4, LinuxThreads, running KDE and two vmware machines during a test with three parallel bash scripts about 300 read requests were possible at about 90 link connections and disconnections per second.

² if no value is available in the process image, an RNB is executed in the background.

³ possible states are: good, bad, unknown.

⁴ further kernel versions available by agreement.

⁵ further platforms available by agreement.