

LINUX systems are an increasingly common first choice in industrial environments due to their exceptional stability and flexibility. Troublefree communication is a crucial aspect for which a fitting solution has to be found. In many cases, the LINUX systems are expected, among other things, to communicate with older generations of SIMATIC controllers. We have developed two products specifically for this purpose: SOFTNET S7/LINUX and SOFTBUS/ LINUX.

The challenge

One of the most daunting challenges confronting information technology entails filtering heterogeneous data out of a production facility, processing and delivering it promptly to the relevant decision makers. Therefore classic ERP systems have to be connected to MES systems and devices at the automation level. In many companies the production areas have yet to be fully integrated into the corporate LAN. Legacy land-scapes with different hardware and software platforms frequently limit the possibilities for cross-system information exchange – leading to the development of IT islands. Consistent connection of the LINUX systems that are increasingly installed in these areas to the industrial communications network is vital.



Seven good reasons for SOFTNET S7/ LINUX and SOFTBUS/LINUX

- Easy integration of applications into existing software
- Automatic handling of temporary errors in communication
- Failsafe communication down to application level
- Scalable redundancy
- Secured transaction transmission to the database
- Defined restart after a system failure
- No lost or duplicate jobs

SOFTNET S7/LINUX SOFTBUS/LINUX

Troublefree communication in an industrial LINUX environment

Industrial Services

SIEMENS

Our solution

We bring communication capability to IT islands in an industrial LINUX environment – with SOFTNET S7/LINUX, SOFTBUS/LINUX, and SOFTBUS/LINUX RED.

SOFTNET S7/LINUX

This product ensures communication with SIMATIC S7 using the S7 protocol. A C/C++ application programmer interface is offered to users. The S7 protocol is optimized via the SAPI S7 interface for communication with SIMATIC S7 and SIMATIC M7 – ensuring easy and flexible access to data (DB, A, E, M).

SOFTBUS/LINUX

This add-on lets you communicate with SIMATIC S7 or S5 – or even across different computers and operating systems – thanks to a simple, standardized interface with just six calls.

A C/C++/JAVA application programmer interface is offered to users. SOFTBUS/LINUX supports the following communications protocols:

- SEND/RECEIVE
- HTB (fetch/write)

The resulting virtual bus allows all nodes to exchange data consistently across different platforms – regardless of the underlying network protocol.

SOFTBUS/LINUX RED

This product facilitates secured transaction communication with SIMATIC S5 and S7 via a simple interface. If maximum availability is essential, redundant communication can be provided as an option.



A C/C++/JAVA application programmer interface is offered to users. The following communication protocols are supported:

- SEND/RECEIVE
- HTB (fetch/write)
- APRED

Communication partners:

- SIMATIC S7 and S5 systems
- SOFTBUS applications
- Local on the same computer
- Cross-system to remote computers
- Oracle database (via a SOFTBUS-DB module)

No special hardware required

The Ethernet ports included in the PC are used as communication interface – separate hardware investments are not necessary.

Choice of protocols means added flexibility

TCP/IP, ISO on TCP (RC1006) and ISO are supported as communications protocols. Older SIMATIC S5 and S7 systems can thus be connected to a LINUX PC without any problem.

Ordering data

- SOFTNET S7/LINUX (TCP)
Order No.: 2XV9450-1CG00
- SOFTBUS/LINUX (TCP)
Order No.: 2XV9450-1CG08
- SOFTBUS/LINUX RED(TCP)
Order No.: 2XV9450-1CG02
- ISO protocol
on request

For further information, please contact the IT4Industry Team.

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Order-No.: E10001-T480-A123-V1-7600
Printed in Germany
Dispo-No.: 21646 K-No.: 37500
GB C-ISEC5208M01 DA 11071.5
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