

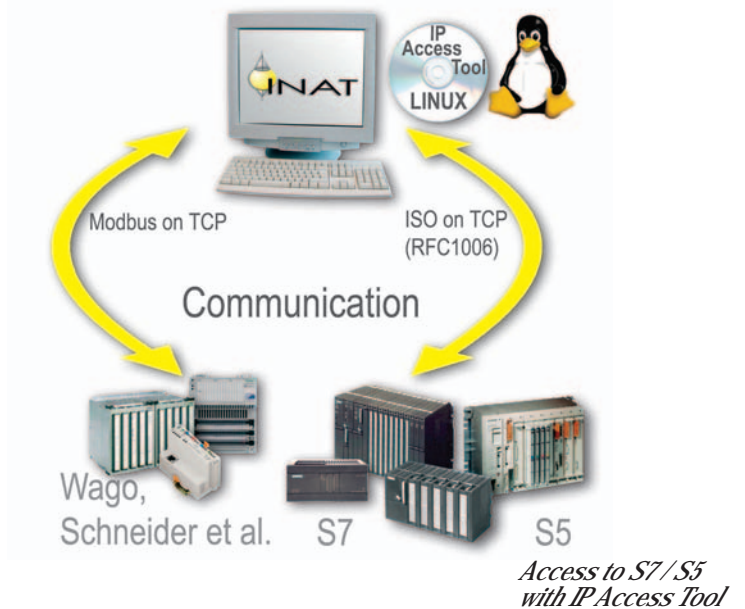
IP Access-Tool for Linux

With IP Access Tool for Linux you realise access to Siemens S7 and S5 PLCs via Ethernet by using the routines of the IP access library.

IP Access Tool provides – besides the routines for Send / Receive and Fetch / Write – easy-to-understand sample programs for the first implementations of a data transmission in source code.

Transmission of raw data, headers and checksums is part of the tool as well as the ISO on TCP protocol (RFC1006).

RFC1006 is especially used in combination with the programmable logic controllers Siemens Simatic® S7 and Simatic® S5.



Special Features

- Any number of connections, even from several tasks
- Active and passive connections
- Direct access to PLC elements:
 - Data blocks
 - Periphery
 - Flags
 - Counter
 - Inputs
 - Timer
 - Outputs
 - System data
- Easy implementation
 - Applications are very easy to create, because the tool comes as language-independant library (so called shared objects)
 - Optimised sample programs for the first implementations
 - Runs with standard TCP/IP of the operating system
- Several programming models such as multithreading, multitasking or polling are executable at the same time
- Slight system load
- Works with every network adapter, that works with Linux
- Tested for Linux Kernel 2.0 and higher

System Requirements

- PC with 80 x 86 Processor
- Installed network adapter
- GNU lib6 library: libc.so.6 (C library)
- POSIX Thread library: libpthread.so.0
- Operating system: at least Linux Kernel 2.x

Order Data

IP Access Tool for Linux

- including development tools for RFC1006
- including sample programs for access to S7 / S5 in source code

Product:	Order No:
Single user license	100-3040-02
Company license per company location	100-3040-51



Routines

SEND / RECEIVE DIRECT

General Functions

- Open driver
- Close driver
- Determine version of the driver
- Establish connection
- Establish RFC connection
- Remove connection
- Remove all connections
- Stop connection and restart with same parameters
- Test connection
- Fetch operational values of a station
- Set station parameters of a station
- Fetch IP basic setting
- Set IP basic setting
- Transmission error codes

Specific Functions

- Start send
- Poll send
- Start read
- Poll read

S5 PROGRAMMING INTERFACE

Connection handling

- S5 start connection IP
- S5 start connection IP OSI
- Stop connection
- Stop all connections
- Fetch revision states

Fetch active

- Start read from PLC
- Poll read from PLC

Write active

- Start write to PLC
- Poll write to PLC

Fetch passive

- Start fetch passive
- Poll fetch passive

Write passive

- Start write passive
- Poll write passive

S7 PROGRAMMING INTERFACE

Connection handling

- S7 start connection IP
- S7 start connection IP OSI
- Stop connection
- Stop all connections
- Fetch revision states

Fetch active

- Start read from PLC
- Poll read from PLC

Write active

- Start write to PLC
- Poll write to PLC

*Programming interface is the same
for other operating systems*