WAGO I/O SYSTEM 750

Linking up a WAGO 750-342 Ethernet Coupler to iFix V2.1 from Intellution

Application note

A102400, English
Version 1.0.0

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INNOVATIVE CONNECTIONS

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Every conceivable measure has been taken to ensure the correctness and completeness of this documentation. However, as errors can never be fully excluded we would appreciate any information or ideas at any time.

We wish to point out that the software and hardware terms as well as the trademarks of companies used and/or mentioned in the present manual are generally trademark or patent protected.

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1 Important comments

To ensure fast installation and start-up of the units described in this manual, we strongly recommend that the following information and explanation is carefully read and adhered to.

1.1 Legal principles

1.1.1 Copyright

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1.1.2 Personnel qualification

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1.1.3 Intended use

For each individual application, the components supplied are to work with a dedicated hardware and software configuration. Modifications are only admitted within the framework of the possibilities documented in the manuals. All other changes to the hardware and/or software and the non-conforming use of the components entail the exclusion of liability on part of WAGO Kontakttechnik GmbH.

Please direct any requirements pertaining to a modified and/or new hardware or software configuration directly to WAGO Kontakttechnik GmbH.

1.2 Range of validity

This application note is based on the stated hardware and software of the specific manufacturer as well as the correspondent documentation. This application note is therefore only valid for the described installation.

New hardware and software versions may need to be handled differently. Please note the detailed description in the specific manuals.

2 Description

These notes describe the use of the 750-342 Ethernet Bus Coupler in conjunction with the SCADA/HMI software iFix from Intellution.

3 Reference Material

3.1 WAGO 750-342 I/O Ethernet bus coupler

A detailed description is contained in the manual relating to the Ethernet bus coupler.

3.2 iFix from Intellution

The example program works with demo version 2.1.
More detailed information is available from Intellution.

4 Solution

4.1 Preparing the Ethernet bus coupler

The Ethernet bus coupler has to be initially assigned an IP address. This is done with the supplied BootP program. After the BootP server has been configured (IP address, MAC address) and started, a power-on reset is required on the Ethernet bus coupler. When the bus coupler is powered up, the I/O LED lights green and the error LED goes out.

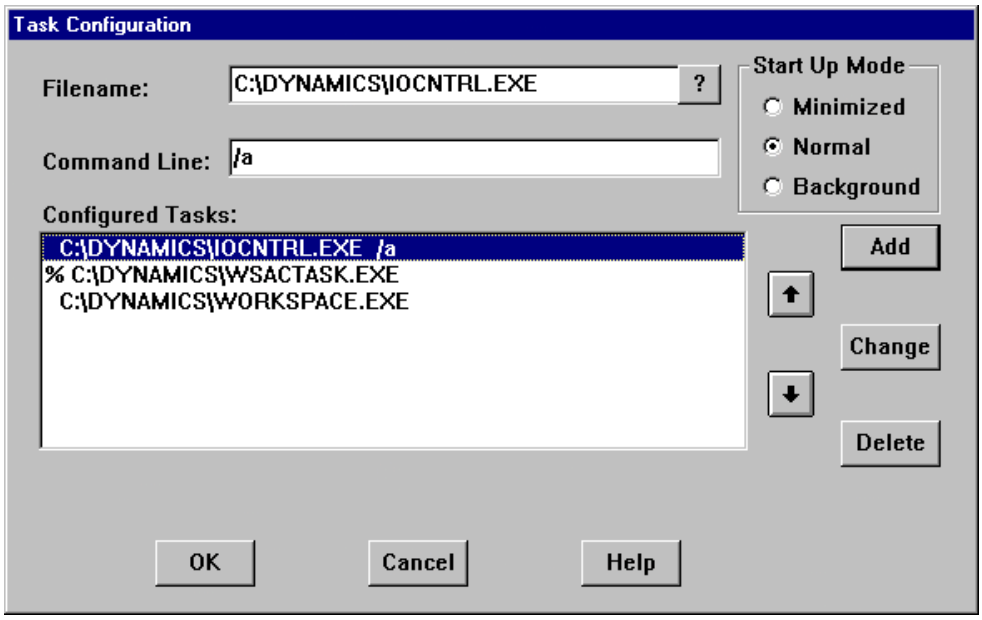
You can now test communication with the Ethernet bus coupler via the new IP address by using the ping command, e.g. ping 10.1.250.251.

5 Examples

The basic procedure in iFix is explained with the help of the example of digital and analogue process signals. The following steps must be carried out:

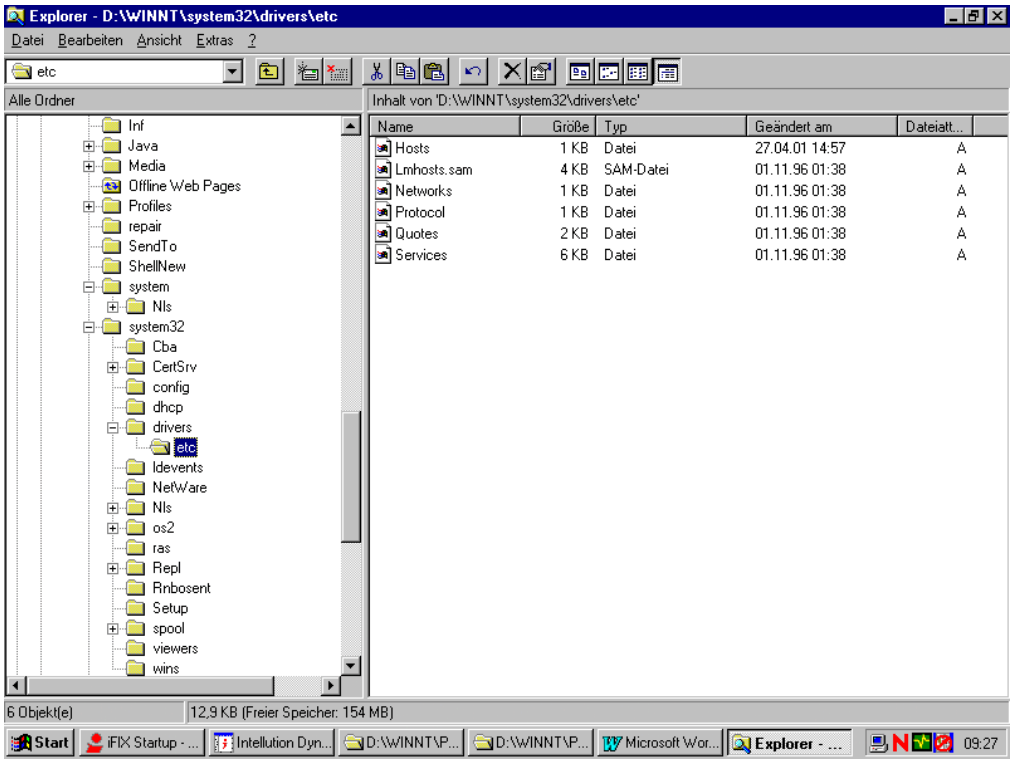
1. **Install the HBE v6.10h Ethernet driver from diskette.**

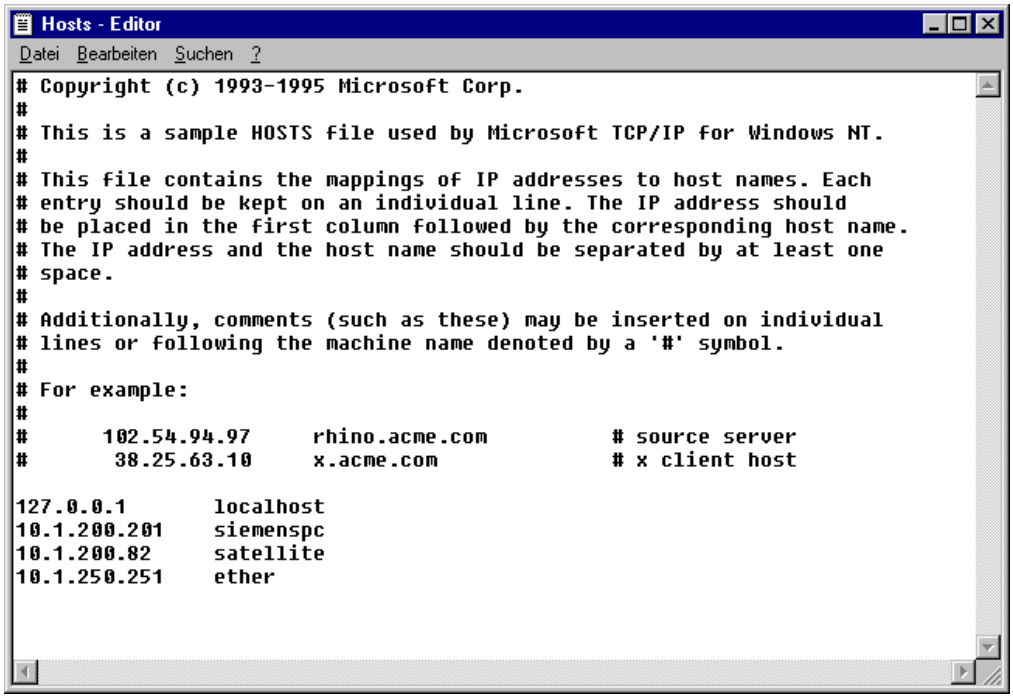
2. **Start iFix and, under Tasks in the Configuration menu, install the IOCNTRL driver as follows:**



3. **Edit the file Hosts in the Winnt\system32\drivers\etc directory and enter the address of the Ethernet controller.**

The last line has been added here.

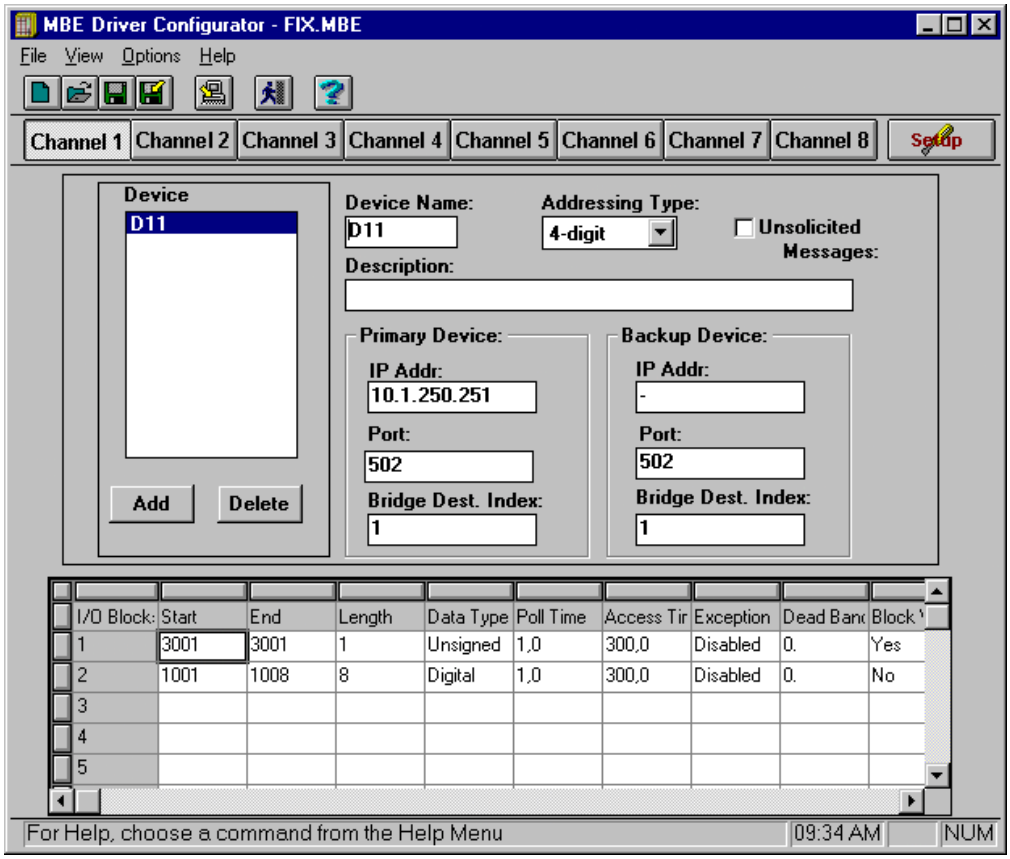


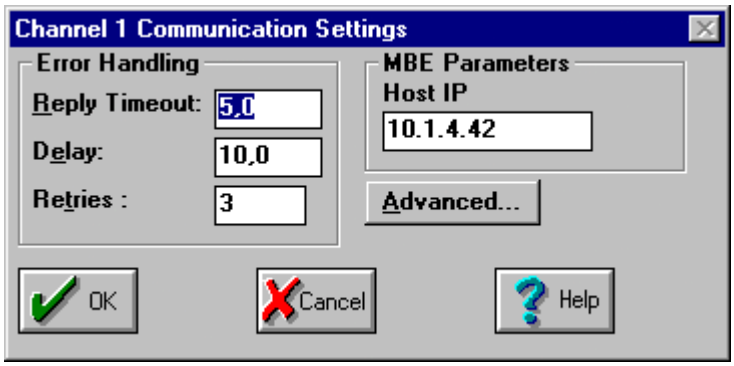


4. Configuring the driver

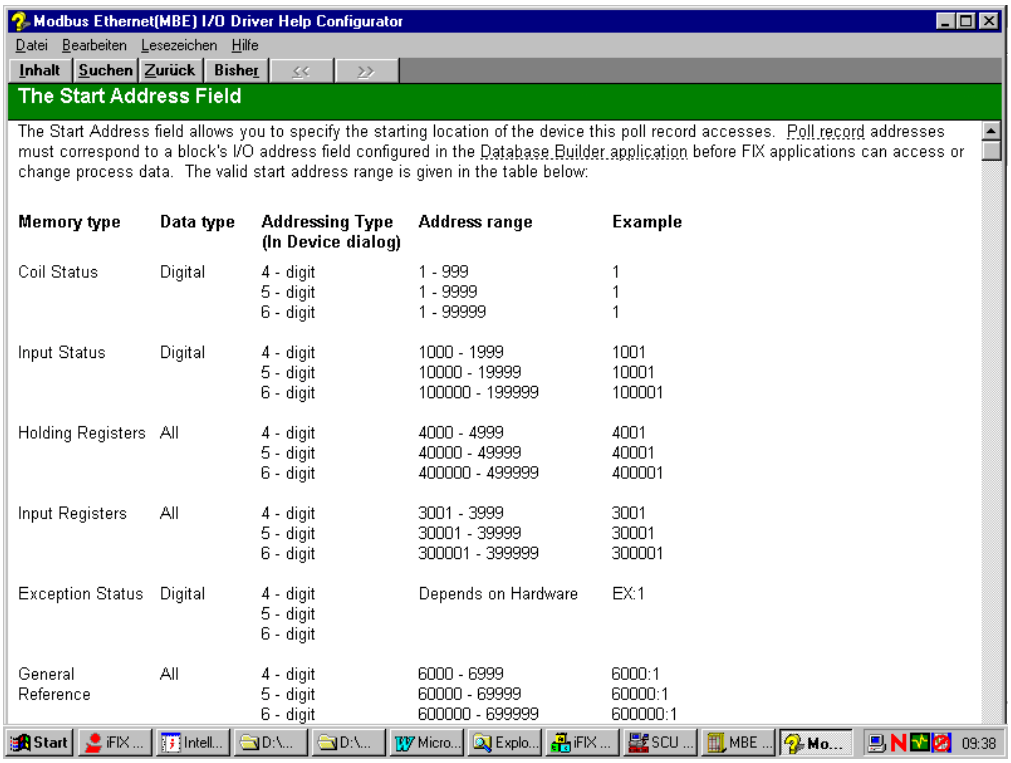
In the primary device box, enter the IP address of the Ethernet Controller. Use 502 as the port number. Set the Bridge Dest. Index parameter to 1.

In the bottom area of the screen, define a line for each of the various signal types, such as digital inputs or analogue inputs, according to the scope of the signals.





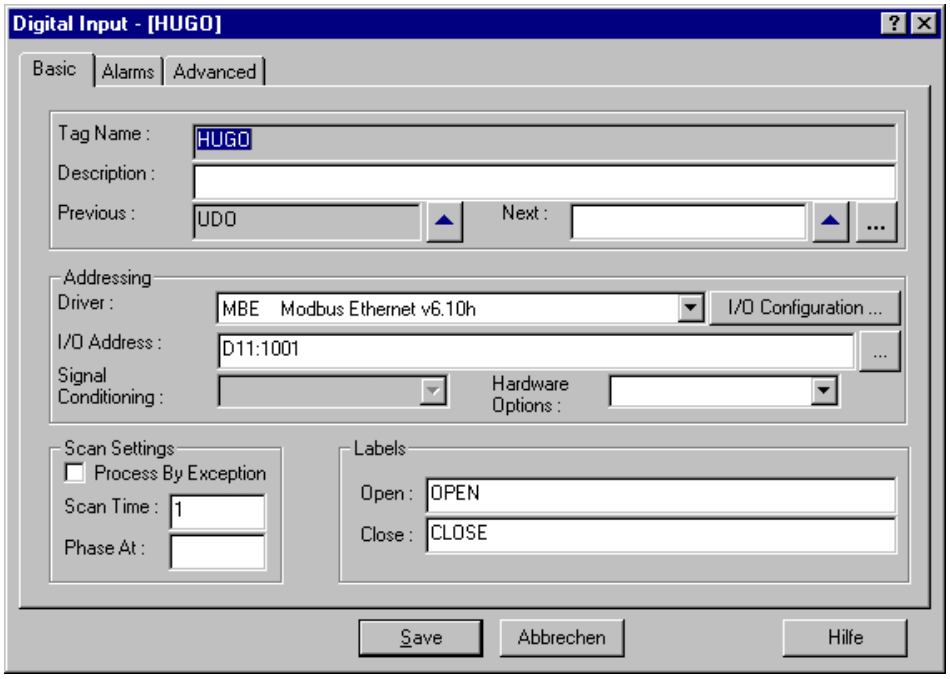
Click on the Setup button to open the following menu. Under Host IO, enter the address of the Ethernet card of the PC on which the iFix system is installed. The following help file can be called with F1 to provide assistance with defining the I/O block.



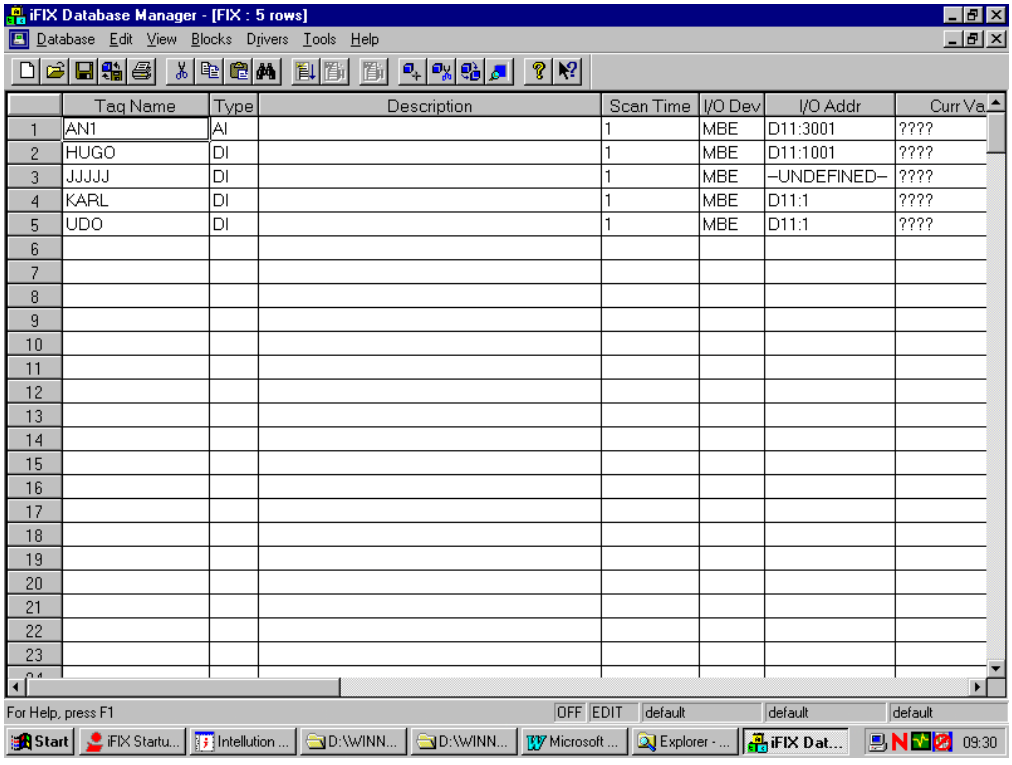
5. Defining tags

A tag name must be assigned. The driver to be selected is the MBE Modbus Ethernet driver. The precise address of the individual signals consists of the device name followed by a colon and a number, which, for digital inputs for example, specifies the individual input.

The current states of the different tags can be displayed in the Database Manager. The display is updated with Ctrl R.



6. **The current states of the different tags can be displayed in the Database Manager. The display is updated with Ctrl R.**



7. Address assignment:

- Digital inputs: 10001,10002,...
  (or 40001 ,40002,...for, in each case, 16 digital signals)
- Analogue inputs: 30001,30002,30003,...
  (or 40001,40002,40003,...)
- Digital outputs: 513,514,515,...
- Analogue outputs: 40513,40514,...

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