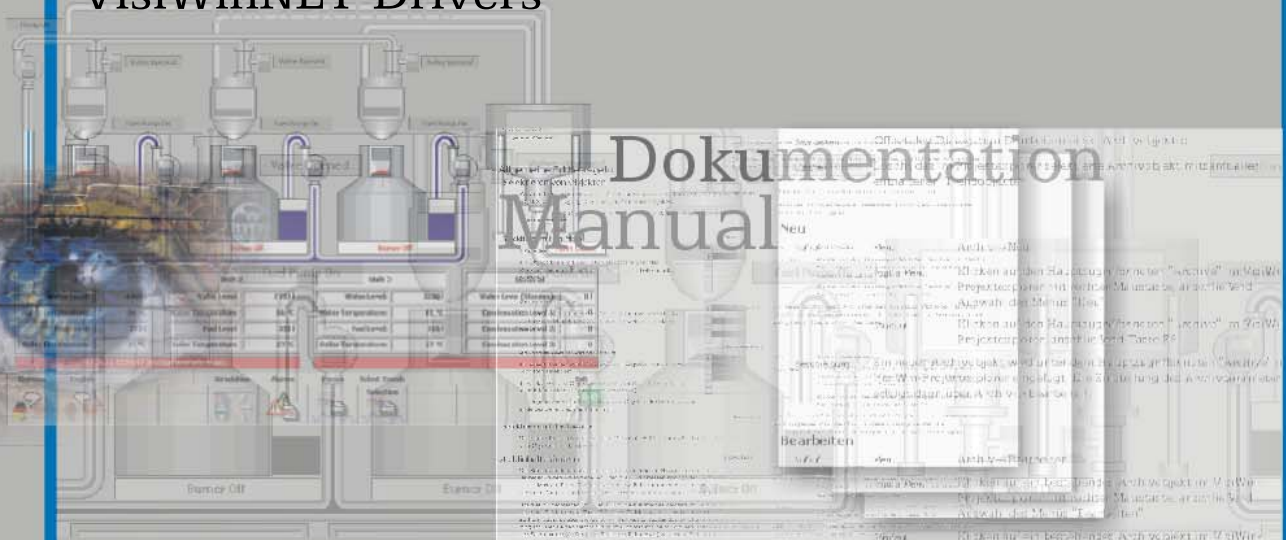


VisiWinNET 2005

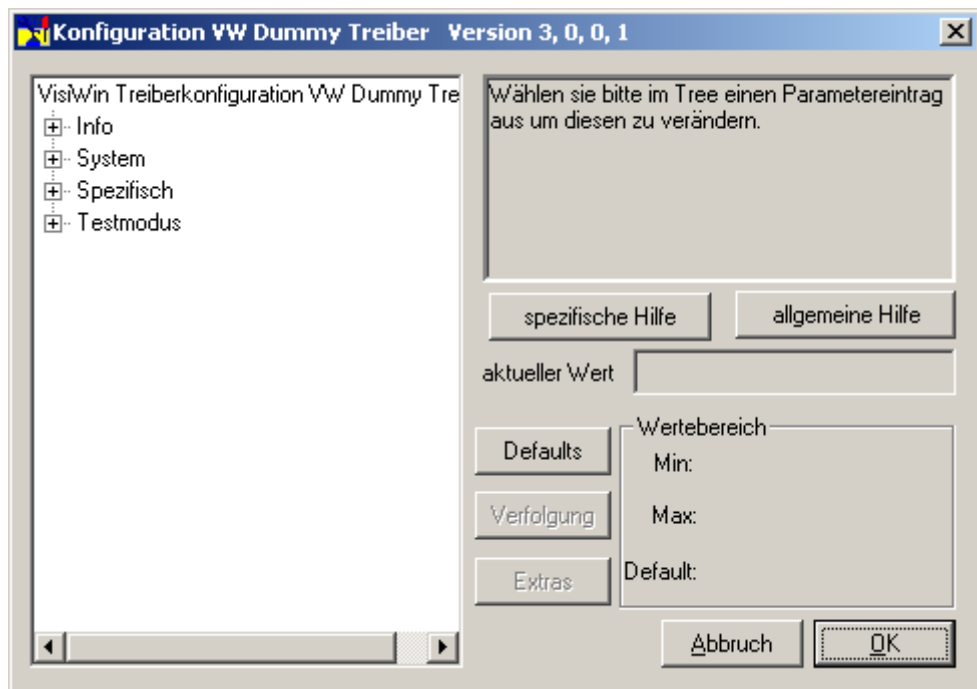
VisiWinNET Drivers



- **VisiWin**
- **VisiWinNET 2005**
- Common
- Class Library
- Systems
- Tools
- **Technical Informations**
- **Inosoft OPCServer**
- Basics and helping tools
- Protocols

VisiWinNET 2005

VisiWinNET Drivers



Typical VisiWin driver configuration dialog







The contents of this manual must not otherwise be used without explicit written consent from INOSOFT GmbH.

We have checked the contents of this manual for compliance with the described software. Discrepancies can, however, not be ruled out. For this reason we cannot guarantee full compliance. The contents of the manual are subject to regular checking for necessary updates/amendments. Such amendments will be made in the subsequent edition.

Suggestions for improvement are welcome.

Legend

In order to point out particular paragraphs the following symbols are used in the INOSOFT documentations:

	Attention	Passages with this sign should be read – and observed – with particular attention.
	Hint	Important paragraph “additional information”
	Tip	Many roads lead to Rome; here a shortcut is to be found.
	In work	Functions that are in preparation or already implemented but not yet prepared for documentation.
	Example execute	Instructions to be carried out in an example
	Observe result	Results to be observed with carrying out the exemplary instructions

© / ™ / ®

Windows®, Windows NT®, Windows 2000®, Windows XP® are registered trademarks of the Microsoft company.

Further product names marked ® are trademarks of the appropriate manufacturers.

INOSOFT GmbH created on

VisiWinNET Version: from 6.04.000

created on 08.06.2010

Contents

1 Preamble	1
2 VisiWinNET-Driver	2
2.1 Installation	3
2.2 Project Integration	3
2.3 Configuration	5
2.3.1 General Configuration Settings	5
2.3.2 Specific Configuration Settings	6
2.4 Diagnosis Dialog	6
2.4.1 Read Data	7
2.4.2 Groups	8
2.4.3 Variables.....	9

1 Preamble

About this manual

This manual contains specific information on VisiWinNET drivers. It describes the properties that all VisiWinNET drivers possess. Beside this document an individual document exists for every driver that refers to the protocol-specific particularities.

Questions and Problems

For technical questions and problems please contact your responsible INOSOFT agent or the INOSOFT GmbH Support under +49 (5221) 16 66 02 or email: Support@INOSOFT.com

Frequent questions and problems are dealt with on our homepage under www.inosoft.com

There you will also find a support area for direct contact with our Main Office.

2 VisiWinNET-Driver

The VisiWinNET drivers are the latest member of the communication components usable in the VisiWinNET visualization in the development history of VisiWin. Unlike their predecessors "VisiWin drivers" and "OPC servers" their implementation is based on the .NET platform. This makes them widely platform-independent. Therefore, VisiWinNET drivers can also be implemented under the CE operating systems without problems. Besides, the communication between driver and visualization loses the critical security risk moment. Microsoft has meanwhile given up the further development of DCOM as a communication base due to the numerous security problems, instead favoring "Remoting", an interface for Internet communication introduced with the .NET framework.

VisiWinNET drivers are communication components that control the data exchange between variable kernel and PLC. They contain the specific protocol of the used device. This documentation provides an overview of the handling of the VisiWinNET drivers. All information mainly describes the connection of the drivers with VisiWinNET.

The document describes the characteristics identical with all VisiWinNET drivers. This refers to the following subjects:

Installation	VisiWinNET drivers are not part of the visualization package. They contain their own setup.
Integration into a project	In the communication channels drivers are specified as communication components.
Configuration	VisiWinNET drivers contain a set of basic functions such as diagnosis functions that can be parameterized in the driver configuration. In addition specific parameters are offered for every driver that determine information such as the used interface.
Diagnosis	At runtime a dialog can be called up as a diagnosis tool in which the functions of the driver are displayed.

Parameters or particularities that depend on the individual protocol are described in the specific documentation provided with the appropriate VisiWinNET driver. This refers to the following subjects:

Particular characteristics	Description of the required environment characteristics (devices, operating system, ...) that are assumed for operability.
Specific configuration parameters	Specific parameters describing for example the connections with the PLC.
Specific address structure of the process variable	The address structure in the driver is mostly according to the variable syntax of the PLC. Therefore, the individual driver, too, contains a specific syntax.

2.1 Installation

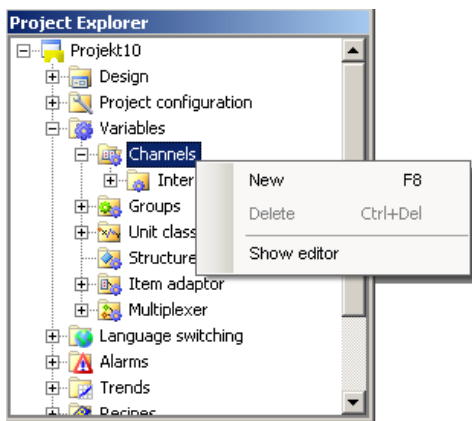
VisiWinNET drivers are always to be installed as an individual setup. (Exceptions with individual OEM versions are not to be mentioned here.)

The driver setup is to be carried out subsequent to the installation of the visualization.

Only after its installation the driver is available in the driver selection dialog of the development environment.

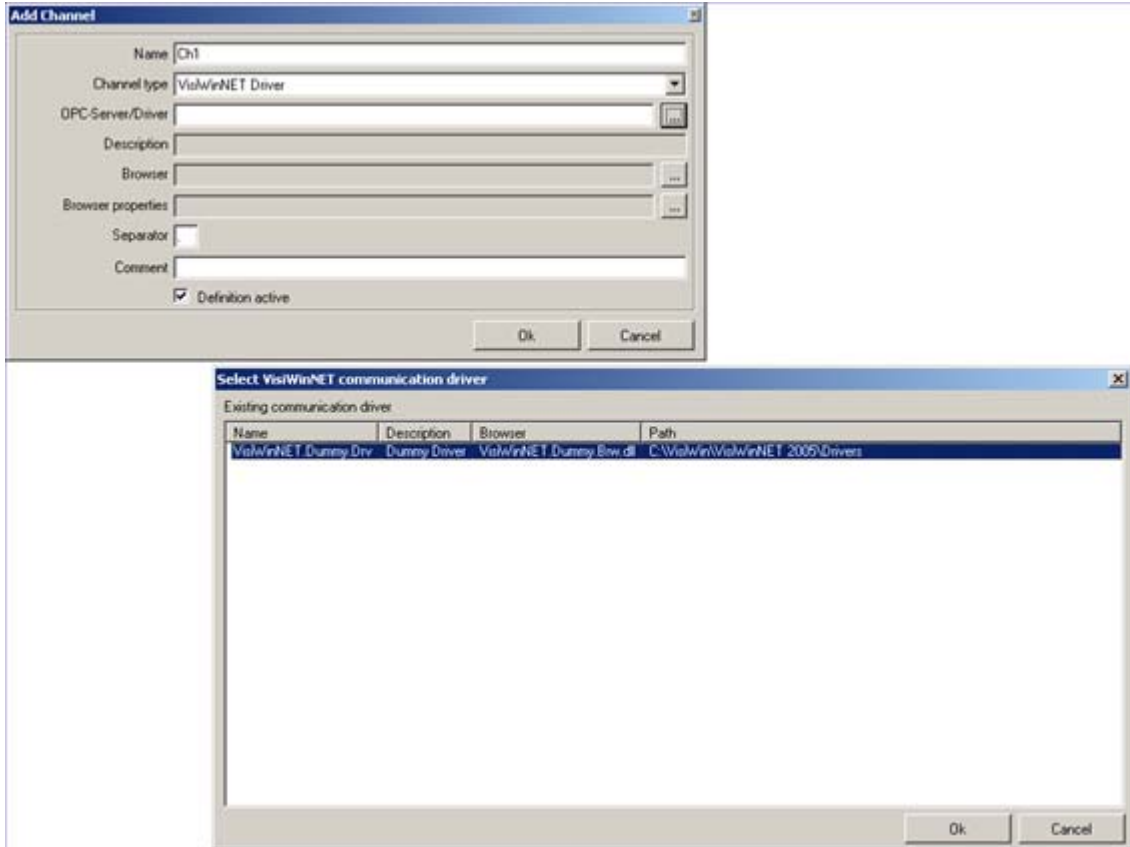
2.2 Project Integration

The integration of a driver is effected in the development environment of the visualization through the "Variables→Channels" node in the VisiWinNET project explorer.

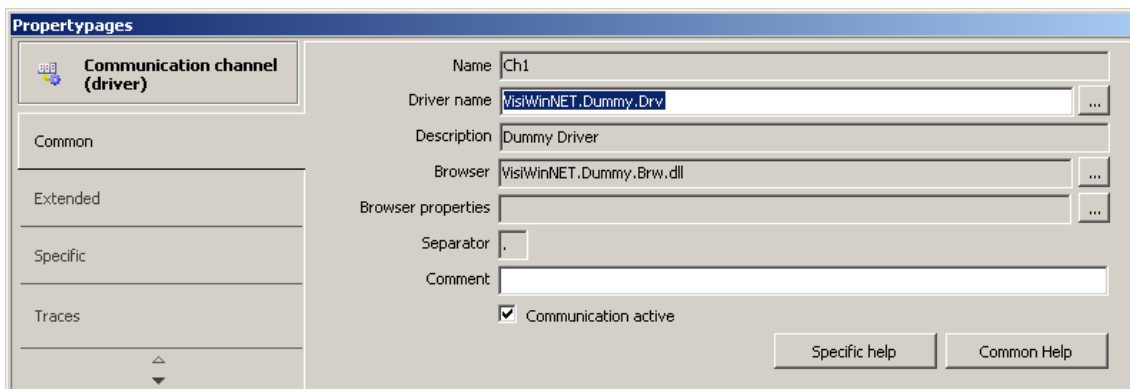


Here the context menu is to be opened through the r.h. mouse button. Through the "New" entry the "Add channel" dialog to determine the basis communication properties opens.

To select the VisiWinNET driver select the "VisiWinNET driver" channel type is to be selected. Through the [...] button next to the "OPC server/driver" a dialog for the selection of an installed driver opens.



The selection in the dialog transfers the contents of the "OPC server/driver" field to the selected driver. Following confirmation of the "Add channel" dialog through the "OK" button an appropriate node is added in the project explorer. Simultaneously the display of the VisiWinNET properties page changes to the appropriate settings of the new channel.



This display contains on the different index cards:

- The parameters of the communication channel that identify the communication component, and describe the performance of the VisiWin runtime towards the communication component,
- The configuration settings of the driver that describe the connection settings, and the specific performance.



In fact the parameters of the communication channel and the configuration settings for the driver are not distinguished from each other on the properties page.

- The parameters are referenced in the "Data Access" manual.
- Information on the configuration settings can be found in this manual under the "Configuration" chapter as well as in the specific driver documentation.

2.3 Configuration

The configuration is displayed on the VisiWinNET properties page. If a communication channel is marked in the VisiWinNET project explorer that uses a VisiWinNET driver as communication component the VisiWinNET properties page will also display the configuration settings amongst other information.

The configuration contains:

General configuration settings

These settings are available in all VisiWinNET drivers.

Specific configuration settings

The specific driver settings are individual characteristics. They are offered on the "Specific" index card.

2.3.1 General Configuration Settings

The following configuration parameters are available in all VisiWinNET drivers:

Index Card	Parameter	Description
Enhanced	Display diagnosis dialog	Determines that with the start of the driver (i.e. with the start of the project) the diagnosis dialog is loaded and displayed.
Traces	Groups	Processes that influence the data exchange through the control of groups are saved in the log file of the project.
	Variables	Processes that influence the data exchange through the control of variables are saved in the log file of the project.

2.3.2 Specific Configuration Settings

The specific settings are offered on the "Specific" index card.

L.h. in the tree display the individual settings are shown, divided into categories. A setting marked here can be changed in the input elements on the r.h. side of the dialog. In the process the following information is displayed:

Help text	A brief description on the selected setting. If the text displayed here is not sufficient as assistance the specific driver help can be used for further details.
Set value	Current value. Depending on the type of the setting different input elements (selection list, control boxes, ...) are displayed here that support the projector with the settings.
Default	Value that served as the initial value following the integration of a "fresh" driver.
Maximum	With numeric values the maximum value that can be set.
Minimum	With numeric values the minimum value that can be set.
Button "Reassign"	Sets the selected parameter to its default value.
Button "Help"	Opens the specific driver help. Here the specific configuration settings and the structure of the ItemID for this driver are explained.

2.4 Diagnosis Dialog

The diagnosis dialog is displayed at runtime of the project if the appropriate configuration setting "Display diagnosis dialog" has been activated on the "Enhanced" index card.

It contains the following displays:

Read data	Provides status information on the current read/write orders.
Groups	Provides status information on the group control.
Variables	Displays the variables and further status information.

2.4.1 Read Data

The "Read Data" index card displays as a data point list the variables or data blocks that are currently processed by the driver. Here, data blocks are:

- structures and fields,
- individual variables that were combines into blocks through internal optimization methods.

Status Information

After a data point was marked in the list status information is displayed on the r.h. side:

Field	Description
Count Read	Number of reading accesses since the start of the driver
Count Write	Number of writing accesses since the start of the driver
Read Pos	Number of successful reading accesses
Read Neg	Number of unsuccessful reading accesses
Write Pos	Number of successful writing accesses
Write Neg	Number of unsuccessful writing accesses
Last Read	Time of latest reading
Last error	Time of latest error
Last duration read	Duration of latest reading process
Last duration write	Duration of latest writing process
Total duration	Total access time
Monitoring	The data point is logged. Logging can here be (de-) activated.

Further Operating Elements

- The "Actualize" button updates the display of the list and the status information.
- The "Variables" button changes the display to the "Variables" index card. Here the individual variables of the currently marked data point are displayed.

2.4.2 Groups

The "Groups" index card lists the groups of the project.

Status Information

After a group in the list was marked status information is displayed on the r.d. side:

Field	Description
Actualization	Actualization cycle of the group
Active	Status of the group. The group can here be (de-) activated.
Monitoring	Actualization processes of the group are logged. Logging can here be (de-) activated.

Further Operating Elements

- The "Actualize" button updates the display of the list and the status information.
- The "Variables" button changes the display to the "Variables" index card. Here the individual variables of the currently marked data point are displayed.

2.4.3 Variables

The "Variables" index card lists the variables of the project. Which variables are displayed depends on how the index card was activated:

- If a display change was made through the "Variables" button of the "Read Data" or "Groups" index cards the variables list only shows the appropriate variables that were selected through selecting the previous index card.
- If the index card was directly activated or the display rebuilt through the "Actualize" button all variables are listed.

Status Information

After a variable in the list was marked status information is displayed on the r.h. side:

Field	Description
Group	Name of the group the variable is allocated to
Active	The variable is exchanged
LastRead	Time of the latest reading
Monitoring	Writing/reading accesses to the variable are logged. Logging can here be (de-) activated.

Further Operating Elements

- The "Actualize" button updates the display of the variables list and the status information.