



Getting Started

INAT OPC-Server MPI

Version 0702-001k

***INAT
OPC-Server 
MPI***

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Range of delivery

- CDROM with
 - * INAT OPC-Server MPI
 - * Testclient
 - * Online manual
- Manual „Getting Started“

Manual OPC-Server MPI**CDROM OPC-Server MPI**



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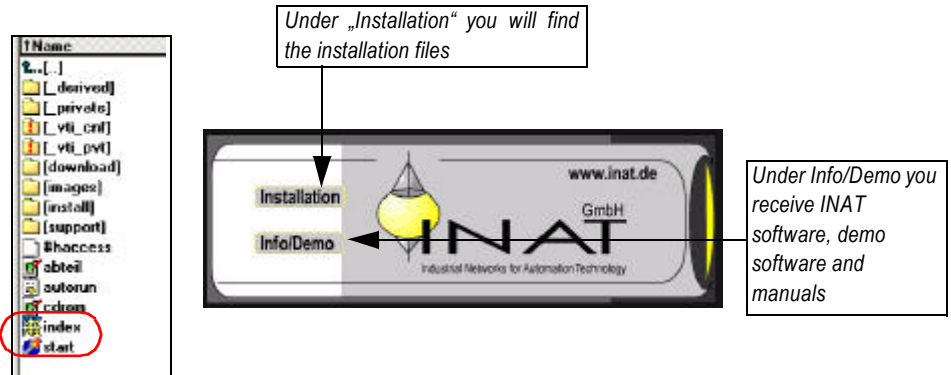
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1 Quick Start

1.1 Software installation

Insert the CDROM OPC server MPI. If autorun is activated the INAT installation windows appears. If autorun is not activated, start the file start.exe or index.html.



Select „Installation“.

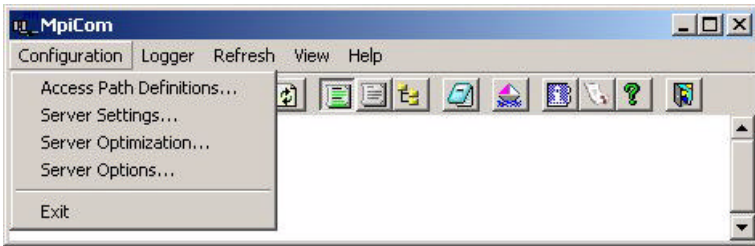
You are asked to start the Installation.



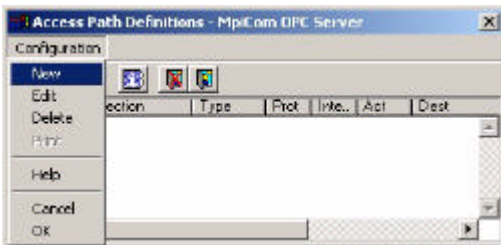
You will be guided through the installation. INAT provides a small client solution with the server installation.

1.2 How to parameterize a new connection

- Start the OPC server MPI.
- Select **Configuration > Access Path Definitions**.



- To create a new connection, select **Configuration > New**



- Enter a name for the new connection
- Confirm your entries with „OK“. In the next window you have to enter the MPI parameters.

MPI Parameters [X]

Connection

Name:

MPI S7-300 or S7-400 PPI S7-200

MPI Address SPS: MPI Address PC:

Write-access to PLC permitted
 Allow Cyclic Polling

Serial Port


Serial Port	Baud
<input checked="" type="radio"/> COM 1	<input type="radio"/> 9 600 <input type="radio"/> 56 000
<input type="radio"/> COM 2	<input type="radio"/> 19 200 <input type="radio"/> 57 600
<input type="radio"/> COM 3	<input checked="" type="radio"/> 38 400 <input type="radio"/> 115 200
<input type="radio"/> COM 4	

Special Settings

Pol-Intervall [ms]:

Read-Optimization Bytes for new Block

OK
Cancel
Help



Type of interface
Select MPI, if you want to communicate with a S7-300 or S7-400 Select PPI if you want to communicate with a S7-200
MPI address PLC
Enter the MPI address of the desired PLC (available from SIMATIC Manager)
MPI address PC
Enter the MPI address of the PC (default „0“)
Write-access to PLC permitted
Here the write access to the PLC can be prevented for each connection
Allow Cyclic Polling
In fixed intervals the process visualization orders user data to be updated
Serial Port
Select the serial interface (COM Port) of your PC, where the PC/MPI adapter will be plugged.
Baud rate
Select the desired baud rate Note! The baud rate has to be set at the PC/MPI adapter. If you are using the INAT adapter this is <u>not</u> necessary. The adapter recognizes the baud rate itself.
Pol Intervall
The "Pol-Interval" function specifies in msec the intervals at which user data are to be updated for process visualization. To keep network load as low as possible, the intervals should be based on the importance of the particular user data (i.e., as short as necessary but as long as possible). If the specified read interval is shorter than the actual transmission, the data are read as fast as possible.
Read Optimization
With activation of the radio button Read optimization, the OPC-Server combines data bytes to blocks of a size, which can determine under Bytes for a new block. This procedure is very helpful if large gaps exist in the datablock structure of your PLC.

2 Communication example

In this example the procedure how the OPC server MPI communicates with a S7 PLC shall be explained.

2.1 OPC communication with a S7-400

2.1.1 Task

Process data from a Siemens S7-400 shall be shown in a visualization on PC. The MPI interface of the PLC and the COM 1 Port of the PC are connected via the INAT PC/MPI adapter. As visualization the OPC testclient¹ is used.

2.1.2 Requirements?

- OPC-Client
- OPC-Server
- Operating system Windows
- PC/MPI adapter



1. This test client is provided with the server installation.

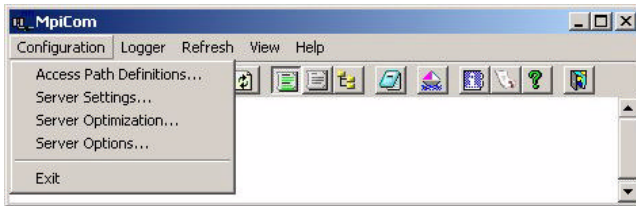
2.1.3 Procedure

To realize the communication task the following steps have to be performed.

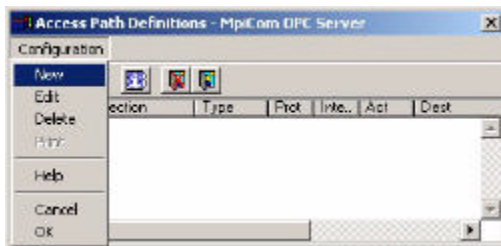
- Parameterize a connection in the OPCServer
- Order data in the client

2.1.3.1 Parameterize a new connection in the OPC Server

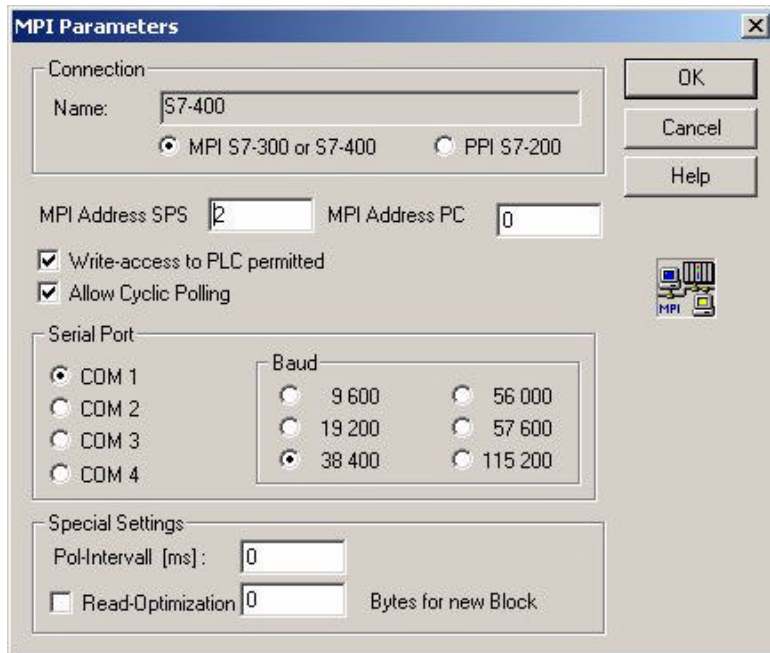
- Start the INAT OPC Server MPI
- Select **Configuration > Access Path Definitions...**



- In the next window select **Configuration > New**. Enter a name for the new connection.



- In the next window you have to enter the MPI parameters.



- Since you want to communicate with a S7-400, select MPI.
- Select the MPI address of the PLC (available in SIMATIC Manager).
- Select the MPI address of your PC
- Select COM1, if the PC/MPI adapter will be plugged in COM port 1 of your PC.
- Select the desired baud rate.
- Confirm your entries with „OK“
- Exit the OPC Server and start it again.

2.1.3.2 Connection between PC and PLC

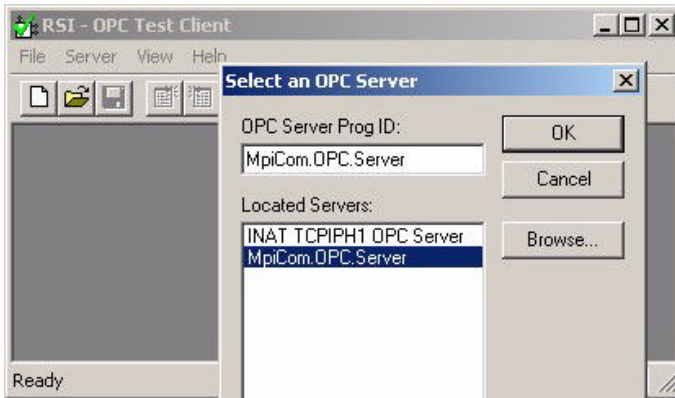
Connect the PC and the PLC via a PC/MPI adapter

Note! The baud rate has to be set at the PC/MPI adapter, too. If you are using a INAT adapter this is not necessary. The adapter recognizes the baud rate itself.

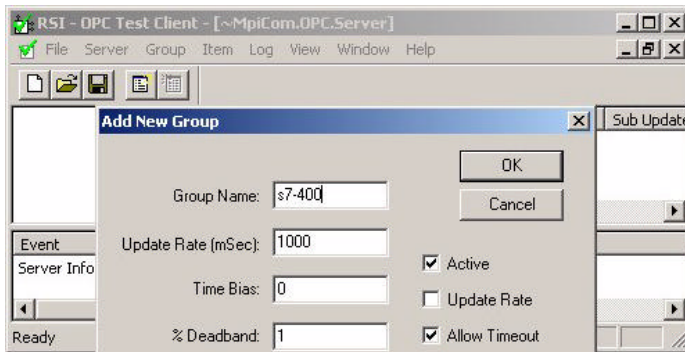
2.1.3.3 Communication between Client, Server and PLC

In this example the test client, which is provided with the server installation will be used.

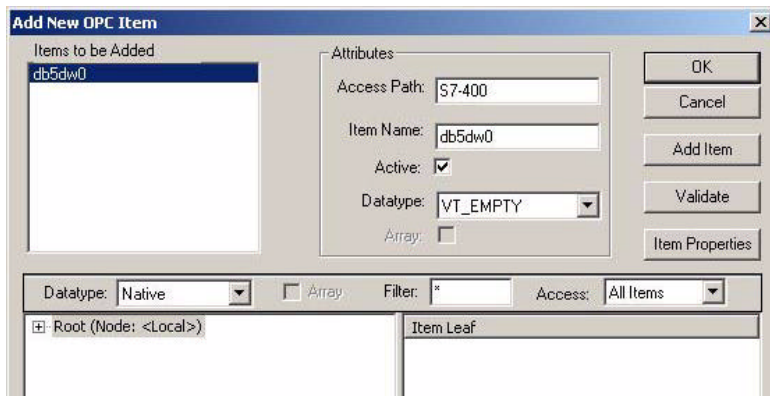
Start the OPC client and browse for INAT MpiCom OPCServer



- In the next window select **Group > Add Group** and enter a name for the new group



- Confirm your entries with „OK“.
- In the next window select **Item > Add Item**. Enter your Access Path and the Item



Access Path

The Access Path corresponds to the connection name you have entered in the OPC Server MPI. Access Path and connection name have to be identical.

Item

The Item (e.g. db5dw0) has to correspond with the requested data in your PLC.

3 Licensing

Start the OPC server MPI. Select **Help > License**. The following window appears:

License - C:\DOKUME~1\rb\LOKALE~1\Temp\License\LicenseKey.txt

Product	OPC-Server MPI	OK
Order-no.	100-3300-01	Cancel
Company Name	INAt	Help
User	Mone-Lisa	-> Clipboard
License Request Code	6DEDU013UP4MEQH	
License Confirm Code		

License Status The checksum is wrong

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License Agreement

- Compare the entries under Product and Order No with your ordering data
- Enter your company name and the user name in order to get a unique license
- Use the button **Clipboard**. The data for the licensing request are now available in the clipboard for pasting them to your favorite Email program. E.g.:

OPC-Server MPI
100-3300-01
Company
User
6DEDU013UP4MEQH
=====

Note: The request code is unique for your system!
Send the License Request Code via
Fax to 0911/54427-27 or
via Email to info@inat.de.

Due to the contract with INAT you will get an unlimited License Confirm Code or a limited License Confirm Code for test purposes.

Under License the following messages are possible:

License Status	Meaning
ok	
Checksum is wrong	Check the entered codes
no valid license	If the test runtime is over (by default 72h) the server end with the message "the server ends, because there exists no valid license"

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