

## ***How-To-Do***

# **OPC-Server with MPI and ISO over TCP/IP Communication**

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## 1 General

### 1.1 Information

This 'How-To-Do' describes the procedure by means of an example, how you can adjust the OPC server for the MPI communication and the ISO over TCP/IP communication.

You can find a detailed description of the OPC server in the manual under the link [http://www.vipa.com/uploads/tx\\_sbdownloader/HB45e\\_opc\\_server\\_12-46.pdf](http://www.vipa.com/uploads/tx_sbdownloader/HB45e_opc_server_12-46.pdf).

### 1.2 Reference

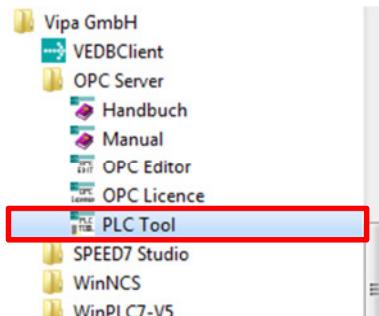
In this 'How-To-Do' the principal procedure is described by means of examples.

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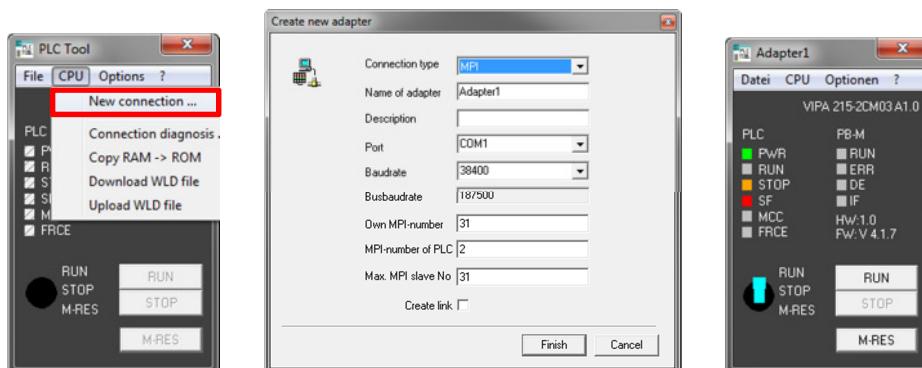
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## 2 Procedure for the Setup of the OPC Server

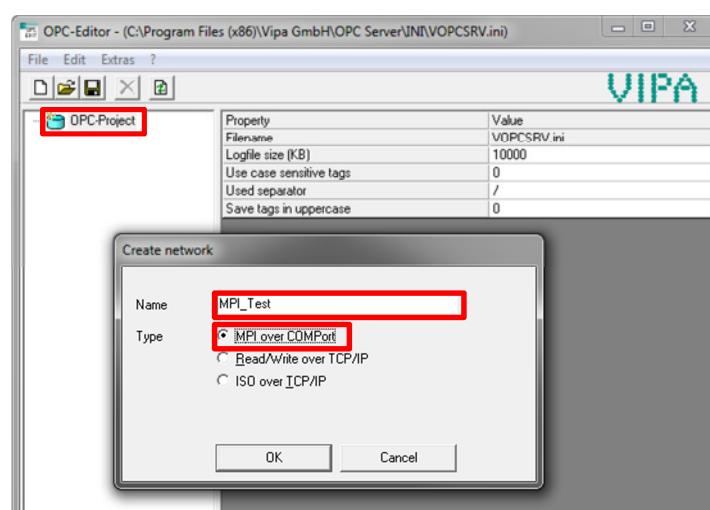
1. Connect your PC to the PLC via the adapter cable RS232-MPI.
2. All required programs are to be found in the start menu under:  
*Start → Programs → VIPA GmbH → OPC Server*



3. Start the program *'PLC-Tool'* to check the connection to the PLC. Select *'CPU' → 'New connection ...'* in the menu. Create a new adapter by "Connection type: MPI", your COM port, baud rate 38400, MPI address of your CPU. After click on *'Finish'* the tool will be connected to the PLC. As precondition for further steps the connection buildup must work.

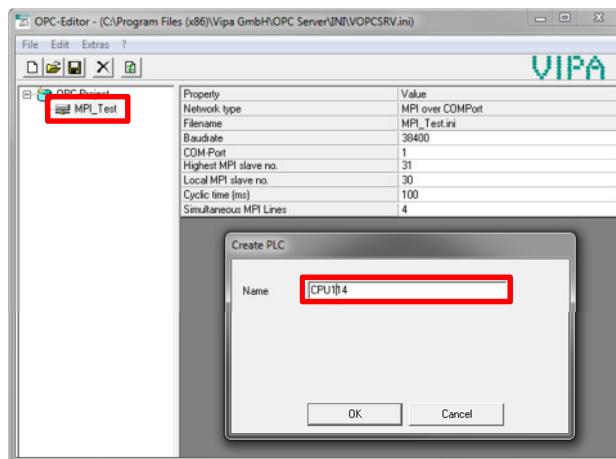


4. Finish again the PLC tool and start the OPC editor.
5. Open the project „VOPCSRV.ini“ via *'File' => 'Open project'*. Delete the contained networks and integrate a MPI network via *'Edit' => 'Add network'*.

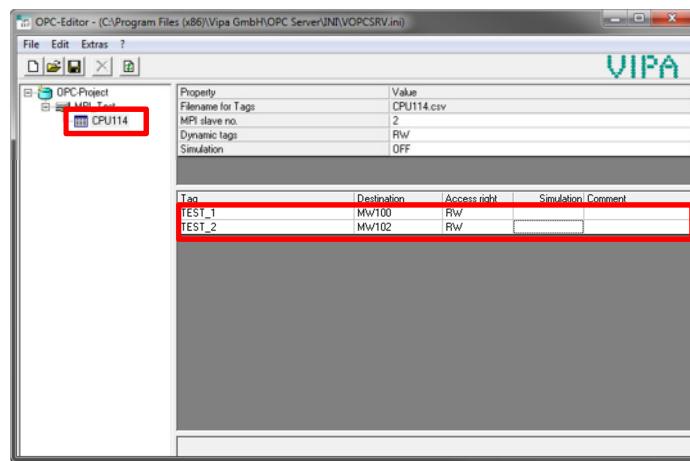


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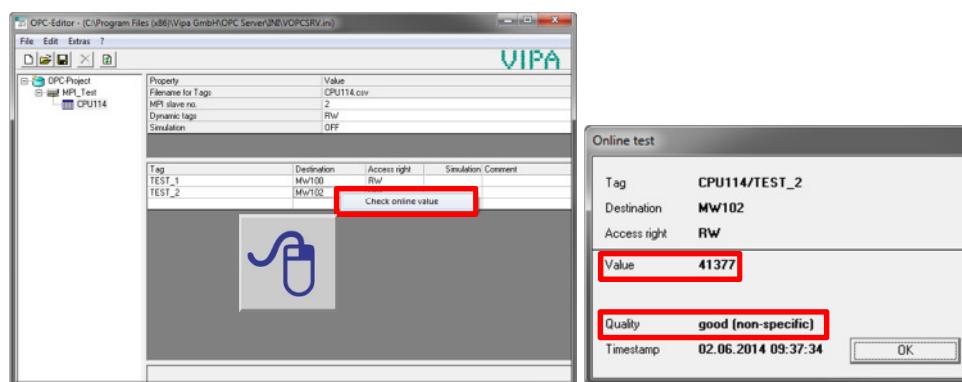
6. Mark the MPI network by mouse and edit the MPI parameters on the right in the spreadsheet (see below). Insert a new control via ,Edit‘ → ,Add PLC‘.



7. Fill in the tags and the interconnection into the spreadsheet of the controls (see below)

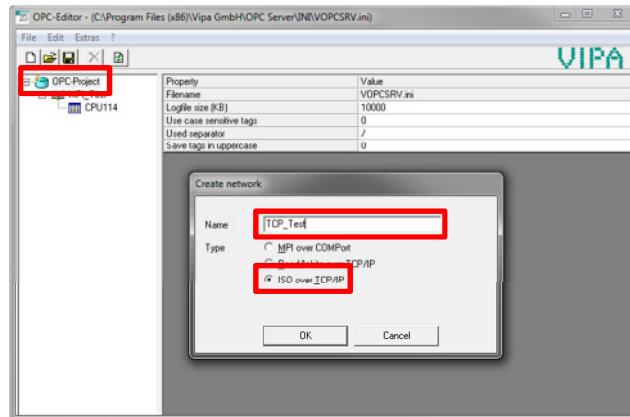


8. **Important:** save your project in the VIPA installation directory:  
*C:\Program Files (x86)\VIPA GmbH\OPC Server\INI\*
9. Restart the OPC server via ,Extras‘ → ,Reconfigure OPC Server‘.
10. With ,Check online value‘ via right mouse click on any tag you can read the current value directly from the PLC (see pictures below).

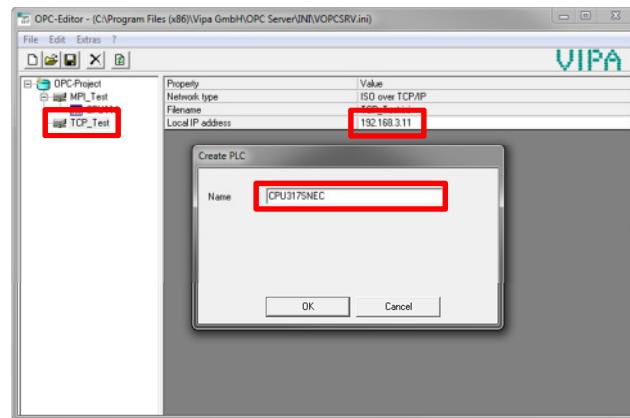


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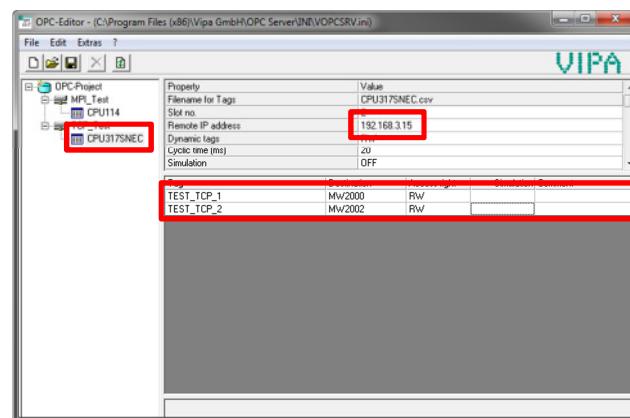
11. Network your PC to the PLC via Ethernet. Mark “OPC-Project” and insert an ISO-over-TCP/IP network via ,Edit’ → ,Add network‘.



12. Mark the TCP network by the mouse and fill in your IP address into the spreadsheet on the right (see below). Insert an new control via ,Edit’ → ,Add PLC‘.

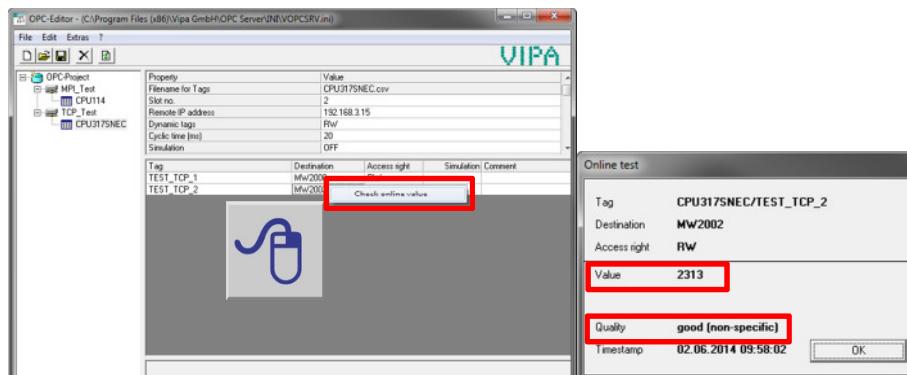


13. Mark the new control and fill in the IP address of the control and your tags and interconnections to the PLC into the spreadsheet of the controls (see below).



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14. Save your project.
15. Restart the OPC server via ,*Extras*‘ → ,*Reconfigure OPC Server*‘.
16. With ,*Check online values*‘ via right mouse click on any tag you can read the current value directly from the PLC (see pictures below).



## 3 Revision History

### 3.1 Changes:

DATUM	ÄNDERUNGEN	BEARBEITER
24.01.2007	Erstellung	A. Mühlfelder
02.06.2014	Überarbeitung Layout und Textanpassungen	N. Schlimm
20.03.2014	Übersetzung Englisch	N. Schlimm
02.06.2014	Textanpassung und Screenshots (Englisch)	M. Dörnhöfer