

Howto access echolink S7-compact with the S7/S5 OPC server

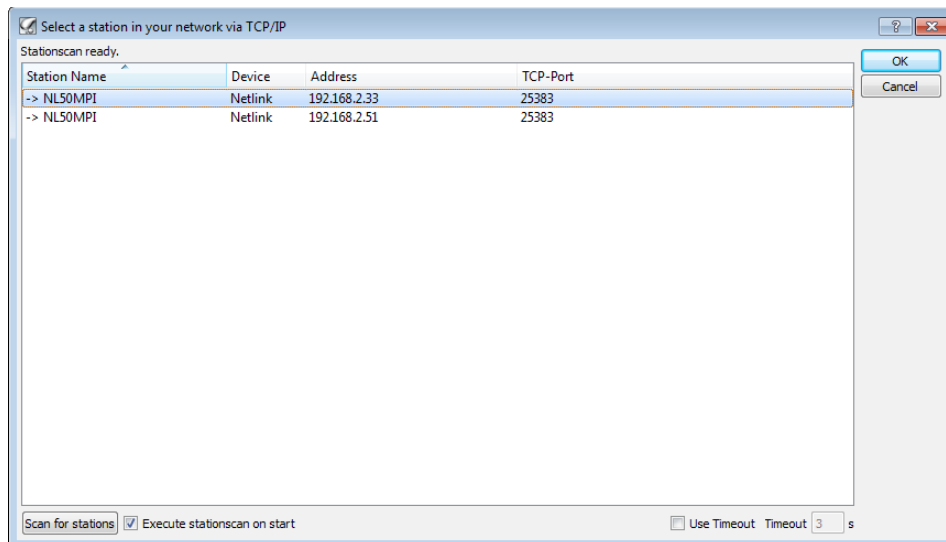
1. Configure echolink S7-compact

Open the NetCon S7 Compact configuration software and select 'Configuration via TCP/IP'



A broadcast search is performed.

Select the echolink S7-compact from the station list and press 'OK'



Set the device parameters of the echolink S7-compact.

IP Address, Subnet Mask, Router Address, MPI Address and Busprofile.

Confirm the settings with OK to save the configuration to the device.

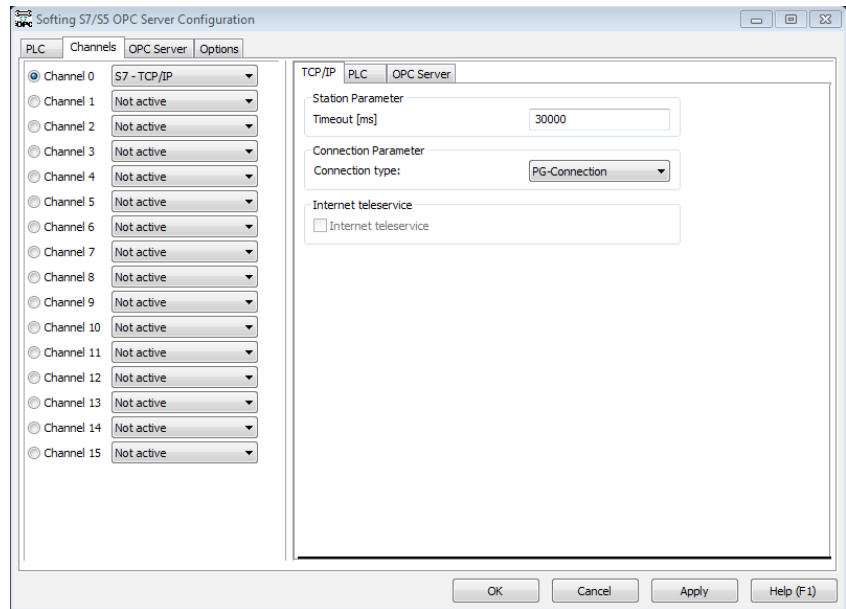
The screenshot shows a software window titled "Station Parameters" with a standard Windows-style title bar (minimize, maximize, close buttons). The window contains the following fields and controls:

- Name of the Station:** Text input field containing "NL50MPI".
- MAC (Ethernet) Address:** Text input field containing "00 02 A2 29 19 DF".
- TCP/IP Station Parameter:** A section containing three unchecked checkboxes: "Only set temporary IP Address", "Use DHCP", and "Use Boot-P".
- IP Address:** Text input field containing "192.168.2.33".
- Subnet Mask:** Text input field containing "255.255.255.0".
- Router Address:** Text input field containing "192.168.2.126".
- Mpi Parameter:** A section containing:
 - Mpi Address:** Text input field containing "19".
 - Mpi Bus Speed:** A dropdown menu currently set to "187.5 kbit/s".
- Buttons:** "Mpi Default" and "Profibus Default" buttons are located below the MPI parameters.
- Other Controls:** "OK" (blue), "Cancel", "Update Firmware", and "Version Information" buttons are located on the right side of the window.
- Bus Parameters:** An unchecked checkbox labeled "Bus Parameters" is located at the bottom left.

2. Configure S7/S5 OPC server

Start the configurator and open the 'Channels' tab.

For the Channel type select 'S7 - TCP/IP'



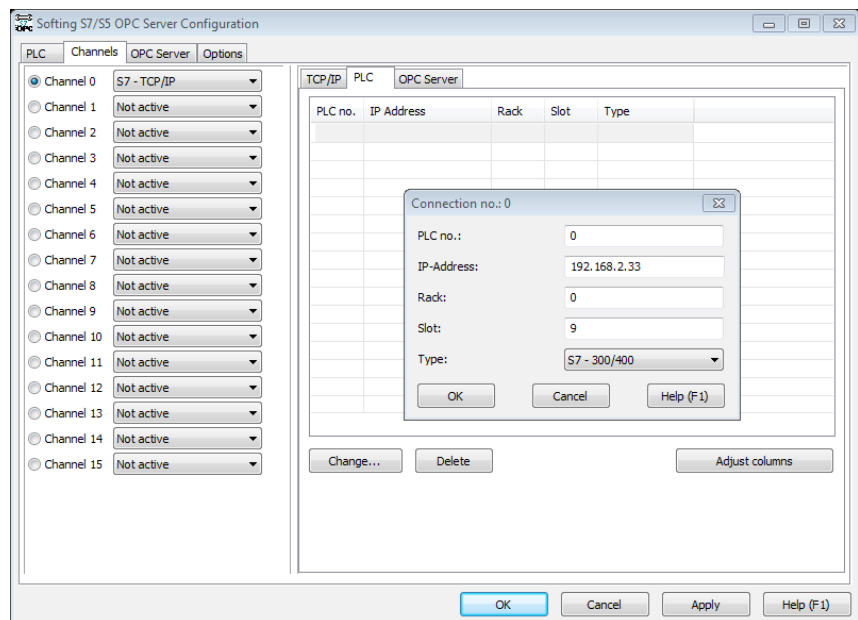
On the right hand side inside the 'Channels' tab select the 'PLC' tab.

Double click on the first line to add a PLC.

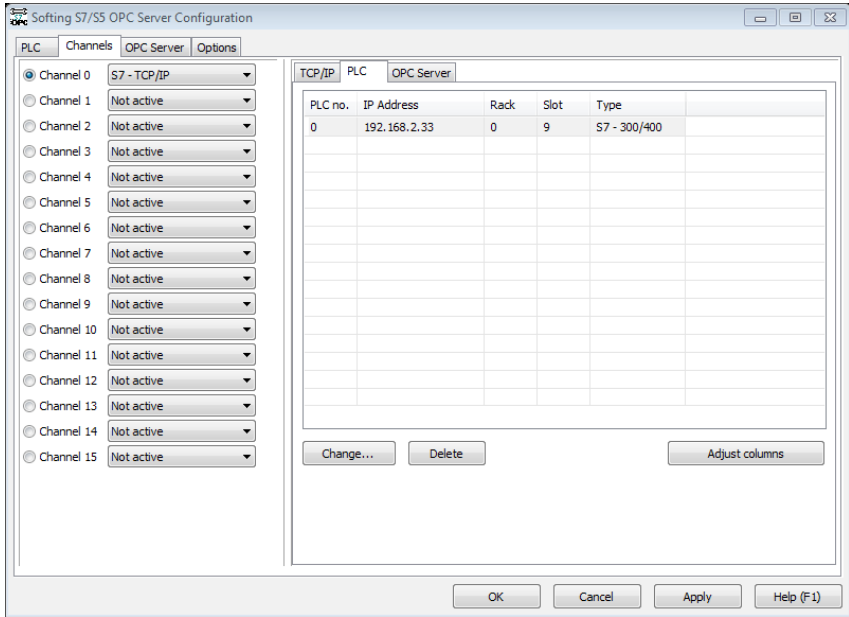
Enter the IP-Address of the echolink S7-compact.

Enter the MPI address of the S7 PLC as Rack/Slot. Please refer to the table in chapter 4.

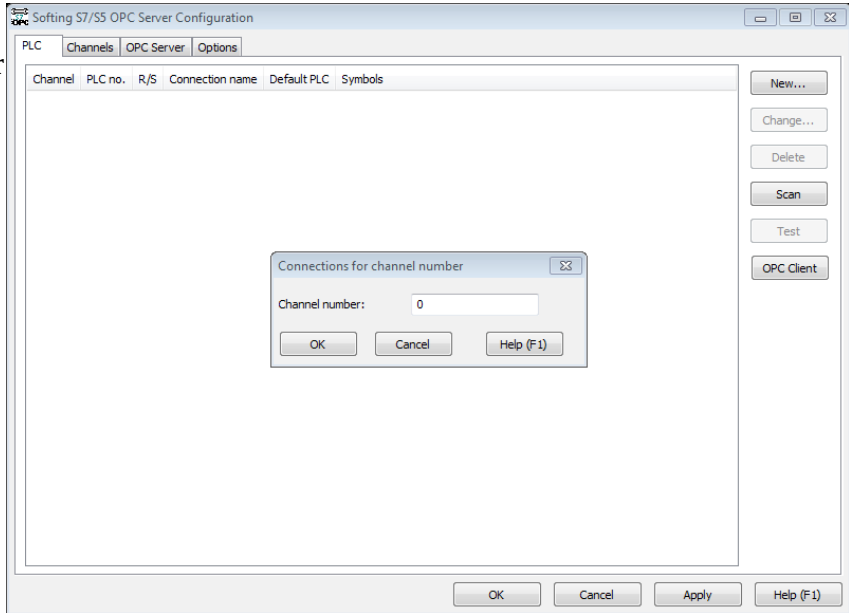
In this example the PLC has MPI address 9.



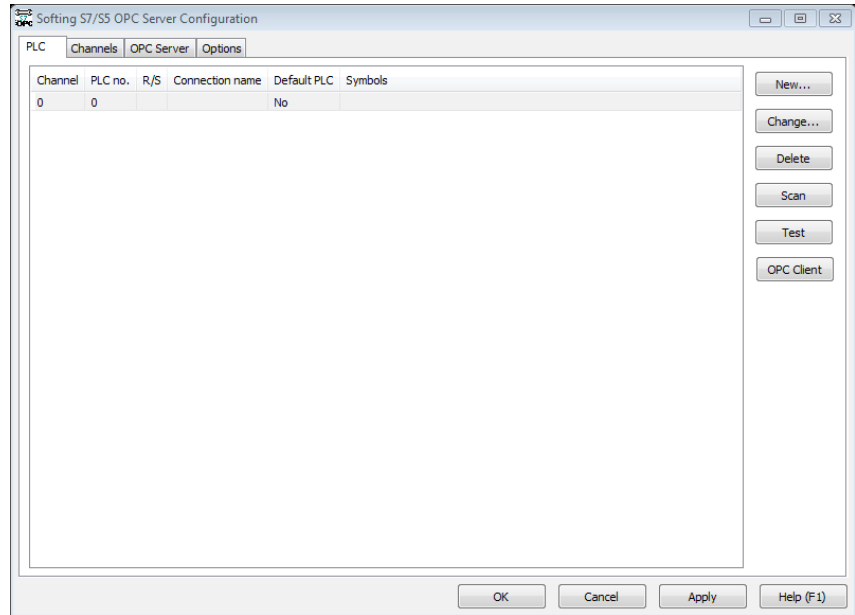
When finished the 'PLC' section of the 'Channels' tab will contain the echolink S7-compact connection.



Change to the 'PLC' tab and press the 'Scan' button. Search stations for the configured Channel number.

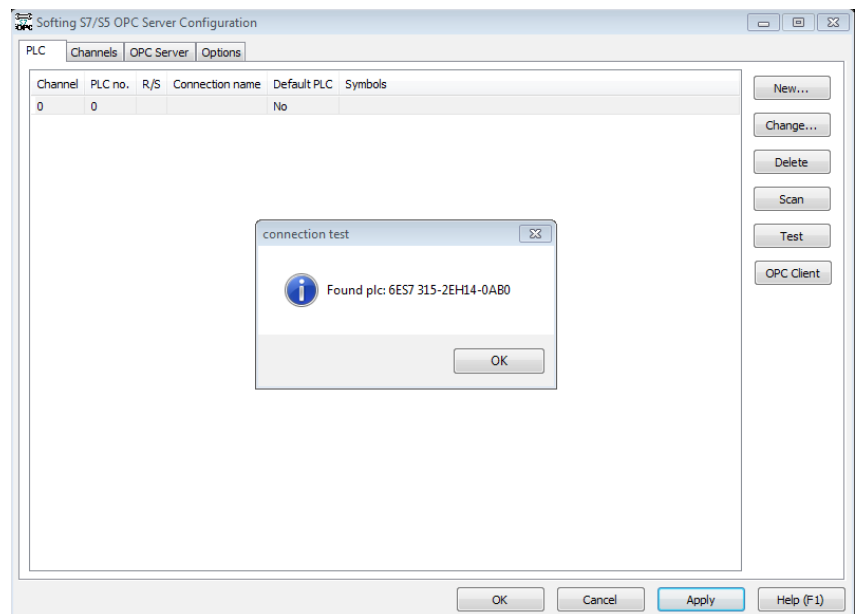


The Accesspath list will be automatically filled with the connections found during the scan.



Confirm that the connection is configured properly by pressing the 'Test' button.

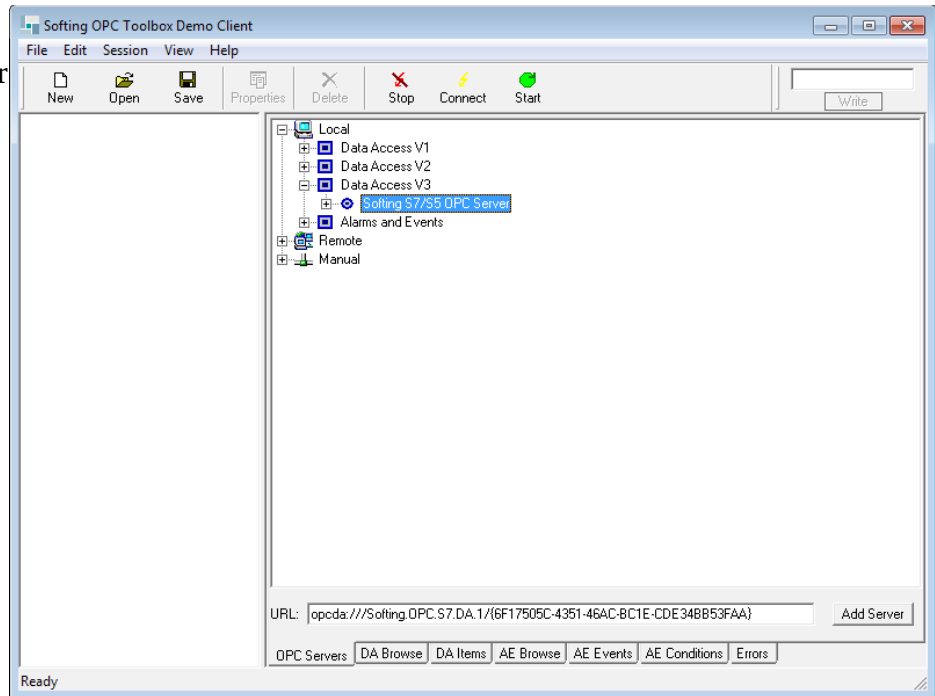
The type of PLC is displayed.



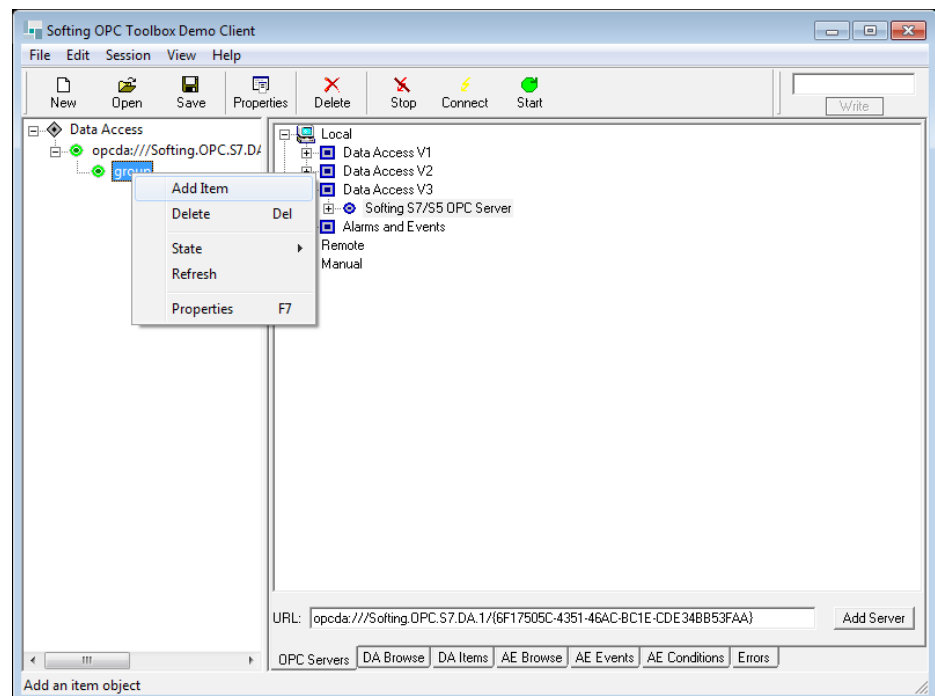
3. Access PLC with Democlient

Start the demo client and browse to the local 'Softing S7/S5 OPC Server' from 'OPC Servers' tab.

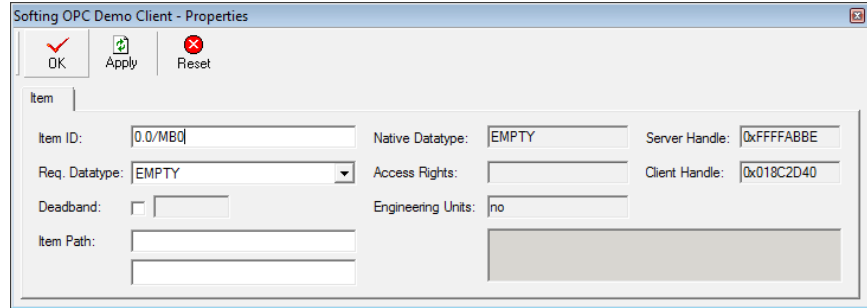
Connect to the server by either double clicking on it or marking it and clicking the 'Add Server' button.



Right click on the group and select 'Add Item' from the context menu.

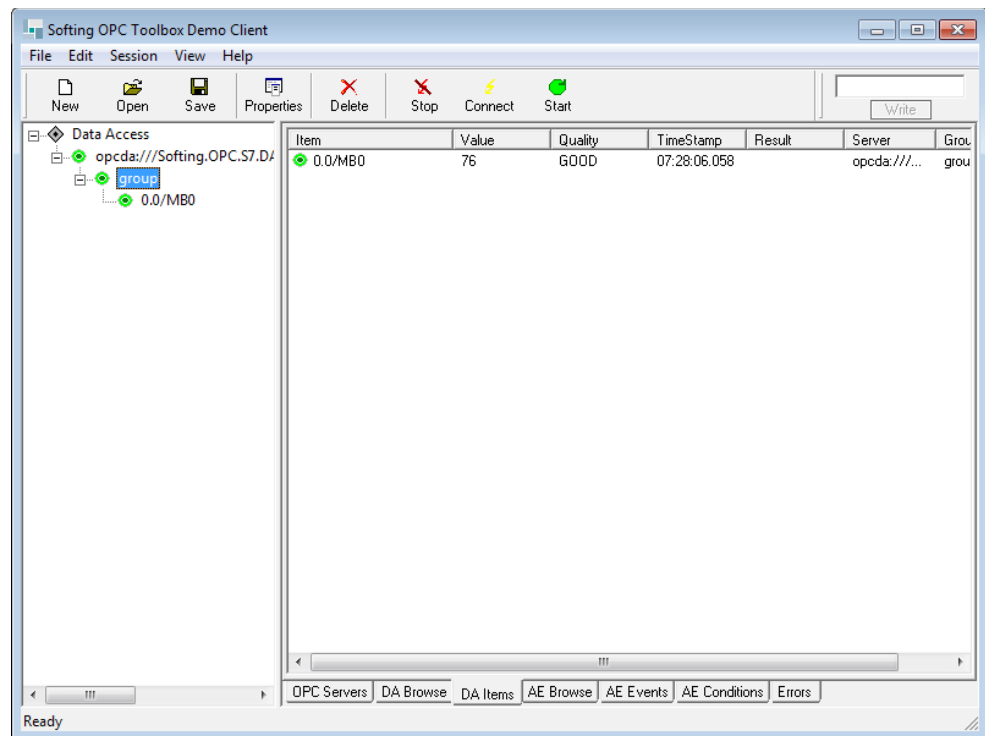


Add a valid item from the OPC servers namespace. In this example MB0 is used.



Switch to the 'DA Items' tab.

If everything works a value shall be displayed and the Quality of the item is 'GOOD'.



4. MPI address mapping table

MPI	Rack	Slot	TSAP
0	0	0	0200
1	0	1	0201
2	0	2	0202
...
31	0	31	021F
32	1	0	0220
33	1	1	0221
...
63	1	31	023F
64	2	0	0240
65	2	1	0241
...
95	2	31	025F
96	3	0	0260
97	3	1	0261
...
126	3	30	027E