S5-LAN++

Communication WinCC flexible with S5-LAN++

S5-LAN++ behaves like a CP 343-1 or as an HMI ProfiNet connection. So you use the same configuration as when you are connected to the Simatic S7 300/400 with TCP/IP.

Here's a short guide for setting WinCC Flexible:

Select in the S5-LAN++ as S5/S7 server port 102!

This port is usually by default setting ready at 102.

Select for a communication driver in the WinCC flexible SIMATIC S7 300/400 as shown in the picture. For the PLC you enter the IP address of the S5-LAN++. The Typ select to „IP". Rack- and Slotnumber is for the usage with S5-LAN++ not significant. Just enter the default data: Rack 0, Slot 2.

Please note that the access point (S7ONLINE) is set correctly. The attitude you take in the Control Panel under "Set PG/PC Interface". Make sure that an adapter with TCP / IP support is selected.
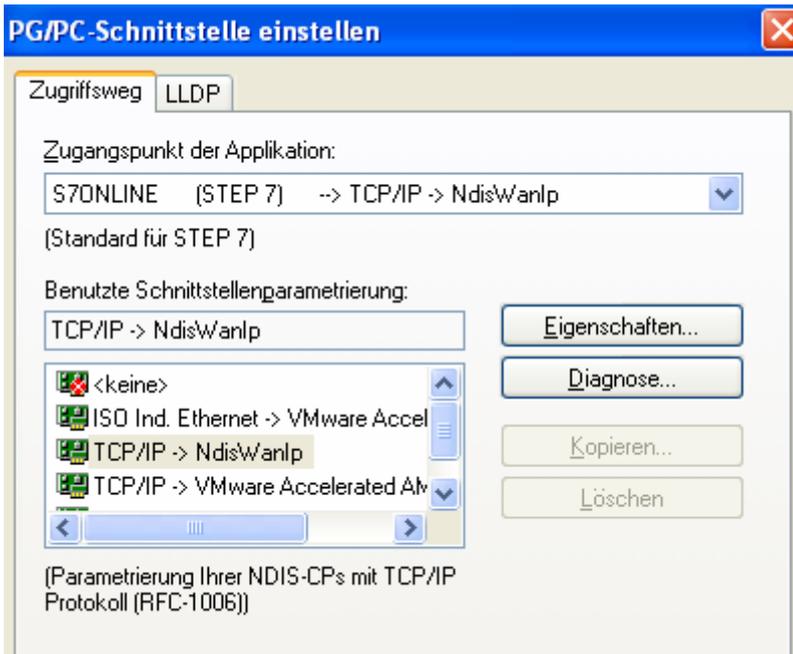
Important! Important! Important! Important!

Addressing

The conversion from S5-float (KG-format) to S7-float (IEEE 754) is automatic in both directions. It is important to use a variable type of IEEE 754.

The addressing of memory bits, inputs, outputs, timers and counters is the same for S5 and S7. However, there are differences in the data blocks. Addressing at the data blocks has been adapted to the S7.

For example:

DB10 DW 10 (S5) is addressed with DB10.DBW20 (S7). The background is that the S7 principle addresses in byte. If you want to read a single byte, for e.g. DB10.DL4 (S5), so you have to address DB10.DBB8. It is therefore necessary: even byte address = DL, odd address = DR in DB of the S5.

Simatic S5	Simatic S7	Format
MB 11	MB 11	Byte
MW 20	MW 20	Word
DB10 DW 9	DB10 DBW 18	Word
DB10 DW 60	DB10 DBW120	Word
DB10 DL 3	DB10 DBB 6	Byte
DB10 DR 3	DB10 DBB 7	Byte
DB10 DD 25	DB10 DD 50	DWord
DB10 DD 35	DB10 DD 70	Real

Here are some examples of address:

How can we address a DX (for e.g. extended DB135)

Must be for e.g. a DX addressed in a CPU 135, then the following rule applies:

DB-number 1-255 = DB, DB-number > 255 = DX.