

Tech tip: PLC assignment list exchange SIEMENS STEP 7 TIA Portal (SDF)

General

This TechTip helps you exchange PLC assignment lists with the SIEMENS STEP 7 TIA Portal.

Preparations in EPLAN

Create a scheme for PLC-specific settings under **Options > Settings > Projects > "Project name" > Devices > PLC:**

Tab Addresses

Inputs

Addressing	Identifier	Data type	Type of signal	Increment
Bit	%I	BOOL	Digital input	0.1
Byte	%IB	BYTE	Analog input	1
WORD	%IW	WORD	Analog input	2
DWORD	%ID	DWORD	Analog input	4
LWORD		LWORD	Analog input	8

Outputs

Addressing	Identifier	Data type	Type of signal	Increment
Bit	%A	BOOL	Digital output	0.1
Byte	%QB	BYTE	Analog output	1
WORD	%QW	WORD	Analog output	2
DWORD	%QD	DWORD	Analog output	4
LWORD		LWORD	Analog output	8

If you have not set the language identifier to German in the TIA Portal, please adjust the identifiers "%E" and "%A", for example %I" instead of "%E" and "%Q" instead of "%A" etc.

Tab Format of assignment list

Format of the assignment list row

Format element	Symbol	Setting
Separator	" "	" "
Symbolic address	S	[S...]
Separator	" , "	" , "
Address	A	[A...]
Separator	" " , "	" " , "
Data type	D	[D...]
Separator	" " , "	" " , "
Ignored text	T	[T...]
Separator	" " , "	" " , "
Ignored text	T	[T...]
Separator	" " , "	" " , "
Ignored text	T	[T...]
Separator	" " , "	" " , "
Function text	F	[F...]
Separator	" " , "	" " , "
Ignored text	T	[T...]
Separator	" " , "	" " , "
Ignored text	T	[T...]
Separator	" "	" "

The "Ignored text" format element is available for the elements in the assignment list that have no assignment in EPLAN Electric P8.

Format of assignment list address

Delete all format elements.

Export from EPLAN and import into TIA Portal

- All format elements that were declared as "Ignored text" were exported as empty text elements during the data export from EPLAN.
- During the data import into the TIA Portal all assignments are newly generated as assignments. There is no synchronization with already existing entries!

Export from TIA Portal and import into EPLAN

- During the data import into EPLAN all format elements that were declared as "Ignored text" are ignored.