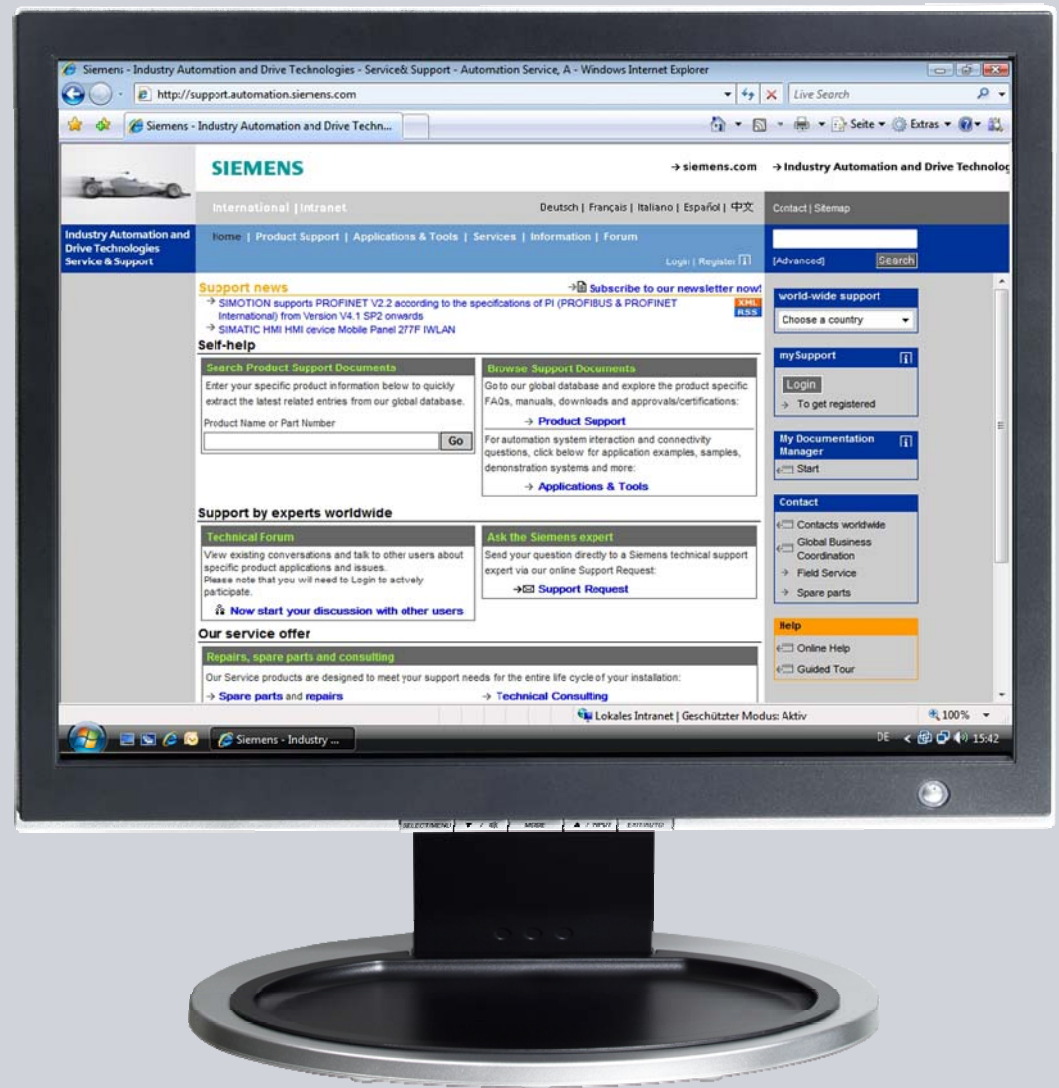


Instructions for Configuring an ISO Transport Connection

S7-300 / S7-400 Industrial Ethernet CPs

FAQ • January 2011



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Question

How do you configure an ISO transport connection for data exchange between S7-300 and/or S7-400 by way of Industrial Ethernet CPs?

Answer

Follow the instructions and notes listed in this document for a detailed answer to the above question.

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1 Introduction

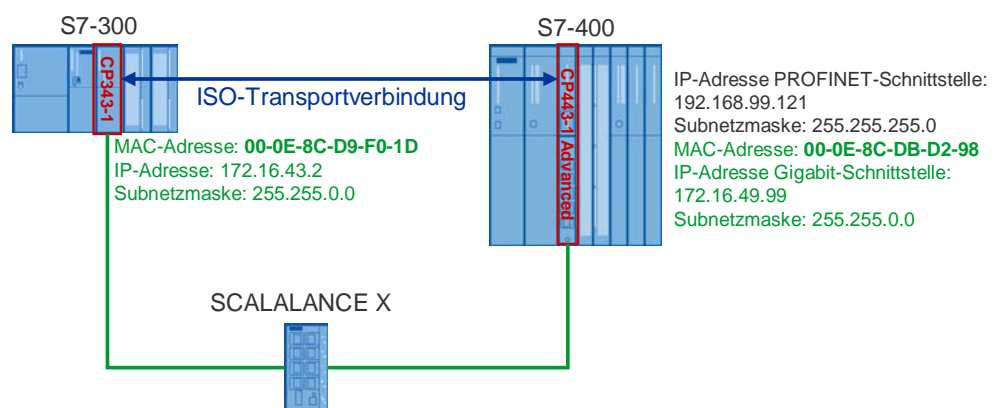
You can use the open communication through ISO transport connections for data exchange by way of the Industrial Ethernet CPs of S7-300 and S7-400.

In this example an S7-300 is connected over the PROFINET interface of the CP343-1 on the subnetwork 172.16.0.0. The S7-400 on the other hand is connected over the GBIT interface of the CP443-1 Advanced on the subnetwork 172.16.0.0. The PROFINET interface of the CP443-1 Advanced is connected on the subnetwork 192.168.99.0.

Configuration overview

Figure 1-1 shows an overview of the configuration.

Figure 1-1



2 Configuration

Below we describe how to configure an ISO transport connection for sending and receiving data by way of an Industrial Ethernet CP of S7-300 and S7-400.

2.1 Configuring CP343-1 and CP443-1 Advanced

2.1.1 Assigning IP addresses to CP343-1 and CP443-1 Advanced

The following MAC addresses and IP addresses are used in this configuration.

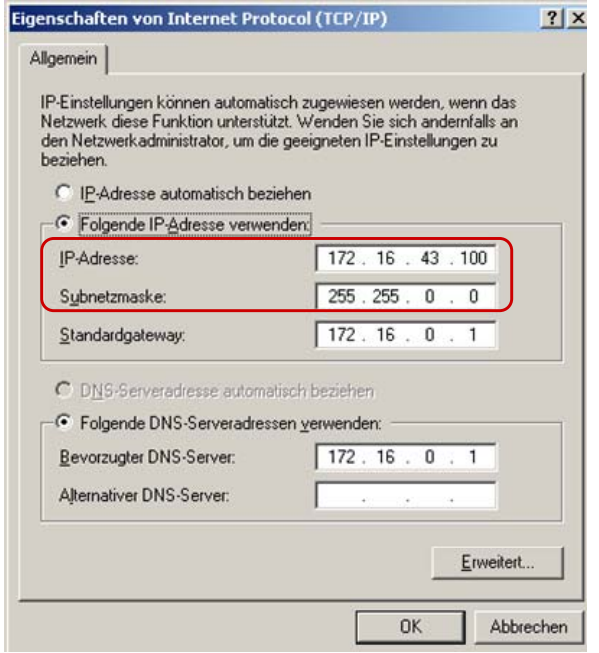
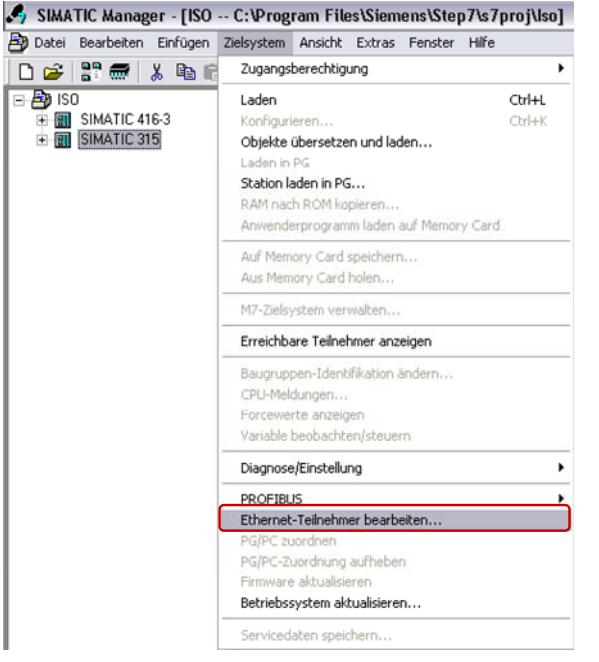
Table 2-1

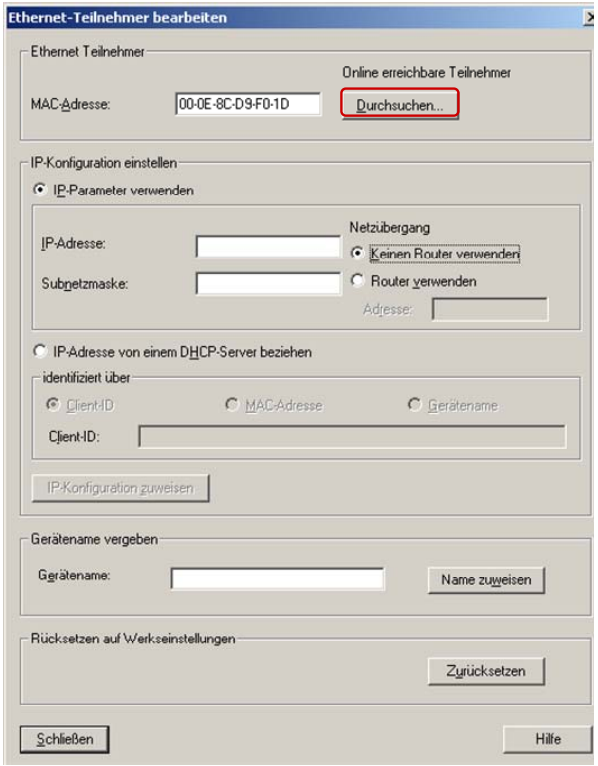
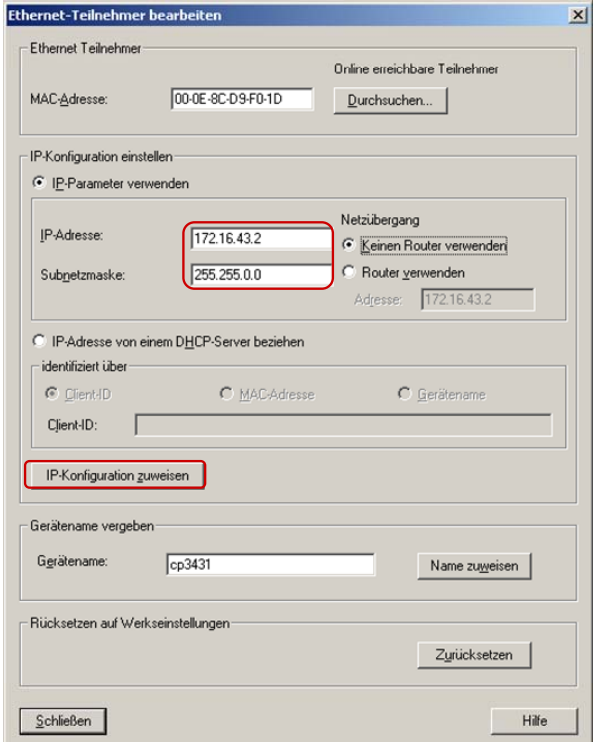
Industrial Ethernet CP	Interface	MAC address	IP address	Subnet mask
CP343-1	PROFINET	00-0E-8C-D9-F0-1D	172.16.43.2	255.255.0.0
CP443-1 Advanced	PROFINET	-	192.168.99.121	255.255.255.0
CP443-1 Advanced	GBIT	00-0E-8C-DB-D2-98	172.16.49.99	255.255.0.0

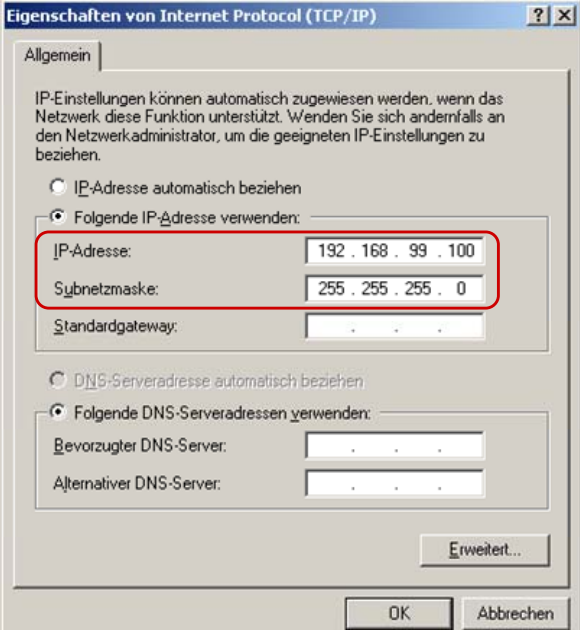
Assign the IP addresses to CP343-1 and CP443-1 Advanced.

Follow the instructions below for assigning the IP addresses.

Table 2-2

No.	Configuration step	Note
1.	<p>Connect the SIMATIC Field PG on which the configuration created with STEP 7 is stored to the PROFINET interface of CP343-1.</p> <p>In Windows network settings → LAN (Local Area Network) of the SIMATIC Field PG you enter an IP address that is in the same subnetwork as that of CP343-1.</p> <p>In this example the IP address 172.16.43.100 and subnetwork mask 255.255.0.0 are used for the SIMATIC Field PG.</p>	
2.	<p>In the SIMATIC Manager you open the STEP 7 project that contains the configurations of S7-300 and S7-400 between which the data is to be exchanged over an ISO transport connection.</p> <p>By means of the menu PLC → Edit Ethernet Node you open the "Edit Ethernet Node" dialog.</p>	

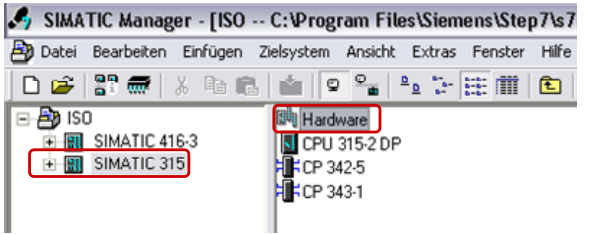
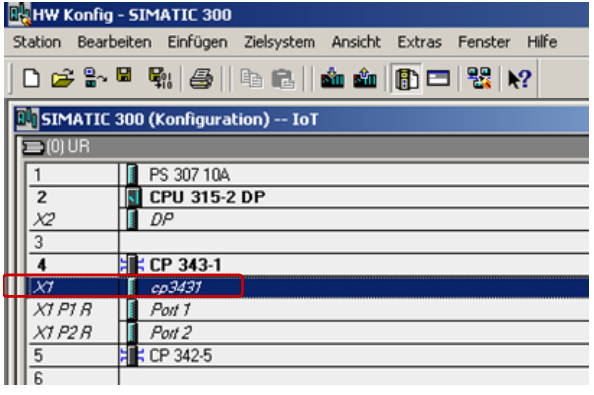
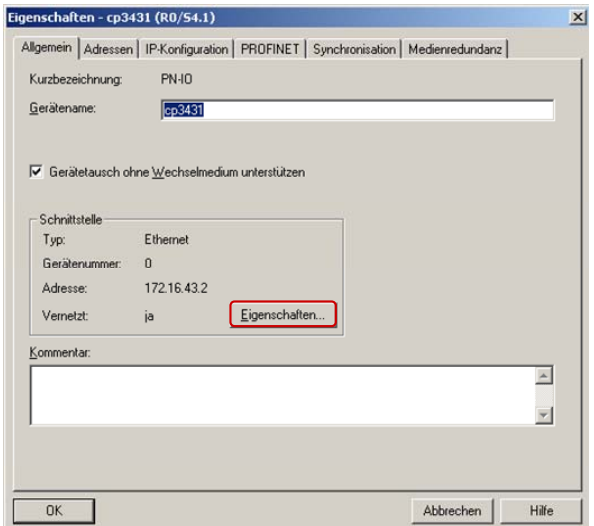
No.	Configuration step	Note
3.	In the "Edit Ethernet Node" dialog you click the "Browse..." button and select the MAC address of CP343-1.	
4.	Enter the IP address and subnet mask of CP343-1. Click the "Assign IP Configuration" button to assign the IP address entered to CP343-1. Then click the "Close" button to close the "Edit Ethernet Node" dialog.	
5.	Enter the assigned IP address in the Hardware Configuration of the S7-300 station and download the configuration into the S7-300 CPU.	See section 2.1.2.

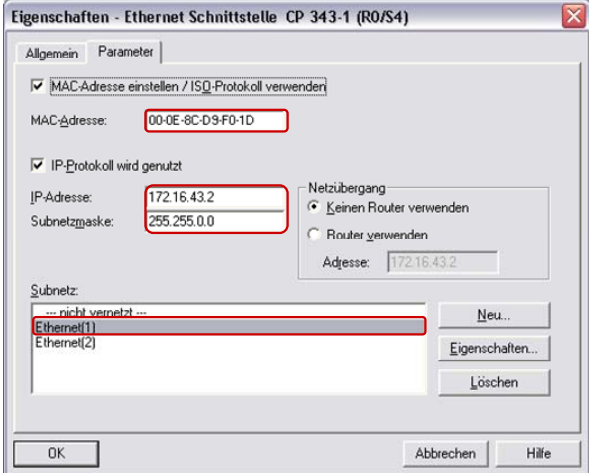
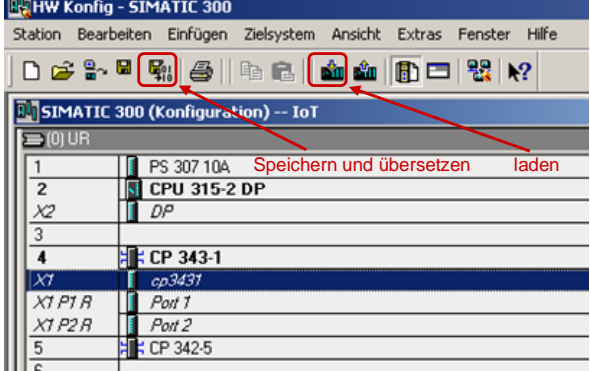
No.	Configuration step	Note
6.	<p>Connect the SIMATIC Field PG on which the configuration created with STEP 7 is stored to the PROFINET interface of CP443-1 Advanced.</p> <p>In Windows network settings → LAN (Local Area Network) of the SIMATIC Field PG you enter an IP address that is in the same subnetwork as that of CP443-1. In this example the IP address 192.168.99.100 and subnetwork mask 255.255.255.0 are used for the SIMATIC Field PG.</p>	
7.	<p>Repeat configuration steps 2 to 4 to assign the IP address 192.168.99.100 and subnet mask 255.255.255.0 to CP443-1 Advanced.</p>	
8.	<p>Enter the assigned IP address in the Hardware Configuration of the S7-400 station and download the configuration into the S7-400 CPU.</p>	<p>See section 2.1.3.</p>

2.1.2 Entering the IP address of CP343-1 in the Hardware Configuration and downloading the configuration into the CPU

After you have assigned the IP address 172.16.43.2 and subnet mask 255.255.0.0 to CP343-1 you enter the assigned IP address in the Hardware Configuration.

Table 2-3

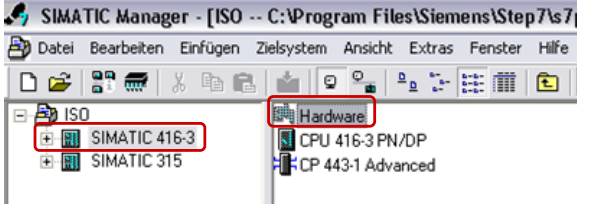
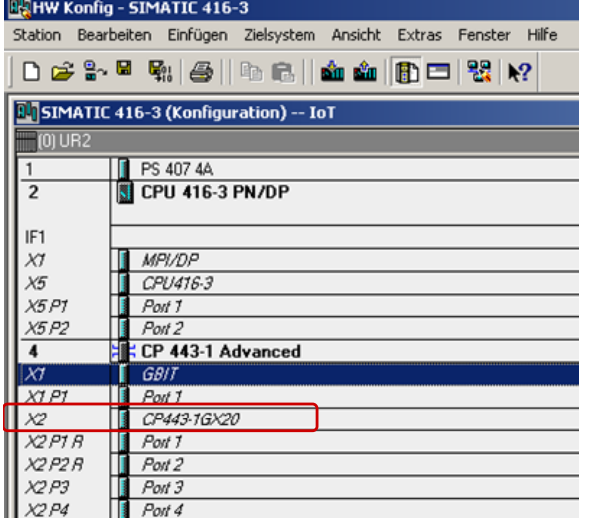
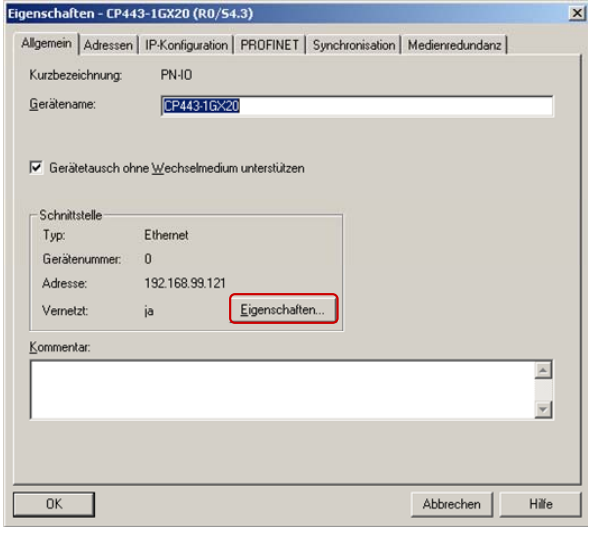
No.	Configuration step	Note
1.	In the SIMATIC Manager you mark the SIMATIC S7 300 station and double-click "Hardware" in order to open the Hardware Configuration of the S7-300 station.	
2.	In the Hardware Configuration of S7-300 you double-click the PROFINET interface of CP343-1. The Properties dialog of the PROFINET interface opens.	
3.	In the Properties dialog of the PROFINET interface you click the "Properties..." button to open the "Properties - Ethernet interface PN-IO" dialog.	

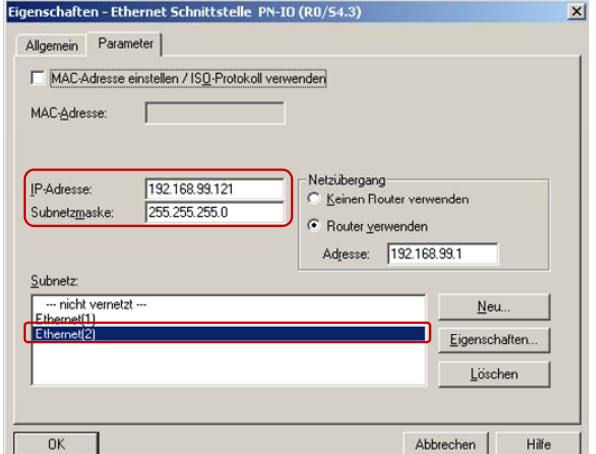
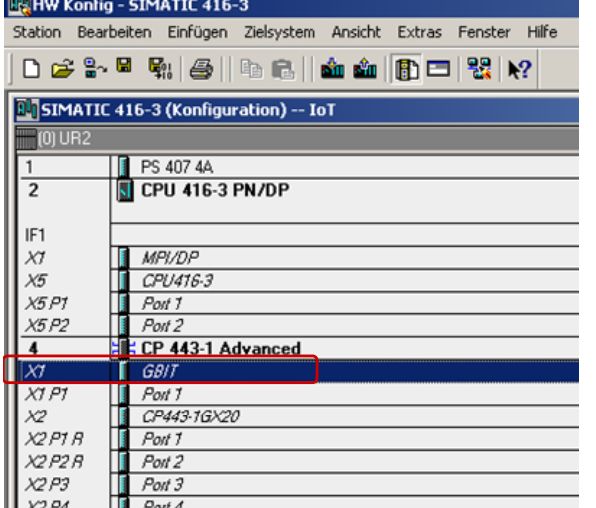
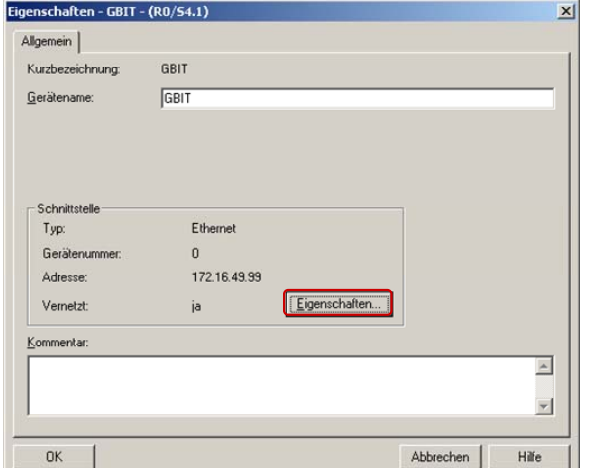
No.	Configuration step	Note
4.	<p>Activate the "Set MAC address / Use ISO protocol" function and enter the MAC address 00-0E-8C-D9-F0-1D of CP343-1.</p> <p>Enter the IP address 172.16.43.2 and subnet mask 255.255.0.0, which you have already assigned to CP343-1.</p> <p>Assign an existing subnet to CP343-1 or click the "New..." button to create a new subnet.</p> <p>Apply the settings with "OK".</p>	
5.	<p>Save and compile the hardware configuration of the S7-300 and then load the configuration into the S7-300 CPU.</p>	

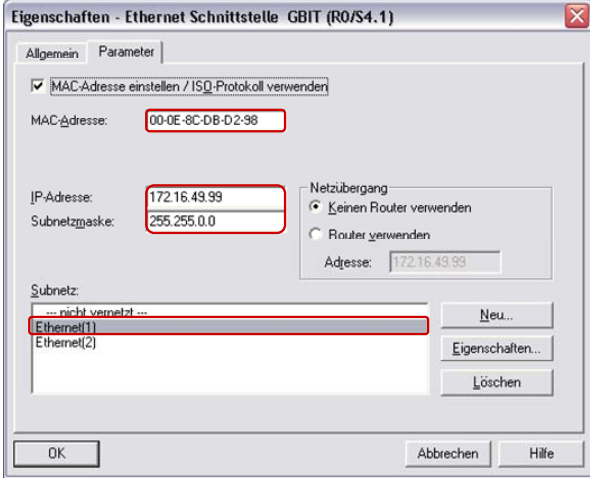
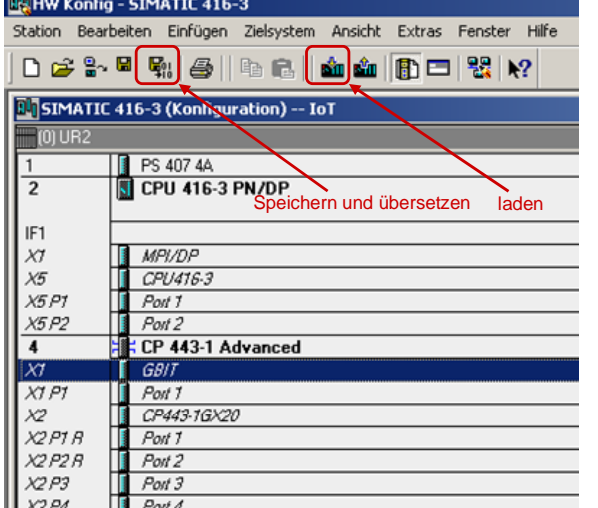
2.1.3 Entering the IP address of CP443-1 Advanced in the Hardware Configuration and downloading the configuration into the CPU

After you have assigned the IP address 192.168.99.121 and subnet mask 255.255.255.0 to CP343-1 you enter the assigned IP address in the Hardware Configuration.

Table 2-4

No.	Configuration step	Note
1.	In the SIMATIC Manager you mark the SIMATIC S7 400 station and double-click "Hardware" in order to open the Hardware Configuration of the S7-400 station.	
2.	In the Hardware Configuration of S7-400 you double-click the PROFINET interface of CP443-1 Advanced. The Properties dialog of the PROFINET interface opens.	
3.	In the Properties dialog of the PROFINET interface you click the "Properties..." button to open the "Properties - Ethernet interface PN-IO" dialog.	

No.	Configuration step	Note
4.	<p>Enter the IP address 192.168.99.121 and the subnet mask 255.255.255.0. Assign a subnet to the PROFINET interface of CP443-1 Advanced. In this example the subnet assigned to the PROFINET interface of CP443-1 Advanced is different to that assigned to the PROFINET interface of CP343-1. Apply the settings with "OK".</p>	
5.	<p>In the Hardware Configuration of S7-400 you double-click the GBIT interface of CP443-1 Advanced. The Properties dialog of the GBIT interface opens.</p>	
6.	<p>In the Properties dialog of the GBIT interface you click the "Properties..." button to open the "Properties - Ethernet interface GBIT" dialog.</p>	

No.	Configuration step	Note
7.	<p>Activate the "Set MAC address / Use ISO protocol" function and enter the MAC address 00-0E-8C-DB-D2-98 of CP443-1 Advanced.</p> <p>Enter the IP address 172.16.49.99 and the subnet mask 255.255.0.0.</p> <p>Assign the same subnet to the GBIT interface of CP443-1 Advanced as to the PROFINET interface of CP343-1.</p> <p>Apply the settings with "OK".</p>	
8.	<p>Save and compile the hardware configuration of the S7-400 and then load the configuration into the S7-400 CPU.</p>	

2.2 Configuring an ISO Transport Connection

Once you have completed configuration of CP343-1 and CP443-1 Advanced and have downloaded the hardware configuration into the S7-300 CPU and the S7-400 CPU, then you configure the ISO transport connection for data exchange between S7-300 and S7-400 by way of Industrial Ethernet CPs. The ISO transport connection is configured bilaterally in the S7-300 and in the S7-400.

2.2.1 Configuring a specified ISO transport connection

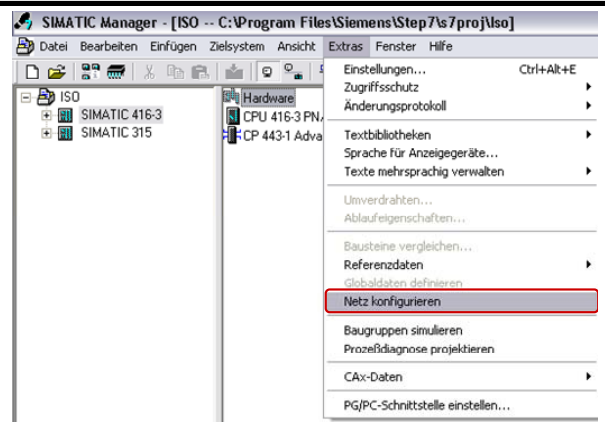
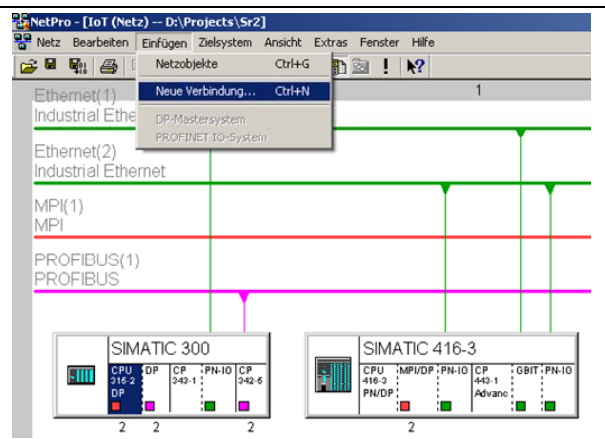
If the S7-300 and S7-400 between which there is data exchange are configured in the same STEP 7 project, then you configure a specified ISO transport connection.

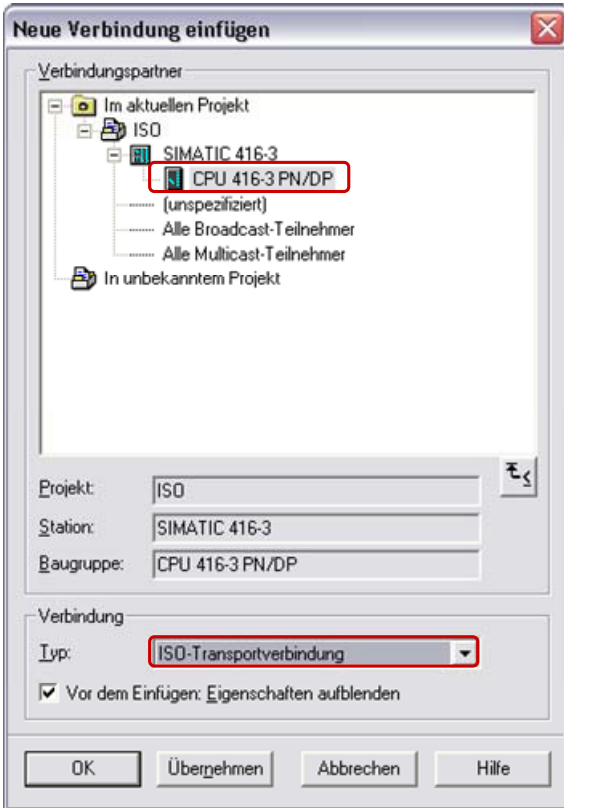
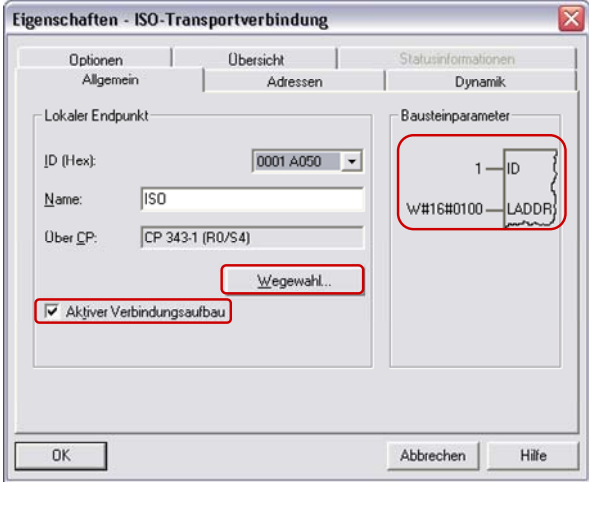
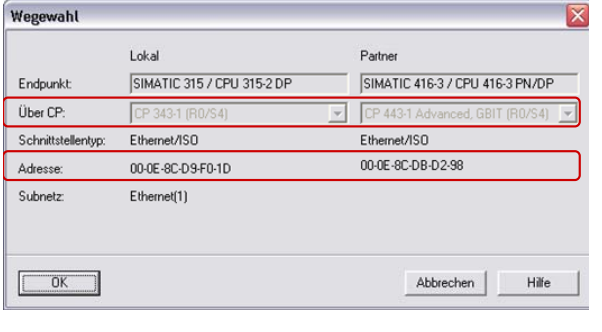
Below we describe how to configure a specified ISO transport connection for data exchange between an S7-300 and S7-400 by way of Industrial Ethernet CPs using the connection parameters below.

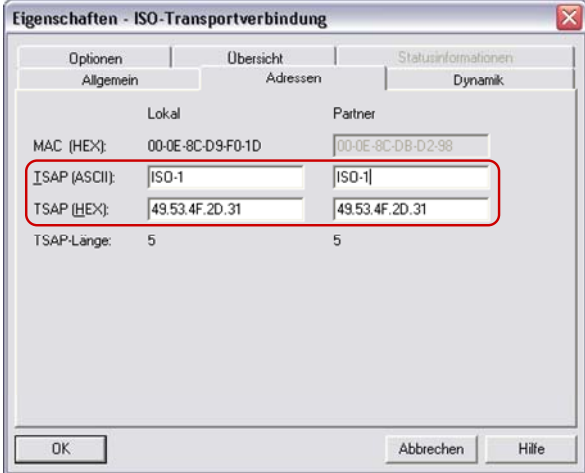
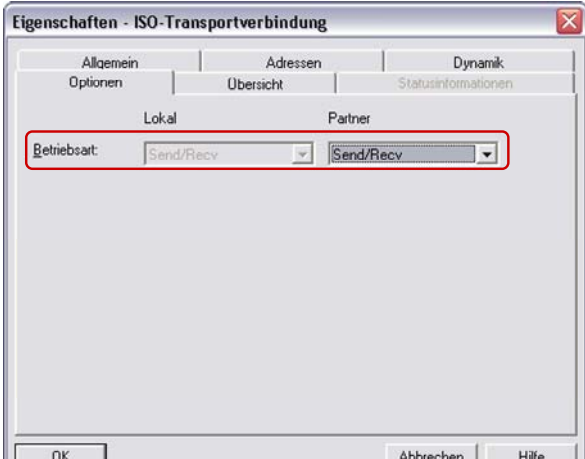
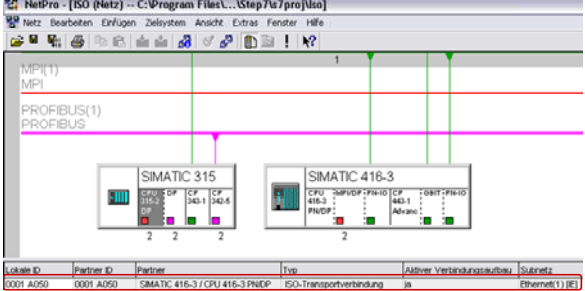
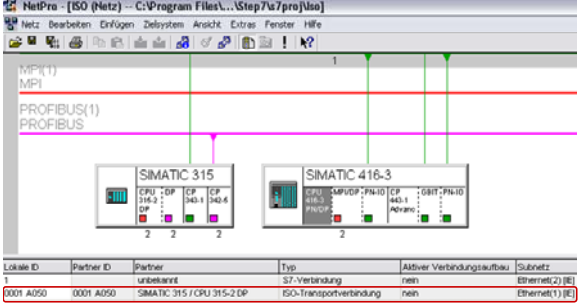
Table 2-5

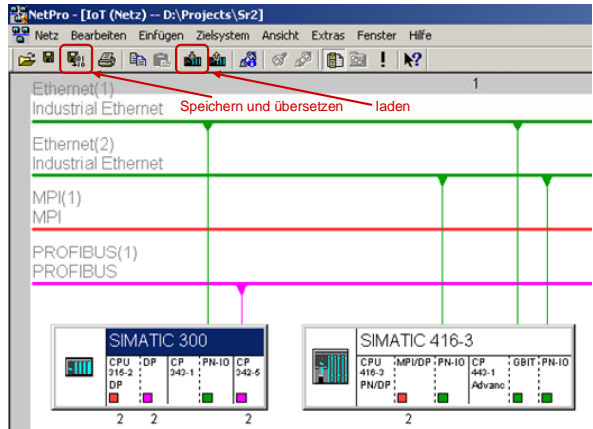
Connection parameters	S7-300	S7-400
Connection partners	S7-400 CPU	S7-300 CPU
Connection type	ISO transport connection	ISO transport connection
MAC address	00-0E-8C-D9-F0-1D	00-0E-8C-DB-D2-98
IP address	172.16.43.2	172.16.49.99
Connection setup	Active	Passive
ID (connection number)	1	1
LADDR (module start address)	W#16#0100	W#16#3FFA
Local TSAP (ASCII)	ISO-1	ISO-1
Local TSAP (HEX)	49.53.4F.2D.31	49.53.4F.2D.31
Partner TSAP (ASCII)	ISO-1	ISO-1
Partner TSAP (HEX)	54.43.50.2D.31	54.43.50.2D.31

Table 2-6

No.	Configuration step	Note
1.	In the SIMATIC Manager you open the STEP 7 project that contains the configurations of S7-300 and/or S7-400 between which the data is to be exchanged over an ISO transport connection. By means of the menu options → Configure Network you open NetPro where you configure the ISO transport connection.	
2.	Mark the CPU of the SIMATIC 300 station and create a new connection by means of the menu Insert → New Connection....	

No.	Configuration step	Note
3.	<p>In the "Insert New Connection" dialog you select the S7-400 CPU as connection partner.</p> <p>Select "ISO transport connection" as the connection type.</p> <p>Then click the "Apply" button to open the Properties dialog of the ISO transport connection.</p>	
4.	<p>In the Properties dialog of the ISO transport connection → "General" tab you determine the connection number and module start address of CP343-1 via the block parameters "ID" and "LADDR". You specify the values at the input parameters "ID" and "LADDR" when you call the functions FC5 "AG_SEND" and FC6 "AG_RECV". These functions are called in the user program of the CPU and are for sending and receiving data.</p> <p>Activate the function "Active connection establishment" because the S7-300 actively establishes the ISO transport connection.</p> <p>Double-click the "Route..." button.</p>	
5.	<p>In the "Route" dialog you see that the ISO transport connection is established between the MAC addresses 00-0E-8C-D9-F0-1D and 00-0E-8C-DB-D2-98, i.e. the data is exchanged between S7-300 and S7-400 via CP343-1 and the GBIT interface of CP443-1.</p> <p>Close the dialog with "OK" and switch to the "Addresses" tab in the Properties dialog of the ISO transport connection.</p>	

No.	Configuration step	Note												
6.	<p>In the Properties dialog of the ISO transport connection → "Addresses" tab you enter the local TSAP and the partner TSAP. This defines the local connection end point in the S7-300 and the connection end point in the communication partner.</p> <p>In the Properties dialog of the ISO transport connection you switch to the "Options" tab.</p>													
7.	<p>In the Properties dialog of the ISO transport connection → "Options" tab you select the "Send/Recv" mode locally in the S7-300 and in the communication partner.</p> <p>Apply the settings with "OK".</p>													
8.	<p>Mark the CPU of the SIMATIC 300 station. The configured ISO transport connection is now displayed in the connection table.</p>	 <table border="1" data-bbox="767 1547 1353 1574"> <thead> <tr> <th>Lokale ID</th> <th>Partner ID</th> <th>Partner</th> <th>Typ</th> <th>Aktive Verbindungsaufbau</th> <th>Subnetz</th> </tr> </thead> <tbody> <tr> <td>0001 A050</td> <td>0001 A050</td> <td>SIMATIC 416-3 / CPU 416-3 PN/DP</td> <td>ISO-Transportverbindung</td> <td>ja</td> <td>Ethernet(1) [E]</td> </tr> </tbody> </table>	Lokale ID	Partner ID	Partner	Typ	Aktive Verbindungsaufbau	Subnetz	0001 A050	0001 A050	SIMATIC 416-3 / CPU 416-3 PN/DP	ISO-Transportverbindung	ja	Ethernet(1) [E]
Lokale ID	Partner ID	Partner	Typ	Aktive Verbindungsaufbau	Subnetz									
0001 A050	0001 A050	SIMATIC 416-3 / CPU 416-3 PN/DP	ISO-Transportverbindung	ja	Ethernet(1) [E]									
9.	<p>Mark the CPU of the SIMATIC 400 station. The configured ISO transport connection is now displayed in the connection table.</p>	 <table border="1" data-bbox="767 1850 1353 1899"> <thead> <tr> <th>Lokale ID</th> <th>Partner ID</th> <th>Partner</th> <th>Typ</th> <th>Aktive Verbindungsaufbau</th> <th>Subnetz</th> </tr> </thead> <tbody> <tr> <td>0001 A050</td> <td>0001 A050</td> <td>SIMATIC 315 / CPU 315-2 DP</td> <td>ISO-Transportverbindung</td> <td>nein</td> <td>Ethernet(2) [E]</td> </tr> </tbody> </table>	Lokale ID	Partner ID	Partner	Typ	Aktive Verbindungsaufbau	Subnetz	0001 A050	0001 A050	SIMATIC 315 / CPU 315-2 DP	ISO-Transportverbindung	nein	Ethernet(2) [E]
Lokale ID	Partner ID	Partner	Typ	Aktive Verbindungsaufbau	Subnetz									
0001 A050	0001 A050	SIMATIC 315 / CPU 315-2 DP	ISO-Transportverbindung	nein	Ethernet(2) [E]									

No.	Configuration step	Note
10.	<p>Once you have completed the connection configuration, you save and compile the configuration. Mark the SIMATIC 300 station and download the configuration into the S7-300 CPU.</p> <p>Then mark the SIMATIC 400 station and download the configuration into the S7-400 CPU.</p>	
11.	<p>In the user program of the S7-300 you call the functions FC5 "AG_SEND" and FC6 "AG_RECV".</p>	<p>You will find the functions FC5 "AG_SEND" and FC6 "AG_RECV" in the library "SIMATIC_NET_CP → CP 300 → Blocks".</p> <p>At the link below is a sample program with the call of the functions FC5 "AG_SEND" and FC6 "AG_RECV" for the S7-300.</p> <p>http://support.automation.siemens.com/WW/view/de/17853532</p>
12.	<p>In the user program of the S7-400 you call the functions FC50 "AG_LSEND" and FC60 "AG_LRECV".</p>	<p>You will find the functions FC50 "AG_LSEND" and FC60 "AG_LRECV" in the library "SIMATIC_NET_CP → CP 400 → Blocks".</p> <p>At the link below is a sample program with the call of the functions FC50 "AG_LSEND" and FC60 "AG_LRECV" for the S7-400.</p> <p>http://support.automation.siemens.com/WW/view/de/24693800</p>

2.2.2 Configuring an unspecified ISO transport connection

If the S7-300 and S7-400 between which there is data exchange are configured in different STEP 7 projects, then you configure an unspecified ISO transport connection.

Below we describe how to configure an **unspecified** ISO transport connection for data exchange between an S7-300 and S7-400 by way of Industrial Ethernet CPs using the connection parameters below.

Table 2-7

Connection parameters	S7-300	S7-400
Connection partners	S7-400 CPU	S7-300 CPU
Connection type	ISO transport connection	ISO transport connection
MAC address	00-0E-8C-D9-F0-1D	00-0E-8C-DB-D2-98
IP address	172.16.43.2	172.16.49.99
Connection setup	Active	Passive
ID (connection number)	2	2
LADDR (module start address)	W#16#0100	W#16#3FFA
Local TSAP (ASCII)	ISO-2	ISO-3
Local TSAP (HEX)	49.53.4F.2D.32	49.53.4F.2D.33

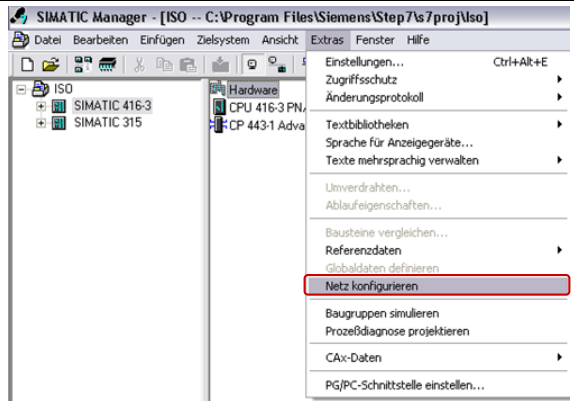
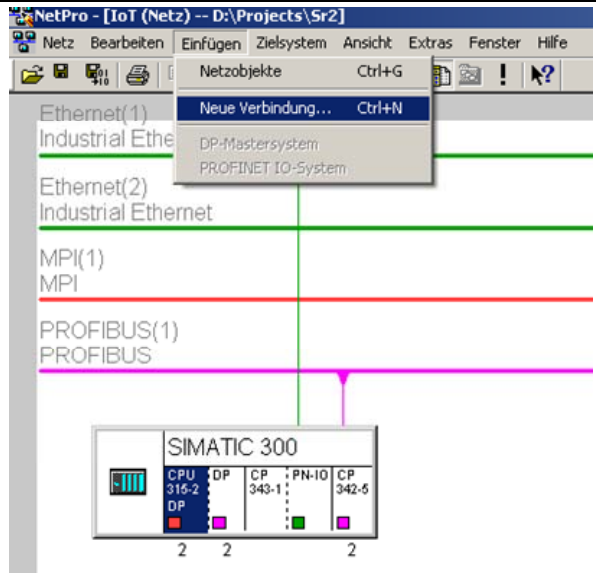
2 Configuration

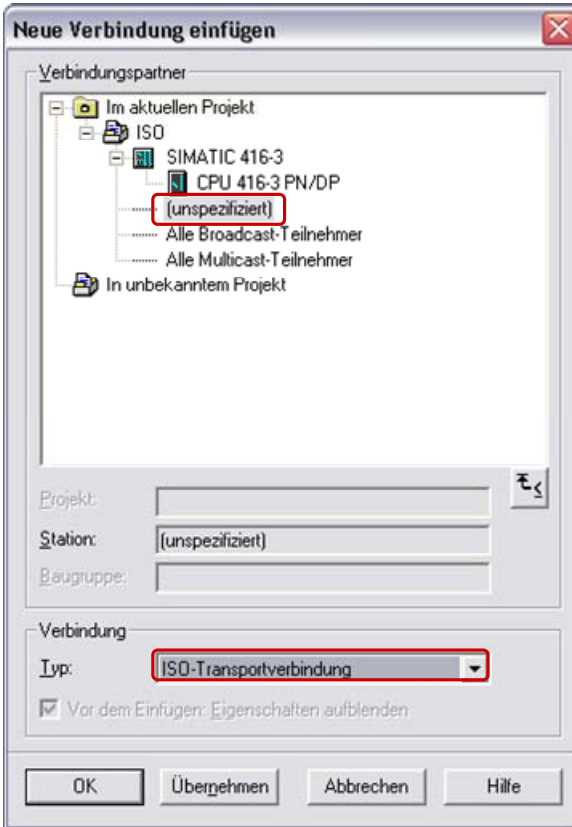
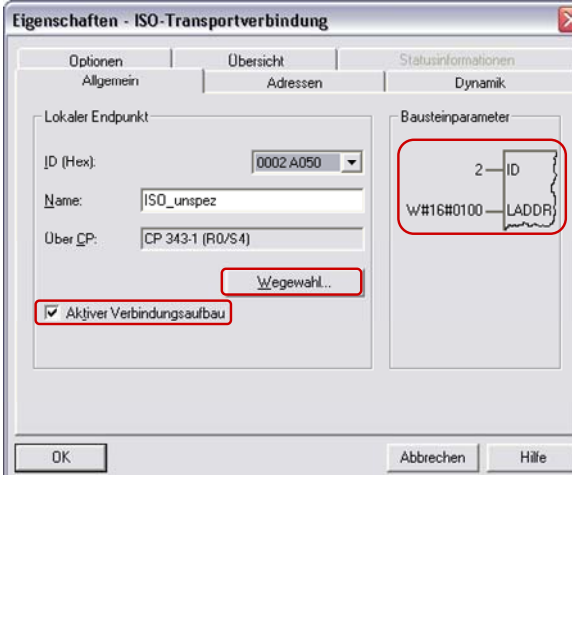
Connection parameters	S7-300	S7-400
Partner TSAP (ASCII)	ISO-3	ISO-2
Partner TSAP (HEX)	49.53.4F.2D.33	49.53.4F.2D.32

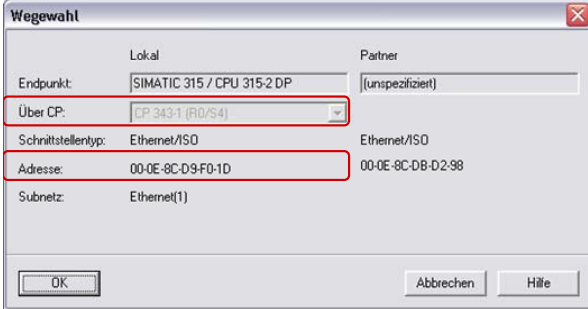
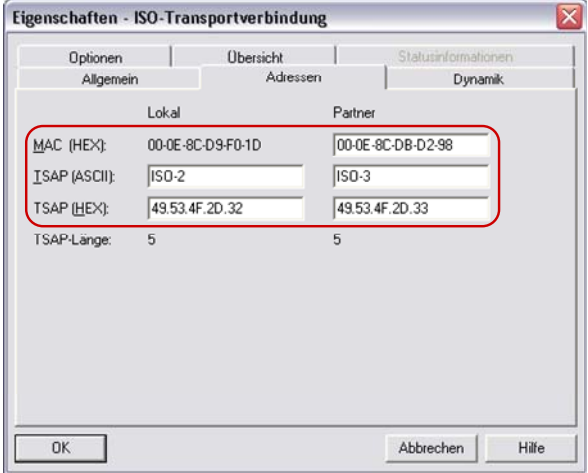
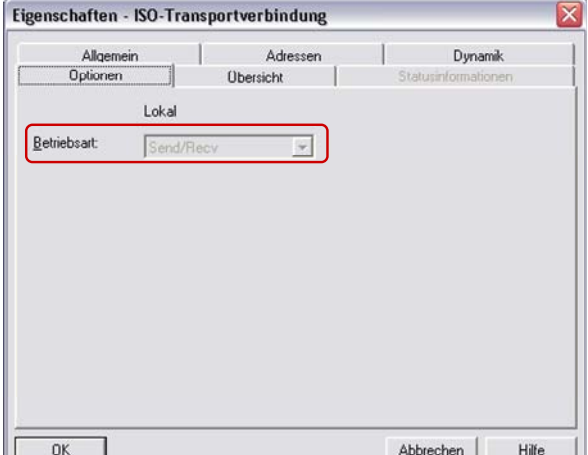
Configuring an unspecified ISO transport connection for the S7-300

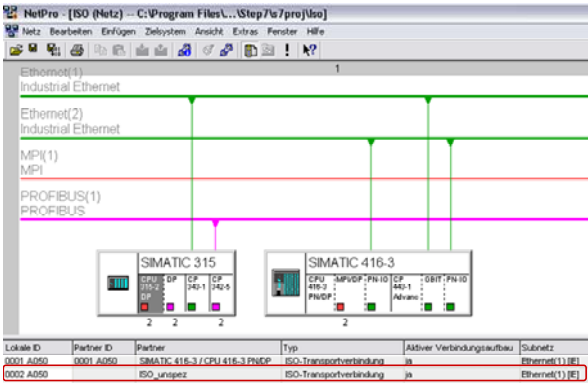
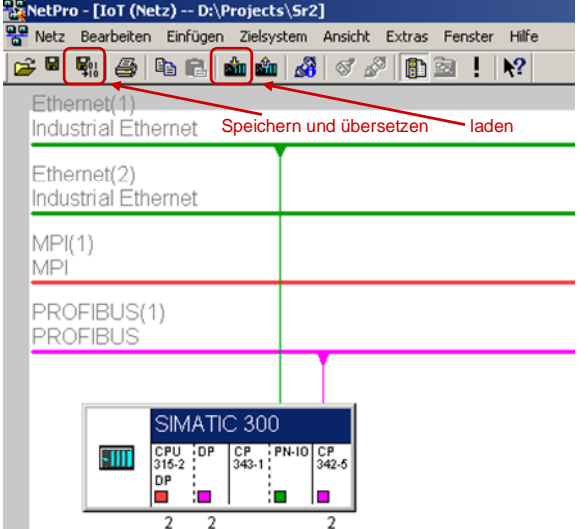
Follow the instructions below to configure an unspecified ISO transport connection for the S7-300.

Table 2-8

No.	Configuration step	Note
1.	In the SIMATIC Manager you open the STEP 7 project that contains the configuration of S7-300 which is to send and receive the data over an ISO transport connection. By means of the menu Options → Configure Network you open NetPro where you configure the ISO transport connection.	
2.	Mark the CPU of the SIMATIC 300 station and create a new connection by means of the menu Insert → New Connection...	

No.	Configuration step	Note
3.	<p>In the "Insert New Connection" dialog you select the item "unspecified" as connection partner.</p> <p>Select "ISO transport connection" as the connection type.</p> <p>Then click the "Apply" button to open the Properties dialog of the ISO transport connection.</p>	
4.	<p>In the Properties dialog of the ISO transport connection → "General" tab you determine the block parameters "ID" and "LADDR". The block parameter ID provides the connection number. The block parameter LADDR provides the module start address of CP343-1.</p> <p>You specify the connection number and the module start address at the input parameters "ID" and "LADDR" respectively when you call the functions FC5 "AG_SEND" and FC6 "AG_RECV". These functions are called in the user program of the CPU and are for sending and receiving data.</p> <p>Activate the function "Active connection establishment" because the S7-300 actively establishes the ISO transport connection.</p> <p>Double-click the "Route..." button.</p>	

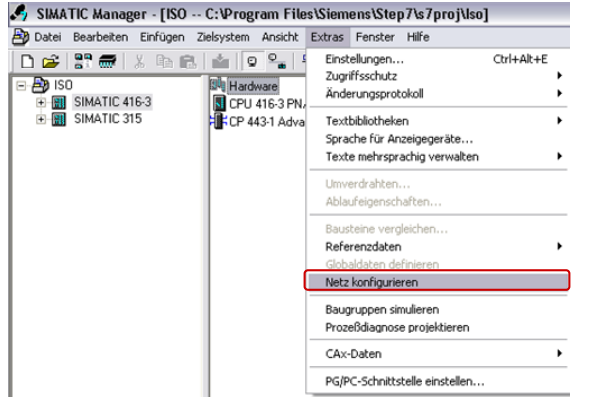
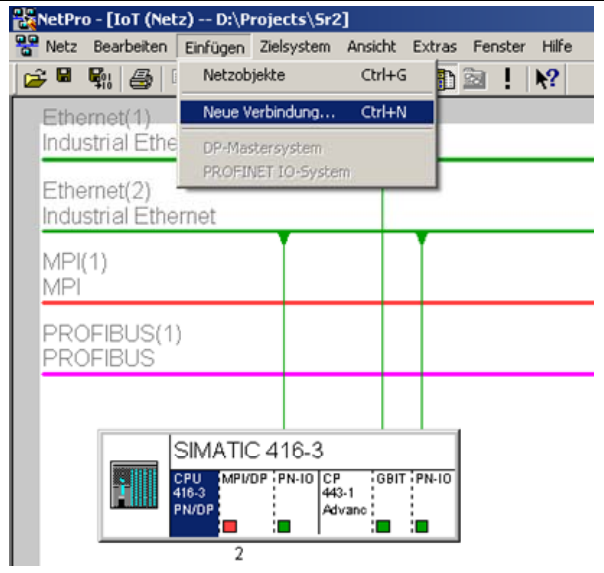
No.	Configuration step	Note
5.	<p>In the "Route" dialog you see that the ISO transport connection to the communication partner is established by way of the MAC address 00-0E-8C-D9-F0-1D, i.e. the data is exchanged with the communication partner by way of the CP343-1.</p> <p>Close the dialog with "OK" and switch to the "Addresses" tab in the Properties dialog of the ISO transport connection.</p>	
6.	<p>In the Properties dialog of the ISO transport connection → "Addresses" tab you enter the MAC address of the communication partner, i.e. in this example you enter the MAC address 00-0E-8C-DB-D2-98 of CP443-1 Advanced.</p> <p>Then you enter the local TSAP and the partner TSAP. This defines the local connection end point in the S7-300 and the connection end point in the communication partner.</p> <p>In the Properties dialog of the ISO transport connection you switch to the "Options" tab.</p> <p>Note: In the SIMATIC 300 station you enter the local TSAP of the SIMATIC S7-400 as the partner TSAP.</p>	
7.	<p>In the Properties dialog of the ISO transport connection → "Options" tab you select the "Send/Recv" mode.</p> <p>Apply the settings with "OK".</p>	

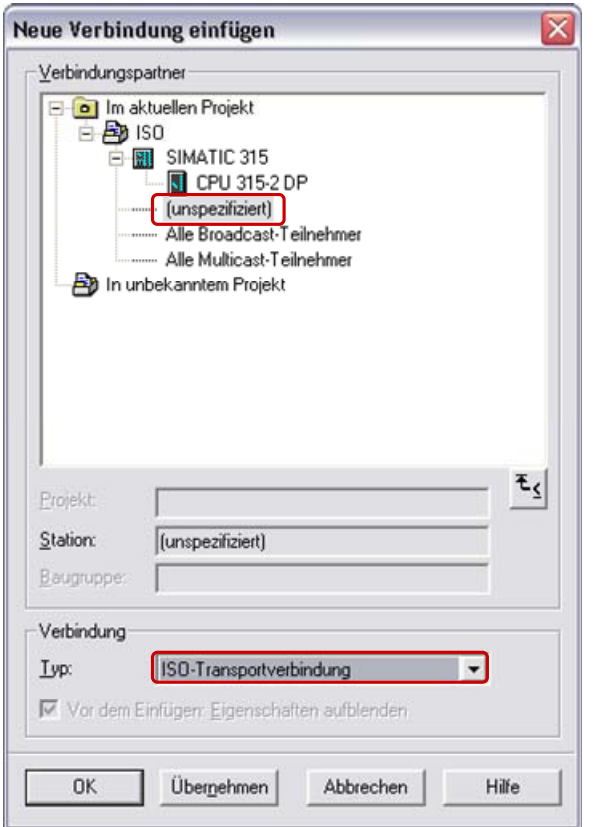
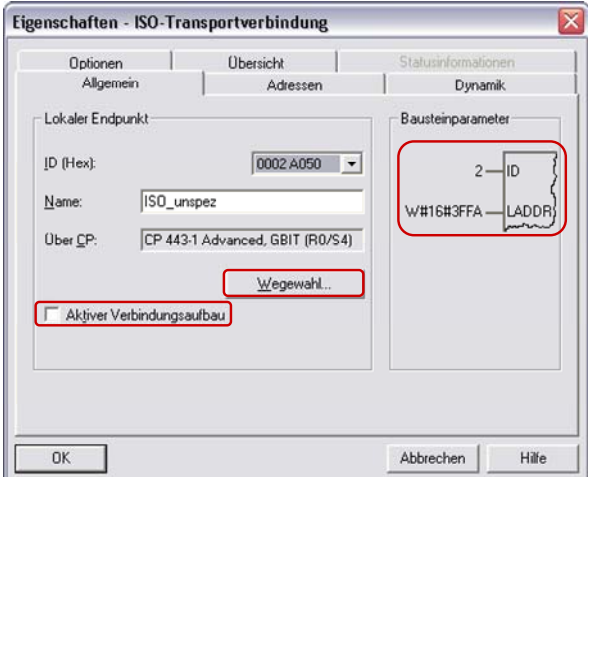
No.	Configuration step	Note																		
8.	Mark the CPU of the SIMATIC 300 station. The configured ISO transport connection is now displayed in the connection table.	 <table border="1" data-bbox="767 640 1356 685"> <thead> <tr> <th>Lokale ID</th> <th>Partner ID</th> <th>Partner</th> <th>Typ</th> <th>Activer Verbindungsaufbau</th> <th>Subnetz</th> </tr> </thead> <tbody> <tr> <td>0001 A050</td> <td>0001 A050</td> <td>SIMATIC 416-3 / CPU 416-3 PN/DP</td> <td>ISO-Transportverbindung</td> <td>ja</td> <td>Ethernet(1) [E]</td> </tr> <tr> <td>0002 A050</td> <td></td> <td>ISO_unspez</td> <td>ISO-Transportverbindung</td> <td>ja</td> <td>Ethernet(1) [E]</td> </tr> </tbody> </table>	Lokale ID	Partner ID	Partner	Typ	Activer Verbindungsaufbau	Subnetz	0001 A050	0001 A050	SIMATIC 416-3 / CPU 416-3 PN/DP	ISO-Transportverbindung	ja	Ethernet(1) [E]	0002 A050		ISO_unspez	ISO-Transportverbindung	ja	Ethernet(1) [E]
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0002 A050		ISO_unspez	ISO-Transportverbindung	ja	Ethernet(1) [E]															
9.	Once you have completed the connection configuration, you save and compile the configuration. Mark the SIMATIC 300 station and download the configuration into the S7-300 CPU.																			
10.	In the user program of the S7-300 you call the functions FC5 "AG_SEND" and FC6 "AG_RECV".	<p>You will find the functions FC5 "AG_SEND" and FC6 "AG_RECV" in the library "SIMATIC_NET_CP → CP 300 → Blocks".</p> <p>At the link below is a sample program with the call of the functions FC5 "AG_SEND" and FC6 "AG_RECV" for the S7-300.</p> <p>http://support.automation.siemens.com/WWW/view/de/17853532</p>																		

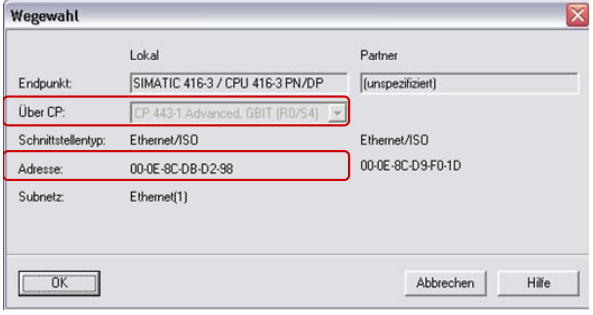
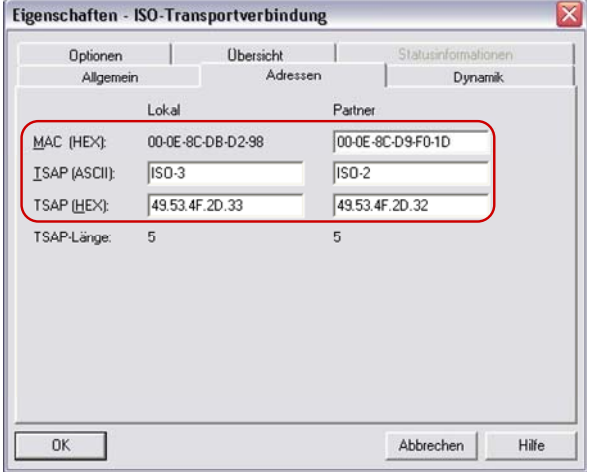

Configuring an unspecified ISO transport connection for the S7-400

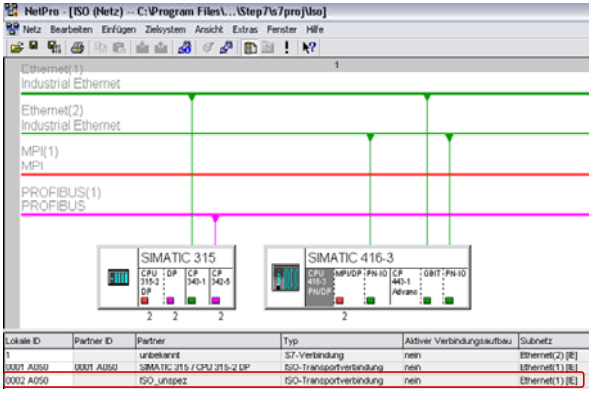
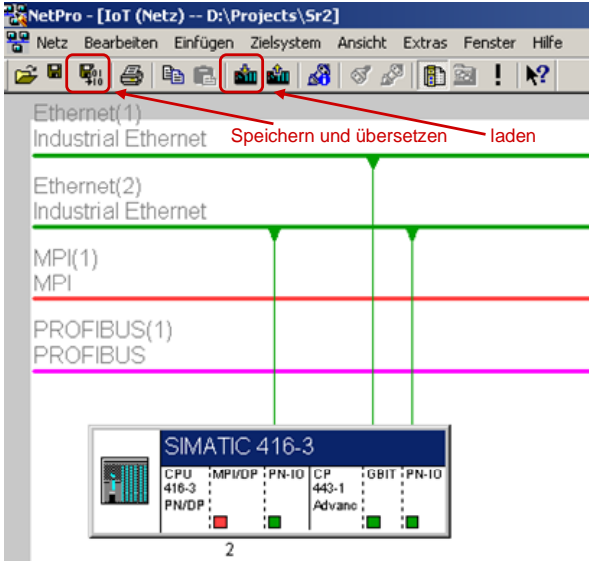
Follow the instructions below to configure an unspecified ISO transport connection for the S7-400.

Table 2-9

No.	Configuration step	Note
1.	<p>In the SIMATIC Manager you open the STEP 7 project that contains the configuration of S7-400 which is to send and receive the data over an ISO transport connection.</p> <p>By means of the menu Options → Configure Network you open NetPro where you configure the ISO transport connection.</p>	 <p>The screenshot shows the SIMATIC Manager interface. The 'Extras' menu is open, and the option 'Netz konfigurieren' is highlighted with a red box. The background shows a project tree with SIMATIC 416-3 and SIMATIC 315.</p>
2.	<p>Mark the CPU of the SIMATIC 400 station and create a new connection by means of the menu Insert → New Connection....</p>	 <p>The screenshot shows the NetPro interface. The 'Insert' menu is open, and the option 'Neue Verbindung...' is selected. The background shows a network diagram with Ethernet, MPI, and PROFIBUS connections to a SIMATIC 416-3 CPU.</p>

No.	Configuration step	Note
3.	<p>In the "Insert New Connection" dialog you select the item "unspecified" as connection partner.</p> <p>Select "ISO transport connection" as the connection type.</p> <p>Then click the "Apply" button to open the Properties dialog of the ISO transport connection.</p>	
4.	<p>In the Properties dialog of the ISO transport connection → "General" tab you determine the block parameters "ID" and "LADDR". The block parameter ID provides the connection number. The block parameter LADDR provides the module start address of CP443-1 Advanced.</p> <p>You specify the connection number and the module start address at the input parameters "ID" and "LADDR" respectively when you call the functions FC50 "AG_LSEND" and FC60 "AG_LRECV". These functions are called in the user program of the CPU and are for sending and receiving data.</p> <p>Deactivate the function "Active connection establishment" because the S7-400 is passively involved in establishing the ISO transport connection.</p> <p>Double-click the "Route..." button.</p>	

No.	Configuration step	Note
5.	<p>In the "Route" dialog you see that the ISO transport connection to the communication partner is established by way of the MAC address 00-0E-8C-DB-D2-98, i.e. the data is exchanged with the communication partner by way GBIT interface of CP443-1 Advanced.</p> <p>Close the dialog with "OK" and switch to the "Addresses" tab in the Properties dialog of the ISO transport connection.</p>	
6.	<p>In the Properties dialog of the ISO transport connection → "Addresses" tab you enter the MAC address of the communication partner, i.e. in this example you enter the MAC address 00-0E-8C-D9-F0-1D of CP343-1.</p> <p>Then you enter the local TSAP and the partner TSAP. This defines the local connection end point in the S7-400 and the connection end point in the communication partner.</p> <p>In the Properties dialog of the ISO transport connection you switch to the "Options" tab.</p> <p>Note: In the SIMATIC 400 station you enter the local TSAP of the SIMATIC S7-300 as the partner TSAP.</p>	
7.	<p>In the Properties dialog of the ISO transport connection → "Options" tab you select the "Send/Recv" mode.</p> <p>Apply the settings with "OK".</p>	

No.	Configuration step	Note																								
8.	Mark the CPU of the SIMATIC 400 station. The configured ISO transport connection is now displayed in the connection table.	 <table border="1" data-bbox="767 633 1359 696"> <thead> <tr> <th>Lokale ID</th> <th>Partner ID</th> <th>Partner</th> <th>Typ</th> <th>Aktiver Verbindungsaufbau</th> <th>Subnetz</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>unbekannt</td> <td>S7-Verbindung</td> <td>nein</td> <td>Ethernet(2) [R]</td> </tr> <tr> <td>0001 A050</td> <td>0001 A050</td> <td>SIMATIC 315 / CPU 315-2 DP</td> <td>ISO-Transportverbindung</td> <td>nein</td> <td>Ethernet(1) [R]</td> </tr> <tr> <td>0002 A050</td> <td></td> <td>ISO_unspez</td> <td>ISO-Transportverbindung</td> <td>nein</td> <td>Ethernet(1) [R]</td> </tr> </tbody> </table>	Lokale ID	Partner ID	Partner	Typ	Aktiver Verbindungsaufbau	Subnetz	1		unbekannt	S7-Verbindung	nein	Ethernet(2) [R]	0001 A050	0001 A050	SIMATIC 315 / CPU 315-2 DP	ISO-Transportverbindung	nein	Ethernet(1) [R]	0002 A050		ISO_unspez	ISO-Transportverbindung	nein	Ethernet(1) [R]
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9.	Once you have completed the connection configuration, you save and compile the configuration. Mark the SIMATIC 400 station and download the configuration into the S7-400 CPU.																									
10.	In the user program of the S7-400 you call the functions FC50 "AG_LSEND" and FC60 "AG_LRECV".	<p>You will find the functions FC50 "AG_LSEND" and FC60 "AG_LRECV" in the library "SIMATIC_NET_CP → CP 400 → Blocks".</p> <p>At the link below is a sample program with the call of the functions FC50 "AG_LSEND" and FC60 "AG_LRECV" for the S7-400.</p> <p>http://support.automation.siemens.com/WWW/view/de/24693800</p>																								