

OACIS

Open Architecture Control Integrated System

Siemens S7-1200_1500 UDP with OACIS

version 01.01



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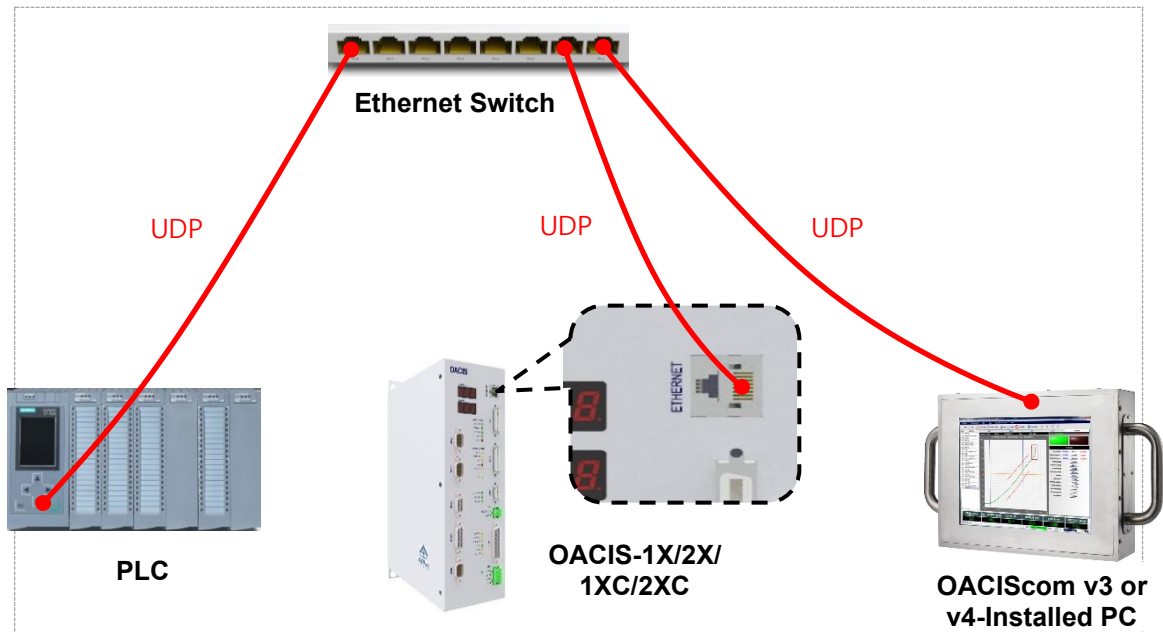
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I. SYSTEM CONFIGURATION

A. Overall Ethernet Connection



- During the initialization process, OACIS IP address shows on FND of the front panel for 2 seconds.
- Overall wiring can be different depending on the purpose of use.

B. Download Files

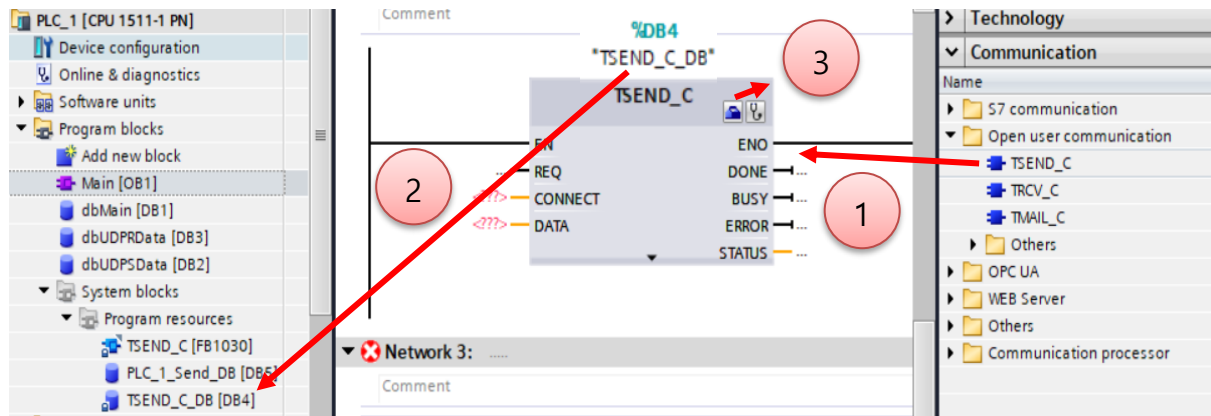
For your PLC program to communicate with OACIS, you need to download **Siemens S7-1200_1500 UDP Template with OACIS_eng_v002.zip** file below from

http://atainc.com/en/Support/?dir=%2F03.SOFTWARE%2F03.PLC_PROGRAM/Siemens_S7-1200_1500_UDP_Template_with_OACIS_eng_v002.zip

Siemens S7-1200_1500 UDP Template with OACIS_eng_v002.zip
-. S7-1500_UDP_v001.zip
-. ATA-MA-G-Siemens S7-1200_1500 UDP with OACIS_eng_v01.01.pdf

C. Configuration: Send 1

1. Bring TSEND_C
2. If you bring TSEND_C, DB with same name is automatically created in Program sources
3. Click the purse-shaped icon



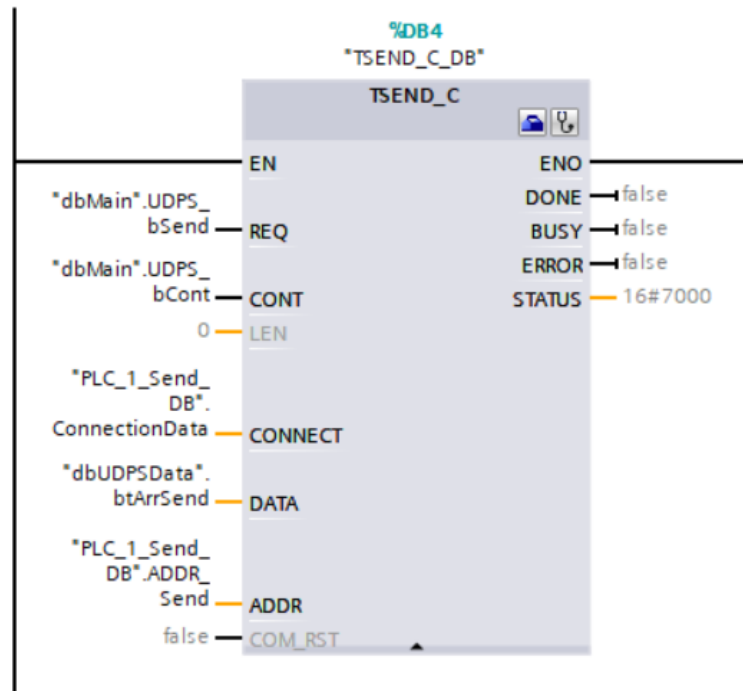
D. Configuration: Send 2

1. Partner: Unspecified
2. Connection data: Select a default value after clicking New
3. Connection type: UDP
4. Configuration mode: Use program blocks
5. Connection ID: Assign not to overlap if PLC communicates with different devices
6. OACIS IP Address
7. Partner Port: You can pick one of OACIS-side Com Port. 2008~2010
8. Local Port: PLC-side Com Port

The screenshot shows the 'Configuration' tab of the 'TSEND_C [FB1030]' window. The 'Connection parameter' section is active, showing 'General' settings. The 'Local' side configuration includes: End point (PLC_1 [CPU 1511-1 PN]), Interface (PLC_1, PROFINET interface_1[X1]), Subnet, Address (172.28.30.10), Connection type (UDP), Configuration mode (Use program blocks), Connection ID (dec): 1, and Connection data (PLC_1_Send_DB). The 'Partner' side configuration includes: Partner (Unspecified), Interface, Subnet, Address (172.28.30.117), and Port (decimal): 2000. The 'Address details' section shows Local Port (2000) and Partner Port (2000). Red circles with numbers 1-8 highlight the following fields: 1. Partner dropdown, 2. Connection data dropdown, 3. Connection type dropdown, 4. Configuration mode dropdown, 5. Connection ID input field, 6. Partner Address input field, 7. Partner Port input field, and 8. Local Port input field.

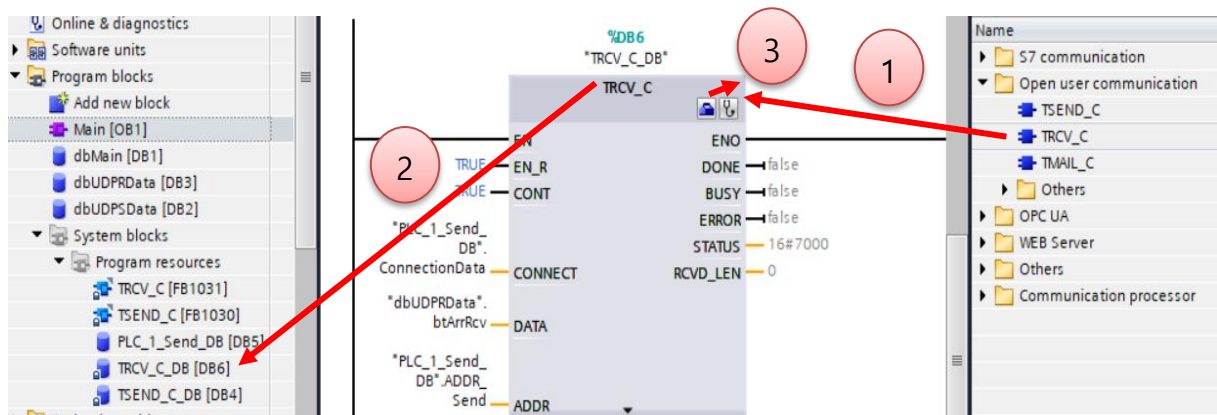
E. Configuration: Send 3

1. REQ: When you turn on the bit, data be sent while changing false to true
2. CONT: Always true
3. LEN: If you set Data to send as (byte). 0, all Data be sent
4. CONNECT: Create automatically in the previous step (Do not manually create)
5. ADDR: Create automatically in the previous step (Do not manually create)
6. ERROR: If normal, false
7. STATUS: if normal, 0x7004



F. Configuration: Receive 1

1. Bring TRCV_C
2. If you bring TRCV_C, DB with same name is automatically created in Program sources
3. Click the purse-shaped icon



G. Configuration: Receive 2

1. Partner: Unspecified
2. Connection data: Select the value that you set in above Send
3. Connection type: UDP
4. Configuration mode: Use program blocks
5. Connection ID: Assign not to overlap if PLC communicates with different devices
6. Local Port: PLC-side Com Port

The screenshot shows the 'Configuration' tab for the 'TRCV_C [FB1031]' block. The 'Connection parameter' section is active, and the 'General' sub-tab is selected. The configuration is as follows:

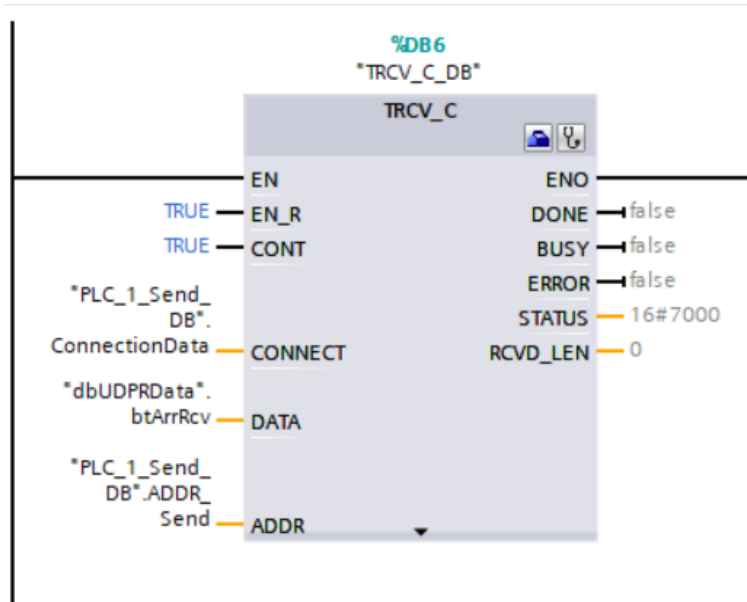
- Local:**
 - End point: PLC_1 [CPU 1511-1 PN]
 - Interface: PLC_1, PROFINET interface_1[X1]
 - Subnet: (empty)
 - Address: 172.28.30.10
- Partner:**
 - Partner: Unspecified (marked with a red circle 1)
- Connection type:** UDP (marked with a red circle 3)
- Configuration mode:** Use program blocks (marked with a red circle 4)
- Connection ID (dec):** 1 (marked with a red circle 5)
- Connection data:** PLC_1_Send_DB (marked with a red circle 2)
- Active connection establishment:** (radio button selected)

The 'Address details' section shows:

- Local Port:** 2000 (marked with a red circle 6)
- Partner Port:** (empty)

H. Configuration: Receive 3

1. EN_R: Always true
2. CONT: Always true
3. CONNECT: Create automatically in the previous step (Do not manually create)
4. ADDR: Create automatically in the previous step (Do not manually create)
5. ERROR: If normal, false
6. STATUS: if normal, 0x7006



REVISION

v01.00: Engineering Released

v01.01: Title updated