

Advantech AE Technical Share Document

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| Date | 2018/ 05/ 07 | SR# | 1-3443372161 |
| Category | <input type="checkbox"/> FAQ <input checked="" type="checkbox"/> SOP | Related OS | N/A |
| Abstract | CODESYS, How to use network variable function | | |
| Keyword | CODESYS, Data exchange, Network variable | | |
| Related Product | APAX-5580-CDS, ADAM-5560-CDS | | |

■ Problem Description:

In the CODESYS, there is a function which is called “network variable” to allow the data exchange between different CODESYS RTE.

The system structure is shown as *Figure 1*, the sender and the receiver of CODESYS RTEs in the same network domain could use the UDP to update the data in the GVL (global variable list) from the sender to the receiver.

The customer could download the sample project in the CODESYS website to test it directly, in this SOP, we will simply introduce the setting procedures in the CODESYS to use this function.

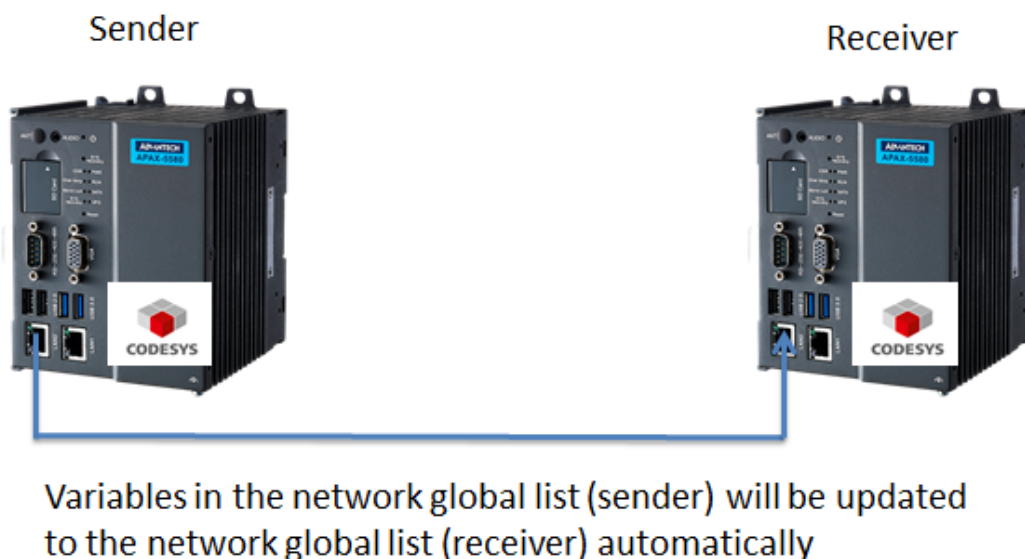


Figure 1

■ Answer:

1. Add two devices in the CODESYS project. (Figure 3)

Note: Two CODESYS RTE devices must in the same network domain so that sender to send the data to the receiver successfully

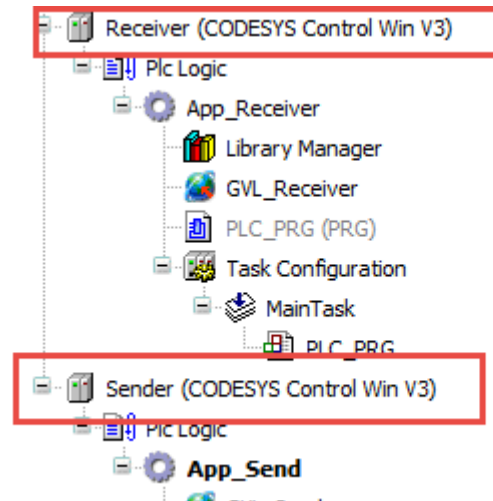


Figure 2

2. Create network variable list (sender) and announce the variable in the GVL (Figure 3)

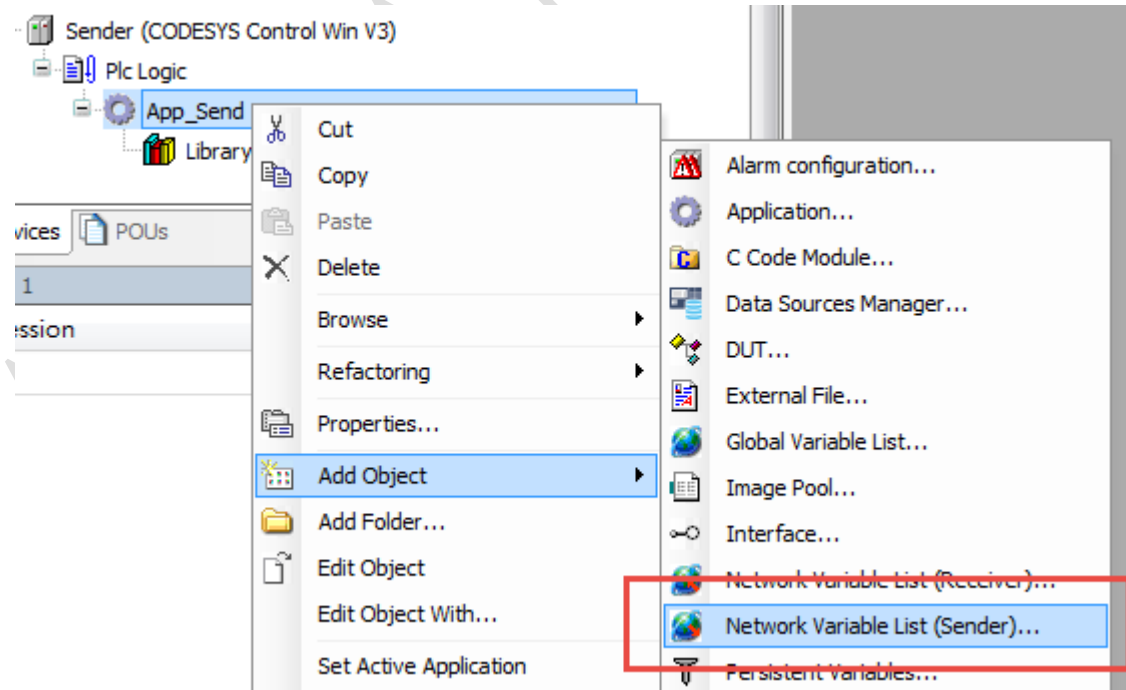


Figure 3

3. In the Properties→ Network Properties select the network type, task and update interval accordingly (Figure 4)

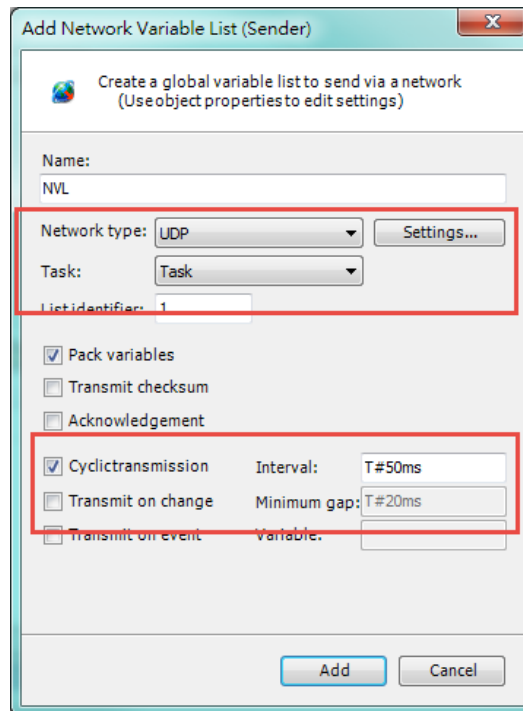


Figure 4

4. Create network variable list (Receiver) and announce the variable in the GVL at **another device**

Note: Here you could select the Sender GVL and then all of the variables will be created automatically. (Figure 5)

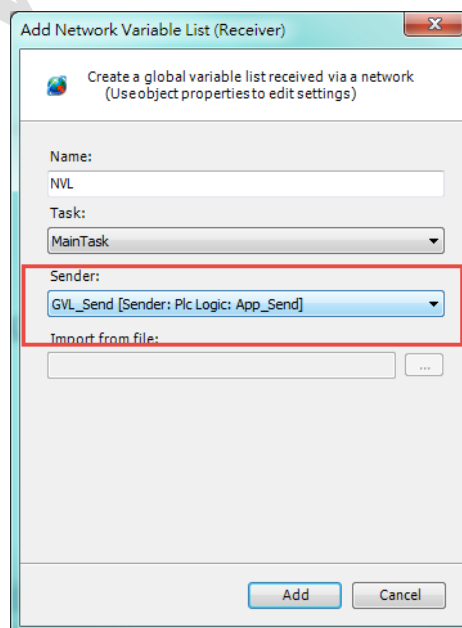


Figure 5

5. Compile and download the program into two CODESYS RTE separately.

Note: In order to select the application to be downloaded to the CODESYS RTE, please right click on the application → Set Active Application (*Figure 6*)

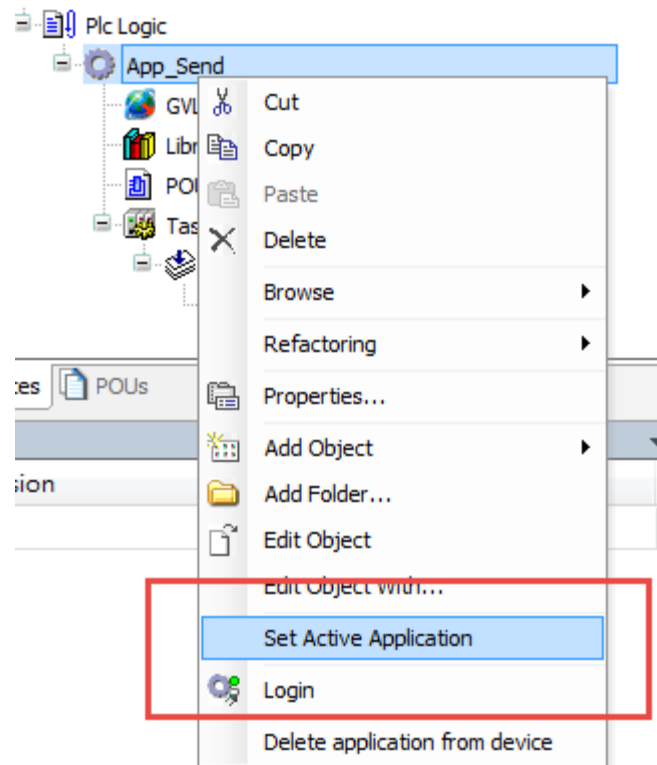


Figure 6