GW-7553 (Modbus TCP Master) Example for SIMATIC STEP 7

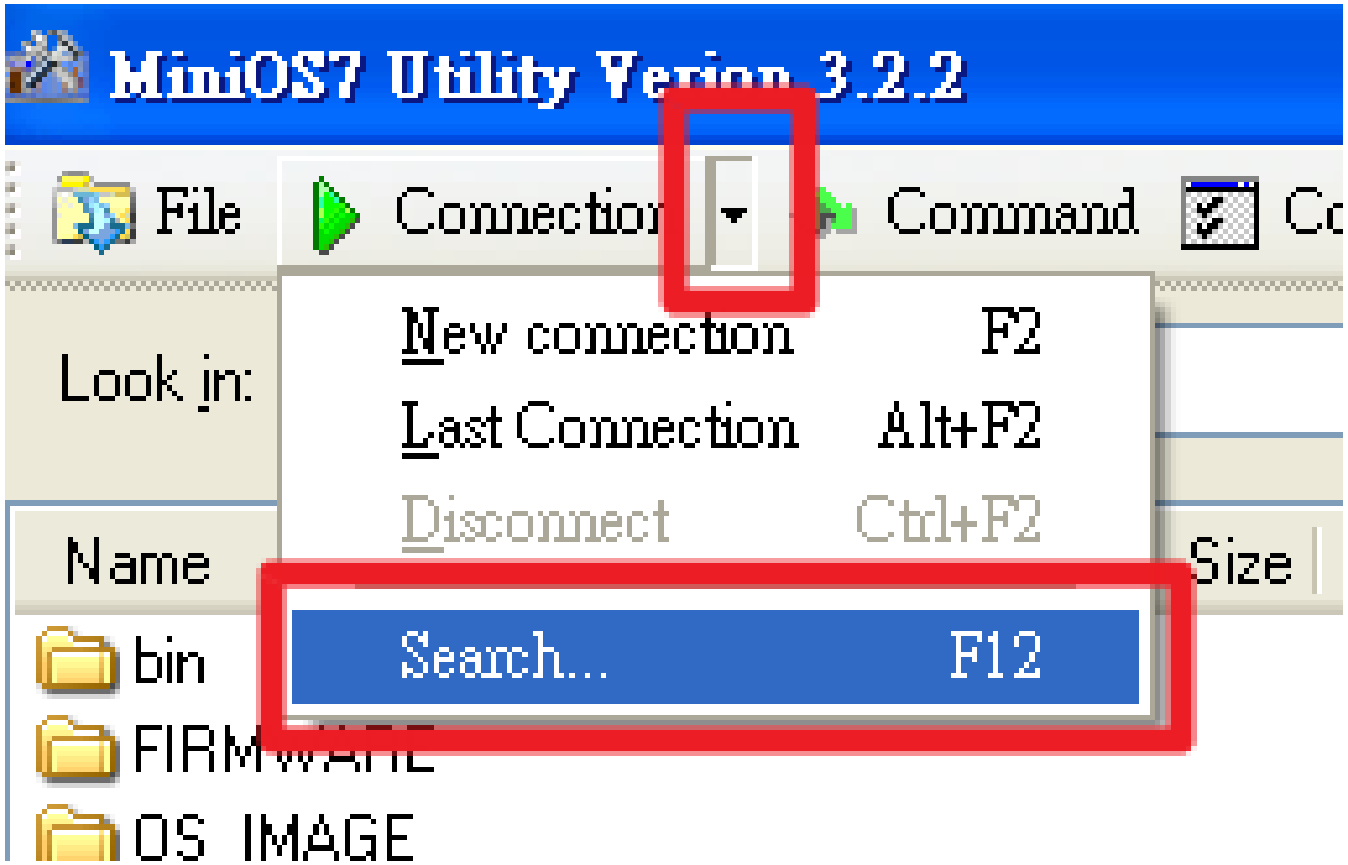
- **Search IP address**
- **Web Configuration**
- **Example 1:Reads and Writes DO module data**
- **Example 2:Reads DI module data**
- **Example 3:Reads and Writes AO module data**
- **Example 4:Reads AI module data**

Search IP address

Step 1: Open MiniOS7 Utility

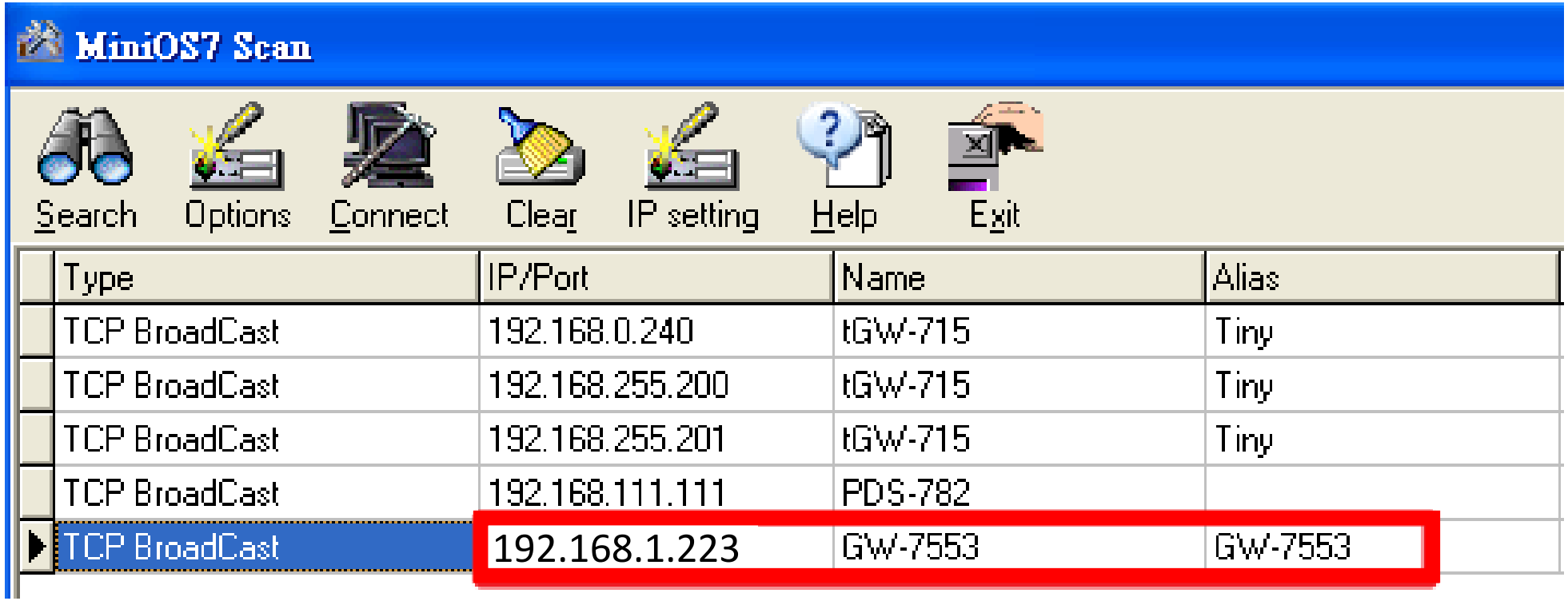
1.The utility is on the web site in the following directory:
http://ftp.icpdas.com/pub/cd/8000cd/napdos/minios7/utility/minios7_utility/

2.Choose “Connection→Search” or “F12”.



Search IP address

Step 2: User can find the IP address of GW-7553



Web Configuration

(1)Enter the IP address of the GW-7553 module

Login
User Account
IP Setting
Safe Value Setting
Communication Log
Information

Reboot

User Login

You are not logged yet!!

Password Max. 16 characters (0~9, A~Z, a~z)	••••••

(2)Default password : icpdas

Enter

(3)Click “Enter”

Login
User Account
IP Setting
Safe Value Setting
Communication Log
Information

Reboot

(1)Click here

(5)Click “Reboot”

New Setting | Load From Device

(2) Load the IP setting from GW-7553.

Local IP Setting

IP : 192.168.1.223
MASK : 255.255.0.0
GATEWAY: 192.168.0.254

Remote IP Setting

IP (1) :	192.168.0.100	Time Out			
IP (2) :	192.168.0.100	Time Out			
IP (3) :	192.168.0.100	Time Out			
IP (4) :	192.168.1.222	Time Out Value (ms)(1~65535) :	1500	ReConnect Time (ms)(1~65535) :	8000
IP (5) :	192.168.0.100	Time Out Value (ms)(1~65535) :	1500	ReConnect Time (ms)(1~65535) :	8000
IP (6) :	192.168.0.100	Time Out Value (ms)(1~65535) :	1500	ReConnect Time (ms)(1~65535) :	8000
IP (7) :	192.168.0.100	Time Out Value (ms)(1~65535) :	1500	ReConnect Time (ms)(1~65535) :	8000
IP (8) :	192.168.0.100	Time Out Value (ms)(1~65535) :	1500	ReConnect Time (ms)(1~65535) :	8000

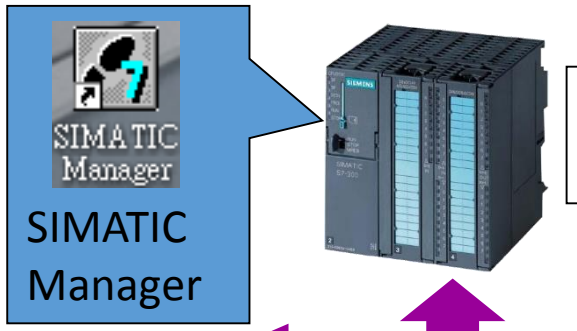
(3) The user can set IP address, time out value and reconnecting time of the Modbus TCP Slave in this part.

Save to Device

(4)Save the IP setting to GW-7553.

Load From Device OK !!

Read and Write 16-channel DO



SIMATIC PLC
* PROFIBUS Device (Master)

Web Server

IP: 192.168.1.223

PROFIBUS DP

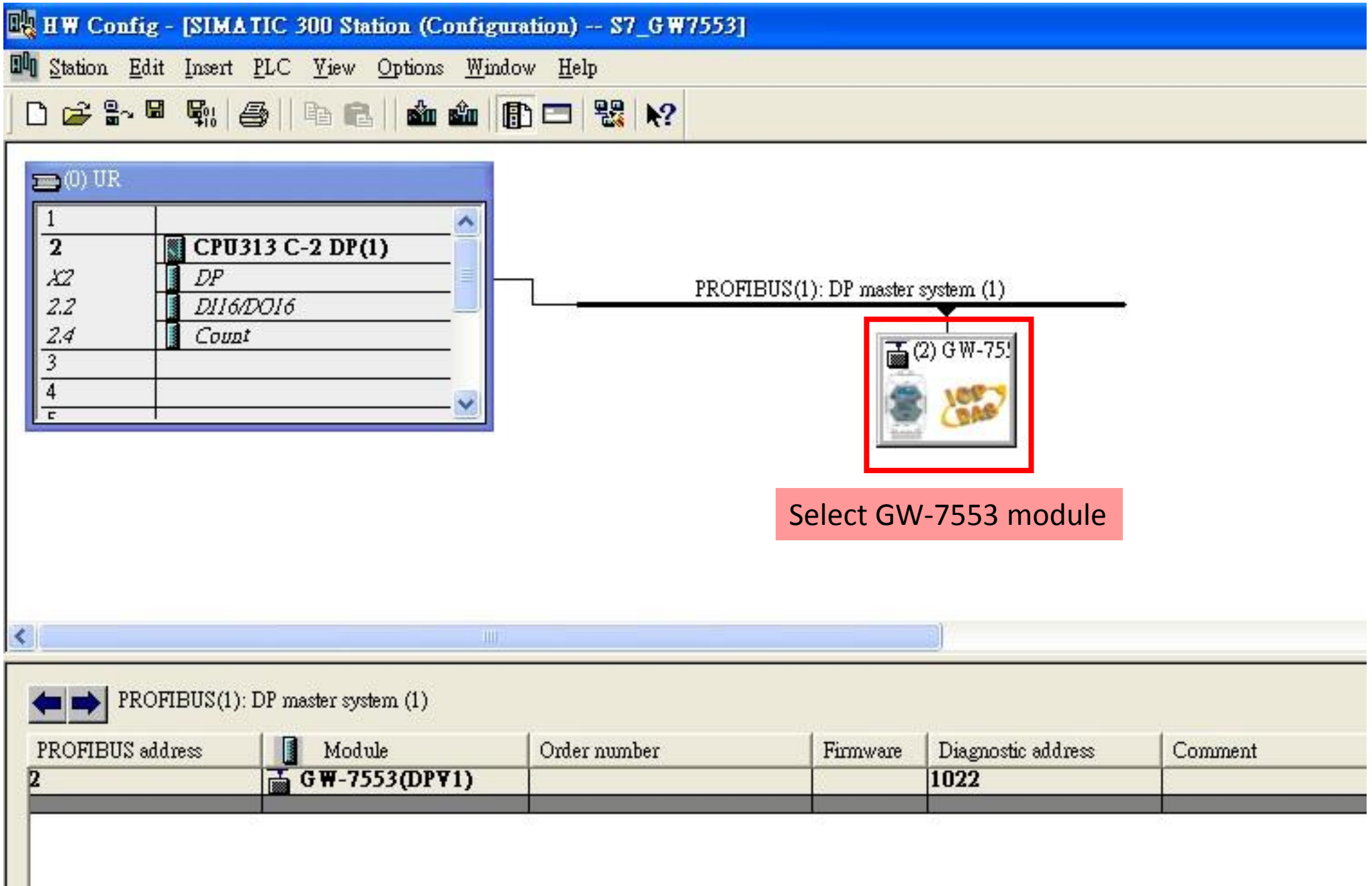
Ethernet

GW-7553
- PROFIBUS Device (Slave)
- Station ID:2
- Modbus Device (TCP Master)
- IP: 192.168.1.223

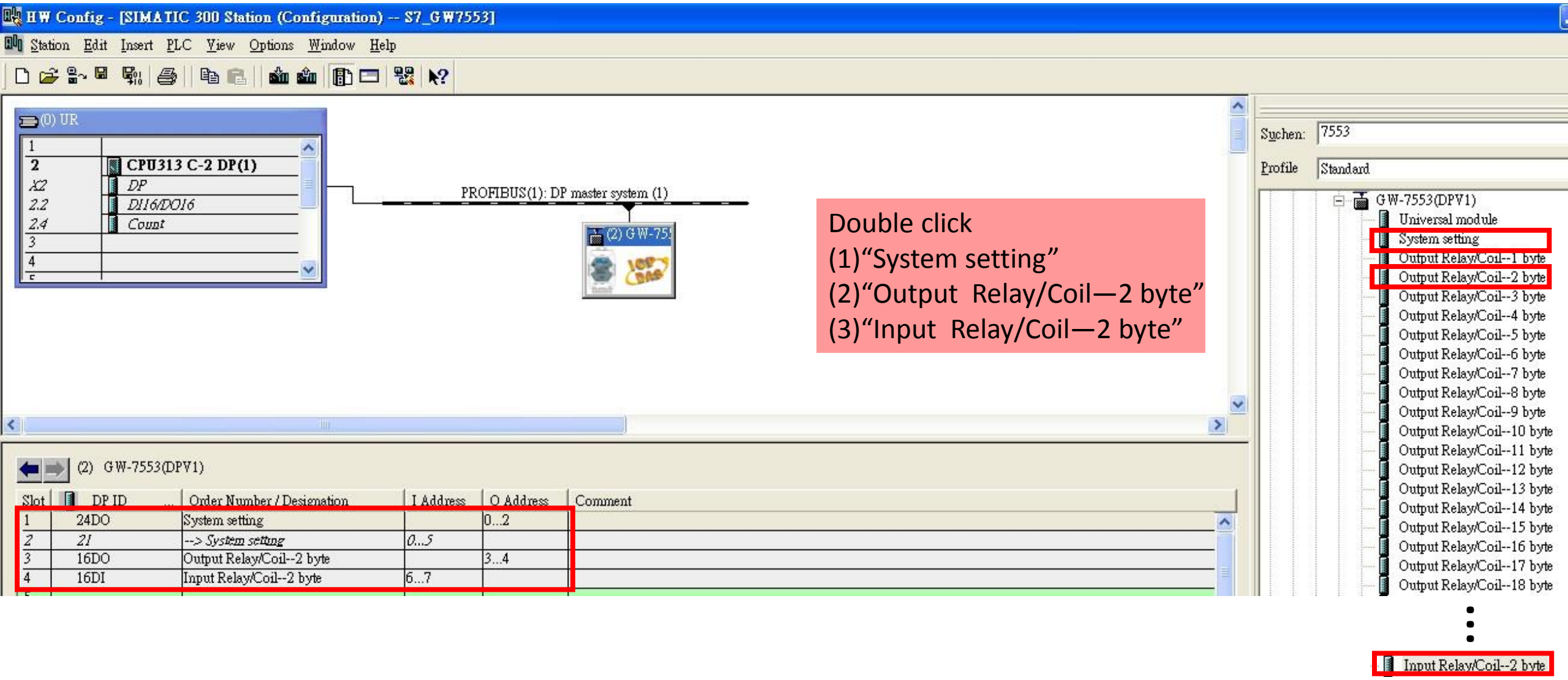
MODBUS TCP

DO module (TCP Slave)
* IP: 192.168.1.222
* Modbus ID: 2
* Data Address: 00001~00016
* Data Length: 2

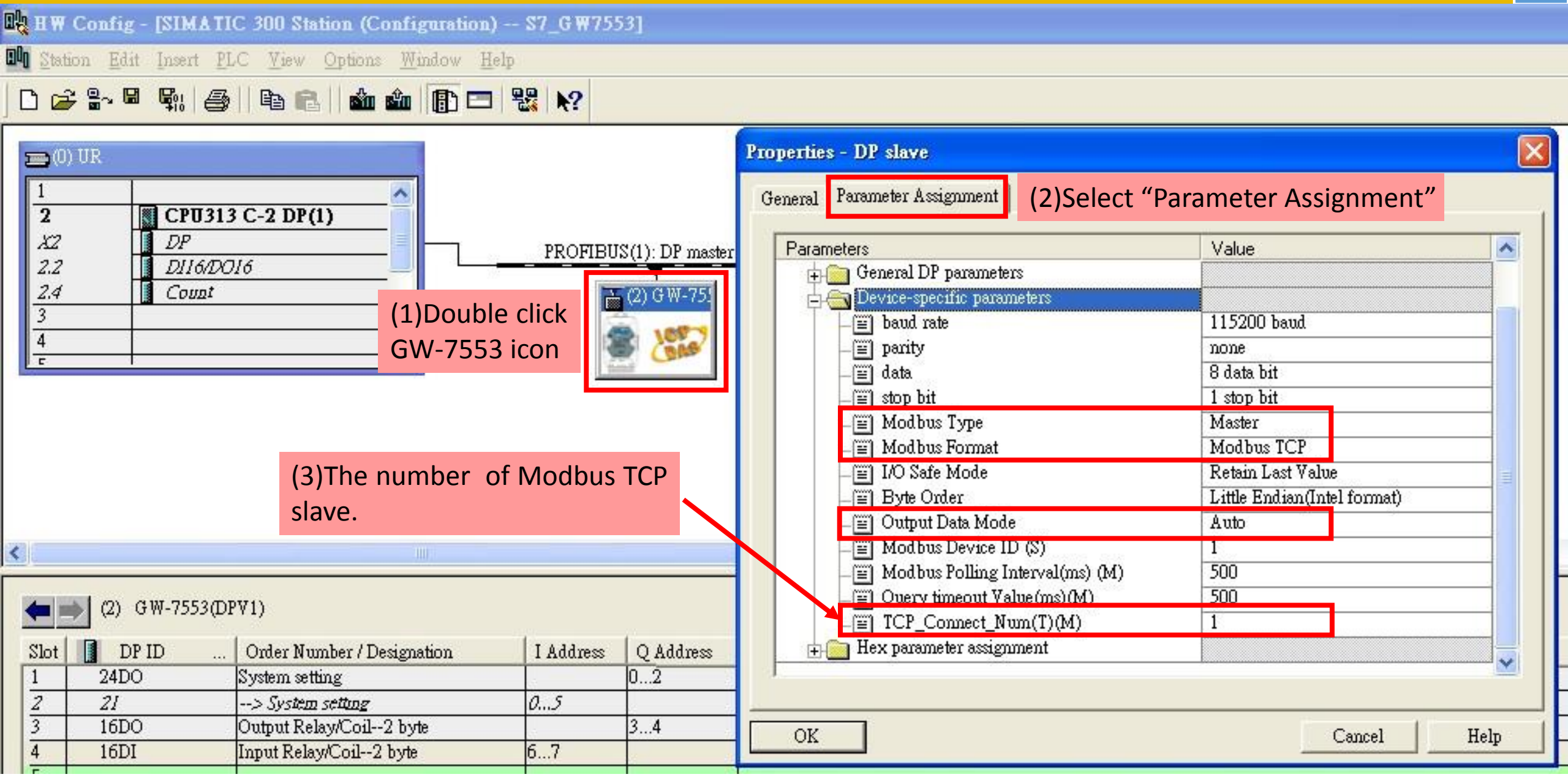
Read and Write 16-channel DO



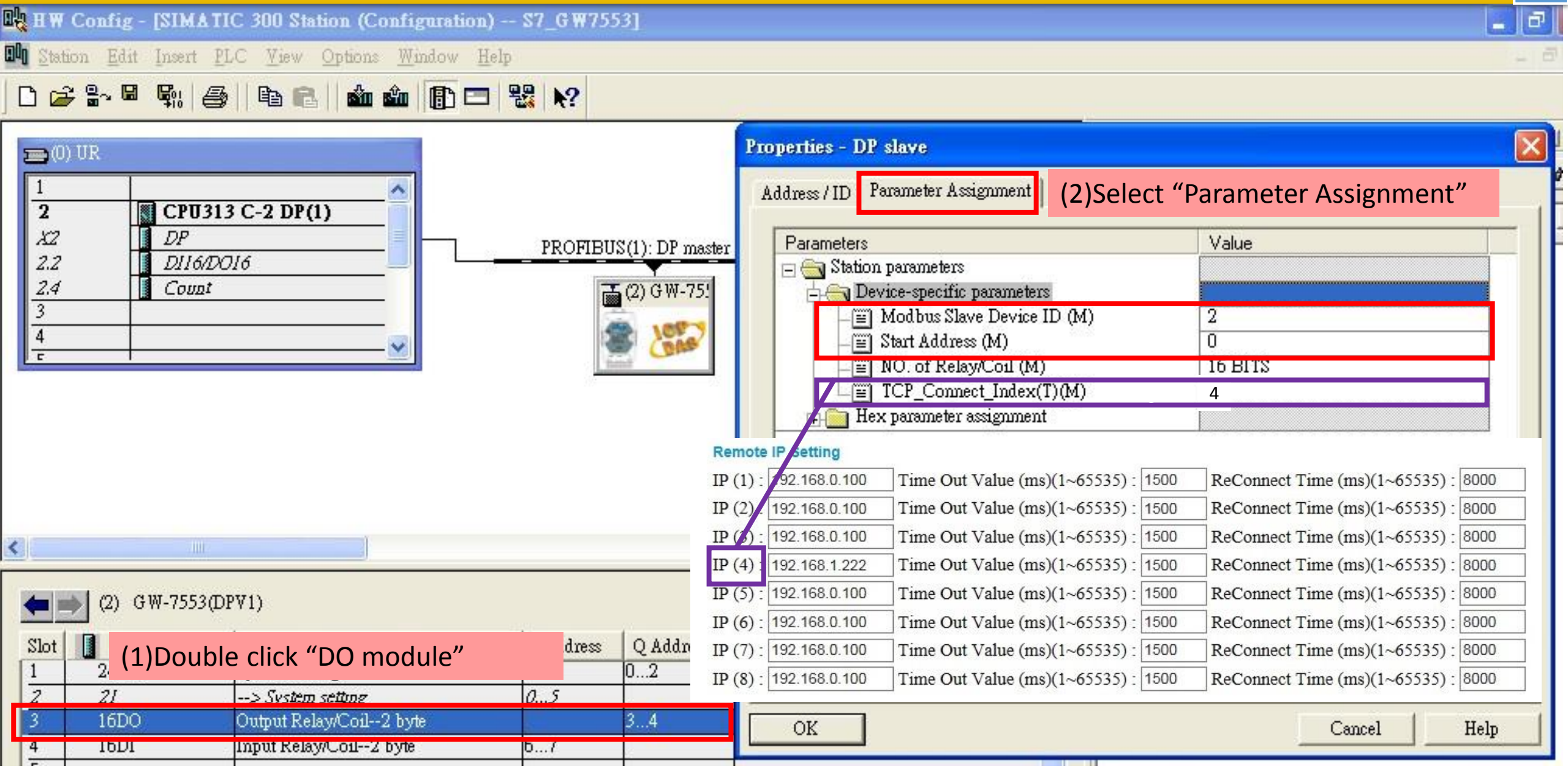
Read and Write 16-channel DO



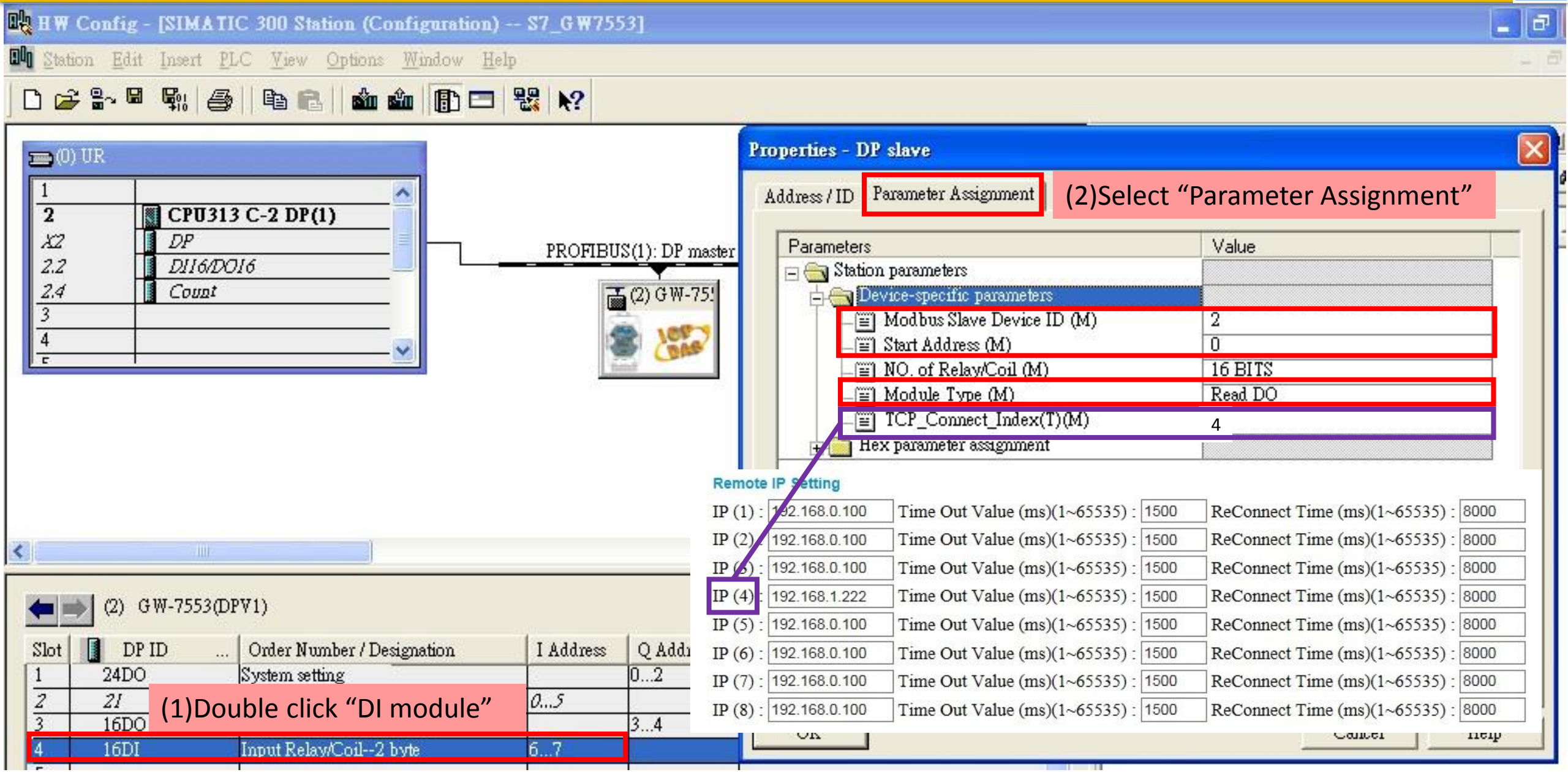
Read and Write 16-channel DO



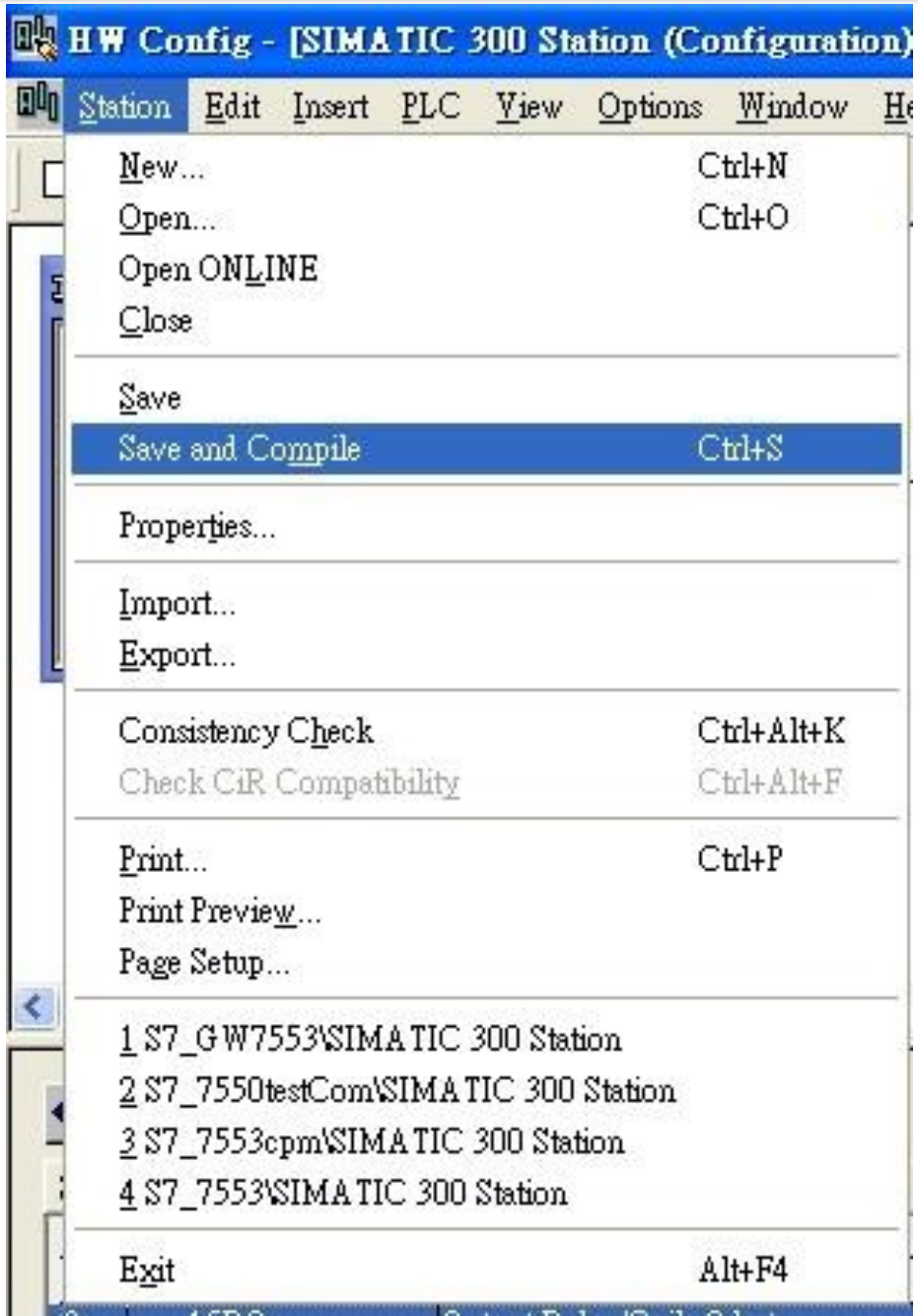
Read and Write 16-channel DO

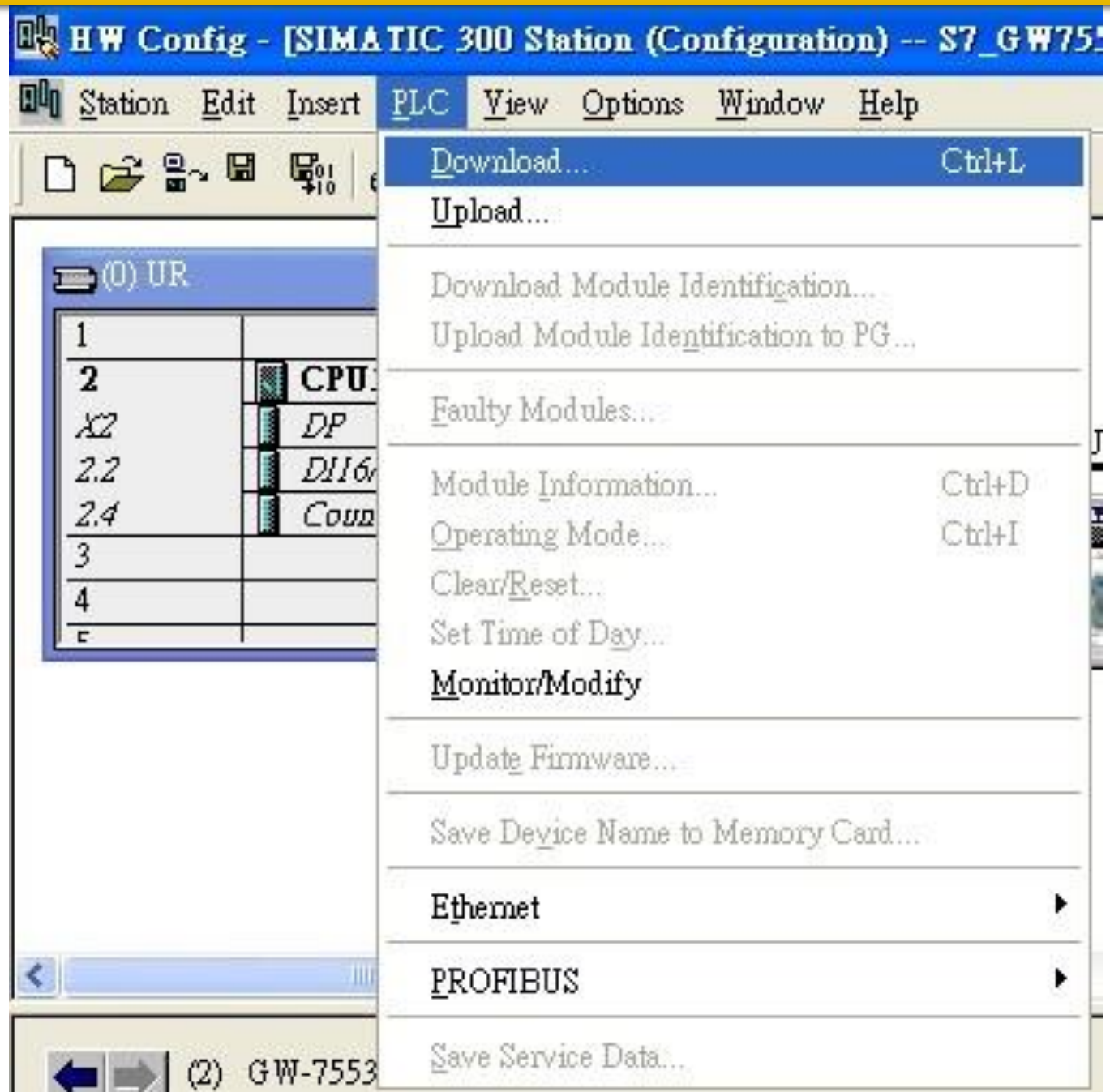


Read and Write 16-channel DO

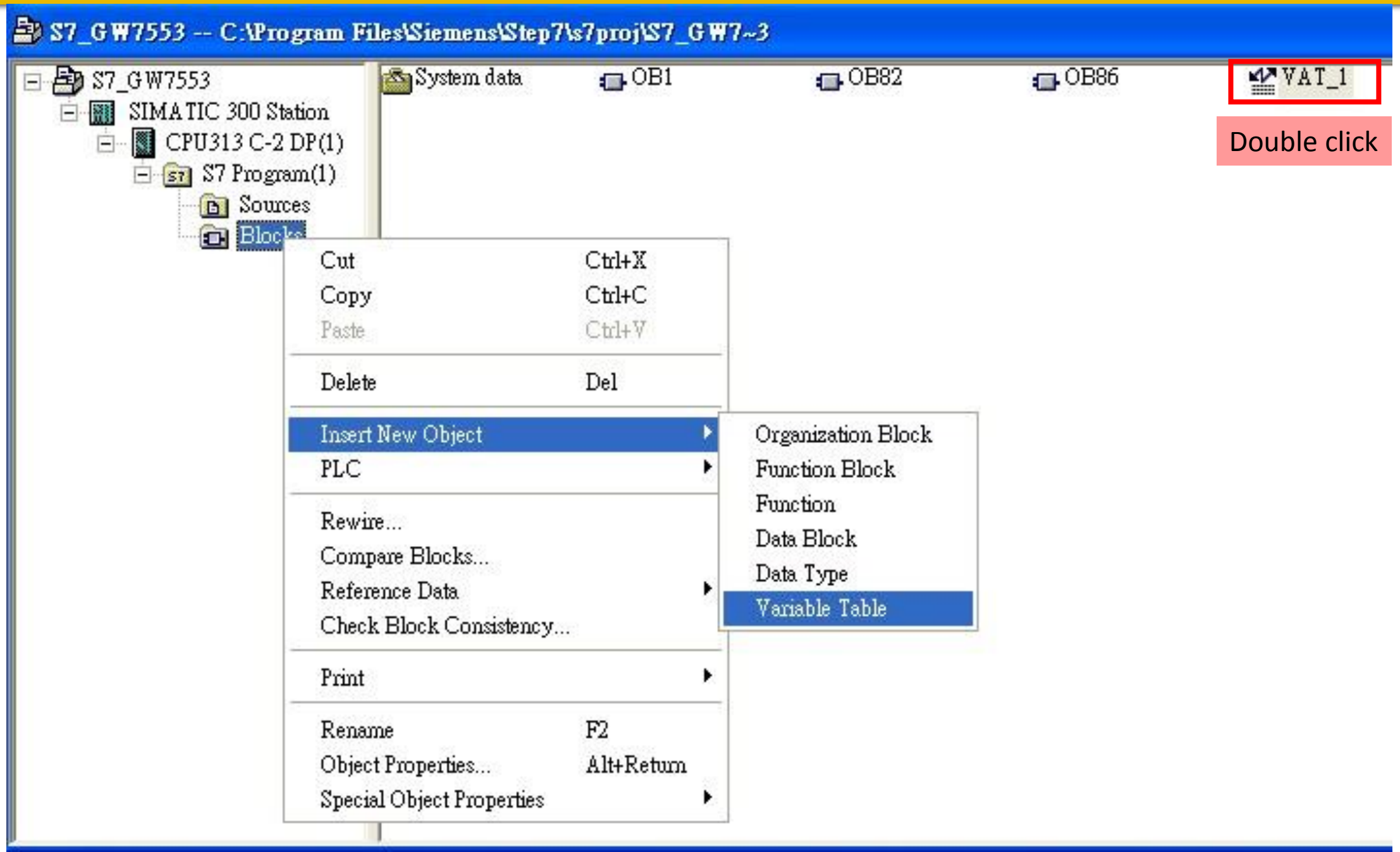


Read and Write 16-channel DO

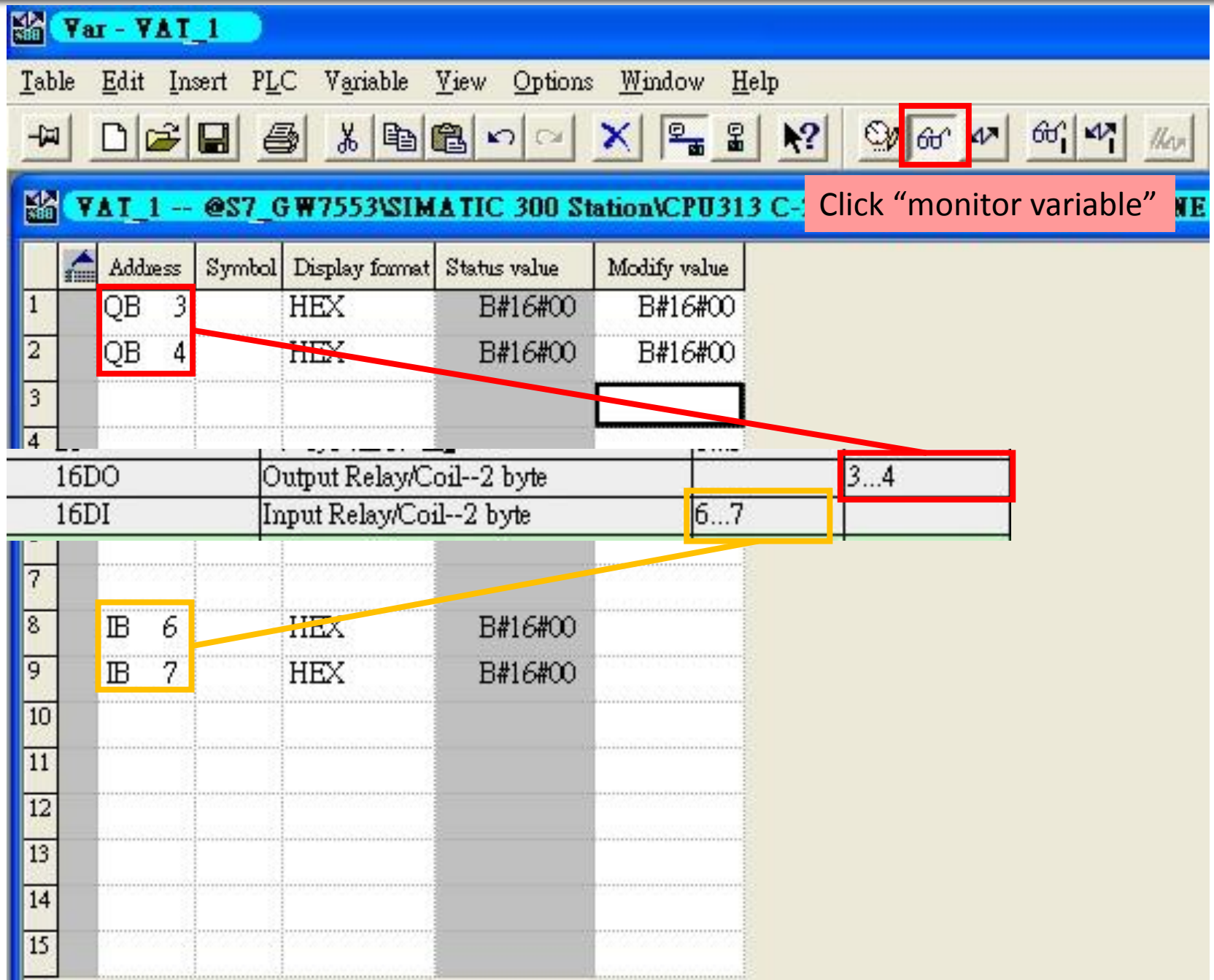




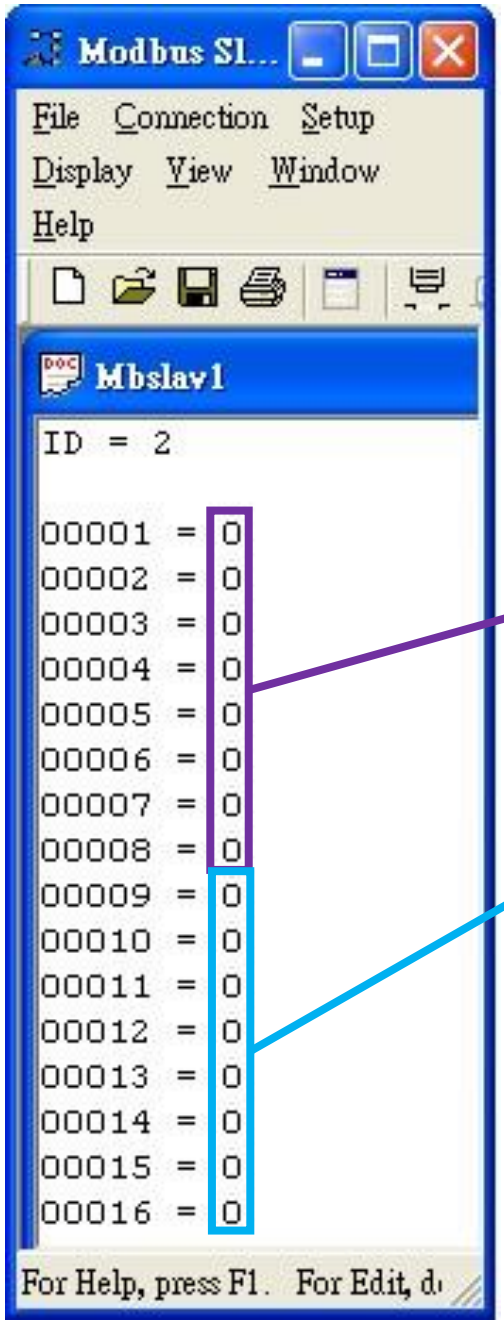
Read and Write 16-channel DO

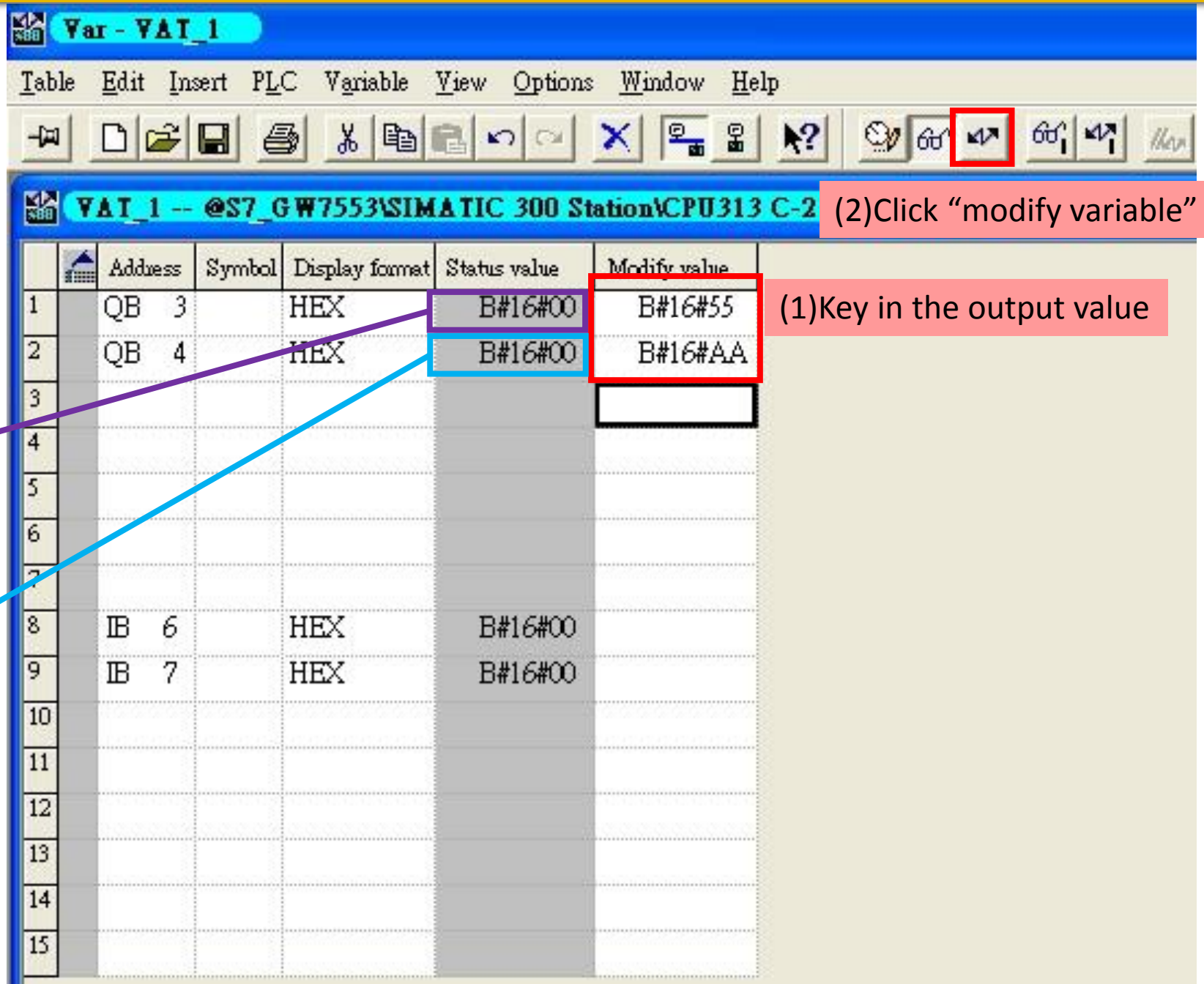


Read and Write 16-channel DO

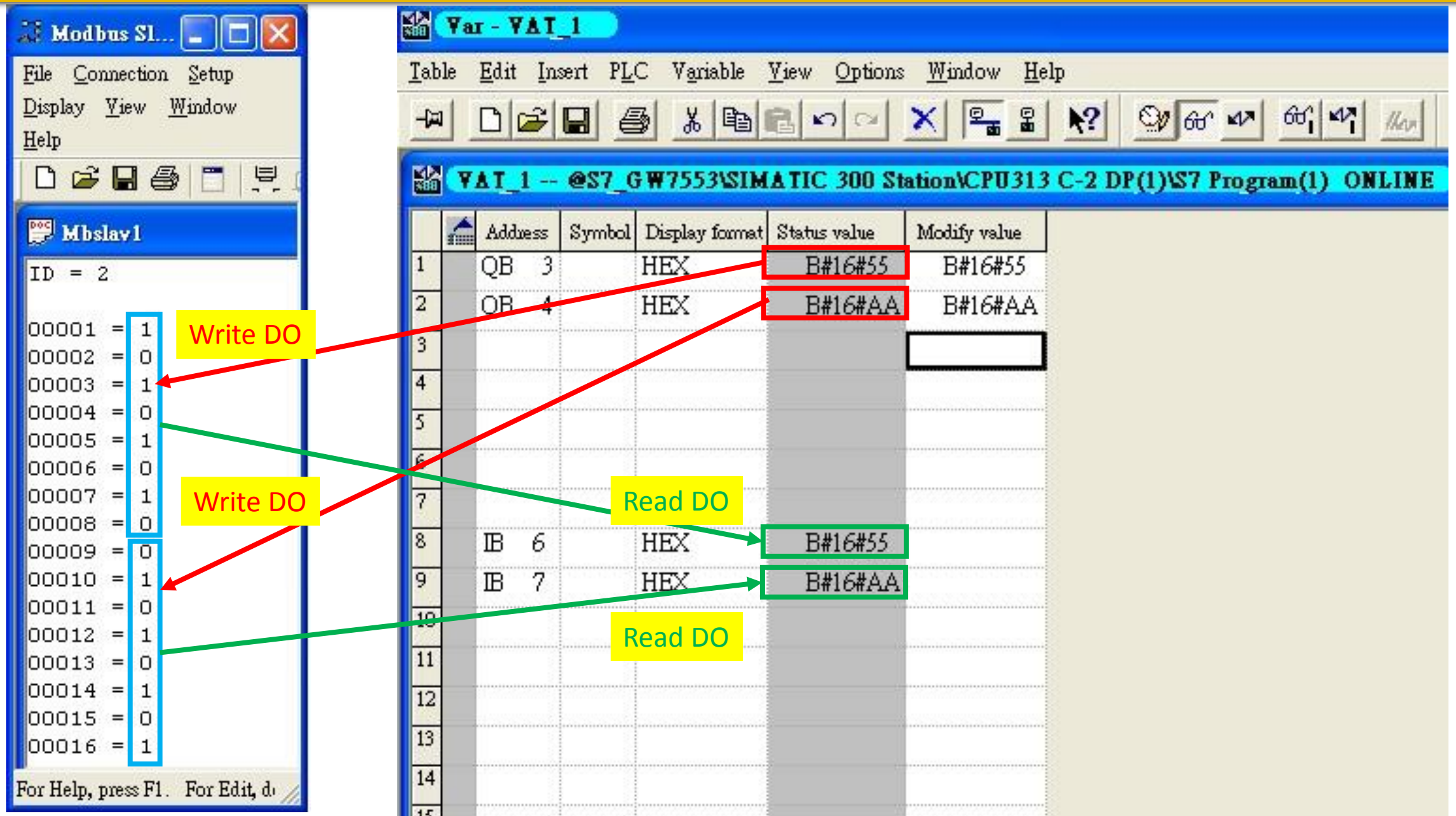


Read and Write 16-channel DO

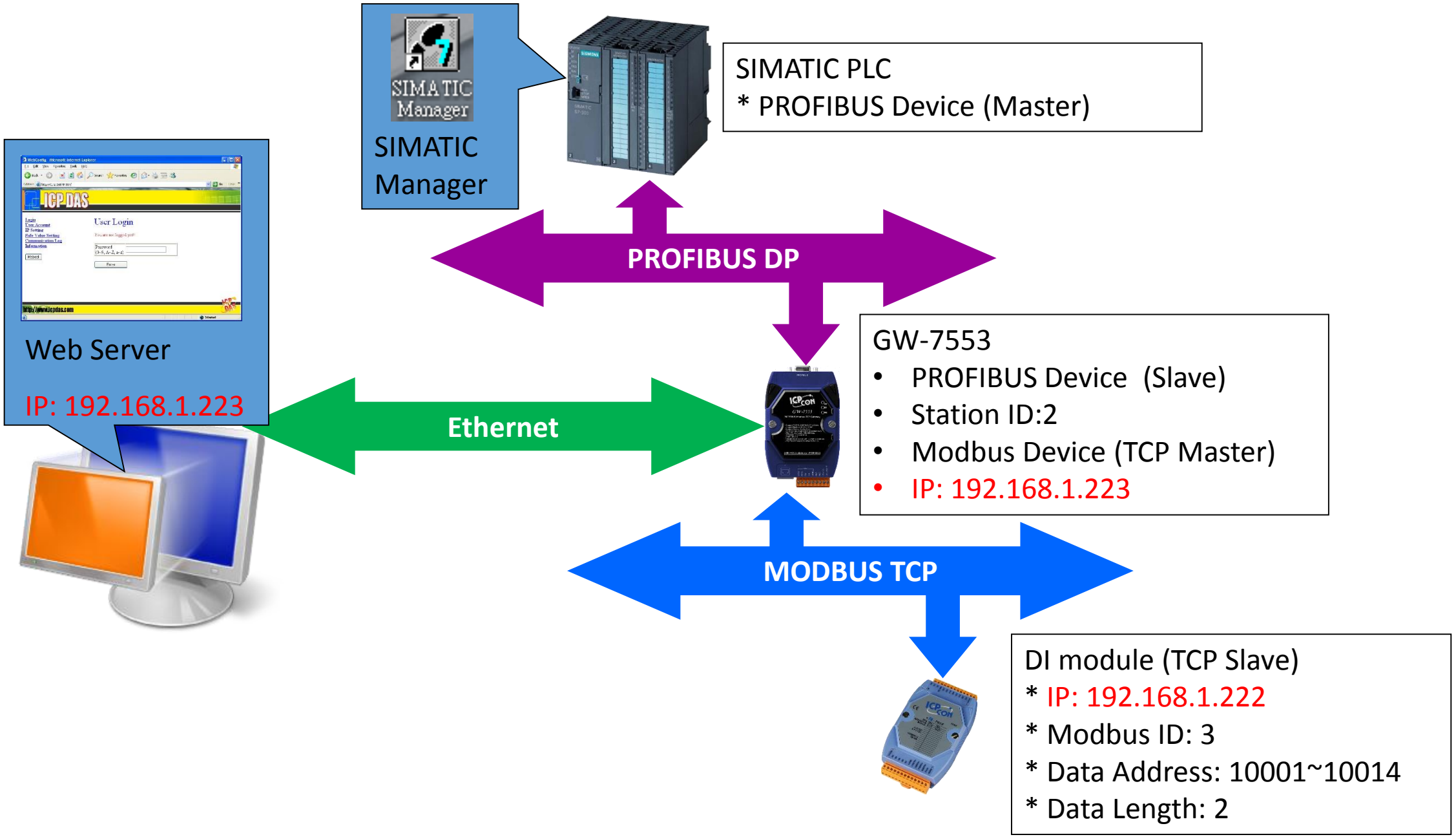




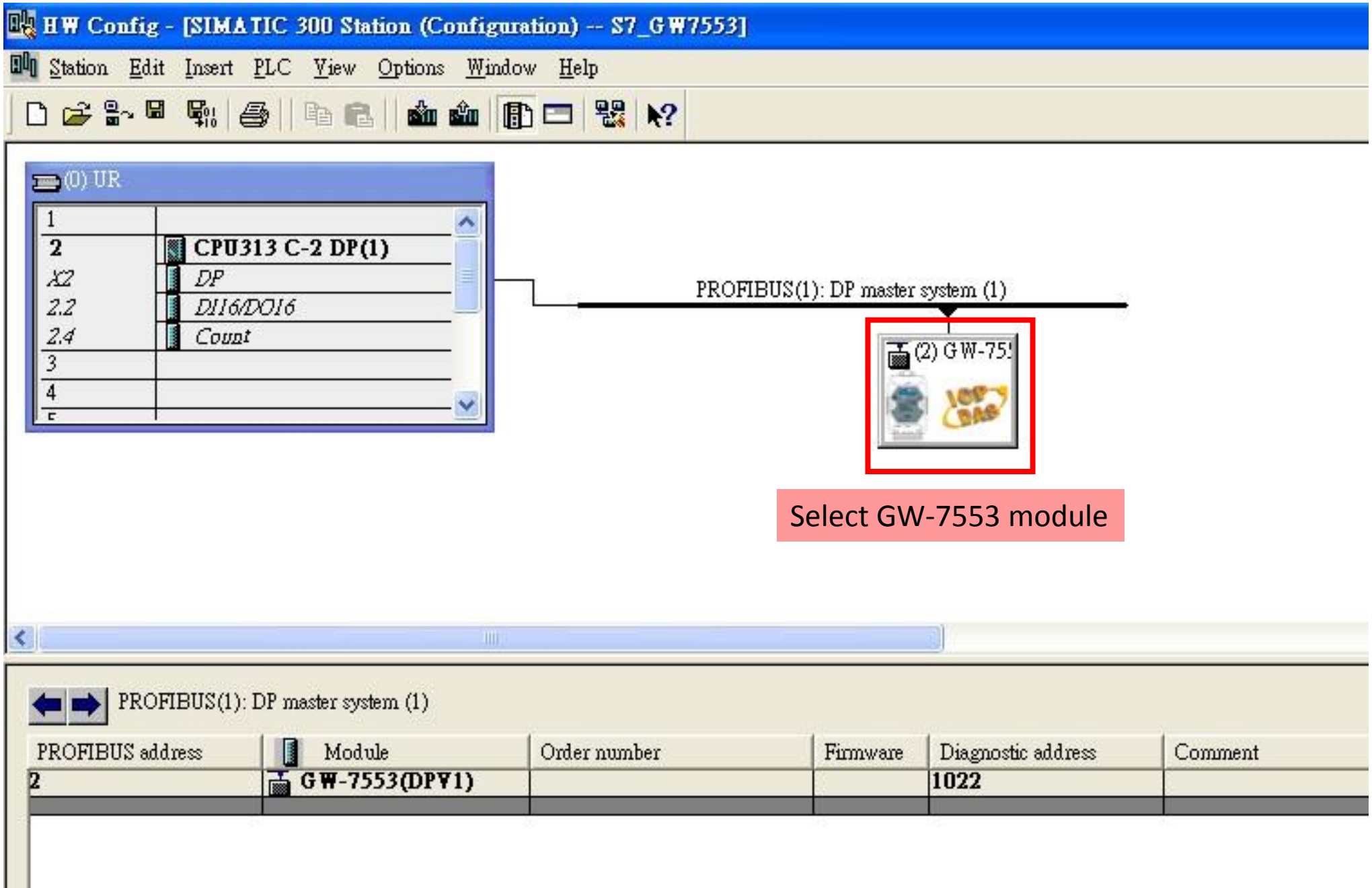
Read and Write 16-channel DO



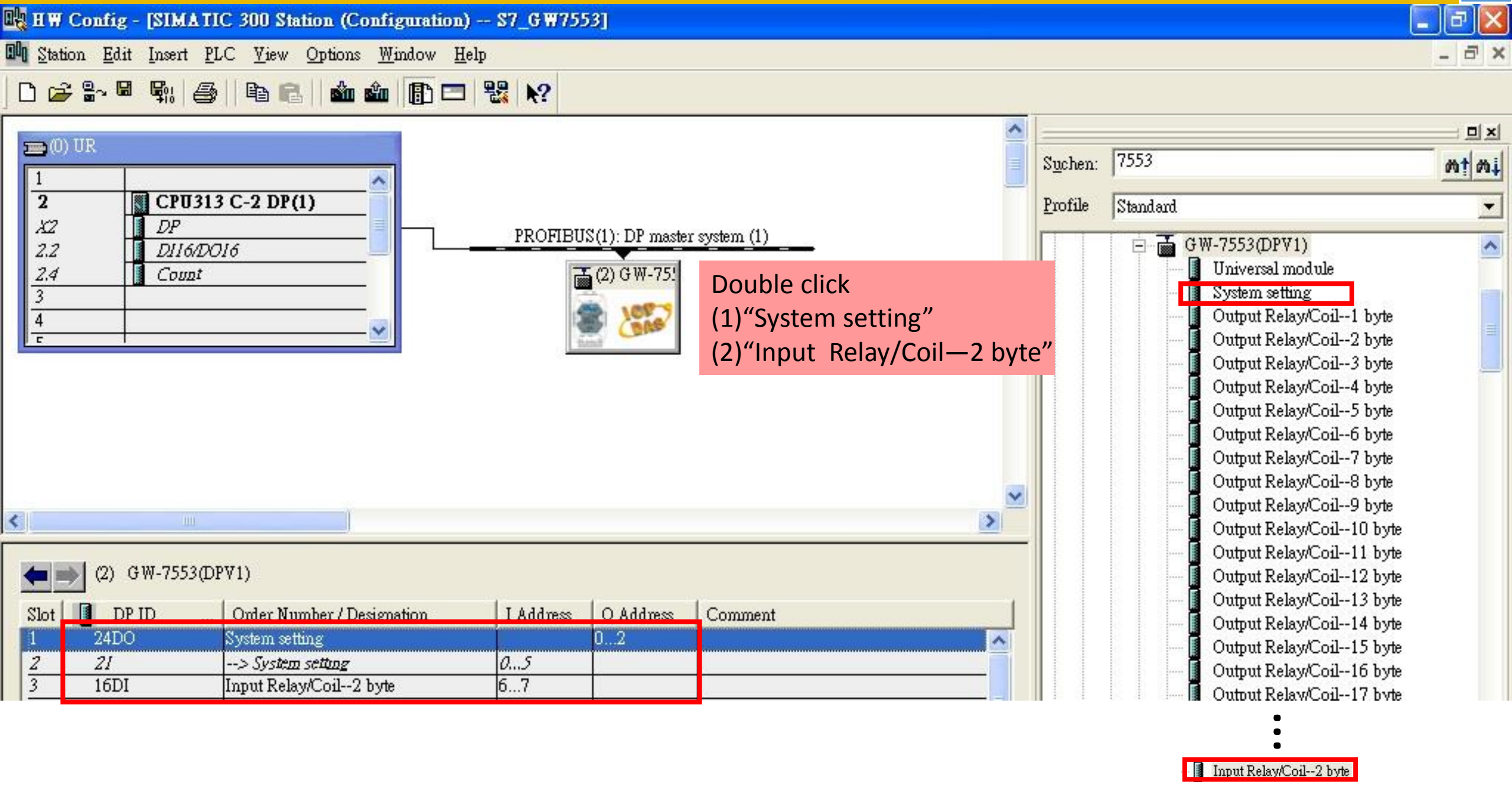
Read 14-channel DI



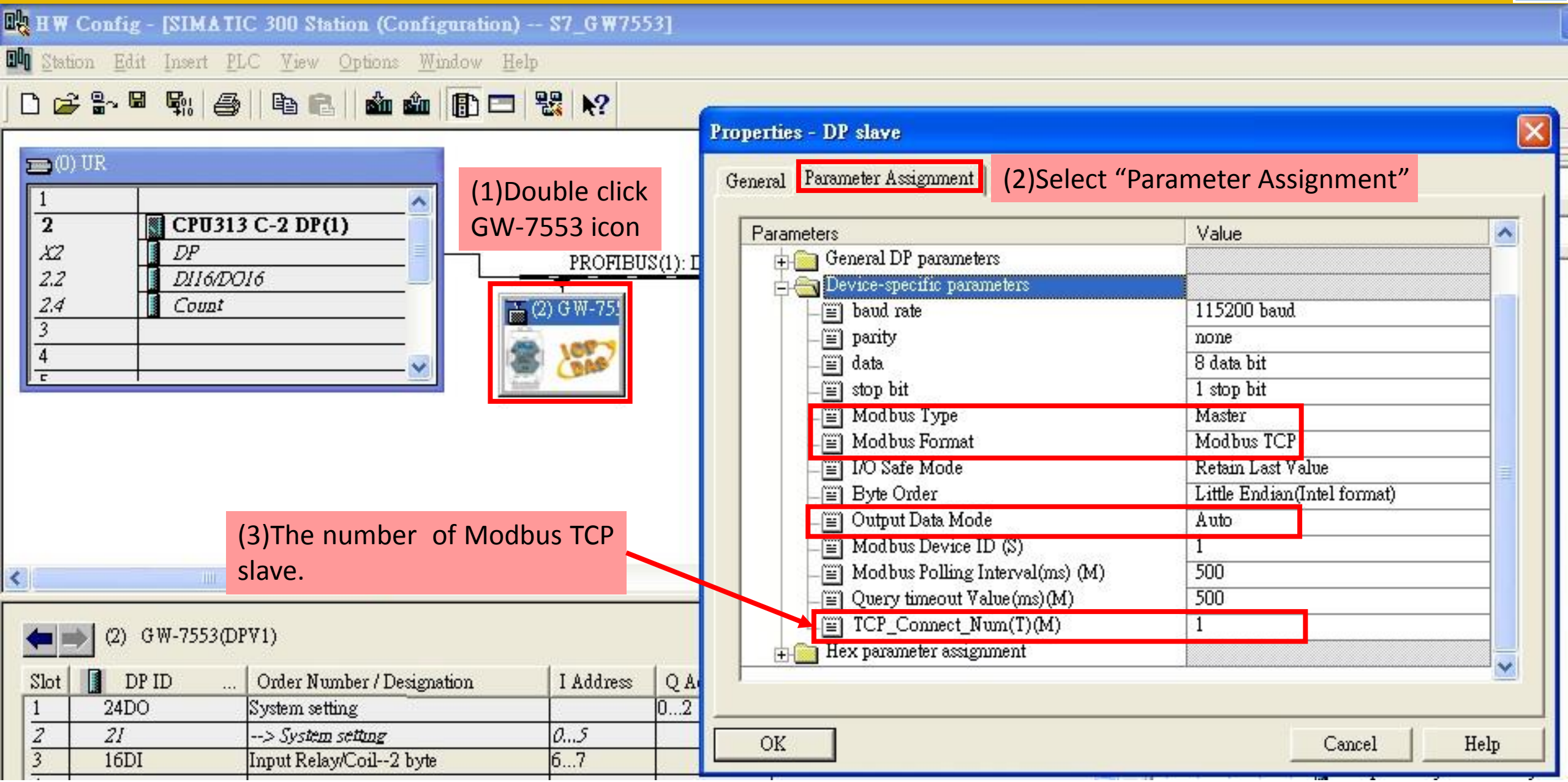
Read 14-channel DI



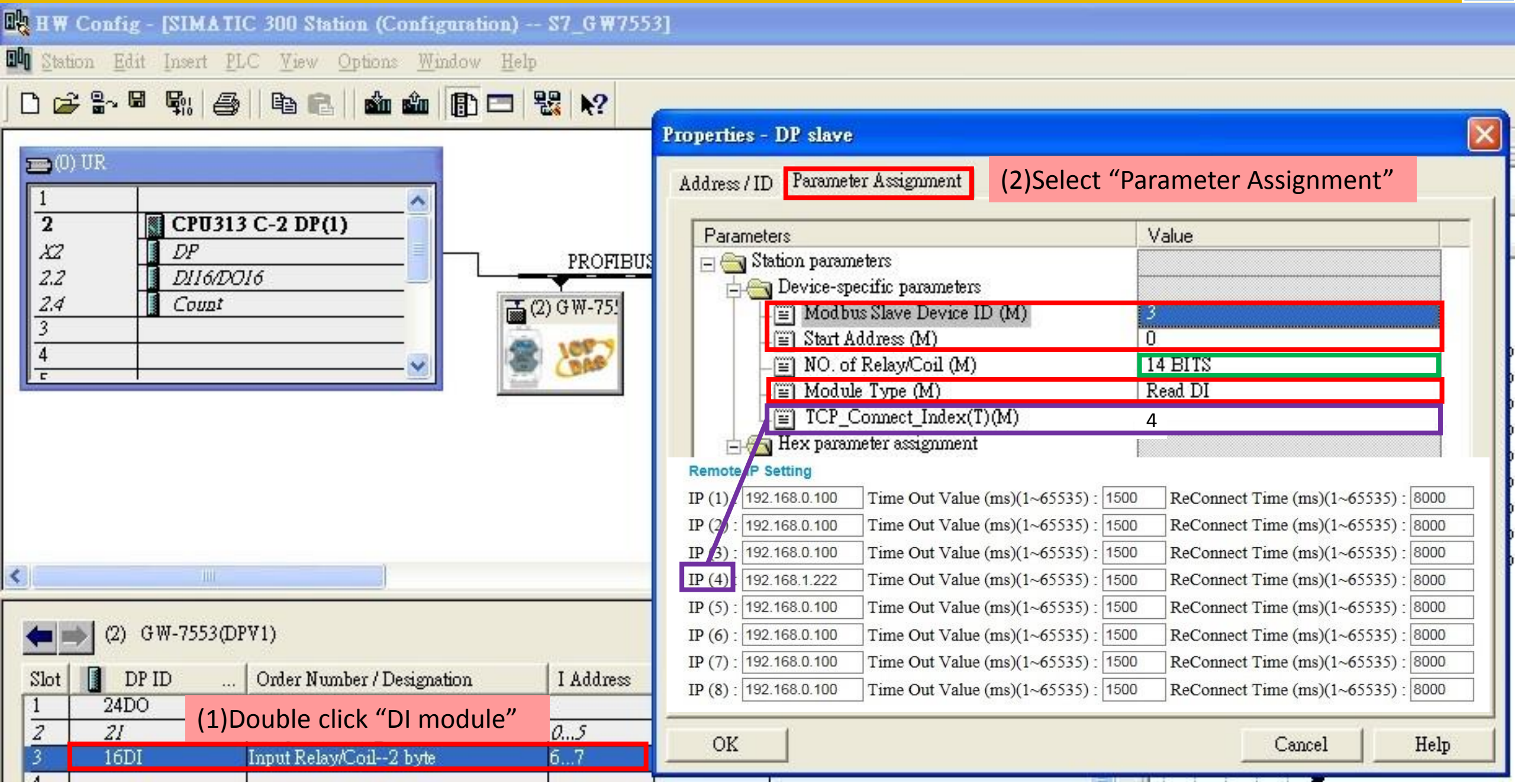
Read 14-channel DI



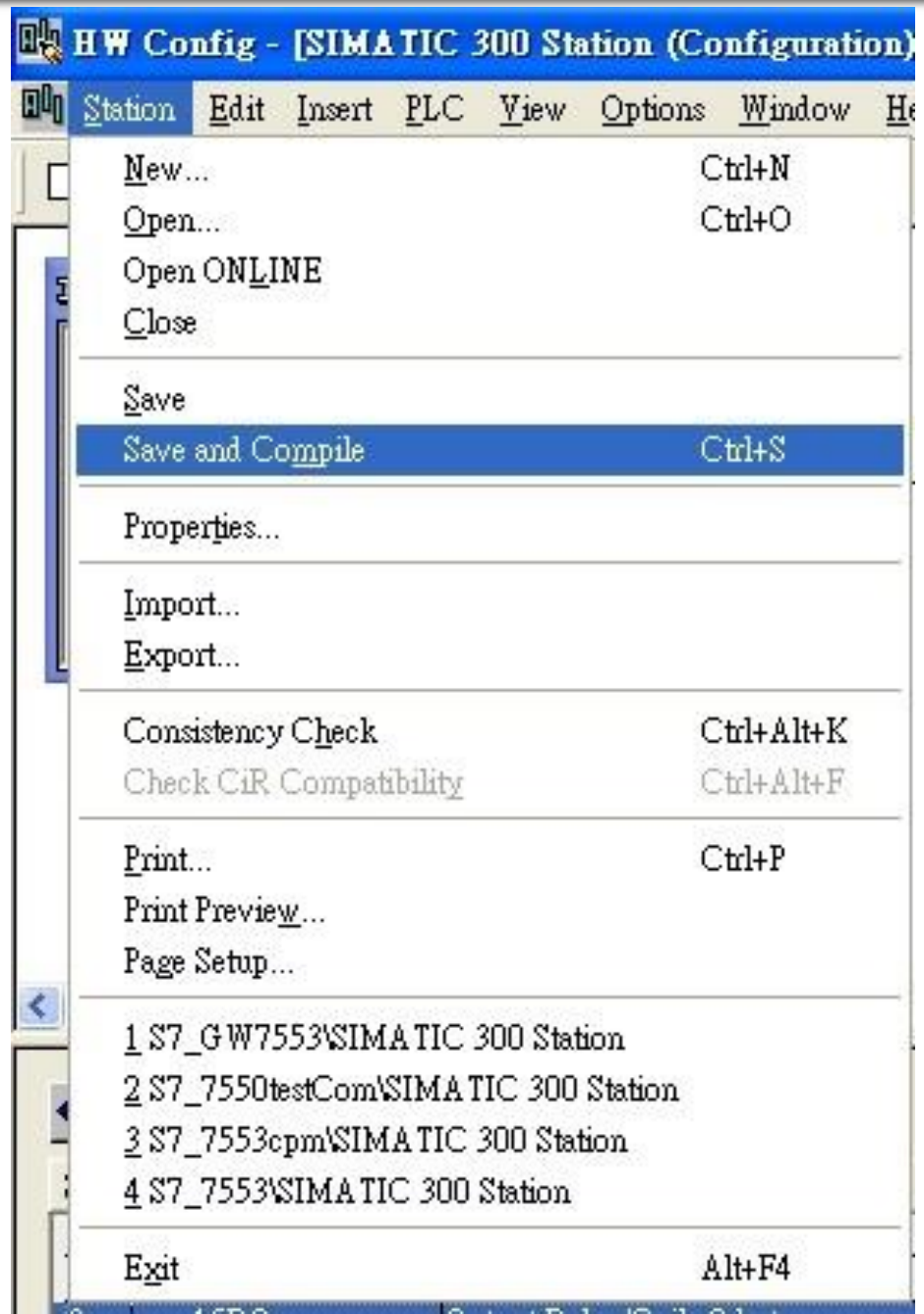
Read 14-channel DI



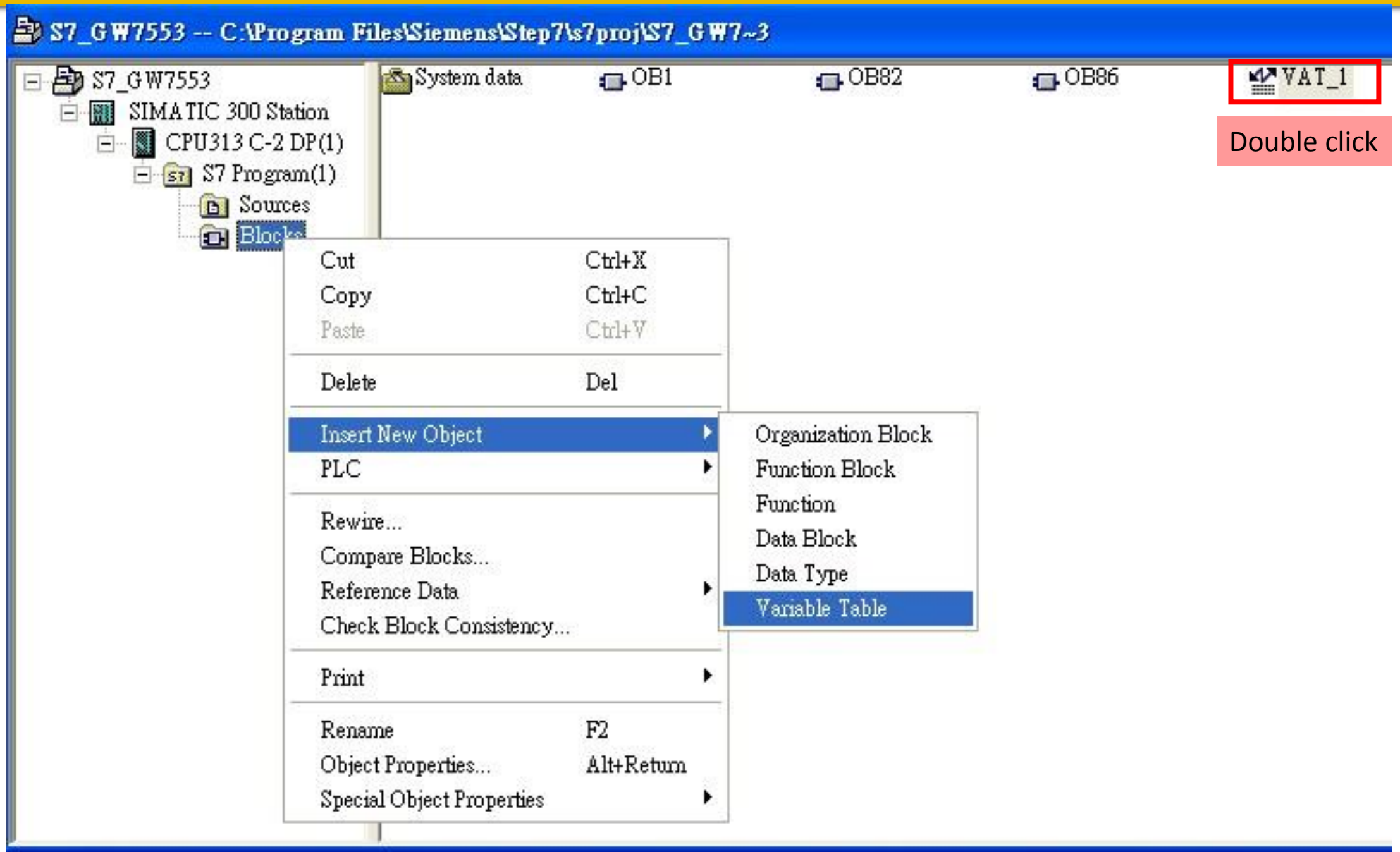
Read 14-channel DI



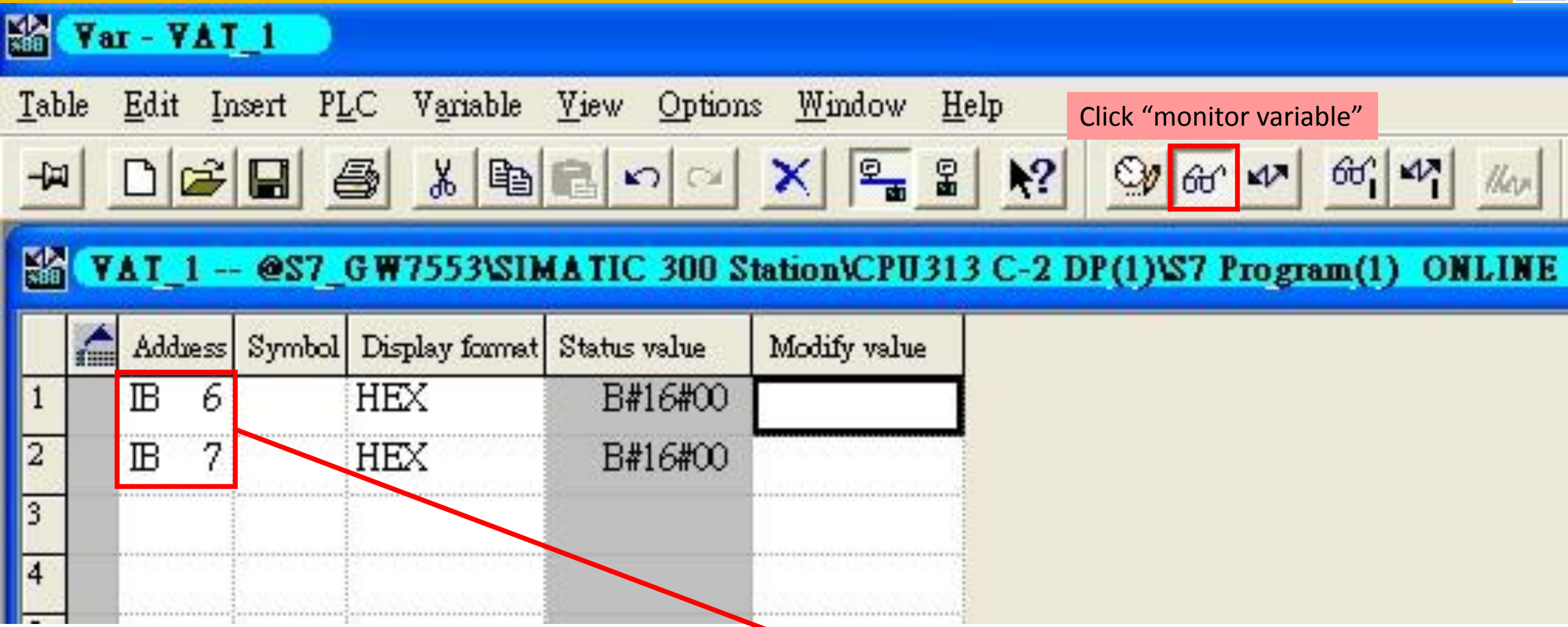
Read 14-channel DI



Read 14-channel DI

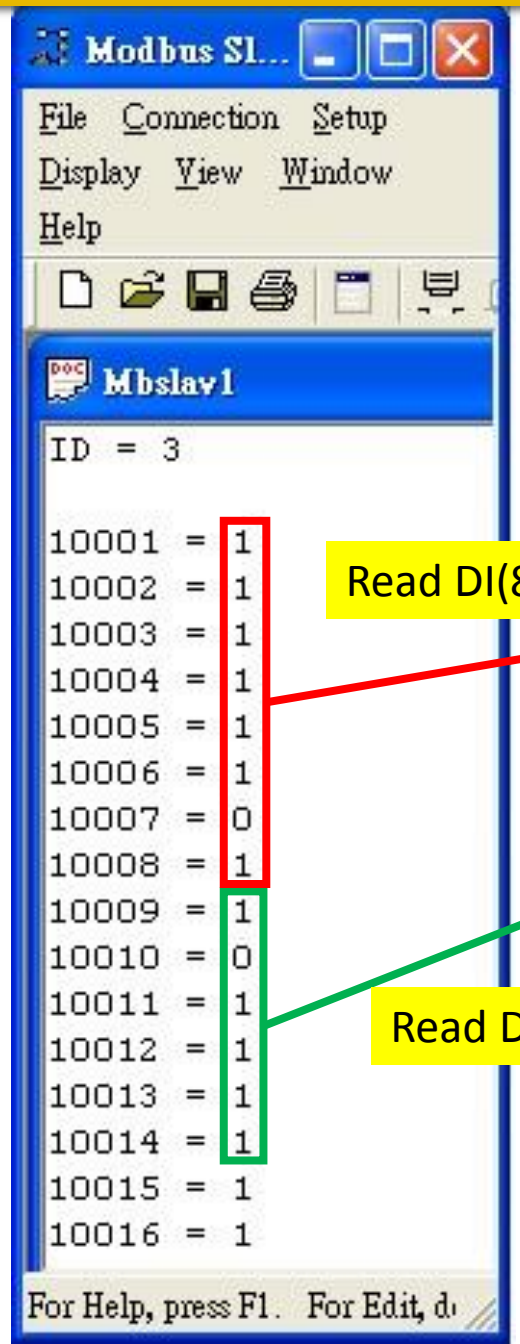


Read 14-channel DI



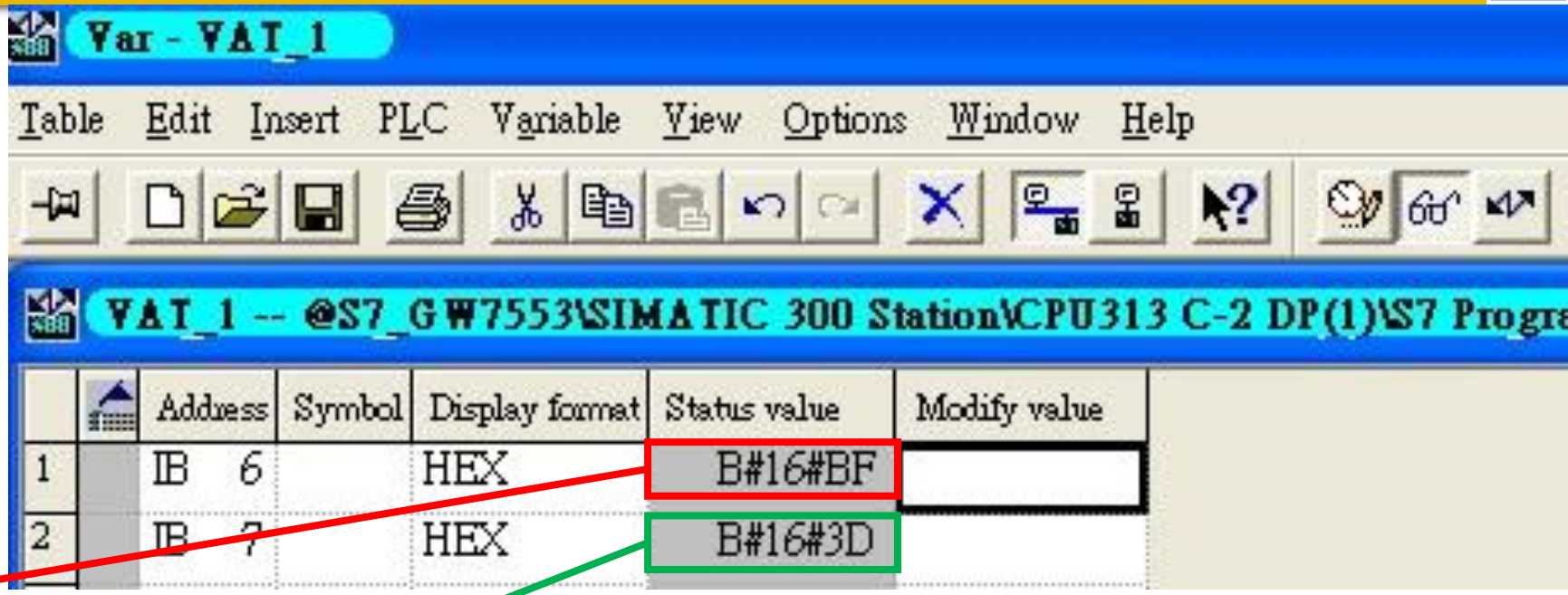
Input Relay/Coil--2 byte	6...7

Read 14-channel DI

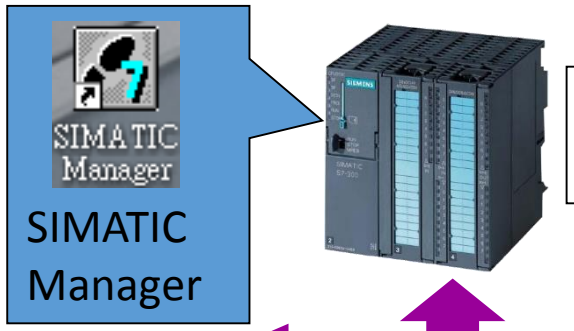


Read DI(8bit)

Read DI(6bit)



Read and Write 3-channel AO



SIMATIC PLC
* PROFIBUS Device (Master)

PROFIBUS DP

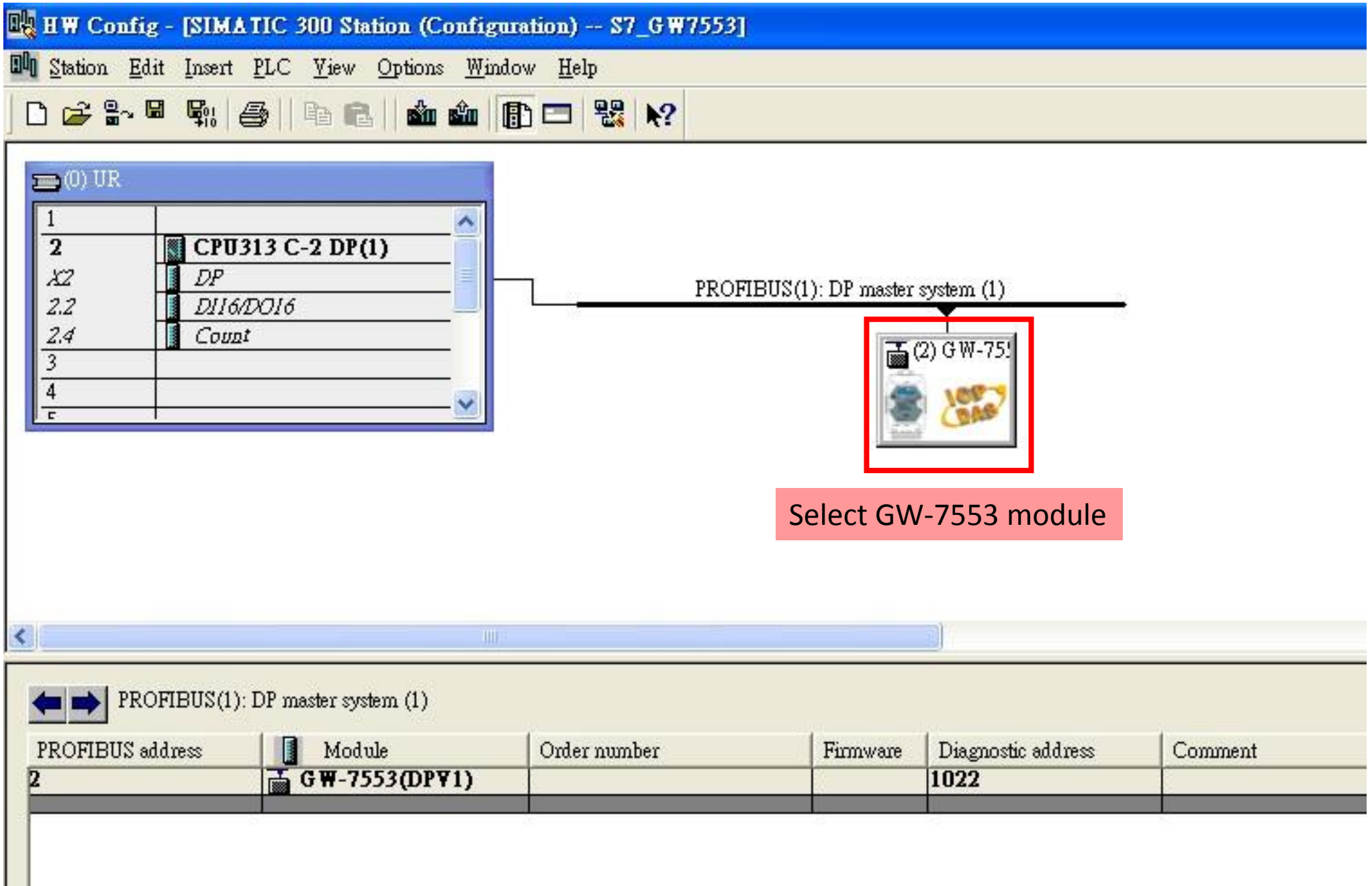
Ethernet

GW-7553
- PROFIBUS Device (Slave)
- Station ID:2
- Modbus Device (TCP Master)
- IP: 192.168.1.223

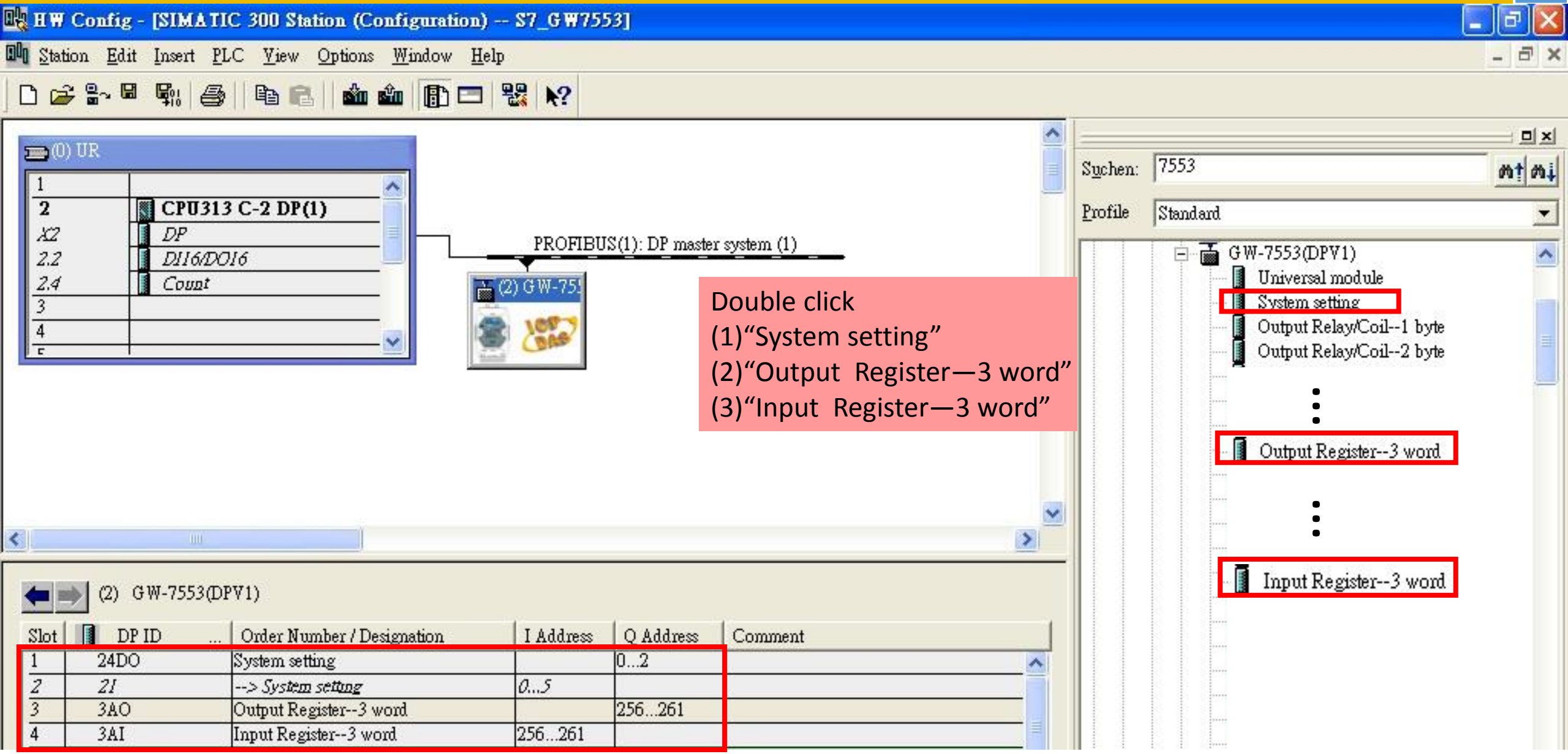
MODBUS TCP

AO module (TCP Slave)
* IP: 192.168.1.222
* Modbus ID: 4
* Data Address: 40001~40003
* Data Length: 3

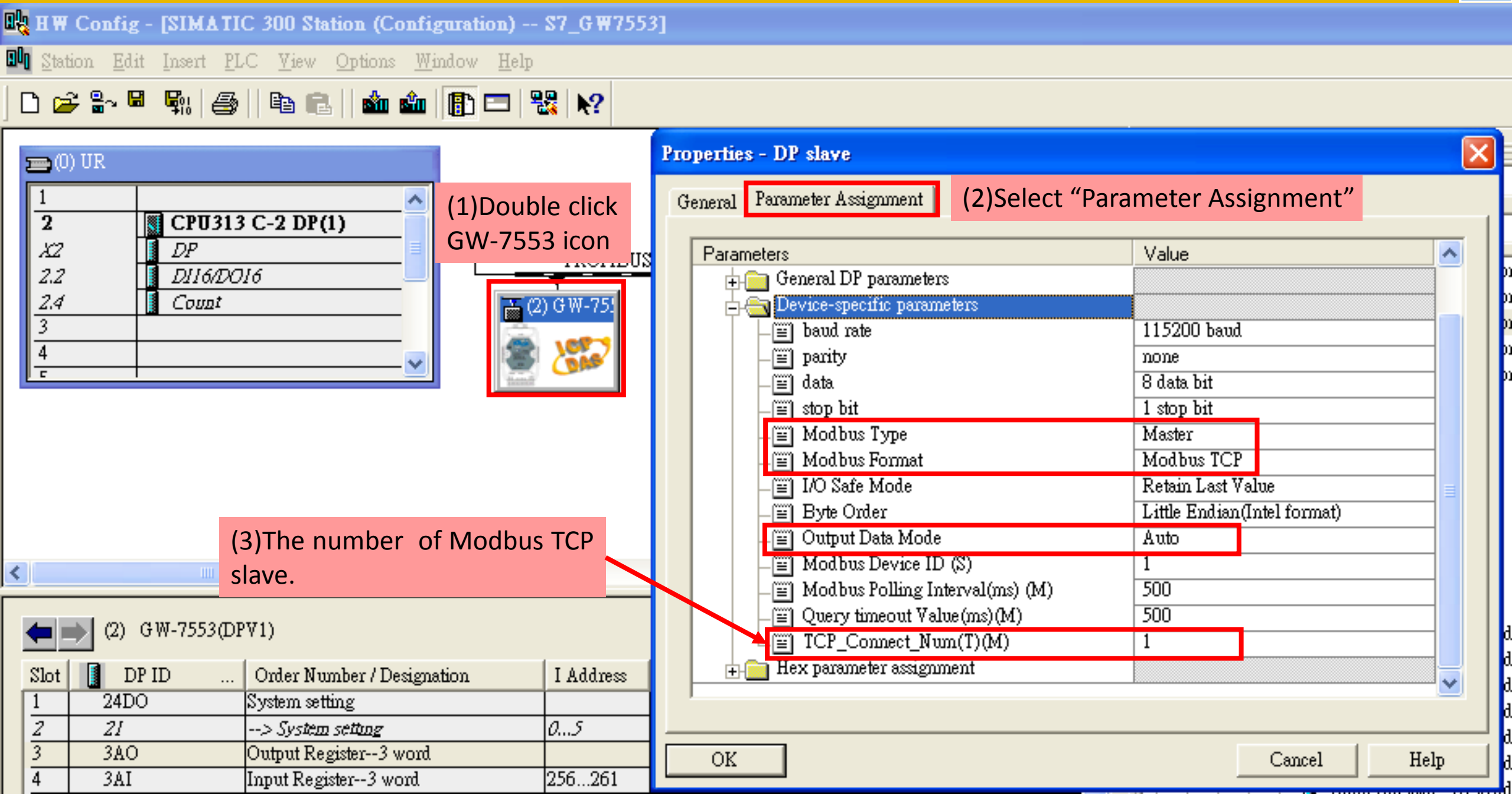
Read and Write 3-channel AO



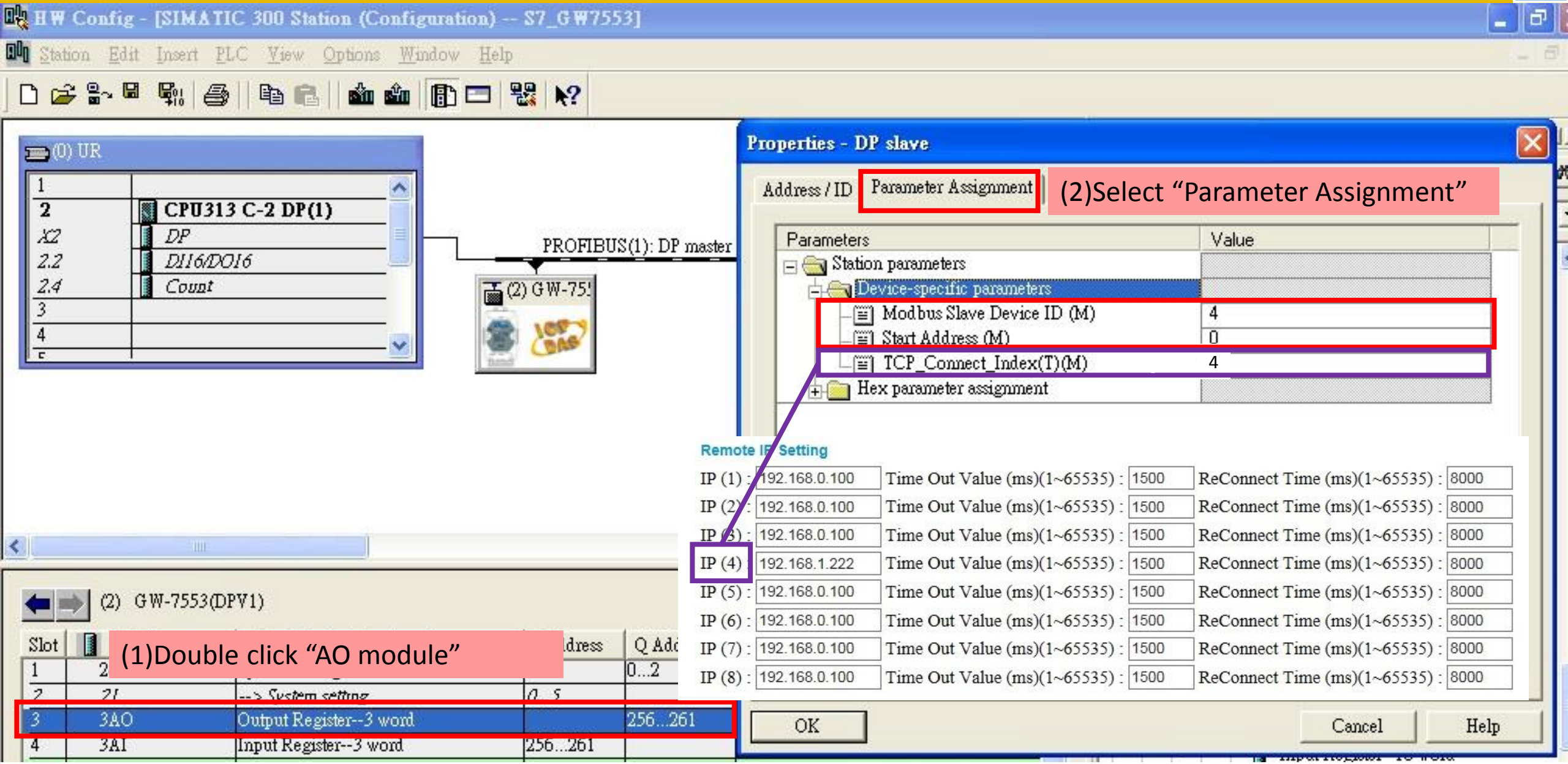
Read and Write 3-channel AO



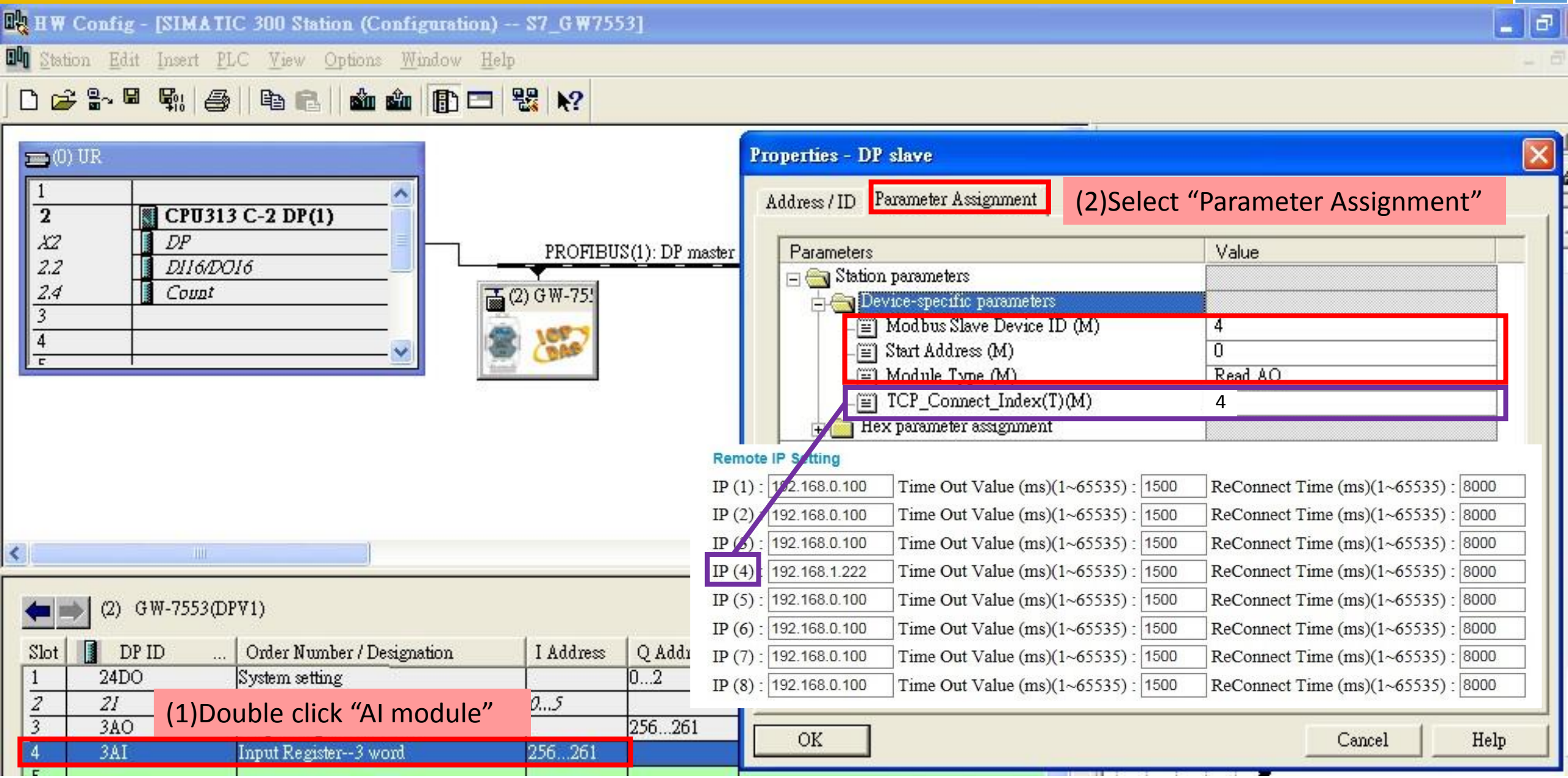
Read and Write 3-channel AO



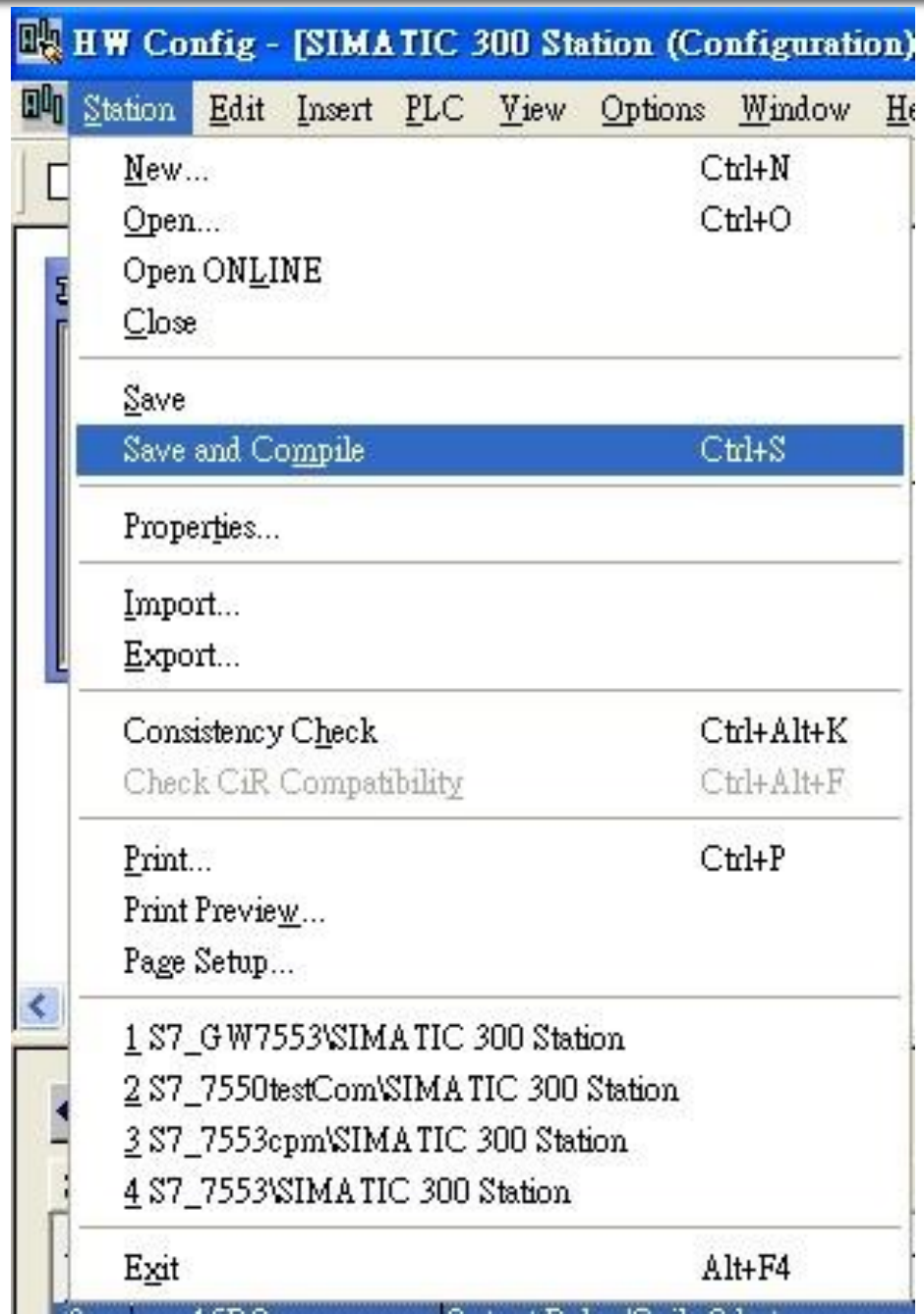
Read and Write 3-channel AO



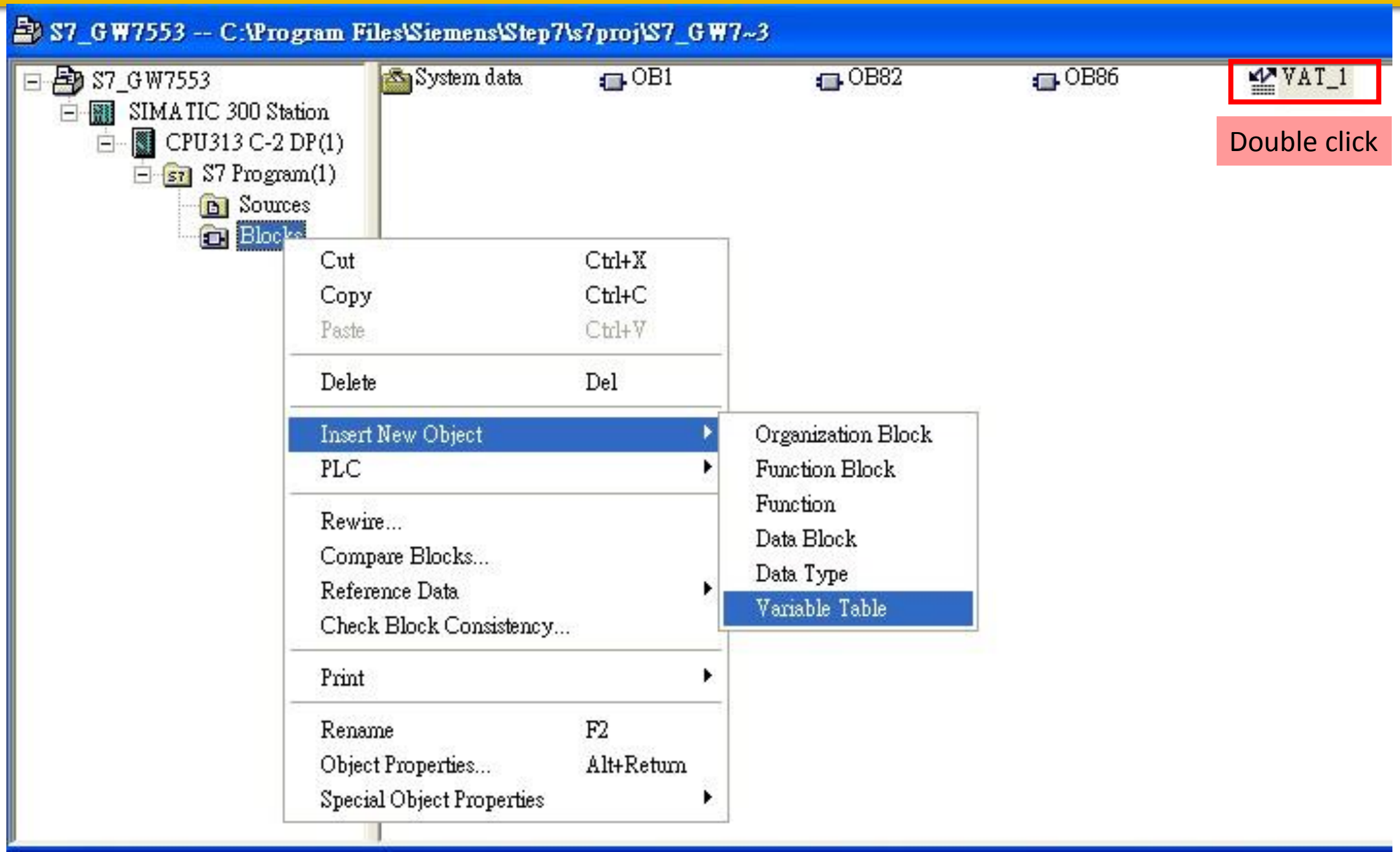
Read and Write 3-channel AO



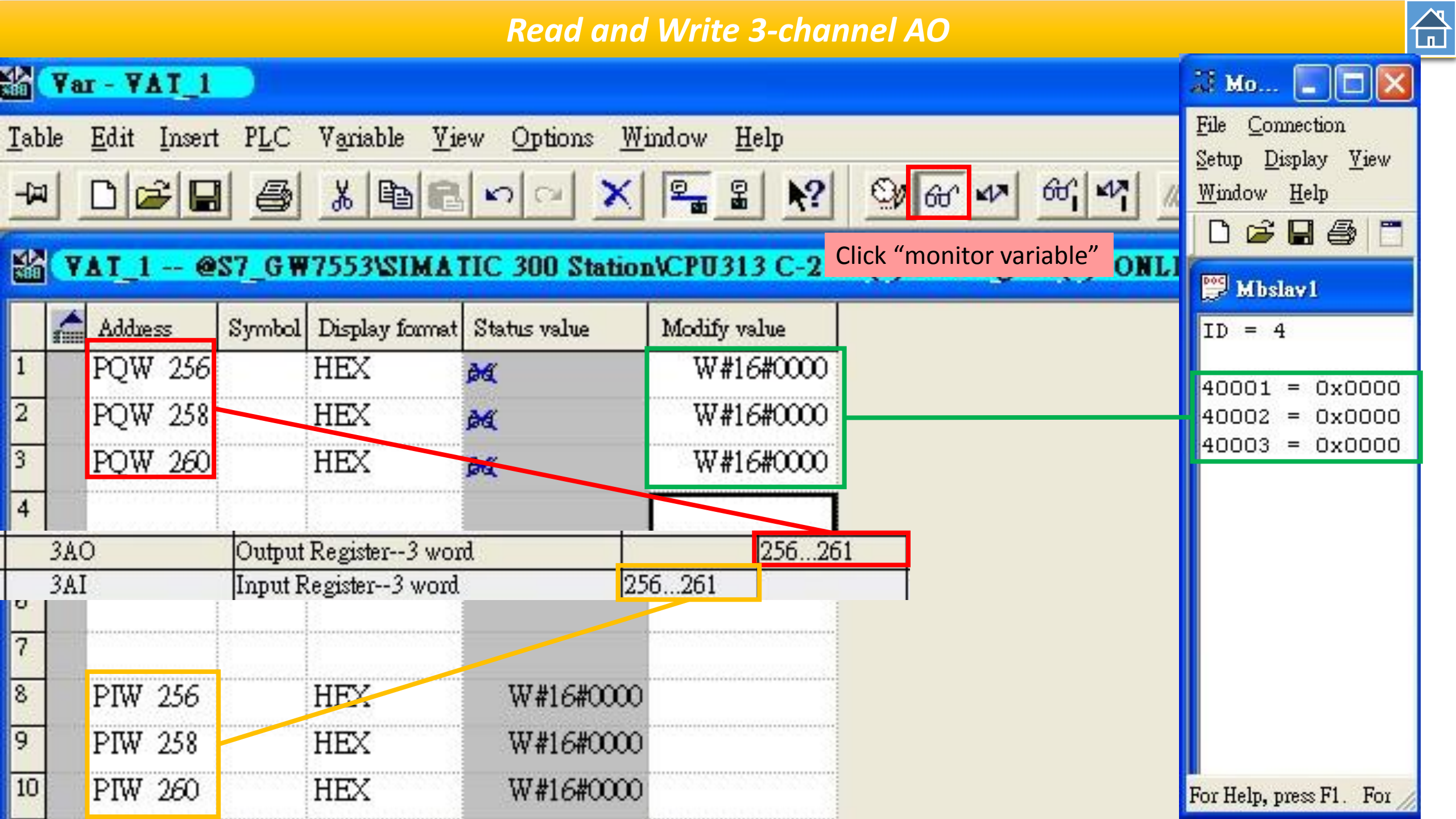
Read and Write 3-channel AO



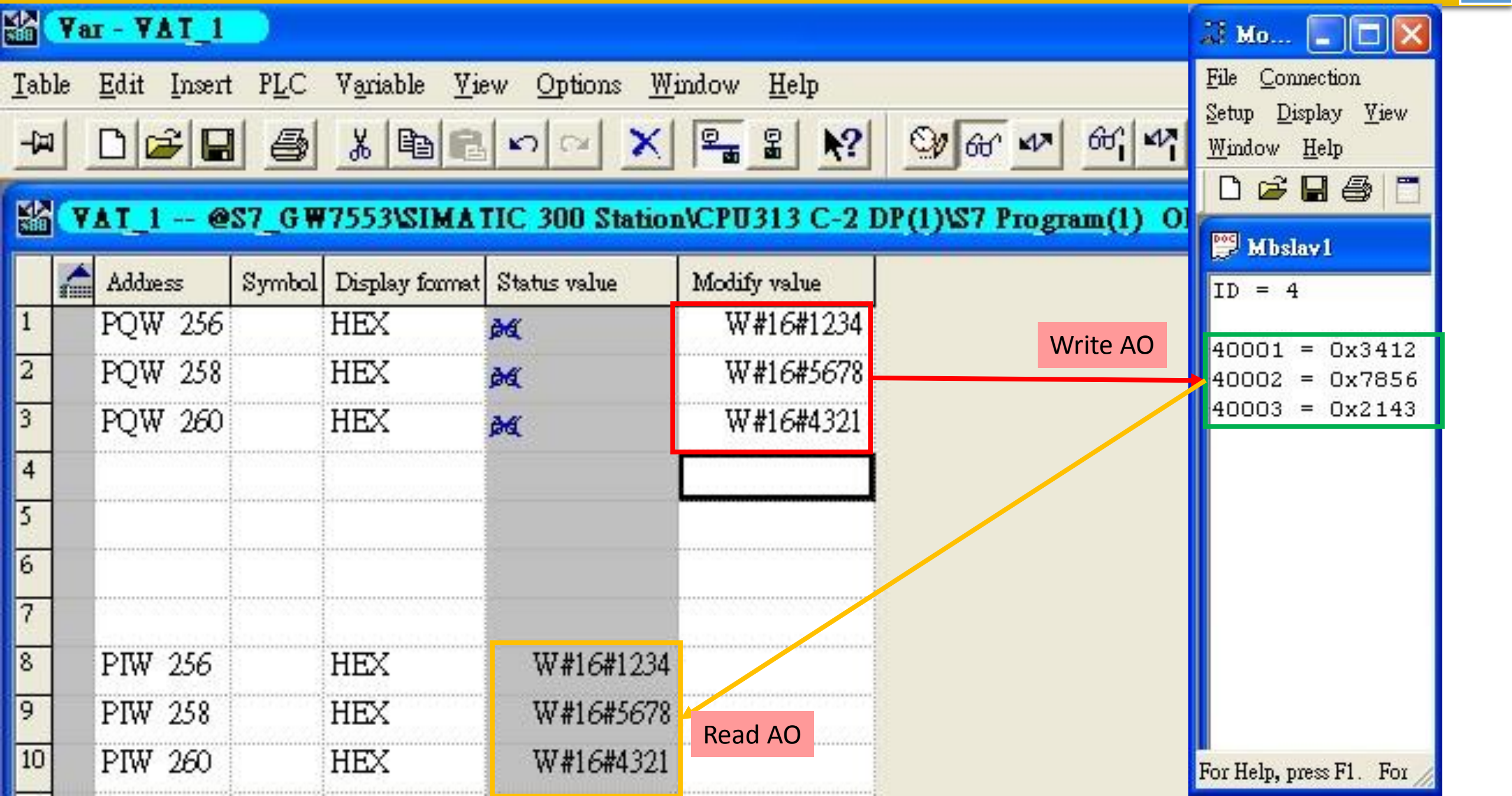
Read and Write 3-channel AO



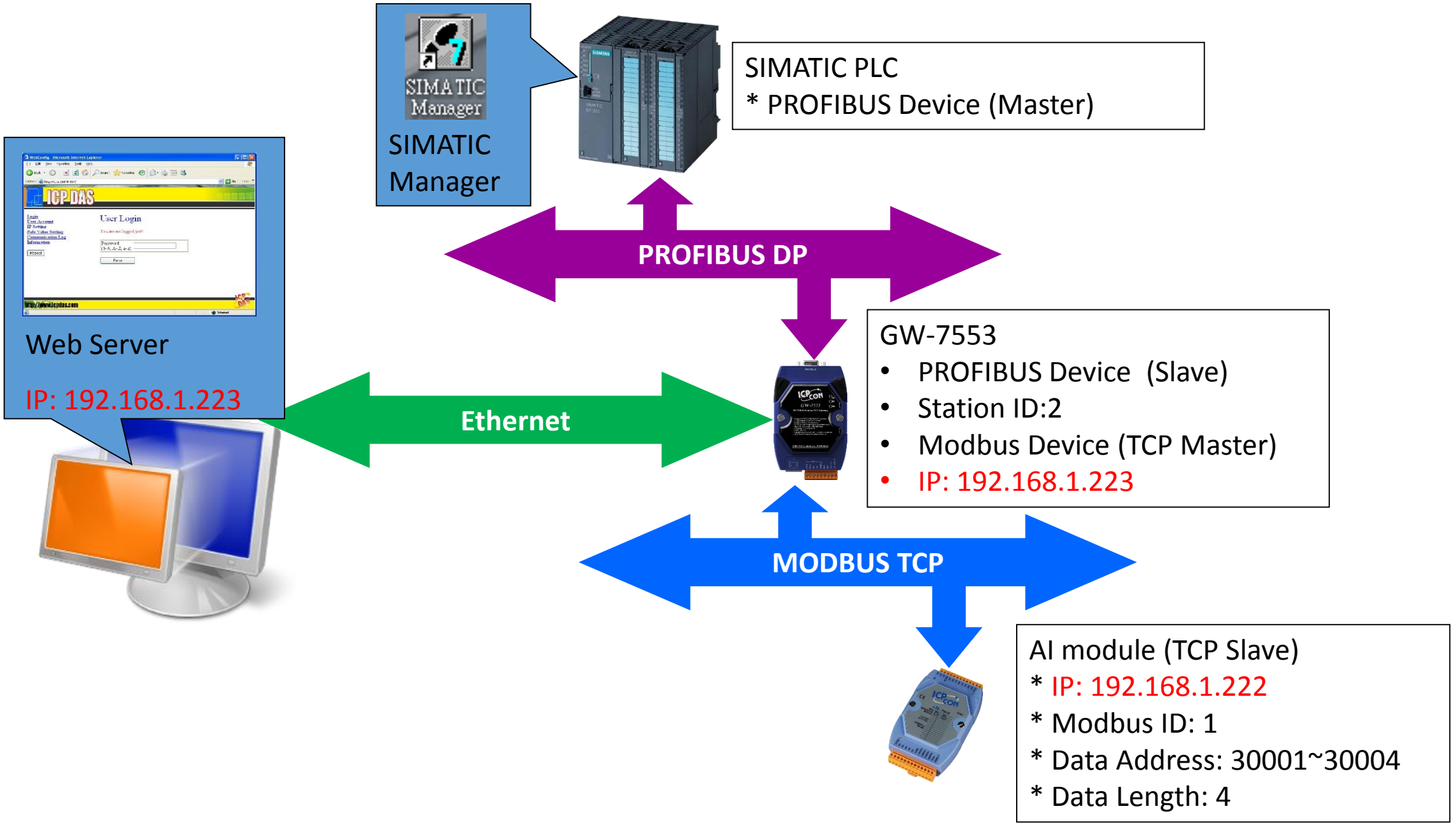
Read and Write 3-channel AO



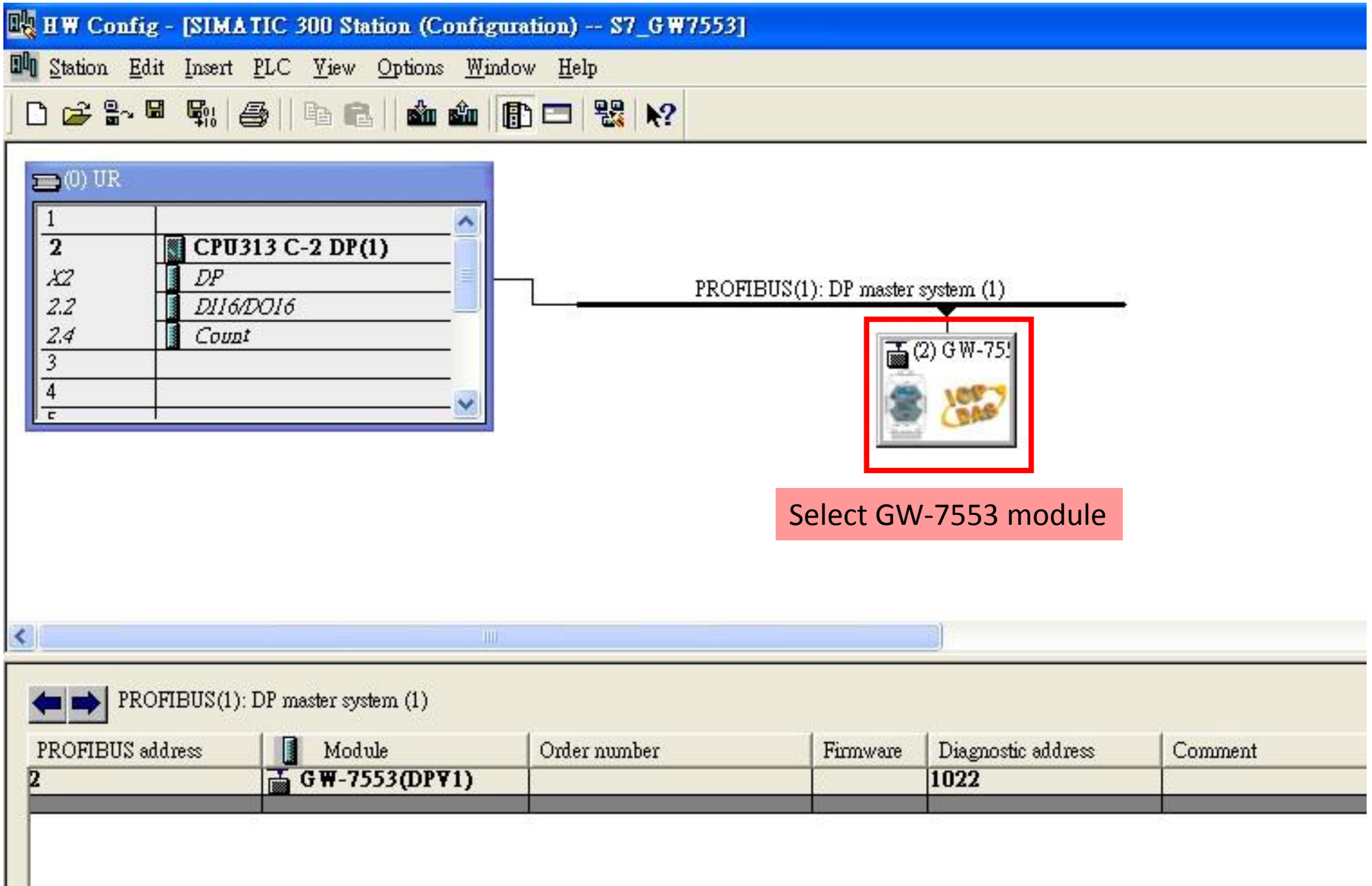
Read and Write 3-channel AO



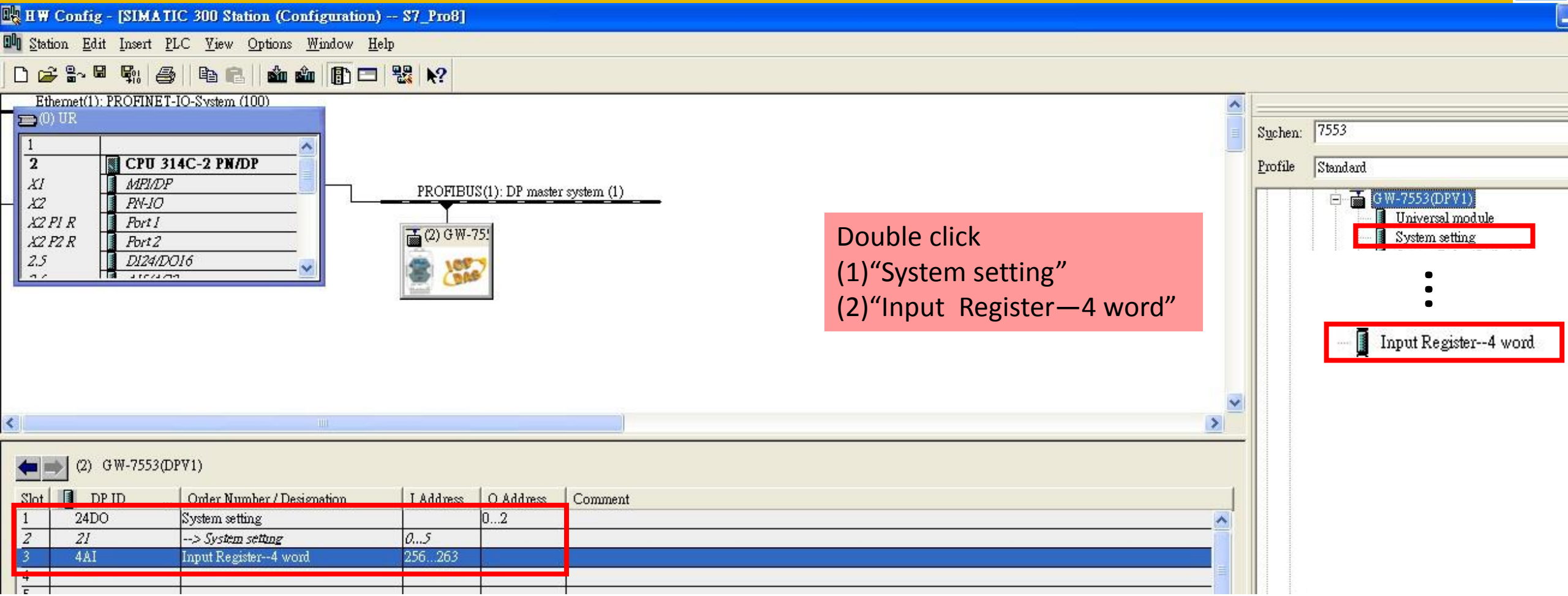
Read 4-channel AI



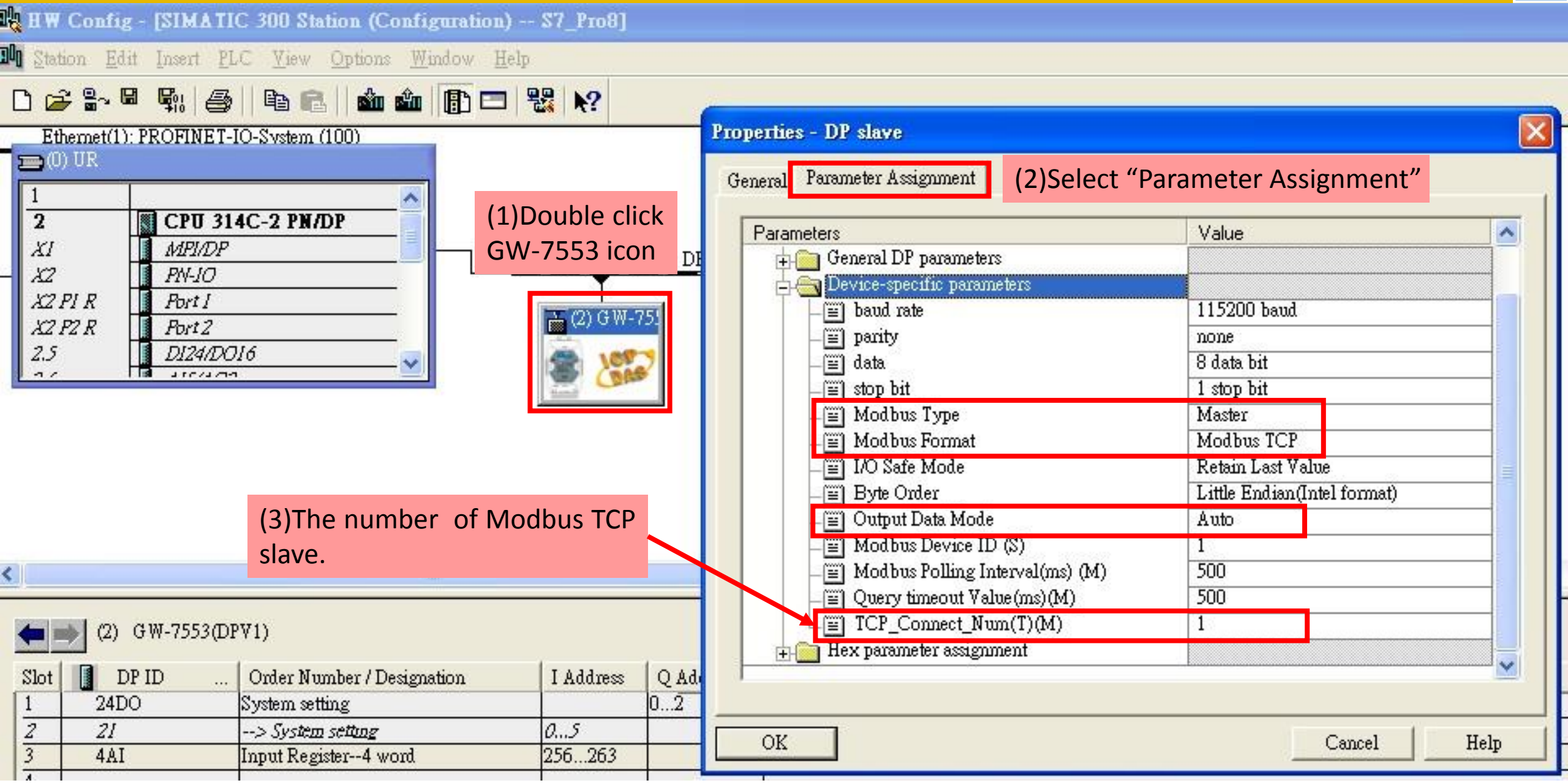
Read 4-channel AI



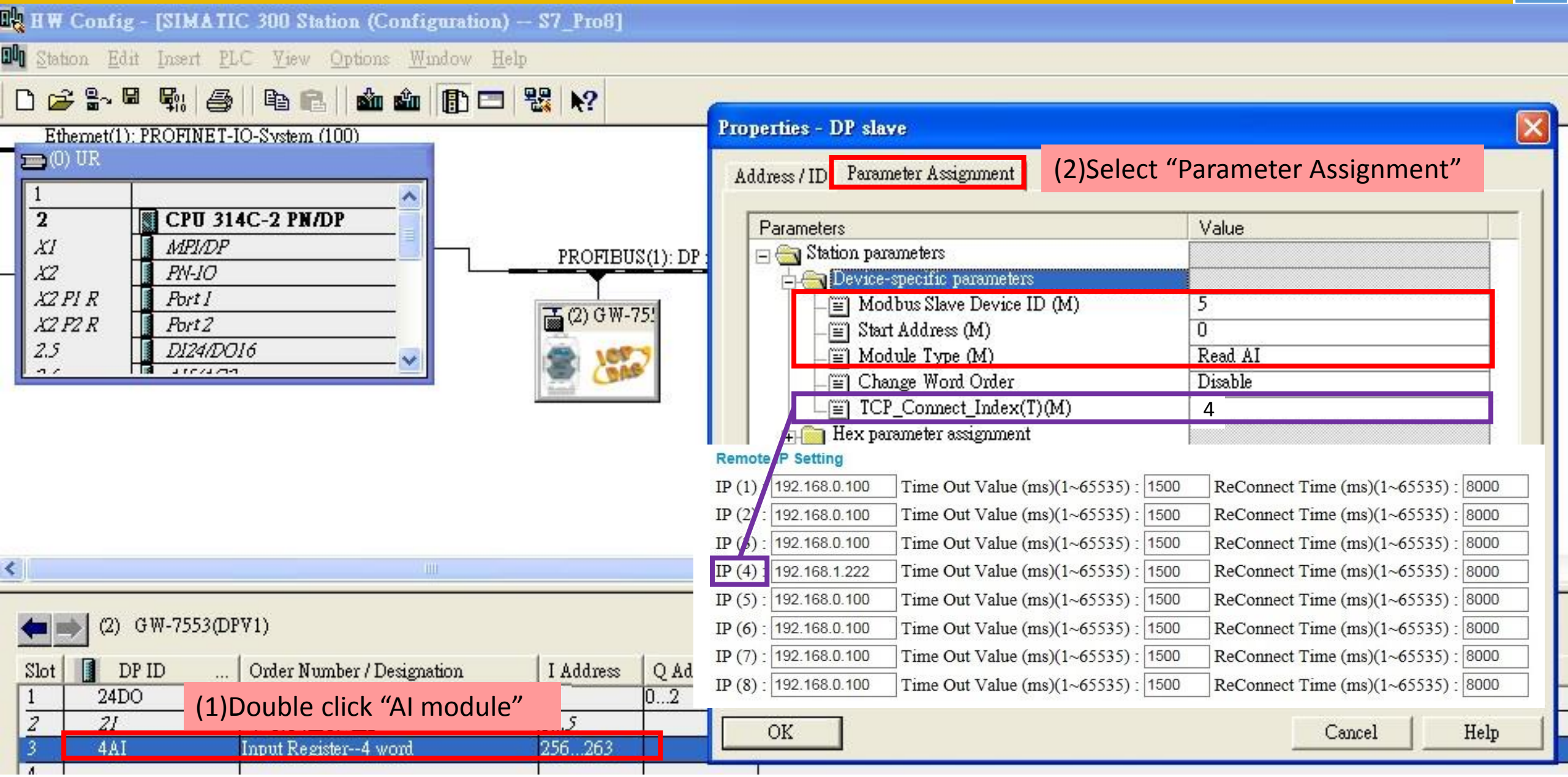
Read 4-channel AI



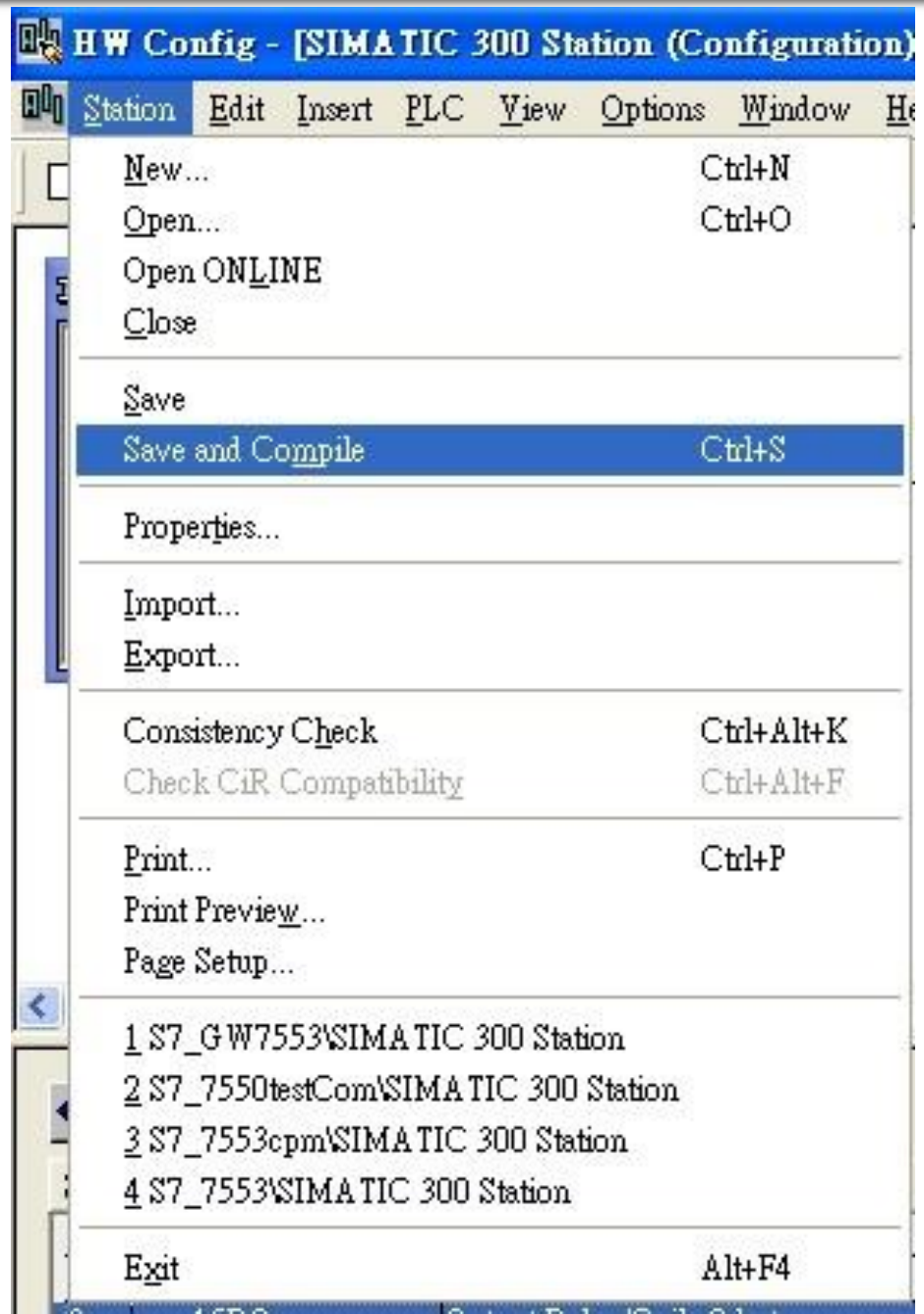
Read 4-channel AI



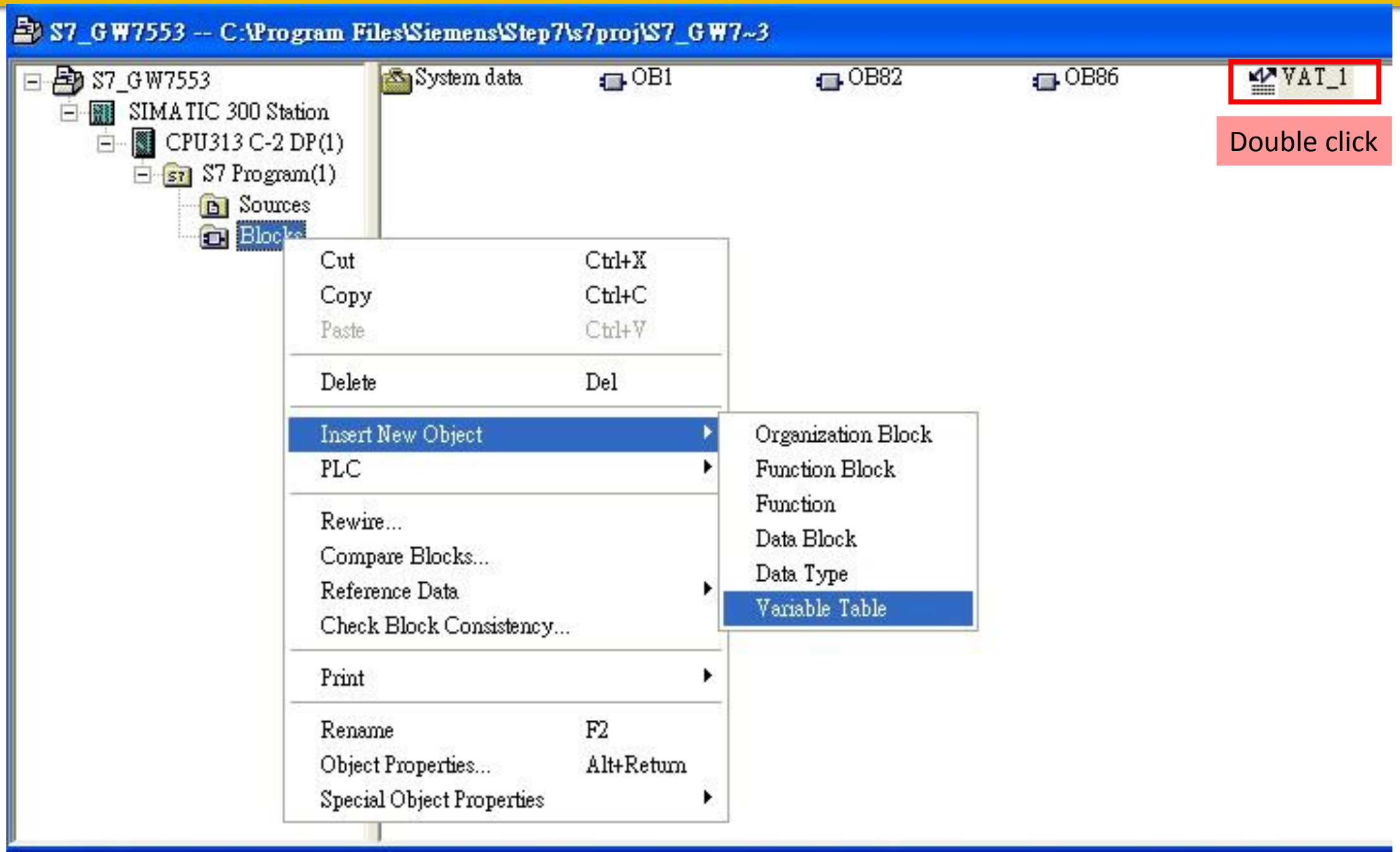
Read 4-channel AI



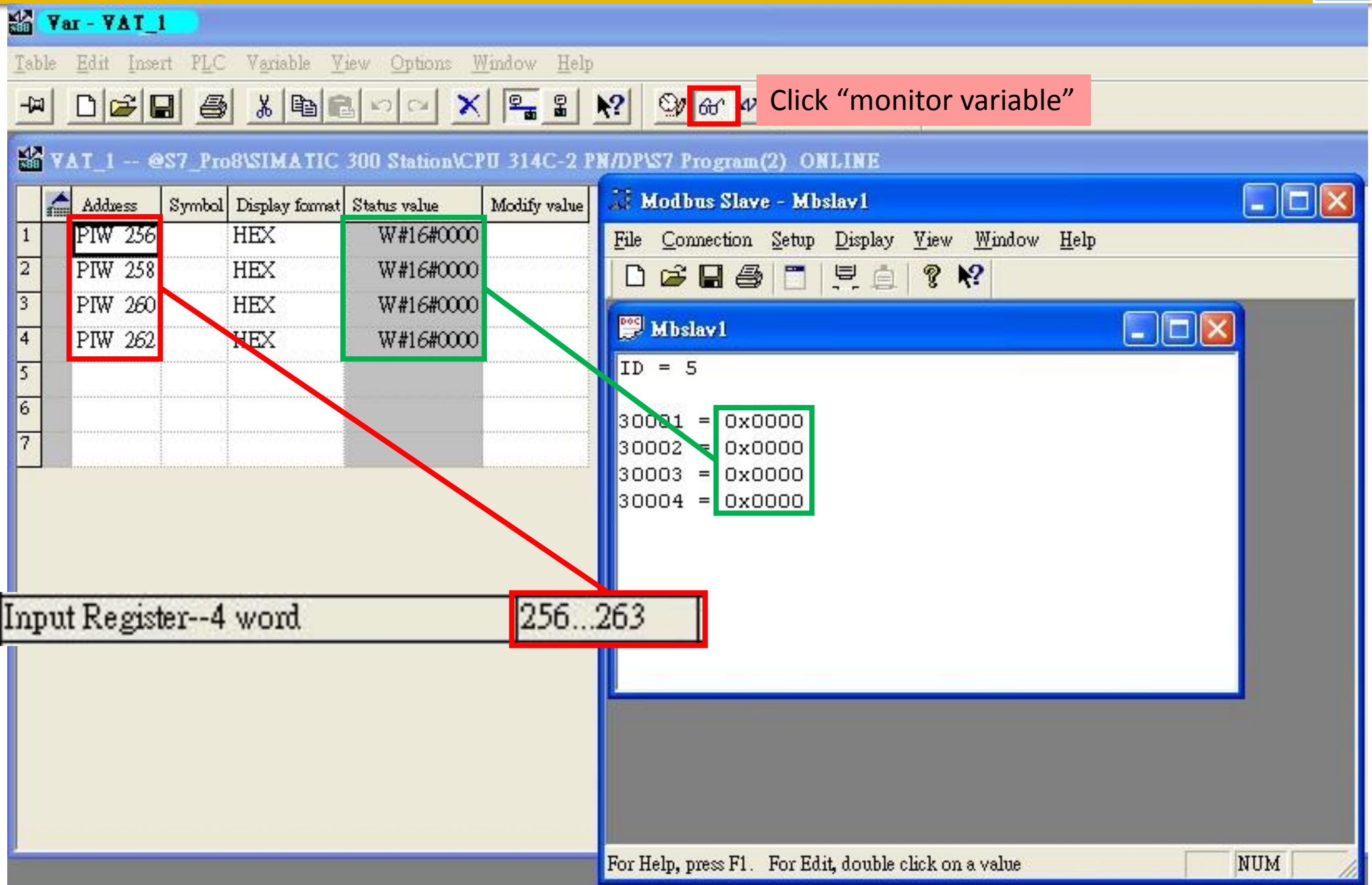
Read 4-channel AI

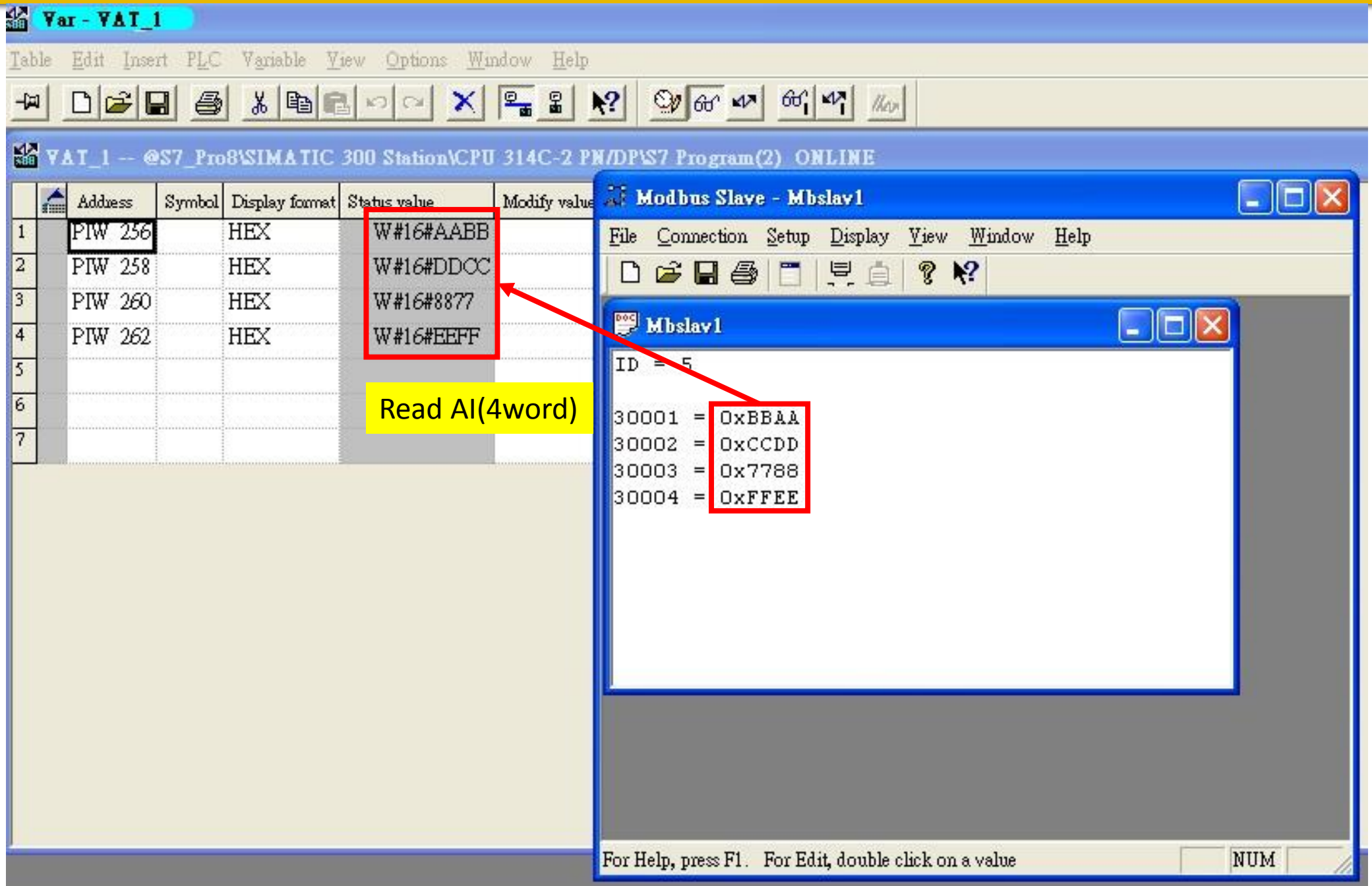


Read 4-channel AI



Read 4-channel AI



4AI	Input Register--4 word	256...263

Read 4-channel AI