

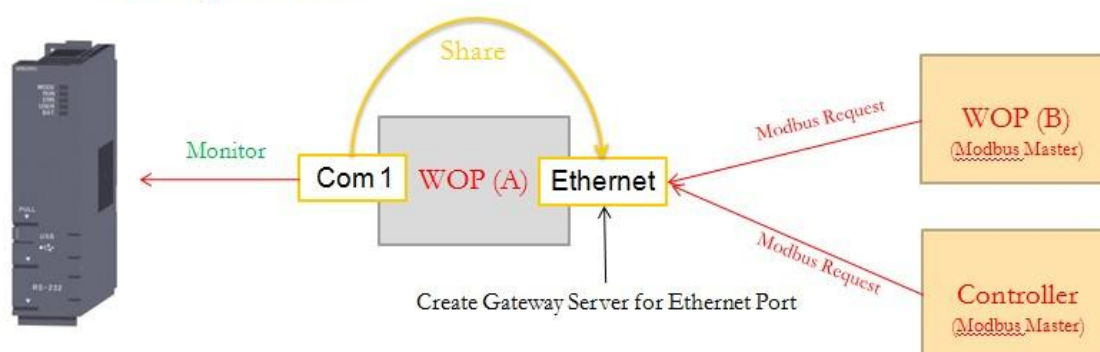
Advantech AE Technical Share Document

Date	2015 / 04 / 10	SR#	
Category	■ FAQ □ SOP	Related OS	RTOS
Abstract	How to Use Modbus TCP/IP Gateway on WebOP		
Keyword	Gateway/ WOP/ WebOP/ Modbus/ Panel Express		
Related Product	WOP-2000V/ WOP-2000T/ WOP-3000T/ Panel Express		

■ Problem Description:

WOP – Gateway Server Driver

- WebOP provide gateway server to share data from controller.
 - For example, User could read data from PLC by com1, and share data by Ethernet port as Modbus Server in network. Another Modbus Master device could read data from WOP if user has already setup TCP/IP Gateway Server on WOP. Please refer to following architecture.



■ Brief Solution - Step by Step:

Example Environment:

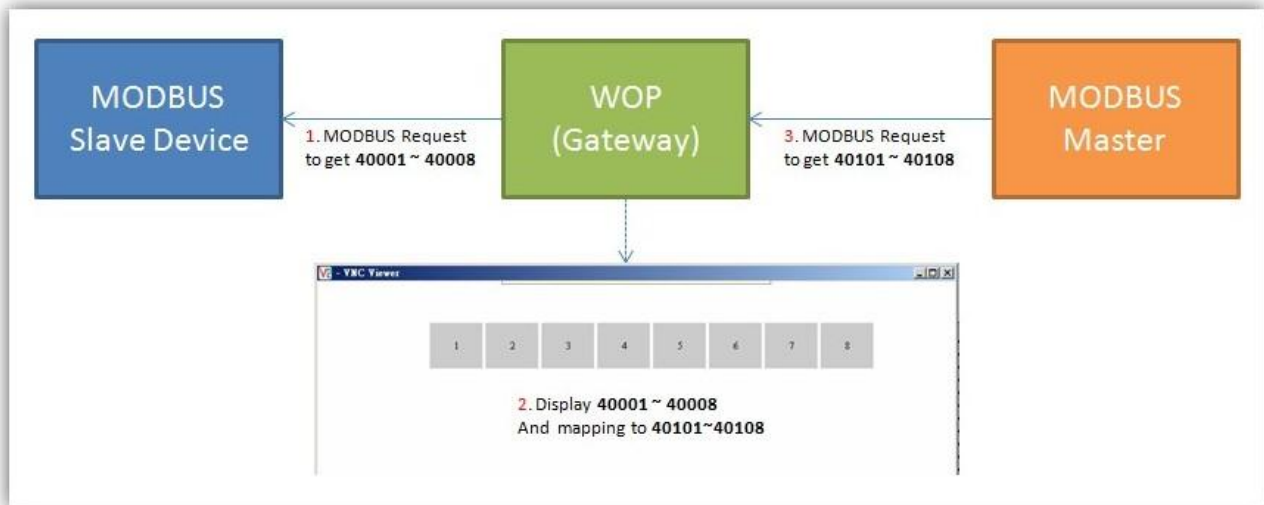
PLC: Modbus Slave Simulator (Modsim32) / or Modbus Slave Device
IP: 172.16.12.85

WOP: WOP-2070T
IP: 172.16.12.156

3-Party Modbus Master Software:
IP: 172.16.12.123

Notice – the example here could be adapted to WOP-2000V Series / WOP-2000T Series/ WOP-3000 Sereis/ Panel Express

WebOP will send modbus request to get 40001 ~ 40008 from PLC(172.16.12.85) and share the data to 40101 ~ 40108 which is located on WebOP itself. So WebOP will be Modbus TCP/IP Gateway and 3-party modbus master software is able to request data of PLC from WebOP.

**Steps:**

1. Create new project

New Project

Project Name:

Location:

2. Select your WOP model

New Panel Application

Application Name:

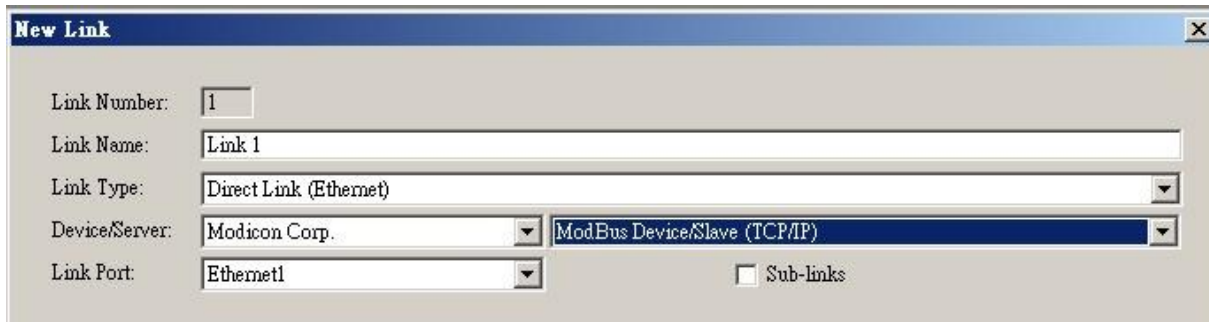
Display Size:

Display Orientation:

Model:

Display Resolution:

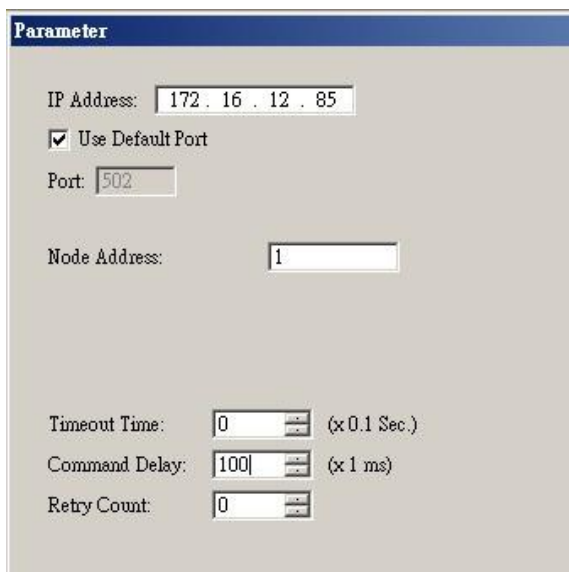
3. Select Modbus Communication Driver (WOP will be Master if you select driver “Modbus Device/Slave (TCP/IP)”)



The 'New Link' dialog box is shown with the following settings:

- Link Number: 1
- Link Name: Link 1
- Link Type: Direct Link (Ethernet)
- Device/Server: Modicon Corp. (selected), ModBus Device/Slave (TCP/IP) (highlighted)
- Link Port: Ethernet1
- Sub-links: ☐

4. Set Target IP address of PLC



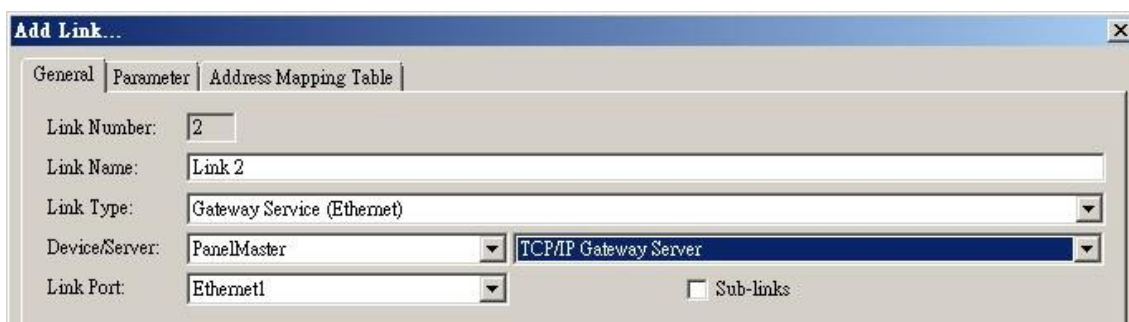
The 'Parameter' dialog box is shown with the following settings:

- IP Address: 172 . 16 . 12 . 85
- Use Default Port: ☒
- Port: 502
- Node Address: 1
- Timeout Time: 0 (x 0.1 Sec.)
- Command Delay: 100 (x 1 ms)
- Retry Count: 0

5. Create another Link



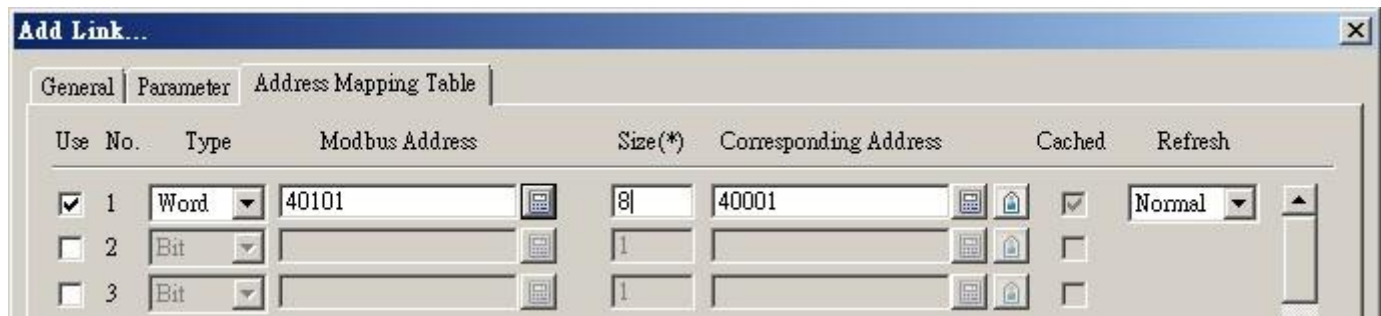
6. Select Gateway Service and TCP/IP Gateway Server.



The 'Add Link...' dialog box is shown with the following settings:

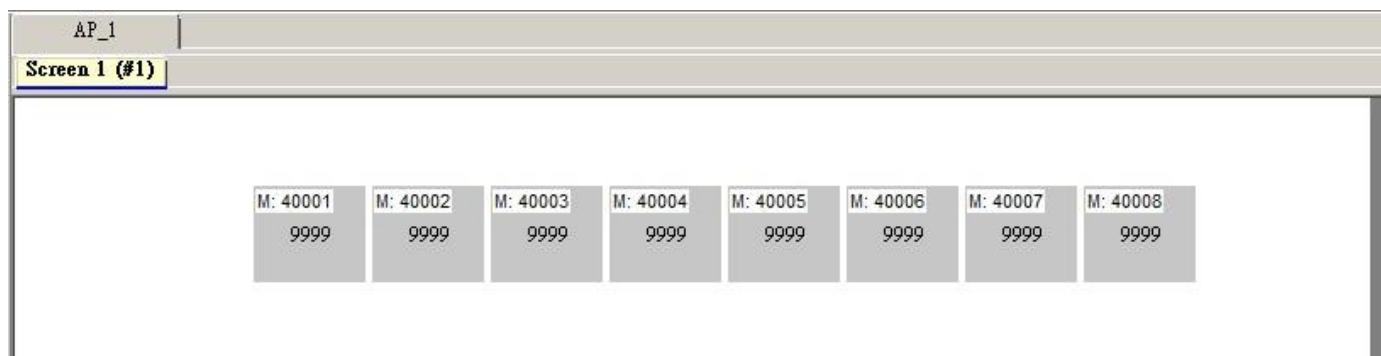
- Link Number: 2
- Link Name: Link 2
- Link Type: Gateway Service (Ethernet)
- Device/Server: PanelMaster (selected), TCP/IP Gateway Server (highlighted)
- Link Port: Ethernet1
- Sub-links: ☐

- According to follow setting, the address 40001 ~ 40008 will be shared to local Modbus Address 40101 ~ 40108.



Use	No.	Type	Modbus Address	Size(*)	Corresponding Address	Cached	Refresh
☒	1	Word	40101	8	40001	☒	Normal
☐	2	Bit		1		☐	
☐	3	Bit		1		☐	

- Create eight of numeric display on screen 1 and Save file.



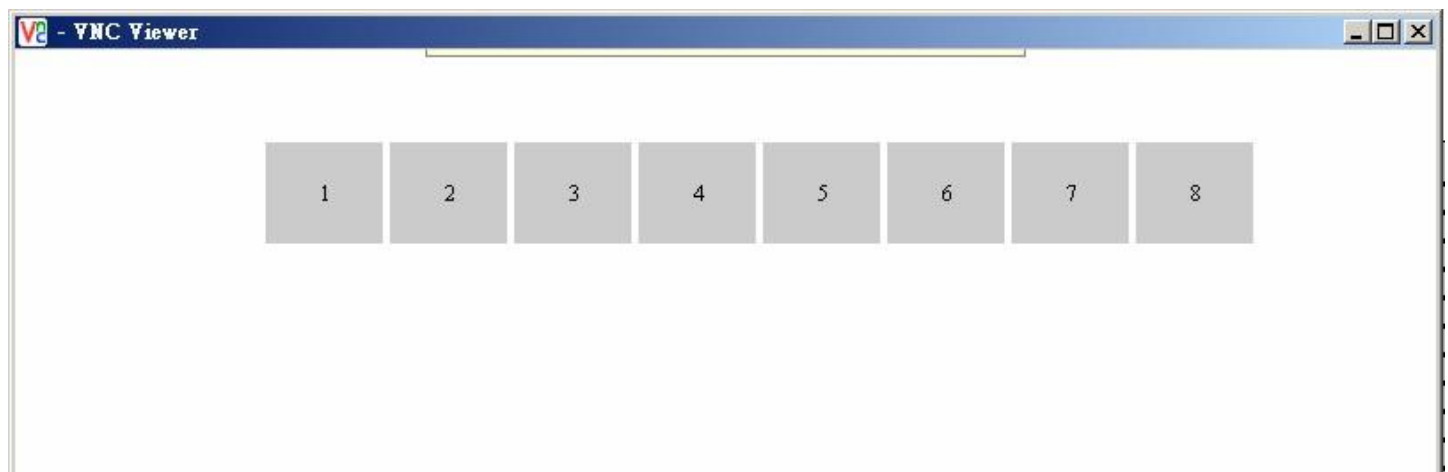
AP_1

Screen 1 (#1)

M: 40001 9999	M: 40002 9999	M: 40003 9999	M: 40004 9999	M: 40005 9999	M: 40006 9999	M: 40007 9999	M: 40008 9999
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- Compile  and download  to WOP.

- Make sure if WOP now able to read value from PLC.



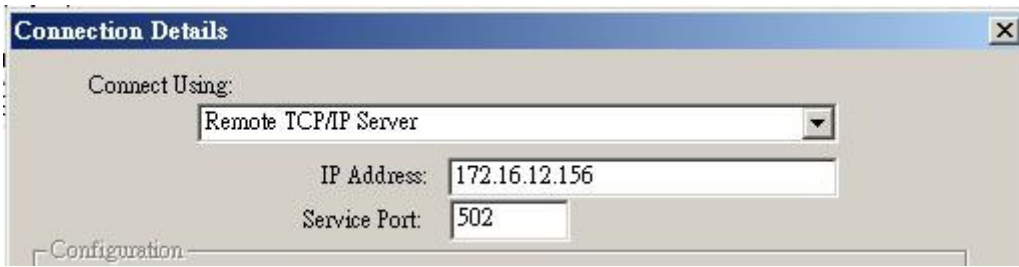
VNC Viewer

1	2	3	4	5	6	7	8
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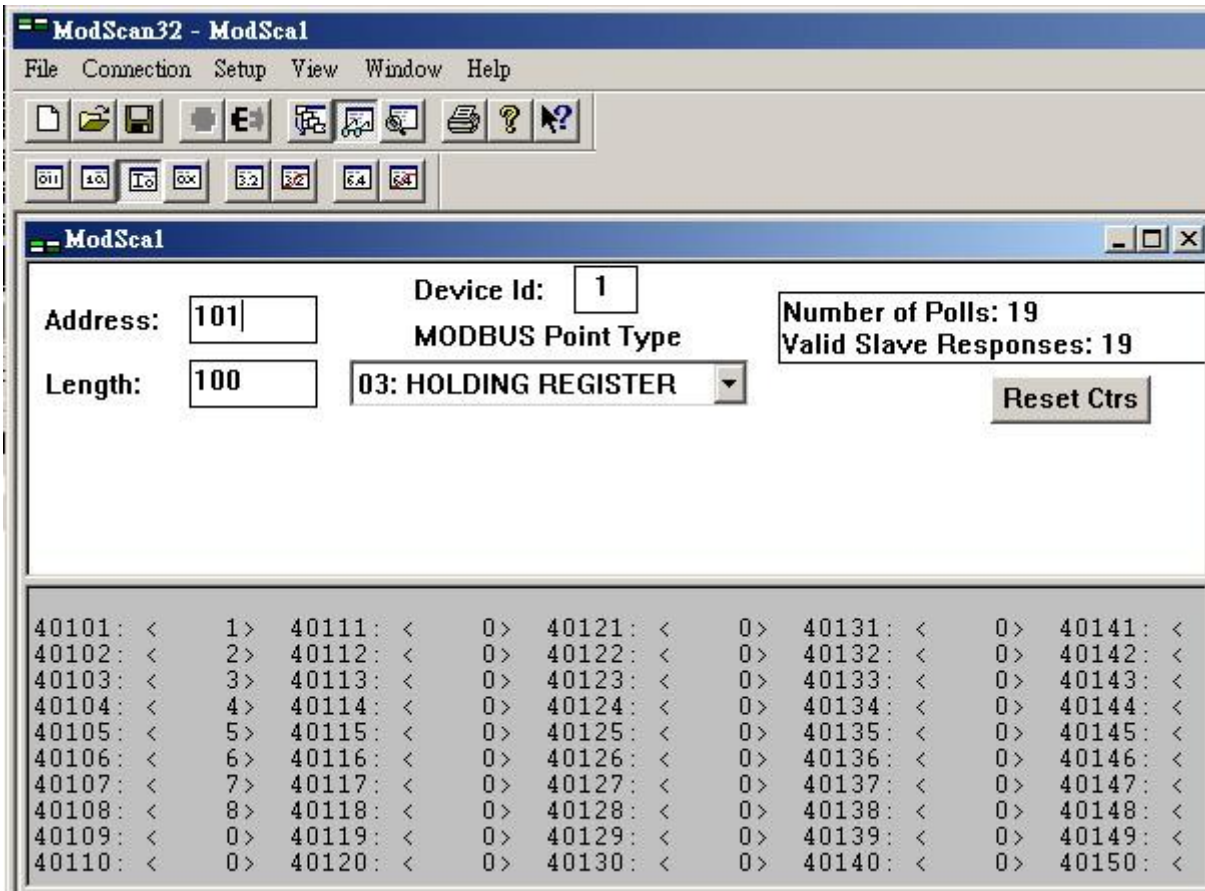
11. Use 3-party Modbus Master Device or Modbus Master Software.

(We use Modscan Software for example here.)

Set Target IP address of WOP (**172.16.12.156**)



12. Send request to get 40101 ~ 40108 and confirm if we got same values as 40001 ~ 40008 from PLC.



■ Reference:

N/A