



**BusWorks® 900EN Series  
10/100 Mbps Industrial Ethernet I/O Modules**

**Configuring the Wonderware® MBENET  
I/O Server to Communicate with the  
Acromag 9xxEN Ethernet Modules**

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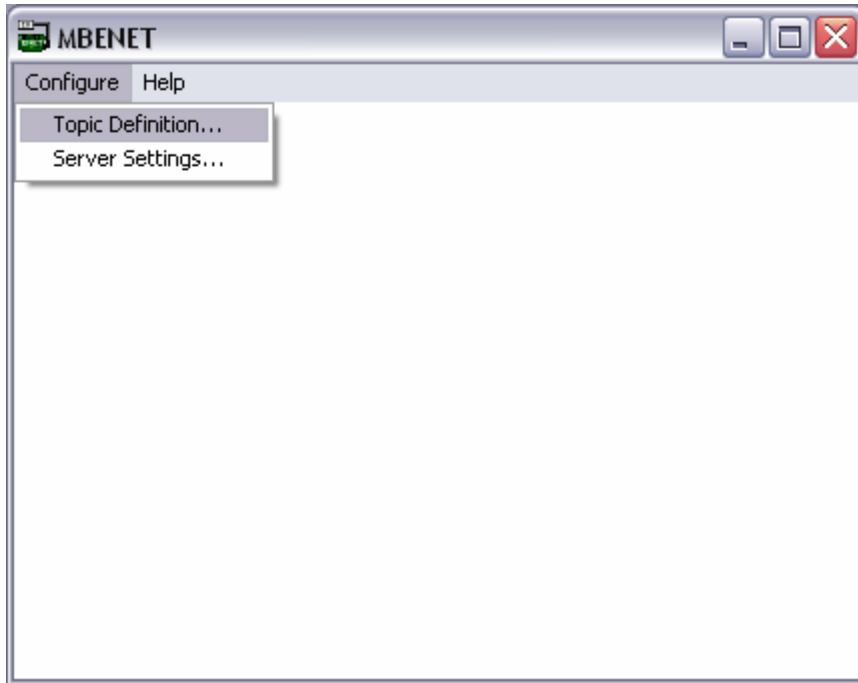
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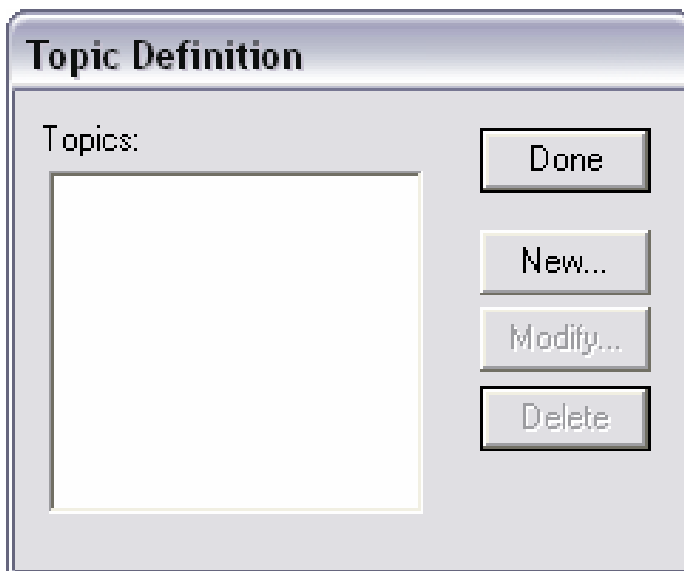
**OBJECTIVE**

The purpose of this document is to provide a procedure for configuring MBENET I/O Server (ie: Modicon Ethernet I/O Server) to communicate with an Acromag [Series 9xxEN Ethernet I/O Module](#). It is assumed that the user has a working knowledge of Wonderware and how to link the Wonderware application to the Wonderware I/O driver.

## Setup for Modbus Ethernet Communication for 9xxEN Modules



1. To establish communication between MBENET I/O Server and Acromag 9xxEN modules, a Topic Definition needs to be created. To create a Topic Definition, open MBENET I/O Server.
2. In the MBENET window, open the **Configure** menu, and click on **Topic Definition**. This opens the Topic Definition dialogue box.



3. In the Topic Definition dialogue box, click the **New** button. This opens the **MBENET Topic Definition** dialogue box.

The **MBENET Topic Definition** dialogue box is where communication settings are defined. Create a Topic Definition as indicated below.

4. **Topic Name**

Create a unique Topic Name that is less than 32 characters long and begins with a letter.

5. **IP Address**

Specify the IP Address that will be used to access the 9xxEN Module.

**Note:** The default IP Address for 9xxEN modules is 128.1.1.100

6. **Dest Index or Unit ID**

Set to **0**.

7. **Slave Device Type**

In the dropdown box, select **584/984 PLC**.

8. **Communication Channels**

Verify that the **Unsolicited Messages** box is not checked.

9. **String Variable Style**

Select **Full Length**.

10. **Register Type**

Select **Binary**.

11. **Block I/O Sizes**

**Coil Read:** Can be any user defined multiple of 8 between 8 and 2000.

**Coil Write:** Can be any user defined multiple of 8 between 8 and 800.

**Register Read:** Can be any user defined value between 1 and 100.

**Register Write:** Can be any user defined value between 1 and 100.

**Note:** Coil/Register values refer to the number of *consecutive* coils/registers to be read/written at one time.

12. **Update Interval**

User defined.

**Note:** Acromag default value is 100 msec.

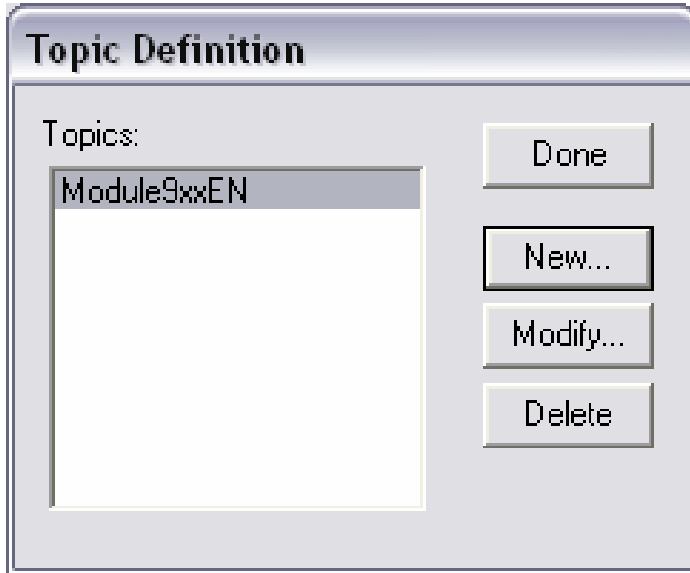
13. **Reply Timeout**

Set to **1** second.

14. Click the **OK** button. This completes the Topic Definition setup and returns to the **Topic Definition** dialogue box.

The screenshot shows the 'MBENET Topic Definition' dialog box with the following settings:

- Topic Name: Module9xxEN
- IP Address: 128.1.1.100
- Dest\_Index or Unit\_ID: 0
- Slave Device Type: 584/984 PLC
- Use Concept Data Structures:
- Unsolicited Messages:
- String Variable Style:  Full length,  C style,  Pascal style
- Register Type:  Binary,  BCD
- Block I/O Sizes:
  - Coil Read: 16
  - Register Read: 100
  - Coil Write: 16
  - Register Write: 100
- Update Interval: 100 msec
- Reply Timeout: 1 sec



15. This concludes the creation of this Topic Definition. It is now listed under **Topics** in the **Topic Definition** dialogue box.
16. To return to the MBENET I/O Server Window to begin communication between MBENET I/O Server and an Acromag 9xxEN Module, click the **Done** button.
17. To create another Topic Definition, click the **New** button and repeat steps 4 through 15.
18. To Modify an existing Topic Definition, select the desired Topic Definition and click the **Modify** button.
19. To Delete an existing Topic Definition, select the desired Topic Definition and click the **Delete** button.

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