

## Modbus using in LabVIEW

1. Free download NI's Modbus library (for LabVIEW 7.1)

[http://sine.ni.com/apps/we/niepd\\_web\\_display.display\\_epd4?p\\_guid=F1582737BACF5CA8E0340003BA7CCD71](http://sine.ni.com/apps/we/niepd_web_display.display_epd4?p_guid=F1582737BACF5CA8E0340003BA7CCD71)

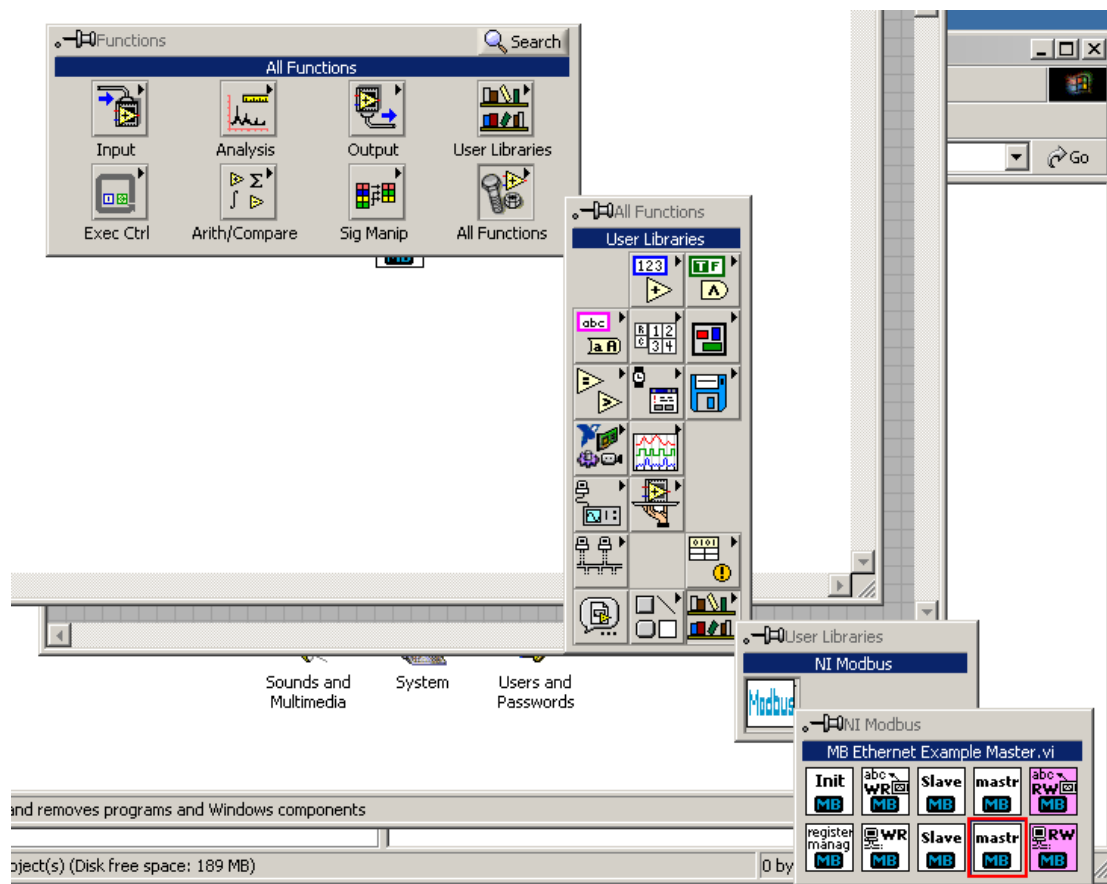
- or download the MGIModbus (for LabVIEW 6.1)

[http://sine.ni.com/apps/we/niepd\\_web\\_display.display\\_epd4?p\\_guid=F1582737BACF5CA8E0340003BA7CCD71](http://sine.ni.com/apps/we/niepd_web_display.display_epd4?p_guid=F1582737BACF5CA8E0340003BA7CCD71)

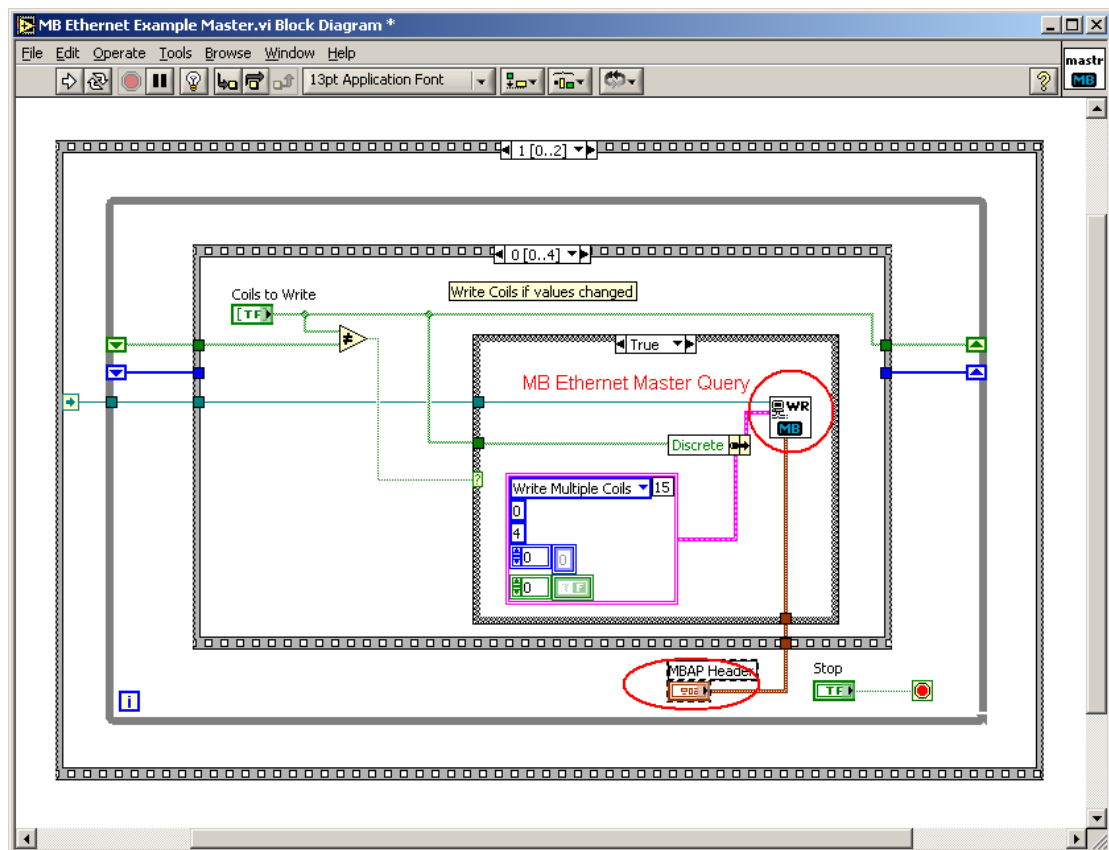
2. Install NI's Modbus library, or unzip MGIModbus and copy the two folders into LabVIEW.

## Modbus/TCP

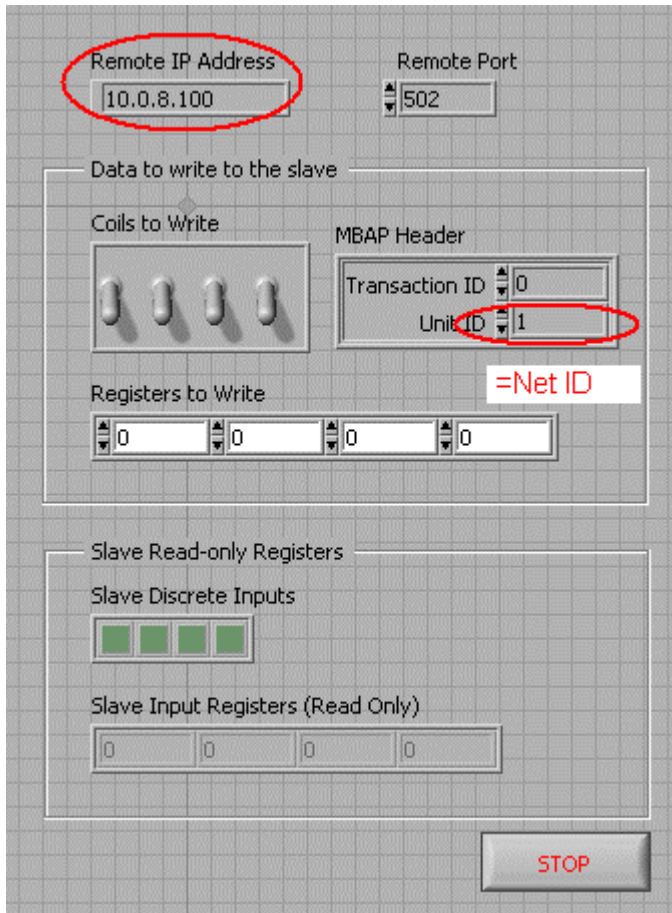
1. Open MB Ethernet Example Master.vi from "Functions Palette" >> "User Libraries" >> "NI Modbus" >> "MB Ethernet Example Master.vi"



3. Create MBAP Header of “MB Ethernet Master Query.vi” and link the controller to “MB Ethernet Master Query.vi” in frame0 ~ frame 3



#### 4. Set IP and NetID of remote Modbus slave



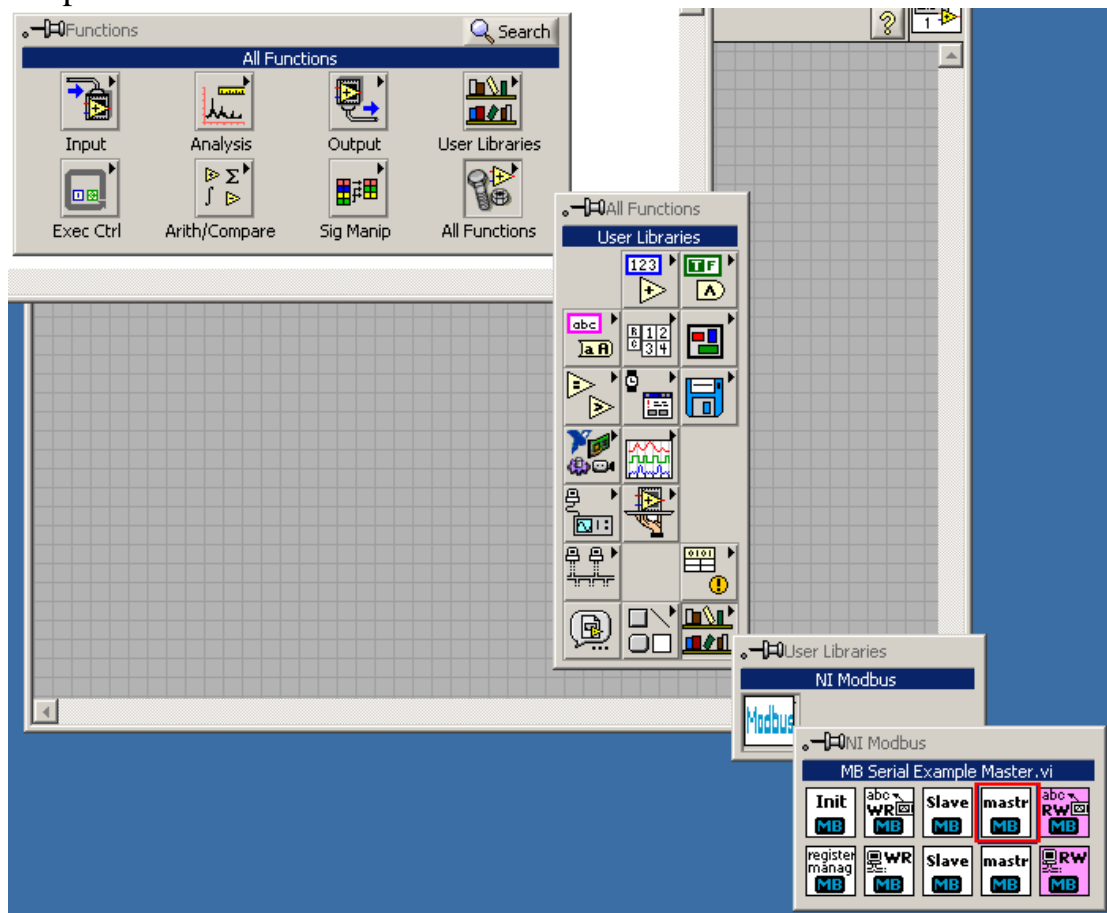
The screenshot shows a software interface for configuring a remote Modbus slave. At the top, the 'Remote IP Address' is set to '10.0.8.100' and the 'Remote Port' is '502'. Below this, the 'Data to write to the slave' section contains 'Coils to Write' (four toggle switches), 'MBAP Header' (Transaction ID: 0, Unit ID: 1), and 'Registers to Write' (four numeric input fields, all set to 0). A red circle highlights the 'Unit ID' field, with a red arrow pointing to a label '=Net ID'. The 'Slave Read-only Registers' section includes 'Slave Discrete Inputs' (four green indicator lights) and 'Slave Input Registers (Read Only)' (four numeric input fields, all set to 0). A 'STOP' button is located at the bottom right.

#### 5. Run the VI.

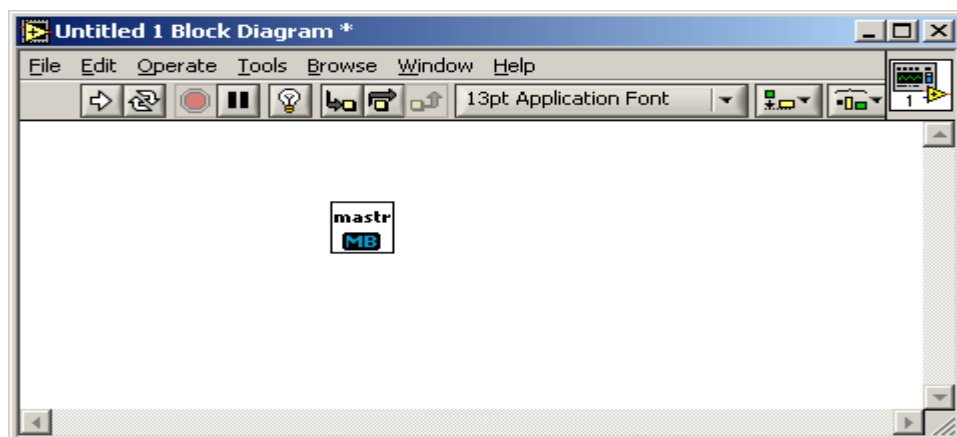
## Modbus/RTU

1. Make sure the PC have VISA runtime installed.

2. Open MB Serial Example Master.vi from “Functions Palette” >> “User Libraries”>> “NI Modbus”>> “MB Serial Example Master.vi”

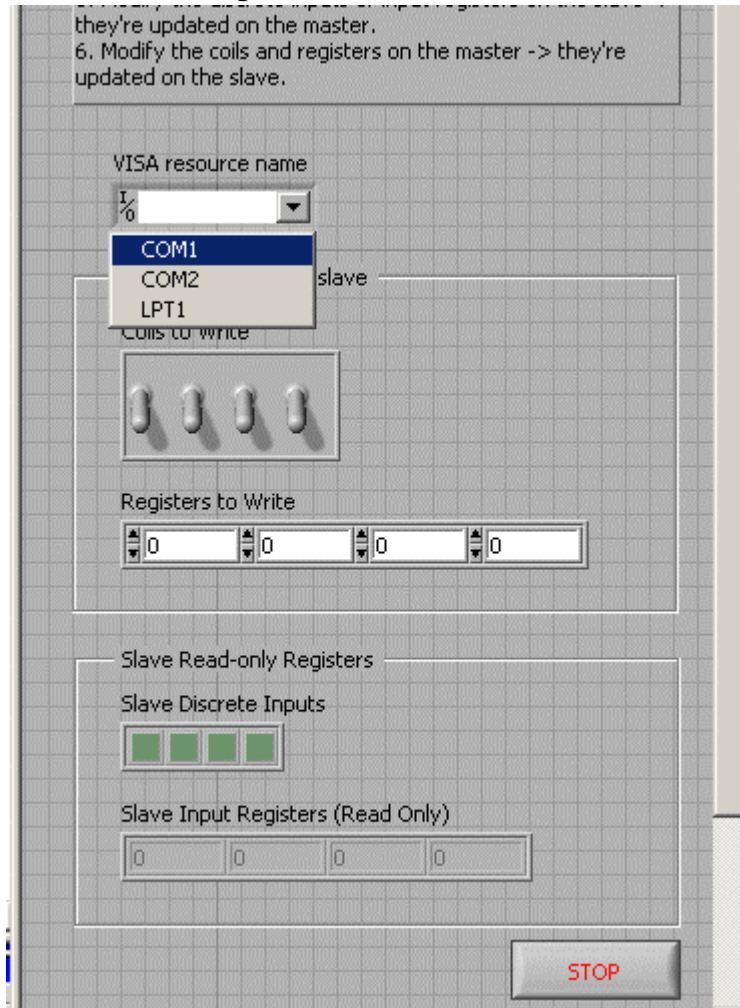


3. Double-click the icon to open it





## 6. Select COM port



## 7. Run the VI.