

Chapter 2: Getting Started

Software and License Installation

For information about software installation, see *Chapter 2: Installation* in the *PowerNet Software User's Guide*.

For information about licenses and installing licenses, see *Chapter 7: License Manager* in the *PowerNet Software User's Guide*.

Defining Devices

Before you can use NetPower Modbus Tools, all of the physical devices in the networks that attach to a NetPower DeviceServer must be configured using the NetPower Configurator application. When you configure these devices, you also define the polling rates of the device attributes (Status, Data, etc.) that you want to map to an Input Register.

Important

When configuring with the NetPower Configurator application, you **must** define the polling rate for any device attribute that you wish to monitor with the NetPower Modbus Tools application. If you do not, an error message displays. For more information, see *Chapter 3: Configuring the System*.

For information on how to configure devices and set their polling rates, see *Chapter 9: Configuring the System* in the *PowerNet Software User's Guide*.

Running NetPower Modbus Tools

For detailed information about starting, logging on, checking out a license, logging off, and exiting NetPower Modbus Tools, see *Chapter 6: Logging On and Off* in the *PowerNet Software User's Guide*.

Starting NetPower Modbus Tools

To start Modbus Tools, do the following:

1. Choose NetPower Modbus Tools from the IMPACC PowerNet Suite program group in the Start menu.
2. If you have not previously checked out a license, check out a license for NetPower Modbus Tools.

The NetPower Modbus Tools main window displays. If you are not currently logged on to a PowerNet Software application, you have view-only security privileges. If you are currently logged on to an application, you are logged on to NetPower Modbus Tools with the last user ID and password you used.

Logging On

To log on to NetPower Modbus Tools, do the following:

1. If you have not previously logged on to an application, select Log On “NetPower Modbus Tools” from the File menu.
2. Enter your user ID and password into the Log On dialog box.
3. Click OK.

NetPower Modbus Tools logs you on.

Logging Off

Note

If NetPower Modbus Tools does not detect any keyboard input or mouse movement, you are logged off automatically after a set time interval. For more information about automatic log off, see *Chapter 6: Logging On and Off* in the *PowerNet Software User's Guide*.

To log off NetPower Modbus Tools, choose Log Off “NetPower Modbus Tools” from the File menu.

NetPower Modbus Tools logs you off. You now have view-only security privileges.

Exiting NetPower Modbus Tools

To exit NetPower Modbus Tools, do the following:

1. From the File menu, choose Exit.
A confirm dialog box displays, verifying the request to exit.
2. Click OK.

NetPower Modbus Tools exits and returns the license.

Note

You can also use the Exit and Keep License command, which does not return the license to the NetPower License Manager. For more information, see *Chapter 6: Logging On and Off* in the *PowerNet Software User's Guide*.

Setting Up Database Synchronization

When you run NetPower Modbus Tools for the first time, and have not set up database synchronization, the Database Synchronization Setup dialog box displays. You must identify the correct pathname to both the Master and Local Configuration and Security databases.

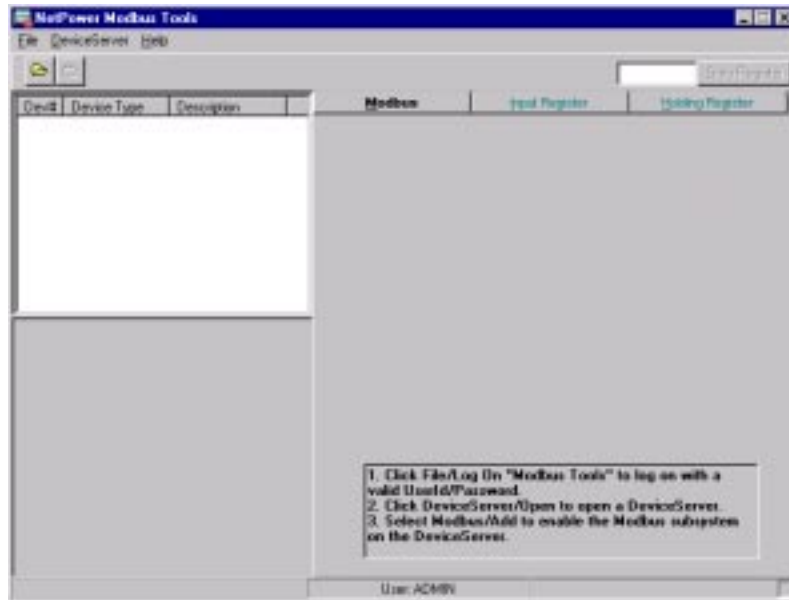
Note

If you have previously run a PowerNet Software application and identified the correct pathname to both the Master and Local Configuration and Security databases, these settings are saved for all applications. Thus, you do not need to set up synchronization when subsequently running a PowerNet Software application.

For more information about database synchronization, see *Chapter 5: Database Synchronization* in the *PowerNet Software User's Guide*.

Main Window

The NetPower Modbus Tools main window displays after you start the NetPower Modbus Tools application.





Most of the Modbus menu options, icons, and tabs are not enabled until after you log on and open a NetPower DeviceServer. When you open a NetPower DeviceServer, the NetPower Modbus Tools main window updates to display the open NetPower DeviceServer.

Menu Options and Toolbar Icons

The following table describes the menu options and their corresponding icons:

Note
 Not all menu items are available at all times. When you select the Modbus tab, the Modbus menu displays. When you select either the Input Register tab or the Holding Register tab, the Register menu displays.
 Several of the listed menu items are available by right-clicking in either the Input Register tab or the Holding Register tab.

Menu Option	Description	Icon
File		
Print	Prints the Modbus Configuration.	N/A
Setup Database Synchronization	Sets up the database synchronization.	N/A
Setup Auto Logoff	Sets up the automatic logoff time interval.	N/A
Log On "NetPower Modbus Tools"	Logs you on to NetPower Modbus Tools.	N/A
Log Off "NetPower Modbus Tools"	Logs you off of NetPower Modbus Tools.	N/A
Exit & Keep License	Exits NetPower Modbus Tools without returning the license.	N/A
Exit	Exits NetPower Modbus Tools and return the license.	N/A
DeviceServer		
Open	Allows you to Open and Connect (either On-Line or Off-Line) to a configured NetPower DeviceServer.	
Close	Allows you to Close and Disconnect from a NetPower DeviceServer (allows you to open another NetPower DeviceServer). (This icon is not active until after you open a NetPower DeviceServer.)	
Disconnect	Allows you to Disconnect (terminate communications) with a NetPower DeviceServer, i.e., switch to Off-Line mode.	N/A

Menu Option	Description	Icon
Connect	Allows you to Reconnect (begin communications) with a NetPower DeviceServer; i.e., switch to On-Line mode.	N/A
Save to Database Only	Saves the Modbus configuration to a local database only.	N/A
Save and Download to DeviceServer	Saves the Modbus configuration to a local database and to the NetPower DeviceServer.	N/A
Modbus (<i>This menu only displays when the Modbus tab is selected.</i>)		
Add	Allows you to add a Modbus configuration. (This option is used to <i>enable</i> the NetPower DeviceServer as a Modbus slave.)	N/A
Delete All Modbus Configuration	Allows you to delete a Modbus configuration. (This option is used to <i>disable</i> the NetPower DeviceServer as a Modbus slave.)	N/A
Register (<i>This menu only displays when either the Input Register tab or the Holding Register tab is selected.</i>)		
Delete mapping	Unmaps a single register and leaves that register open for remapping.	N/A
Delete Row	Unmaps a single register and deletes the associated register number so that all subsequent register numbers are renumbered, incrementing one less register number.	N/A

Menu Option	Description	Icon
Insert Row	Adds a register number so that all subsequent register numbers are renumbered, incrementing one greater register number.	N/A
Unmap Multiple Registers	Unmaps multiple registers and leaves those registers open for remapping.	N/A
Copy Input Register Mappings From Device to Device	Copies the input registers from a selected device to the input registers of another selected device.	N/A
Help		
Contents	Displays the table of contents for on-line help.	N/A
Keyword Search	Performs a keyword search.	N/A
About	Displays the About Modbus Configurator dialog box.	N/A

Tabs

When you log on to NetPower Modbus Tools, three tabs display on the right-hand side of the NetPower Modbus Tools main window. Each tab corresponds to a unique task when using NetPower Modbus Tools. You cannot select these tabs until after you open a NetPower DeviceServer.

The NetPower Modbus Tools tabs are:

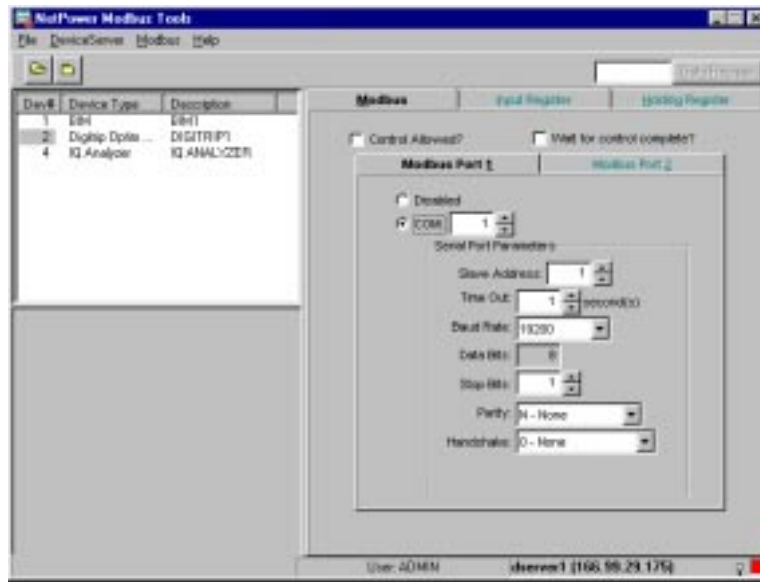
- ◆ Modbus tab
- ◆ Input Register tab
- ◆ Holding Register tab

Modbus Tab

The Modbus tab displays every time you open a NetPower DeviceServer. Using the Modbus tab, you are able to:

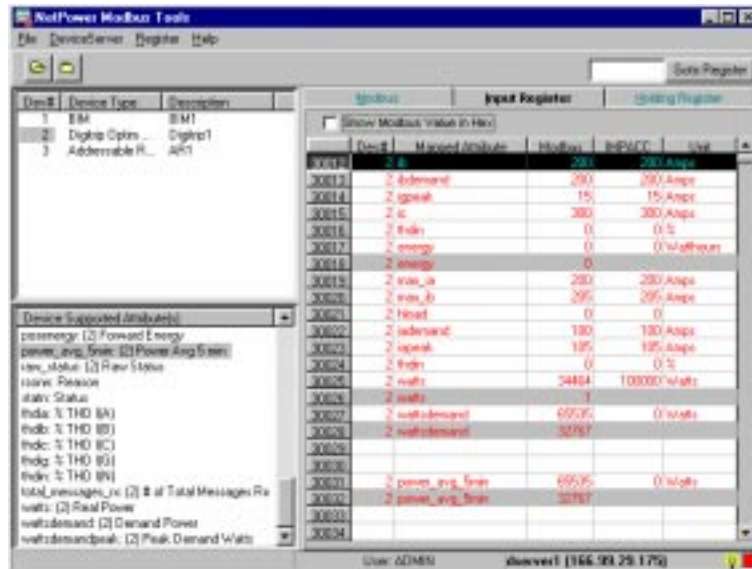
- ◆ Configure NetPower DeviceServer COM ports (set up serial communication parameters, such as slave address, baud rate, etc., to be used for Modbus communication).
- ◆ Enable the NetPower DeviceServer as a Modbus slave.

For information on how to configure the NetPower DeviceServer COM ports, and enable a NetPower DeviceServer as a Modbus slave, see *Chapter 3: Configuring the System*.



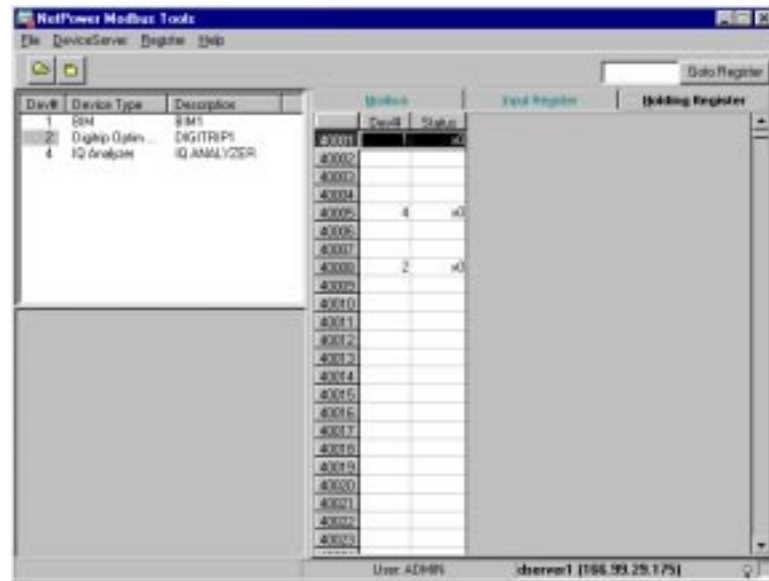
Input Register Tab

This tab contains the Input Registers that you configure to obtain device data. For information on how to configure the Input Registers, see *Chapter 3: Configuring the System*.



Holding Register Tab

This tab contains the Holding Registers that you configure to control devices. Once these registers are configured, they are available for storing device control commands from the Modbus Master. For information on how to configure the Holding Registers, see *Chapter 3: Configuring the System*.



Status Bar

The Status bar displays:

- ◆ The IP address of the connected NetPower DeviceServer.
- ◆ The Indicator light.

IP Address

When you open a NetPower DeviceServer in either the On-Line or Off-Line mode, the Status Bar indicates the IP address of the NetPower DeviceServer that you have selected and opened.

Indicator Light

The Indicator light in the lower right-hand corner displays the status of your current configuration. The following table describes each status and corresponding display colors for configured Input and Holding Registers.

Status	Configured Registers	Indicator Light
Edit (Configured registers are not yet saved.)	Red	Blinking Red
Local Save (Configured registers are saved to the Modbus Database.)	Blue	Blinking Blue
Save (Configured registers are saved to both the Modbus Database and the NetPower DeviceServer.)	Black	None