Chapter 2: Getting Started

Software and License Installation

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

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

Running NetPower Waveform

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

Starting NetPower Waveform

To start NetPower Waveform, do the following:

1. Choose NetPower Waveform 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 Waveform.

The NetPower Waveform 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 Waveform with the last user ID and password you used.

Logging On

To log on to NetPower Waveform, do the following:

1. If you have not previously logged on to an application, select Log On "NetPower Waveform" from the File menu.

2. Enter your user ID and password into the Log On dialog box.

3. Click OK.

NetPower Waveform logs you on.

Logging Off

> **Note**
> If NetPower Waveform 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 Waveform, choose Log Off "Waveform" from the File menu.

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

Exiting NetPower Waveform

To exit NetPower Waveform, do the following:

1. From the File menu, choose Exit.

   A confirm dialog box displays, verifying the request to exit.

2. Click OK.

NetPower Waveform exits and returns the license to the NetPower License Manager.

> **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.*

Database Synchronization

When you run NetPower Waveform 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

From the NetPower Waveform main window, you can do the following:

♦ Capture and upload waveforms.

♦ Broadcast a manual waveform capture.

♦ Open and display a waveform file.

♦ Close a waveform file.

♦ Remove an upload from the Upload Progress list.

♦ Export a CSV file.

♦ Connect to a disconnected NetPower DeviceServer.

On the right-hand side of the main window is the Mode output field that indicates the mode in which waveform is running. On-Line indicates waveform is running. Demo indicates that you accessed NetPower Waveform in Demo mode through the command line interface. For more information about accessing Demo mode, see *Chapter 6: Logging On and Off* in the *PowerNet Software User's Guide*.

At the bottom of the main window, NetPower Waveform lists the user ID of the individual logged on.

There are two tabs on the main window that list different information. For more information on the window tabs, see the section *Tabs*.
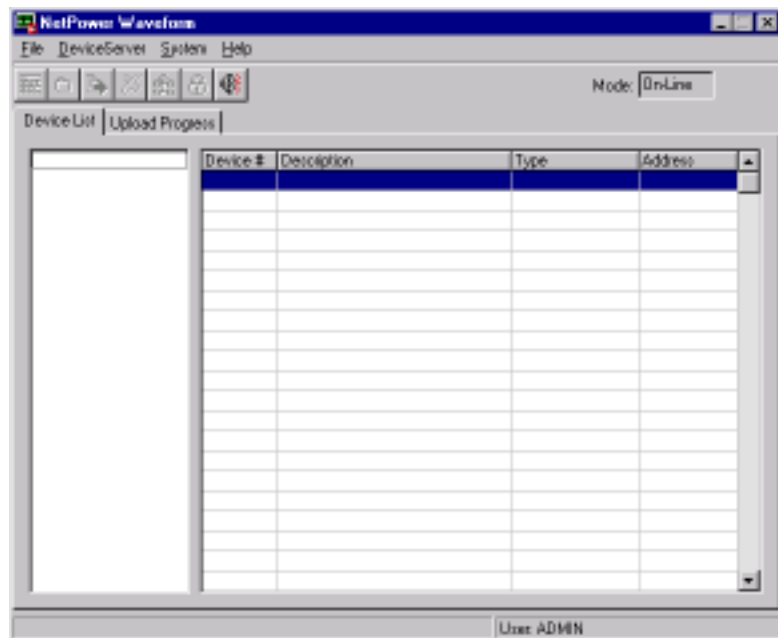
Menu Options and Toolbar Icons

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

Menu Option	Description	Icon
File		
Open Waveform from Database	Displays the Open Waveform from Database dialog box.	
Open Waveform File	Displays the Open Waveform File dialog box	N/A
Close	Closes a displayed waveform.	
Export CSV	Exports a CSV file.	
Remove from List	Removes a waveform data file from the Upload Progress list.	
Setup Database Synchronization	Sets up database synchronization.	N/A
Setup Auto Logoff	Sets up the automatic logoff time interval.	N/A
Log On NetPower Waveform	Logs you on to NetPower Waveform.	N/A
Log Off NetPower Waveform	Logs you off of NetPower Waveform.	N/A
Exit & Keep License	Exits NetPower Waveform without returning the license.	N/A
Exit	Exits NetPower Waveform and returns the license.	N/A
DeviceServer		
Connect	Connects to a disconnected NetPower DeviceServer.	
System		
Capture/Upload Waveform	Displays the NetPower Waveform Capture and Upload dialog box for the selected device.	

Menu Option	Description	Icon
Broadcast Manual Waveform Capture	Broadcasts a manual waveform capture command to all the IQ Analyzers on all connected NetPower DeviceServers.	
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 NetPower Waveform dialog box.	N/A

Tabs

Below the NetPower Waveform toolbar icons on the NetPower Waveform main window are the NetPower Waveform tabs. Each tab lists information.

♦ Device List

The Device List tab lists the NetPower DeviceServers and the devices on a selected NetPower DeviceServer. To view the Device List tab, click the Device List tab title.

♦ Upload Progress

The Upload Progress tab lists the progress of uploads from the devices.

Device List

The list box on the left-hand side of the Device List tab lists the NetPower DeviceServers that are available on the network.

The list box on the right-hand side lists the devices connected to the selected NetPower DeviceServer. The following table describes the information listed in the columns of the device list.

Column	Description
Device #	Lists the device number.
Description	Lists the description of the device, as entered in the NetPower Configurator.
Type	Lists the type of device.
Address	The address, in hexadecimal, of the device.

Upload Progress

The list box in the Upload Progress tab lists the waveform uploads you have initiated or completed. The following table describes the information listed in the columns of the Upload Progress list.

Column	Description
DeviceServer	Lists the name of the NetPower DeviceServer where the device is located.
Device #	Lists the number of the device on that NetPower DeviceServer.
Description	The description of the device as listed in the NetPower Configurator.
Event Index	Lists the event index number of the trigger event.
% Complete	Lists the percentage of the waveform data that has been uploaded to NetPower Waveform.
Status	The status of the upload.

DeviceServer	Device #	Description	Event Index	% Complete	Status
DeviceServer1	1	Building 99	761	100%	Finished

Upload Progress

Uploading Waveforms and NetPower Tools

Before you can upload waveforms from devices to the waveform database and view waveforms from the database, you must first configure a waveform merge with NetPower Tools. For information about configuring merges in NetPower Tools, see *Chapter 11: NetPower Tools* in the *PowerNet Software User's Guide*.

Configuring the IQ Analyzer

In order to capture and upload waveform data from the IQ Analyzer, you must first configure the device setpoints on the IQ Analyzer to support waveform data capture.

Note
For detailed information about editing device setpoints, see *Chapter 10: Configuring Device Setpoints* in the *PowerNet Software User's Guide*.

The IQ Analyzer can be configured to capture waveforms in response to specific conditions, and to capture waveforms in response to a manual request.

To configure triggers to cause the IQ Analyzer to automatically capture waveforms, and to configure the IQ Analyzer for manual capture, do the following:

1. From the NetPower Setpoints & Trip Curve main window, select the IQ Analyzer for which you want to set the triggers.
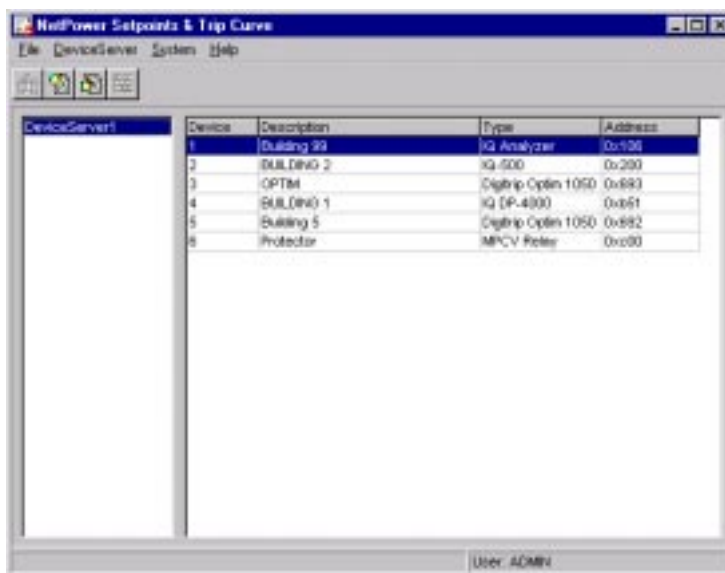
2. Click the Change Setpoints icon.

   The System Configuration dialog box displays.
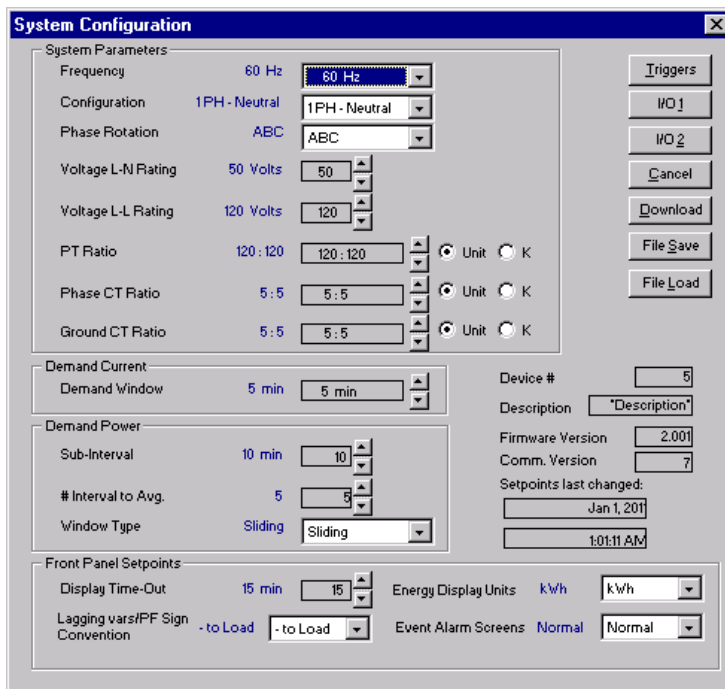
3. Click Triggers.

The IQ Analyzer - Trigger dialog box displays.

4. Specify one to seven triggers. Each trigger configuration can be one of 10 possible triggers.
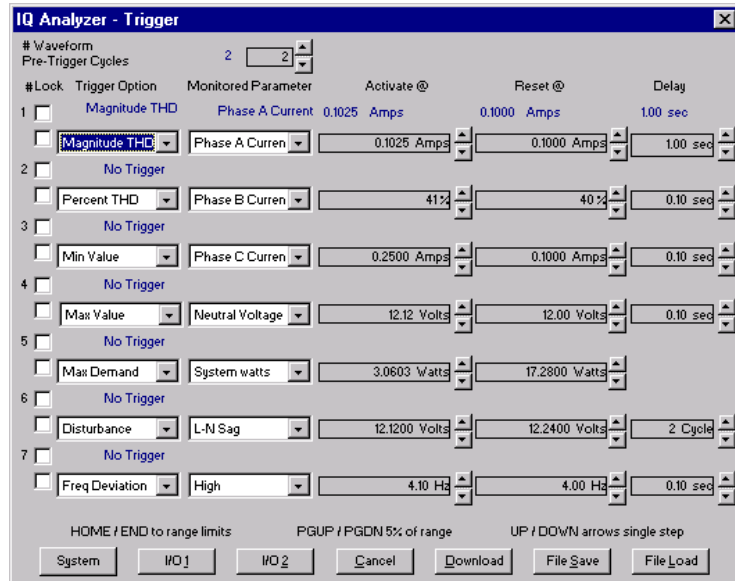
The following table describes each column, from left to right.

Column	Description
#	The trigger configuration number. You can configure up to seven triggers.
Lock	The Lock check box locks the specification of the waveform in the memory of the IQ Analyzer. Clicking the bottom check box prevents the IQ Analyzer from overwriting a previously captured waveform when a new waveform is captured via this trigger.

A check in the top check box indicates that the previously downloaded specification is locked. |
| Trigger Option | The type of trigger that the IQ Analyzer uses to determine when to capture waveform data. |
| Monitored Parameter | The type of device data that the IQ Analyzer monitors to determine when to capture waveform data. |

Column	Description
Activate @	The target data value of the monitored parameter. When the value of the monitored parameter reaches this value, the IQ Analyzer begins capturing waveform data, unless Delay is set.
Reset @	The data value of the monitored parameter at which point the IQ Analyzer recaptures a waveform.
Delay	The time the value of a monitored parameter must remain at or beyond the Activate @ threshold before the IQ Analyzer begins to capture the waveform. This prevents rapidly fluctuating values from continuously starting brief, uninformative captures.

If you want to manually capture waveform data, choose Manual from the Trigger Option drop-down list, and IMP/LOC from the Monitored Parameters drop-down list.

Note
You can specify both automatic and manual triggers at the same time. If you do not want to set a trigger, choose No Trigger from the Trigger Option drop-down list.

If you want to capture more than eight cycles worth of data for an event trigger or manual capture, configure two or more triggers identically.

For example, you can configure three triggers for manual capture. When you request a manual capture from the IQ Analyzer, it captures 24 cycles of data.

IQ Analyzer - Trigger

| # Waveform Pre-Trigger Cycles | 1 | 1 |

#Lock	Trigger Option	Monitored Parameter	Activate @	Reset @	Delay
1 ☐	Disturbance	L-N Sag	179.9000 Volts	257.2570 Volts	2 Cycle
☐	Disturbance ▾	L-N Sag ▾	179.9000 Volts	257.2570 Volts	2 Cycle
2 ☐	Manual	IMP/LOC			
☐	Manual ▾	IMP/LOC ▾			
3 ☐	Manual	IMP/LOC			
☐	Manual ▾	IMP/LOC ▾			
4 ☐	Manual	IMP/LOC			
☐	Manual ▾	IMP/LOC ▾			
5 ☐	No Trigger				
☐	No Trigger ▾				
6 ☐	No Trigger				
☐	No Trigger ▾				
7 ☐	No Trigger				
☐	No Trigger ▾				

HOME / END to range limits   PGUP / PGDN 5% of range   UP / DOWN arrows single step

| System | I/O 1 | I/O 2 | Cancel | Download | File Save | File Load |

7.   When you finish specifying the triggers, click Download.

The Confirm Your Selection dialog box displays.

Confirm Your Selection

Are You Sure You Want To

Change Setpoints
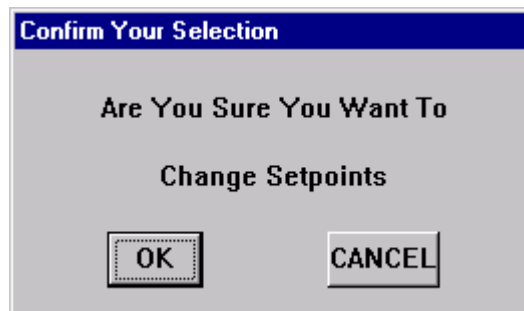
| OK | CANCEL |

8.   Click OK.

NetPower Setpoints & Trip Curve downloads the triggers to the device.

Note
The Confirm Your Selection dialog box times-out after 10 seconds, canceling any changes you made.

The IQ Analyzer is configured to recognize the device conditions you described in the IQ Analyzer-Triggers dialog box. When these conditions occur, the IQ Analyzer captures the waveform data and stores it in a buffer in the device. You must upload the data to NetPower Waveform before you can view or access it. For information about uploading waveform data, see *Chapter 3: Capturing and Uploading Waveforms*.