Chapter

19

Troubleshooting

Stop Load

This tool is useful if you are unable to locate devices because the configuration is corrupted.

Stop Load helps resolve this issue by loading a temporary factory-built file that sets the IP address to a temporary 10.15.x.x IP address and uses the default version of firmware for the DigiLinX device. This allows you to send a new configuration or re-upload the latest firmware.

Troubleshooting Phase 1

1. Open the DigiLinX Dealer Setup Program.
2. Select **Tools>Stop Load**.

   A popup window displays and begins the Stop Load process (see Figure 19-1).

Figure 19-1 Stop Load process window

1. Unplug and replug power to the device that DigiLinX is not recognizing.

Let the Stop Load commands fill the page. Wait two to five minutes for the device to completely reboot.

2. Select **Cancel** from the Stop Load process window.
3. Close the Stop Load process window.
4. To test whether the device was successfully re-initiated with Stop Load:
   - Highlight the device in the DigiLinX Dealer Setup Program.
   - Select the About Device () button.

     A Test and Load window displays. In the data returned, you should see a line that shows:

     ```
     programName=TestAndLoad
     ```
   - Close the Test and Load window.
5. Send the configuration.
6. If the issue is resolved, stop here. If not, continue to *Troubleshooting Phase 2*.

Troubleshooting Phase 2

1. Remove the device from the project.
2. Save the project.
3. Send the configuration.
4. Add the device back to the project.

   A new configuration is built for the device.
5. Send the configuration.

DigiLinX Dealer Setup Design Rules Check Function

The new DigiLinX Dealer Setup Design Rules Check is a diagnostic tool that checks your DigiLinX project file for problems before sending the configuration files to all DigiLinX devices in the system.

The Design Rules Check is available with DigiLinX Dealer Setup version 1.42 and later versions. More diagnostic tools will be added in future releases.

The following are some potential issues that Design Rules checks:

- Invalid Characters or Strings - includes characters (such as ~, #, $, \, %) or strings (such as “Amp”, “C”, “Q”). These characters are reserved for programming code.
- Duplicate Service Names - checks for one or more devices that have the same name.
- Camera Information - checks for duplicate or improper IP configuration.
- IP conflicts - checks for wrong IP addressing scheme or invalid subnet mask.

NOTE: Other checks are performed in addition to these, but this list includes the most common issues found in DigiLinX project files.

Running the Design Rules Check Function

To run the Design Rules Check function, complete the following steps:

1. Create a project file using the DigiLinX Dealer Setup Program.
2. With the project open, select **Tools>Design Rules Check**.

   A popup window displays showing any errors in your project file (see Figure 19-2).

NOTE: This example shows a duplicate service name error and an IP addressing problem.

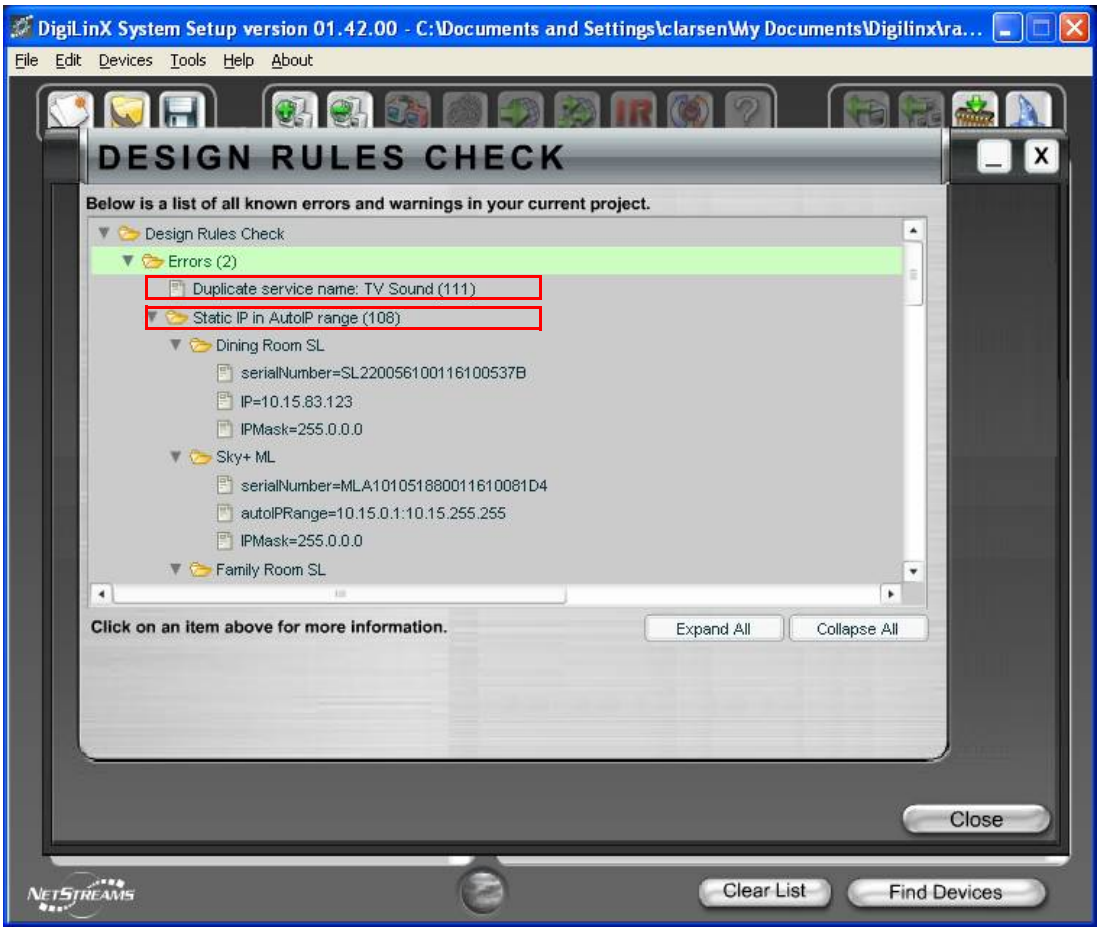

Figure 19-2 Design Rules Results Screen

3. Note and fix any issues.
4. Rerun the Design Rules Check function until you have cleared all errors.

Troubleshooting Files and Logs

When you want to report a problem to *NetStreams* Tech Support, please send the following files and logs:

- A description of the problem

- Project file
- Help diagnostics
- Debug log.

Creating a Shortcut

Create a Net Debug shortcut for your desktop.

1. Open Windows Explorer.
2. Go to C:\Program Files\DigiLinX Dealer Setup\tools.
3. Copy the Net Debug Log Viewer icon and paste it to your desktop. The shortcut is created.

Creating a Net Debug Log

To create the Debug log, complete the following steps:

1. Double-click on the Net Debug Log Viewer shortcut you just created. The Net Debug Log Viewer screen displays (see Figure 19-3).

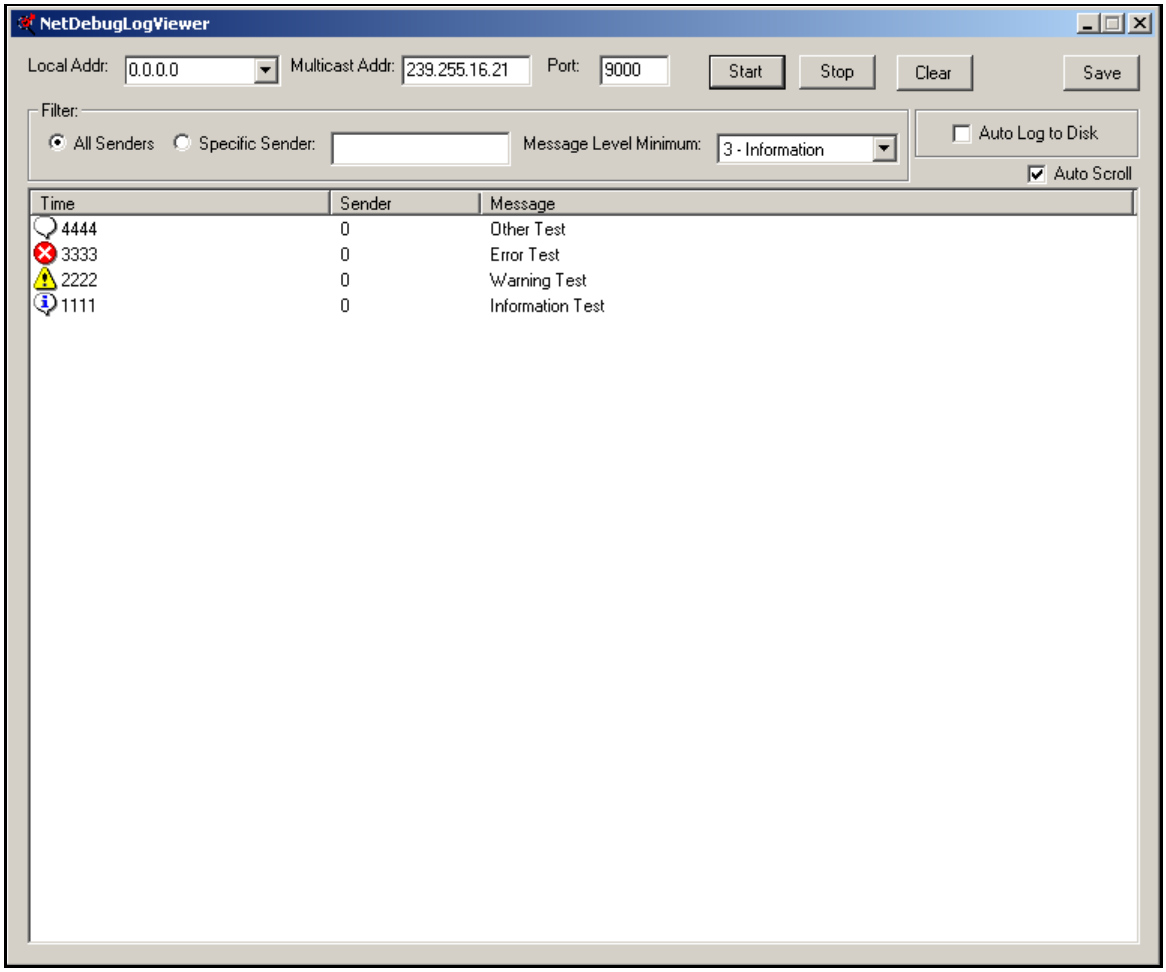

Figure 19-3 Debug Viewer screenS

2. Change fields in the top portion of the view as follows:
   - Local Address - the address of the PC NIC that is connected to the SwitchLinX
   - Message Level Minimum - set to *2 - Warning*
   - The rest of the fields should be blank.
3. Select **Start**.

   You get information every device is sending (see Figure 19-4).

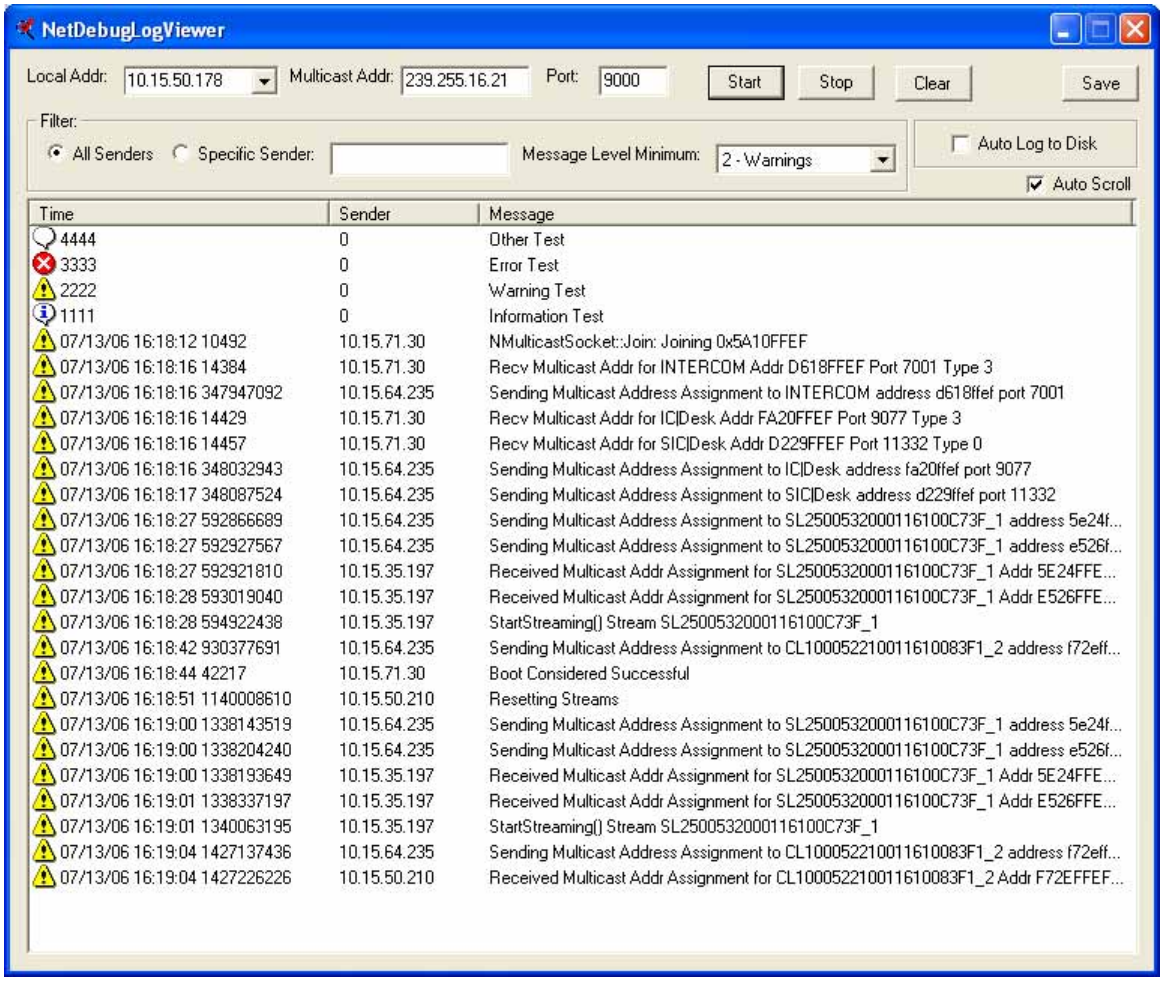

Figure 19-4 Device information

4. Let the log run for five minutes or until the problem is captured in the log.
5. Select **Stop**.
6. Select **Save**.
7. Save the file as a text file and attach it to the email with the rest of the information discussed at the beginning of this section.

Diagnostics

The Diagnostics tool allows you to:

- see information regarding your network connections. This includes:
  - network card name

- connection IP address
- address type (static or DHCP)
- subnet mask
- the number of DigiLinX devices found on the network.

- detect problems with your connection, and provides an explanation.

To view the diagnostics tool, select **Help>Diagnostics**. The Diagnostics tool displays (see Figure 19-5).

Figure 19-5 Diagnostics Tool

NOTE: The email support button automatically includes a copy of the project and the diagnostic. However, this button only works for systems with an email program already configured and working.

Troubleshooting

Table 19-1
Troubleshooting

Device or Function	Symptoms	Remedy
Media Server	Doesn't communicate with DigiLinX	Possible firmware mis-match. 1. **Verify that the media server is running the latest firmware that supports DigiLinX** 2. **Verify you are running the latest version of the DigiLinX Dealer Setup program and that all devices are running the latest firmware.**

Table 19-1
Troubleshooting

Device or Function	Symptoms	Remedy
		Possible bad cable connection. Ensure that the system is set up correctly. Refer to the *DigiLinX Installation and Design Guide* for detailed instructions on how to connect devices and terminate wires in the DigiLinX system. You can download this manual from the Dealer section of the *NetStreams* website.
		Firewall issues. You must temporarily disable any firewalls that may be running on your PC.
		Some setting changes may need to be enabled through a restart. 1. **Turn the media server off then back on.** 2. **Close Dealer Setup and reboot your PC.**
		Incorrect IP address assigned. 1. **Confirm that DHCP is disabled.** 2. **Confirm that you are using a static IP address.** NOTE: If you have more than one media server you need to assign unique IP addresses for each. NOTE: If you change the IP address range of the DigiLinX network, ensure that the IP address and the subnet mask of the media server matches the range and subnet you chose for the DigiLinX network. 3. **Ensure you have entered the correct Gateway and DNS server IP address into the media server.** 4. **Ensure that all streams have been assigned.** 5. **Send the configuration to the system.**

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Table 19-1

Troubleshooting

Device or Function	Symptoms	Remedy
Media Server/*KeyLin*X	❍ Can't get media server presets to work. ❍ Trouble programming the media server stream as a source in a *KeyLin*X.	Incorrectly programmed. Solution: To use the media server presets you first have to identify a few things. Keep in mind that the presets are stream-specific. This means that there are a number of presets for each individual stream. ❍ Know which device is hosting what stream. You can find this by clicking on the media server and going to streams. Take note of the proxy device of each particular stream. ❍ Know exact syntax of a Playlist, Artist, etc. ❍ To program the presets for a stream, select the particular device that is hosting the stream, and then click on the "Stream" tab. You will see the presets at the bottom of the page. ❍ Label the preset button accordingly. For example, you might have a playlist called "Rock" on your server, so label that button "Rock". ❍ Select where that playlist is located. In this case it's easy (it's under "Playlists"). ❍ Select playlist form the drop down box. ❍ Enter the exact name of that playlist into the third column. ❍ Send configuration files.
Streams	I'm installing a system, and DigiLinX is supposed to allow me six streams. I'm only seeing "X" number of streams. Why can't I get the rest of the allowable streams?	DigiLinX does allow up to six streams of data. However, if you only have two devices, you'll only have two available streams. The number of streams is dependent on the number of devices you have connected to the media server.
Auto Discover	No devices appear during auto discovery.	The network interface card has not been assigned in Dealer Setup. Solution: Go to Edit>Preferences and select the hard-wired NIC from the drop-down menu. Make sure to apply the changes. Exit Dealer Setup and then reopen Dealer Setup. Devices should now appear in the auto discovery field.
Sending Configuration	Unable to make socket connection when sending configuration to devices.	The network interface card has the wrong IP address or an IP overlap. Solution: Ensure that AutoIP is enabled in the Edit>Preferences area of Dealer Setup. You must exit and re-start Dealer Setup for these changes to take affect.

Table 19-1
Troubleshooting

Device or Function	Symptoms	Remedy
No web-based control	Cannot control DigiLinX from home computer.	The DigiLinX devices have a default IP range of 10.15.0.1 to 10.15.255.255 Solution: Click on the folder tab labeled “System-Audio Distribution” located in the left-hand window pane of Dealer Setup. Click on “Show advanced Options.” Then type in the correct “System IP Address Range” in the second area down from the top of the right-hand pane. NOTE: *You need to know what the IP structure of the home network is* (example: 192.168.1.2-192.168.1.99/255.255.255.0 (gateway address is not necessary for DigiLinX devices)) This gives you 98 possible addresses for DigiLinX devices. A typical home network router begins the DHCP assignment at 100 and the router address will be 192.168.1.1 (this is also your gateway for media servers). These changes will take affect after you send configuration to all devices. DO NOT USE STATIC IP AS THEY ARE NOT NECESSARY.
	Cannot see all sources from a web browser.	Sometimes Dealer Setup does not add all sources to all rooms. Solution: With any SpeakerLinX highlighted/selected click on the “Audio” tab. Select “Sources” from the Static Menu drop-down box. Follow procedures for adding sources to the TouchLinX GUI display.
TouchLinX	None of my sources are showing up on my TouchLinX.	Sometimes Dealer Setup will not automatically add all sources to all rooms. Solution: With any TouchLinX selected, click on the “User Interface” tab. Select “Sources” from the Static Menu drop-down box and click “edit”. Available sources display on the left and the sources display on the right. Click the “add all” button and then “copy menu to other rooms”, “select all”, then “ok”. You have now made all sources available to all rooms. NOTE: Apply, but do not update until all programming is done!
	Cannot use the MultiRoom feature.	It is not enabled by default in Dealer Setup. Solution: With any SpeakerLinX selected click on the “Audio” tab. Select “MultiRoom” from the Static Menu drop-down box. Follow procedures for adding sources to TouchLinX/SpeakerLinX GUI display. The “Rooms” selection in the drop-down box in static menus can be used to restrict access to certain areas from a TouchLinX/SpeakerLinX browser. “Sources” can also be restricted from access from a TouchLinX/SpeakerLinX browser using static menus.

Table 19-1

Troubleshooting

Device or Function	Symptoms	Remedy
System is slow.	❍ If the wiring is not installed according to the standards of networking there may be non-maintained twist ratios which will cause slow packet transmission. ❍ There could be bends, nicks, shorts, or stretches of the wire itself. ❍ There may be too many devices connected through the switch on the TouchLinX. The TouchLinX switch is non-managed non-IGMP. Too many connections will cause data collision and packet loss. Therefore the devices have to send and resend the info until they receive a valid packet. ❍ If a SpeakerLinX connected through a TouchLinX is hosting a stream and playing a stream at the same time, the data transmission through that device has quadrupled.	Purchase a Test-UmValidator NT950 or similar network certification device to ensure the wiring is sound and performing at maximum ability. The system will always perform better if all devices are home-run. If you must run devices through the TouchLinX, try excluding the device from proxy when you assign the streams for media servers.
Sound	Poor sound quality.	There may be several reasons why the system does not sound good. ❍ Determine which SpeakerLinX is being used (SL220/SL250). ❍ Determine the impedance of the speakers being used. ❍ What quality of speakers are being used? Solution: Ensure that the impedance of the SpeakerLinX is matched to that of the speakers. NOTE: Bose uses four ohm impedance, most manufacturers use eight ohm. Speaker impedance matching can be configured by: ❍ Selecting the SpeakerLinX in question. ❍ Click on the “audio” tab and select the proper impedance. NOTE: If there are more than one pair of speakers (two in parallel per channel), the impedance usually needs to be set at four ohms. ❍ Apply changes and send the configuration. NOTE: The GEQ in the SL250 can be adjusted improperly. For example, the 80Hz and 300Hz may be up too high for a small 6-inch 10oz cone speaker to handle. ❍ Suggest higher quality speakers.