

Optimizing the Performance of Triple Play Analyzer

To achieve optimum performance on the Triple Play Analyzer, follow the instructions in this document to make the best of the Triple Play Analyzer.

Hardware Requirement

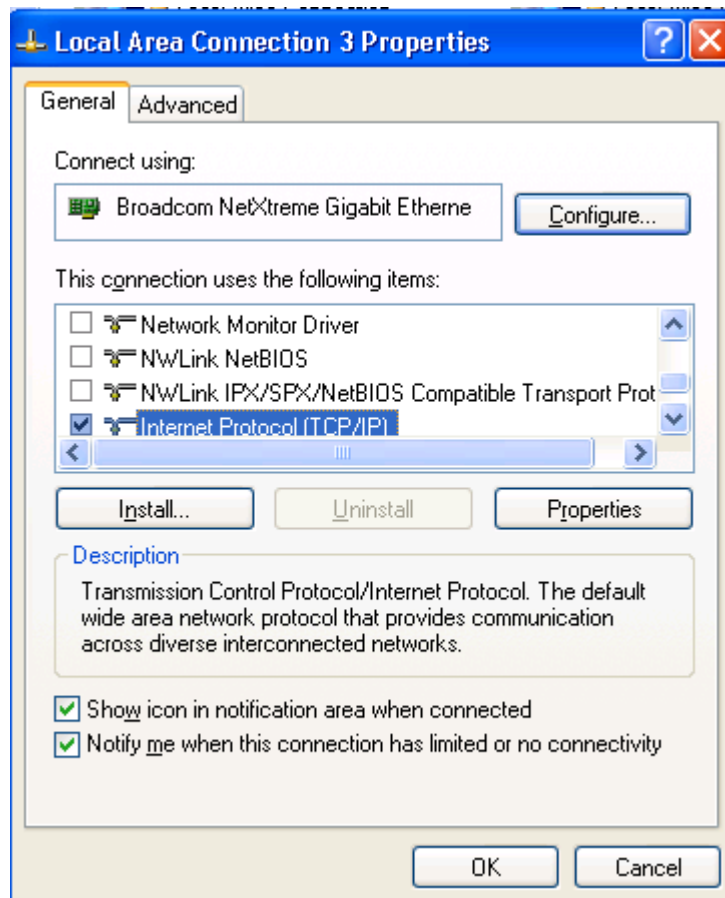
Recommended hardware requirements are as follows:

- Intel Core 2 Duo 2 GHz Processor
- 2 GB of RAM:
- PCI-E network adapter
- Windows® XP Professional (recommended), Windows® 2000 SP 4, Windows® Server 2003 or Windows® Vista

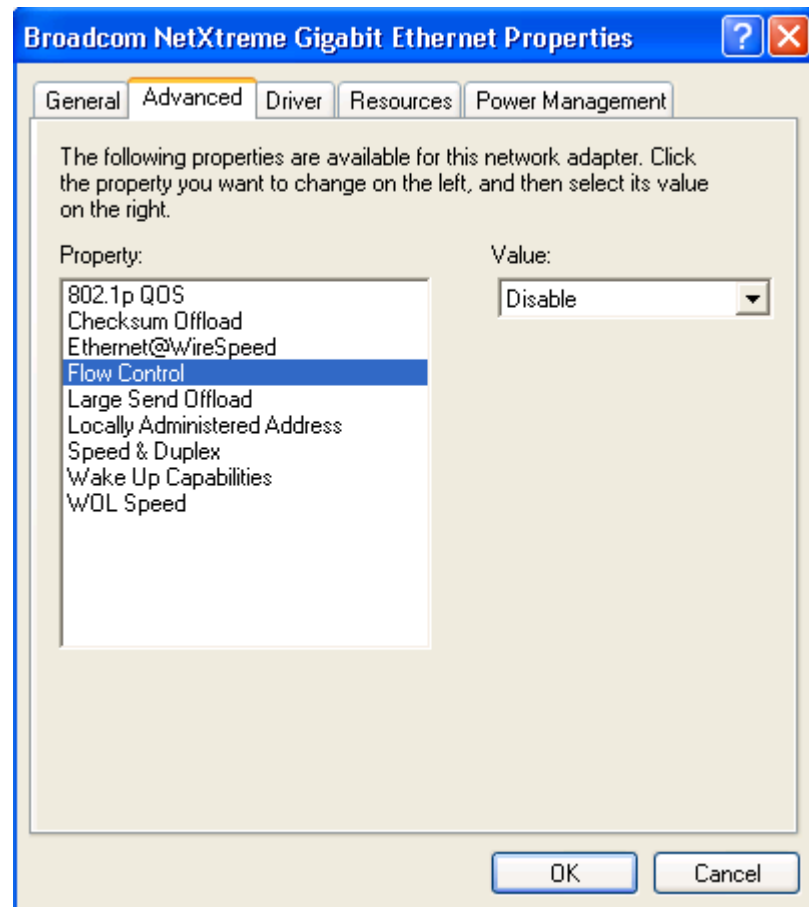
Configure the Operating System

Follow the steps below to configure your Windows operating system.

1. Close all the running programs or services that are not really necessary. If possible, exit the firewall and antivirus application as well.
2. Configure the network adapter for best performance:
 - a. Go to Control Panel. Right-click Local Network Connections and select the Properties option.
 - b. In the Local Area Connection Properties dialog box, select the General tab.
 - c. Remove the check mark of the following items:
 - Client for Microsoft Networks
 - File and Printer Sharing for Microsoft Networks
 - QoS Packet Scheduler
 - Network Monitor Driver



- d. Click the Configure button.
- e. In the dialog box that pops up, select the Advanced tab. Disable or turn off the following properties: Flow Control and Large Send Offload



Note:

- The properties you can disable vary with the type of network adapter you are using.
- In TPA 1.5, you can disable or turn off all the options except for the Internet Protocol (TCP/IP) option, if you want to enable the Active IGMP functionality. TPA 1.5 needs TCP/IP protocol to get the MAC address for IGMP message. But if you don't want the Active IGMP functionality, deselect it to enhance the performance of TPA remarkably. In TPA 1.7, you can simply disable all the options for the sake of better performance.

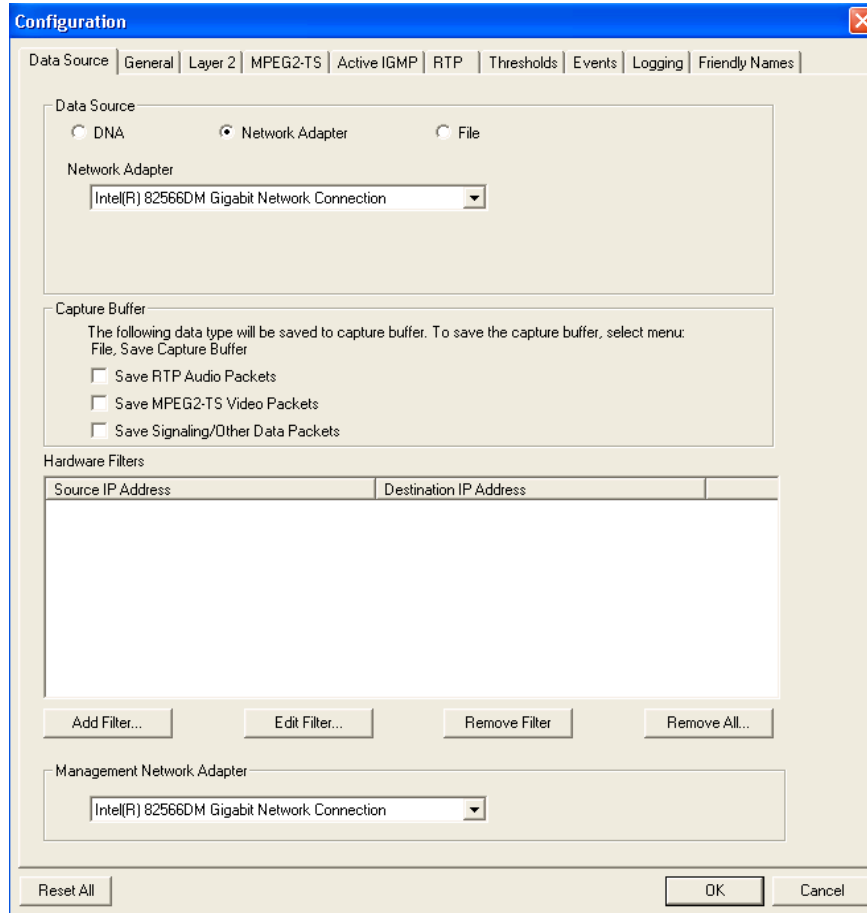
Configure the TPA

There are several ways you can configure the TPA for better performance:

1. Disable the Capture Buffer

Open the Configuration dialog box and go to the Data Source tab. Deselect all the three options in the Capture Buffer section.

When these options are not checked, the decode functionality and the Saved Buf File (File) Save Buffer File) will be disabled.

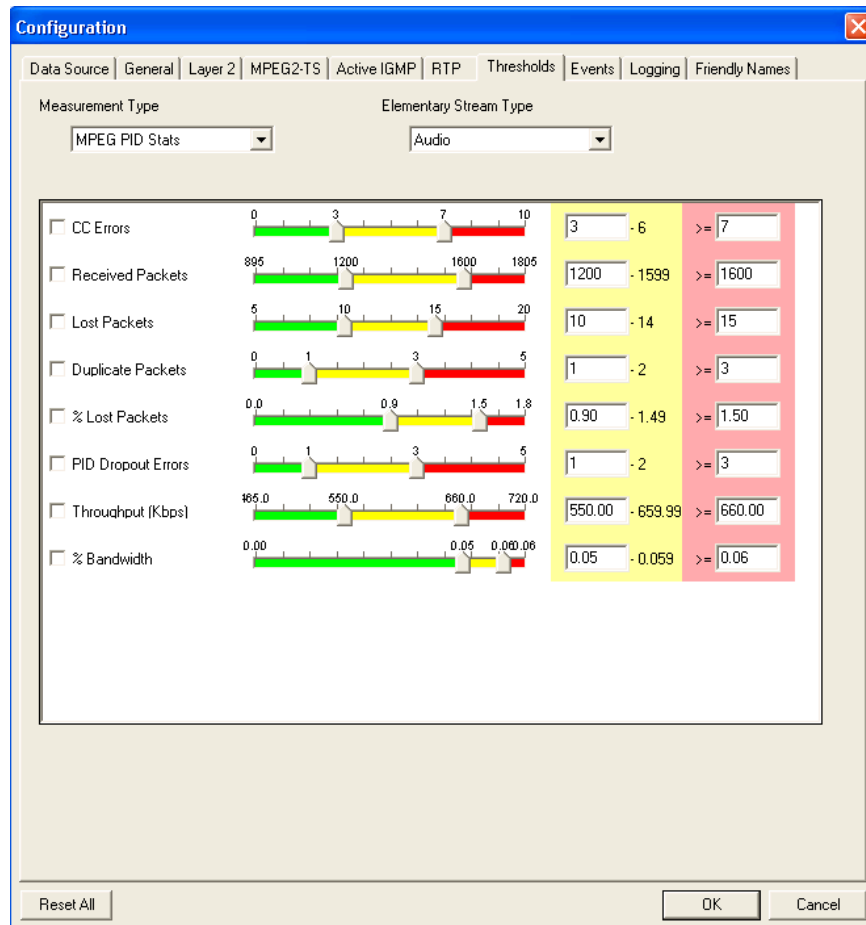


The screenshot shows the 'Configuration' dialog box with the 'Data Source' tab selected. The 'Data Source' section has three radio buttons: 'DNA' (unselected), 'Network Adapter' (selected), and 'File' (unselected). Below this is a 'Network Adapter' dropdown menu showing 'Intel(R) 82566DM Gigabit Network Connection'. The 'Capture Buffer' section contains a text box with the instruction: 'The following data type will be saved to capture buffer. To save the capture buffer, select menu: File, Save Capture Buffer'. Below this are three checkboxes: 'Save RTP Audio Packets' (unchecked), 'Save MPEG2-TS Video Packets' (unchecked), and 'Save Signaling/Other Data Packets' (unchecked). The 'Hardware Filters' section has a table with two columns: 'Source IP Address' and 'Destination IP Address'. Below the table are four buttons: 'Add Filter...', 'Edit Filter...', 'Remove Filter', and 'Remove All...'. The 'Management Network Adapter' section has a dropdown menu showing 'Intel(R) 82566DM Gigabit Network Connection'. At the bottom are 'Reset All', 'OK', and 'Cancel' buttons.

Source IP Address	Destination IP Address
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2. Disable the Thresholds

Open the Configuration dialog box and go to the Thresholds tab.
Deselect the threshold items that are not needed.

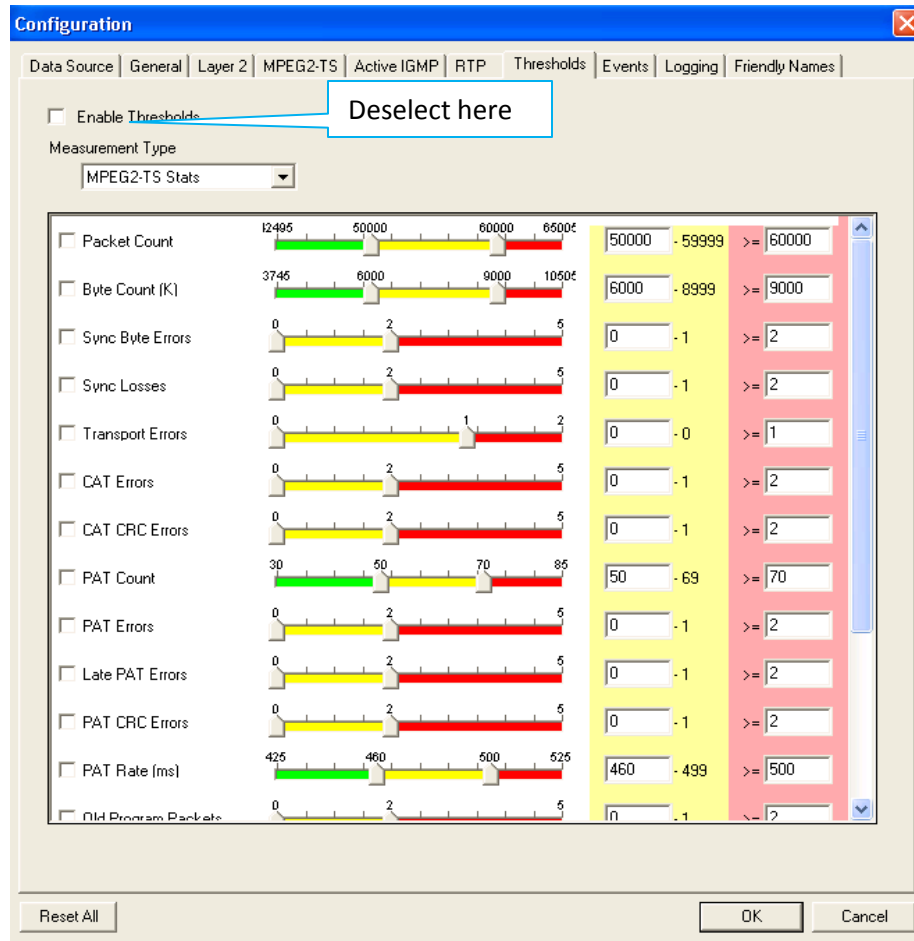


The Configuration dialog box is shown with the 'Thresholds' tab selected. The 'Measurement Type' is set to 'MPEG PID Stats' and the 'Elementary Stream Type' is set to 'Audio'. The following table shows the threshold settings for various metrics:

Metric	Current Value	Range	Threshold Value	Threshold Operator	Threshold Value
☐ CC Errors	3	0 - 10	6	>=	7
☐ Received Packets	1200	895 - 1805	1599	>=	1600
☐ Lost Packets	10	5 - 20	14	>=	15
☐ Duplicate Packets	1	0 - 5	2	>=	3
☐ % Lost Packets	0.90	0.0 - 1.8	1.49	>=	1.50
☐ PID Dropout Errors	1	0 - 5	2	>=	3
☐ Throughput (Kbps)	550.00	465.0 - 720.0	659.99	>=	660.00
☐ % Bandwidth	0.05	0.00 - 0.06	0.059	>=	0.06

Buttons: Reset All, OK, Cancel

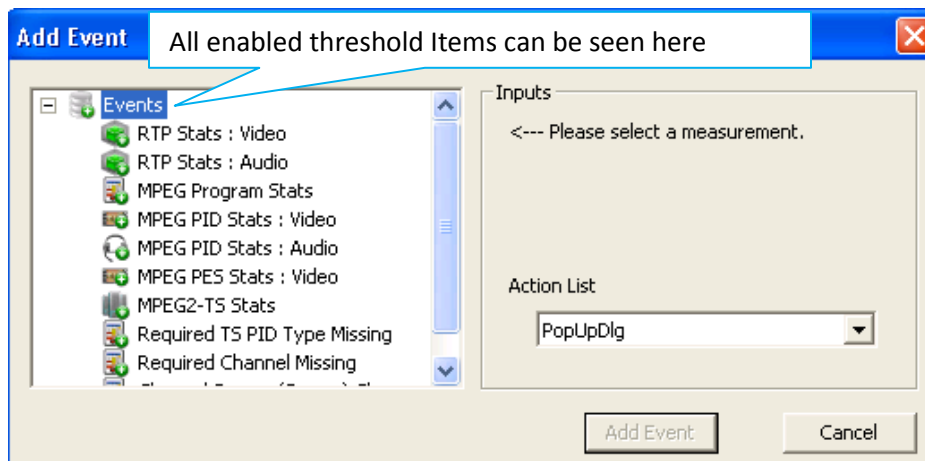
Note: In TPA 1.7, you can deselect all the Threshold items by deselecting the Enable Thresholds option.



3. Disable the Events

Open the Configuration dialog box and go to the Events tab.

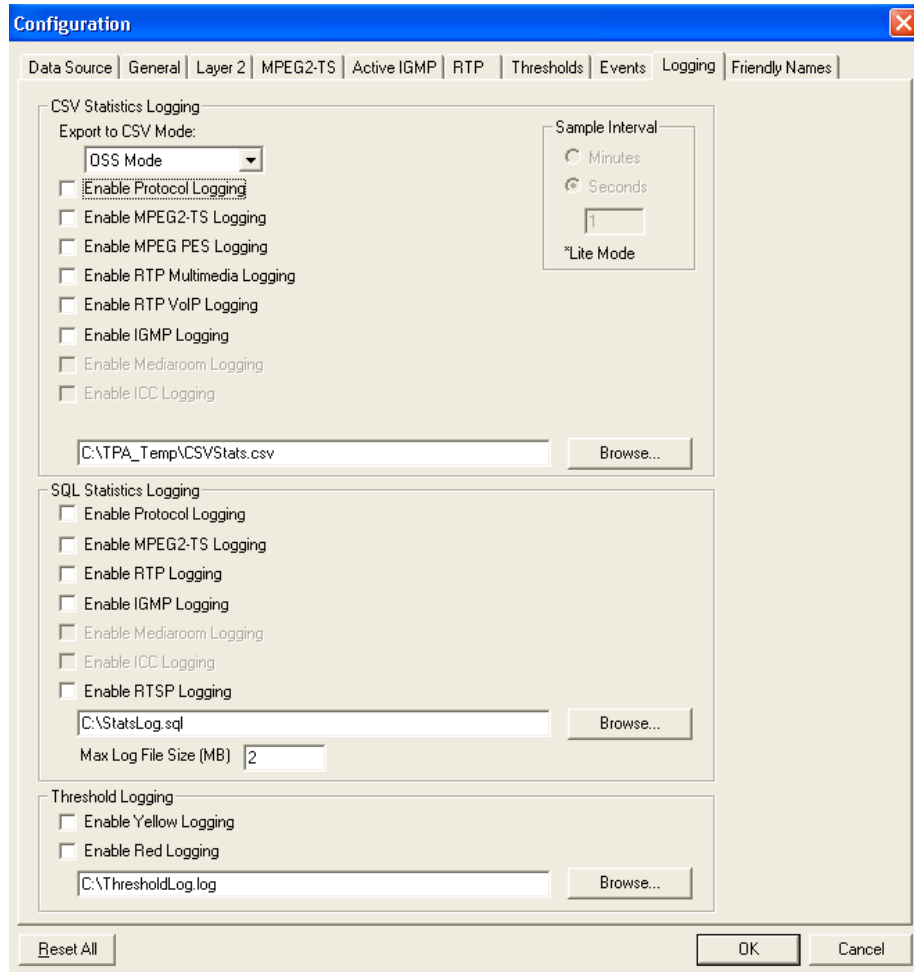
Check if there are still some Thresholds items you forget to deselect.



4. Disable the Logging options

Open the Configuration dialog box and go to the Loggings tab.

Deselect all the items in the CSV Statistics Logging, SQL Statistics Logging and Threshold Logging sections.



Configuration

Data Source | General | Layer 2 | MPEG2-TS | Active IGMP | RTP | Thresholds | Events | **Logging** | Friendly Names

CSV Statistics Logging

Export to CSV Mode:

☐ Enable Protocol Logging

☐ Enable MPEG2-TS Logging

☐ Enable MPEG PES Logging

☐ Enable RTP Multimedia Logging

☐ Enable RTP VoIP Logging

☐ Enable IGMP Logging

☐ Enable Mediaroom Logging

☐ Enable ICC Logging

Sample Interval

☐ Minutes

☒ Seconds

*Lite Mode

SQL Statistics Logging

☐ Enable Protocol Logging

☐ Enable MPEG2-TS Logging

☐ Enable RTP Logging

☐ Enable IGMP Logging

☐ Enable Mediaroom Logging

☐ Enable ICC Logging

☐ Enable RTSP Logging

Max Log File Size (MB)

Threshold Logging

☐ Enable Yellow Logging

☐ Enable Red Logging

Rule of Priority

Consider the following rules when you prioritize the tasks for the optimum performance of the TPA. The tasks are sorted by their priority, with the most important one on the top of the list.

1. Hardware and software requirements
2. Firewall and antivirus application software
3. Optimize the network adapter
 - 3.1 General settings, such as the TCP/IP protocol
 - 3.2 Advanced settings
 - 3.3 Other protocols
4. Thresholds functionality of TPA
5. Capture Buffer of TPA
6. Logging functionality of TPA