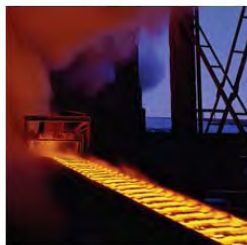


NetDecoderTM Communications Analyzer

Debug Communications Faster!



Frontline Software Features

- Common core software for all Frontline products
- Same user interface for all products, allowing users to easily move between analyzer products
- Dashboard and/or Network View for Ethernet protocol decoders
- Real-time capture and communications analysis
- Bit-level decoding along with control signal capture
- Rapid development of decoders for proprietary protocols



NetDecoder

NetDecoder is a protocol analyzer and network monitoring tool for industrial control and SCADA networks.

Uses

- Find network problems before they cause losses
- Fix network problems quickly
- Optimize bandwidth utilization & reduce latencies
- Monitor your network for alarms and intruders
- Debugging tool for network product developers

Benefits

- Reduce downtime and increase uptime
- Improve network performance
- Improve network security
- Perform faster and more efficient network installations
- Rapidly develop industrial control and SCADA network products
- Perform better in Conformance testing of network products



Supported Industrial Network Technologies

Serial Networks

- Modbus RTU
- Modbus ASCII
- DNP3 over Serial
- DF1/PCCC
- IEC 60870-5-101
- IEC 60870-5-103
- BSAP Bristol Babcock
- ABB COMLI
- Emerson ROC
- BACNet

Ethernet Networks

- Modbus/TCP
- EtherNet/IP (CIP and PCCC)
- Allen-Bradley's CSP/PCCC
- DNP3 over Ethernet
- IEC 60870-5-104
- PROFINET
- CC-Link over Ethernet
- BACNet over Ethernet

Industrial Bus Networks

- Allen-Bradley's Data Highway Plus (DH+)
- DeviceNet
- ControlNet
- Allen-Bradley DH-485
- CAN 2.0 A

NetDecoder software works with USB-based Interface devices

- ▶ **RS-232 ComProbe II**
- ▶ **RS-422/485 ComProbe**
- ▶ **Ethernet ComProbe**
- ▶ **Rockwell's USB interface devices**
 - ControlNet-to-USB Interface (1784-U2CN)
 - Data Highway Plus-to-USB Interface (1784-U2DHP)
 - DeviceNet-to-USB Interface (1784-U2DN)
- ▶ **“CC-Link Interface Device” – Planned release in Q4 2010**
 - USB interface to analysis PC
 - Form factor will be similar to our RS-422/485 ComProbe

RS-232 ComProbe II with USB Interface



- Optional interface for NetDecoder Analyzer
- Async speeds to 921.6K and supports 0.1 microsecond timing

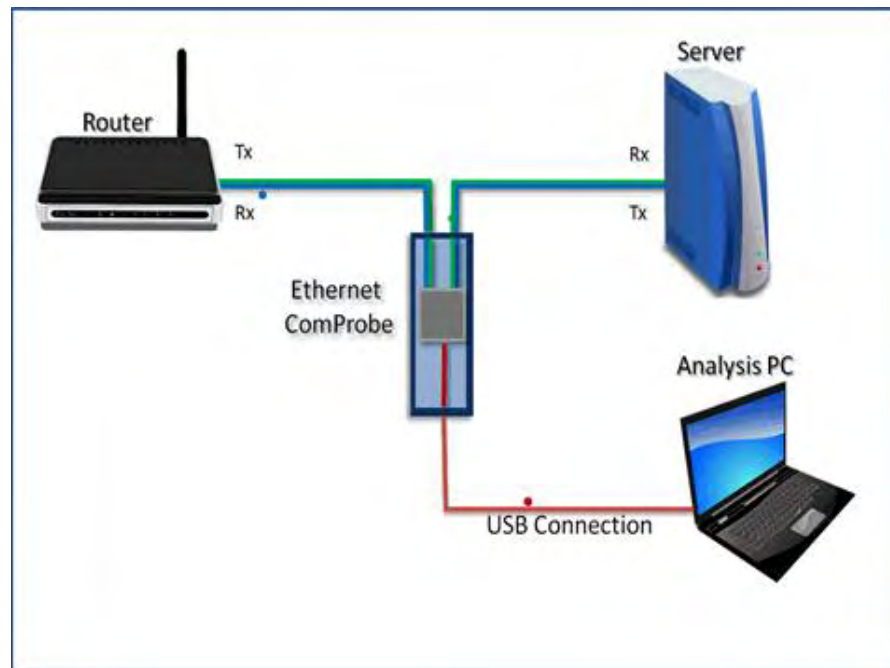
Package Includes:

- 6-foot USB Cable; RS-232 Y-Cable; 6-foot RS-232 Extension Cable
- Two 25-Pin to 9-Pin Adapters
- Frontline Cable bag to keep everything in

RS-422/485 ComProbe



Ethernet ComProbe



Key Ethernet ComProbe Features:

- Enables you to tap into Ethernet traffic downstream of an Unmanaged Switch
- Enables you to invisibly tap into the Ethernet network –
- No new IP address put on the Network
- Capturing through the USB connection enables you to capture more Ethernet communications issues than what is allowed to come through the NIC card in the PC
- Powered via the USB connection to your PC

More Ethernet ComProbe information at: <http://www.fte.com/products/NetworkTap.aspx>

Rockwell Automation's USB Interfaces



ControlNet-to-USB Interface (1784-U2CN)



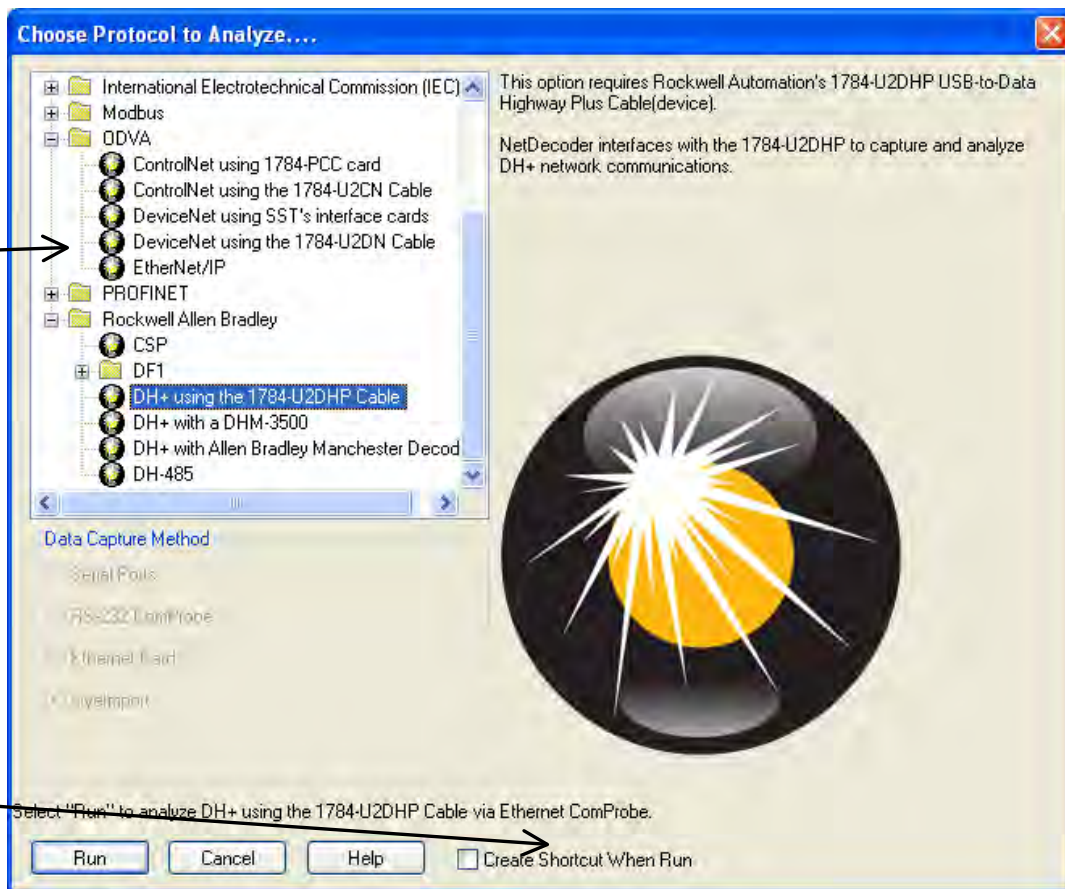
DeviceNet-to-USB Interface (1784-U2DN)



Data Highway Plus-to-USB Interface (1784-U2DHP)

NetDecoder Software

- SELECT the appropriate protocol decoder.
 - NetDecoder comes with a library of protocol decoders and monitoring tools.
- Run both a serial and Ethernet decoders at the same time.
 - Great for those times you need to monitor a serial to Ethernet protocol bridge.
- Create Shortcuts for frequently used protocols.
 - Time Saver

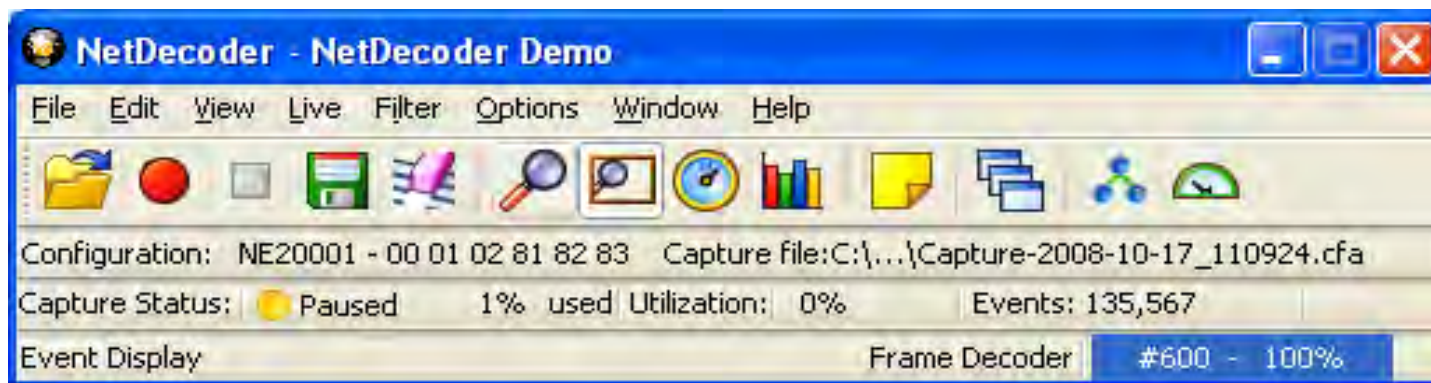


NetDecoder Software Security

- Activate over the Internet
- Activate by Email
- Activate by Phone
- Move License from one PC to another



NetDecoder Control Window



Start Data Capture



Save As



Statistics



Stop Data Capture



Frame Display



Network View



Erase Data Capture



Ethernet Dashboard

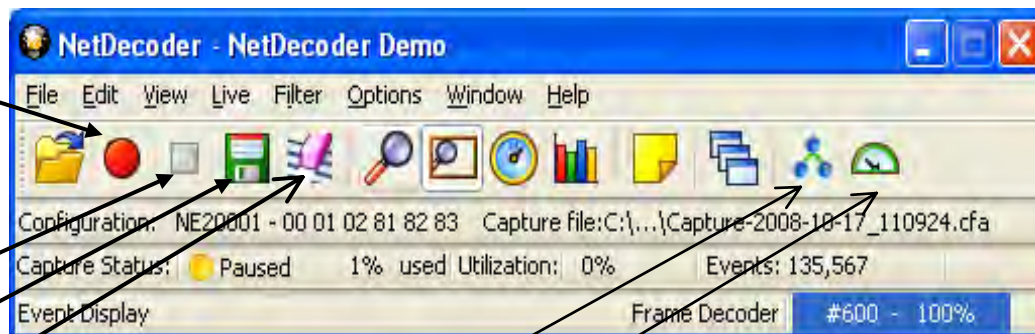


Event Display



Capturing Data

- To start capturing data, select the red circle, it will automatically start capturing data to a file.
- 'Pause' capture
- 'Save' capture
- 'Erase' capture

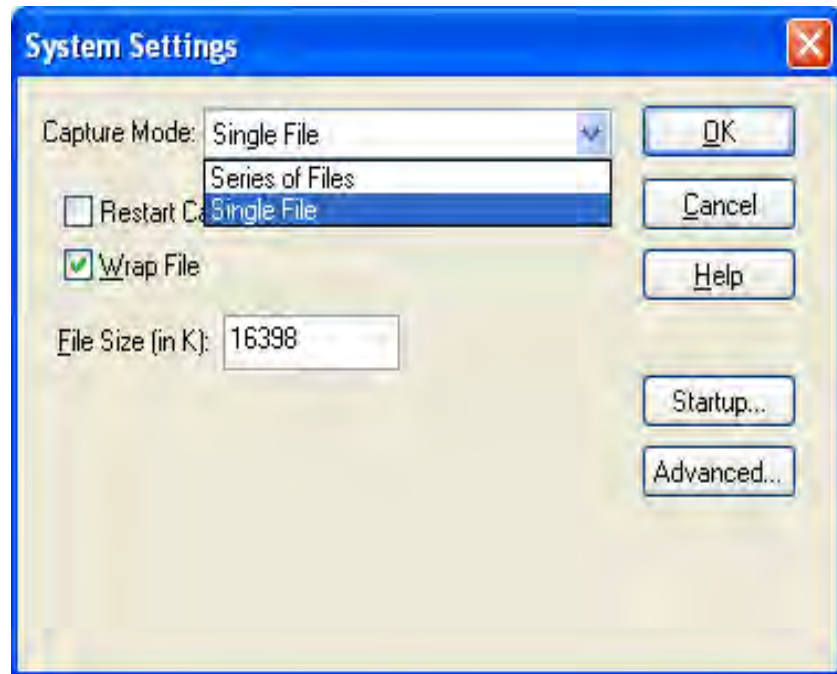


Graphical Network Analysis Features

- Ethernet Network View
- Ethernet Dashboard View
- Proposed CC-Link Dashboard View will have another icon here

Data Capture Options

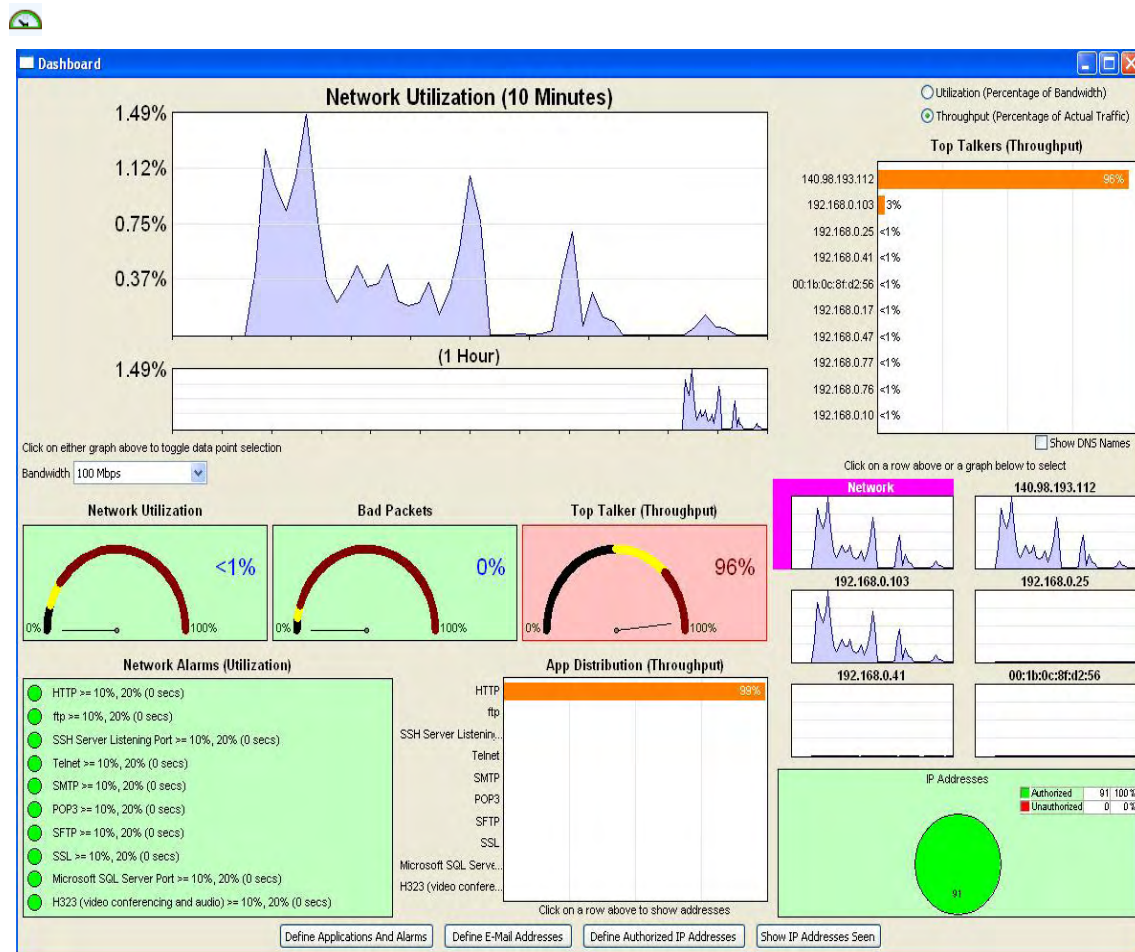
- **Capture to a single file** and choose to wrap or close file when full.
- For 24/7 data capture, **capture to a series of files** and optionally wrap files.
- **Capture file size** is mostly dependent on PC's hard drive size.



Ethernet Dashboard View

Dynamic Graphical overview of the Ethernet network with Alarms and Notifications

- 10 and 60 Minute **Histogram** of Network Utilization
- **Network Utilization Meter** with Color Background Alert
- **Bad Packets Meter** with Color Background Alert
- **Top Talker Meter** with Color Background Alert
- **Top 10 IP/MAC Address Contributing** to Network Traffic
- 10 and 60 Minute **Histogram** of **Top Six IP Addresses**
- **Distribution of TCP/or UDP** Application Related Protocols
- **Network Alarms** for Unauthorized IP Addresses and User Define Protocol Alarm Levels

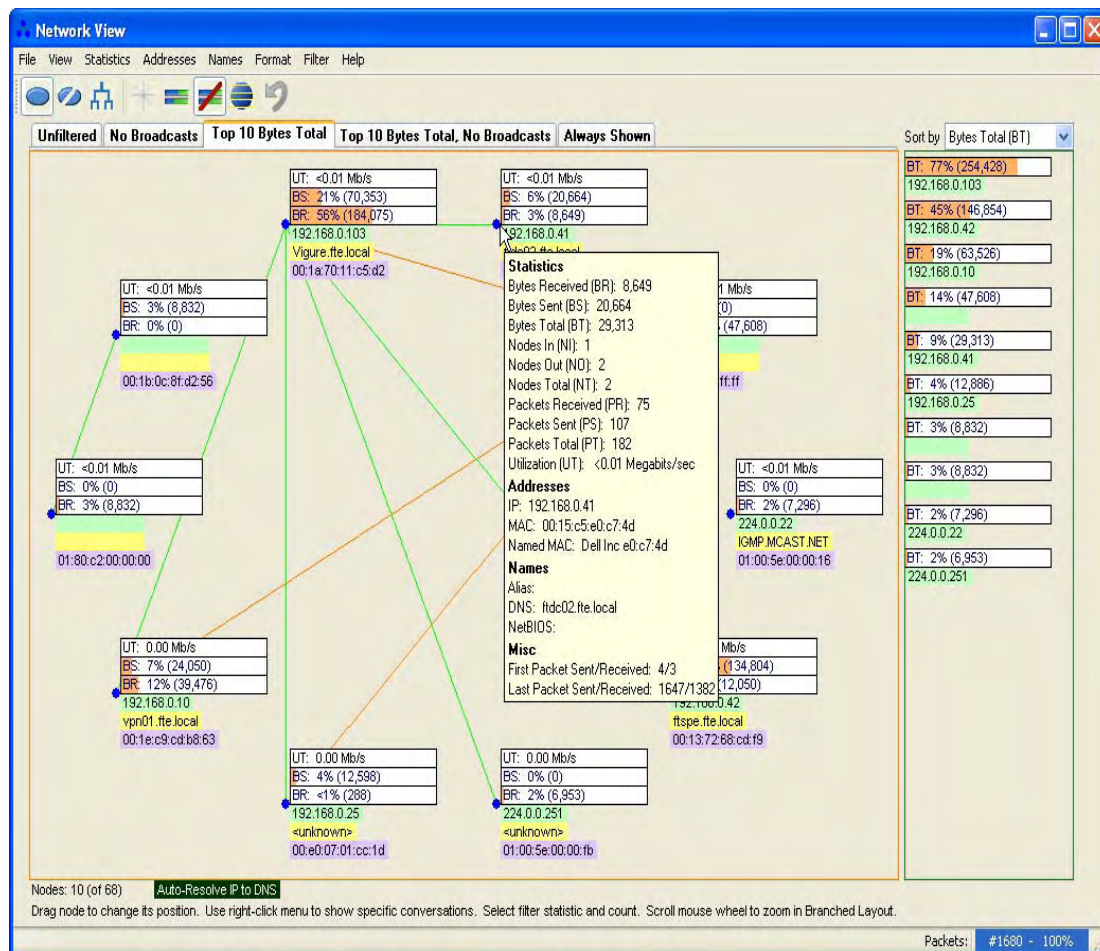


Ethernet Network View



Dynamic graphical view coupled with individual device statistics

- Packets Transmitted and Received
- Bytes Transmitted and Received
- DNS Names
- Nodes In and Out
- Utilization Information
- Broadcast Information
- IP Address and MAC Address
- Named MAC Address
- NetBios Name
- Assign User-Friendly Names for each Node



DH+ Network Statistics

Network Issues

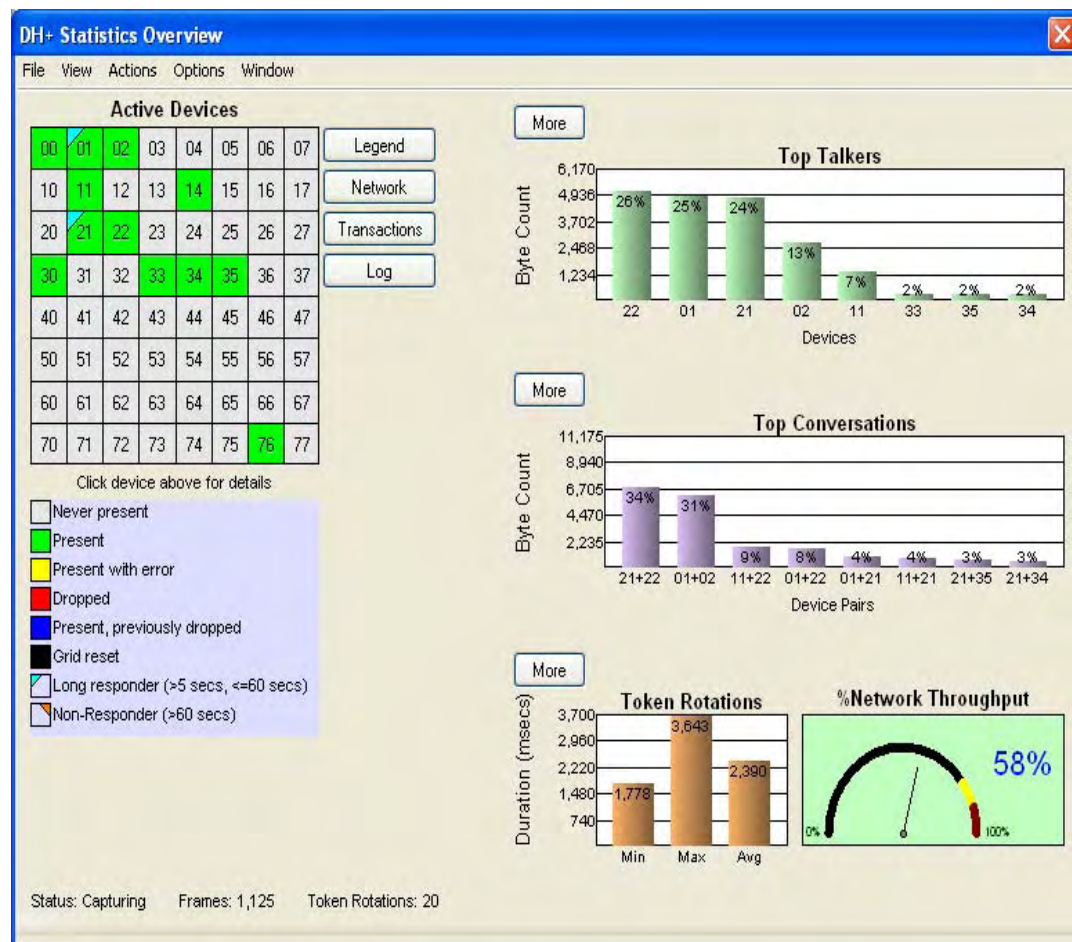
- **Green:** Device present and OK
- **Yellow:** Device present with an Error
- **Red:** Device absent
- **Blue:** Device present, previously dropped off bus
- **Red Triangle:** Device is a non-responder

Network Statistics

- Token Rotation Timing
- Network Event Log
- Token Rotation Timing and History
- Network Throughput

Device Statistics

- Top Talkers
- Top Conversations
- Top Listeners
- Nodes Transaction Summary



ControlNet Network Statistics

- Network Update Time
- Scheduled and Unscheduled Maximum Node
- Slot Time
- Blanking Time
- Guard Band Information
- Interval Modulus

Network Monitoring

| | | | | | | | | |
|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 |
| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 |
| 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 |
| 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 |
| 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 |
| 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 |
| 99 | | | | | | | | |

Network Information

Network Update Time (ms):

Scheduled Max. Node:

Unscheduled Max. Node:

Slot Time (μs):

Blanking Time:

Guard Band Start (μs):

Guard Band Center (μs):

Guard Band Prestart (μs):

Interval Modulus (NUTs):

Scheduled Information in the Interval Modulus

Average Bandwidth Used:

0.00

Maximum Bandwidth Used:

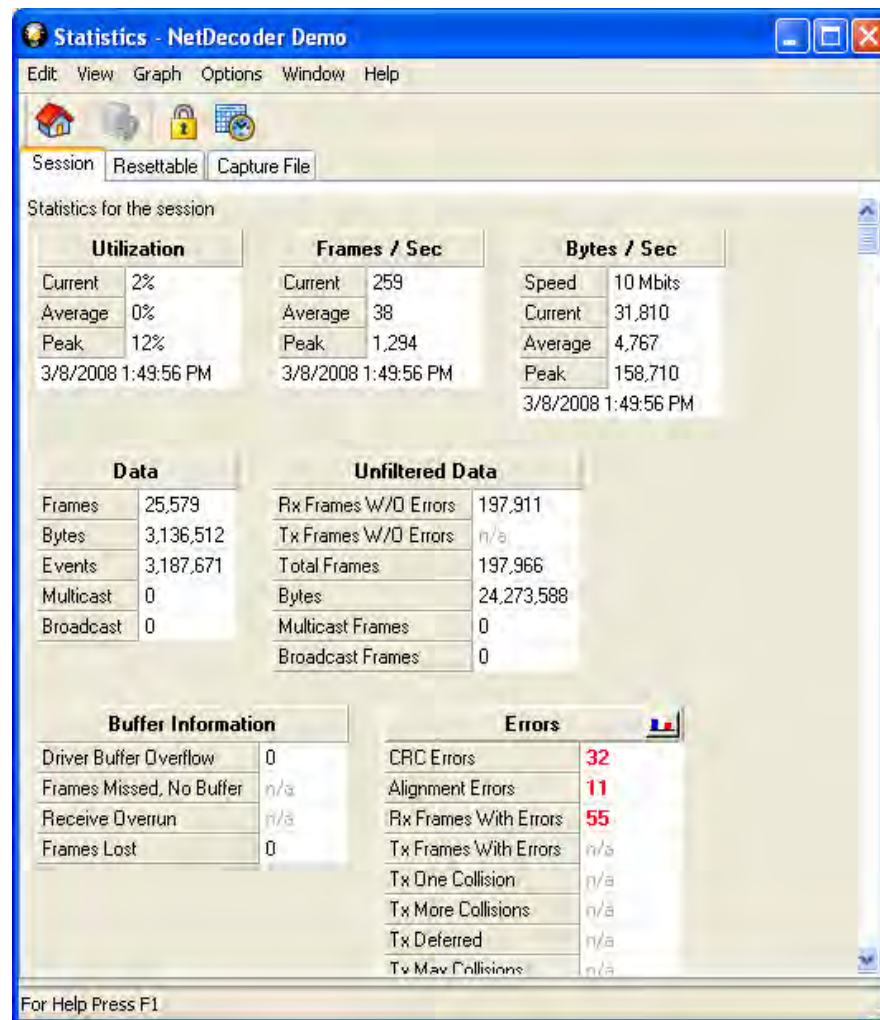
UnScheduled Information in the Interval Modulus

Average Available (Bytes Per Second):

Average Used (Bytes Per Second):

Network Statistics

- **Statistics Screen** useful for
 - base lining,
 - troubleshooting and
 - to determine network health and status.
- Look for metrics or indicators that are “***out of range***”.



Protocol Analysis with Frame Display



Frame Display - NetDecoder Demo

File Edit View Format Live Filter Options Window Help

Filter: Include frames where the protocol CIP exists

Frame 3,434: Len=170

Ethernet:
Destination Address: Rockwell Automation 1d:c: Source Address: Rockwell Automation 03:4f:1b: Ethernet: IPv4 FCS: 0x43524321

IPv4:
TCP:

CIP Encapsulation:
Command: Send Unit Data
Length: 75
Session Handle: 131584
Encapsulation Status: Success
Sender Context: 0x00000000
Option Flags: 0x00000000
Interface Handle: 0x00000000
Timeout: 0

CIP:
Source: 131.200.50.105
Destination: 131.200.50.100
Item Count: 2
Item: Connection-based
Item Length: 4
Connection Identifier: 0x02000100
Item: Connected Transport packet
Item Length: 56
Sequence: 3
Request/Reply: Request
Service Code: Execute_PCCC
Path Size (Words): 2
Path: 0x20 67 24 01
Segment: 8-bit Class
Segment Type: Logical
Logical Type: Class ID
Logical Format: 8-bit logical address:
Class: 0x67 Vendor Defined
Segment: 8-bit Instance
Segment Type: Logical
Logical Type: Instance ID
Logical Format: 8-bit logical address:
Instance: 1
Execute_PCCC:
Requester ID Length (Inclusive): 7
CIP Vendor ID: Rockwell Software, Inc
CIP Serial Number: 0x 3c 2e bf 25

AB PCCC:
Cmd/Reply Indicator: Command
Priority: Low
Command Code:
Remote Error:
Local Error:
Transaction:
Function Code:

Summary CIP Ethernet with Auto-traverse

| Unfiltered | AB PCCC | CIP | CIP Encapsulation | Data | Ethernet | IPv4 | TCP | | | | | |
|------------|---------|----------------|-------------------|-----------|------------|------|-----------|---------------------|-------------------|-------------|--------|-----------------|
| B... | Frame# | Source | Destination | Item | ConnID | Seq | Req/Reply | Class | Service | Info/Sta... | Fra... | Delta |
| | 3,420 | 131.200.50.105 | 131.200.50.100 | Unconn | | | Request | 0x01 Identity | Get_Attribute_All | | 116 | 00:00:00 036083 |
| | 3,422 | 131.200.50.100 | 131.200.50.105 | Unconn | | | Reply | | Get_Attribute_All | Success | 153 | 00:00:00 000016 |
| | 3,424 | 131.200.50.105 | 131.200.50.100 | Unconn | | | Request | 0x02 Msg Router | Forward_Open | | 156 | 00:00:00 010777 |
| | 3,425 | 131.200.50.100 | 131.200.50.105 | Unconn | | | Reply | | Forward_Open | Success | 140 | 00:00:00 000010 |
| | 3,426 | 131.200.50.105 | 131.200.50.100 | ConnTrans | 0x02000100 | 1 | Request | 0x67 Vendor Defined | Execute_PCCC | | 138 | 00:00:00 015608 |
| | 3,427 | 131.200.50.100 | 131.200.50.105 | ConnTrans | 0x00000100 | 1 | Reply | | Execute_PCCC | Success | 147 | 00:00:00 000010 |
| | 3,429 | 131.200.50.105 | 131.200.50.100 | Unconn | | | Request | 0x01 Identity | Get_Attribute_All | | 116 | 00:00:00 015586 |
| | 3,430 | 131.200.50.100 | 131.200.50.105 | Unconn | | | Reply | | Get_Attribute_All | Success | 153 | 00:00:00 000013 |
| | 3,431 | 131.200.50.105 | 131.200.50.100 | ConnTrans | 0x02000100 | 2 | Request | 0x67 Vendor Defined | Execute_PCCC | | | 007 |
| | 3,432 | 131.200.50.100 | 131.200.50.105 | ConnTrans | 0x00000100 | 2 | Reply | | Execute_PCCC | S... | | 469 |
| | 3,434 | 131.200.50.105 | 131.200.50.100 | ConnTrans | 0x02000100 | 3 | Request | 0x67 Vendor Defined | Execute_PCCC | | | 015 |
| | 3,435 | 131.200.50.100 | 131.200.50.105 | ConnTrans | 0x00000100 | 3 | Reply | | Execute_PCCC | S... | | 007 |
| | 3,437 | 131.200.50.105 | 131.200.50.100 | Unconn | | | Request | 0x67 Vendor Defined | Execute_PCCC | | | 725 |
| | 3,438 | 131.200.50.100 | 131.200.50.105 | Unconn | | | Reply | | Execute_PCCC | S... | | 548 |
| | 3,439 | 131.200.50.105 | 131.200.50.100 | ConnTrans | 0x02000100 | 4 | Request | 0x67 Vendor Defined | Execute_PCCC | | 138 | 00:00:00 000012 |
| | 3,440 | 131.200.50.100 | 131.200.50.105 | ConnTrans | 0x00000100 | 4 | Reply | | Execute_PCCC | Success | 135 | 00:00:00 000007 |
| | 3,442 | 131.200.50.105 | 131.200.50.100 | Unconn | | | Request | 0x02 Msg Router | Forward_Open | | 156 | 00:00:00 020487 |

Summary Pane

Binary Decode

Radix (Hex, Octal, Decimal) Decode

ASCII Decode

Decode to Text

Total Frames: 3,444 | Frames Filtered In: 2,121 | Frame #s Selected: 3,434; (1 total) [70 bytes]

For Help Press F1

Filtering... 100%

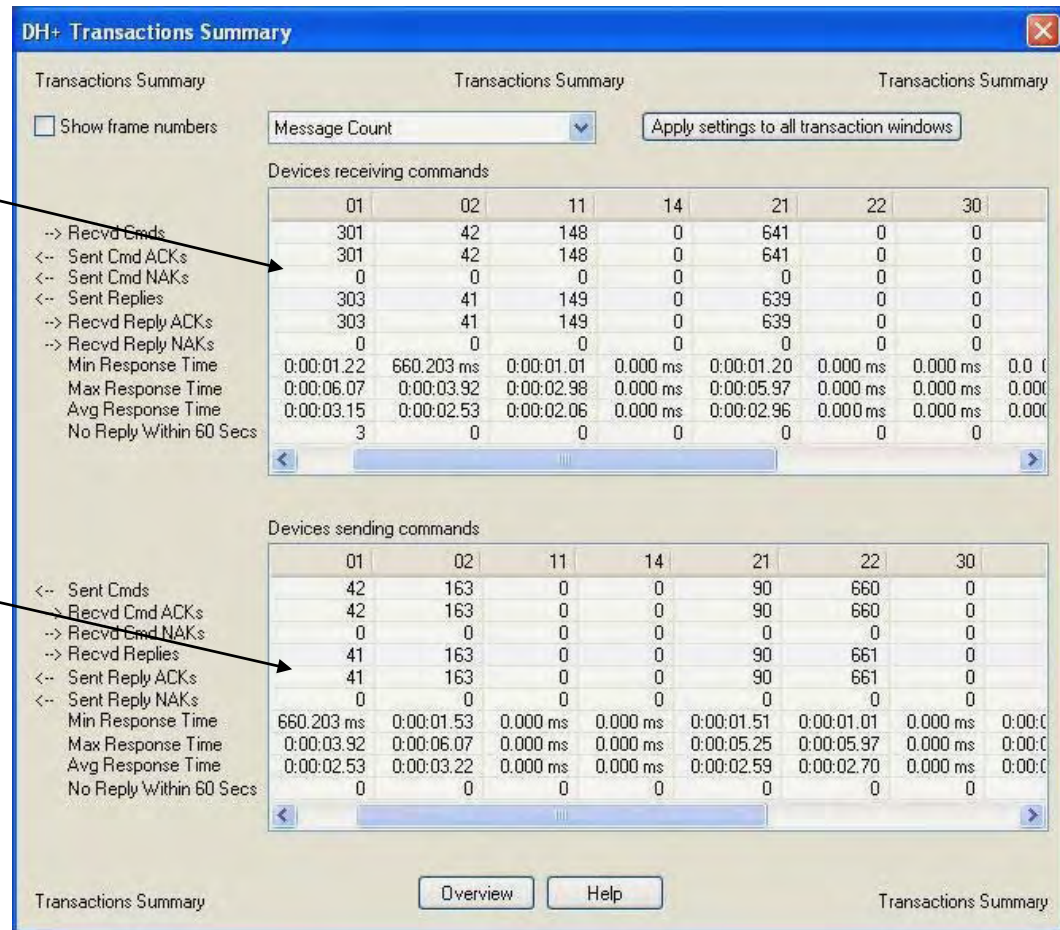
Example of NetDecoder DH+ Device Performance Analysis

Statistics on Device responsiveness

How responsive are the nodes on the bus to commands sent to them or do they sometimes not respond at all.

Statistics on Device Requests for Information

How responsive are other nodes on the bus to commands sent by these devices



Event Display Window - Detailed data display

Multiple events can be
Highlighted in the Event
Display Window

Display Includes:

- Event Number
- Frame
- Data Rate
- Delta Time
- CRC
- Errors
- Control Signal Status
- Hex, ASCII,
Decimal, Octal
Binary

Event Display - Modbus Rtu Sample.cfa

File Edit View Format Options Window Help

Event Number 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

| Event Number | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | ASCII |
|--------------|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|-------|
| 1 | | | | | | | | | | | | | | | | | |
| 17 | 00 01 9e b2 | | | | | | | | | | | | | | | | |
| 33 | 04 32 03 00 0e 8f 76 | | | | | | | | | | | | | | | | |
| 49 | | | | | | | | | | | | | | | | | |
| 65 | | | | | | | | | | | | | | | | | |
| 81 | 00 01 02 00 01 65 db | | | | | | | | | | | | | | | | |
| 97 | | | | | | | | | | | | | | | | | |
| 113 | a0 ee 41 7c | | | | | | | | | | | | | | | | |
| 129 | 01 04 02 bf b0 c8 b4 | | | | | | | | | | | | | | | | |
| 145 | b2 | | | | | | | | | | | | | | | | |
| 161 | 00 0e 8f 76 | | | | | | | | | | | | | | | | |
| 177 | 00 03 1b 00 00 03 16 00 00 00 00 00 00 00 00 00 00 | | | | | | | | | | | | | | | | |

Event 23 of 5,132 (Frame 3) 5/28/2001 12:46:34.277976 PM

| Source | ASCII | Hex | Dec | Oct | Binary | RTS | CTS | DSR | DTR | CD | RI | Errors |
|--------|-------|-----|-----|-----|----------|-----|-----|-----|-----|-----|-----|--------|
| DCE | SOH | 01 | 1 | 1 | 00000001 | Off | Off | Off | Off | Off | Off | |

For Help Press F1

Protocol Analysis

The **Event Display**, **Frame Display** and **Protocol Navigator** are all **synchronized**, providing a powerful protocol analysis solution.



Highlight a Frame in any window and it will show in all three.

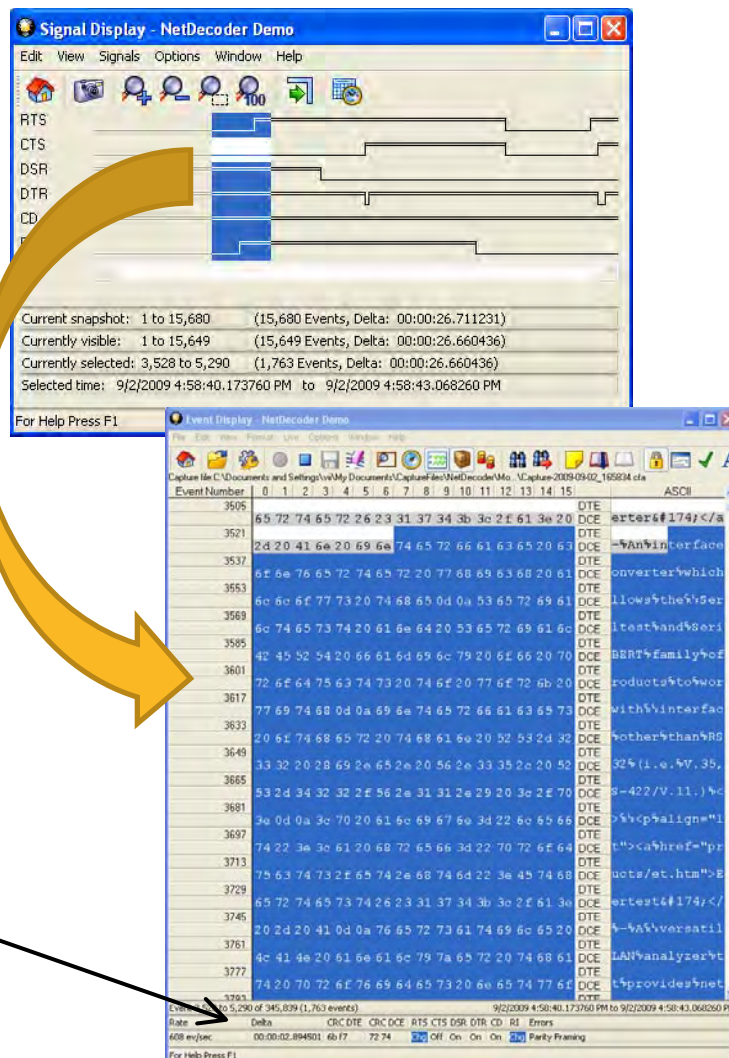
The image displays three synchronized windows from the NetDecoder Demo application:

- Protocol Navigator - NetDecoder Demo:** Shows a tree view of captured frames. Frame 9 (DTE) Len=23 is selected, showing details like Destination: 1, Source: 3, End Text Delimiter: 0x1003, and CRC: 0x0bd1.
- Frame Display - NetDecoder Demo:** Shows a table of frames with columns for Frame#, Source, Destination, Cmd/..., Cmd Code, STS, TNS, Function Code, Frame Size, Delta, and Timestamp. Frame 9 is highlighted in blue.
- Event Display - NetDecoder Demo:** Shows a hex dump of the selected frame's data, with columns for Event Number and Event Data. The data is displayed in hexadecimal and ASCII.

At the bottom, a status bar shows: "Event 23 to 57 of 9,220 (35 events)", "3/8/2008 2:37:19.752147 PM to 3/8/2008 2:37:19.802864 PM", "Rate Delta CRC DTE CRC DCE RTS CTS DSR DTR CD RI Errors 670 ev/sec 00:00:00.050717 8c 56 Off Off Off Off Off Off", and "For Help Press F1".

Data Analysis: Identify Events

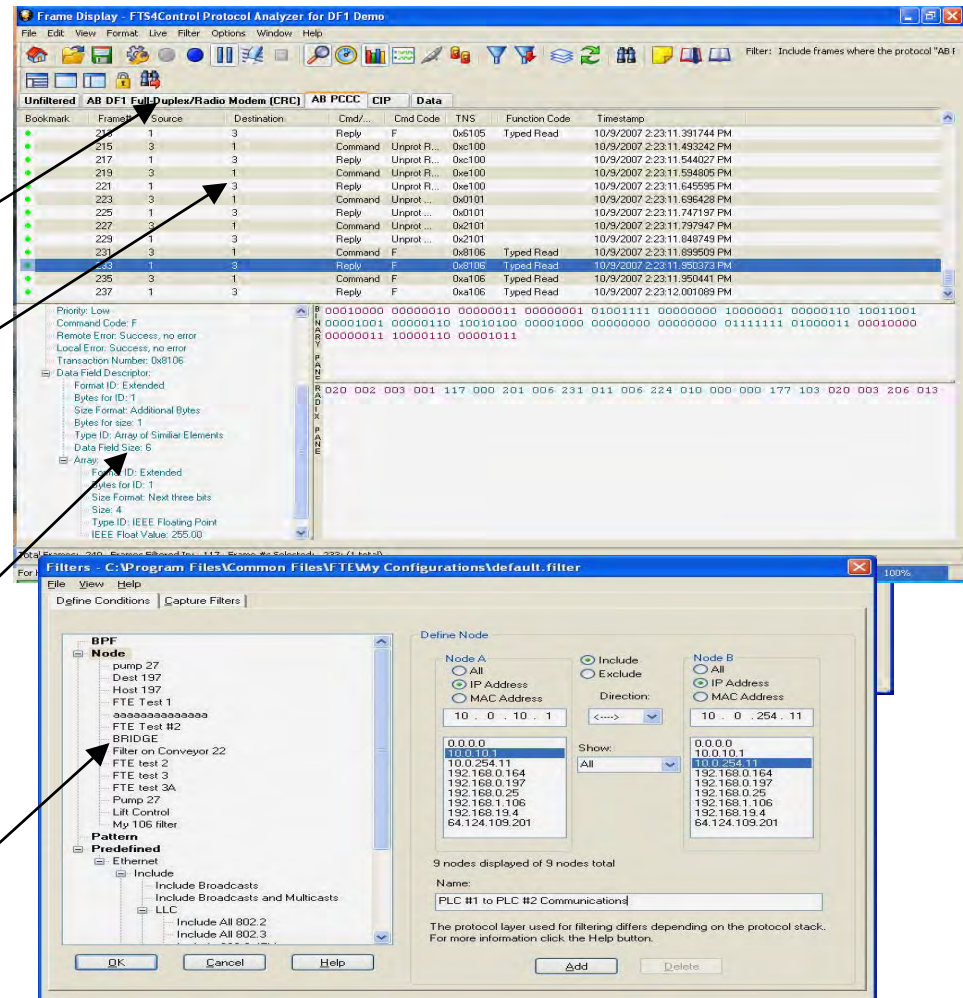
- The **Event Display**  flags transitions and combined with the **Signals Display**  you can identify timing problems.
- **Synchronized Displays**
- **Useful for fragmented messages**
 - Ethernet
 - DeviceNet
 - Serial
- **Delta times between events**



Display Filters & Capture Filters

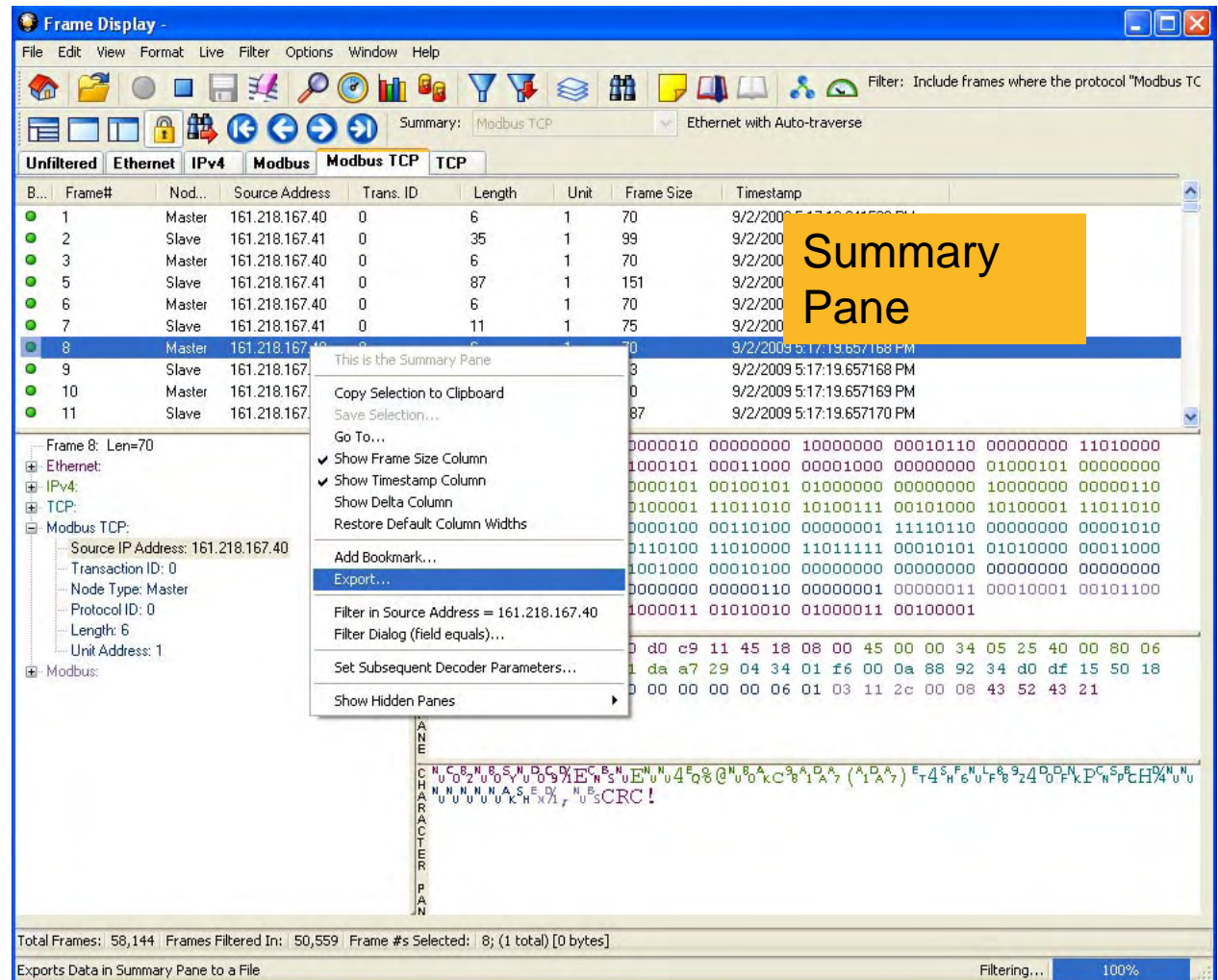
Filtering Enables You to View only the Relevant Information

- **Click on a Protocol Tab** to filter that particular protocol
- **Right Click Filter** on a value and select "Name = Value" from the list to filter on that Value.
- **Quick Filter** option to display only what you want to see. Includes preset filters and user defined filters.
- **Capture Filter** option to limit the amount of captured Ethernet data. Useful for long-term network monitoring or quick troubleshooting.



Frame Display Export Function

- Export part or all of a file for processing with third party software
- Export Summary Pane data to CSV file for further statistical analysis
- Select the frame in the Summary Pane, right click and choose "Export"



Frame Display Print Function

- **Print all or selected frames** in Summary Pane
- **Print Summary Pane** along with all or selected Decode Pane Levels

The screenshot shows the 'Frame Display' application window. The 'Summary' pane at the top lists 11 frames. Frame 3 is selected. The 'Decode' pane on the left shows the details for Frame 3, including Ethernet, IPv4, TCP, and Modbus TCP/Modbus information. The 'Frame Display Print' dialog box is open, allowing the user to select what to print (Summary, Data Bytes, or both) and the frame range (All or Selection). The dialog also has options for 'Include' and 'Detail Section' (No decode section, All layers, or Selected layers only). A 'Delete File' checkbox is present. The 'OK', 'Cancel', and 'Help' buttons are at the bottom. The background shows the main frame list and the decode pane with a hex dump and ASCII representation of the frame data.

| B... | Frame# | Nod... | Source Address | Trans. ID | Length | Unit | Frame Size | Timestamp |
|------|--------|--------|----------------|-----------|--------|------|------------|----------------------------|
| ● | 1 | Master | 161.218.167.40 | 0 | 6 | 1 | 70 | 9/2/2009 5:17:19.641530 PM |
| ● | 2 | Slave | 161.218.167.41 | 0 | 35 | 1 | 99 | 9/2/2009 5:17:19.641533 PM |
| ● | 3 | Master | 161.218.167.40 | 0 | 6 | 1 | 70 | 9/2/2009 5:17:19.641534 PM |
| ● | 5 | Slave | 161.218.167.41 | 0 | | | | |
| ● | 6 | Master | 161.218.167.40 | 0 | | | | |
| ● | 7 | Slave | 161.218.167.41 | 0 | | | | |
| ● | 8 | Master | 161.218.167.40 | 0 | | | | |
| ● | 9 | Slave | 161.218.167.41 | 0 | | | | |
| ● | 10 | Master | 161.218.167.40 | 0 | | | | |
| ● | 11 | Slave | 161.218.167.41 | 0 | | | | |

Frame 3: Len=70

- Ethernet:
 - Source IP Address: 161.218.167.40
 - Transaction ID: 0
 - Node Type: Master
 - Protocol ID: 0
 - Length: 6
 - Unit Address: 1
- Modbus TCP:
 - Source: 161.218.167.40
 - Destination: 161.218.167.41
 - Type: Normal
 - Function: Read Holding Registers
 - Starting Address: 2810
 - Quantity of Registers: 42

Frame Display Print dialog options:

- Include: ☒ Summary, ☐ Data Bytes
- Frame Range: ☐ All, ☒ Selection
- Detail Section: ☒ No decode section, ☐ All layers, ☐ Selected layers only
- ☒ Delete File

Buttons: OK, Cancel, Help

Note: Browser print options may affect whether any gray background is printed. See Help for info.

Total Frames: 171,733 | Frames Filtered In: 149,503 | Frame #s Selected: 3; (1 total) [0 bytes]

For Help Press F1

Filtering... 100%

DecoderScriptTM

- Easy to use scripting language to write your own decoders
- Write decoders for proprietary protocols or add extensions to existing protocol decoders
- You don't need to be a "C" programmer to write decoders!
- Write a decoder yourself or contract with Frontline's engineering team to write the decoders for you.

NetDecoder PC Requirements

- Windows XP SP 2 or higher, Vista, 32-bit Win-7 (Win 7 64-bit with Frontline Devices that have USB interfaces.)
- Pentium 1GHz processor or higher; RAM: 1 GB (minimum), 2 GB recommended; 50 MB free Hard Disk space.
- One USB Port.
- Ethernet sniffers require standard Ethernet Network Interface Card (NIC) or the Frontline Ethernet ComProbe
- Data Highway Plus sniffer requires:
 - Rockwell Automation's 1784-U2DHP
- DH-485 sniffer requires a 2 port RS-485 serial card.
- CAN2.0A sniffer requires SST's DeviceNet PCI or PCMCIA interfaces.
- DeviceNet sniffer requires one of the following
 - SST's DeviceNet PCI or PCMCIA interfaces
 - Rockwell Automation's 1784-U2DN.
- ControlNet sniffer requires Rockwell Automation's 1784-PCC card or 1784-U2CN device.



- Demo Downloads
- Free File Viewer
- Training Videos
- Documentation
- Product Information
- And much more ...



The screenshot shows the Frontline FTE website. The header includes the logo and tagline "UNEQUALED PROTOCOL ANALYSIS TRUSTED IN THE FIELD AND IN THE LAB WORLDWIDE". A navigation bar contains links for HOME, PRODUCTS, SERVICE & SUPPORT, ABOUT US, and WHERE TO BUY, along with a search bar. A testimonial from Ken Roach of Rockwell Automation is featured. The main content area highlights the NetDecoder product, including a "Purchase Now" button, a list of features, and a section for latest updates. A sidebar on the left provides links to developer tools, industrial network tools, and core product features.

frontlineTM FTE.COM
Debug Communications Faster!

Welcome: Guest! [Login]

UNEQUALED PROTOCOL ANALYSIS TRUSTED IN THE FIELD AND IN THE LAB WORLDWIDE

HOME PRODUCTS SERVICE & SUPPORT ABOUT US WHERE TO BUY

"NetDecoder allowed me to detect and work around a serial communication protocol mismatch that has been running for 23 years."

-Ken Roach, Rockwell Automation Northwest District

ACTIVATE PRODUCT ORDER GET QUOTE CONTACT US 

DEVELOPER TOOLS

INDUSTRIAL NETWORK TOOLS

NetDecoderTM

Downloads

- NetDecoder Software
- Add-on Protocol Decoders
- Free Capture File Viewer
- Demonstration Version

Core Product Features

- Byte Level Display
- Frame Level Display
- Network Statistics
- Network View
- Dashboard View
- Features Summary
- Specifications

Industrial Networks

- ControlNet Analyzer
- DeviceNet Analyzer
- DH+ Analyzer
- RS-232 Analyzer
- Sniffing RS-232 Networks
- RS-422/485 Analyzer

NetDecoderTM: Industrial Network Analyzer Protocol Analyzer for Serial, Fieldbus, SCADA and Ethernet Networks [Purchase Now](#)

Frontline's NetDecoderTM protocol analyzer, an award winning software, is designed to diagnose and troubleshoot communication problems in industrial networks. Frontline's NetDecoder analyzer has the ability to monitor and provide detailed timing, data and messaging information for serial, fieldbus, and Ethernet networks. The NetDecoder protocol analyzer is used in many industries including Oil & Gas, Food and beverage, Electric power transmission, Water or sewer management, and Factory automation.



Try-out an evaluation version (time-expiring license) of the NetDecoder analyzer and see how it can help you solve your network problems. Contact our [sales team](#) (US & Canada: 800-359-8570; International: +1 434-984-4500) or [submit an Evaluation Request Form](#).

Latest Updates (for NetDecoder 9.12.5.0):

1. The NetDecoder software now supports Rockwell Automation's Data Highway Plus to USB Cable (1784-U2DHP).



FEATURES

- Single software package for multiple technologies
- Supports many Serial, Ethernet and Industrial bus protocols
- High level Dashboard views provide a quick overview of your network's health
- Graphical Network views provide real-time visibility into your network
- Network Statistics provide break-down of network traffic
- Multiple decoded views of frames on the network
- Low level decoding of frames with ability to filter and search data

Contact Frontline

Frontline Test Equipment, Inc.
337 West Rio Road
Charlottesville, VA 22901

Voice: +1 (434) 984-4500 or 800-359-8570

Fax: +1 (434) 984-4505

Tech Support: tech_support@fte.com

Web Site: http://www.fte.com

Copyright © 2008. All rights reserved by Frontline Test Equipment, Inc. Frontline, Frontline Test System, FTS, Ethertest, FrameDecoder, Serialtest and Serialst ComProbe are registered trademarks, and FTS4Control is a trademark of Frontline Test Equipment, Inc.
All other trademarks are property of their respective owners.