

Datasheet: Network Time Machine Portable Series - Plug and Play Network Forensic Analysis for Real Time Visibility

Highlights

- All in one, plug and play architecture for quick root cause analysis reduces downtime
- Portable and robust design for quick deployment
- Industry leading 10Gbps stream to disk capture throughput suitable for field and laboratory use
- Two platforms to fit your budget: economical Portable1B or powerful Portable2B with 10Gbps performance
- Real time and back in time data and video/voice analysis
- Directly analyze IP based applications even in mix of tunnel encapsulation traffic for quick field troubleshooting
- ClearSight Analyzer™ is embedded for deep packet analysis without traffic leaving the unit
- Analysis data can be exported to CSV or PDF file for troubleshooting report generation



The toughest network and application problems always happen when you least expect them. Sometimes, in order to isolate the root cause, you need monitoring where you don't have it. To complicate matters further, symptoms often happen intermittently. Network Time Machine (NTM) Portable Series, with its high performance stream to disk engine and easy to use on board analysis, can help you solve even the toughest problems quickly and easily.



Robust plug and play portable design

With the NTM Portable, there's no need to haul around heavy, bulky rack mount appliances for forensic analysis. Network professionals can carry the NTM Portable to remote sites or network blind spots. Additionally, technicians and system integrators can easily conduct onsite analysis of application and network issues with the ability to collect traffic, go back in time and analyze on the spot with the embedded application analysis engine. NTM's high performance stream to disk architecture with multiple network interfaces handles multi-segment or multi-tier high speed network traffic (up to 10 Gbps), ensuring you have visibility into network problems when and where they happen – even the illusive intermittent events.

Plug and play operation

Plug the NTM Portable into the network and it immediately starts monitoring or capturing traffic to disk. Multiple monitoring interfaces – either four ports for 10/100/1000 Mbps Ethernet or two ports for 10 Gbps Ethernet – are available in the portable unit. Various network monitoring taps are available to connect the NTM Portable to the network in line to duplex links, aggregate main and redundant links or switch quickly between links. The unit is compact, lightweight and entirely self contained with uncompromising real time monitoring, data extraction, analysis and reporting engine. With NTM Portable, network professionals have all the analysis capabilities required to solve illusive problems onsite quickly.

Powerful data mining

NTM Portable's powerful stream to disk architecture indexes packets as they are captured, enabling quick data extraction by specifying a time period of interest down to one second. The Atlas function offers advanced analysis of large numbers of packets to quickly identify relevant IP flow(s), which is then sent to the embedded ClearSight Analyzer for root cause analysis. Atlas also offers real time application layer analysis in addition to connection and network layer flow visibility. The NTM Portable is especially useful in the testing of video and voice traffic. RTP streams carrying voice and video content are categorized based on codec type, quality of service with callee and caller ID information. SIP and H.323 signaling applications are classified by type of call, quality of call and codec.

Intuitive Application Performance Bottleneck Analysis reduces time to setup and fault domain isolation

NTM automatically discovers applications and reports performance trending metrics by server, network and client site. The unique Performance Bottleneck Analysis (PBA) displays server, network and client site time for each TCP flow. PBA metrics show where application time is spent; immediately identifying the root cause of application performance complaints. In addition, the NTM also shows how related performance metrics change over time, allowing identification of the fault domain to a specific server, or network. The packet extraction process is integrated with the UI so that the set of flows exhibiting the problem can be quickly analyzed. Once the relevant packets are extracted, the NTM guides users from application to flow to transaction views using an intuitive drill down process. Bounce charts give a clear indication of how transactions transverse over time and indicate problem packets without going into decode view. The result is increased operational efficiencies through a reduced learning curve, shorter time to domain isolation and quicker root cause resolution.

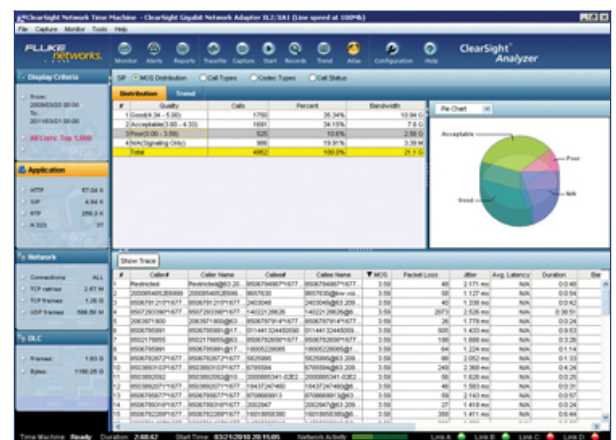
Voice and video analysis

Network Time Machine provides real time metrics on voice and video performance without additional agents or polling to the Call Manager. Despite a lack of visibility into the setup traffic, NTM can reassemble the caller/callee information from the RTP stream in real time to generate quality assessment for the video/voice stream. Its high performance capture and analysis architecture make it the ideal quick to deploy analysis solution for VoIP.

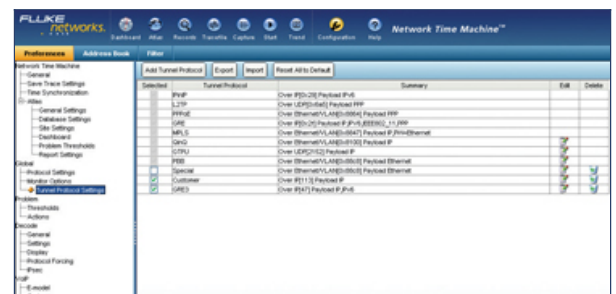
Easily extract packets for a call with just a click of a button. Call setup and RTP/RTCP streams are extracted together, correlated and shown on a bounce chart for easy visualization and playback.

Automatic Tunneled Traffic Analysis in multi tenant networks

Tunneling protocols encapsulate traffic, much like VLANs in LANs, to segment and prioritize traffic. NTM automatically analyzes and decodes tunneled traffic, allowing enterprise network engineers to conduct application performance analysis and troubleshoot applications in each tunnel quickly. A large variety of tunneling protocols are supported, including IPinIP, L2TP, PPPoE, GRE, MPLS, QinQ, PBB/PBT, and GTPU. Customized tunnel protocol support can be defined and added. In addition, filtering conditions can easily be configured based on tunneling protocol and bitpattern for quick extraction of relevant packets.



Voice and Video Analysis



Automatic Tunnel Traffic Analysis

Efficient application centric analysis

NTM Portable's embedded ClearSight Analyzer offers out of the box application level problem identification, automatic flow recognition and ladder diagram analysis for all IP flows. Its clear health assessment icon features an intuitive drill down procedure to guide users from application to root cause. It supports playback of interactive content such as voice, video, fax, web, MSN messaging, email, Telnet and FTP sessions. This application playback feature allows network professionals to go back in time to experience the same quality of the service the user did.

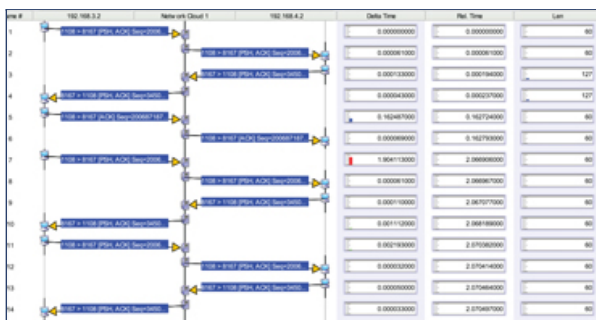
Collaborative remote analysis

NTM Portable can support multiple concurrent remote viewers, enabling collaborative analysis between experts in the operation center and technicians in the field. All analysis is conducted onboard the NTM Portable, so there is generally no need to upload trace files across the network for analysis. Remote analysis can happen over low bandwidth links, such as ISDN or other sub-T1 links.

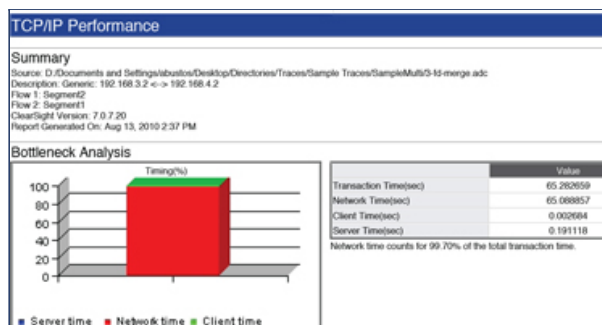
NTM's Intelligent Packet Analysis features auto multisegment analysis, which combines traces collected from multiple interfaces of the NTM and other packet capture devices, such as other NTMs and laptop based ClearSight Analyzers. This allows for quick visual fault analysis of timing, packet loss or out of sequence problems as the IP flows transverse different segments of the network. Integrated Wireshark takes advantage of the user defined protocol supported by open source communities. This means it supports most protocols used in the market today.

Pre-configured summary report

NTM Portable provides many preconfigured reports for direct application out of the box. Reports for VoIP, HTTP and Oracle are available in PDF or HTML format. Users can combine report elements to form custom reports. Powerful bottleneck report and ladder diagram exporting are perfect to communicate timing and transactional issues with application flows.



PDF format ad-hoc report from Multi-segment Ladder View to serve as record of analysis can be very useful to communicate problems among the network and application teams.



Bottleneck reports for multi-segment analysis showing the time each flow spent on server, network and client on different segments of the network.

Specification

NTM Model	Portable 2B		Portable 1B	
Model	CSN/NTM-PO2B-1A CSN/NTM-PO2B-10A	CSN/NTM-PO2B-10PA	CSN/NTM-PO1B-C	CSN/NTM-PO1B CSN/NTM-PO1B-A
Type of Interface supported	10/100Base-Tx 1000Base-T 1000Base-SX 1000Base-LX OR 10GBase-SR 10GBase-LR	10/100Base-Tx 1000Base-T 1000Base-SX 1000Base-LX AND 10GBase-SR 10GBase-LR	10/100Base-Tx 1000Base-T 1000Base-SX 1000Base-LX	
Maximum stream-to-disk throughput (Gbps)	4.5	10	2	3
Raw capacity (TB)	4	8	3	4
RAID controller for PacketStore	5		0	
CPU	Intel Xeon E5645, 2.4GHz		Intel Xeon E3-1225 v3 @ 3.20Ghz	
OS	Window 2008 Embedded		Window 7 Embedded 64bit	
Weight	13kg (28.5lb)		9.8kg (21.5lb)	10.4kg (23lb)
Dimension	35cm (13.72") x 42cm (16.46") x 17.5cm (6.88")		26.9cm (10.6") x 38.6cm (15.2") x 17.5cm (6.9")	
Environmental	Operating: 5° to 35°C (41°F to 95°F) Non-operating: -40° to 65°C (-40°F to 149°F)		Operating: 5° to 45°C (41°F to 113°F) Non-operating: -40° to 65°C (-40°F to 149°F)	Operating: 5° to 40°C (41°F to 104°F) Non-operating: -40° to 65°C (-40°F to 149°F)
System power supply	100-240 VAC, 50/60 Hz 600W Auto-Switching		400W 110V-240V AC, Auto-Switching	

Models

Model	Description
CSN/NTM-PO1B-C	Network Time Machine Portable 1B, 1Gbps, 3 TB
CSN/NTM-PO2B-1A	Network Time Machine Portable 2B, 1Gbps, 4 TB w/Atlas
CSN/NTM-PO2B-10A	Network Time Machine Portable 2B, 10Gbps, 4 TB w/Atlas
CSN/NTM-PO2B-10PA	Network Time Machine Portable 2B, 1&10Gbps, 8TB w/Atlas

Note:

- Tranceivers for capture cards are not included with NTM Appliances. CSN/ACC-90XX must be ordered separately
- A soft-carrying case is shipped with NTM Portable appliances

Gold Support

Model	Description
GLD-NTMPO1B-C	1 Year Gold Maintenance for CSN/NTM-PO1B-C
GLD-NTMPO1B	1 Year Gold Maintenance for CSN/NTM-PO1B or CSN/NTM-PO1B-A
GLD-NTM-PO2B-1A	1 Year Gold Maintenance for CSN/NTM-PO2B-1A
GLD-NTM-PO2B-10A	1 Year Gold Maintenance for CSN/NTM-PO2B-10A
GLD-NTM-PO2B-10PA	1 Year Gold Maintenance for CSN/NTM-PO2B-10PA

Options and Accessories

Model	Description
CSN/ACC-9050	Two 1 Gbps Single-mode SFP transceivers
CSN/ACC-9051	Two 1 Gbps Multi-mode SFP transceivers
CSN/ACC-9055	Two 10/100/1000 Mbps Copper SFP transceivers
CSN/ACC-9041	Two 10 Gbps Single-mode SFP+ transceivers (use on PO2B)
CSN/ACC-9042	Two 10 Gbps Multi-mode SFP+ transceivers (use on PO2B)
CSN/NTM-PO2B-HC	NTM Portable2B Hard Case for Shipping