Release Note - Network Time Machine

Network Time Machine 7.1 Build 58 Release Notes (5/11/2010)

Overview

These release notes describe Network Time Machine (NTM) 7.1, which includes all the features of NTM 7.0.7, plus new features and bug fixes, as described below.

New Features in NTM 7.1

- **New adapter cards support**
  This release supports the NT4e and NT20e cards in addition to the XD, XL2 and NT20X card already supported in NTM 7.0.7.
- **Hardware-Based De-duplication support**
  Frames captured from mirror ports on switches are typically counted twice — once as they enter the switch and once as they leave. The NT4e, NT20X, and NT20e cards support a hardware-based solution, sending only one copy of each duplicated frame on to be captured and analyzed by NTM.
- **Improved Slicing Control**
  The interaction between Slice Length settings and capture filters has been improved in this release.
- **Time-Based Lock Trigger function has been improved**
  The Time-Based Lock Trigger function has been improved to allow specification of start and stop times for up to three lock triggers.
- **Nanosecond Timestamp Resolution**
  NTM time interval displays now support nanosecond resolution, and all three decode engines can open and save nanosecond pcap files.
- **Support for Wireshark 1.2.4**
  This release supports Wireshark 1.2.4, including support for all of the Wireshark 1.2.4 configuration options.
- **Start/Stop Capture from the Agent Manager**
  Capture on one NTM Agent can now be started and stopped directly from the Agent Manager.
- **Windows Server 2008 Support**
  All components of NTM 7.1 are supported on Windows Server 2008.
- **Windows 7 Client Support**
  NTM 7.1 clients (Agent Manager, Agent Viewer, and Remote Viewer) are supported on the 32-bit version of the Windows 7 operating system.
- **10G Capture Performance**
  Capture only performance at 10 Gbps wire rate is supported on the NT20e adapter.
- **NTM Express with NT4e Adapter**
  NTM Express is now available with the NT4e adapter.
- **Address Book Import and Export**
  You can now import an address book from an existing CSV file, or export the current address book to a new CSV file.
- **LTE Decode Support**
  When the 3rd party decode engine is selected, the LTE decode now displays LAYER-2 (including MAC, RLC and PDCP), LAYER-RRC, S1AP, X2AP, GTP, and NAS-EPS.
- **Trace File Split Tool**
  This utility is not a part of NTM, but is provided with it; it can be used to split a large trace file into multiple 256 MB sized files.
- **PacketStore Recovery Tool**
  This utility is not a part of NTM, but is provided with it; it lets a user recover PacketStore data into a set of trace files, according to a specified time range. This can be useful when the MetadataStore is broken.

- **Improved NTP Time Synchronization**
  An automatic daily time synchronization feature has been added – the time of day can be set in a Time Synchronization configuration screen.

Bugs Fixed in NTM 7.1

- **Incorrect Values in RTPFlowReporter CSV file**
  Previously, the values of Jitter, Interval, R value, and MOS in the RTPFlowReporter CSV file were incorrect.
- **Short Term History Time Mismatch with Last Update Time**
  Previously, if a captured packet had a bad timestamp and if NTM then kept capturing for a long time without traffic, the last update time would differ from the timestamp in the bottom of the Monitor Short Term History page.
- **Save As Function for Filter Edit**
  Previously, a user could not save an existing filter into another filter.
- **Import/Export address book enhancement**
  Previously, a user could not import an address book from a CSV file, or export an address book to a CSV file.
- **Incorrect port limit**
  Previously, a user could not set the port number greater than 32767 for an IPv4 flow capture filter.
- **Additional decimal numbers**
  Previously, the “Utilization” column in the LLCstat.csv file only displayed two decimal numbers; in this release it increases to four.
- **SIP over TCP**
  Previously, Atlas did not recognize TCP-based SIP calls.
- **Repeat Lock trigger did not work (bug#12101)**
  Previously, the repeat capture lock trigger did not work.
- **L2 Layer Ethernet II filter did not work**
  Previously, in the L2 Layer Ethernet II filter, when the EtherType was set to a value greater than 32768, the filter would not take effect.
- **Incorrect EtherType limit**
  Previously, a user could not set the EtherType number greater than 9999 for an Ethernet II capture filter.
- **PacketStore lock to full**
  Previously, if the all PacketStore files were locked, all frames would be dropped and the user could not stop the capture.
- **IPv6 TCP Hardware filter did not work**
  Previously, the IPv6 TCP hardware filter did not work on the NT4e/NT20e/NT20X adapter.
- **Replaying HTTP would hang the UI**
  Previously, replaying an HTTP flow would sometimes cause the UI to hang up for a long time.
- **Filter frame size could not be set greater than 1514**
  Previously, a user could not set a frame size greater than 1514 in the physical layer filter.
- **Could not recognize IPv6 frame on L4 protocol layer**
  Previously, an IPv6 frame on the L4 protocol layer could not be recognized during capture.
- **Upgrade installation reset NR_PACKETSTORE**
  Previously, the installation program reset the Windows environment variable NR_PACKETSTORE and caused multiple MD1000 NTM Premium malfunctions.
- **Incorrect hardware filter result**
  Previously, a hardware filter for IPv4 TCP would cause IPv6 TCP frames to be captured on the NT20X adapter.

Known Bugs and Limitations

- **Only one client can connect to the Agent behind an NAT (network address translator) router**
  If an Agent Viewer or Remote Viewer stands behind an NAT router, only one Agent Viewer or Remote Viewer can connect to an Agent at a given time.
- **Put/Get configuration doesn't work**
  Clicking the Put/Get button in the Agent Manager doesn't work.
- **Some filter options cause problems on the NT20X (10G) adapter**
  Checking both **Bidirectional** and **Exclude** options on a flow layer capture filter will cause the capture to fail.
- **Incorrect ladder view for ICQ flow**
  If an ICQ flow has no message, the ladder view will be incorrect.
- **IDN is not supported**
  When the DNS traffic has IDN (Internationalized Domain Names), the name cannot be shown correctly.
- **Playback time incorrect for some codecs**
  If the user plays back an MPV/H263-1998/H264/MP2T flow in a popup window, then enlarging the window will make the playback time greater than before.
- **Incorrect port number resolution for small frames**
  If the length of a frame is less than 54 bytes, its port number will be shown as 0 in the network connection view.
- **Jumbo frame feature limitation**
  When the Jumbo option is enabled, packets less than 9018 bytes in length, and with CRC error will be counted as CRC frames in the capture statistics.
- **Incorrect 10G card status**
  In the Windows **Network Connections** window, the 10G card status indicator shows the cable unplugged even when the cable is connected.
- **Frame size limitation**
  The XL2 card can capture frame sizes up to 10240 bytes, but the 10G card can capture frame sizes up to only 10000 bytes. The XD card can capture frame sizes up to 12288 bytes.
- **Capture trigger does not work if Agent Viewer is not running**
  If the Agent Viewer is not running for an NTMD Agent, the capture trigger will not work on the Agent.
- **SNMP trap based lock trigger does not work when Agent and Agent Manager are running on the same machine**
  The SNMP trap based lock trigger uses port 162 by default, but this port is already used by the NTMD Agent Manager.
- **Cannot connect to an Agent with IPv6 address**
  Neither the NTM Remote Viewer nor the Agent Manager can connect to an Agent with an IPv6 address.