MX300 Firmware/Software Updates

Software version 1.2.3   **January 24, 2013**

Release Scope:

General availability.

New features and improvements:

1. Added Round Trip Delay Histogram function in the Throughput application. The user can enable the hiostogram function, configure the sampling period, and set a threshold to trigger an alarm.

2. Added an IPv6 Network Discovery Protocol (NDP) and NDP Gateway buttons in the RFC2544, V-SAM, Throughput, and BERT applications. This function allows to user to send a NDP message to an IP address and resolve the MAC address of the corresponding IP address. It is equivalent to the ARP and ARP Gateway buttons in IPv4 mode.

3. Added a pop up message in the ViPAG/V-Route test suite that prompts the user if they want to continue the test suite if the ping fails at the beginning of the test.

4. Added the SCPI interface support. SCPI commands are supported for BERT, Throughput, RFC2544, V-SAM, Loopback, and VLAN Scan.

5. Enabled the ability to measure optical power levels when a test is not running. The user can go into the Throughput application's Results/Signal menu and see the measurements.

6. Changed the Round Trip Delay decimals supported. In microseconds two decimal places are supported with a resolution of 20ns or 0.02us. In milliseconds five decimal places are supported with the same 20ns resolution.

7. Added One Way Delay measurements (OWD) when in Dual Port 1GE mode (copper and fiber interfaces). OWD can be carried out between two ports of the same unit. The Histogram feature is available in this mode.

8. Added WireShark support to the 1GE interface packet capture.

9. Added the VeEX/Nextragen PESQ feature.

10. Added the Color Mode feature to V-SAM (VeEX's ITU-T Y.1564 implementation).

11. Changed the throughput rate used in the RFC2544 Latency test when flow control is on. The received throughput rate found in the Throughput test is used in the Latency test now.

12. Changed the LASER status to OFF for both the 1GE and 10GE interfaces. Before the LASER default was ON.

13. Changed the date format of the results/report generated in ReVeal MTX300. The format is now "Thursday January 24 2013 12:00:00": Day, Month, Date, Year, time".

14. Removed the Arp/ARP Gateway button when in PPPoE mode from the test traffic applications.

15. Fixed a Timed mode bug where the configured settings were not saved and applied properly to the test.

16. Fixed a 2G Fibre Channel LOS bug. LOS would occur after a long term test.

17. Fixed a RTD/FTD bug in multiple streams (V-SAM and Throughput).

18. Fixed a RTD averaging bug on the 1GE interfaces.

19. Fixed a jitter value bug in RFC2544. Incorrect jitter values were being displayed.

20. Fixed a RFC2544 Burst test bug when three VLAN tags were enabled.

21. Fixed a bug where the RFC2544 test would fail after switching between IPv4 and IPv6 modes.

22. Fixed a link down bug in Layer 1 unframed BERT. This only applies to the 1GE fiber port.

23. Fixed the result saving bug where the user was no longer prompted to change the file name if they opted to do so.

24. Fixed a NetWiz results bug where the result could not be loaded on the browser.

25. Fixed incorrect NetBIOS results displayed in the NetWiz feature.

Known issues or limitations:

1. Custom Auto- Negotiations advertisements must have at least one speed/duplex advertisement selected. If none are selected the port will not link up. This will be addressed in the next general availability release.

Software version 1.1.69-9   May 31, 2012

Release Scope:

General availability.

New features and improvements:

26. Improved OOS and Frame Loss detection algorithm for 1 GE interface.

27. Changed **Type of Service** label to **DSCP** when TOS typpe is set to DSCP.

28. Improved Nextragen/VoIP.

29. Fixed TCP/UDP error counter checksum error on 1 GE interface.

30. Enhanced ViPAG function.

Known issues or limitations:

2. Nothing significant to report.

Software version 1.1.69-8   January 31, 2012

Release Scope:

Point release.

New features and improvements:

1. Added IPv6 support on the 10GE interface.

2. Added PHY Mode support to the 1GE interface.

3. Fixed the frames per second (FPS) graphis in Throughput test; they were not changing accordingly to the actual received rate.

4. Fixed a bug in the Frame Loss graph: incorrect values would be displayed.

Known issues or limitations:

1. IPv6 on the 1GE and 10GE interfaces cannot be tested in a routed environment at this time.

Software version 1.1.69-7   Dec 1, 2012

Release Scope:

General availability.

New Transport features and improvements:

1. Added V-SAM: VeEX's implementation of the ITU-T Y.1564 Ethernet Service Activation standard.

2. Added Ethernet Link Level (IEEE 802.3ah) and Service Level (IEEE 802.1ag and ITU-T Y.1731) OAM support.

3. Fixed a Fibre Channel bug in 1/2/4Gbps where a false reporting of LOS events were riggered with bad frames detection.

4. Replaced the old web browser with a new one that supports PDF generation.

5. Fixed a bug in the Frame Loss graph: incorrect values would be displayed.

Software version 1.1.69   May 27, 2011

Release Scope:
General availability

New features and improvements:
1. FTP enhancemetns added: passive and active modes are added.

2. Added the Nextragen VoIP Client for PESQ measurements agains the Nextragen Server.

Software version 1.1.68-25   May 11, 2011

Release Scope:
General availability

New features and improvements:
1. Improves 10GE-WAN mode - Multiple Stream, individual stream rate can be adjusted to 0.1% to

2. Fixed a bug in RFC2544 where the last frame tested always reported 99.99% instead of 100%.

3. Fixed a bug in Fibre Channel 2G/4G where it intermittently cannot transmit the first time.

4. Enabled the ability to save results while the measurements are running.

5. Changed the LASER icon in Fibre Channel mode to match the icon used in Ethernet mode.

6. Fixed a RFC2544 Asymmetric bug: where the incrrect throughput was being reported for the remote results.

Software version 1.1.68-23   Apr 20, 2011

Release Scope:
General availability

New features and improvements:
1. Fixed a service disruption counter bug in BERT and Throughput.

2. Fixed a RTD bug in RFC2544 for frame size 56 and 128 in Fibre Channel mode.

3. Added Loopback filters to the 1GE interfaces.

4. Added the Cable Test NetWiz feature.

5. Adjusted the Summary page to add Utilization in bits/second.

Software version 1.1.68-19   Mar 4, 2011

Release Scope:
General availability

New features and improvements:

1. Added results/statistics in Loopback mode.

2. Enhanced the Fibre Channel core for 1/2/4G

3. Added fractional wavelegth reading for DWDM SFPs.

4. Added a dynamic display of delay values: the units of measurement change autoamtically from microseconds, to milliseconds, to seconds, respectively.

Software version 1.1.68-18   Feb 17, 2011

Release Scope:

General availability

New features and improvements:

1. Fixed a BER calculation bug in CPRI mode.

2. Fixed a bit error injection bug in CPRI mode. Bit errors were not being injected properly.

3. Enhanced the optical power level readings: it is no longer required to start the test in order to read the optical power levels.

4. Improved the FTP/HTTP throughput measuremetns by adding more stattistic and effective throughput values.

Software version 1.1.68-16   Feb 11, 2011

Release Scope:

General availability

New features and improvements:

1. Fixed FTP bug: when large files were downloaded the FTP status would not change and remain as if the test was still running.

2. Fixed a bug on the DHCP options introduced in the previous release.

Software version 1.1.68-14   Jan 24, 2011

Release Scope:

General availability

New features and improvements:

1. Fixed a Round trip delay bug: differnet frame sizes will have different RTD when the test port was looped to itself.

2. Added MAC/IP filters for 10GE packet capture

Software version 1.1.68-13   Jan 14, 2011

Release Scope:

General availability

New features and improvements:

1. Added Ipv6 on the 1GE port (Ethernet applications)

2. Added millisecond settings to the Burst and Ram test on the 1GE port.

3. Added DHCP options to the IP tools menu.

4. Added Pause frame injection to the 1GE interface.

5. Added the PAUSE frame counter in the Summary tab.

Software version 1.1.68-11   Jan 5, 2011

Release Scope:

General availability

New features and improvements:

1. Added the new German character (**ß)** to URL field.

2. Added new CPRI 3.072G optical testing. It is a software option controlled feature.

References   MX300

Upgrading the MX300 software

Once you have obtained and uncompressed the upgrade file (mx300-veex-arm.tar), software upgrade (also known as firmware upgrade) can be performed in two ways:

1. From the PC, connect to the MX300 using **ReVeal MTX300** application and use the **Upgrade** function in the **Home** menu, or

2. Via USB Drive, by copying the uncompressed file to the root and then plugging it to the MX300. Turn the power OFF. Press the 🗁 and 🔒 buttons simultaneously, while powering the unit ON. The three buttons can be released once the confirmation beep is heard.

MX300 must be connected to AC/DC charger at all times during the whole upgrade process. DO NOT turn it off at any time; the upgrade process will take several minutes and the MX300 will reboot itself at the end.

To verify the current software version number installed in the unit, open the **Utilities** section, select **Settings**, and open **About**.