

RXT Platform - System Software Updates

The software listed here is not compatible with older Sunrise Telecom RXT-1000 product family. Please contact CustomerCare@veexinc.com for support. Installation instructions provided at the end of this document.

Software version 02.00.0043

Sep 15, 2015

Release Scope:

General availability

New features and improvements:

1. Added support for RXT-6000 Packet Capture result files.
2. Added RXT-8000 support with LCD improvements.
3. Updated the welcome page "Getting Started" guide to assist new and existing users on how to use the new technology-based Test Mode selection GUI.
4. Optimized the VNC server to reduce CPU usage.
5. Fixed the on-screen wander offset removal (relative TIE) affecting the relative MTIE and TDEV run-time analysis.

Known issues or limitations:

- a. No new significant issues to report.

Software version 02.00.0042

Aug 27, 2015

Release Scope:

General availability

New features and improvements:

1. New off-line test feature activation via license key. Tapping on a disabled (Expired) item in the >Settings >About >Software options screen brings up the password dialog. This enables license distribution to customers who prefer to keep their test sets off the public internet (no access to VeExpress) or within in secured corporate networks with strong VPN and/or firewalls policies. Any feature that is manually enabled with a license key will be locked to a specific test module (it can't be shared). License keys are specific to a software option and a test module and must be requested when the affected options are purchased. Supported for RXT-3000, RXT-6000 and RXT-8000 test modules.
2. Added support for RXT-3000's new and improved intuitive Test Mode selection menu. Conveniently groups all Test Applications by technologies and allows for richer lists of new and future test application.
3. Added support for RXT-3000's new auto-relaunch function that restarts the last Ethernet test if the batteries were depleted during a long power outage

Known issues or limitations:

- a. No new significant issues to report

Software version 02.00.0040

Jul 10, 2015

Release Scope:

General availability

New features and improvements:

1. Added Timed Auto-Save to periodically save partial test results to the internal memory or a USB memory stick attached to the test platform.
2. Added support for RXT-3000 direct Ethernet test profile launch from the File Manager. Users can now go to the File manager, select the desired test profile and load or run the test application. The process of selecting a test app, test mode, port setup and application settings is now fully automated.
3. File Manager column display improvements

4. Fixed a display issue caused by long WI-FI BSSID strings
5. Add option control support for OTU3/OTU4 advanced mapping and multiplexing options.
6. Enable OTU3/OTU4 multiplexing in test mode selection
7. Improved VeExpress Check compatibility with RXT-6000's power management

Known issues or limitations:

- a. No new significant issues to report

Software version 02.00.0034**May 19, 2015****Release Scope:**

General availability

New features and improvements:

1. NEW! Introduces Platform Sleep Mode (Standby) with Active Phase Holdover support. Allow users press Home + ESC buttons together to put the test set to sleep. Time reference can be transported indoors to equipment room where tests would take place. The test set will maintain the holdover during the low power consumption state. Allows users to store the test set back in the carrying case, without having to worry about overheating or blocked cooling fans, while they go through security check points, elevators, etc. With a fully charged battery, the test set could remain in sleep mode for more than 20 hours. The low power chip-scale Atomic Clock remains fully powered and active during standby. A "watermark" clock and battery status indication is provided for indoors use (press HOME).
2. NEW! Built-in VeExpress license Release and Request function to make sharing licenses easier. The function must be enabled by the group administrator in VeExpress web. A confirmation message is has also been added in case the Release button is tapped by mistake.
3. Added Atomic 1PPS phase tracking button to monitor the phase difference between the disciplined Atomic 1PPS output and its GPS 1PPS input. Since there are no absolute references in many field sites, this relative measurement gives a good indication of the disciplining status, phase alignment and stability. Users should look for a horizontal trend around the zero nanosecond line.
4. Added "Sync 1PPS" button to align the free-running Atomic 1PPS to the GPS 1PPS, within <100ns, without disciplining. Users have a choice of aligned free-run 1PPS and full disciplining. Free-run phase stability has a more linear (predictable) behavior which in certain applications may allow users to predict its long-term cumulative time error, once the atomic oscillator's natural frequency offset is known (measured)
5. Enhanced GPS disciplining settings for the optional built-in Atomic Clock provides better control of the interaction between the GPS and Atomic Clock, especially when users force it into holdover mode to make indoor measurements.
6. Added support for multi-profile test sequencer (scripting) with live message in the bottom bar to let test app show the current running profile and remain time. Up to 10 Ethernet test profiles can be programmed to run in sequence.
7. Added a Column button on File Manager to allow users to Show/Hide desired columns.
8. Improved File Manager sorting
9. Fixed a battery charging issue that occurred when the DC charger was plugged-in while the test platform was OFF (green LED instead of orange) [2244].
10. Added RXT-1200 Platform Manual to the Help menu

Known issues or limitations:

- a. The Power and Battery LEDs will rapidly blink in orange color when the battery charge is almost finished.

Software version 02.00.0024**March 19, 2015****Release Scope:**

General availability

New features and improvements:

1. Added support for the new RXT-6000 10M to 100G Multi-service Testing Module (CFP2, QSAP+, SFP+, RJ45)

2. Added support for miniature Planex GW450S 802.11ac/n/a 433Mbps 5GHz USB2.0 Wi-Fi adapter.
3. Improved built-in VeExpress client to allow users to check available licenses and release licenses (make available to others) directly from the test set.
4. Improved module detection

Known issues or limitations:

- a. No new significant issues to report

Software version 02.00.0016**March 4, 2015****Release Scope:**

General availability

New features and improvements:

1. Added support for the following MTT modules, using the RXT-2000A Carrier module with firmware version 02.00.0005 or newer:
 - a. RXT-2060 (MTT-06B) VF TIMS (use RXT-2060 release 02.00.0003 or later)
2. Modified 1PPS and 10MHz precision clock selection support for upcoming RXT-6000 10M-to-100G Multi-Service module
3. Enhanced >Utilities >Files >USB file browser. Allows users to open wander measurements and PCAP protocol capture files for further post-analysis. HTML and TXT file viewers are also supported. RXT launches the required application.
4. Added support for new Edimax 802.11ac USB Wi-Fi dongle (Z99-99-027G)
5. Improved test module detection during boot up

Known issues or limitations:

- b. No new significant issues to report

Software version 02.00.0009**Dec 17, 2014****Release Scope:**

General availability (RXT-1200 only)

Uses ReVeal RXTS companion PC software (download from www.veexinc.com)**New features and improvements:**

1. Added web browser-based Remote Access to the RXT-1200. Provides access to test profiles, test results, screen capture images stored in the test set, as well as remote control (GUI mirroring)
2. Added support for the following MTT modules, using the RXT-2000A Carrier module with firmware version 02.00.0001 or newer:
 - a. RXT-2090 (MTT-09) Datacom (use RXT-2090 release 02.00.0001 or later)
 - b. RXT-2140 (MTT-14B) SHDSL (use RXT-2140 release 02.00.0003 or later)
 - c. RXT-2190 (MTT-19A) ADSL2+ (use RXT-2190 release 02.00.0004 or later)
 - d. RXT-2240 (MTT-24) DS1/DS3 (use RXT-2240 release 02.00.0001 or later)
 - e. RXT-2450 (MTT-45) IEEE C37.94 (use RXT-2240 release 02.00.0001 or later)
3. Added support for upcoming RXT-6000 100GE test module
4. Added support for upcoming CATV Spectrum Analysis Module

Known issues or limitations:

- a. No new significant issues to report

Software version 02.00.0003

Oct 3, 2014

Release Scope:

Initial Release. General availability for new RXT-1200 only.

RXT-2000A (RXT-Carrier for MTT modules) requires version 02.00.0001

Note: All test modules (RXT-XXXX, RXT-Carrier and MTT) must be upgraded to their respective 02.00.0001 versions to assure compatibility.

New features and improvements:

1. The new RXT-1200 offers faster processor, improved software architecture, and a variety of new native high-performance feature-rich test modules built by VeEX, like RXT-3000 Combo, RXT-4100 OTDR and RXT-4500 OSA
2. Supports Sunrise Telecom's original native modules: RXT-2600 SHDSL.bis
3. Supports the RXT-2000A Carrier module, keeping the commitment of offering forward compatibility support for popular Sunrise Telecom MTT legacy modules identified with RXT-2XX0 nomenclature, for each MTT-XX modules:
 - a. RXT-2080 (MTT-08) Dual T1
 - b. RXT-2160 (MTT-16A) TDR/DMM
 - c. RXT-2270 (MTT-27) Dual E1 and MTT-27L Single E1
 - d. RXT-2380 (MTT-38) SDH/SONET/PDH/DSn
 - e. RXT-2480 (MTT-48) USDL
 - f. RXT-2500 (MTT-50) 1GE
 - g. RXT-2510 (MTT-51) Bonded UDSL.
4. Familiar VEEX GUI sharing standard and optional tools with other VeEX platforms
5. New automatic IP connection when the Management Port is set to DHCP or STATIC modes
6. New built-in VeExpress client for software updates (delta push) and license management (permanent, leased, shared) is available to certain modules supporting such function (e.g. RXT-Combo)
7. New welcome screen to guide new users and help transitioning from original RXT and TX300 into the GUI
8. Added support for dual-band Wi-Fi dongle (2.4 & 5 GHz)
9. Added Wi-Fi InSSIDer 2.4 and 5 GHz channel scan
10. Added support for Wi-Fi Spectrum Analyzer (software option and USB dongle required)
11. Added support for Huawei E180 WCDMA HSDPA cellular data card. Works with 900/2100MHz HSPA/UMTS and 850/900/1800/1900MHz EDGE/GPRS/GSM (Requires Z77-00-015G USB cellular modem and 499-05-157 USB Data Card Support option. SIM not included)

Known issues or limitations:

- a. Although compatibility with RXT-2000A Carrier and popular MTT test modules is retained, this software is not backward compatible with Sunrise Telecom's original RXT-1000 platform
- b. Module hot swap is not available in this version (test application doesn't start when new module is inserted)
- c. Browser-based Remote Access is not yet available in this version

References

Test Profiles and Test Results Backup Procedure

The RXT Platform File Management system offers backup [To USB] and restore [From USB] functions. They can be found in the >(V) **Utilities >Files >Saved**, on the left side of the screen.

To enable the [To USB] and [From USB] functions, insert a FAT32 USB Memory stick into any of the USB ports. Wait for the USB memory to be recognized (the folder icon will change appearance with a green USB memory icon).

Select the desired test results, test profiles, screen capture and protocol capture files to be saved, using the individual check boxes. For a full backup, check the master box on the header and all files will be marked.

Tap the [To USB] button to initiate the file transfer procedure and wait for the progress bar to finish. Original files won't be deleted from the test set.

When all files have been copied to the USB, you may tap the folder icon (top-right corner) and select "Remove USB Drive" to make sure all cached data is transferred to the USB drive, especially when transferring small files.




It is highly recommended to select all important test profiles and results, and make a backup copy to a USB drive, before upgrading the unit's software. The software upgrade process cleans up all the data stored in the unit. After the unit has been updated, use the [From USB] function to restore the data back to the test set.

Updating the RXT Platform System Software (via USB)

Warning: The system update procedure reformats the platform's internal storage and all results and profiles are erased. Please follow the procedure above to save all important files prior to updating the system software.

Once you have obtained and uncompressed the update package file (rxt1200-veex-arm.tar.gz), the firmware update procedure can be performed using a FAT32 USB Memory stick.

Note: If installed in your PC, some file compression agents (applications) may show the resulting rxt1200-veex-arm.tar.gz as a compressed file, but there is no need to expand the file any more. Keep it as is.

- Copy the uncompressed file to the root of the memory stick
- Plug the memory stick into one of the RXT-1200 platform's USB ports
- Turn the power OFF and remove test module.
- Press the  (alt),  (enter) and  (power) buttons simultaneously. The three buttons can be released once the confirmation tone (beep) is heard. The system update procedure starts.
- The update process would take a few minutes and the RXT will reboot itself at the end.

The RXT-1200 must be connected to AC/DC charger at all times during the whole upgrade process. DO NOT turn it off at any time.

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

Test modules may need to be updated to their latest software version available, to assure full compatibility.

Updating the RXT Platform System Software (Internet)

Connect the unit to the internet, then go to >**Utilities >VeExpress** and press **Check** to connect to the VeExpress server and see if there is a new SW update (Delta Push) or full upgrade (via USB memory) available.

If available, the built-in VeExpress client can perform consecutive (incremental) updates directly from the RXT Platform (for example, updating from 1.0.1 to 1.0.2). The advantage is that update packages are smaller and faster to download. The test set must be connected to a LAN (using the Management port) and have access to the Internet.

If the current SW is much older for a delta push, then the RXT will instruct you download the full install package from www.v-express.com or www.veexinc.com and perform the USB Upgrade procedure described earlier. The test set can also download the full upgrade package to an attached USB memory stick (no PC required).

Updating Native Test Module Software (via USB)

Note: Certain test modules may use different software update procedures. Please check the specific module documentation or Software Release Notes for details.

Make sure the RXT-1200 Platform is running the latest firmware version available.

- Copy the test module's uncompressed firmware update package file to the root of the memory stick
- Plug it into one of the RXT-1200 platform's USB ports
- Turn the power OFF and insert the appropriate test module (if not already inserted).
- Turn the RXT Platform ON and wait for the boot up process to finish.
- The RXT may display an "incompatible software version" warning message to indicate that the test module requires a firmware update. Tap the OK button to close the message.
- Touch the **V** or **Utilities** button on the top bar, open the **Utilities** tab on the left bar, and select **M.Upgrade**.
- The RXT will search the memory stick for valid update packages and show its information.
- Tap on the **Upgrade** button to start the firmware update process. This could take several minutes. The RXT will shut itself off at the end.
- Turn the test set ON, connect to a LAN, go to **>Utilities >VeExpress** and press **Check** to update its licenses

The RXT-1200 must be connected to AC/DC charger at all times during the whole upgrade process. DO NOT turn it off at any time; the update process would take a few minutes and the RXT will reboot itself at the end.

To verify the software version number installed in the current test module, turn the RXT back on, open the **Utilities** section, select **Settings**, and open **About**.

The firmware update package files for multiple modules can be copied into a USB memory stick at once, but each module must be updated separately, by plugging one module at a time, following the procedure listed above.

Synchronizing Native Test Module's Licenses with VeExpress

Some RXT Test Modules offer the ability to connect to a VeExpress server to register, validate their software licenses and (in some cases) check for new software updates.

To retrieve the Test Module Licenses (also known as software options)

- Insert the desired module into the RXT-1200 platform and turn it on
- Connect the RXT to the Internet via its management port, press the **Utilities** or **V** button on the top-left corner of the screen, and select **>Utilities >VeExpress** to access the client. Press **Check** to register and get the permanent licenses (some modules may offer rented or leased licenses). It also checks if the test set is running the latest software version.

It is recommended to sync supported RXT test modules with VeExpress on a regular basis, especially when inserting a module for the first time or after performing software upgrades, to refresh its licenses. Connecting to VeExpress is also required if new software features (licenses) have been purchased, leased, rented or shared.

Updating MTT Module Licenses (Software Options)

Whether it is adding new functions (software options) to an existing module or importing the option list from an existing SunSet MTT into the RXT-1200, you will need to get an OPT file from VeEX Customer Care group.

- If you are importing the existing MTT Module's licenses from a SunSet MTT to an RXT platform, you should contact CustomerCare@veexinc.com and provide the MTT-XX model and serial numbers, the original SunSet MTT, RXT-1200 and RXT-2000A serial numbers, so they can be validated and issue an OPT file that is compatible with the RXT-1200.
- If you bought new features (licenses) for an MTT-XX module that is already registered and working in an RXT-1200 with RXT-2000A, you should have received an OPT file via email, link or any other electronic means.

OPT files are very small and contain the signature for the specific MTT module which serial number is listed in the file name (RxTMTTXX_YYYYYY.OPT). The XX represents the target MTT-XX module type (e.g. MTT-08 or MTT-27) while the YYYYYY is the target serial number. Each OPT file will only work with its intended MTT module. Nonetheless, each OPT file can be

installed in multiple RXT-2000A units, so that particular module can be shared among different users.

Note: You should securely store the latest copy of all the OPT files you have received for each of the modules you own, in case you need them in the future.

- Once you have obtained the RxTMTTXX-YYYYYY.OPT file(s), copy them to the root of a FAT32 USB Memory Stick, then insert the memory into one of the RXT USB ports.
- Turn the RXT-1200 ON, with the RXT-2000A and an MTT-XX module inserted, then wait until the Module user interfaces launches and it is ready.
- Select **>Tools >Options >USB Drives** and verify that the desired OPT files are displayed
- Select the files one by one and tap on the **Import** button. Repeat this until all desired modules are loaded (the specific MTT modules don't need to be present)
- Reboot the unit to make the new options available.

ReVeal RXTS (PC software)

Offers Remote Access, download screen capture, results, profiles and wander files, create reports, etc. Download it from www.veexinc.com >Products and Solutions >RXT Series >RXT-1200 >Software

ReVeal Wander Analysis (PC software)

Wander and absolute phase analysis and reporting. MTIE and TDEV analysis and standard pass/fail masks

Download it from www.veexinc.com >Products and Solutions >TX Series >TX300S >Software

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