spectracom

Software Update Release Notes: VersaSync[™] and VersaPNT[™] Software Version 1.3.1: Release Notes 3

Spectracom Rochester NY, USA 31 August 2018

Spectracom released a software update for VersaSync and VersaPNT. Customers can download this software update at no charge from the Spectracom website (see <u>How to download and install</u> <u>the new SW</u>.) This latest software update will upgrade the unit's system software to **Version 1.3.1**.

This update provides added benefits through new features, enhancements to existing functionality, as well as software fixes and security updates, as described in this document.

For your convenience, older legacy releases are also described in this document.

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Version 1.3.1

Newly released features

- Added GPSD support and GSPD configuration and display via VersaSync/VersaPNT CLI and WebUI. GPSD displays the status of the ublox receiver.
- Added Event Time Stamper availability without requiring the application of a license file in order to provide the service to all users.
- Added support for SAASM (for authorized customers only) and CSAC.
- Enabled BroadShield service support and WebUI functionality.
- Added support for VersaPNT.

Enhancements and fixes

The following defects were corrected and improvements were applied to existing features and functions:

Networking:

- Improvements made to Versa-specific SNMP MIB, including increased clarification of alarm messages and KTS commands.
- Repaired and reconfigured the HTTP and HTTPS management method.
- Altered settings in both the Web UI and CLI to allow the system to retain DNS information after DHCP is disabled.
- Verified and adjusted timing reference distribution to GNSS, internal 1PPS, external 1PPS, DCLS, RS485, and IRIG.
- Upgraded to long-term stable Buildroot kernel (2018.02.3 LTS: 4.9.76-rt61-ltsi).

WebUI:

- Added 'Save Config' and 'Load Config' buttons on the pin layout page.
- Repaired defect with the saving pin layout function.
- Configured Web UI to correctly identify product model on startup.
- Refreshed a warning dialog to alert the user of an attempt to roll back the system firmware.
- The installed software license information is now displayed in the upgrades section.
- Fixed issue with SNMP restart after disabling and re-enabling services.
- Fixed issue with reflecting the Netmask changes in the Web UI.
- Incorporated x410 high-precision OCXO models into Web UI functionality.

- Repaired issue with WebUI report of positioning of the dial name at less than 1 degree.
- Restored System Time Message functionality

Misc:

- Corrected CLI model and model options commands to correctly identify VersaSync and VersaPNT.
- Included "*cfg" and "*get" CLI commands that will display the current configuration of the interface.
- Repaired problem setting GNSS position in the CLI.
- Fixed defect with CLI "clean" command to reset the pin configuration to default settings.
- Implemented RTC at boot-up of unit in order to reduce errors during setup.
- Redesigned log files
- Included the hostname in the list of items affected by the "config restore" command.

Known Issues:

- The "release4" and "release6" CLI commands are not currently functional.
- A few CLI commands have syntax which differs from the helpcli file. These commands display correctly in the inline help instructions.

Version 1.1.5

Newly released features

- The Galileo constellation is now supported.
- The brightness of the **front panel LEDs** is now adjustable. To turn OFF the LEDs, set the brightness to zero.
- The GNSS configuration now supports the **Manual Position** option which, in Standard receiver mode and Stationary dynamics, allows the user to manually set the geographic position. This may be necessary if the GNSS receiver could not complete a survey e.g., if GNSS reception is poor.
- In Standard receiver mode and Stationary dynamics setting, on startup of the unit, a **GNSS** resurvey will now be performed automatically.
- The default GNSS mode is now **Mobile mode**, rather than Stationary. SW upgrades will not change the user-set configuration.

Enhancements and fixes

The following defects were corrected and improvements applied to existing features and functions:

Networking:

- Fixed issues with services failing to start when ETH1 was disconnected on startup.
- Fixed issues with services failing to start on bootup when DHCP was disabled.
- When using the 'net' command, the MAC address will now be displayed correctly.

NTP & PTP:

• Fixed startup issues with NTP (previously released patch).

WebUI:

- The **FAULT indicator** in the Web UI will now be ON only if a fault condition is present.
- The **Saving Logs** functionality now saves all logs at the same time (in the Web UI, navigate to Management > Log Configuration).

Misc:

- The **output on pins 1 & 2** will no longer be lost after a power cycle.
- Fixed an issue with the **system time** being 1/1/2000 until a valid reference was found.
- The **MIB** now displays the product name "VERSASYNC".
- Fixed an issue with the **deletion of logs**.

Version 1.1.0

Newly released features

- Added support for event timestamping (paid license option)
- Blackout mode for front panel Status LEDs (NOTE: lights are ON temporarily during startup)
- Added hardware timestamping to PTP (NOTE: In 1.1.0 PTP is restricted to ETH0. The interface for PTP data will likely change in a future release.)
- Added support for zero-configuration networking

Enhancements and fixes

The following defects were corrected and improvements were applied to existing features and functions:

Networking:

- Fixed an issue with creating static routes
- Fixed an issue with handling DHCP leases
- Fixed an issue with handling traffic on ETH1
- Allow pinging with sudo (e.g., sudo ping 192.168.1.1)
- Now provide a unique dynamic hostname for device

PTP:

- Improved status reporting in PTP
- Improved PTP compatibility with certain slaves
- Fixed incorrect timescale in PTP

WebUI:

- Performance improvements
- Validation of pin configuration
- Page cleanup
- Fixed an issue with viewing GNSS satellite data

Misc:

- LED behavior now matches the documented behavior.
- Improvements to the configuration restoration
- Fixed an issue causing pin configuration changes to require a reboot to take effect
- Fixed an issue with applying leap seconds to NTP/PTP packets late
- Improved runtime hardware monitoring
- Added signing of upgrade bundles for robustness
- Cleanup of logging, removing erroneous log messages
- Improved system stability
- Applied improvements to system cleaning functionality
- Fixed an issue with creating user accounts

Known Issues:

- Pin configuration is not restored in a configuration restore.
- Issue updating from versions older than 1.0.2
- Fault indicator in Web UI is always illuminated
- Constant ~10 µs offset in PTP packets on ETH0
- System time is sometimes reset on power-up
- 10 MHz outputs cannot be disabled
- Incorrect default GNSS configuration (should be 'Mobile')

Version 1.0.2

Newly released features

- It is now possible to generate xPPS signals.
- A REST API for VersaSync is now available.

Enhancements and fixes

The following defects were corrected and improvements were applied to existing features and functions:

- Ethernet1 is now available.
- sshd is now supported
- The Havequick input is now available.
- The default 1PPS output pulse width is now 200ms.
- It is now possible to configure PTP via the Web UI.
- It is now possible to use 2 reference inputs of the same type.
- The default mux configuration does work now.
- A defect with the network configuration has been fixed.

Which software version is installed on my VersaSync or Versa PNT?

To determine the software version currently installed on your unit:

- 1. Login to the unit's Web UI
- 2. Navigate to **Tools** > **Upgrade/Backup**. The **System Configuration** panel in center of the screen displays the current version number under System:

tions	System Co	nfiguration	Upgrade Log 🗳		
A Update System Software	System	Spectracom VersaSync	SW V X (943348ff8a50)	Update succe	essful 2 weeks, 1 day ago
	Model	1228-0110-0601		Using update tool supplied by upgrade (SWUAL)	
Save Configuration					2 weeks, 1 day ago
Restore Configuration	Serial #	25			
Upload Configuration					
Restore Factory Defaults (Clean)	Power Supply	DC 10-32V		Software Ver	sions
* Rollback System *	Oscillator	OCXO (50ppb)		Apache	2.4.20
* Clean Configuration and Halt *				NTP	4.2.8p7
	Timing Processor		SW V4.0.0 (691e13581035) / FPGA V0103		
isk Status				OpenSSL	1.0.2h
	GNSS Receiver	u-blox M8T	SW V2.30	-	
Total 5.2G				NetSNMP	5.6.2.1
	HW Slot 1	Empty			
Used 290.9M				OpenSSH	7.2p2
	Option				
Free 4.6G				PHP	5.6.22
Percent 6%					
Clear All Logs					
Clear All Stats					

Figure 1: Software revision reported under **Tools** > **Upgrade/Backup**.

How to download and install the new SW

Downloading the Software Update

The latest VersaSync software update can be downloaded from the Spectracom website under https://files.spectracom.com/downloads/versasync

Installing the Software Update

Instructions on how to install the new software update can be found under http://manuals.spectracom.com/VSS/Content/VSS/SYSAD/SW_Upgrades.htm.

How to contact Spectracom Technical Support

Should you have any questions or comments regarding any of the above-mentioned features or fixes, please contact Spectracom Technical Support:

https://spectracom.com/support/request-service-product-support