

PSP2211

To: All Spectracom customers with a Premium Support Package  
Subject: Notification of an available NTP TimeServer Software Update  
From: Keith Wing, Spectracom Customer Service Manager  
David Lorah, Customer Service Technician

Dear valued Spectracom customer:

We at Spectracom Corporation continuously strive to improve our products. To this end, we have released a software update (Application software version 3.4.1) for the Spectracom NetClocks (Models 9383, 9389, 9283, and 9289) and the Ethernet Time Server (Model 9288).

This notification and software update are being offered to you free of charge as part of the Spectracom Premium Support Package that was purchased for this product. Automatic notification of software updates is among the many benefits of the Premium Support Package. The complete list of benefits can be viewed at Spectracom's website, [www.spectracomcorp.com](http://www.spectracomcorp.com), under "Support." It may also be viewed directly through the following link:

<http://www.spectracomcorp.com/Support/Services/PremiumSupportPackage/tabid/64/Default.aspx>.

This software update upgrades the application software of the NTP time server to version 3.4.1. The version 3.4.1 upgrade provides added benefits and minor fixes to the operation of this equipment. Due to difficulties in the field upgrade process, versions 3.3.0 and 3.4.0 of the software were limited release updates. Highlights of the changes to versions 3.3.0, 3.4.0 and 3.4.1 are listed for your reference. Updating to versions 3.3.0 or 3.4.0 before updating to version 3.4.1 is not required. All 928x and 938x NTP time servers can be upgraded directly to version 3.4.1.

**New Features:**  
**(Version 3.4.0)**

- **Implemented a software Halt function**
  - Added a Halt function (process can be initiated via the web browser, console port, or SNMP) that provides the equipment with additional time to shut down. This helps prevent the internal CF flash card from becoming potentially corrupted when the equipment is powered down.

- **Added the NTP version to the System Status web page**
  - The System Status page of the web browser now displays the version of the installed NTP software for those customers who wish to know this version information.

**(Version 3.3.0)**

- **Automatic FTP of NTP statistics files to a remote server**
  - Added the capability to transfer automatically the NTP statistics files to a remote server via File Transfer Protocol (FTP). The statistics files transferred by this feature are loopstats, peerstats, and clockstats. Each file contains statistics data for the current day. The files are automatically transferred to the remote server 30 minutes into every hour (12:30, 1:30, 2:30, etc).
- **Rubidium oscillator log now displays oscillator frequency counts** (applicable only to the Model 9283 with Option 4: Rubidium oscillator installed):
  - The oscillator log for the Model 9283 with the optional Rubidium oscillator installed now logs the frequency counts of the 10 MHz output of the oscillator.
- **Added IPSec (IPV4/IPV6) as a standard feature:**
  - Added IPSec (IP Security) to the Models 9283, 9289, and 9288 as a standard feature.

IPSec is a suite of protocols for securing Internet Protocol (IP) communications by using authentication and encryption algorithms on each IP packet in the data stream. Network and client software must be able to support this feature in order to utilize it.

**Software fixes:**

**(Version 3.4.1)**

- **Resolved an issue with POST (Power On Self Test) reporting when using a new version of the microprocessor (not applicable to any units shipping prior to the March, 2008 time-frame).**
  - With a new version of the microprocessor module now being used, the POST test was failing to report the versions of the data output processors. This was causing a POST failure alarm. Version 3.4.1 allows the versions to be read correctly and clears the POST failure alarm.
- **Updated DST (Daylight Saving Time change) rules for Australia**
  - Updated the Local System Clock's DST rules to reflect changes that have been made to Australia's DST rules.

**(Version 3.4.0)**

- **Fixed minor issues with the SpecUp update utility used to update software in the field**
  - Fixed minor issues with the Spectracom SpecUp utility to improve the field update process.
- **Vulnerability scans no longer disable NTP**
  - Resolved an issue in which vulnerability scans could potentially disable the NTP service. The resolution was verified using a Nessus vulnerability scanner.
- **Resolved an issue in which SNMP would not restart correctly after a reboot**
  - Fixed an issue in which SNMP might not restart correctly after equipment reboot.
- **Updated installed OpenSSH and OpenSSL versions**
  - To avoid potential security vulnerabilities in the OpenSSH and OpenSSL software, updated OpenSSH to stable version 4.7p1 and updated OpenSSL to stable version 0.9.8e.
- **Updated installed Apache web server version**
  - Updated Apache to latest stable version (version 2.2.6) and modified configuration files to prevent potential security vulnerabilities.
- **NetClock with optional IRIG input could stop syncing to IRIG reference source**  
(Applicable only to the Model 9283 or 9383 when Option 6: IRIG input is installed).
  - Prevents a potential buffer overflow condition in the IRIG input circuitry.

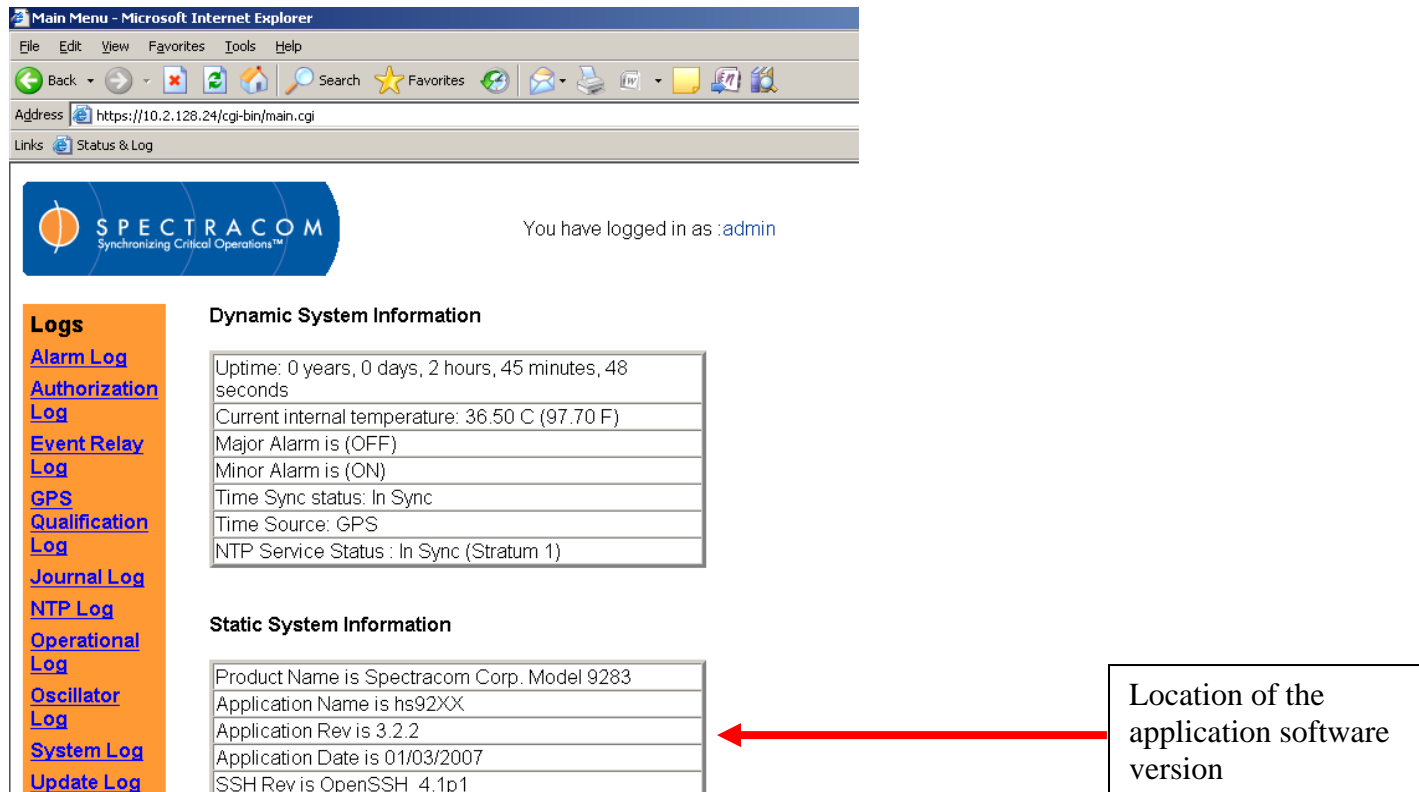
**(Version 3.3.0)**

- **Serial ports now retain port settings during power cycle**
  - Resolves an issue in which the rear panel serial port(s) could switch from the multicast mode back to the interrogation mode of operation, setting the Local System Clock values for these ports back to UTC time when the unit was power-cycled.
- **Fix for an issue caused by network settings being displayed on the front panel**  
(applicable only to the Model 9283 and the Model 9289 when Option 2: Front panel display is installed; not applicable to the Model 9288)
  - Resolves a potential issue that can occur when the network settings (IP address, net mask, and gateway values) are displayed on the front panel of the time server, causing varying symptoms such as loss of GPS or the unit being unable to open a web browser session.

Please contact Spectracom Technical Support at US +1.585.321.5800 for more information regarding any of these features or fixes. To request and obtain the software update, visit [www.spectracomcorp.com/upgrade](http://www.spectracomcorp.com/upgrade) and fill out the requested information on the form. The software update is accomplished using a supplied Spectracom Windows-based GUI utility (downloaded from this site or, if necessary, from a CD-ROM sent to you upon request) to place the new files into your NetClock/GPS or Ethernet Time Server. The installation instructions will walk you through the procedures necessary to install the new software. The form requests the model, serial number, and the current application software version of your device, as well as address information.

**NOTE:** This software and equipment are governed by United States Export Control. In order to obtain the software upgrade, you must acknowledge that you understand this software cannot be exported to certain foreign nationals or countries.

To determine the current application software version of your NetClock or Ethernet Time Server, log in to the unit's web browser user interface. Click on "Status and Logs" located on the bottom menu and then on "System Status" located on the left menu. Scroll down to the "Static System Information" box, which contains a line stating "Application Rev is." The number next to this is the current application software version. Refer to Figure 1.



**Figure 1: Application Software Revision Contained on the System Status Page**

Manual updates reflecting the software changes have been uploaded to the Support page of Spectracom's website.

Refer to <http://www.spectracomcorp.com/Support/ManualDownload/tabid/449/Default.aspx> to download a copy of the manual. Hard copies of the new manual may also be purchased from the Spectracom Sales department at US +1.585.321.5800.

Thank you for purchasing the Spectracom Time Server. Please let us know if you have any questions about this software update, the Premium Support Package benefits, or any other issues concerning your Spectracom equipment. Your Premium Support Package entitles you to emergency technical support 24 hours a day, seven days a week, at US +1.585.455.7411.

Sincerely,

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