System Release Notice
SyncServer® S600/S650
Release 2.2

Introduction

This document provides information about SyncServer S600/S650 release 2.2.5. The latest information regarding features, improvements, and known issues are described in this document.

Summary of Features

New General Features Added

- NTP configuration page now supports 25 entries
- Increased length of RADIUS and TACACS+ keys to 60 characters

Resolved Issues

- PTR11852: If using an IRIG signal that doesn't include the year and the user enters a year on the SyncServer web GUI, then the unit will now increment the year properly on the year roll-over from December 31 to January 1.
- KXX-1134: CLI help for "show gnss" displays correct information
- KXX-1142: The pull-downs for the announce, sync, and delay rates on the PTP configuration pages now contain the correct log numbers for positive values.
- KXX-1143: The RADIUS port setting is now saved to flash memory and will be properly restored after a reboot or power-up.
- KXX-1145: The GNSS time qualified event now uses the correct event ID and can be configured to generate email, SNMP trap, or to change the severity.
- KXX-1158: NTPd sysinfo and system peer now display the full IPv6 address in dashboard.
- PTR11876: Unit will no longer try to contact the Microsemi server if the check-for-upgrades box is not checked.
Security Improvements

SyncServer security hardening is an ongoing process due to the frequent publication of new Common Vulnerabilities and Exposures (CVEs), feedback from customers performing extensive security evaluations, and our own internal testing and evaluation.

While version 2.2 did not need to mitigate any new CVEs, it does incorporate further hardening based on feedback and requests from the testing performed by network security teams at major US corporations. It is prudent that we not list these security improvements in this notice, instead we encourage all SyncServer customers to be on Software Support so they can migrate to the latest and most secure version of software.

Known Issues

- **KXX-1201**: For the S650i, the unit will not allow downgrading the software from 2.2.5 to an earlier revision.
  
  *Workaround*: This issue will be corrected in the next release.

- **KXX-603**: If DHCP has been used to obtain an IP address for a LAN port, the SyncServer S6x0 will not attempt to obtain a new address from a new DHCP server until the DHCP lease expires, even if the old DHCP server is no longer reachable.

- **KXX-844**: IPv6 interfaces only allow configuration of the prefix value to 64 in DHCP mode.
  
  *Workaround*: None

- **KXX-976**: Event "First time normal-track since power up" is being created early at fast-track clock state instead of normal-track clock state. This is only an issue with when the event is generated and does not affect performance of the SyncServer.
  
  *Workaround*: Event "Enter/exit Time/Frequency Normal" could be monitored for the actual time of entering normal clock state.

- **KXX-1105**: Time error alarms ("timing quality > xxx" and "holdover time error threshold exceeded" may be cleared on entry to holdover recovery, but system output may still exceed the threshold.
  
  *Workaround*: timing threshold should be met when unit transitions to normal-lock state.

- **KXX-1106**: Squelch feature may not work correctly if feature configured to squelch when unit is already in the configured condition. For example, if configuring to "squelch if not locked" when unit is in holdover (not locked), then squelch feature may incorrectly un-squelch when the unit is in holdover recovery.
  
  *Workaround*: Configure squelch feature while the system is in normal-lock state.

- **KXX-1129**: System user interface will be slow when the unit is heavily loaded.
  
  *Workaround*: Be patient or reduce load. Priority is given to servicing time requests.
KXX-1138: When performing upgrades and downgrades of the software while the unit is under heavy load, there have been rare conditions where the unit hung.

Workaround: Perform upgrades or downgrades under light traffic (or no traffic). If not possible, a reboot of the system may be required.

KXX-1144: The phase offset value for PTP client will accept a larger integer than is supported.

Workaround: Only enter values from -500000000 ns to 500000000 ns.

KXX-1164: System will not support a remote syslog server using an IPv6 address.

Workaround: Use remote syslog server with an IPv4 address.

KXX-1170: Under some rare conditions, the GNSS icon can disappear from the Timing->Input Control page. This has only been seen after downgrading the firmware.

Workaround: If this condition occurs, perform a factory default and remove power for 10 minutes.

KXX-1180: The FPGA version is not displayed on the Help->About page for the ULPN module.

KXX-1181: A PDOP value of 99.99 is displayed for the "show gnss status" CLI command if the PDOP value can't be calculated. It should display "N/A".

Workaround: Treat a PDOP value of 99.99 as "N/A"

Notes

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLI Administrator</td>
<td>User Name: admin</td>
</tr>
<tr>
<td></td>
<td>Password: Microsemi</td>
</tr>
<tr>
<td>LAN1 IP Address</td>
<td>192.168.1.100</td>
</tr>
</tbody>
</table>

The LAN1 interface should not be configured with the same address as one of the other Ethernet ports. If this is done, then network access could be lost to the LAN1 management interface. Each port should be configured on a separate subnet.

Serial port settings on the DB9 interface are 115,200 baud, 8N1, Flow Control=None.

If using a gateway, then all IP interfaces should be configured with the proper gateway IP address and subnet mask. If a gateway address is programmed on LAN1, then the gateway/router must be present and reachable for the port to operate normally.
For SNMPv3 traps, both a user and a trapuser need to be configured identically, depending on the SNMP trap manager. In addition, the SNMP manager should use the specified user/trapuser to connect to the SyncServer S6x0. This will ensure that a SNMPv3 trap will be successfully received by the manager using the corresponding trapuser username.

If the browser is displaying a busy indicator, then please wait until the previous action is complete before starting another action. Depending on the browser used, the web page responsiveness will vary due to the use of the encryption cipher suite used in the S600/S650. Microsemi recommends using the Google Chrome browser.

Available Documentation for Setup and Configuration

- System Release Notice (this document, 098-00721-000)
- SyncServer S600/S650 User's Guide (098-00720-000 Rev. D1)
- SyncServer S600/S650 Quick Start Guide (098-00719-000 Rev. A)
- SNMP MIBs

This System Release Notice and the User’s Guide is provided in PDF format. The SNMP MIB is provided as an ASCII text file. You will need the version of Adobe Acrobat Reader that is appropriate for your Operating System to view and print these documents. If you don’t have Acrobat Reader already installed on your system, you can download it from Adobe’s Web site (http://www.adobe.com).

Where to Find Installation Procedures

Please refer to the SyncServer S600/S650 User’s Guide for instructions for installing and updating the software.

Contacting Technical Support

If you encounter any difficulty installing the update or operating the product, contact Microsemi Frequency and Time Division (FTD) Services and Support at:

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