GE
Grid Solutions

Reason S20 Industrial Managed Ethernet Switch

Firmware version 07A05 Release Notes

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Overview

GE regularly introduces firmware updates to address enhancements in different functional areas. This firmware release includes the following:

- Configuration file upload/download using SNMP/SFTP
- Firmware update using SNMP/SFTP
- Enable/disable extra interface protocols using SNMP
- Added PTP power profile IEEE C37.238/2017
- General improvements

Firmware Release Date: **December 2019**

Firmware Upgrade Process

Upgrading to firmware 07A05 can be done by downloading the upgrade file directly from our website:

http://www.gegridsolutions.com/Communications/catalog/S20.htm

Firmware versions 06A02 and newer can be upgraded directly to 07A05.

- If you have an S20 with firmware version 06A02, upgrade first to firmware 07A03 and then upgrade to 07A05.

- If you have an S20 with firmware version 06A01 or lower, upgrade first to firmware version 06A02, then to 07A03, and lastly upgrade to 07A05.

- If you have an S20 with firmware version 04A01.00 or lower, upgrade first to 05A00, secondly to 06A02, then to 07A03 and finally to 07A05.

When performing multiple firmware upgrades, please make sure to save the running configuration to the startup between each upgrade, as directed in the user manual.

HW Compatibility

Firmware 07A05 is compatible with hardware version B and C.

Firmware 07A05 is NOT compatible with hardware version A.

Please contact your local sales representative or Grid Automation Global Contact Center for any questions regarding this upgrade.

Release details

In the following release descriptions, a revision category letter is placed to the left of the description. Refer to the Appendix at the end of this document for a description of the categories displayed.

New SNMP operations and improvements

N **Configuration file upload/download using SNMP/SFTP**

Added support to upload/download configuration file using sftp protocol. This operation is available using SNMP.

N **Firmware update using SNMP/SFTP**

Added support to upload firmware file from server to S20 using sftp protocol and execute firmware update. This operation is available using SNMP.

N **Enable/disable extra interface protocols using SNMP**

User can now disable the following protocols using a SNMP operation:

- SSH
- Telnet
- HTTP
- HTTPS

E **SNMP operations using versions bellow the configured are rejected**

To improve cyber security now when the user configures S20 to use SNMP version 3, it rejects SNMP operations using version 2 or 1. Likewise when version 2 is configured then any operation using version 1 is rejected.

In contrast, when version 1 is configured S20 still accepts operations using version 2 and 3. Likewise when version 2 is configured then operations using version 3 are also still accepted.

G **Changed default SNMP configuration**

To improve cyber security SNMP protocol is now disabled in the default configuration.

General improvements

E **Added PTP power profile IEEE C37.238/2017**

The switch already had all the functionalities to be configured as a PTP power profile, but now an option is available for the user for easy configuration.

G **Physical Ethernet port description in syslog messages**

Changed virtual port descriptions (e.g. "Fast Ethernet 1/x" or "Gigabit Ethernet 1/x") to physical port descriptions (e.g. "Port 1/x"), where the generic "x" represents the respective port.

G **Switch identification in downloaded log file**

Included header in downloaded log file with the following data: Switch Name, Serial Number, Cortec, Application, Software Version, Base Software Version, Bootloader Version, MAC Address, IP Interface, System Time.

G **Changed default STP configuration**

Change default STP configuration from MSTP to RSTP, with GE-MSTP-REGION as default group name.

E **Improve NTP status monitoring through web interface and CLI**

The equipment now signalizes the current source of sync. Through web interface refer to "Monitor->system->NTP Status" and through CLI use the comment "show ntp status".

E **Fixed SNMP accepting operations with versions bellow the configured**

Now S20 only accepts operations with the SNMP version configured or higher (more secure), e.g., if version 2 is configured then operations with version 1 are rejected and operations with version 2 or 3 are accepted.

E **Fixed NTP server time**

S20 configured as NTP server with PTP adjusting system time was sending invalid timestamps (year 2065) with flag indicating a valid value. This occurred when the GPS master clock was reset (tested with GE Reason RT430).

Now the flag is set as valid only when PTP is in locked state.

E **Fixed static MAC Table Configuration being changed after equipment reboot**

When there was a static MAC table configuration where the user did not select any port member it would be removed after a power cycle.

E **Fixed PTP Priority 1 configuration affecting the value in PTP priority 0**

E **Fixed duplicated syslog messages being sent after equipment reboot**

E **Fixed SNMP "snmpEngineTime" behavior according to RFC3411**

E **Fixed veriPHY cable diagnostics feature stability**

Appendix

Change categories

This document uses the following categories to classify the changes.

Table 1: Revision Categories

Code	Category	Comments
N	New feature	A separate feature added to the product. Changes to existing features even if they significantly expand the functionality are not in this category
G	Change	A neutral change that does not bring any new value and is not correcting any known problem
E	Enhancement	Modification of an existing feature bringing extra value to the application
D	Changed, incomplete or false faceplate indications	Changes to, or problems with text messages, LEDs and user pushbuttons
R	Changed, incomplete or false product records	Changes to, or problems with product records (syslog, oscillography, demand, fault reports, etc.)
C	Protocols and communications	Changes to, or problems with protocols or communication features
B	Unexpected restart	Product restarts unexpectedly

For further assistance

For product support, contact our Grid Automation Global Contact Center:

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Redhill Business Park

Stafford

ST16 1WT

United Kingdom

Phone: +44 1785 250070

E-mail: ga.support@ge.com

Website: https://www.gegridsolutions.com/multilin/support.htm