

# Previous SWR2311P-10G

## Firmware version information

### V2.02.33

#### Vulnerability Response

- Addressed an SSH-related vulnerability (CVE-2023-48795).

#### Improvements

- IGMP Snooping Function Improvements
  - Added enhancements to prevent video interruption or block noise during switching.
    - When the querier receives a GSQ (Group Specific Query), it now forwards it to downstream receivers.
    - In IGMPv3 (SSM) environments, when a BLOCK\_OLD\_SOURCES message results in an empty source list and fast-leave is enabled, the device now immediately leaves the multicast group.
    - Changed the method for detecting a switch-connected port: from “System Capabilities” in LLDP Basic Management TLV to “Enabled Capabilities”.
- SD Card Mount Status Display
  - The show environment command now displays the Micro SD card's mount status.
- Web GUI Maintenance Menu Update
  - Removed the Web GUI page: [Administration] → [Maintenance] → [Command Execution].
- Categorized Output in the show environment
  - The show environment command now displays information grouped by category.
- L2MS Notification Enhancement
  - Enhanced L2MS to support power module-based notifications:
    - LAN map notifications & history
    - Email notifications
- Dashboard Traffic Graph Limit Update
  - Increased the upper limit of the traffic graph in the Web GUI dashboard from 10 Gbps to 100 Gbps.
- Device ID Display in the show environment
  - Added Device ID information to the show environment output.

- Automatic Dante Optimization via LLDP
  - Revised the settings applied by LLDP-based Dante optimization.
 

Note: This optimization applies only when all related settings are in the factory default state. Some factory default values changed in this revision; if prior revision settings were saved (e.g., password changes), Dante optimization may not apply. A cold start (factory reset) will restore applicability.
- Security Enhancements
  - The minimum password length for the username and enable password commands has been increased to 8 characters.
  - Users whose passwords are shorter than eight characters will experience:
    - Privileged users: forced to change the password on login.
    - Non-privileged users: login denied.
- Web GUI Login Screen Updates
  - Admin users with passwords shorter than eight characters will be prompted to change their password at login.
  - General users with passwords shorter than eight characters will be blocked from logging in.
  - Password change screens and [Administration] → [Access Control] → [User Settings] no longer allow passwords under eight characters.
- Restricted Commands in Command Execution Menu
  - Prohibited commands in Web GUI [Administration] → [Maintenance] → [Command Execution]: username, no username.
- UI and Help Documentation Improvements
  - Several UI enhancements and help document reviews were implemented.

## Bug Fixes

- VLAN Selection Issue in Tag VLAN Settings
  - Solved the problem where a VLAN configured as a trunk could be incorrectly selected as a native VLAN after returning from a confirmation screen.
- Time Zone Display Inconsistency
  - Corrected the inconsistent timezone labeling in [Administration] → [System Settings] → [Time Settings].
  - Added support for time zones: GMT-4:30, GMT-3:30, GMT+3:30, GMT+4:30, GMT+5:30, GMT+5:45, GMT+6:30, GMT+9:30.
- IGMP Report Checksum Error
  - Solved the problem where extra bytes at the end of IGMP reports caused invalid packet checksums.
- Missing Commands in ProAV Profile Setup

- Solved the problem where commands (spanning-tree bpdu-filter enable, l2ms filter enable) were not applied when configuring redundant Dante profiles.
- IGMPv3 (SSM) Decoder Stop Issue
  - Solved the problem where, in an IGMPv3 (SSM) environment with a querier present, stopping one decoder also stopped other decoders in the same multicast group.
- IPv6 Route Display After VLAN Deletion
  - Solved the problem where routes for deleted VLANs still appeared in show ipv6 route.
- VLAN State Dependency Issue
  - Solved the problem where the presence of a disabled VLAN prevented other VLANs from coming up.
- Traffic Graph Display Error
  - Solved the problem where the traffic widget on the dashboard displayed lower values than actual traffic.
- VLAN Interface Removal Reboot Issue
  - Solved the problem where, after certain operations on a VLAN interface followed by its deletion, a reboot could occur when performing:
    - SNMPv1 trap send
    - Accessing [Layer 3 Functions] → [Routing] in the Web GUI
- Solved several minor bugs

## V2.02.31

### Feature Additions

- Support for ProAV Quick Setup
  - Added and updated the following commands:  
 ip igmp snooping fast-leave auto-assignment  
 ip igmp snooping check ra enable/disable  
 ip igmp snooping check tos enable/disable  
 ip igmp snooping report-forward enable/disable  
 ipv6 mld snooping report-suppression  
 show ip igmp snooping interface  
 show ipv6 mld snooping interface  
 proav profile-type

### Specification Changes

- Default Configuration Updates
  - Added the following settings:

ip igmp snooping disable

ipv6 mld snooping disable

- Web GUI ProAV Menu Enhancements
  - Added a new ProAV profile screen.
  - Added a new multicast screen.
  - Updated the Web GUI's Dante optimization settings:
    - Reviewed commands applied during manual configuration.
    - When flow control is enabled, commands now disable this feature.
    - When LLDP is disabled, commands will now allow it.
  - Updated the Web GUI dashboard:
    - Added a bandwidth usage button to the interface gadget to display per-port usage.
  - Added new settings in Web GUI:
    - [Multicast] - [IGMP Snooping]
      - RA Check
      - ToS Check
      - Report Forwarding Feature
      - Automatic Fast Leave Assignment
    - [Multicast] - [MLD Snooping]
      - Report Suppression Feature
- Port Initial Layout Update
  - Changed the default port layout from Vertical to Horizontal.
  - Set the upper row as Dante Primary and the lower row as Secondary in a Horizontal layout.
  - Displays an error if the VLAN ID limit is exceeded:
    - "Profile cannot be set as the VLAN ID limit has been reached."
- Command Updates
  - Updated LAN/SFP port configurations:
    - Added, tlv-select basic-mgmt(LLDP).
    - Removed, spanning-tree enable/disable.
  - Removed the no spanning-tree command from the ProAV profile reset configurations.
- Initialization Specification Changes
  - Changed the "Reset to Default Settings" button in the Web GUI ProAV profile screen to restore factory settings.
  - Made the following adjustments:
    - System Initialization:
      - Replaced, "no lldp run" with "lldp run".

- Added, "lldp auto-setting enable".
  - VLAN Interface Initialization:
    - Added, "l2-mcast flood 239.192.128.250".
    - Added, "ip igmp snooping disable" and "ipv6 mld snooping disable".
  - LAN/SFP Port Initialization:
    - Replaced, "no lldp-agent" with "lldp-agent".
    - Added, "no tlv-select basic-mgmt".
- Multicast Default Reset Update
  - Changed the "Reset to Default Settings" action for VLAN interfaces to restore factory settings.

## Bug Fixes

- IGMP/MLD Snooping Setting Fix
  - Solved an issue where the following commands, when executed in "no" format, did not reflect changes:
    - ip igmp snooping version
    - ipv6 mld snooping version
- Dante Optimization Display Fix
  - Solved an issue where Dante optimization status was not displayed correctly in the RM-CR GUI.
- VLAN-ID Error Fix
  - Solved an error in the ProAV multicast settings screen when selecting profiles with VLAN IDs of 257 or higher.
- Toggle Button Height Alignment
  - Unified toggle button heights in the following ProAV settings screens:
    - Dante Primary/Secondary Connection Settings
    - CUSTOM Settings
- Menu Display Issue Fix
  - Solved an issue where menu items were not visible when the Web GUI language was set to English, and the browser window was resized.
- Error Message Update
  - Updated error messages in the Web GUI [ProAV Settings] - [Profile] when LAG member ports exist:
    - "Remove the ports that belong to a logical interface from the logical interface."
- Unused Legend Display Fix
  - Solved an issue where unused legends were displayed in the Web GUI ProAV

profile.

## V2.02.30

### New Functionality

- The sFlow function was added, and a page for its settings was added to the Web GUI management screen.
- The “Find this switch” function in the ADECIA security enhancement was added.
- The RMON function setting page was added to the Web GUI management screen.
- The “Find this switch” page was added to the Web GUI management screen.

### Improvements

- The loop detection function now works on logical interfaces.
- With the ADECIA security enhancement, the automatic device recognition function now works even when an IGMP querier does not exist.
- Revised the settings to apply “Dante optimization” by LLDP automatically.
- The LLDP function and basic management TLVs were enabled in the Web GUI's “Dante optimization” settings.
- The following wording in the Web GUI was changed:
  - from "Admin Password" and "Administrator Password" to "Privileged Password"
  - when CONFIG is saved
  - other wording has been unified.

### Fixed Bugs

- Fixed a bug in 802.1X authentication that could cause a reboot when receiving a large EAP fragment size RADIUS packet.
- Fixed a bug in the ADECIA security enhancement that caused communication to fail in rare cases when security settings were disabled.
- Fixed a bug in the MAC authentication function that communication might not be possible when the clear mac-address-table command is executed after successful authentication.
- Fixed a bug in the SNMP function that the correct value could not be obtained when acquiring the private MIB of the loop detection information.
- Fixed a bug in which some configuration screens in [Layer2 Functions]-[Spanning Tree] of the Web GUI's advanced settings were garbled when displayed in English.
- Fixed a bug in the following pages of the Web GUI management screen where the setting values were sometimes not reflected:
  - [SNMP]-[MIB]-[Management Information Settings].
  - [SNMP]-[Community]-[List of Communities]
  - [SNMP]-[SNMPv3 User]-[MIB View List]
  - [SNMP]-[SNMPv3 User]-[Group List]

- [SNMP]-[SNMPv3 User]-[User List]
- [SNMP]-[SNMP Trap]-[Trap Type to Send]
- [SNMP]-[SNMP Trap]-[List of Traps Destinations]
- [LLDP]-[System Settings]
- [LLDP]-[Interface settings]
- [Mail Notification]-[List of Registered Mail Servers]
- [Mail Notification]-[List of Mail Notifications Settings]
- [Terminal Monitoring]-[List of Monitored Terminals]
- Errors have been corrected with the English help display of the Web GUI.

## V2.02.29

### New Functionality

- Support for the following devices was added for L2MS and the LAN map screen of the Web GUI.
  - SWX2220-18NT
  - SWX2220-26NT
  - SWX2220P-18NT
  - SWX2220P-26NT
- Support for DHCP snooping functionality was added.  
A page for DHCP snooping settings was added to the [Layer 2 functions]-[DHCP snooping] page in the Detailed settings screen of the Web GUI.
- Functionality for routing jumbo frames was added.  
A command was added to set VLAN Interface MTU values.  
mtu  
Functionality for specifying MTU values was added in the [VLAN]-[Create VLAN] page of the Detailed settings screen of the Web GUI.
- A command was added to specify whether to forward ARP requests by unicasting or broadcasting when an ARP entry times out.  
arp-ageing-timeout request
- A command specifying how unknown multicasting frames are processed was added to the VLAN interface mode.  
I2-unknown-mcast  
Settings related to unknown multicast frames can now be specified for each VLAN in the [Multicast]-[Multicast basic settings] page in the Detailed settings screen of the Web GUI.
- In auto-configure via LLDP settings, a “tlv-select basic-mgmt” command is now automatically specified for ports that receive LLDP frames sent from specific Yamaha devices that support Dante.

- A [Power consumption information] gadget was added to the Dashboard screen of the Web GUI.
- In the [Maintenance]-[Summary data management] page of the Management screen of the Web GUI, summary data can now be exported without inserting an SD card.
- In the [Traffic control]-[QoS] page of the Web GUI Detailed settings screen, the [Web conference applications optimization] was added.

## Improvements

- When an ARP entry times out, an ARP request is sent to reset the ARP entry.
- A mac-address-table static command can no longer be specified for physical interfaces included in link aggregation.  
If link aggregation is specified for a physical interface with a mac-address-table static command specified, then the mac-address-table static setting is deleted.
- Certain additional multicast packets (IGMP and MLD) are now subject to the authentication trigger in the MAC authentication function.
- The port authentication function changed the error message that appears if a port authentication command is specified for a physical interface affiliated with a logical interface.
- The following global configuration mode commands were eliminated.  
l2-unknown-mcast forward<ipv4\_addr> <vlan\_ifname>  
no l2-unknown-mcast forward<ipv4\_addr> <vlan\_ifname>  
If the commands are specified by “startup-config”, they are converted to an alternative command during startup.  
Also, the following multicast frame transmission setting command was added to the VLAN interface mode.  
l2-mcast flood
- In IGMP and MLD snooping functionality, log data is no longer extended output whenever a query for a version different than specified in the unit is received.  
The following commands for IGMP snooping and MLD snooping functionality now display the number of queries received from a different version than specified in the unit.  
show ip igmp snooping interface  
show ipv6 mld snooping interface
- Execution speed was improved for the following commands.  
show inventory  
show ddm status  
show tech-support
- The format of Help information on the Dashboard screen of the Web GUI was changed.
- In the LAN map screen of the Web GUI, the OUI file used to identify the manufacturer of connected devices was updated.



- The following changes were made to the [Agent list] on the [Device list] page in the LAN map screen of the Web GUI.
  - An IP address column list was created on the far right for displaying IP addresses.
  - IP addresses were added to CSV files obtained using the [Save as CSV] button.
- The IP address of the L2MS manager is now displayed in the [Whole map] of the LAN map screen of the Web GUI.
- When optimal Dante settings are specified in the [Dante optimization]-[Manual settings] page of the Management screen of the Web GUI, the following commands are set for the designated VLAN interfaces.
  - I2-mcast flood 224.0.1.129
  - I2-mcast flood 224.0.1.130
  - I2-mcast flood 224.0.1.131
  - I2-mcast flood 224.0.1.132
  - I2-mcast flood 239.254.3.3
  - ip igmp snooping report-suppression disable

## Fixed Bugs

- A bug was fixed that prevented sending communications to terminals at interfaces with the port authentication function enabled when the terminals were relocated without linking down due to not updating the ARP entry.
- A bug was fixed in port authentication functionality that caused authentication to fail when conflicting authentication requests were received from multiple supplicants.
- A bug in port authentication functionality was fixed that caused the port authentication function not to function if using a UDP port number which differs to that used in the RADIUS server.
- A bug was fixed that caused automatic SD card booting not to function.
- A bug was fixed in MLD snooping that caused streams to not necessarily continue to be forwarded without properly deleting registered multicast group address information.
- A bug was fixed that caused overall system settings for processing unknown multicast frames not to be appropriately applied.
- A bug was fixed that displayed an inappropriate error message when the “no ip address” command was executed.
- A MLD snooping bug was fixed that caused an error not to be displayed when an inappropriate interface was specified among multicast router connections.
- A bug was fixed that, in rare cases, caused startup history events not to be appropriately saved when a “reload” command was executed.
- A bug that outputted an error log event was fixed when the loop detection function (for the overall system) was disabled while a loop was still detected.

- A bug that displayed information for no longer necessary VLAN interfaces was fixed when a loop was detected (shutdown) at the physical port with the highest port number, and the “show errdisable” command was executed.
- English language errors were corrected in the following gadgets on the Dashboard screen of the Web GUI.
  - [Traffic information] gadget
  - [Resource information] gadget (graph)
- A bug was fixed that caused English messages to not display correctly in the "History" area of the LAN map screen of the Web GUI after the fan operation was restored.
- A bug that caused the [Print preview] screen layout to not display correctly in the [Whole map] of the LAN map was fixed.
- A bug was fixed that sometimes displayed detected agents as eliminated terminals in the [Terminal list] of the [Device list] in the [LAN map].
- A bug was fixed that sometimes displayed clock values 1 second ahead of the actual value in acquisition date/time information in the “Connected Devices” view when the device management function was enabled in the LAN map.
- A bug was fixed that resulted in not displaying warning information about conflicts between multiple L2MS managers in the warning list on the Help page of the Dashboard screen of the Web GUI.
- A bug was fixed that caused messages about fan operation being restored not to be displayed in the notification history list on the Help page of the LAN map screen of the Web GUI.
- A bug was fixed that showed both yen and backslash symbols on the Help page of the Web GUI.
- A bug was fixed that caused the button name indicated in [Backup settings for summary data]-[Check entered content] explanatory text in the [Summary data management] page of the Web GUI Help page to not match the actual button name.
- Some other Web GUI display bugs were fixed.

## V2.02.27

### New Functionality

- The following command can now forward multicast packets without discarding part of the multicast communication even if “l2-unknown-mcast discard” is specified.  
l2-unknown-mcast forward
- Support for “summertime” time zones was added.  
User settings for the summertime period and offset hours were added to the “clock summertime” command.

On the Web GUI [Management]->[Interface settings] page, a [Time zone setting] page was added for setting the time zone and summer time settings.

- Security measures were strengthened for accessing the unit.
- A new cable diagnostics function was added.  
In addition, a cable diagnostics page was added to the [Management]->[Maintenance] menu of the Web GUI.
- Support for the automatic SD card booting function was enabled.
- A command for changing the authentication order was added in case the same authentication method is also used for the port authentication function.
  - auth order
- Commands that can be registered in the FDB as static entries were added to the MAC authentication function.
  - auth-mac static
- IGMP snooping features were expanded to support the following:
  - A command for enabling/disabling the report suppression function was added.
  - ip igmp snooping report-suppression
  - A command for enabling/disabling the multicast router port data forwarding suppression function was added.
  - ip igmp snooping mrouter-port data-suppressionThe following settings were added to the [Multicast]->[IGMP snooping]->[IGMP snooping settings] field in the Detailed settings screen of the Web GUI:
  - Report Suppression Function
  - Multicast Router Port Data Forwarding Suppression Function
- SYSLOG facility values became changeable.
  - syslog facilityIn addition, the ability to change/display SYSLOG facility value settings was added in the [Management]->[Maintenance]->[SYSLOG management] field of the Web GUI.
- Commands were added to restrict access to the SNMP server.
  - snmp-server accessIn addition, the [Access via SNMP] settings screen was added to the [Management]->[Access management]->[Various server settings] field of the Web GUI.
- In auto-configure via LLDP settings, IEEE802.3 TLVs can now be added within LLDP frames transmitted by switches.
  - tlv-select ieee-8023-org-specific
- Private MIB support was added for loop detection.
- Support for the following was added to the Web GUI:

- A [Multicast basic settings] page was added to the Detailed settings.
- The following settings were enabled in the [Traffic control]->[QoS] field in the Detailed settings:
  - [CoS]->[Transmit queue mapping table] settings
  - [DSCP]->[Transmit queue mapping table] settings
- The following settings are now displayed in the [Management]->[Dante optimization] field:
  - Unknown multicast frame settings
  - QoS settings

## Improvements

- The maximum number of characters in shared passwords used for port authentication and RADIUS server functionality was increased from 64 to 128.  
 RADIUS server shared password setting (radius-server key)  
 RADIUS server host setting (radius-server host)  
 RADIUS client setting (NAS)
- The following changes were made to the default config settings:  
 LLDP functionality is enabled  
 Auto-configure via LLDP functionality is enabled.
- Improvements were made to multicast address registering and deleting processes for IGMP/MLD snooping.
- The following terminology was changed for Yamaha network products:

Function	Before	After
L2MS	Master	Manager
	Slave	Agent
Stack	Master	Main
	Slave	Member
URL Filter	Black-list	Reject-list
	White-list	Pass-list
Backup route	Master	Main
SNMP (Private MIB)	ysl2msFindSlave	ysl2msFindAgent

- The following ARP changes were made:
  - ARP entries are no longer generated when ARP requests are received.

- ARP replies are now received for only a fixed period after an ARP request is sent by that unit.
- Support for the IGMP snooping fast-leave function was also included in IGMPv3.
- Improvements were made to the time required by the logical interface to link up for LACP link aggregation.
- The use of characters " ' ` and \ were disallowed in URLs.
- A "tlv-select ieee-8023-org-specific" command is now specified for ports that receive LLDP frames sent from specific Yamaha devices that support Dante.
- In the Web GUI login screen, a scroll bar is displayed if the browser display is small.
- The accordion menus for Detailed settings and Management screens of the Web GUI were reorganized.
- The "Change the settings related to the community accordingly." or "Delete from related settings as well." checkbox can be selected when changing/deleting community settings in the Web GUI [Management]->[SNMP]->[Community] field. These settings specify which clients can access the SNMP servers that determine whether the community is now also changed/deleted accordingly.
- The explanatory text was changed for the JavaScript and Cookie settings in the Web GUI general help page.

## Fixed Bugs

- A bug was fixed that caused the system sometimes to reboot if the CPU usage ratio increased after receiving a portion of the IGMP packet.
- A bug was fixed that sometimes returned unwanted IGMP reports if an IGMP report was received from a multicast router port.
- A bug was fixed that sometimes stopped multicast streams from being forwarded correctly if a LAN/SFP port associated with a logical interface is linked up/down with IGMP/MLD snooping.
- A bug was fixed that sometimes caused unwanted log events to be output if an IGMP snooping group registration was deleted.
- A bug that sometimes prevented authentication when a guest VLAN was enabled during MAC authentication was fixed.
- A bug was fixed that resulted in rebooting if an invalid LLDP frame was received.
- The possibility of rebooting was eliminated after specifying the "send from" command for the mail notification function.
- A bug that prevented using the following commands to make revisions via an SSH connection was corrected.
  - firmware-update execute
  - firmware-update sd execute

- A bug was fixed that enabled a user to log in to the console without a password if the “username” command was used to change only the privilege settings for an existing user without entering the password.
- A bug was fixed that resulted in not reflecting associated LAN/SFP ports in settings when there are port authentication settings for a logical interface, and VLAN access to the logical interface was changed.
- A bug was fixed that sometimes prevented transmitting packets when the half-duplex mode was used for port communication.
- A bug that sometimes resulted in not transmitting streams requiring a multicast router port when “l2-unknown-mcast discard” is specified was fixed.
- A bug that sometimes did not reflect VLAN IP address settings in the sender IP address settings for sending IGMPv2 report messages during IGMP snooping was fixed.
- A bug was fixed that sometimes cleared authentication information before the FDB aging time was complete during MAC authentication.
- A bug was fixed that sometimes caused some functionality to become unstable after the current time setting was changed, such as after the NTP time setting was corrected.
- A bug that prevented URL encoding values entering HTTP proxy server settings used for updating firmware was fixed.
- A format error in the “no switchport multiple-vlan group” command was corrected.
- A bug was fixed that prevented displaying LED indicators appropriately at physical ports participating in logical ports from link aggregation when port LED indicators were displayed in the VLAN mode.
- A bug that sometimes prevented properly updating information in the “Device details and settings” view in the LAN map screen of the Web GUI was fixed.
- A bug was fixed that prevented displaying errors correctly after trying to specify dynamic VLAN settings for trunk ports using the [Interface settings]->[Port authentication]->[Port authentication settings] in the Detailed settings screen of the Web GUI.
- A bug was fixed that displayed an error if email template settings were specified in the [Management]->[Mail notification] field of the Web GUI.
- A bug was fixed that resulted in an error if a VLAN had frame transmission disabled when optimization settings were executed in [Management]->[Dante optimization] of the Web GUI settings.
- Inconsistencies in how some information was displayed in the Web GUI help information were corrected.

## **V2.02.22**

### **New Functions**

- Supports the following devices by L2MS.

- SWX3220-16MT
  - SWX2320-16MT
- Supports alias IP addresses.  
Carefully read the external specifications before using this function.  
To use this function, the following updates have been made in [VLAN] -> [Create VLAN] of the Detailed settings screen.
  - Up to four secondary IPv4 addresses can be set to one VLAN.
  - Up to five global IPv6 addresses can be set to one VLAN.
  - A label can be set to the IPv4 addresses.
  - A host name can be set to the IPv4 addresses obtained by DHCP.
- Supports the schedule function.  
Carefully read the external specifications before using this function.
- Enables using LACP link aggregation with stack configuration.
- Supports web consoles.
- Added the following pages in the Detailed settings screen.
  - Port Authentication
  - Spanning Tree
- Added the Backup / Restoration pages to the Management screen of the Web GUI.
- Enables the interface gadgets to show port block status caused by the spanning tree protocol on the Dashboard screen of the Web GUI. Please note that only the corresponding CIST ports is shown.

## Enhancements

- Addressed the following vulnerability in OpenSSL.
  - CVE-2020-1971(JPCERT/CC JVN#91053554)
- Enables transferring the L2MS frames when the L2MS feature is disabled.
- Enables continually supplying power to a LAN port to which the shutdown command is set.
- Enables the SYSLOG functions to output the following INFO level logs when more than one L2MS master is detected or the duplicate is resolved.  
[L2MS]:inf: L2MS master duplication detected. ( ADDR, portX.Y )  
[L2MS]:inf: L2MS master duplication resolved. ( ADDR, portX.Y )
- The following will be processed when the fan stops or an error occurs to the temperature sensor.
  - Sends an SNMP trap.
  - Shows the “The fan speed has increased.” message on the Dashboard screen of the Web GUI.
  - Shows the “The fan speed of the Yamaha switch has increased.” message on the LAN map screen of the Web GUI.

- The open-source software license is now shown on the Web GUI help.

## Fixed Bugs

- Fixed a problem in which, in rare cases, an invalid SYSLOG message would be output or any of the servers could not be accessed at the startup after setting the access permission for servers such as HTTP and TELNET.
- Fixed a problem in which the link became unstable when connecting an SFP/SFP+ module to the SFP/SFP+ ports.
- Fixed a problem in which the switch would not be able to communicate through the native VLAN when launching the switch using a config where either of the following commands was set to the interface.
  - `switchport trunk allowed vlan add VLAN-ID`
  - `switchport trunk native vlan VLAN-ID`
- Fixed a problem in which the POWER indicator may not light in orange when an abnormal temperature was detected.
- Fixed a problem in which a port that satisfied the following conditions could be changed to a trunk port.
  - The port authorization setting is enabled and it is not in the multi-supplciant mode.
  - A guest VLAN is set.
- Fixed a problem in which, when multiple VLANs were set to the logical interface of link aggregation, starting the switch would not reflect the settings to the operations.
- Fixed a problem in which authentication may fail if the IP address was set and there was a linked-down VLAN interface in the RADIUS server function.
- Fixed a problem in which an IP address would not appear on the Web GUI if the static IPv4 address was set to a link local address (169.254.0.0/16).
- Fixed a problem in which the performance observation function would not show the past observation information (Day and Month) on the Dashboard screen of the Web GUI when the year changed.
- Fixed a problem in which a black border would appear around a port by clicking the port on the LAN map screen of the Web GUI in Chrome or Edge (Chromium) browser.
- Fixed a problem in which pressing the "port power supply" button would not activate the power supply to a switch port on the LAN map screen of the Web GUI.
- Fixed the following problems found in the tag VLAN page on the LAN map screen of the Web GUI.
  - The port number of an L2MS slave that does not support the stack function was incorrect.
  - An L2MS slave combo port did not appear.
  - The screen display corrupted by updating the display due to a topology change while selecting a port to join a VLAN group.



- Uplink/downlink arrows for a combo port did not appear.
- Fixed a problem in which showing the list map on the LAN map screen of the Web GUI with a system that included a switch from other manufacturers would corrupt the tree display.
- Fixed a problem in which a VLAN with the same existing settings as the native VAN would not be set as an access VLAN if the operation mode was switched from Trunk to Access on [VLAN] -> [Tag VLAN] in the Detailed settings screen of the Web GUI.
- Fixed a problem in which the Ingress filter setting of a trunk port would not be shown properly on [Tag VLAN] in the Detailed settings screen of the Web GUI.
- Fixed a problem in which the setting items for the IGMP snooping would be shown in an incorrect order on [IGMP snooping] in the Detailed settings screen of the Web GUI.
- Fixed a problem in which the required input items became invalidated if "Select an authentication function" was changed on [RADIUS server] -> [User management] in the Detailed settings screen of the Web GUI.
- Fixed an incorrect explanation in the input content confirmation screen for the following Detailed settings' pages of the Web GUI.
  - [RADIUS server] -> [Server settings]
  - [RADIUS server] -> [User management]
  - [RADIUS server] -> [Managing certificates]
- Fixed a problem in which a warning would appear even if a "strongest" password was set to [Access management] in the Management screen of the Web GUI.
- Fixed a problem in which receiving a certain L2MS message would result in a memory leak when the switch worked as an L2MS slave.
- Fixed some other minor problems.

## V2.02.17

### New Functions

- The following devices are supported by L2MS.
  - SWR2310-10G/18GT/28GT/52GT
- Supports RADIUS servers.
- Supports SMTPS and SMTP authentication by the email notification function.
- Supports inter-VLAN routing.

### Enhancements

- Expanded the number of slaves managed by L2MS from 64 to 128.
- Reduced the CPU load when saving logs.
 

Since the internal operation of log saving has changed, the logs in the RAM area of the main unit may not be in chronological order when the firmware is revised down.
- Supports the following for the configuration file control by TFTP.

- Enables automatic restart when the startup config is updated.
- Enables import and export of all settings of startup config. The remote paths are as follows.
  - startup-config #0 All settings : config0-all
  - startup-config #1 All settings : config1-all
  - startup-config #2 All settings : config2-all
  - startup-config #3 All settings : config3-all
  - startup-config #4 All settings : config4-all
- The remote path for all the settings of Startup Config in the SD card is as follows.
  - startup-config #SD config.txt : configsd
  - startup-config #SD All settings : configsd-all
- Enables automatic adjustment of the vertical axis of the traffic information graph between 10 kbps and 10 Gbps on the dashboard of the Web GUI.
- Enables applying of the access list to the OUT direction of the VLAN interface in [Access List] in the detailed settings of Web GUI.
- Enables setting the tagged VLAN of the logical interface in [VLAN] of the detailed settings of Web GUI.
- Made the following changes in [Maintenance] -> [CONFIG management] in [Management] of Web GUI.
  - Supports import and export of all settings.
  - Enabled selection of the config surface when importing or exporting.
  - Changed the file name when exporting the config of the L2MS slave device from "slave-config" to "l2ms-slave-config."
  - Error checking has been enhanced for importing and exporting configs.

## Fixed Bugs

- Fixed a problem that a memory leak would occur if the L2MS function was disabled in the state of LAN map warning detected during operating as an L2MS master.
- Fixed a problem in which restart was executed when a large number of SNMP packets were received.
- Fixed a problem in which the ARP table was not updated in the Spanning Tree when a topology change had occurred and communication could have been temporarily disabled, depending on the configuration.
- Fixed a problem in which, when in Spanning Tree, the device may end abnormally if the shutdown by BPDU guard and the recovery by auto recovery have been repeated.
- Fixed a problem in which the automatic recovery setting of BPDU guard was invalid after rebooting in the spanning tree error detection function.

- Fixed a problem in which the IGMP/MLD snooping settings remained in the running config even if the VLAN was deleted.
- Fixed a problem in which entries of ARP table or IPv6 Neighbor table may have been illegally overwritten by the following operations when multiple static ARPs or static IPv6 Neighbors were registered to one VLAN.
- Fixed a problem in which the running config would not be applied correctly even if it was set by TFTP.
- Fixed a problem in which unnecessary error logs would be output when DHCP Offer was received from multiple DHCP servers.
- Fixed a problem in which packets with different port numbers would also meet the conditions even if a policy map including a port number specification was applied to an interface in QoS.
- Fixed some other minor problems.

## V2.02.14

### Vulnerability Response

- Addressed the following vulnerability issues:
  - [CVE-2019-11477\(JVNVU#93800789\)](#)
  - [CVE-2019-11478\(JVNVU#93800789\)](#)
  - [CVE-2019-11479\(JVNVU#93800789\)](#)

### New Functions

- When a switch works as the querier while the IGMP snooping function and spanning tree are enabled, if a route change occurs due to cable disconnection, etc., a query will be sent immediately regardless of the query interval setting. This will resume the Dante multicast flow transmission shortly.

### Enhancements

- The frame buffer size allocated per port has been increased to make it difficult for packets to be dropped when burst traffic occurs.

### Fixed bugs

- Fixed a problem in which some Dante devices were not displayed in Yamaha LAN Monitor.
- Fixed some other minor problems

## V2.02.13

### Vulnerability Response

- Addressed the following SSL v3 vulnerability issues:
  - [CVE-2014-3566](#)

## New Functions

- Now supports multiple VLAN function.
- Now supports MLD Snooping function.
- Added a command to control whether EAP frames can be forwarded or not.
- The following pages have been added to the WebGUI detailed settings.
  - “Creating an access list”
  - “Apply access list”

## Enhancements

- The following changes were made in port authentication.
  - Supports dynamic VLAN in multi-supPLICANT mode.
  - Supports logical interface (Static and LACP).
  - Supports trunk port.
  - Added the status of the custom file for Web authentication to the execution result of the “show auth status” command.
- Policy map can be applied to link aggregation logical interface by QoS.
- The following settings of QoS can be changed with link aggregation logical interfaces.
  - Trust mode
  - Default CoS value
  - Port priority
- Access list can be applied to received frames of link aggregation logical interfaces by the ACL function.
- The interface specification option of the “clear ip igmp snooping group” command has been removed.
- The following changes were made in the WebGUI detailed settings.
  - Enabled to configure link aggregation logical interfaces in “QoS.”
  - When assigning LAN / SFP ports to the link aggregation logical interface in "Link aggregation," the QoS settings of each port are automatically unified.

## Fixed bugs

- Fixed a problem in which if you continue to access the WebGUI via HTTPS, you would not be able to log in to the WebGUI.
- Fixed a problem in which an unnecessary error log is output under the following conditions:
  - When disabling spanning tree on a port basis
  - When the VLAN interface to which the logical interface belongs is linked up or down
  - When creating or deleting a logical interface
  - When the multicast receiver end reception with the IGMP Snooping function

- Fixed a problem when IGMP Snooping related commands are configured in the IGMP Snooping function, an error may occur when executing the “ip igmp snooping disable” command.
- Fixed a problem when IGMP Snooping is disabled in the IGMP Snooping function, IGMP packets are not forwarded.
- Fixed a problem in which in the IGMP Snooping function, when there are multiple receiving terminals for one multicast, the multicast is not flooded even if all terminals have finished receiving.
- Fixed a problem where packets were not correctly prioritized by QoS.
- Fixed a problem in which the Trust Mode setting of the interface to which the policy map is applied may not be applied when it is restarted.
- Fixed a problem in which IGMP frames loop even if loop detection is enabled.
- Fixed a problem in which the right indicator of SFP port does not go out during loop detection.
- Fixed a problem in which an authentication screen might not be displayed by Web authentication.
- Fixed a problem that caused packet drops in communication between ports with different communication speeds.
- Fixed a problem in which an error was displayed and saving failed when running CONFIG save from the LAN map of the L2MS master while operating as an L2MS slave.
- Fixed the following problems in the WebGUI dashboard:
  - If you disabled PoE power supply while the power supply was stopped due to a temperature abnormality, a warning continued to be displayed even if the temperature abnormality disappears
  - "Port blocked" was displayed when shutting down a port with loop detection
- Fixed the following problems in the WebGUI detailed settings:
  - In the tag VLAN screen, the combo port on the SFP side that was the uplink cannot be set as a trunk port
  - The error message was not displayed when selecting combo port with uplink in tag VLAN screen
- Fixed a problem where the PoE indicator status did not stop powering when powering down due to a fan error.
- Fixed a problem that the indicator does not return even if the error is reset by pressing and holding the "MODE" button when the loop occurs outside and the port is shut down by the loop detection function.
- Fixed some other minor problems.

## V2.02.11

### Enhancements

- The initial setting value of the "startup-config select" command has been changed to "sd". If the micro SD card contains a configuration file, it will start up using the configuration file of the micro SD card.
- The following changes were made to the Dante optimization setting function.
  - The VLAN interface to be automatically optimized by LLDP has been changed from the fixed VLAN 1 to the VLAN of the port that received the LLDP packet.
  - Changed IGMP snooping version to always work with "3".
- The contents displayed by the "show interface brief" command have been optimized.

### Fixed bugs

- Fixed a problem in which when the VTY port in use was invalidated, the corresponding console terminal would not terminate.
- Fixed a problem in which if you connect the VXL1 Series P model to the SWR2311P-10G in a Dante network with SWP1 and SWR2311P-10G mixed together, multiple Dante devices may become Clock Master or sound drop-outs may occur.
- Fixed some other minor problems.

## V2.02.09

### New Features

- Added the command for the internal information of the SWR2311P-10G to be copied to the micro SD card (backup system).
- Added the command for the internal information of the SWR2311P-10G to be restored from the micro SD card (restore system).
- Added the command which enables or disables the SD card boot function of the firmware (boot prioritize sd).
- Added the command which shows the status of TFTP server (show tftp-server).
- Added the command which sets log-in timeout time for HTTP server (http-server login-timeout).
- Added a mail sending test function to [Email notification] of the detailed Web GUI settings

### Enhancement

- The ACL function can filter IPv4 packets with TCP flag (ACK / FIN / PSH / RST / SYN / URG).
- In Voice VLAN, VLAN and QoS can be set for IP phones using LLDP.
- The SFP light reception level is displayed in the [System information] gadget on the Web GUI dashboard.

- The maintenance VLAN is displayed as an accessible interface in [Access management] -> [Various server settings] of Web GUI management.
- Improved handling of vulnerability concerning VLAN name in Web GUI.

## Fixed bugs

- Fixed a problem in the spanning tree, in which communication of the access port may have been interrupted when using the MST instance.
- Fixed a problem in the spanning tree, in which information on the ARP received on the port in the blocked state was registered in the ARP table.
- Fixed a problem in IGMP snooping, in which if you changed the setting while the VLAN is linking down, it may not have been reflected in the operation.
- Fixed a problem in IGMP snooping that the setting might not be reflected in the query's IP address or QQIC value.
- Fixed a problem that IGMP snooping might not have reflected the setting value in the Web GUI.
- Fixed a problem in which an unnecessary error log might have been recorded at startup.
- Fixed the following problems in the [Dashboard] of the Web GUI.
  - Warning icon would not appear in interface information gadget when detecting light reception level error on SFP port
  - If you separate the SYSLOG gadget, only 10 items would be displayed even if you changed the display count
- Fixed the following problems in the [Detailed settings] of the Web GUI.
  - When setting new settings duplicating existing settings on the setting page of [Routing], notice that overwriting the setting is not displayed as a caution text
  - Characters other than alphanumeric symbols can be set as explanation of the interface on the following pages  
[Interface settings] -> [Physical interface settings]  
[Link Aggregation] -> [Logical interface settings]
- Fixed the following problems in the [Management] of the Web GUI.
  - When setting the current date and time from [Unit settings], an error would be output even if the setting was successful
- Fixed some other minor problems.

## Known issues

- If you connect the VXL1 Series P model to the SWR2311P-10G in a Dante network with SWP1 and SWR2311P-10G mixed together, multiple Dante devices may become Clock Master or sound drop-out may occur.  
In this case, before connecting VXL1, set [Automatic settings using LLDP] in [Management]

-> [Dante optimization settings] of SWR2311P-10G Web GUI to be invalid, and set Dante optimizing.