Previous SWR2311P-10G Firmware version information

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 summer-time" 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.

- o ip igmp snooping mrouter-port data-suppression

    The following settings were added to the [Multicast]->[IGMP snooping]->[IGMP snooping settings] field in the Detailed settings screen of the Web GUI:
  - o Report Suppression Function
  - o Multicast Router Port Data Forwarding Suppression Function
- SYSLOG facility values became changeable.
  - o syslog facility

    In 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.
  - o snmp-server access

    In 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.
  - o tlv-select ieee-8023-org-specific
- Private MIB support was added for loop detection.
- Support for the following was added to the Web GUI:
  - o A [Multicast basic settings] page was added to the Detailed settings.
  - o The following settings were enabled in the [Traffic control]->[QoS] field in the Detailed settings:
  - o [CoS]->[Transmit queue mapping table] settings
  - o [DSCP]->[Transmit queue mapping table] settings
  - o The following settings are now displayed in the [Management]->[Dante optimization] field:
  - o Unknown multicast frame settings
  - o 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.

- - - o SWX3220-16MT
    - o 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.
    - o Up to four secondary IPv4 addresses can be set to one VLAN.
    - o Up to five global IPv6 addresses can be set to one VLAN.
    - o A label can be set to the IPv4 addresses.
    - o 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.

    - o Port Authentication
    - o 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.
    - o CVE-2020-1971(JPCERT/CC JVNVU#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.
    - o Sends an SNMP trap.
    - o 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-supplicant 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.

- o The port number of an L2MS slave that does not support the stack function was incorrect.
- o An L2MS slave combo port did not appear.
- o The screen display corrupted by updating the display due to a topology change while selecting a port to join a VLAN group.
- o 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.
  - o [RADIUS server] -> [Server settings]
  - o [RADIUS server] -> [User management]
  - o [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.
  - o 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.

- o 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.
    - o Trust mode
    - o Default CoS value
    - o 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.
    - o Enabled to configure link aggregation logical interfaces in "QoS."
    - o 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:
    - o When disabling spanning tree on a port basis
    - o When the VLAN interface to which the logical interface belongs is linked up or down
    - o When creating or deleting a logical interface
    - o 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.

o 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.

o 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.

    o Warning icon would not appear in interface information gadget when detecting light reception level error on SFP port

    o 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.

    o 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

    o 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.

o   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.