# Previous SWP2 Firmware version information

## V 2.03.21

### New Functionality

- The sFlow function was added, and a page for its setting 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:
  - o [SNMP]-[MIB]-[Management Information Settings].
  - o [SNMP]-[Community]-[List of Communities]
  - o [SNMP]-[SNMPv3 User]-[MIB View List]
  - o [SNMP]-[SNMPv3 User]-[Group List]
  - o [SNMP]-[SNMPv3 User]-[User List]
  - o [SNMP]-[SNMP Trap]-[Trap Type to Send]
  - o [SNMP]-[SNMP Trap]-[List of Traps Destinations]
  - o [LLDP]-[System Settings]
  - o [LLDP]-[Interface settings]
  - o [Mail Notification]-[List of Registered Mail Servers]
  - o [Mail Notification]-[List of Mail Notifications Settings]
  - o [Terminal Monitoring]-[List of Monitored Terminals]
- Errors have been corrected with the English help display of the Web GUI.

# V 2.03.20

## New Functionality

- 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.
  l2-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 [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.
- 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.
  l2-mcast flood 224.0.1.129
  l2-mcast flood 224.0.1.130
  l2-mcast flood 224.0.1.131
  l2-mcast flood 224.0.1.132
  l2-mcast flood 239.254.3.3
  ip igmp snooping report-suppression disable
- A [Maintenance]-[Summary data management] page was added to the [Management] screen of the Web GUI.

## 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 in port authentication functionality was fixed that caused authentication information not to be synchronized with stack members after a stack reconfiguration.
- 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. This bug occurred 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 showed both yen and backslash symbols on the Help page of the Web GUI.
- Some other Web GUI display bugs were fixed.

# V2.03.18

## New Functionality

- Login security measures were strengthened.
- A new cable diagnostics function was added.
  In addition, a cable diagnostics page was added to the [Management] -> [Maintenance] menu of the Web GUI.
- 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-suppression
    The 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.

- 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.
- 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 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 |

| Function | Before | After |
| --- | --- | --- |
|  | White-list | Pass-list |
| Backup route | Master | Main |
| SNMP (Private MIB) | ysl2msFindSlave | ysl2msFindAgent |

- A bug that sometimes prevented authentication when a guest VLAN was enabled during MAC authentication was fixed.
- 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.
- 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 sometimes caused unwanted log events to be output if an IGMP snooping group registration was deleted.
- 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 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 from entering HTTP proxy server settings 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 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 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.

# V2.03.13

## New Functions

- 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.
- Supports web consoles.
- Added the following pages in the Detailed settings screen.
    - Port Authentication
    - Spanning Tree
- 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.

## Improvements

- Addressed the following vulnerability in OpenSSL.
    - CVE-2020-1971(JPCERT/CC JVNVU#91053554)
- Enables transferring the L2MS frames when the L2MS feature is disabled.
- 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 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 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 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.

# V2.03.09

## New Functions

- Supports RADIUS servers.
- Supports SMTPS and SMTP authentication by the email notification function.

## Enhancements

- 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.
    o Enables automatic restart when the startup config is updated.
    o Enables import and export of all settings of startup config. The remote paths are as follows.
        - For USER mode: config0-all

- For DANTE mode: config1-all (export only)
- 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.
  - Prevented automatic restart under the following conditions.
    - When the device OS hangs up
    - When the system cannot access some of the hardware inside the system

## Fixed Bugs

- 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.

# V2.03.06

## Vulnerability Responses

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

- 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"
- 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 contents displayed by the "show interface brief" command have been optimized.
- 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.
- VLAN PRESET NORMAL disabled port 11 and 12 link aggregation and enabled spanning tree instead.
- 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 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 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 the following problems in the WebGUI dashboard:
    - "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 in which when the VTY port in use was invalidated, the corresponding console terminal would not terminate.
- Fixed a problem in which some Dante devices were not displayed in Yamaha LAN Monitor.
- Fixed some other minor problems.