



SWX Configuration Tool

Configuration software for Yamaha SWX Series

User's Manual

Please carefully read this manual before use to ensure appropriate installation and configuration.

Please ensure to follow all the warnings and precautions provided in this manual in thereby ensuring appropriate and safe use.

Please retain this manual in a safe place for future reference.

Introduction

SWX Configuration Tool is the software allowing direct change and check of the settings and status of Yamaha Smart L2 Switch “SWX2200” Series via PCs.

Content

- This document explains how to install and use SWX Configuration Tool.
- This document is prepared for users who understand the Operating System (Windows) and the basic of network communication.

Expressions in this document

Abbreviations

The following will be used to refer to the software and their parts in this document;

- Yamaha SWX Configuration Tool: This software
- Yamaha SWX2200-8G or SWX2200-24G: SWX2200 Series
- Microsoft® Windows®: Windows

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This AGREEMENT shall be governed by and construed in accordance with the laws of Japan without reference to the principles of conflict of laws.

Features

This software software allows you to change and check the settings and status of Yamaha Smart L2 Switch “SWX2200” Series directly with your personal computer.

Status display

Displays the condition of the SWX2200 Series equipment and the link status of each port.

Setting/Display for each port

The following setting items can be checked or changed:

- Speed
- Shutdown
- Counter
- Automatic straight/Cross cable distinction
- Flow control
- Port mirroring

VLAN

You can set Port VLAN, Multiple VLAN, and Tag VLAN.

Power conservation function

You can set the power conservation function of SWX2200 Series.

Loop detection

You can set how SWX2200 Series operates when it detects any loops.

Operation

You can restart SWX2200 Series or initialize it to the factory settings.

Note

This software is connectable only to Yamaha SWX2200 Series.

Installation

System requirements for installation

This software supports the following platforms.

- Microsoft Windows 7 (32bit/64bit Edition)
- Microsoft Windows Vista SP2 (32bit)
- Microsoft Windows XP SP3 (32bit)

Note

This software runs on only the operating systems installed via clean install. Operation systems updated from the previous version, the Windows operating environment based on the virtualization technology, and operation on Mac PCs are not guaranteed.

Requirements before installation

Before installing the software, disable any anti-virus software and anti-malware software functions. Otherwise, such software may block changes of Windows settings during installation, and prevent complete installation of the software.

Recommended system environment

The minimum configuration of the personal computer for this software is as follows:

Microsoft Windows 7

- Processor: 1GHz or higher
- Memory (RAM): 1GB
- Hard disc capacity: 100MB of free space
- Network connection: TCP/IP network protocol

Note

To install this software, you must have full access right for the computer system files.

Installation

(Continued from the previous page)

Installation procedure

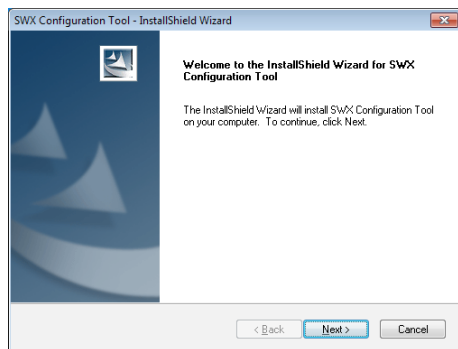
Notes

- You must have an administrator account of the user's computer, or Administrator's right.
- Before installation, read the release note.

1 Startup the installer.

Save the install package (SWX_App_x86.msi (for 32bit OS) or SWX_App_x64.msi (for 64bit OS)) in the computer's local disc, and then, double-click the install package icon.

The installer starts up and Install Wizard is displayed. Follow the installation procedure indicated by Install Wizard.

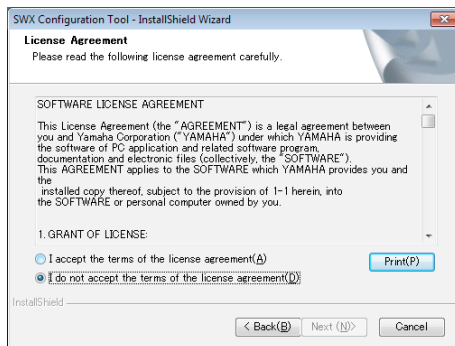


Tip

Start Installer, and the "User Account Control" dialogue appears. Click "Yes" or "Continue", or "OK" to activate Installer.

2 Click "Next."

The "License Agreement" screen appears.



3 To agree with the license agreement, click "I accept the terms of the license agreement" and then click "Next."

The "Choose Destination Location" screen appears.

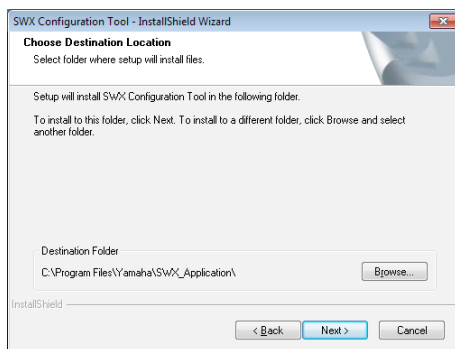
When you do not agree with the license agreement

Click "Cancel" and stop the installation procedure.

4 Specify where the software is to be installed and click "Next."

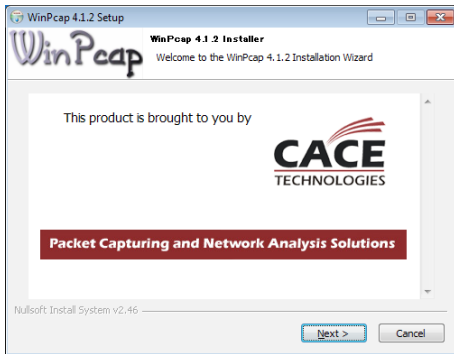
The "Setup type" screen appears.

5 Confirm that the "Install WinPcap 4.1.2" box is checked, and click "Next."



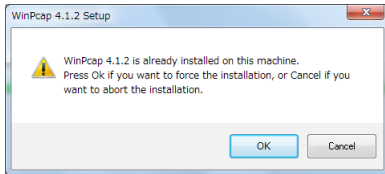
6 Follow the instructions on the screen to install the software.

7 When the “WinPcap 4.1.2 Setup” screen appears, click “Next.”



Note

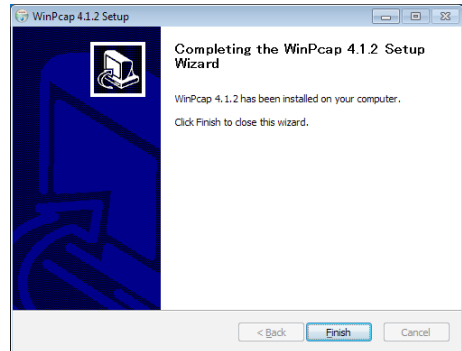
If “WinPcap” has been already installed (Wireshark has been installed), the confirmation screen below may appear. Click “OK” and continue the procedure.



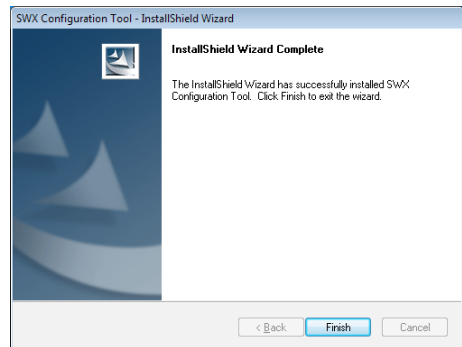
8 Follow the instructions on the screen to install “WinPcap 4.1.2.”

9 When the following screen appears, click “Finish.”

When WinPcap 4.1.2 is completely installed, the following screen appears. Click “Finish” to close the “WinPcap 4.1.2” installation screen and return to the installation screen of this software.



10 Click “Finish.”



Close the installation screen.

Installation

(Continued from the previous page)

Uninstallation

To uninstall the software, follow the standard uninstallation procedure for Windows. Open “Uninstall a program” in Control Panel. Select [SWX Configuration Tool] from List, and click “Uninstall” on the upper area of the screen.

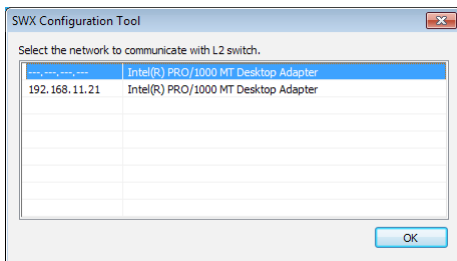
Note

After uninstallation of the software, all the settings for the software are deleted.

Connection to SWX2200

- 1 Connect the PC in which the software has been installed and SWX2200 Series with a LAN cable.**
- 2 On the “Start” menu, select “SWX_ Application.”**

The software starts up, and the screen for selecting a network to be used for communication with SWX2200 Series appears.



- 3 Select a network to be used for communication with SWX2200 Series, and click “OK.”**

The “SWX Configuration Tool” screen appears, and indicates SWX Series connected to the selected network.

Note

If you use another application which uses WinPcap (such as Wireshark) together, this software may operate incorrectly. Terminate such applications before using the software.

Change of SWX2200 settings

Functions of this software

This software software allows you to change and check the settings and status of the Yamaha Smart L2 Switch “SWX2200” Series directly with your personal computer.

Status display

Displays the condition of the SWX2200 Series equipment and the link status of each port.

Setting/Display for each port

The following setting items can be checked or changed:

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- Port mirroring

VLAN

You can set Port VLAN, Multiple VLAN, and Tag VLAN.

Power conservation function

You can set the power conservation function of SWX2200 Series.

Loop detection

You can set how SWX2200 Series operates when it detects any loops.

Operation

You can restart SWX2200 Series or initialize it to the factory settings.

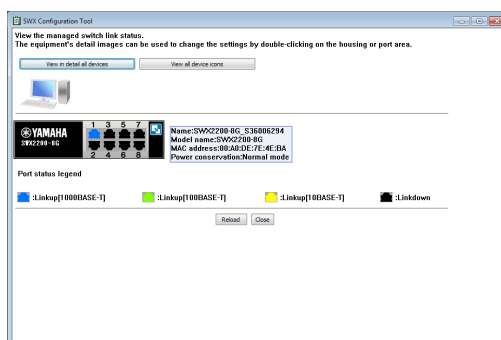
Note

This software is connectable only to Yamaha SWX2200 Series.

Basic operation

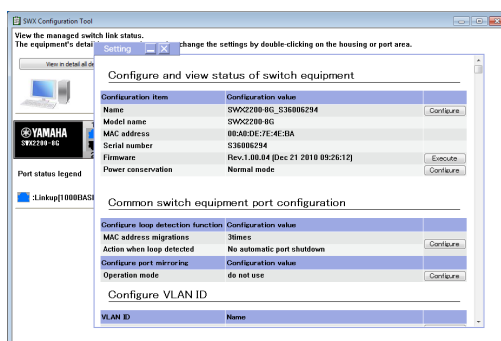
On the “SWX Configuration Tool” screen, open the setting screen of the target SWX2200 Series, and change the settings.

Click the icon of the target SWX2200 Series of which settings you want to change or current status you want to check, to enlarge the icon.



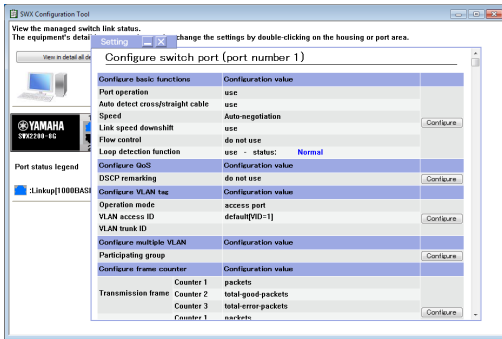
Change of SWX Series equipment setting

Double-click the body part of the endangered icon to open the setting screen.



Change of port setting of SWX Series

Double-click the port part of the endangered icon to open the setting screen.



Close of setting screen

Click the “Close” button on the setting screen.

Change of port link speed

To connect an equipment of which link speed is fixed, you can fix the link speed of a specified port.

1 Click the icon of the target SWX2200 Series of which setting you want to change.

2 Double-click a port of which link speed you want to fix.

The setting screen of the selected port appears.

3 Click “Configure” in the “Configure basic functions” section.

The “Configure basic functions” screen appears.

4 Select a link speed in the “Speed” section and click “OK.”

The confirmation screen appears.

5 Click “Back to setting page.”

Return to the setting screen of the port selected in the step 2.

Change of SWX2200 settings (Continued from the previous page)

Shut-down of unused port

To prevent disapproval connection, you can shut-down unused ports. This function prevents network accesses of any third party who connects a network equipment to a free port.

1 Click the icon of the target SWX2200 Series of which settings you want to change.

2 Double-click a port to be shut-down.

The setting screen of the selected port appears.

3 Click “Configure” in the “Configure basic functions” section.

The “Configure basic functions” screen appears.

4 Select “do not use” in the “Port operation” section, and then click “OK.”

The confirmation screen appears.

5 Click “Back to setting page.”

Return to the setting screen of the port selected in the step 2.

Capturing packet for port (port mirroring)

This setting allows capturing of packets sent to a specified port, for the network monitoring. To use this function, enable the port mirroring on the target SWX2200, and specify a target port.

1 Click the icon of the target SWX2200 Series of which setting you want to change.

2 Double-click the main body part of the icon.

The setting screen for the selected switch appears.

3 Click “Configure” in the “Configure port mirroring” section.

4 Click “use” in the “Operation mode” section.

5 Select the port mirroring setting, and then click “OK.”

- **Sniffer port:** This option sets a selected port to be a monitoring port (which receives captured and transferred packets from the monitored port).

- **Monitoring direction:** Select one option from “Receive,” “Send,” and “Receive and send” as monitored packets (to be captured and transferred).

The confirmation screen appears.

6 Click “Back to setting page.”

Return to the setting screen of the port selected in the step 2.

Division of network segment (VLAN)

Change of VLAN ID

1 Click the icon of the target SWX2200 Series of which setting you want to change.

2 Double-click the main body part of the icon.

The setting screen for the selected switch appears.

3 Click “Configure” in the “Configure VLAN ID” section.

The “Configure VLAN ID” screen appears.

4 Change the “VLAN ID” setting and then, click “OK”.

The confirmation screen appears.

Addition of VLAN ID

Check the “Add” box and enter the VLAN ID and name.

Deletion of VLAN ID

Check “Del” box of the VLAN ID to be deleted.

Change of VLAN ID name

Change the information indicated in the “Name” section of the VLAN ID, of which name you want to change.

Note

For VLAN ID names, only half-width alphanumeric characters are available.

5 Click “Back to setting page.”

Return to the setting screen of the port selected in the step 2.

Change of Tag VLAN settings

1 Click the icon of the target SWX2200 Series of which setting you want to change.

2 Double-click a port of which Tag VLAN setting is to be changed.

The setting screen for the selected port appears.

3 Click “Configure” in the “Configure VLAN tag” section.

The “Configure VLAN tag” screen appears.

4 Select the Tag VLAN setting and then, click “OK.”

The confirmation screen appears.

Operation mode

- **access port:** Allows using of the current port as an access port.
- **trunk port:** Allows using of the current port as a trunk port.
- **hybrid port:** Allows using of the current port as a hybrid port.

VLAN access ID

When selecting “access port” or “hybrid port” in “Operation mode,” select an ID of the access VLAN.

VLAN trunk ID

When selecting “trunk port” or “hybrid port” in “Operation mode,” select an ID of the trunk VLAN.

5 Click “Back to setting page.”

Return to the setting screen of the port selected in the step 2.

Change of SWX2200 settings (Continued from the previous page)

Setting of Multiple VLAN

1 Click the icon of the target SWX2200 Series of which setting you want to change.

2 Double-click a port of which Multiple VLAN setting is to be changed.

The setting screen for the selected port appears.

3 Click “Configure” in the “Configure multiple VLAN” section.

The “Configure multiple VLAN” screen appears.

4 Check the groups to be available for the current port, and then click “OK.”

The confirmation screen appears.

5 Click “Back to setting page.”

Return to the setting screen of the port selected in the step 2.

Setting of operation at the time of loop detection

1 Click the icon of the target SWX2200 Series of which setting you want to change.

2 Double-click the main body part of the icon.

The setting screen for the selected switch appears.

3 Click “Configure” in the “Configure loop detection function” section.

The “Configure loop detection function” screen appears.

4 Specify operation at the time of loop detection, and then, click “OK.”

Threshold for number of MAC address migrations

You can specify the condition to judge loop occurrence with the number of transferring of the same MAC address.

Action taken upon any loop detection

- **Automatically shutdown, and then release port:** This function automatically shuts down a port where a loop is detected, and recovers the port after the specified time. Specify time on the second time scale. A port with a larger port number is selected as a port to be shut down. If the loop connection is not eliminated even when the shut-down port is recovered, that loop is detected again.
- **No automatic port shutdown:** The operation continues as is even after a loop is detected.

Tip

You can operate the main unit of SWX2200 Series to cancel the loop detection condition. For more detail, refer to the SWX2200 operation manual.

5 Click “Back to setting page.”

Return to the setting screen of the port selected in the step 2.

Reading of external file and changing of switch setting

You can change the settings of SWX2200 Series by reading of a text file of which content to be set for SWX2200 is described in command format.

1 Double-click the icon of the switch control PC.

The “Configure switch control function” screen appears.

2 Click “Load” in the “Switch management information” section.

The “Load configuration” screen appears.

3 Click “Refer” and specify a file you want to read, and then, click “OK.”

The confirmation screen appears and the read setting is automatically reflected to SWX2200 Series.

Tip

The settings of this software is saved in config_swx.txt, which is stored in \ProgramData\Yamaha\SWX_Application.

Read this file on a Yamaha router's console that can manage SWX2200 Series, or on the “Execute command” screen of the GUI setting screen as commands, and you can operate SWX2200 Series even in the network with the Yamaha router with the same settings.

Initialization of switch

1 Click the icon of the target SWX2200 Series of which setting you want to change.

2 Double-click the main body part of the icon.

The setting screen for the selected switch appears.

3 Click “Execute” on “Special switch equipment operation” - “Return to factory default” section.

The confirmation screen appears.

4 Click “OK.”

The switch settings are initialized.

Tip

You can initialize via the main unit of SWX2200 Series. For more detail, refer to the SWX2200 operation manual.

