# **AMC Manager**

# **User's Manual**



Copyright© 2015 Silex technology, Inc. All rights reserved. WA102520XS

### Index

1. Introduction	1
1-1. Introduction	1
Disclaimers	1
Trademarks	1
2. What is AMC Manager?	3
2-1. AMC Manager's Features	4
AMC Manager's Features	5
AMC Manager's Operating Environment	7
3. Installing AMC Manager	9
3-1. Before You Begin	9
License Information	9
Checking Device Compatibility	
3-2. Installing AMC Manager	10
3-2. Installing AMC Manager	
	17
4. AMC Manager	
4. AMC Manager 4-1. Starting/Finishing AMC Manager	
<b>4. AMC Manager</b> 4-1. Starting/Finishing AMC Manager Starting AMC Manager	
<ul> <li>4. AMC Manager</li> <li>4-1. Starting/Finishing AMC Manager</li> <li>Starting AMC Manager</li> <li>Finishing AMC Manager</li> </ul>	
<ul> <li>4. AMC Manager</li></ul>	
<ul> <li>4. AMC Manager</li> <li>4-1. Starting/Finishing AMC Manager</li></ul>	
<ul> <li>4. AMC Manager</li> <li>4-1. Starting/Finishing AMC Manager</li></ul>	
<ul> <li>4. AMC Manager</li></ul>	
<ul> <li>4. AMC Manager</li></ul>	
<ul> <li>4. AMC Manager</li></ul>	

4-6. Bulk Configuration	
Before You Begin	
Bulk Configuration Window	54
Add Device Window	55
Edit Device Window	56
IP Address Configuration Window	57
Reservation Window	57
Bulk Configuration Using a Reservation Function	58
Configuring Devices in Bulk	63
4-7. Firmware Update	69
Firmware Update Window	69
Reservation Window	70
Firmware Update Using a Reservation Function	71
Updating Firmware	75
Updating Firmware of Multiple Devices at Once	78
4-8. Factory Default Configuration	81
Factory Default Configuration Window	81
Factory Default Configuration	82
4-9. Restart	85
Device Restart Window	85
Restarting Device	86
4-10. Showing Device Configuration List	
Configuration Retrieval Window	
Configuration List Window	90
Showing Device Configuration	91
Configuration File Comparison	94
4-11. Device Group Management	96
Group List and Device List	96
Creating Group	97
Adding Device to Group	
Deleting Device from Group	102
Editing Group Information	103

Exporting/Importing Group Information	
4-12. Accessing Logs on Log Viewer	
Starting Log Viewer	
Finishing Log Viewer	
Log Viewer's Window	110
Filter Condition	114
Searching for Logs	116
Using Filter of Log List	119
Saving Event Logs to File	121
Opening Event Logs	
4-13. Alert Notification	126
Alert Condition	127
Alert Notification Settings	
4-14. Allowing Public Use In Case of Emergency	
Emergency Use Setting Window	134
Setting Window	134
Before You Begin	135
Configuring Emergency Use Setting	139
Using Emergency Use Feature	142
Resetting to Normal Use	146
4-15. Checking Device Operating Status	149
Graph Window for Power-ON Time	150
Graph Window for Operating Time	151
Graph Window for Number of Wireless Clients	152
Checking Device Operating Status	153
Saving Graph as a File	156
CSV File Format	158
4-16. Radio Signal Strength Control	
Radio Signal Strength Control	
Radio Signal Strength Control Setting	
4-17. Registering Device Location	165
Location Edit Window	

Registering Locational Information	
4-18. AMC Manager's Optional Settings	
Option Window	
Mail Server Setting Window	
Mail Address Setting Window	
Changing AMC Manager Settings	175
4-19. License Information	
License Information Window	176
Updating License Key	177
5. Survey Assistant	179
5-1. Survey Assistant's Features	
Survey Assistant's Features	
5-2. Starting/Finishing Survey Assistant	
Starting Survey Assistant	
Finishing Survey Assistant	
5-3. Survey Assistant's Main Window	
5-4. Device Monitoring	
Monitor Setting Window	
Device Monitoring	190
5-5. View Mode	
Single View Mode	
Multi View Mode	
Historical View Mode	
Map Mode	
5-6. Changing Bandwidth	195
5-7. Changing View Mode	
5-8. Showing Device Graph on Map	
Before You Begin	
Creating Map	
Graph Edit Mode	
Adding Graph to Map	

5-9. Survey Assistant's Optional Settings	
Option Window	
Changing Survey Assistant Settings	
A. Appendix	207
A-1. Uninstalling AMC Manager	
A-2. Latest Firmware Downloads	210
A-3. Customer Support Center	211

Blank page

# 1. Introduction

Thank you for purchasing the AMC Manager utility.

# 1-1. Introduction

This manual provides information on how to configure and use the AMC Manager.

### Disclaimers

- The unauthorized transfer or copying of the content of this manual, in whole or in part, without prior written consent is expressly prohibited by law.
- The content of this manual is subject to change without notice.
- This manual was prepared to accurately match the content of each OS, but the actual information shown on the computer monitor may differ from the content of this manual due to future OS version upgrades, modifications, and other changes.
- Although every effort was made to prepare this manual with the utmost accuracy, Silex Technology will not be held liable for any damages as a result of errors, setting examples, or other content.

### Trademarks

- AMC Manager is a registered trademark of Silex Technology.
- Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.
- Wi-Fi, Wi-Fi Direct, Wi-Fi Protected Setup, Wi-Fi Protected Access (WPA), WPA2 are trademarks or registered trademarks of Wi-Fi Alliance.
- Other company names and product names contained in this manual are trademarks or registered trademarks of their respective companies.

Blank page



This chapter explains each function of the AMC Manager.

# 2-1. AMC Manager's Features

The AMC Manager provides unified and remote control of the Silex devices connected both in wired or wireless network, such as status monitoring, configuration change, firmware update, restart, etc. It can save your time of maintenance for devices installed to many locations, as well as find a possible problem for quicker resolution. There are 3 types of AMC Manager as follows.

There are 3 types of AMC Manager as follows.

- AMC Manager<sup>®</sup> (non-free version) (\* hereinafter "AMC Manager<sup>®</sup> Standard")
- AMC Manager<sup>®</sup> E model (non-free version)
- AMC Manager<sup>®</sup> Free (free version)

Each one has different features. See below table for details.

Features	AMC Manager <sup>®</sup>	AMC Manager <sup>®</sup>	AMC Manager <sup>®</sup>
reatures	Standard	E model	Free
Number of controllable devices	Up to 10000 devices	Up to 10000 devices	Up to 10 devices
Number of devices that can be	Up to 10000 devices	Up to 10000 devices	Up to 10 devices
controlled at a time			
Number of groups that can be created	Up to 100 groups	Up to 100 groups	Up to 2 groups
Number of devices that can be	Up to 1000 devices	Up to 1000 devices	Up to 10 devices
registered to 1 group			
Status monitoring	Supported	Supported	Supported
Configuration using Web browser	Supported	Supported	Supported
IP configuration	Supported	Supported	Supported
Individual configuration,	Supported	Supported	Supported
bulk configuration			
Firmware update	Supported	Supported	Supported
Factory default configuration	Supported	Supported	Supported
Restart	Supported	Supported	Supported
Alert notification by email	-	Supported	-
Allow Emergency Use	-	Supported	-
Operating Status Check	-	Supported	-
Radio Signal Strength Control	-	Supported	-
Log Viewer	Supported	Supported	-
Syslog	-	Supported	-
Survey Assistant	-	Supported	-
Mesh Monitor	Supported	Supported	-
Edit Location	Supported	-	-
Link to AMC Manager Plus	Supported	-	-

### **AMC Manager's Features**

The AMC Manager has following features:

### **Common user interface for Silex products**

For maintenance of the Silex Access Points or station products, many configuration features are installed to the AMC Manager, which can monitor device status, change the configuration and update the firmware version, etc. It can reduce the maintenance cost for the network administrators.

### Remote control / monitoring

The status information (wireless LAN status, device status, etc.) can be monitored and the configuration (channel, IP, SSID, etc.) can be changed from a remote place. A network error or device error can be predicted, prevented and resolved from a remote place.

### Bulk configuration / firmware update

Even when Silex devices are installed to multiple locations, the configuration can be changed or the firmware can be updated at once. You can save the time of maintenance as well as easily change the security settings such as SSID regularly.

# Survey Assistant plug-in provides a remote wireless survey feature (AMC Manager® E model only)

By using the Survey Assistant plug-in together with Silex product, your wireless environment can be visualized as a graph. Because of this, you can check the wireless LAN status and the environmental changes from a remote place in order to keep a stable wireless connection.



- "Survey Assistant plug-in" is a plug-in function which can be used with the Silex network display adapter products such as SX-ND-4350WAN, etc.

### Alert notification by email (AMC Manager® E model only)

When an error occurred on AMC Manager<sup>®</sup> E model or Silex devices, it can be alerted to users by email.

### Syslog information (AMC Manager® E model only)

Syslog information is retrieved from Silex devices and then saved as data base. The saved information can be accessed by Log Viewer.

### Allow Emergency Use (AMC Manager® E model only)

Silex device setting can be changed to the emergency setting or reset to the normal use setting easily by registering bulk configuration files, when Silex device setting needs to be changed in case of emergency.

### **Operating Status Check (AMC Manager® E model only)**

Operating status information (e.g. total operating hours, screen projection period, number of wireless client devices, etc.) is retrieved from the compatible Silex devices and it can be visualized as a graph. Also, it is possible to make a graph of unified operating status for grouped Silex devices. The retrieved information can be saved to an image file or CSV file.

### Link with AMC Manager Plus (AMC Manager® Standard only)

After various information of Silex products (e.g. communication errors, etc.) is collected by AMC Manager<sup>®</sup> Standard, AMC Manager Plus can show them onto the smartphones or tablet devices. It is possible to link with AMC Manager Plus by installing the plug-in utility "AMC Manager Plus Utility".

#### Name Details OS Microsoft Windows 7 SP1 (32/64bit) Microsoft Windows 8 (32/64bit) Microsoft Windows 8.1 (32/64bit) Microsoft Windows Server 2008 R2 **Microsoft Windows Server 2012** Microsoft Windows Server 2012 R2 Microsoft Windows 10 (32/64bit) Microsoft Windows Server 2016 Languages English Japanese Chinese .NET Framework 4.5 or newer Environment Supported devices Silex's network devices \* Please visit our homepage for compatible devices. Number of controllable Up to 10000 devices (non-free version) devices Up to 10 devices (free version) Supported transport layer protocol TCP(#60000) (Port number is occupied) UDP(#60000)

### AMC Manager's Operating Environment



• The AMC Manager runs as a classic desktop application on Windows 8 or newer.

UDP(#60001)

• Windows RT is not supported.

Blank page

# **3.** Installing AMC Manager

This chapter explain how to install the AMC Manager.

## 3-1. Before You Begin

### License Information

To use non-free version of AMC Manager, following information is required that you may have registered when the license is issued or purchased. Please get the information beforehand.

- License key
- Company name
- Name
- Email address



When you are to install AMC Manager Free, above license information is not necessary.

Note

### **Checking Device Compatibility**

In order to use the AMC Manager, the Silex product must support the AMC Manger. Please check the compatibility on our website below.

Also, depending on the product, you may need to change the setting of it.

For details, refer to the user's manual of each product.

	URL
USA/Europe	https://www.silextechnology.com/
Japan	https://www.silex.jp/

## 3-2. Installing AMC Manager

Start the installer to install the AMC Manager.

**1**. Double-click **Setup.exe** of the AMC Manager on your PC.





• When the user account control is enabled on your PC, the User Account Control screen is displayed (the screen may differ depending on your OS). If it is displayed, click **Continue** or **Yes**.

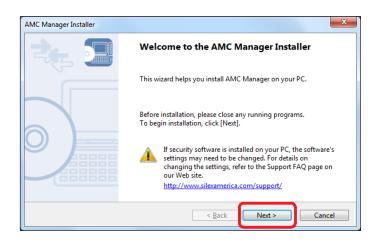
2. Select a language and click Next.

AMC Manager Installer		×
	Please select your language	
	Language Chinese English Japanese	
	Back Next > C4	2)

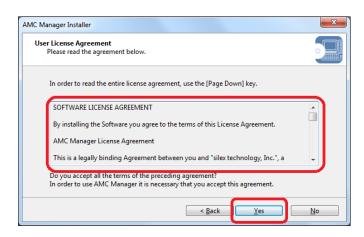
- When AMC Manager has already been installed, the message below may appear depending on version of the utility you are going to install.
- **Note** If the message appears, click **Yes** and go on to **3**.

AMC Man	ager Installer	23
?	If this application is installed, a part of the features may become unavailable. Do you want to continue the installation?	
	<u>Y</u> es No	

### 3. Click Next.



**4.** Read the software license notes and click **Yes** when you agree with the terms and conditions.



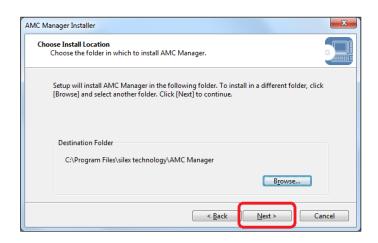
**5.** When you are to use the non-free version, enter the license information of registered license and click **Next**. If the AMC Manager has already been installed to your PC, the screen below is not displayed.

MC Manager Installer		
Please enter the license in	formation.	
Enter the license informa	tion and click [Next].	
License <u>K</u> ey:		
ABCDE-FGHIJ-KLMNO-	QRSTU	
User Information		(1)
<u>C</u> ompany Name:	silex technology, Inc.	
Na <u>m</u> e:	User1	
Email Address:	user1@silex.com	
Use a free version		
	< <u>B</u> ack	Next > C

• When you are to use the free version, check the check box at **Use a free version** and click **Next**.

# Note

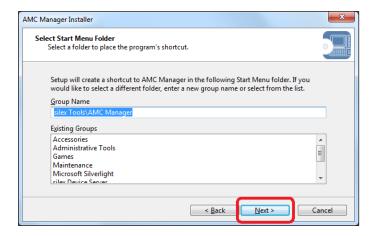
6. Select a folder to install the AMC Manager into and click Next.





- By defaults, the AMC Manager is installed to (C:\Program Files) \silex technology\AMC Manager on your PC.
- By clicking **Browse**, you can change the folder to install the AMC Manager into.

7. Specify a group name to be displayed at the start menu and click Next.

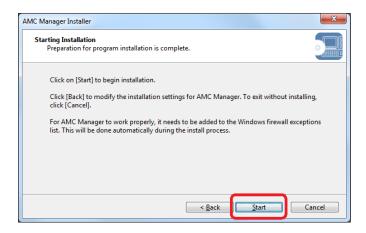




• By defaults, the group name is set as **silex Tools\AMC Manager**.

• It is possible to change the group name.

### 8. Click Start to start the installation.



**9.** Click **Finish**. The AMC Manager will start.

AMC Manager Installer		X
	Installation of AMC Manager is complete	
	AMC Manager has been successfully installed on your PC.	
	< <u>B</u> ack <u>Finish</u> Car	ncel

Blank page



This chapter explains how to use the AMC Manager.

# 4-1. Starting/Finishing AMC Manager

How to start and finish the AMC Manager is explained.

### Starting AMC Manager

**1.** Click **Start** - **(All) Programs** - **silex Tools** - **AMC Manager** - **AMC Manager**. The AMC Manager will be started.

Image: Point Control of
Output     Device Name     Ethernet Address     Host Name     IP Address     Version <ul> <li>Detected Devices</li> <li>AP-500AC</li> <li>84:25:3F:12:34:56</li> <li>AP500-122456</li> <li>172:25:72:253</li> <li>1.00</li> <li>(* ""</li> <li>(* ""</li></ul>
Detected Devices         AP-500AC         84:25:3F:12:34:56         AP500-123456         172:25:72:253         1.0.0                        1.0.0 </th
vert Log vvel Date/Time Event Device Name Ethernet Address Host Name Details
vert Log Event Device Name Ethernet Address Host Name Details
vert Log Event Device Name Ethernet Address Host Name Details
vel Date/Time Event Device Name Ethernet Address Host Name Details
III
evice(s) found.



For Windows 8

Right-click on the start screen, click All apps from the app bar and click silex Tools - AMC Manager.

Note • For Windows 8.1

Click [] on bottom left of the start screen and click **silex Tools** - **AMC Manager**.

• For Windows 10

Click Start - (All apps) - silex Tools - AMC Manager - AMC Manager.

TIP

If the **Start-up Password** is set at the **Option** window, password entry is required when AMC Manager is started.

**1**. Click the close button from top right of the window. The AMC Manager will be finished.

ile <u>E</u> dit S	Stat <u>u</u> s <u>S</u> ettings	<u>T</u> ools <u>H</u> elp				
0			than the second	0 6 🕸	× .	٩
Group		Device Name	Ethernet Address	Host Name	IP Address	Version
P Detect	ed Devices	(♥ AP-500AC	84:25:3F:12:34:56	AP500-123456	172.25.72.253	1.0.0
Event Log		٢	m			,
	Date/Time	<	117 Device Name	Ethernet Address	Host Name	> Details
Event Log Level i Informa		Event	Device Name	Ethernet Address 84:25:3F:12:34:56	Host Name AP500-123456	



The AMC Manager can also be finished by the method below.

• Click File - Exit from the menu bar.

Note

# 4-2. AMC Manager's Main Window

The following explains the AMC Manager's main window.

	(1)			(2)		(3)	
				- I			
AMC Mana	ager E model						
<u>File E</u> dit S	itat <u>u</u> s <u>S</u> ettings <u>T</u> o	ools <u>H</u> elp					
C							
Group		Device Name	Ethernet Address	Host Name	IP Address	Version	
🔎 Detect	ed Devices	🔮 AP-500AC	84:25:3F:12:34:56	AP500-123456	192.168.0.1	1.0.0	
🐹 Group	D A	AP-500AC	84:25:3F:12:34:57	AP500-123457	192.168.0.2	1.0.0	
📓 Group		AP-500AC AP-500AC	84:25:3F:12:34:58 84:25:3F:12:34:59	AP500-123458 AP500-123459	192.168.0.3 192.168.0.4	1.0.0 1.0.0	
🕅 grout		AP-500AC	84:25:3F:12:34:5A	AP500-12345A	192.168.0.5	1.0.0	
		🐼 AP-500AC	84:25:3F:12:34:5C	AP500-12345C	192.168.0.6	1.0.0	
(4	+)			(5)			
	- 11						
	ノ						
Event Log		1	Ш				
.evel	Date/Time	Event	Device Name	Ethernet Address	Host Name	Details	
🚺 Informa	4/27/2016 6:34:25 P	M Device detect	AP-500AC	84:25:3F:12:34:56	AP500-123456	Device was found.	
			(6	1			
			(0	/			
	und						
device(s) fou	in two						
device(s) fou							
device(s) fou							

(7)

### (1) Menu bar

Executes each function of the AMC Manager.

### (2) Tool bar

Executes each function of the AMC Manager.

### (3) Search box

Searches for the entered text and shows the matched devices in the list.

### (4) Group list

Shows a list of created groups.

### (5) Device list

Shows a list of the Silex devices running on a network and the operating status of each.

### (6) Log list

Shows the event logs.

### (7) Status bar

Shows the general information of the Silex device selected on the list.

### Menu Bar

Executes each function of the AMC Manager such as configuring the search settings, retrieving the device information, etc.

Menu	Name	Details				
File		Refreshes the device information on the list.				
	Refresh	The devices will be detected and displayed even if they				
		are in factory defaults.				
	Exit	Finishes the AMC Manager.				
Edit	Add Group	Creates a new group.				
	Edit Group	Opens the edit window for the selected group.				
	Delete Group	Deletes the selected group.				
	Import Group	Reads group configuration from a file.				
<u>Cran</u>	Export Group	Saves group configuration to a file.				
Status	Start Monitoring	Starts monitoring for the selected device.				
		The status will be refreshed at the specified interval.				
	Stop Monitoring	Stops monitoring for the selected device.				
		The status will not be refreshed unless you refresh it manually				
	Properties	Displays the properties window.				
	Edit Location	Edits a location of the device. (AMC Manager® Standard only				
<b>c</b> :	Get System Log	Retrieves the system log.				
Settings	Configure Using Web Browser	Displays the Web configuration interface.				
	IP Configuration	Configures the IP address.				
	Device Configuration	Configures a single device.				
	Bulk Configuration	Configures multiple devices in bulk.				
	Create Configuration File	Creates the configuration file to use for bulk configuration				
	Merge Configuration File	Merges the configuration files.				
	Firmware Update	Updates the device firmware.				
	Factory Default Configuration	Resets the device to the factory defaults.				
	Restart	Restarts the device.				
	Show Device Configuration	Receives the setting of selected devices and shows it as a lis				
Tools	Option	Changes the optional settings of the AMC Manager.				
	Start Survey Assistant	Starts the Survey Assistant. (AMC Manager <sup>®</sup> E model only)				
		Starts the Mesh Monitor.				
	Start Mesh Monitor	(AMC Manager <sup>®</sup> Standard and AMC Manager <sup>®</sup> E model only				
	Start AMC Manager Dlug Litility	Starts the AMC Manager Plus Utility. (AMC Manager® Standard only)				
	Start AMC Manager Plus Utility					
	Start Log Viewer	Starts the Log Viewer.				
		(AMC Manager <sup>®</sup> Standard and AMC Manager <sup>®</sup> E model only				
	Allow Emergency Use	Displays the emergency use setting window.				
		(AMC Manager <sup>®</sup> E model only)				
	Check Operating Status	Shows the operating status window. (AMC Manager® E				
		model only)				
	Check Group Operating Status	Shows the group operating status window.				
		(AMC Manager <sup>®</sup> E model only)				
Help	Silex Homepage	Opens the homepage of Silex Technology, Inc.				
	License Information	Shows the license information.				
	About AMC Manager	Shows the version information.				

### <u>File Edit Status Settings Tools Help</u>



• Even if the device has the default settings and is not configured yet, it will be detected by clicking the **Refresh** button, as the AMC Manager can discover the devices with a different IP address class when the devices are running in the same network as the PC.

• It is impossible to select the function when it is not supported by the device.

### Toolbar

Executes each function of the AMC Manager such as configuring the search settings, retrieving the device information, etc.



lcon		Name (Tooltip)	Details				
	1		Refreshes the device information on the list.				
	5	Refresh	The devices will be detected and displayed even if they				
	-		are in factory defaults.				
6	$\sim$	Start monitoring	Starts monitoring for the selected device.				
0	9	Start monitoring	The status will be refreshed at the specified interval.				
-	)		Stops monitoring for the selected device.				
8	∍	Stop monitoring	The status will not be refreshed unless you refresh it				
-			manually.				
We	eb	Configure using Web browser	Displays the Web configuration interface.				
4		configure using web blowser	Displays the web configuration interface.				
	1	Duran anti-a					
m		Properties	Displays the properties window.				
	P	Configure the IP address	Configures the IP address.				
_	2						
III	S	Configure the device	Configures a single device.				
	-						
E E	3	Configure multiple devices in bulk	Configures multiple devices in bulk.				
5	<b>~</b>						
		Create the configuration file	Creates the configuration file to use for bulk configuration.				
LZ							
	7	Eirmuara undata	Undator the device firmware				
11	1	Firmware update	Updates the device firmware.				
E.	2						
	4	Factory default configuration	Resets the device to the factory defaults.				
-	2						
1111	0	Restart	Restarts the device.				
Ę	SC .	Option	Changes the optional settings of the AMC Manager.				
41	<b>4</b> 4						
0.	7 -	Start the plug-in tools	Starts the plug-in tools of AMC Manager.				
	6						



• Even if the device has the default settings and is not configured yet, it will be detected by clicking the **Refresh** button, as the AMC Manager can discover the devices with a different IP address class when the devices are running in the same network as the PC.

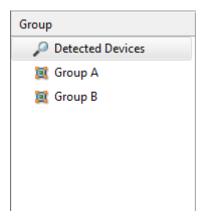
### Search box

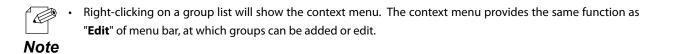
Searches for a certain text and shows the devices that include that text. The text search is handled on all items of the device list.

	م
--	---

### **Group list**

Shows a list of created groups. If a group is selected, the devices registered to that group will be displayed in the device list.







When AMC Manager<sup>®</sup> Free is used, up to 10 devices are displayed at **Detected Devices**.

### List View (Device List)

Shows a list of the Silex devices running on a network and the operating status of each.

Device Name	Ethernet Address	Host Name	IP Address	Version
V AP-500AC	84:25:3F:12:34:56	AP500-123456	172.25.72.253	1.0.0

Name	Details					
Device Name Shows the device status icon and device name.						
Ethernet Address Shows the Ethernet Address.						
Host name	Shows the host name.					
IP Address Shows the IP Address.						
Version Shows the firmware version.						
Status	Shows the status information.					
	Shows the information string received from the device.					
Information	It differs depending on the device.					
	(AMC Manager <sup>®</sup> Free and AMC Manager <sup>®</sup> E model only)					
Location	Shows the location of installation. This information can be edited at Edit					
Location	Location. (AMC Manager <sup>®</sup> Standard only)					
Last Update Time	Shows the time of last status update.					

lcon	Status	Details
$\odot$	Refreshing the status	Retrieving the device status.
<b>S</b>	Ready	Device is operating.
<b>v</b>	Ready (factory defaults)	Device is operating with the factory default settings.
8	No reply	Device is not found on a network.
8	No reply (factory defaults)	Device is not found on a network.
	Not a monitoring target	Device is not a target for monitoring.
?	Not detected	Device is not detected.



• If you click a column header, the order of devices will be sorted by the column you have clicked.

### Note

### **Context menu**

If one device is right-clicked on the device list, the context menu is displayed.

The context menu provides each function of the AMC Manager such as device monitoring, configuration, etc. of the selected device.

Device Na	me	Ethernet Address	Host Nam	e	
♥ AP-	Start Monito Stop Monito	ring	AP500-123	3456	
	Properties				
	Edit Location	ı			
	Get System I	.og			
	Configure U				
		iguration			
	Firmware Up Factory Defa Restart	date ult Configuration			
	Show Device	Configuration			
	Add to Grou Remove fror		•		
	Refresh		F5		

Name	Details					
Start Monitoring	Starts monitoring for the selected device.					
Start Monitoring	The status will be refreshed at the specified interval.					
Stop Monitoring	Stops monitoring for the selected device.					
Stop Monitoring	The status will not be refreshed unless you refresh it manually.					
Properties	Displays the properties window.					
Edit Location	Edits the location of installation (AMC Manager® Standard only)					
Check Operating Status	Shows the operating status window. (AMC Manager® E model only)					
Check Group Operating Status	Shows the group operating status window. (AMC Manager® E model only)					
Get System Log	Opens the system log window.					
Configure Using Web Browser	Displays the Web configuration interface.					
IP Configuration	Configures the IP address.					
Device Configuration	Configures a single device.					
Bulk Configuration	Configures multiple devices in bulk.					
Create Configuration File	Creates the configuration file to use for bulk configuration.					
Merge Configuration File	Merges the device configuration files.					
Firmware Update	Updates the device firmware.					
Factory Default Configuration	Resets the device to the factory defaults.					
Restart	Restarts the device.					
Show Device Configuration	Receives the setting of selected devices and shows it as a list.					
Add to Group	Adds a device to group.					
Remove from Group	Removes a device from group.					
Refresh	Refreshes the device status.					

### [Log list]

Log list shows the event information of AMC Manager including executed operations, network monitoring results, etc..

Information of log list is initialized when AMC Manager is started but the past logs would remain on Log Viewer.

Level	Date/Time	Event	1	Device Name	Etherr	net Address	Host	Name	Details
👔 Informa	2016/04/27 1	Device detect	ion	AP-500AC	84:25:	3F:12:34:56	AP500	)-123456	Device was four
👔 Informa	2016/04/27 1	Device detect	ion	AP-500AC	84:25:	3F:12:34:56	AP500	)-123456	Device was four
👔 Informa	2016/04/27 1	Device detect	ion	AP-500AC	84:25:	3F:12:34:56	AP500	)-123456	Device was four
👔 Informa	2016/04/27 1	Device detect	ion	AP-500AC	84:25:	3F:12:34:56	AP500	)-123456	Device was four
👔 Informa	2016/04/27 0	Device detect	ion	AP-500AC	84:25:	3F:12:34:56	AP500	-123456	Device was four

Name	Details
Level	Shows the icons of warning level.
Date/Time Shows the date/time of event.	
Event	Shows the event type.
Device Name Shows the device name.	
Ethernet Address	Shows the Ethernet Address.
Host Name Shows the host name.	
Details	Shows the details of the event.

lcon	Level Type	Details
	Information	Configuration change, device detection, etc.
8	Error	Configuration change error, communication error, etc.
$\Delta$	Warning	Monitoring stop, etc.



• When AMC Manager<sup>®</sup> E model is used, syslog information can be accessed. The syslog icon and level type are as follows.

Note

lcon	Level Type	Details
8	Emergency	
8	Alert	
8	Critical	Shows importance level of syslog that is retrieved from
8	Error	
	Warning	device
	Notice	
	Information	
	Debug	

Event Type	Details
IP configuration	IP address is configured.
Configuration change	Configuration is changed.
Initialization	Configuration is initialized.
Restart	Device is restarted.
Firmware update	Firmware is updated.
Log retrieval	System log is retrieved.
Mail transmission	Alert notification is sent by email when an error occurred on AMC Manager® E model or monitored devices.
Monitoring start	Device monitoring is started.
Monitoring stop	Device monitoring is stopped.
Device detection	Device reply is sent.
Device loss	Device reply is lost (communication error).
Device recovery	Device reply is found again after it is lost.
Change detection	Configuration is changed or firmware is updated by a method other than AMC Manager.
Application start	AMC Manager is started.
Application close	AMC Manager is finished.
Device syslog	Syslog information is received from device.



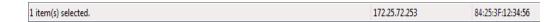
• If you click a column header, the order of logs will be sorted by the column you have clicked.



### **Status Bar**

Shows the numbers of active devices or selected devices.

When only one device is selected on the list, the Ethernet Address and IP Address of that device will be displayed.

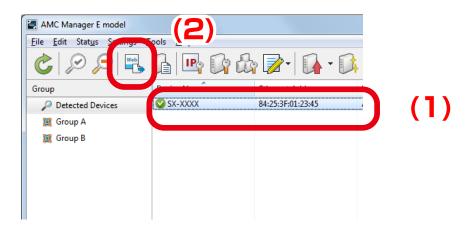


# 4-3. Displaying the Web Configuration Interface

The following explains how to display the Web configuration interface of the Silex device. In the Web configuration interface, you can check the detailed status as well as configure the advanced settings.

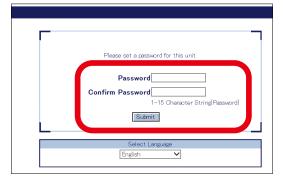
**Displaying Web Configuration Interface** 

**1.** Select a device in the list and click the **Configure using Web browser** icon from the toolbar.





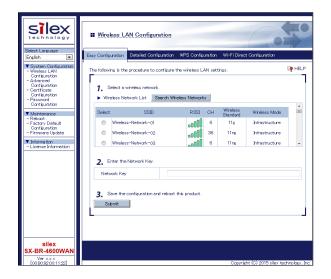
- The Web configuration interface can also be displayed by one of the following methods:
- Select the device and click Settings Configure Using Web Browser from the menu bar.
- Right-click on the device and select Configure Using Web Browser from the context menu.
  When an IP address class is different between the device and your PC, the Web configuration interface cannot be displayed. See 4-4. Configuring IP Address for details on how to change the IP address of the device.
- When the login password configuration window is displayed, enter the login password to configure for the device and click **Submit**.



• When the login password is set to the device, the window below is displayed. Enter the login password and click **Login**.

Password
Select Language English

**2.** The Web browser will run and the Web configuration interface of the device will be displayed. For details on the Web configuration interface, refer to the user's manual of that device.



# 4-4. Configuring IP Address

How to configure an IP address to the Silex device is explained. IP address can be configured from the **IP Address Configuration** window.

# **IP Address Configuration Window**



Name	Details	Default Value
Device Name	Displays the device name.	-
Ethernet Address	Displays the Ethernet Address.	-
IP Address	Enter the IP Address to configure.	None
Subnet Mask	Enter the Subnet Mask to configure.	0.0.0.0
Default Gateway	Enter the Default Gateway to configure.	0.0.0.0
Open the device configuration page using Web browser after this configuration	Check this check box when you wish to display the Web configuration interface of the device after finishing the configuration. The URL " <b>http://(IP Address)/</b> " will be used to display the Web configuration interface.	OFF
[OK] button	Configures the entered IP Address to the device.	-
[Cancel] button	Cancels the configuration and closes the window.	-

## **Configuring IP Address**

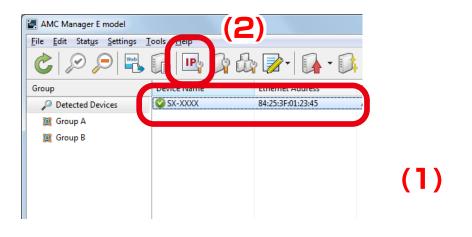
**1.** Before configuring the IP address to the device, the IP address of the PC needs to be changed.

Change the IP address of the PC to the one that can be communicated with the device after the configuration.

Sample Setting)

Sample IP address for device	Sample IP address for PC
192.168.0.10	192.168.0.100
172.25.10.10	172.25.10.100

2. Select the device to configure the IP Address from the list and click the **Configure the** IP address icon on the toolbar.





**3.** In the **IP Address Configuration** window, enter the IP Address and click **OK**. If you wish to display the Web configuration interface after you finish the IP Address configuration, check the check box at **Open the device configuration page using Web browser after this configuration** and then click **OK**.

IF	Address Configuration	ss to the device below.	
	Device Name: Ethernet Address:	SX-XXXX 84:25:3F:01:23:45	
	IP Address: <u>S</u> ubnet Mask: <u>D</u> efault Gateway:	192       .       168       .       20       .       123         255       .       255       .       255       .       0         0       .       0       .       0       .       0	(1)
	Open the device configuration browser after this configuration		



• When a password is set to the device, the window below is displayed. Enter the password of the device and click **OK**.

Enter Password	×	
Enter the passw	rord to connect to the device blow.	
Device Name: Ethernet Address:	SX-XXXX 84:25:3F:01:23:45	
	64:23:51:01:25:45	
<u>P</u> assword:		(1)
	<u> </u>	

**4.** The result of IP Address configuration is displayed.

If you have checked the check box at **Open the device configuration page using Web browser after this configuration**, your Web browser will run to display the Web configuration interface. Click **Close** to close the **IP Address Configuration** window.

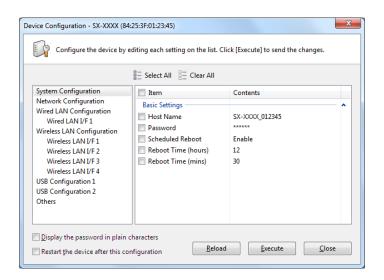
P Address Configuration	s has been configured.		×	
Device Name	Ethernet Address 84:25:3F:01:23:45	Status Completed.		
57,000	04,23,31,101,23,43	completed	(1)	
$\frown$			<b>'</b>	
			Close	(2

# 4-5. Individual Device Configuration

How to configure a single device is explained.

The device can be configured from the **Device Configuration** window.

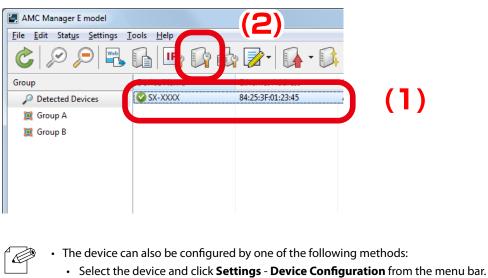
# **Device Configuration Window**



Name	Details	
Window title	Shows the device name and the Ethernet Address.	
Select All	Clicking this will check the check boxes of all setting items.	
Clear All	Clicking this will clear the check boxes of all setting items.	
Configuration manu	Menu of settings.	
Configuration menu	If one menu item is clicked, the detailed settings will be displayed on the list.	
	Contents of settings.	
List of cottings	The settings displayed on this list will vary depending on the device you configure.	
List of settings	Each setting will show the current settings of the device. Check the check box of the	
	items you want to configure.	
Display the password in plain	Chack this shack hav when you do not want to hide the password	
characters	Check this check box when you do not want to hide the password.	
Restart the device after this	Check this check box when you want to restart the device automatically after finishing	
configuration	the configuration.	
[Reload] button	Reloads the setting information.	
[Execute] button	Executes the configuration.	
[Close] button	Closes the window.	

## **Configuring Device**

**1.** Select a single device from the list and click the **Configure the device** icon from the toolbar.



- Note
   Right-click on the device and select Device Configuration from the context menu.
- **2.** When the login password is set to the device, the window below is displayed. Enter the login password and click **OK**.

E	nter Password	X	
	Enter the pass	word to connect to the device blow.	
	Device Name:	SX-XXXX	
	Ethernet Address:	84:25:3F:01:23:45	
	<u>P</u> assword:		(1)



When the login password is not set to the device, the window below is displayed. Enter the login password to configure for the device and click **Register**. When the password registration is completed, the device list is displayed. Start from **1** again.

Password Registration		×
	not registered. To change the device he password needs to be registered.	
Device Name:	SX-XXXX	
Ethernet Address:	84:25:3F:01:09:FD	
<u>P</u> assword: <u>C</u> onfirm Password:		
	<u>R</u> egister Cancel	

**3.** In the **Device Configuration** window, the current settings are displayed on the setting list. Check the check box of the items you want to configure, edit the settings and click **Execute**.

If you want to restart the device automatically after finishing the configuration, check the check box at **Restart the device after this configuration** and then click **Execute**.

Device Configuration - SX-XXXX (84:		lick [Execute] to send the changes.	
System Configuration Network Configuration Wired LAN Configuration Wireless LAN U/F1 Wireless LAN U/F1 Wireless LAN U/F2 Wireless LAN U/F3 Wireless LAN U/F4 USB Configuration 1 USB Configuration 2 Others	Item         Basic Settings         Host Name         Password         Scheduled Reboot         Reboot Time (hours)         Reboot Time (mins)	Contents SX-XXXX_012345 Enable 12 30	1)
Display the password in plain c Restart the device after this cor	Delese	<u>Execute</u>	(2)

The configuration will perform for those you have checked the check boxes. Clear the check box of the items you do not want to change the configuration.
The changes will take effect after the device is restarted. If you have not selected the automatic restart, please restart the device manually. See **Restarting Device** for how to restart the device.



• The configurable settings will differ depending on each device. For details, refer to the operating manual of that device.

**4.** The result of configuration is displayed.

If you have checked the check box at **Restart the device after this configuration**, the device will restart and the configuration will take effect automatically. Click **Close** to close the **Device Configuration** window.

Device Configuration	- have a set for a set			
Device Name	as been configured. Ethernet Address	Status		
SX-XXXX	84:25:3F:01:23:45	Completed.	(1)	
		<u>D</u> etail	s <u>C</u> lo	se

# 4-6. Bulk Configuration

The following explains how to configure multiple devices in bulk.

For bulk configuration, the configuration file is used to send the settings to the devices.

### **Before You Begin**

In order to configure multiple devices at once, the configuration file needs to be created first. The configuration file can be created by one of the following 4 methods:

#### (1) Creating from the selected device

The configuration file is created using the setting information of the device displayed on the list.

#### (2) Creating from a template

The configuration file is created using a template of each device.

#### (3) Editing the existing file

The existing configuration file can be edited.

#### (4) Merging multiple configuration files

Multiple configuration files are merged to one as a new file.



When the login password is not set to a device, please include that setting to the configuration file. If the login password is not set, the bulk configuration does not perform correctly.

## (1) Creating from the selected device

The configuration file is created using the setting information of the device displayed in the list. The current settings of the configured device can be utilized. The configuration file is created in the **Create Configuration File** window.

# [Create Configuration File Window]

	Select All	
System Configuration	Item	Contents
Network Configuration Wired LAN Configuration Wireless LAN Common Confi Wireless LAN Configuration 1 Wireless LAN I/F 1 Wireless LAN I/F 2 Wireless LAN I/F 3 Wireless LAN I/F 4	Basic Settings Host Name Password Scheduled Reboot Reboot Time (hours) Reboot Time (mins) Access Point Name	SX000001 Enable 00 00 AP01
Wireless LAN Configuration 2 Wireless LAN I/F 5 Wireless LAN I/F 6		

Name	Details
Window title	Shows the device name and the Ethernet Address.
Select All	Clicking this will check the check boxes of all setting items.
Clear All	Clicking this will clear the check boxes of all setting items.
Configuration menu Menu of settings.	
	Contents of settings.
List of settings	Each setting will show the current settings of the device. The settings
	displayed in this list will vary depending on the device you configure.
	Check the check box of the items you want to configure.
Display the password	Check this check box when you do not want to hide the password.
[Reload] button	Reloads the setting information.
[Save] button	Saves the edited settings as a configuration file.
[Close] button	Closes the window.

Note

# [Creating Configuration File]

1. Select the device you want to use the configuration of and click the **Create the configuration file** icon and click **Create from Selected Device** from the toolbar.



- The configuration file can also be created by one of the following methods:
- Select the device and click Settings Create from Selected Device from the menu bar.
- Right-click on the device and select Create Configuration File from the context menu.
- When a password is set to the device, the screen below is displayed. Enter the password of the device and click **OK**.

E	nter Password	x		
	Enter the password to connect to the device blow.			
	Device Name:	SX-XXXX		
	Ethernet Address:	84:25:3F:01:23:45		
	<u>P</u> assword:		(1)	

2. In the **Create Configuration File** window, the settings of the current device are displayed on the list. Check the check box of the items you want to use for the configuration file, edit the settings and click **Save**.

System Configuration       Item       Contents         Network Configuration       Basic Settings       Item         Wired LAN VF 1       Host Name       SX000001         Wireless LAN Configuration 1       Fassword       Scheduled Reboot       Enable         Wireless LAN I/F 1       Reboot Time (hours)       00       Item       Item		Select All		
Wired LAN VF 1     Password       Wireless LAN Configuration 1     Scheduled Reboot       Wireless LAN VF 1     Reboot Time (hours)	Network Configuration	Basic Settings		
Wireless LAN I/F 1 Reboot Time (hours) 00	Wireless LAN Common Confi =	Password		
	Wireless LAN I/F 1 Wireless LAN I/F 2			
Wireless LAN I/F 3 Access Point Name AP01 Wireless LAN I/F 4 Wireless LAN I/F 4	Wireless LAN I/F 4	Access Point Name	AP01	
Wireless LAN Configuration 2 Wireless LAN I/F 5 Wireless LAN I/F 6 +	Wireless LAN I/F 5	-		

TIP

Only the items you have checked the check box will be updated. Clear the check box of the items you do not want to change the configuration.

• The configurable settings will differ depending on each device. For details, refer to the operating manual of that device.

Note

E

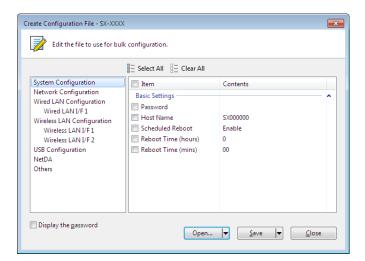
**3.** In the dialog to save the configuration file, specify the file name and click **Save**.

🛃 Save Configuration File					×
😋 🔾 🗢 📕 דאר אאר א	lanager	• 4 <sub>7</sub>	Search AMC	Manager	٩
Organize 👻 New fol					0
🔆 Favorites	Name	Date m	odified	Туре	
🥽 Libraries		No items match your sea	irch.		
🖳 Computer					
📬 Network					
	(	1)—			Þ
File <u>n</u> am sv⊇	x000000x	• /			•
Save as <u>t</u> ype:	( <mark>91)</mark>				-
) Hide Folders		<b>C</b>	Save		2

## (2) Creating from a template

The configuration file can be created in the **Create Configuration File** window using a template for each device.

## [Create Configuration File Window]

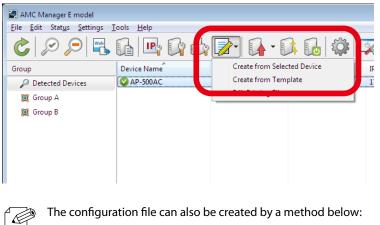


Name	Details	
Window title	Shows the device name of the selected template.	
Select All	Clicking this will check the check boxes of all setting items.	
Clear All	Clicking this will clear the check boxes of all setting items.	
Configuration menu	Menu of settings.	
	Contents of settings.	
List of settings	The settings displayed in this list will vary depending on the device you have	
selected. Check the check box of the items you want to configure.		
Display the password	vord Check this check box when you do not want to hide the password.	
[Open] button	Opens the existing configuration file.	
Open Template	Opens the window to select a template of the configuration file.	
[Save] button	Saves the entered settings as a configuration file.	
[Close] button	Closes the window.	

# [Creating Configuration File]

Note

**1.** Click the **Create the configuration file** icon and click **Create from Template** from the toolbar.



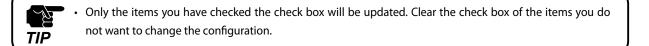
Click Settings - Create Configuration File - Create from Template from the menu bar.

2. In the Select Template window, select the device to configure and click OK.

Device Name	Comments	
AP-500AC	This is the file for AP-500AC.	
P-501AC E model	This is the file for AP-501AC E model.	
P-511AC	This is the file for AP-511AC.	
P-602AC E model	This is the file for AP-602AC E model.	
R-300AN	This is the file for BR-300AN.	
R-400AN	This is the file for BR-400AN.	
S-520AN	This is the file for DS-520AN.	
S-600	This is the file for DS-600.	
BR-100AN	This is the file for FBR-100AN.	

3. In the Create Configuration File window, check the check box of the items you want to use for the configuration file, edit the settings and click Save.

System Configuration Network Configuration Wired LAN Configuration Wireless LAN Configuration Wireless LAN UF 1 Wireless LAN UF 2 USB Configuration NetDA Others	<ul> <li>Select All = Clear All</li> <li>Item</li> <li>Basic Settings</li> <li>Password</li> <li>Host Name</li> <li>Scheduled Reboot</li> <li>Reboot Time (hours)</li> <li>Reboot Time (mins)</li> </ul>	Contents SX000000 Enable 0 00	(1
Display the password			





The configurable settings will differ depending on each device. For details, refer to the operating manual of that device.

Note

**4.** In the dialog to save the configuration file, specify the file name and click **Save**.

Save Configuration File					×
S AMC N	/lanager		👻 🍫 Search AM	C Manager	٩
Organize 🔻 New fo					0
🔆 Favorites	Name	^	Date modified	Туре	1
🥽 Libraries		No items match	h your search.		
💻 Computer					
🙀 Network					
	<	(1)			Þ
	x00x_000000x	- ( • )-			-
Save as <u>t</u> ype:	<u> </u>				
Hide Folders			Save		2

# (3) Editing the existing file

The existing template can be edited in the **Edit Configuration File** window.

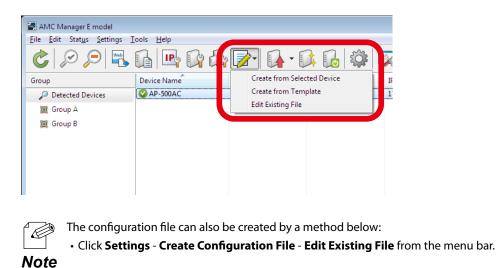
# [Edit Configuration File Window]

Edit Configuration File - sx_xxxx_xxxxx	dit Configuration File - sx_xxxx_xxxxxxxxxcc.cfg *				
Edit the file to use for bulk configuration.					
	Select All				
System Configuration	Item	Contents			
Network Configuration Wired LAN L/F1 Wireless LAN Configuration I Wireless LAN Configuration I Wireless LAN L/F2 Wireless LAN L/F2 Wireless LAN L/F3 Wireless LAN L/F4 Wireless LAN L/F5 Wireless LAN L/F5	Basic Settings Host Name Sassword Scheduled Reboot Reboot Time (hours) Reboot Time (mins) Access Point Name	SX000001 Enable 00 00 AP01	~		
Display the <u>p</u> assword	Open	▼ <u>S</u> ave ▼ <u>C</u> los	se .		

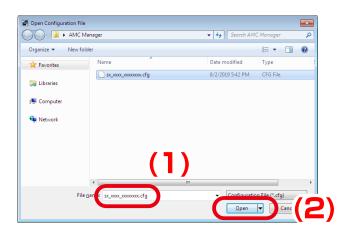
Name	Details
Window title	Shows the file name of the selected configuration file.
Select All	Clicking this will check the check boxes of all setting items.
Clear All	Clicking this will clear the check boxes of all setting items.
Configuration menu	Menu of settings.
	Contents of settings.
List of settings	The settings displayed in this list will vary depending on the device you have
	selected. Check the check box of the items you want to configure.
Display the password	Check this check box when you do not want to hide the password.
[Open] button	Opens the existing configuration file.
Open Template	Opens the window to select a template of the configuration file.
[Save] button	Saves the entered settings as a configuration file.
[Close] button	Closes the window.

# [Editing Configuration File]

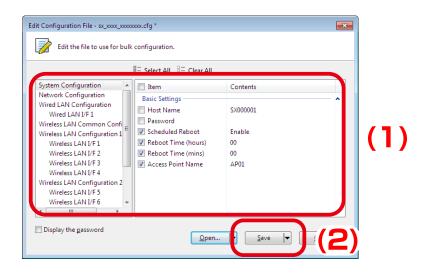
**1.** Click the **Create the configuration file** icon and click **Edit Existing File** from the toolbar.



2. In the dialog to open the configuration file, select the configuration file to edit and click **Open**.



3. In the Edit Configuration File window, check the check box of the items you want to edit, edit the settings and click Save.



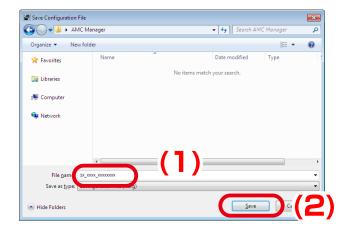
Only the items you have checked the check box will be updated. Clear the check box of the items you do <u>کل</u> not want to change the configuration. TIP



The configurable settings will differ depending on each device. For details, refer to the operating manual of that device.

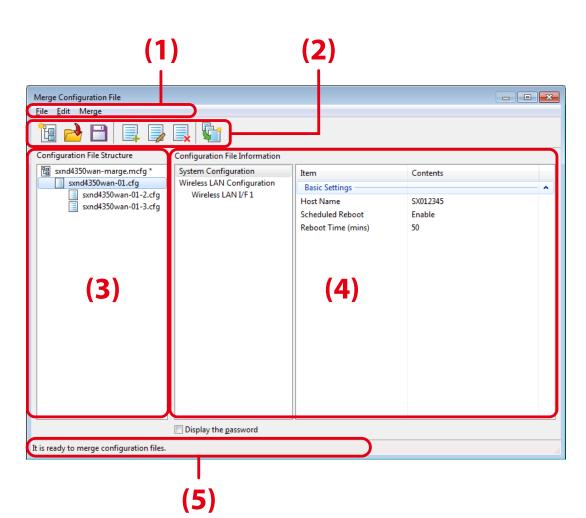
Note

**4.** In the dialog to save the configuration file, specify the file name and click **Save**.



## (4) Merging multiple configuration files

Multiple existing configuration files can be merged into one as a new file.



# [Merge Configuration File Window]

#### (1) Menu bar

Controls the project files and configuration files.

#### (2) Toolbar

Controls the project files and configuration files.

#### (3) Configuration File Structure

Shows the configuration files managed by the project file.

#### (4) Configuration File Information

Shows the merge status and the settings of selected configuration files.

#### (5) Status bar

Displays edit status of the project file.

#### Menu bar

Manu bar provides all available functions of configuration merge window, such as creating project file, adding configuration file, etc.



Menu	Name	Details
File	Create New Project File	Creates a new project file.
	Open Project File	Opens an existing project file.
	Save	Saves change of the project file.
	Save As	Saves a project file.
	Exit	Closes the configuration file merge window.
Edit	Add Configuration File	Adds the existing configuration file to the project.
	Edit Configuration File	Opens the selected configuration file from the project.
	Delete Configuration File	Deletes the selected configuration file from the project.
Merge	Merge Configuration File	Merges settings of each configuration file based on project
		file and creates a new configuration file.

#### Toolbar

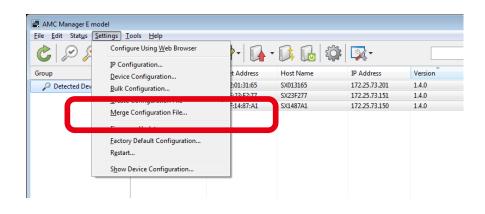
Toolbar provides all available functions of configuration merge window, such as creating project file, adding configuration file, etc.



lcon	Name (Tooltip)	Details
	Create New Project File	Creates a new project file.
2	Open Project File	Opens an existing project file.
B	Save	Saves change of the project file.
	Add Configuration File	Adds the existing configuration file to the project.
	Edit Configuration File	Opens the selected configuration file from the project.
	Delete Configuration File	Deletes the selected configuration file from the project.
	Merge Configuration File	Merges settings of each configuration file based on project file and creates a new configuration file.

## [Merging Multiple Configuration Files]

**1.** From the menu bar, click **Settings** - **Merge Configuration File.** 





The Merge Configuration File window can also be displayed by the method below.

• Select Merge Configuration File from the right-click menu.

**2.** In the **Merge Configuration File** window, click the **Create New Project File** icon from the toolbar to create a project file.

File       Edit Merge         Image: Configuration File Information       Image: Configuration File Information         Image: Configuration File Information       Item       Contents	
Configuration File Information	
item Contents	
Display the password	
Please add a project file.	

**3.** In the **Create New Project File** window, enter the file name and click **Save**.

Create New Project File						×
G v Mc M	anager		• <del>*</del> *	Search AM	C Manager	٩
Organize 🔻 New fol	der				8≣ ▼	0
🔆 Favorites	Name	Ť	Date m	nodified	Туре	1
🧊 Libraries		No items match	your sea	arch.		
🖳 Computer						
📬 Network						
	4					•
File <u>n</u> ame: sxnc	4350wan-marge					•
Save as type: Proj	ect File (*.mcfg)					•
) Hide Folders				<u>S</u> ave	Cance	el

**4.** The created project file is displayed under **Configuration File Structure**. Click the **Add Configuration File** icon to add configuration files to merge.

Merge Configuration File			
<u>File</u> <u>E</u> dit Merge			
🛅 🔁 E 🛛 💷 🕞			
Configuration File Structure	Configuration File Information		
留 sxnd4350wan-marge.mcfg		Item	Contents
	Display the paraword		
	Display the password		
Please add a configuration file.			



• If a configuration file is added to another configuration file, they are displayed as a tree view. When there are different settings between upper file and lower file, the setting of the lower file will be applied for bulk configuration file.

**5.** After the configuration files are added, click the **Merge Configuration File** icon.

Eile <u>E</u> dit Merge				
Configuration File Structure	Configuration File Information			
sxnd4350wan-marge.mcfg *	System Configuration Wireless LAN Configuration	Item Basic Settings	Contents	
■ sxnd4350wan-01-2.cfg ■ sxnd4350wan-01-3.cfg	Wireless LAN <i>VF</i> 1	Host Name Scheduled Reboot Reboot Time (mins)	SX012345 Enable 50	
	Display the password	_![		

- Configuration File Information shows the settings merged between upper file and lower file.
  - Settings to be changed after the file merge will be highlighted in red.
- **Note** Categories including the changed settings will also be highlighted in red.

6. In the Merge Configuration File window, specify the folder path, check the files to output and click Merge Configuration File.

Merge Configuration File	
Folder Path: C:\AMC Manager\N	Merge Browse
List of configuration files to merge:	
Output File Name	Configuration File Structure
<ul> <li>✓ 1_sxnd4350wan-01-2_merge.cfg</li> <li>✓ 2_sxnd4350wan-01-3_merge.cfg</li> </ul>	sxnd4350wan-01.cfg - sxnd4350wan-01-2.cfg sxnd4350wan-01.cfg - sxnd4350wan-01-3.cfg
	Merge Configuration File

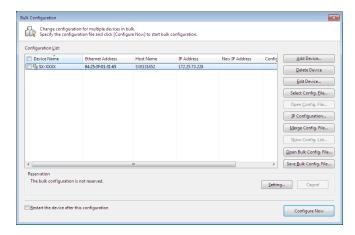


• By default, "project file path\Merge" is selected as folder path. To change it, click Browse and select a new folder.

• By double-clicking the file name, the file name can be changed.

Note

# **Bulk Configuration Window**



Name	Details
	Shows the name, Ethernet Address, Host Name, IP Address of the devices you
Configuration List	may want to configure in bulk. Also, the name of configuration file to use for
Configuration List	bulk configuration is displayed. Check the check box of the devices you want
	to configure in bulk.
[Add Device] button	Adds a device to the configuration list.
	If clicked, the <b>Add Device</b> window is displayed.
[Delete Device] button	Deletes the device from the configuration list.
[Edit Davica] button	Select one device in the configuration list and select the configuration file to
[Edit Device] button	use. If clicked, the Edit Device window is displayed.
[Select Config. File] button	Select the devices in the configuration list and select the configuration file to
[Select Coning. File] Dutton	use. Two or more devices can be selected.
[Open Config. File] button	Opens the Edit Configuration File window at which you can edit the
	configuration file selected for the device.
	Opens the IP Address Configuration window at which you can specify the
[IP Configuration] button	IP address to configure to the device. By selecting two or more devices,
	sequential IP addresses can be configured.
[Merge Config. File] button	Merges multiple configuration files into one file. Opens the Merge
	Configuration File window.
[Show Config. List] button	Shows the setting of configuration file to use for the device whose check box is on.
[Open Bulk Config. File] button	Opens the existing bulk configuration file.
	The devices to configure in bulk and configuration file of each are displayed in the list.
	Saves the list of devices and configuration files as a bulk configuration file.
[Save Bulk Config. File] button	The bulk configuration file can also be used for emergency use.
	For details, refer to "4-14. Allowing Public Use In Case Of Emergency".
	Shows the reservation of the bulk configuration.
Reservation	By clicking <b>Open the target file</b> that is displayed after the reservation is made,
	the registered bulk configuration file can be opened.
	(AMC Manager <sup>®</sup> E model only)
[Setting] button	Opens the reservation window. When no devices are displayed on the
	configuration list, the error message is displayed. (AMC Manager® E model only)
[Cancel] button	Deletes the reservation. (AMC Manager® E model only)
Restart the device after this	Check this check box if you want to restart the devices after finishing the bulk
configuration	configuration.
-	Starts the bulk configuration. Configuration will be loaded to the devices that
[Configure Now] button	you have selected the configuration file and have checked the check box.

# Add Device Window

Add Device							×
Enter the information of the device	to add	ł.					
Ethernet Address:	84	25	ЗF	0	1	23	45
IP Address:	19	2.	168		20		123
<u>H</u> ost Name:	SX01	2345					
Device <u>N</u> ame:	SX-XXXX						
Password:	*****						
Configuration File:	C:\sx_xxxx_setting.cfg						
New IP <u>A</u> ddress:	0		0	÷	0		0
New Subnet Mask:	0		0		0		0
New Default Gateway:	0		0		0		0
🕅 Display <u>t</u> he password		Add			1	Canc	el 📃

Name	Details
Ethernet Address	Enter the Ethernet Address of the device to add.
IP Address	Enter the IP Address of the device to add.
Host Name	Enter the Host Name of the device to add.
Device Name	Enter the name of the device to add.
Password	Enter the password configured to the device.
[Configuration File] button	Select the configuration file to use for the device.
	Specify the IP address to configure.
New IP Address	When 0.0.0.0 is specified, New IP Address, New Subnet Mask and New
	Default Gateway are not configured to the device.
New Subnet Mask	Specify the Subnet Mask to configure.
	When 0.0.0.0 is specified, it is not configured to the device.
Now Default Catoway	Specify the Default Gateway to configure.
New Default Gateway	When 0.0.0.0 is specified, it is not configured to the device.
Display the password	Check this check box when you do not want to hide the password.
[Add] button	Adds the device.
[Cancel] button	Cancels the settings and closes the window.

# Edit Device Window

Ethernet Address:	84 2	5 3	F	01	23	45
IP Address:	192	. 168	3.	20		123
<u>H</u> ost Name:	SX01234	5				
Device <u>N</u> ame:	SX-ND-	4350V	/AN+	÷		
Password:	*******					
Configuration File:	C:\sx_xx	xx_set	ting.	cfg		
New IP <u>A</u> ddress:	0	. 0		0		0
New Subnet Mask:	0	. 0		0		0
New Default Gateway:	0	. 0		0		0

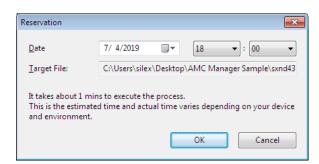
Name	Details			
Ethernet Address	Enter the Ethernet Address of the selected device.			
IP Address	Enter the IP Address of the selected device.			
Host Name	Enter the Host Name of the selected device.			
Device Name	Enter the name of the selected device.			
Password	Enter the password configured to the device.			
[Configuration File] button	Select the configuration file to use for the device.			
	Specify the IP address to configure.			
New IP Address	When 0.0.0.0 is specified, New IP Address, New Subnet Mask and New			
	Default Gateway are not configured to the device.			
New Subnet Mask	Specify the Subnet Mask to configure.			
New Subnet Mask	When 0.0.0.0 is specified, it is not configured to the device.			
New Defeult Cateway	Specify the Default Gateway to configure.			
New Default Gateway	When 0.0.0.0 is specified, it is not configured to the device.			
Display the password	Check this check box when you do not want to hide the password.			
[OK] button	Sets the selected configuration file to the device.			
[Cancel] button	Cancels the edit and closes the window.			

# IP Address Configuration Window

IP Address Configuration						×
Start IP Address:	0	0		0		0
End IP Address:	0	0		0		0
Number of Steps:	0	0		0		1
Subnet <u>M</u> ask:	0	0		0		0
Default Gateway:	0	0	÷	0		0
	OK			С	anc	el

Name	Details
Start IP Address	Specify the start IP address for the address range to configure.
End IP Address	Specify the end IP address for the address range to configure.
	Specify the number to increment when sequential IP addresses are configured
Number of Steps	to the devices by taking the addresses from the specified range (between start
	IP address and end IP address).
Subnet Mask	Specify the subnet mask to configure.
Default Gateway	Specify the default gateway to configure.
	If clicked, the IP address to configure is displayed at New IP Address in the
[OV] hutten	Configuration List. The new IP address is automatically pre-assigned by
[OK] button	taking the address from the specified address range (between start address
	and end IP address) based on the number of steps.
[Cancel] button	Cancels the edit and closes the window.

### **Reservation Window**



Name	Details
Date	Specify the time when the bulk configuration should be executed.
Date	Click $igsim$ to set the date and time.
Target File	Shows a path of the bulk configuration file.
[OK] button	Sets the reservation using the specified date and time.
[Cancel] button	Closes the window.

TIP

### Bulk Configuration Using a Reservation Function

By using the reservation function, multiple devices can be configured in bulk at the specified date/time. How to make the reservation is explained below.

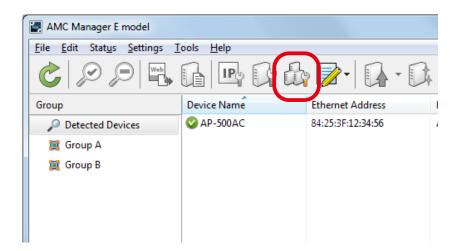
- Only AMC Manager<sup>®</sup> E model supports the reservation function.
- To use the reservation function, time synchronization must be completed in your system using the Windows Time service.
- The bulk configuration using the reservation function can run even when the PC is locked.
- Do not allow the PC to go to sleep mode or to be shut down after the reservation is made. The bulk configuration may start at unexpected time.
- Make sure that bulk configuration and firmware update do not run at the same time with the same devices using the reservation function.

For bulk configuration using the reservation function, the bulk configuration file needs to be created in advance.

For how to create the bulk configuration file, refer to **4-14. Allowing Public Use In Case of Emergency** - **Before You Begin**.

## [Making a Reservation for Bulk Configuration]

1. Click the **Configure multiple devices in bulk** icon from the toolbar.





The bulk configuration window can also be displayed by a method below:

Select the devices to configure in bulk and click Settings - Bulk Configuration from the menu bar.

2. In the Bulk Configuration window, click Open Bulk Config. File.

nfiguration <u>L</u> ist:	Ethernet Address	Host Name	IP Address	New IP Address	Confic	Add Device
						Delete Device
						Edit Device
						Select Config. Eile
						Open Config. File
						IP Configuration
						Merge Config. File
						5 <u>-</u> 5 <u>-</u> 60 - 60 - 60 - 60 - 60 - 60 - 60 - 60
						Open Bulk Config. File
		m				<u></u>
eservation						
The bulk configuration	on is not reserved.				Setting.	

**3.** Select a bulk configuration file to use and click **Open**.

🕽 🔾 🗢 📕 🗢 AMC	Manager Sample	✓ 4 Search AM	C Manager Sample 🛛 🔎
Organize 👻 New	folder		= - 1 0
🔆 Favorites	Name	Date modified	Туре
	sxnd4350wan_bulkconfig.bcf	7/4/2019 6:04 PM	BCF File
🥞 Libraries			
🖳 Computer			
🗣 Network			
	(7)		
	(1)		
	ile name: sxnd4350wan_bulkconfiq.bcf		maion Files

**4.** Click **Setting** to set the time to execute bulk configuration based on the selected file.

onfiguration <u>L</u> ist:						
Device Name	Ethernet Address	Host Name	IP Address	New IP Address	Config	Add Device
SX-ND-4350WAN+	84:25:3F:01:31:65	SX013165	172.25.73.228		sxnd43	Delete Device
🗸 强 SX-ND-4350WAN+	84:25:3F:23:F2:77	SX23F277	172.25.73.151		sxnd43	Delete Device
🖉 🐪 SX-ND-4350WAN+	84:25:3F:14:87:A1	SX1487A1	172.25.73.150		sxnd43	Edit Device
						Select Config. <u>F</u> ile
						Open <u>C</u> onfig. File
						IP Configuration
						Merge Config. File
						Show Config. List
						Open Bulk Config. File
•					•	Save Bulk Config. File.
Reservation The bulk configuration is	not reserved.			(	<u>S</u> etting	Ca <u>n</u> cel

- Only the devices you have checked the checkbox will be the target for bulk configuration.
- If you want to restart the device automatically after finishing the bulk configuration, check the checkbox at

**Note** Restart the device after this configuration and then click Setting.

5. In the Reservation window, specify the date/time for bulk configuration and click OK.

Reservation					×		
<u>D</u> ate	7/ 4/2019		18	▼: 00	-	(	1)
Target File.	C.\Users\siles	(Desktop)	AIVIC Mar	lager Sampler	sxnd43		
It takes about 1 min This is the estimate and environment.				ding on your	device		
			ОК	)(2)	:1		

**6.** Check that the start time of bulk configuration is displayed at **Reservation**.

onfiguration <u>L</u> ist:						
Device Name	Ethernet Address	Host Name	IP Address	New IP Address	Config	Add Device
🔽 🏪 SX-ND-4350WAN+	84:25:3F:01:31:65	SX013165	172.25.73.228		sxnd43	Delete Device
🗹 强 SX-ND-4350WAN+	84:25:3F:23:F2:77	SX23F277	172.25.73.151		sxnd43	Delete Device
🗹 🚹 SX-ND-4350WAN+	84:25:3F:14:87:A1	SX1487A1	172.25.73.150		sxnd43	<u>E</u> dit Device
					(	Select Config. <u>File</u>
					(	Open <u>C</u> onfig. File
					(	IP Configuration
					(	Merge Config. File
					(	Show Config. List
					[	Open Bulk Config. File
		10			4	Save <u>B</u> ulk Config. File.
Reservation						
	reserved.					

• Clicking **Open the target file** will display the confirmation message below. If **Yes** is clicked on the message, the details of the reserved file is displayed.

AMC Man	ager 🔀
?	Do you want to display the details of the reservation? If continued, your edits will be lost.
	Yes

**7.** The reservation has been made.

Note

When the bulk configuration is executed according to the reservation, the information is changed to below.

onfiguration <u>L</u> ist:						
Device Name	Ethernet Address	Host Name	IP Address	New IP Address	Config	Add Device
🔽 🏪 SX-ND-4350WAN+	84:25:3F:01:31:65	SX013165	172.25.73.228		sxnd43	Delete Device
SX-ND-4350WAN+	84:25:3F:23:F2:77	SX23F277	172.25.73.151		sxnd43	Delete Delite
V 🕞 SX-ND-4350WAN+	84:25:3F:14:87:A1	SX1487A1	172.25.73.150		sxnd43	Edit Device
						Select Config. <u>File</u>
						Open <u>C</u> onfig. File
						[P Configuration
						Merge Config. File
					(	Show Config. List
					(	Open Bulk Config. File
					+	Save <u>B</u> ulk Config. File
Reservation						
The bulk configuration is	executed.				Setting	Cancel



• If Show the details is clicked, the result of bulk configuration is displayed.

# [Cancelling a Reservation]

The reservation can be deleted by clicking **Cancel**.

<	► Save <u>B</u> ulk Config. File
Reservation The bulk configuration is reserved. Reserved Time: 7/4/2019 18:00 <u>Open the target file</u>	Setting Cancel
$\blacksquare$ Restart the device after this configuration	Configure No <u>w</u>
	Save <u>B</u> ulk Config. File
Reservation The bulk configuration is not reserved.	Setting Cancel
<u>Restart the device after this configuration</u>	Configure No <u>w</u>

## Configuring Devices in Bulk

The following is an example of configuring multiple devices at once using the configuration file.



- In the bulk configuration, the settings saved in the configuration file will be sent to the devices.
- When you configure the device-specific values such as IP Address or host name, use the configuration file of each device. The configuration file can also be used to update the common setting that is shared among several devices, such as SSID or Pre-Shared Key of the wireless security.



• Only the items you have checked the check box will be updated. Make sure that you have created the configuration file in which the check box is checked for those you want to update.

• When AMC Manager<sup>®</sup> Free is used, up to 10 devices can be configured at a time.

**1.** For the bulk configuration of IP address, the IP address of the PC needs to be changed beforehand. Change the IP address of the PC to the one that can be communicated with the devices after the bulk configuration.

Sample setting)

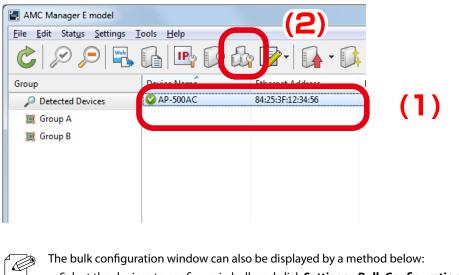
Sample IP address setting for bulk configuration	Sample IP address setting for PC
192.168.0.10 - 192.168.0.30	192.168.0.100
172.25.10.10 - 172.25.10.25	172.25.10.100



• The bulk configuration of IP address can be used for initial configuration.

Note

2. Select the devices to configure in bulk from the list of the AMC Manager and click the **Configure multiple devices in bulk** icon from the toolbar.



The bulk configuration window can also be displayed by a method below: • Select the devices to configure in bulk and click **Settings** - **Bulk Configuration** from the menu bar.

**3.** In the **Bulk Configuration** window, select the devices to configure in bulk from the **Configuration List** and click the **Select Config. File** button.

Bulk Configuration Change configuration Specify the configuration	ation for multiple devices in guration file and click [Conf	bulk. igure Now] to start bul	k configuration.			
Configuration List:	Ethernet Address + 84:25:3F:01:31:65	Host Name SX013165	IP Address 172.25.73.228	ew IP Address Co	Add Device	
C + + + + + + + + + + + + + + + + + + +		SX23F277 SX1487A1	172.25.73.151 172.25.73.150		<u>D</u> elete Device	) (2)
		(1)			Open Sonnig- He           IP Configuration           Merge Config. File           Show Config. List	
<		m			Open Bulk Config. File           ►           Save <u>B</u> ulk Config. File	
Reservation The bulk configuration	n is not reserved.				Setting Cancel	
<u>R</u> estart the device after <u>R</u> estart the device after	r this configuration				Configure No <u>w</u>	

**4.** Select the configuration file that you have created to use for bulk configuration and click **Open**.

	MC Manag	ger Sample	<ul> <li>✓ ✓</li> <li>Search A</li> </ul>	MC Manager Samp	ole 🔎
Organize 🔻 Ne	w tolder	<u> </u>		8== 🗶 🛄	V
🔆 Favorites	<b>^</b>	Name	Date modified	Туре	Siz
🧮 Desktop		sxnd4350wan_setting.cfg	6/2/2015 1:53 PM	CFG File	
<ul> <li>Recent Places</li> <li>Libraries</li> </ul>	E				
Documents Music Pictures Videos Computer	- 4	(1)			

5. The selected file is displayed at Configuration File Name in the Configuration List.Go on to 8 to configure the devices using the configuration file.To specify the IP addresses to configure, click IP Configuration.

 uration <u>L</u> ist:						
Ethernet Address	Host Name	IP Address	New IP Address	Configuration File Name	Add Device	
 84:25:3F:01:31:65	SX013165	172.25.73.228		sxnd4350wan_setting.cfg	Delete Device	
84:25:3F:23:F2:77	SX23F277	172.25.73.151		sxnd4350wan_setting.cfg	Zeice benee	
84:25:3F:14:87:A1	SX1487A1	172.25.73.150		sxnd4350wan_setting.cfg	Edit Device	
					Select Config. Eile	
			/ -		Select Coning. Lile	
					Open Config. File	
				<b>/</b> (	IP Configuration	(2
						-
					Show Config. List	
					Open Bulk Config. File	
			1	E E	Save Bulk Config. File	
vation						
bulk configuration is n						



Information of the devices to configure in bulk and the configuration files can be saved by clicking **Save Bulk Config.File**. Once the bulk configuration is saved, it can be used for **Emergency Use**. **6.** In the **IP Address Configuration** window, specify the IP address range to configure. When finished, click **OK**.

IP Address Configuration							×
Start IP Address:	192		168		0		1
End IP Address:	192		168		0		100
<u>N</u> umber of Steps:	0		0		0		1
Subnet <u>M</u> ask:	255		255		255		0
<u>D</u> efault Gateway:	192	•	168		0		254
OK Cancel							



- When IP address is configured to 3 devices with above setting, the first one will get "192.168.0.1" as same as **Start IP Address**, and the second one and the third one will get "192.168.0.2" and "192.168.0.3" respectively as the address is incremented by 1 as specified to the number of steps.
- The IP addresses to configure are pre-specified and displayed at New IP Address in the Configuration List.

Bulk Cor	nfiguration					×
	Change configuration Specify the configurati	for multiple devices ir on file and click [Cont	i bulk. figure Now] to start bulk	configuration.		
Config	guration <u>L</u> ist:					
	Ethernet Address	Host Name	IP Address	New IP Address	Configuration File Name	Add Device
N+ N+	84:25:3F:01:31:65 84:25:3F:23:F2:77	SX013165 SX23F277	172.25.73.228 172.25.73.151	192.168.0.1 192.168.0.2	sxnd4350wan_setting.cfg sxnd4350wan_setting.cfg	Delete Device
N+	84:25:3F:14:87:A1	SX1487A1	172.25.73.150	192.168.0.3	sxnd4350wan_setting.cfg	Edit Device
						Select Config. <u>F</u> ile
						Open <u>C</u> onfig. File
						IP Configuration
						Merge Config. File
						Show Config. List
						Open Bulk Config. File
				T	Ъ	Save <u>B</u> ulk Config. File
	ervation e bulk configuration is no	ot reserved.			Settir	ıg Ca <u>n</u> cel
<u>R</u> es	start the device after this	configuration				Configure No <u>w</u>



• If the address is displayed at **New IP Address** when the other address is specified in the configuration file, the address displayed at **New IP Address** will be configured to the device.

66

**8.** Check the check box of the devices to configure in bulk and click **Configure Now**.

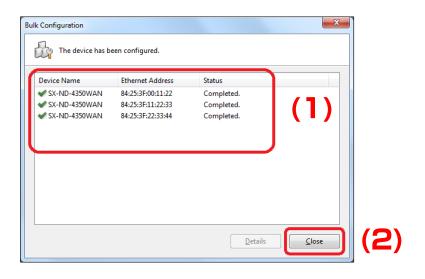
tion List:						
Dev e Name	Ethernet Address	Host Name	IP Address	New IP Address	Config	Add Device
🗹 🐪 s -ND-4350WAN+	84:25:3F:01:31:65	SX013165	172.25.73.228	192.168.0.1	sxnd43	Delete Device
🗹 强 s -ND-4350WAN+	84:25:3F:23:F2:77	SX23F277	172.25.73.151	192.168.0.2	sxnd43	Delete Device
🗹 🔒 S -ND-4350WAN+	84:25:3F:14:87:A1	SX1487A1	172.25.73.150	192.168.0.3	sxnd43	Edit Device
						Select Config. <u>F</u> ile
						Open <u>C</u> onfig. File
						IP Configuration
						Merge Config. File
						Show Config. List
						Open Bulk Config. File.
(		III			•	Save Bulk Config. File
Reservation The bulk configuration is	s not reserved.				<u>S</u> etting	. Ca <u>n</u> cel



- Clicking **Save Bulk Config. File** saves information of devices and configuration files to use for bulk configuration. The saved file can be used for the emergency use feature.
- **Note** When a password is set to the device, the screen below is displayed. Enter the password of the device and click **OK**.

Enter Password	×	
Enter the pass	sword to connect to the device blow.	
Device Name:	SX-XXXX	
Ethernet Address:	84:25:3F:01:23:45	
Password:		(1)

**9.** The bulk configuration performs and the result is displayed. Click **Close**.



If the result status does not say "Completed", modify the setting of the configuration file and try again.
 For how to make changes to the configuration file, see 4-6. Bulk Configuration - Before You Begin - (3)
 Editing the existing file.

# 4-7. Firmware Update

How to update the device firmware is explained.

The firmware can be updated from the **Firmware Update** window. The latest firmware file can be downloaded from our website.

ile Path:	C:\SX-XXXX.bin		<u>B</u> rowse
File Information			
Model Name:	SX-XXXX		
Version:	X.X.X		
Device Name	Ethernet Address	Version	
🔒 SX-XXXX	84:25:3F:01:23:45	X.X.X	
Reservation The firmware updat	ic pot recoved		Cancel

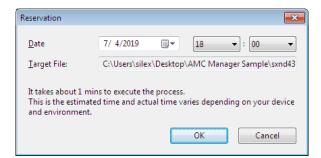
#### Firmware Update Window

Name	Details			
[Browse] button	Select the firmware file (BIN file format or ZIP file format including BIN file).			
File Path	Shows the file path to the selected firmware file.			
Model Name	Shows the device model of the firmware file.			
Version	Shows the firmware file version.			
(List of devices)	Shows the name, Ethernet Address and current firmware version of the			
(LIST OF DEVICES)	devices to update.			
	Shows the reservation of the firmware update.			
Reservation	By clicking <b>Show the details</b> that is displayed after the reservation is made,			
nesel valion	the firmware file and the reserved devices are displayed.			
	(AMC Manager <sup>®</sup> E model only)			
[Setting] button	Opens the reservation window. (AMC Manager® E model only)			
[Cancel] button	Deletes the reservation. (AMC Manager® E model only)			
Restart the device after the	Check this check box if you want to restart the device after finishing the			
update	firmware update.			
[Update Now] button	Executes the firmware update.			
[Close] button	Closes the window.			

TIP

- Some Silex devices need a version update file with the same file name as BIN file, when the firmware version is updated using AMC Manager.
- BIN file and version update file must be saved in the same folder (ZIP file).

### **Reservation Window**



Name	Details			
Date	Specify the time when the firmware update should be executed.			
Date	Click $igsiment$ to set the date and time.			
Target File	Shows a path of the firmware file.			
[OK] button	Sets the reservation using the specified date and time.			
[Cancel] button	Closes the window.			

### Firmware Update Using a Reservation Function

By using the reservation function, the device firmware can be updated at the specified date/time. How to make the reservation is explained below.

Only AMC Manager<sup>®</sup> E model supports the reservation function.

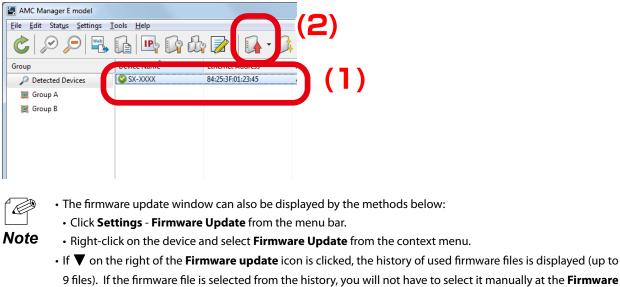
<u>n</u>

TIP

- To use the reservation function, time synchronization must be completed in your system using the Windows Time service.
- The firmware update using the reservation function can run even when the PC is locked.
- Do not allow the PC to go to sleep mode or to be shut down after the reservation is made. The firmware update may start at unexpected time.
- Make sure that bulk configuration and firmware update do not run at the same time with the same devices using the reservation function.

### [Making a Reservation for Firmware Update]

**1.** Select the device to update the firmware from the list and click the **Firmware update** icon from the toolbar.



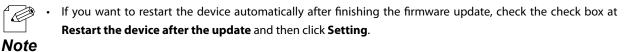
Update window.

**2.** In the Firmware Update window, select the firmware file (BIN file format or ZIP file format including BIN file) by clicking **Browse**.

To update the de ile Path: File Information Model Name: Version:	vice firmware, select firmware	file and click [Update Now].
Device Name	Ethernet Address	Version
¶a sx-xxxx	84:25:3F:01:23:45	1.0.0
Reservation The firmware update i	s not reserved.	Setting Cancel
	r the update	Update Now Close

**3.** Check the file information of the selected firmware and click **Setting**.

ile Path: File Information Model Name:	C:\SX-XXXX.bin	<u>B</u> rowse
Version:	X.X.X	
Device Name	Ethernet Address	Version
SX-XXXX	84:25:3F:01:23:45	X.X.X
Reservation		
The firmware update	e is not reserved.	Setting Cancel



72

**4.** In the **Reservation** window, specify the date/time for firmware update and click **OK**.

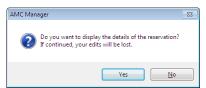
Reservation					<b>-</b> X		
<u>D</u> ate	7/ 4/2019		18	▼ : 00	•	(1	)
Lorget File	Gi\Users\siler	d.Desktop	AMC Ma	noger Somp	le'annel 12		
It takes about 1 m This is the estimat and environment.	ted time and act				ur device		

**5.** Check that the start time of firmware update is displayed at **Reservation**.

ile Path: File Information	C:\SX-XXXX.bin	<u>B</u> rowse
Model Name:	SX-XXXX	
Version:	X.X.X	
Device Name	Ethernet Address	Version
∰ SX-XXXX	84:25:3F:01:23:45	1.0.0
	te is reserved. /2019 18:00 <u>Show the details</u> fter the update	Setting Cancel



• Clicking **Show the details** will display the confirmation message below. If **Yes** is clicked on the message, the details of the reserved firmware file is displayed.



**6.** The reservation has been made.

When the firmware update is executed according to the reservation, the information is changed to below.

irmware Update	device firmware, select firmware	e file and click [Update Now].
File Path:	C:\SX-XXXX.bin	Browse
File Information		
Model Name:	SX-XXXX	
Version:	X.X.X	
Device Name	Ethernet Address	Version
¶ <u>∎</u> sx-xxxx	84:25:3F:01:23:45	1.0.0
Reservation The firmware updat Executed Time: 7/8,	e is executed. (2019 18:00 <u>Show the details</u>	Setting Cancel
Restart the device a	fter the update	Update Now Close

• If Show the details is clicked, the result of firmware update is displayed.

Note

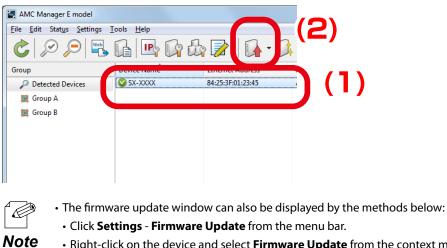
### [Cancelling a Reservation]

The reservation can be deleted by clicking **Cancel**.

Reservation The firmware update is reserved. Reserved Time: 7/8/2019 18:00 <u>Show the details</u>	Setting Cancel
Restart the device after the update	Update Now Close
Reservation	
Reservation The firmware update is not reserved.	Setting Cancel

### **Updating Firmware**

**1**. Select the device to update the firmware from the list and click the **Firmware update** icon from the toolbar.



• Right-click on the device and select Firmware Update from the context menu.

• If  $\nabla$  on the right of the **Firmware update** icon is clicked, the history of used firmware files is displayed (up to 9 files). If the firmware file is selected from the history, you will not have to select it manually at the Firmware Update window.

2. In the Firmware Update window, select the firmware file (BIN file format or ZIP file format including BIN file) by clicking Browse.

file Path: File Information Model Name: Version:		Browse
Device Name	Ethernet Address	Version
₽ SX-XXXX	84:25:3F:01:23:45	1.0.0
Reservation The firmware update	is not reserved.	Setting Cancel

**3.** Check the file information of the selected firmware and click **Update Now**.

If you want to restart the device automatically after completing the firmware update, check the check box at **Restart the device after the update** and then click **Update Now**.

Firmware Update		<b>—</b>
To update the device f	ïrmware, select firmware file a	nd click [Update Now].
File Information	SX-XXXX.bin	<u>B</u> rowse
Device Name	Ethernet Address	Version
🖷 sx-xxxx	84:25:3F:01:23:45	X.X.X
Reservation		
The firmware update is not	reserved.	Setting Cancel
Restart the device after the	update	Jpdate Now Close

• The new firmware will take effect after the device is restarted. If you have not selected the automatic restart, please restart the device manually. See **Restarting Device** for how to restart the device.

- When AMC Manager<sup>®</sup> Free is used, up to 10 devices can be controlled at a time.
- **4.** Enter the password of the device and click **OK**.

If the password is not configured to the device, the window below is not displayed.

Enter Password	×	
Enter the pass	sword to connect to the device blow.	
Device Name:	SX-XXXX	
Ethernet Address:	84:25:3F:01:23:45	
Password:		(1

JA ~

TIP

5. The firmware of the selected device has been updated.Click Close to close the Firmware Update window.

nware Update	has been updated.	
Device Name	Ethernet Address	Status
SX-XXXX	84:25:3F:01:23:45	Completed.

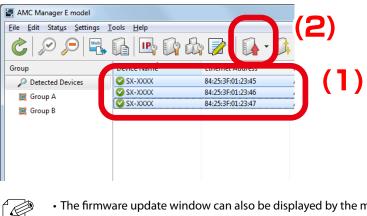
**6.** In the main window of the AMC Manager, check that the version information is changed for the device you have updated the firmware.

AMC Manager E model					
<u>File Edit Status Settings</u>	<u>T</u> ools <u>H</u> elp				
0000		₿ 🔊   🚺 •	📭 🔂 🖓	<b>~</b>	٥
Group	Device Name	Ethernet Address	Host Name	IP Address	Version
🔎 Detected Devices	SX-XXXX	84:25:3F:01:23:45	SX-XXXX-123456	172.25.72.253	X.X.X
🧝 Group A					
🧾 Group B					

Note

### Updating Firmware of Multiple Devices at Once

1. Select multiple devices to update the firmware from the list and click the **Firmware** update icon from the toolbar.



- The firmware update window can also be displayed by the methods below:
- Click Settings Firmware Update from the menu bar.
- Right-click on the device and select **Firmware Update** from the context menu.
- If  $\nabla$  on the right of the **Firmware update** icon is clicked, the history of used firmware files is displayed (up to 9 files). If the firmware file is selected from the history, you will not have to select it manually at the Firmware Update window.
- 2. In the Firmware Update window, select the firmware file (BIN file format or ZIP file format including BIN file) by clicking Browse.

To update the d ile Path: File Information Model Name: Version:	evice firmware, select firmware	file and click [Update Now].
Device Name SX-XXXX SX-XXXX SX-XXXX SX-XXXX	Ethernet Address 84:25:3F:01:23:45 84:25:3F:01:23:46 84:25:3F:01:23:47	Version 1.0.0 1.0.0 1.0.0
Reservation The firmware update	is not reserved.	Setting Cancel
<u>R</u> estart the device aft	er the update	Update Now Close

**3.** Check the file information of the selected firmware and click **Update Now**.

If you want to restart the device automatically after completing the firmware update, check the check box at **Restart the device after the update** and then click **Update Now**.

Firmware Update		<b>×</b>
To update the device	firmware, select firmware file a	nd click [Update Now].
File Path: C:	\SX-XXXX.bin	<u>B</u> rowse
	x-xxxx x.x	
Device Name	Ethernet Address	Version
SX-XXXX	84:25:3F:01:23:45	X.X.X
SX-XXXX	84:25:3F:01:23:46	X.X.X
SX-XXXX	84:25:3F:01:23:47	X.X.X
Reservation		
The firmware update is no	t reserved.	Setting Cancel
Restart the device after the	update	Update Now <u>C</u> lose

• The new firmware will take effect after the device is restarted. If you have not selected the automatic restart, please restart the device manually. See **Restarting Device** for how to restart the device.

- When AMC Manager<sup>®</sup> Free is used, up to 10 devices can be controlled at a time.
- **4.** Enter the password of the device and click **OK**.

dg~

TIP

If the password is not configured to the device, the window below is not displayed.

Enter Password	×	
Enter the pass	sword to connect to the device blow.	
Device Name:	SX-XXXX	
Ethernet Address:	84:25:3F:01:23:45	
Password:	······	(1
	<u> </u>	

**5.** The firmware of the selected device has been updated. Click **Close** to close the **Firmware Update** window.

XXXX         84:25:3F:01:23:45         Completed.           XXXX         84:25:3F:01:23:46         Completed.           XXXX         84:25:3F:01:23:47         Completed.
XXXX 84:25:5F:01:23:47 Completed.

**6.** In the main window of the AMC Manager, check that the version information is changed for the device you have updated the firmware.

ile <u>E</u> dit Stat <u>u</u> s <u>S</u> ettings	<u>T</u> ools <u>H</u> elp				
0		Ŝa [ <b>]</b> •	📭 🔂 🕸 🗗	<b>∛</b> -	0
Group	Device Name	Ethernet Address	Host Name	IP Address	Version
Detected Devices	SX-XXXX	84:25:3F:01:23:45	SX-XXXX-123456	172.25.72.253	X.X.X
I Group A	SX-XXXX	84:25:3F:01:23:46	SX-XXXX-123457	172.25.72.254	X.X.X
	SX-XXXX	84:25:3F:01:23:47	SX-XXXX-123458	172.25.72.255	X.X.X
🚉 Group B					

# 4-8. Factory Default Configuration

How to reset the device to the factory default setting is explained.

The device can be initialized from the **Factory Default Configuration** window.

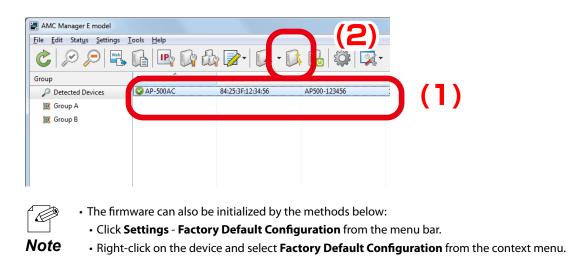
### Factory Default Configuration Window

tory Default Configura	ation		<u></u>
Click [Reset] to	o reset the device to factory de	faults.	
Device Name	Ethernet Address	Status	
SX-XXXX	84:25:3F:01:23:45	Waiting.	
Restart the <u>d</u> evice a	fter the factory default configu	aration <u>Reset</u>	<u>C</u> lose

Name	Details
(List of devices)	Shows the name, Ethernet Address, current status of the devices to initialize.
	The devices can be initialized when they are in the "Waiting" status.
Restart the device after the	Check this check box if you want to restart the device after finishing the
factory default configuration	factory default configuration.
[Reset] button	Executes the initialization.
[Close] button	Closes the window.

### Factory Default Configuration

**1**. Select the device to initialize from the list and click the **Factory default configuration** icon from the toolbar.



2. In the Factory Default Configuration window, check that the status message says Waiting for the device to initialize and click Reset.

If you want to restart the device automatically after completing the factory default configuration, check the check box at **Restart the device after the factory default configuration** and then click **Reset**.

tory Default Configur	ation	faulte	×
Device Name	Ethernet Address	Status	
II SX-XXXX	84:25:3F:01:23:45	Waiting.	
Restart the <u>d</u> evice a	fter the factory default configu	uration <u>R</u> eset	<u>C</u> lose



• The initialization will take effect after the device is restarted. If you have not selected the automatic restart, please restart the device manually. See **Restarting Device** for how to restart the device.

• When AMC Manager<sup>®</sup> Free is used, up to 10 devices can be controlled at a time.

**3.** Click **Yes** to the confirmation message.

AMC Manager	x
Are you sure that y	ou want to initialize the device?
	Yes No

**4.** Enter the password of the device and click **OK**.

If the password is not configured to the device, the window below is not displayed.

Enter	Password	x	
	Enter the passw	rord to connect to the device blow.	
De	vice Name:	SX-XXXX	
Etl	hernet Address:	84:25:3F:01:23:45	
Pa	ssword:		(1)

**5.** Check the result and click the **Close** button.

	as been initialized.		
Device Name	Ethernet Address	Status	
✔ SX-XXXX	84:25:3F:01:23:45	Completed.	

# 4-9. Restart

How to restart the device is explained.

The device can be restarted from the **Restart Device** window.

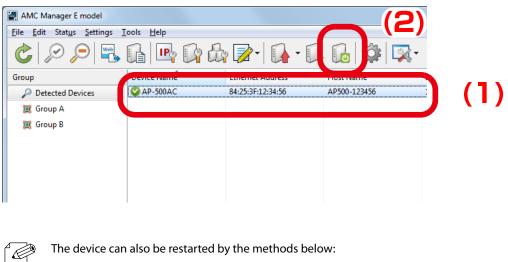
### **Device Restart Window**

art Device	to restart the device.	
Device Name	Ethernet Address	Status
SX-XXXX	84:25:3F:01:23:45	Waiting.
		Restart Close

Name	Details	
	Shows the name, Ethernet Address, current status of the devices to restart.	
(List of devices)	[Status]	
	The devices can be restarted when they are in the "Waiting" status.	
[Restart] button	Restarts the device.	
[Close] button	Closes the window.	

#### **Restarting Device**

1. Select the device to restart from the list and click the **Restart** icon from the toolbar.



- Click Settings Restart from the menu bar.
- **Note** Right-click on the device and select **Restart** from the context menu.
- 2. In the **Restart Device** window, check that the status message says **Waiting** for the device to restart and click **Restart**.

start Device Click [Restart]	to restart the device.	-
Device Name	Ethernet Address	Status
II SX-XXXX	84:25:3F:01:23:45	Waiting.
		Restart Close



• When AMC Manager<sup>®</sup> Free is used, up to 10 devices can be controlled at a time.

**3.** Click **Yes** to the confirmation message.

AMC Manager	x
? Ar	e you sure that you want to initialize the device?
	Yes No

**4.** Enter the password of the device and click **OK**.

If the password is not configured to the device, the window below is not displayed.

Enter Password	X	Γ
Ente	r the password to connect to the device blow.	
Device Name	e: SX-XXXX	
Ethernet Add	dress: 84:25:3F:01:23:45	
Password:		(1)

**5.** Check the result and click the **Close** button.

estart Device		X
The device ha	is been restarted.	
Device Name	Ethernet Address	Status
SX-XXXX	84:25:3F:01:23:45	Completed.
		Close

## 4-10. Showing Device Configuration List

How to retrieve configuration information from multiple devices and show it as a list is explained. The configuration information can be shown as a list on the configuration retrieval window.

### **Configuration Retrieval Window**

Device configuration	on is shown as a list. Click	[Retrieve Configuration].	
evice Name	Ethernet Address	Status	
SX-ND-4350WAN+	84:25:3F:01:31:65	Waiting	
SX-ND-4350WAN+	84:25:3F:23:F2:77	Waiting	
SX-ND-4350WAN+	84:25:3F:14:87:A1	Waiting	
		Retrieve Configuration	ose

Name	Details
	Device name, Ethernet Address and status of the devices are displayed.
(List of devices)	When the status is " <b>Waiting</b> ", configuration information can be retrieved
	from the device.
[Retrieve Configuration] button	Retrieves configuration information from the devices.
	Closes the configuration retrieval window.
[Close] button	After the configuration information is retrieved from the devices, the
	configuration information is displayed as a list.

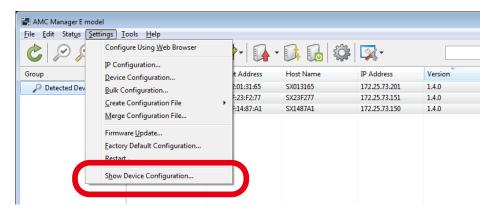
### Configuration List Window

System Configuration Network Configuration Wired LAN Configuration Wireless LAN Configuration Wireless LAN L/F 1 Wireless LAN L/F 2 Wireless LAN L/F 2 Wireless LAN L/F 3 Wireless LAN L/F 4 USB Configuration NetDA Others	Item Basic Settings Password Host Name Scheduled Reboot Reboot Time (hours) Reboot Time (mins)	SX-ND-4350WAN+ 84:25:3F:01:31:65 SX013165 Enable 0 00	SX-ND-4350WAN+ 84:25:3F:23:F2:77 SX23F277 Enable 0 00	SX-ND-4350WAN+ 84:25:3F:14:87:A1 SX1487A1 Enable 0 00
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------	----------------------------------------------------------------------	----------------------------------------------------------------------	----------------------------------------------------------------------

Name	Details
(Menu)	Shows menu of configuration information.
(Configuration information)	Shows the device configuration information. Configuration of each device is
	displayed. The displayed settings will vary depending on the selected devices.
Display the password	When the password information does not need to be hidden, check the
	check box.
	Opens a dialog to select a configuration file to compare. If comparison is
[Compare Configuration] button	executed, the different settings will be highlighted in red.
	Comparison target will be those you have checked the check box when the
	configuration file is created.
[Save] button	Saves the device configuration as CSV file.
[Close] button	Closes the configuration information window.

### Showing Device Configuration

1. Select the devices to show configuration as a list and click **Settings** - **Show Device Configuration** from the menu bar.



The Show Device Configuration window can also be displayed by the method below.

• Select Show Device Configuration from the right-click menu.

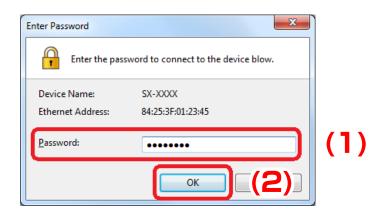
Note

2. In the Show Configuration Information window, check the status is "Waiting" for the devices to retrieve configuration information and click Retrieve Configuration.

now Configuration Informa	tion		
Device configurati	on is shown as a list. Click	[Retrieve Configuration].	
Device Name	Ethernet Address	Status	
II SX-ND-4350WAN+ II SX-ND-4350WAN+ II SX-ND-4350WAN+	84:25:3F:01:31:65 84:25:3F:23:F2:77 84:25:3F:14:87:A1	Waiting Waiting Waiting	
	(	Retrieve Configuration Clos	e

3. Enter the password of the device and click OK.

If the password is not configured to the device, the window below is not displayed.



**4.** The result of configuration retrieval is displayed. Check the status and click **Close**.

ow Configuration Inform	ation		
	ion has been retrieved. now the retrieved config	uration information as a list.	
Device Name	Ethernet Address	Status	
🖋 SX-ND-4350WAN+	84:25:3F:01:31:65	Completed	
🖋 SX-ND-4350WAN+	84:25:3F:23:F2:77	Completed	
🖋 SX-ND-4350WAN+	84:25:3F:14:87:A1	Completed	
			<u>C</u> lose

**5.** The configuration information of selected devices is displayed as a list.

System Configuration Network Configuration Wired LAN Configuration Wireless LAN I/F 1 Wireless LAN L/F 1 Wireless LAN I/F 2 Wireless LAN I/F 2 Wireless LAN I/F 3 Wireless LAN I/F 4 USB Configuration NetDA Others	Item Basic Settings Password Host Name Scheduled Reboot Reboot Time (hours) Reboot Time (mins)	SX-ND-4350WAN+ 84:25:3F:01:31:65 SX013165 Enable 0 00	SX-ND-4350WAN+ 84:25:3F:23:F2:77 SX23F277 Enable 0 00	SX-ND-4350WAN+ 84:25:3F:14:87:A1 SX1487A1 Enable 0 00
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------	----------------------------------------------------------------------	----------------------------------------------------------------------

**Configuration File Comparison** 

**1.** When a list of device configuration information is displayed, click **Compare Configuration**.

System Configuration	Item	SX-ND-4350WAN+	SX-ND-4350WAN+	SX-ND-4350WAN+
Network Configuration		84:25:3F:01:31:65	84:25:3F:23:F2:77	84:25:3F:14:87:A1
Wired LAN Configuration Wired LAN I/F 1 Wireless LAN Configuration Wireless LAN I/F 1 Wireless LAN I/F 2 Wireless LAN I/F 3 Wireless LAN I/F 4 JSB Configuration NetDA Others	Basic Settings Password Host Name Scheduled Reboot Reboot Time (hours) Reboot Time (mins)	SX013165 Enable O OO	SX23F277 Enable 0 00	SX1487A1 Enable O OO

**2.** Select the configuration file to compare and click **Open**.

🛃 Open Configuration File				×
AMC Mana	ager	✓ Search AM	C Manager	٩
Organize 🔻 New folder			H • 🔳	0
☆ Favorites	Name	Date modified	Туре	1
😭 Libraries	sxnd4350wan-base.cfg	5/29/2017 8:32 PM	CFG File	_
19 Computer				
👊 Network				
	•			F
File <u>n</u> ar	me: sxnd4350wan-base.cfg	•	e (*.cfg)	•
		<u>O</u> pen	Cance	

3. In the Show Configuration Information window, the setting of selected configuration file is displayed. When the device configuration differs from the selected configuration file, such portion will be highlighted in red.

System Configuration	Item	SX-ND-4350WAN+	SX-ND-4350WAN+	SX-ND-4350WAN+
Network Configuration Wired LAN Configuration		sxnd4350wan_setting.cfg	84:25:3F:01:31:65	84:25:3F:23:F2:77
Wired LAN I/F 1 Wireless LAN Configuration Wireless LAN I/F 1 Wireless LAN I/F 2 Wireless LAN I/F 3 Wireless LAN I/F 4 USB Configuration NetDA Others	Basic Settings Host Name Scheduled Reboot Reboot Time (mins) Password Reboot Time (hours)	SX012345 Enable 50 O	SX013165 Enable OO	SX23F277 Enable OO
		•		



• The menu item will also be highlighted in red when the device configuration of that menu item differs from the compared configuration file.

Ц Ц

TIP

# 4-11. Device Group Management

Following explains how to make a group of devices.

Groups can be created and devices can be registered to the created groups.

Up to 100 groups can be created. Up to 1,000 devices can be registered per group.

 When AMC Manager<sup>®</sup> Free is used, up to 2 groups can be created. Also, up to 10 devices can be registered for each group.

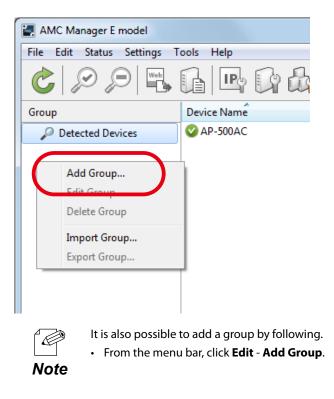
AMC Manag	-						
File Edit St	at <u>us S</u> ettings <u>T</u> ools		b 📝 - 🚺	-0.0	]	-	٩
oroup	De	vice Name	Ethernet Address	Host	Name	IP Address	Version
Detecte	d Devices 🛛 🥝	AP-500AC	84:25:3F:12:34:56	AP50	0-123456	192.168.0.1	1.0.0
Group		AP-500AC	84:25:3F:12:34:57		0-123457	192.168.0.2	1.0.0
		AP-500AC AP-500AC	84:25:3F:12:34:58 84:25:3F:12:34:59		0-123458 0-123459	192.168.0.3 192.168.0.4	1.0.0 1.0.0
其 Group		AP-500AC	84:25:3F:12:34:5A		0-123439 0-12345A	192.168.0.4	1.0.0
		AP-500AC	84:25:3F:12:34:5C		0-12345C	192.168.0.6	1.0.0
Event Log			m				
Level	Date/Time	Event	Device Name	Ethernet /		Host Name	Details
1 Informa	/27/2016 6:34:25 PM	Device detecti	AP-500AC	84:25:3F:1	2:34:56	AP500-123456	Device was found.
<							•
1 device(s) four							.41
Gro	up List			Devi	l ce Lis	t	

### Group List and Device List

Name	Details
Group list	A list of created groups is displayed.
Device list	A list of devices that belong to the selected group is displayed. When <b>Detected</b> <b>Devices</b> is selected in the group list, all devices will be displayed in the device list. When AMC Manager <sup>®</sup> Free is used, up to 10 devices are displayed at <b>Detected Devices</b> . If you click a column header, the order of devices will be sorted by the column you have clicked.

### **Creating Group**

1. Right-click on the group list and select **Add Group** from the context menu.



2. Enter a group name and click **OK**.

Add Group	×
Group <u>N</u> ame	Group A (1)
	ок (2)

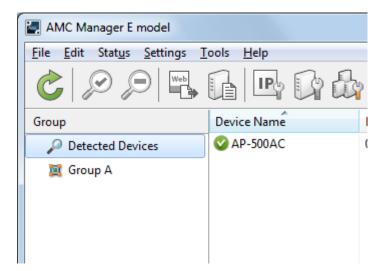


- Up to 32 characters can be used for group name.
- Up to 100 groups can be created.



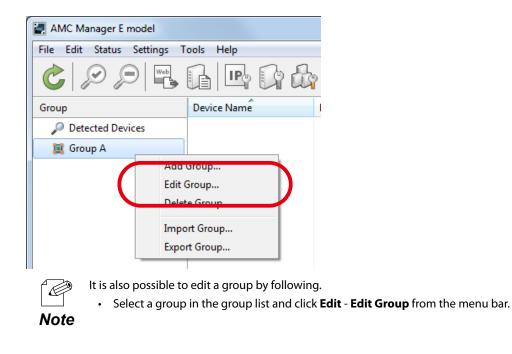
When AMC Manager<sup>®</sup> Free is used, up to 2 groups can be created. Also, up to 10 devices can be registered for each group.

3. The created group is displayed in the list.



### Adding Device to Group

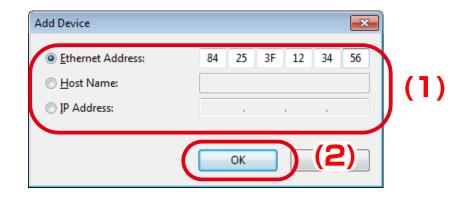
1. Right-click on a group in the group list and select **Edit Group** from the context menu.



2. Click Add Device.

Ec	lit Group				×
	Group <u>N</u> ame	Group A			
	Registered <u>D</u> evices:				$\frown$
	Device Name	Ethernet Address	Host Name	IP Address	Add Device
					<u>R</u> emove Device
				01	
				ОК	Cancel

3. Enter Ethernet Address, Host Name or IP Address of the device to add and click OK.



4. The registered device is displayed in the list.To add another device, go back to 2 and repeat the same process.Click OK when it is finished.

Add Device
Edit Device
emove Device



- (Unknown) is displayed except for those you have entered at 3, until the device is detected by AMC Manager on network.
- Up to 1,000 devices can be registered per group.



When AMC Manager<sup>®</sup> Free is used, up to 10 devices can be registered for each group.

5. The device is added to the group.

AMC Manager E model		
<u>File Edit Status Settings T</u>	ools <u>H</u> elp	
		r 📝 • 🚺 • 🚺
Group	Device Name	Ethernet Address
Detected Devices	(Unknown)	84:25:3F:12:34:56
🔯 Group A	🕜 (Unknown)	84:25:3F:12:34:57
	🕜 (Unknown)	84:25:3F:12:34:58
	🕜 (Unknown)	84:25:3F:12:34:59
	(Unknown)	84:25:3F:12:34:5A



It is also possible to add a device to group by following.

• Right-click on the device in the device list, select **Add to Group** from the context menu and select the group.

Device Name	Ethernet Address	Host Name	IP Address	Version
🕜 (Unknown)	84:25:3F:12:34:56	Start Monitoring		(Unknowr
🕜 (Unknown)	84:25:3F:12:34:57	Stop Monitoring		(Unknown
🕜 (Unknown)	84:25:3F:12:34:58	Stop Monitoring		(Unknown
🕜 (Unknown)	84:25:3F:12:34:59	Configure Using Web Browser		(Unknown
🕜 (Unknown)	84:25:3F:12:34:5A	Properties		(Unknown
		IP Configuration		
		Device Configuration		
		Create Configuration File		
		Merge Configuration File		
		Firmware Update		
		Factory Default Configuration		
		Restart		
		Show Device Configuration		
		oer system tog		
		Add to Group	•	Group A
		Remove from Group		Group B
		Refresh	FS	

• Select a device in the device list and drag & drop it on the group.

AMC Manager E model		
<u>File Edit Status Settings</u>	<u>T</u> ools <u>H</u> elp	
		la 🗗
Group	Device Name	Ethernet Address
Detected Devices	(Unknown)	84:25:3F:12:34:56
🐹 Group A	(2) (nknown)	84:25:3F:12:34:57
Group B	(Un nown)	84:25:3F:12:34:58
Croup B	(Unknown)	04:20:01:12:04:50
	(Unknown)	84:25:3F:12:34:5A

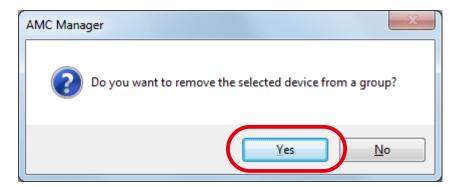
• When AMC Manager® Free is used, up to 10 devices can be registered for each group.

## Deleting Device from Group

1. Right-click on a device to remove from the group and select **Remove from Group** from the context menu.

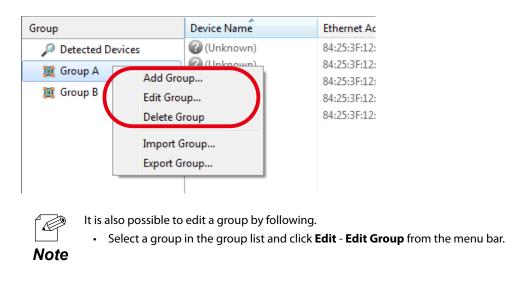
(Unknown)       84:25:3F:12:34:56         (Unknown)       84:25:3F:12:34:57         (Unknown)       84:25:3F:12:34:58         (Unknown)       84:25:3F:12:34:54         (Unknown) <th>Device Name</th> <th>Ethernet Address</th> <th>Host Name</th> <th>IP Address</th>	Device Name	Ethernet Address	Host Name	IP Address
Device Configuration Create Configuration File Merge Configuration File Firmware Update Factory Default Configuration Restart Show Device Configuration Get System Log Add to Group	(Unknown) (Unknown)	84:25:3F:12:34:57 84:25:3F:12:34:58 84:25:3F:12:34:59	Stop Monitoring Configure Using Web Browser	
			Device Configuration Create Configuration File Merge Configuration File Firmware Update Factory Default Configuration Restart Show Device Configuration	
It is also possible to remove a device from group by follow	It is	is also possible to rem	Remove from Group	rs by followin

2. Click Yes.



### **Editing Group Information**

- Following explains how to change the group name and registered devices.
- 1. Right-click on a group in the group list and select **Edit Group** from the context menu.



Enter a group name when it needs to be changed. To delete or change the registered devices, select a device from the list and click Edit Device or Remove Device.
 When the edit is finished, click OK.

t Group				
iroup <u>N</u> ame	Group A			
egistered <u>D</u> evices:				
Device Name	Ethernet Address	Host Name	IP Address	Add Device
(Unknown) (Unknown)	84:25:3F:12:34:56 84:25:3F:12:34:57	(Unknown) (Unknown)	(Unknown) (Unknown)	<u>E</u> dit Device
(Unknown) (Unknown)	84:25:3F:12:34:58 84:25:3F:12:34:59	(Unknown) (Unknown)	(Unknown) (Unknown)	<u>R</u> emove Device
(Unknown)	84:25:3F:12:34:5A	(Unknown)	(Unknown)	
		(	ОК	Cancel
			UK	Cancei

### Exporting/Importing Group Information

By exporting the group information, the created group information can be saved as a file. Also, it is possible to register the group and device configuration by importing the file.



If Export Group is done, all registered groups are saved as a file. It is impossible to export them partially.

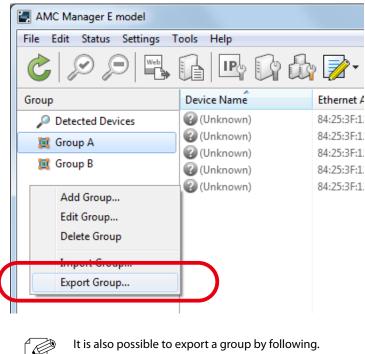
If Import Group is done, group information is added from an external file to present ones on AMC Manager.



**Note** • The group information may not be correctly imported if the different version of AMC Manager is used when the group information is exported and imported.

## **Exporting Group Information**

1. Right-click on a group in the group list and select **Export Group** from the context menu.

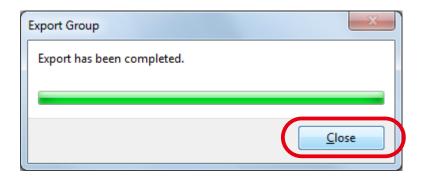


• From the menu bar, click Edit - Export Group.

2. Specify a file name and click **Save**.

🛃 Export Group						X
Con 🖉 - Con	nputer 🕨 Local Disk (C:) 🕨		<b>▼</b> 4 <del>5</del>	Search Local D	isk (C:)	م
Organize 🔻 New	folder					0
詞 Libraries	<ul> <li>Name</li> <li>New folder</li> </ul>	<u>~</u>	Date modified 7/22/2015 10:48 AM	Type File folder	Size	
<ul> <li>Documents</li> <li>Music</li> <li>Pictures</li> <li>Videos</li> <li>Computer</li> </ul>	E					
Local Disk (C:)						Þ
	amc-export Group Information (*.amgl)		_(1)			•
) Hide Folders			C	Save	Cance	(2

### 3. Click Close.



# **Importing Group Information**

1. Right-click on a group in the group list and select **Import Group** from the context menu.

AMC Manager E model		
File Edit Status Settings	Fools Help	
		da 📝 •
Group	Device Name	Ethernet /
Detected Devices	🕜 (Unknown)	84:25:3F:1
Group A	🕜 (Unknown)	84:25:3F:1
	🕜 (Unknown)	84:25:3F:1
💢 Group B	🕜 (Unknown)	84:25:3F:1
Add Group Edit Group Delete Group	Unknown)	84:25:3F:1
Import Group		
Export Group		
	Τ	
	to import a group b enu bar, click <b>Edit - I</b> I	, 5

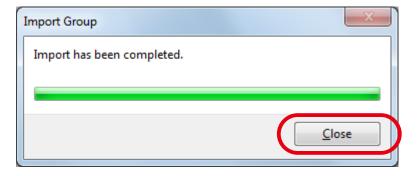
2. Select a file to import and click **Open**.

Import Group					x
Compu	ter → Local Disk (C:) → Users → silex →	<b>√</b> 4 <sub>7</sub>	Search silex		٩
Organize 🔻 New fol	der			· ·	?
🐌 Downloads 🖌	Name	Date modified	Туре	Size	
🖳 Recent Places	amc-export.amgl	4/27/201 6:58 P	File		1 K
Computer			• ,		
					F.
File	name: amc-export.amgl	•	Group Informat	ion (*.amgl)	•
		(	Open	Car	2)



• When AMC Manager<sup>®</sup> Free is used, up to 2 group information files can be imported. By importing one group information file, up to 10 devices can be added.

3. Click Close.



# 4-12. Accessing Logs on Log Viewer

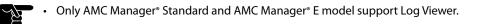
The following explains how to access the event logs saved by AMC Manager using the Log Viewer.



It is possible to specify the retention period of event logs by AMC Manager's option setting.

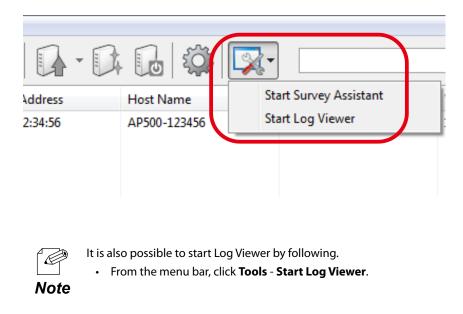
Note

TIP



### **Starting Log Viewer**

1. From the tool bar, click **Start Log Viewer**.



### 2. Log Viewer is started.

listory (Local)	Level	Date/Time	Event	Device Name	Ethernet Address	Host Name	Details
2016/04/27	🚺 Informa	2016/04/27 1	Device detectio	on AP-500AC	84:25:3F:12:34:56	AP500-123456	Device was found.
			Application star				AMC Manager was start
			Application star				AMC Manager was star
			Device detectio		84:25:3F:12:34:56		Device was found.
			Device detectio		84:25:3F:12:34:56	AP500-123456	Device was found.
	👔 Informa.2016/04/27 1 Application start AMC Ma				AMC Manager was star		
	Informa	.2016/04/27 0	Device detectio	on AP-500AC	84:25:3F:12:34:56	AP500-123456	Device was found.
	👔 Informa	.2016/04/27 0	Application star	rt			AMC Manager was star

## Finishing Log Viewer

1. Clicking the close button on top right of the window will finish Log Viewer.

Device Name	Ethernet Address	Host Name	Details
ection AP-500AC start	84:25:3F:12:34:56	AP500-123456	Device was found. AMC Manager was start
start action AP-500AC	84:25:3F:12:34:56	AP500-123456	AMC Manager was start Device was found.
ection AP-500AC start	84:25:3F:12:34:56	AP500-123456	Device was found. AMC Manager was start
ection AP-500AC start	84:25:3F:12:34:56	AP500-123456	Device was found. AMC Manager was start



It is also possible to finish Log Viewer by following.

• From the menu bar, click **File** - **Close**.

### Log Viewer's Window

Following explains on the Log Viewer's window.

Log Viewer - 2016( 42 <u>F</u> ile <u>V</u> iew <u>H</u> elp	7				
History (Local)	Level Date/Time	Device Name	Ethernet Address	Host Name	Details
2010/04/27	informa. 2016/04/27		84:25:3F:12:34:56	AP500-123456	Device was found.
	Informa.2016/04/27				AMC Manager was start.
	Informa.2016/04/27				AMC Manager was start
	Informa.2016/04/27		84:25:3F:12:34:56		Device was found.
	Informa.2016/04/27		84:25:3F:12:34:56	AP500-123456	Device was found.
	Informa.2016/04/27		84:25:3F:12:34:56	40500 100456	AMC Manager was start Device was found.
(2)	<ul> <li>Informa.2016/04/27</li> <li>Informa.2016/04/27</li> </ul>		84:25:3F:12:34:50	AP500-123456	AMC Manager was start
		(	3)		
item(s) found.					

#### (1) Menu bar

Provides each function of Log Viewer, such as export, advanced search, etc.

#### (2) Date/Opened Files

Shows the date of logs and the name of opened Log Viewer files.

#### (3) Log list

Shows a list of event logs.

If you click a column header, the order of logs will be sorted by the column you have clicked.

#### (4) Status bar

Shows a number of logs, etc.

### [Menu bar]

Menu bar provides each function of Log Viewer, such as export of logs, advanced search, etc.

Menu	ltem	Details
File	Open	Reads the Log Viewer format files.
	Export	Saves the log information as Log Viewer format or CSV file.
	History	Shows the opened Log Viewer format files.
	Clear All History	Clears the history of opened files.
	Close	Finishes Log Viewer.
View	Refresh	Refreshes the Log Viewer information.
	Advanced Search	Enables filter for search to show specified log information only.
Help	About Log Viewer	Shows the version information.



• The present information on log list will be saved to a file if "**Export**" is done. If a search filter is enabled by **Advanced Search**, the filtered information will be saved to a file.

Note

### [Log list]

Log list shows the event logs saved by AMC Manager.

Level	Date/Time	Event	1	Device Name	Ethernet Address	5	Host Name	Details
🚺 Informa.	2016/04/27 1	Device detect	ion	AP-500AC	84:25:3F:12:34:5	6	AP500-123456	Device was foun
🚺 Informa.	2016/04/27 1	Device detect	ion	AP-500AC	84:25:3F:12:34:5	56	AP500-123456	Device was foun
🚺 Informa.	2016/04/27 1	Device detect	ion	AP-500AC	84:25:3F:12:34:5	6	AP500-123456	Device was foun
🚺 Informa.	2016/04/27 1	Device detect	ion	AP-500AC	84:25:3F:12:34:5	56	AP500-123456	Device was foun
<ol> <li>Informa.</li> </ol>	2016/04/27 0	Device detect	ion	AP-500AC	84:25:3F:12:34:5	6	AP500-123456	Device was foun

Name	Details
Level	Shows the icons of warning level.
Date/Time	Shows the date/time of event.
Event	Shows the event type.
Device Name	Shows the device name.
Ethernet Address	Shows the Ethernet Address.
Host Name	Shows the host name.
Details	Shows the details of the event.

lcon	Level Type	Details
	Information	Configuration change, device detection, etc.
8	Error	Configuration change error, communication error, etc.
<u> </u>	Warning	Monitoring stop, etc.



When AMC Manager<sup>®</sup> E model is used, syslog information can be accessed. The syslog icon and level type are as follows.

lcon	Level Type	Details
8	Emergency	
8	Alert	
8	Critical	
8	Error	Shows importance level of syslog that is retrieved from
	Warning	device
	Notice	
	Information	
	Debug	

Event Type	Details			
IP configuration	IP address is configured.			
Configuration change	Configuration is changed.			
Initialization	Configuration is initialized.			
Restart	Device is restarted.			
Firmware update	Firmware is updated.			
Log retrieval	System log is retrieved.			
Mail transmission	Alert notification is sent by email when an error occurred on AMC Manager® E model or monitored devices.			
Monitoring start	Device monitoring is started.			
Monitoring stop	Device monitoring is stopped.			
Device detection	Device reply is sent.			
Device loss	Device reply is lost (communication error).			
Device recovery	Device reply is found again after it is lost.			
Change detection	Configuration is changed or firmware is updated by a method other than AMC Manager.			
Application start	AMC Manager is started.			
Application close	AMC Manager is finished.			
Device syslog	Syslog information is received from device.			



• If you click a column header, the order of logs will be sorted by the column you have clicked.

Note

### **Filter Condition**

If a display filter is set by clicking on column header of Log Viewer, only specified logs can be displayed on the log list.

For filter condition, there are **Level**, **Date/Time**, **Event**, **Device Name**, **Ethernet Address**, **Host Name** and **Details**, and the supported filter condition is different between AMC Manager<sup>®</sup> Standard and AMC Manager<sup>®</sup> E model.

Following tables show the difference of compatibility for filter conditions.

### [Level]

Condition Item	AMC Manager®	AMC Manager®
Condition item	Standard	E model
Error	Supported	Supported
Information	Supported	Supported
Warning	Supported	Supported
Critical	Supported	Supported
Alert	-	Supported
Emergency	-	Supported
Notice	-	Supported
Debug	-	Supported

### [Event]

Condition Item	AMC Manager® Standard	AMC Manager® E model
IP configuration	Supported	Supported
Configuration change	Supported	Supported
Initialization	Supported	Supported
Restart	Supported	Supported
Firmware update	Supported	Supported
Log retrieval	Supported	Supported
Monitoring start	Supported	Supported
Monitoring stop	Supported	Supported
Device detection	Supported	Supported
Device loss	Supported	Supported
Device recovery	Supported	Supported
Change detection	Supported	Supported
Application start	Supported	Supported
Application close	Supported	Supported
Device syslog	-	Supported
Mail transmission	-	Supported

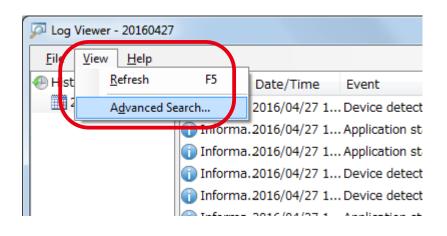
### [Details]

	AMC Manager®	AMC Manager <sup>®</sup>
Condition Item	Standard	E model
IP address was successfully configured.	Supported	Supported
IP address configuration failed.	Supported	Supported
Configuration was successfully changed.	Supported	Supported
Configuration change failed.	Supported	Supported
Firmware was successfully updated.	Supported	Supported
Firmware update failed.	Supported	Supported
Device was successfully initialized.	Supported	Supported
Initialization failed.	Supported	Supported
Device was successfully restarted.	Supported	Supported
Restart failed.	Supported	Supported
System log was successfully retrieved.	Supported	Supported
System log retrieval failed.	Supported	Supported
Device monitoring started.	Supported	Supported
Device monitoring stopped.	Supported	Supported
Device was found.	Supported	Supported
Reply was lost.	Supported	Supported
Recovered from network error.	Supported	Supported
Configuration was changed.	Supported	Supported
Device was initialized.	Supported	Supported
Firmware was changed.	Supported	Supported
AMC Manager was started.	Supported	Supported
AMC Manager was closed.	Supported	Supported
Alert notification mail has been sent.	-	Supported
Failed to send an alert notification mail.	-	Supported

### Searching for Logs

It is possible to search for event logs using a filter of advanced search. Only matched logs will be displayed in the log list.

1. From the menu bar, click **View** - **Advanced Search**.



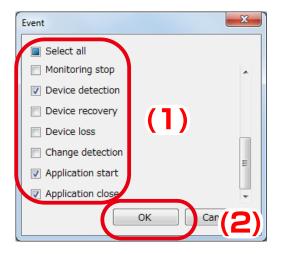
2. Check the search target and filter settings and click Edit.

A	dvanced Search			X	
	Target	Opened Log <u>F</u> iles			
	Filter rule				
	<u>L</u> evel :			Edit	
	☑ Date/Time :	(1)		Edit	
	✓ Event :			Edit	(2)
	📄 De <u>v</u> ice Name :			Edit	(-/
	Ethernet <u>A</u> ddress :			Edit	
	📄 H <u>o</u> st Name :	J		Edit	
			ОК	Cancel	

• "Opened Log Files" of the target can be selected only when Log Viewer format file is opened.

Note

3. Check the filter conditions to use and click **OK**.





Enter the date/time, device name, etc. according to the filter conditions.

4. To configure more filter conditions, go back to 2 and repeat the same process. Once the filter setting is configured, it is displayed in the window. When necessary filters are configured, click OK.

Advanced Search		×
Target	Opened Log <u>F</u> iles	
Filter rule <u>L</u> evel : <u>D</u> ate/Time : <u>E</u> vent :	Device detection, Application start	Edit Edit
<ul> <li>Device Name :</li> <li>Ethernet <u>A</u>ddress :</li> <li>H<u>o</u>st Name :</li> </ul>		Edit Edit
	ОК	Cancel

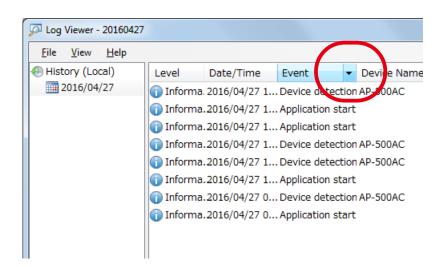
5. The search result is displayed.

File	Level	Date/Time	Event	Device Name	Ethernet Address	Host Name	Details
2016/04/27	👔 Informat	2016/04/27 18	Device detection	AP-500AC	84:25:3F:12:34:56	AP500-1234	Device was found.
2016/04/27	👔 Informat	2016/04/27 18	Application start				AMC Manager was
2016/04/27	👔 Informat	2016/04/27 14	Application start				AMC Manager was
2016/04/27	👔 Informat	2016/04/27 14	Device detection	AP-500AC	84:25:3F:12:34:56	AP500-1234	Device was found.
2016/04/27	👔 Informat	2016/04/27 11	Device detection	AP-500AC	84:25:3F:12:34:56	AP500-1234	Device was found.
2016/04/27	👔 Informat	2016/04/27 11	Application start				AMC Manager was
2016/04/27	👔 Informat	2016/04/27 09	Device detection	AP-500AC	84:25:3F:12:34:56	AP500-1234	Device was found.
	-						
				Export as Lo	g Viewer Format	Export as CS	V Format Close

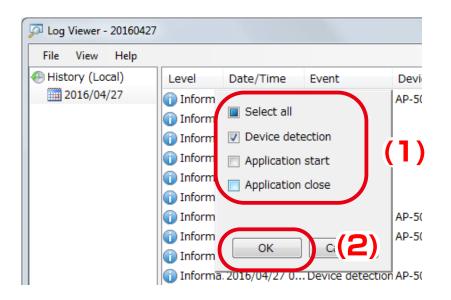
### Using Filter of Log List

It is possible to set a filter individually on each item of the log list. Only matched logs will be displayed in the log list.

1. If a cursor is moved closer to column header, split button is displayed. Click the split button of the item that you want to enable filter on.



2. Check the items you want to show in the list and click **OK**.



3. Event logs are filtered by the selected conditions.

<u>F</u> ile <u>V</u> iew <u>H</u> elp				
History (Local)	Level	Date/Time	Event	✓ Device Nar
2016/04/27	1 Informa	2016/04/27 1	. Device detec	tion AP-500AC
	1 Informa	2016/04/27 1	. Device detec	tion AP-500AC
	1 Informa	2016/04/27 1	. Device detec	tion AP-500AC
	1 Informa	2016/04/27 1	. Device detec	tion AP-500AC
	1 Informa	2016/04/27 0	. Device detec	tion AP-500AC



When a filter is used, check mark will be displayed in the column header of that filter.



### Saving Event Logs to File

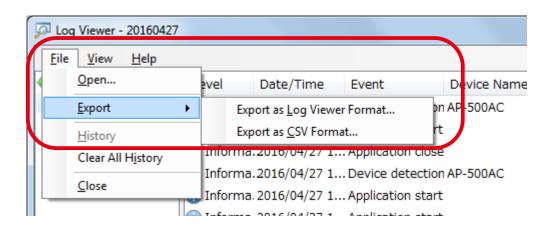
It is possible to export event logs and save it as a file. The file can be saved in either Log Viewer format or CSV file. If the file is saved in Log Viewer format file, it can be opened by Log Viewer.



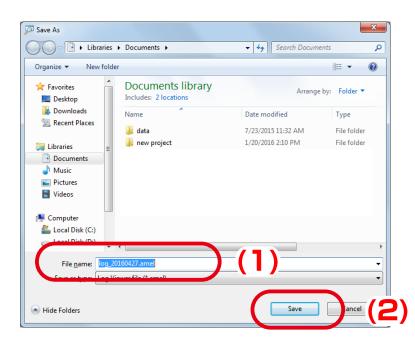
Log Viewer saving format differs between AMC Manager® Standard and AMC Manager® E model.

	Compatible Log Viewer Format
AMC Manager® Standard	.amel
AMC Manager <sup>®</sup> E model	.amelx

1. From the menu bar, click File - Export - Export as Log Viewer Format or Export as CSV Format.



2. Specify a file name and click **Save**.



### **Opening Event Logs**

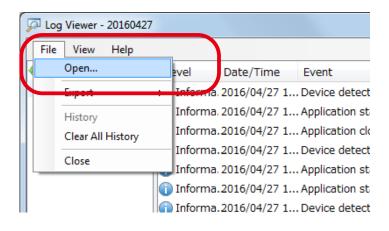
Once the event logs are exported and saved as Log Viewer format file, it can be imported by Log Viewer.



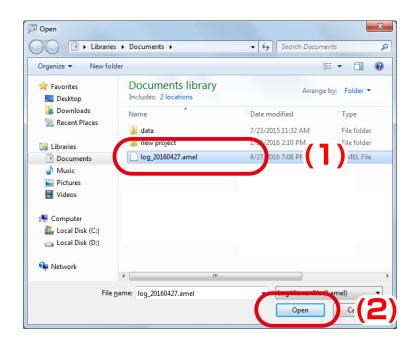
- Log Viewer format differs between AMC Manager® Standard and AMC Manager® E model.
- AMC Manager<sup>®</sup> Standard's Log Viewer is not able to read AMC Manager<sup>®</sup> E model's Log Viewer format.

	Compatible Log Viewer Format
AMC Manager® Standard	.amel
AMC Manager <sup>®</sup> E model	.amel
	.amelx

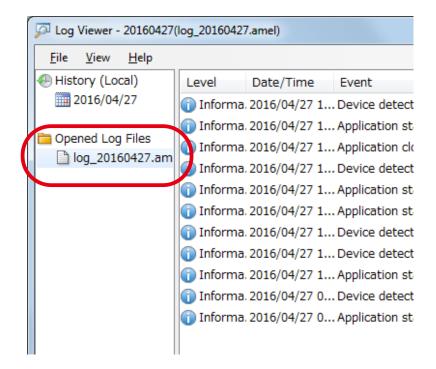
#### 1. From the menu bar, click **File** - **Open**.



2. Select a Log Viewer format file and click **Open**.



### 3. The file is opened.





• The history of imported files is displayed at **History** of **File** menu. Up to 5 files are displayed as history. If the file is clicked on the history, the file is opened.

💭 Log Viewer - 20160427(log\_20160428.amel) File View Help Open... vel Date/Time Event Device Name Informa. 2016/04/27 1 Device detection AP-500AC Export ion start ca History ۲ log\_20160428.amel on close cat Clear All History log\_20160427.amel detection AP-500AC 11101111a.2010/04/27 1... Device Informa. 2016/04/27 1... Application start 🕦 Informa. 2016/04/27 1... Application start Informa. 2016/04/27 1... Device detection AP-500AC 🕦 Informa. 2016/04/27 1... Device detection AP-500AC 🕦 Informa. 2016/04/27 1... Application start

# 4-13. Alert Notification

Alert notification is a function that sends alert email when an error occurred on AMC Manager<sup>®</sup> E model and/or the monitored devices. Alert condition and receiver's address can be specified.

2 event(s) occurred	as follows.
Device Name : Device Information:	2017/01/23 13:21:07 SX-ND-4350WAN+ O0:80:92:01:31:65 (SX001122) Device reply was lost.
Device Name : Device Information:	2017/01/23 13:21:07 BR-300AN 84:25:3F:01:09:E8 (SX0109E7) Device reply was lost.

Sent by AMC Manager



Alert notification feature is supported by AMC Manager® E model only.

## Alert Condition

Alert condition can be set by checking the check box of each condition at **Option** setting window. Following conditions can be specified.

Group	Condition	Details
	System log capacity exceeded	Syslog data size exceeded its capacity and the past logs were deleted.
For AMC Manager	Start-up password authentication failed	AMC Manager <sup>®</sup> E model start-up password authentication failed
i ol nine manager		for 3 times.
	Emergency use function was executed	Emergency use function was executed.
	Too many wireless client devices	41 or more wireless client devices were connected to the device.
	were connected to the device	The more whereas cheft devices were connected to the device.
	Device setting was changed or	Device setting was changed or initialized by a method other
	initialized	than your AMC Manager® E model.
	Device firmware was changed	Device firmware was changed by a method other than your
		AMC Manager® E model.
For Device	Device reply was lost	Device reply was lost.
For Device	Wireless client device failed to	Wireless client device failed to connect to the device.
	connect to the device	whereas cheric device failed to conflect to the device.
	Error occurred on wireless module	Error occurred on wireless module of the device.
	of the device	End occurred on wireless module of the device.
	Device failed in Smart Wireless	Smart Wireless Setup failed.
	Setup	
	DFS function started on the device	DFS function ran on the device.

# **Alert Notification Settings**

**1**. Select the **Option** icon from the toolbar.

AMC Manager E model					
<u>File Edit Status Settings T</u>	ools <u>H</u> elp				
⊘ ≫ ∋ ⊑ G ⊵ G & ₹- G C @ \$					
Group	Device Name	Ethernet Address	Host Name		
🔎 Detected Devices	🔮 AP-500AC	84:25:3F:12:34:56	AP500-123456		
🔯 Group A					
🔯 Group B					

• The **Option** window can also be displayed by clicking **Tools** - **Option** from the menu bar.



2. In the Option Window, click the Alert Notification tab.

Option	×
General Device Searce Alert Notification	
Basic settings for AMC Wanager.	
Basic Configuration Automatically add newly discovered devices as <u>m</u> onitoring target	
Start-up Password Configuration	_
Password (0-16 characters):	
Automatic Refresh Configuration	-
Main window refresh interval (5-60 5 🚔 mir mins)	۱
Log Saving Configuration	51
Log retention period (5-365 days) 30 🚔 day	rs
OK Cancel Apply	y

**3.** In the **Alert Notification** tab, select the condition to send alert email.

Option 💌	
General Device Search Alert Notification	
Alert notification setting can be configured. Alert Condition	
Condition	
For AMC Manager 🔨 🔺	
System log capacity exceeded	
Start-up password authentication failed  Emergency use function was executed	(1)
For Device	(   )
Too many wireless client devices were connecte	
Device setting was changed or initialized	
Device firmware was changed	
Device reply was lost	
Mail Setting	
Mail server and mail address are not configured.	
Mail Server Setting	
OK Cancel Apply	

**4.** Click **Mail Server Setting** to configure the mail server setting.

Option						×
General Device	Search	Alert Notificat	on	]		
Alert notificatio	on settin	g can be config	ureo	ł.		
- Alert Conditio	n					
Conditio	n	*				*
For AMC N	/lanagei				^	
		city exceeded				=
	· · · · ·	rd authenticatio unction was exe				=
Energer For Device	·	unction was exe	cut	eu		
		ess client device	s we	re connecte		
Device s	etting w	as changed or i	nitia	lized		
	Device firmware was changed					
Device re	Device reply was lost			Ŧ		
Mail Setting          Mail server and mail address are not configured.         Mail Server Setting						
		ОК	(	Cancel	A	pply

5. In the Mail Server Setting window, enter each setting and click OK.

Mail Server Setting	X	)
Mail server (SMTP) se	etting can be configured.	
User Information		
Mail Address:		
<u>N</u> ame:		
Logon Account for	Mail Server	
Account Name:		
<u>P</u> assword:		(1)
Mail Server Informat	tion	
Mail <u>S</u> erver:		
P <u>o</u> rt Number:	25	
Encryption Mode:	None 💌	
Server <u>T</u> imeout:	60 🚔 sec (10-600 sec)	
Sen <u>d</u> Test M	Маі ОК ((2)	



- Clicking Send Test Mail will send a test mail to the address configured at User Information.
- Test mail is sent with a subject "AMC Manager Test Mail".

#### Note

6. Click Mail Address Setting to set the address to receive alert email.

Option	<b>—</b> ×
General Device Search Alert Notification	
Alert notification setting can be configured.	
Alert Condition	
Condition	*
For AMC Manager	•
System log capacity exceeded	=
Start-up password authentication failed Emergency use function was executed	
For Device	
Too many wireless client devices were connecte	
Device setting was changed or initialized	
Device firmware was changed     Device reply was lost	-
Mail Setting	
Mail address is not set.	
Mail <u>S</u> erver Setting Mail Address Setting.	ng
OK Cancel	Apply

7. In the Mail Address Setting window, enter the address to receive alert email and click OK.

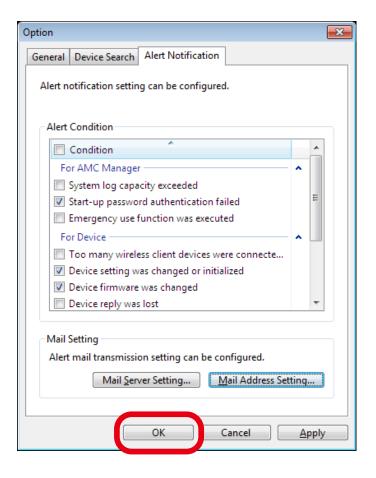
Mail Address Setting	
Enter the mail address.	
Address Information <u>I</u> O: <u>C</u> C:	(1)
<u>B</u> CC:	

Note

Multiple addresses can be registered by separating them with semicolon (		
	Address Information	
	<u>1</u> 0:	silex-1@silex.com; silex-2@silex.com
	<u>C</u> C:	silex@silex.com
	BCC:	silex-3@silex.com; silex-4@silex.com

).

8. Click OK to close the Option window.



# 4-14. Allowing Public Use In Case of Emergency

If the Emergency Use feature is used, use of Silex Technology's Access Points can be opened to public in case of emergency.

By previously setting a bulk configuration file for emergency use, the device settings can be changed all at once just by clicking a button. If a bulk configuration file for normal use is prepared, it can be used to reset all devices back to normal use just by clicking a button.



The emergency use setting is a feature of AMC Manager® E model.

# Emergency Use Setting Window

Allow Emergency Use	×
<u>E</u> mergency Use	
<u>N</u> ormal Use	
Status The emergency use function can be used.	
Setting	se

Name	Details
[Emergency Use] button	Executes bulk configuration for emergency use.
[Normal Use] button	Executes bulk configuration for normal use.
Status	Shows the operating status of emergency use function.
[Setting] button	Opens a dialog to select a bulk configuration file.
[Close] button	Closes the Allow Emergency Use window.

# Setting Window

Setting	<b>—</b>
Bulk configuration file for <u>e</u> mergency use:	Browse
Bulk configuration file for <u>n</u> ormal use:	Browse
Password (0-16 characters):	
ОК	Cancel

Name	Details
Bulk configuration file for	Select a bulk configuration file to use when <b>Emergency Use</b> button is clicked.
emergency use	Click <b>Browse</b> to select the file.
Bulk configuration file for normal	Select a bulk configuration file to use when <b>Normal Use</b> button is clicked.
use	Click <b>Browse</b> to select the file.
Password	Set the password to start the emergency use feature.
Password	The password must be 0-16 characters.
[OK] button	Saves the setting and closes the window.
[Cancel] button	Closes the window without saving the setting.

### **Before You Begin**

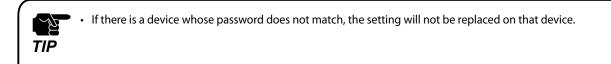
How to create a bulk configuration file is explained.

To use the emergency use feature, bulk configuration file needs to be respectively registered for emergency use setting and normal use setting.



• Only the items you have checked the check box will be updated. Make sure that you have created the configuration file in which the check box is checked for those you want to update.

- **1.** Check the password of the device to allow emergency use.
- 2. For "Password" of the configuration file, set the password that you have checked at 1.

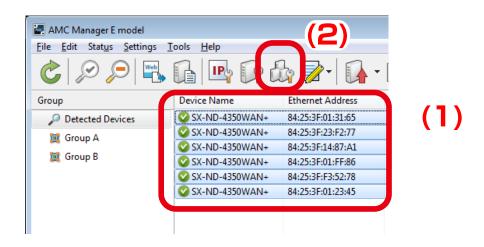




• For details on the configuration file, refer to **4-6. Bulk Configuration** - **Before You Begin**.

Note

**3.** Select the devices to configure in bulk from the list of the AMC Manager<sup>®</sup> E model and click the **Configure multiple devices in bulk** icon from the toolbar.





The bulk configuration window can also be displayed by a method below:

• Select the devices to configure in bulk and click Settings - Bulk Configuration from the menu bar.

**4.** In the **Bulk Configuration** window, select the devices to configure in bulk from the **Configuration List** and click the **Select Config. File** button.

Bulk Configuration Change configuration for multiple devices in bulk Specify the configuration file and click [Configure Configuration List:	L Now] to start bulk configuration.			
Op/Control         Ethernet Address           Image: SA:ND-2350WAH+         84253978013165           Image: Non-2350WAH+         8425397812170           Image: Non-2350WAH+         8425397145761           Image: Non-2350WAH+         8425397145783           Image: Non-2350WAH+         842539712345	Host Name IP Address \$003165 172257328 \$0237277 172257325 \$0237277 1722573151 \$0217766 1722573157 \$001245 1722573157 \$0012345 172257315 \$0012345 1722577315 \$0012345 1725775 \$0012345 172577575 \$0012345 172577575 \$0012345 172575757575 \$0012575757575757575 \$001257575757575757	New IP Address C rfg	Add Device Relete Device Select Config. File Dopen Sconfig. File IP Configuration Merge Config. File Spow Config. File Save Bulk Config. File Save Bulk Config. File Cencel Configure Now	) (2)

**5.** Select the configuration file that you have created to use for bulk configuration and click **Open**.

	C Manager	✓ Search AM	C Manager	- 1
Organize 🔻 🛛 New	folder		) · · · ·	0
🔆 Favorites	Name	Date modified	Туре	
	sxnd4350wan-01.cfg	5/29/2017 8:32 PM	CFG File	
🥽 Libraries	sxnd4350wan-01-2.cfg	5/23/2017 4:24 PM	CFG File	
	sxnd4350wan-01-3.cfg	5/23/2017 4:32 PM	CFG File	
🖳 Computer	sxnd4350wan-01-base.cfg	5/29/2017 8:32 PM	CFG File	
🗣 Network	i sınd4350wanplus_setting.cfg	3/31/2017 2:45 AM	CFG File	
F	ile name: sxnd4350wan-01.cfg		on File (*.cfg)	

**6.** The configuration file has been selected for the devices and the **Bulk Configuration** window is displayed again. Repeat the same process at **4-5** to select the configuration file for each device.

When finished selecting the configuration file for all devices, click **Save Bulk Config. File**.

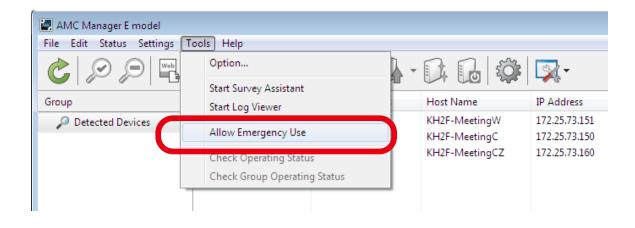
Config	guration <u>L</u> ist:					
	Ethernet Address	Host Name	IP Address	New IP Address	Configuration File Name	Add Device
V+	84:25:3F:01:31:65	SX013165	172.25.73.228		sxnd4350wan_setting.cfg	Delete Device
٧÷	84:25:3F:23:F2:77	SX23F277	172.25.73.151		sxnd4350wan_setting.cfg	
4	84:25:3F:14:87:A1	SX1487A1	172.25.73.150		sxnd4350wan_setting.cfg	Edit Device
4	84:25:3F:01:FF:86	SX01FF86	172.25.73.157			
N+	84:25:3F:F2:53:78	SXF25378	172.25.73.15			Select Config. File
4+	84:25:3F:01:23:45	SX012345	172.25.73.155			Open <u>C</u> onfig. File
						IP Configuration
						Merge Config. File
						Show Config. List
						Open Bulk Config. File.
4			"	1	•	Save Bulk Config. File
The	avation E bulk configuration is no start the device after this				Settin	g Ca <u>n</u> cel

7. In the Save Bulk Configuration File window, enter the file name and click Save.

🛃 Save Bulk Configuration	n File				×
S AMC N	Manager		✓ ✓ Search AM	C Manager	٩
Organize 🔻 New fo	older				?
🔆 Favorites	Name	Ŧ	Date modified	Туре	1
🥽 Libraries		No items match	i your search.		
📜 Computer					
👊 Network					
	•				+
File <u>n</u> ame: em	nergency	<b>)</b> (1)			•
Hide Folders			Save	2)	

## **Configuring Emergency Use Setting**

**1**. From the menu bar, click **Tools** - **Allow Emergency Use.** 



**2.** When a password is set for the emergency use feature, the window below is displayed. Enter the password and click **OK**.

Enter Password	×	
Enter the password.		
Password:	••••••	(1)

3. In the Allow Emergency Use window, click Setting.

Allow Emergency	y Use
	<u>E</u> mergency Use
	<u>N</u> ormal Use
Status The emerge	ency use function can be used.
	Setting

**4.** In the **Setting** window, select the configuration files to use when **Emergency Use** or **Normal Use** is clicked.

Setting	×
Bulk configuration file for <u>e</u> mergency use:	<u>B</u> rowse
Bulk configuration file for <u>n</u> ormal use:	B <u>r</u> owse
Password (0-16 characters):	
ОК	Cancel

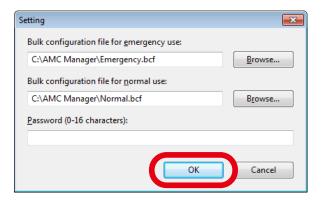


- Clicking Browse opens a dialog to select a file. In the dialog, select a bulk configuration file to use and click Open.
- For details on how to create a bulk configuration file, refer to 4-14. Allowing Public Use In Case of Emergency - Before You Begin.
- If a password is set, the password entry will be required before the **Allow Emergency Use** window is displayed.



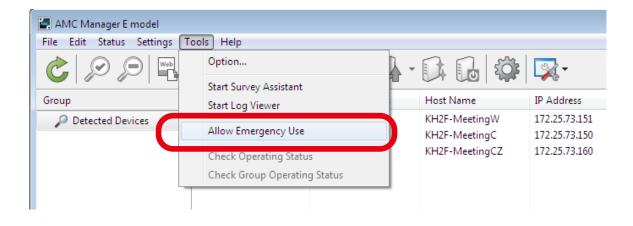
Only one bulk configuration file can be specified respectively for emergency use setting and normal use setting.

**5.** When finished selecting bulk configuration files, click **OK**.



## Using Emergency Use Feature

**1.** From the menu bar, click **Tools** - **Allow Emergency Use.** 



**2.** When a password is set for the emergency use feature, the window below is displayed. Enter the password and click **OK**.

Enter Password Enter the password.		
Password:		(1)
	<b>OK</b> (2)	

**3.** To apply emergency use setting to the devices, click **Emergency Use** at the **Allow Emergency Use** window.



If following settings are changed on the devices as result of emergency use configuration, the devices may be lost in the network or AMC Manager may fail to change the settings of those devices.
 IP Address (IP Address, Subnet Mask, Default Gateway)
 DHCP (DHCP on/off, DHCP Server on/off)
 VLAN (VLAN ID)
 MAC Address Filter
 Please check that inappropriate setting is not configured to the devices beforehand that can make the devices fail to communicate with others.

**4.** When **Retry until the configuration change is processed** is checked, the configuration will continue for the specified number of days until it is successfully configured on the devices. When the setting is entered, click **OK**.

Allow Emergency Use	×
The process can be repear successfully completed.	ted until the configuration change is
	iration change is processed
Retry <u>P</u> eriod:	1 v day(s)
	OK Cancel



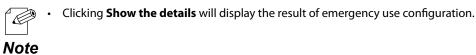
- When **Retry until the configuration change is processed** is not checked, the configuration will run only once.
- The retry period can be selected from 1-5 days.

5. When the emergency use configuration is in progress, the windows below is displayed.

Allow Emergency	/ Use
	<u>E</u> mergency Use
	<u>N</u> ormal Use
Status Trying to ex	recute the emergency use function.
	Setting Close

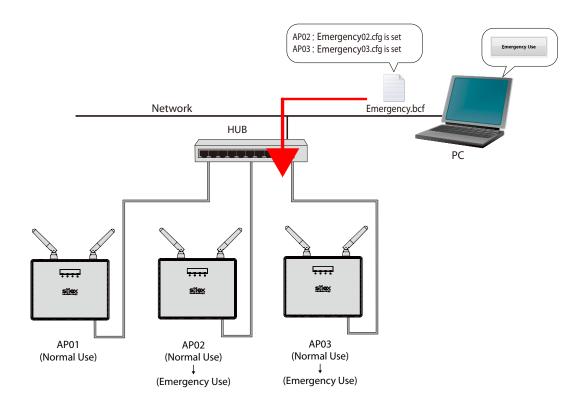
**6.** When the emergency use configuration is completed, the windows below is displayed.

Allow Emergency Use
<u>E</u> mergency Use
<u>N</u> ormal Use
Status The emergency use function has been executed. Executed Time: 7/26/2019 18:22 <u>Show the details</u>
Setting Close



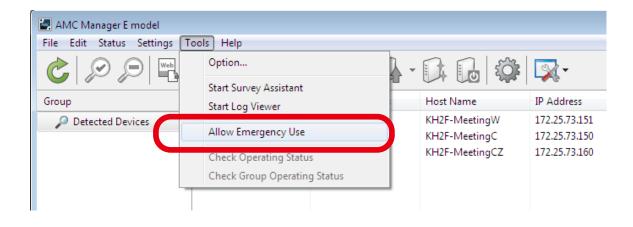
## [Sample of executing emergency use configuration]

As shown in the following configuration, if **Emergency Use** is clicked when **Emergency.bcf** is applied, AP02 and AP03 settings are changed.



# Resetting to Normal Use

**1.** From the menu bar, click **Tools** - **Allow Emergency Use.** 



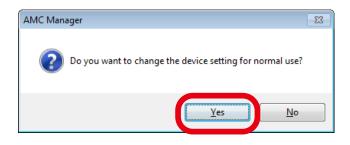
**2.** When a password is set for the emergency use feature, the window below is displayed. Enter the password and click **OK**.

Enter Password	<b>×</b>	
Enter the password.		
Password:	•••••	(1)
	OK (2)	

**3.** To reset the device back to normal use setting, click **Normal Use** at the **Allow Emergency Use**.

Allow Emergency Use		×
	<u>E</u> mergency Use	
	<u>N</u> ormal Use	
Status The emergency u	se function can be used.	
	Setting Close	]

4. Click Yes to the confirmation message

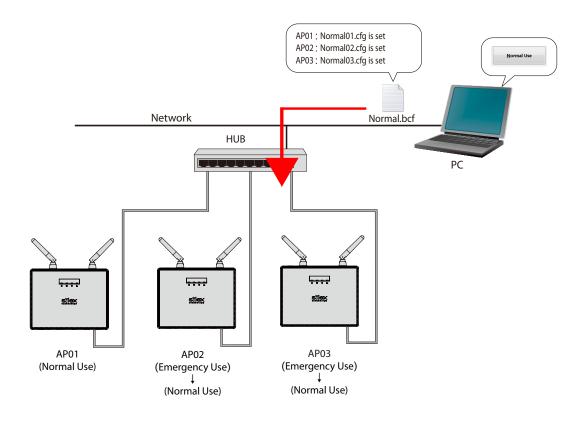


**5.** Bulk configuration for normal use is executed and the result is displayed. Click **Close**.

lk Configuration	een configured.		<b></b> X
Device Name SX-ND-4350WAN SX-ND-4350WAN SX-ND-4350WAN	Ethernet Address 84:25:3F:00:11:22 84:25:3F:11:22:33 84:25:3F:22:33:44	Status Completed. Completed. Completed.	
		<u>D</u> etails	<u>C</u> lose

### [Sample of executing normal use configuration]

As shown in the following configuration, if **Normal Use** is clicked when **Normal.bcf** is applied, AP02 and AP03 settings are changed.



# 4-15. Checking Device Operating Status

The operating status check feature can show a graph that displays a transition of the device usage time and the number of the connected wireless clients.

It can also show the total operating time, the number of devices connected to wireless LAN interface and how long the device is connected using the projection assistant software "SX Virtual Link Display for Education".

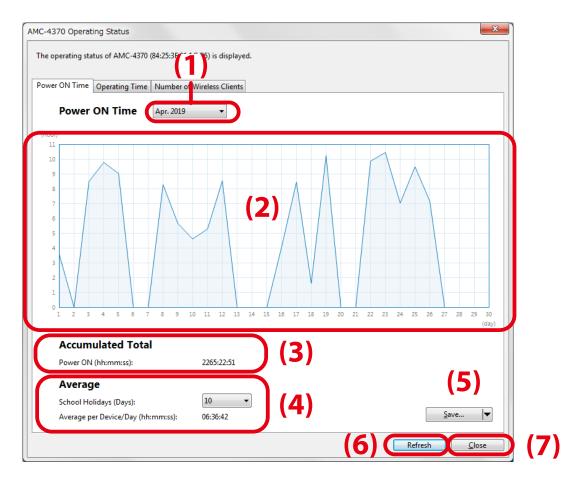


Only AMC Manager<sup>®</sup> E model supports the operating status check.

• To use the operating status check feature, the device needs to support it.

## Graph Window for Power-ON Time

The following explains the graph window for power-on time.



#### (1) Date

Select the year/month of the graph to display.

#### (2) Graph Area

This area displays the graph of the month you have selected.

#### (3) Accumulated Total

Total power-on time of the device is displayed.

#### (4) Average

This area shows the average power-on time per device/day excluding the information of school holidays of the month.

#### (5) [Save] button

The displayed status information can be saved to a CSV file or an image file.

#### (6) [Refresh] button

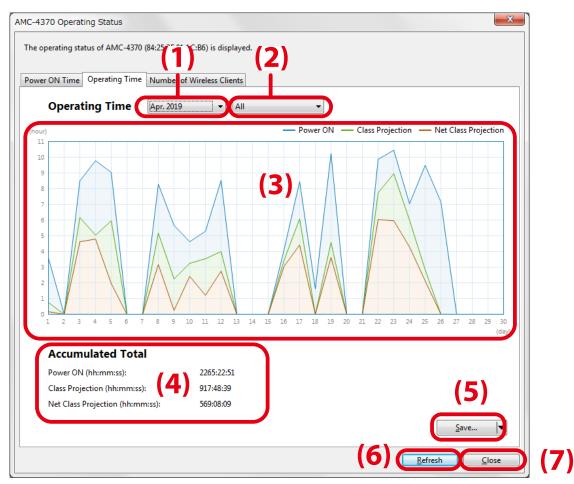
The graph is refreshed at Power ON Time, Operating Time and Number of Wireless Clients tabs.

#### (7) [Close] button

The operating status window is closed.

# Graph Window for Operating Time

The following explains the graph window for operating time.



#### (1) Date

Select the year/month of the graph to display.

#### (2) Type of Graph

Select whether to show one or all of the followings.

Data Type	Details
Power ON Total operating time of the device	
Class Projection	A period of class projection. This shows the time length of the class that was handled
Class Projection	using the projection assistant software "SX Virtual Link Display for Education"
Not Class Projection	A period of net class projection. This shows the actual time length of display projection that
Net Class Projection	was handled using the projection assistant software "SX Virtual Link Display for Education".

#### (3) Graph Area

This area displays the graph corresponding to the month and type of graph you have selected.

#### (4) Accumulated Total

Total operating time is displayed for **Power ON**, **Class Projection** and **Net Class Projection**.

#### (5) [Save] button

The displayed status information can be saved to a CSV file or an image file.

#### (6) [Refresh] button

The graph is refreshed at Power ON Time, Operating Time and Number of Wireless Clients tabs.

#### (7) [Close] button

The operating status window is closed.

## Graph Window for Number of Wireless Clients

The following explains the graph window for number of wireless clients.

	(1) (	(2)
AMC-4370 Operating Status		X
The operating status of AMC-4370 (84:25:3F:01:1C:B6) Power ON Time Operating Time Number of Wirele Number of Wireless Clients	ess Clients	otal Devices 🔻
	(3)	
	9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 (hour)
		(4) <u>Save</u> ▼ (5) <u>Refresh <u>C</u>lose (</u>

#### (1) Date

Select the year/month of the graph to display.

#### (2) Type of Graph

Specify the type of the graph to display. The graph can show the number of connected wireless client devices for each wireless LAN interface or for all wireless LAN interfaces.

#### (3) Graph Area

This area displays the graph corresponding to the date and type of graph you have selected.

#### (4) [Save] button

The displayed status information can be saved to a CSV file or an image file.

#### (5) [Refresh] button

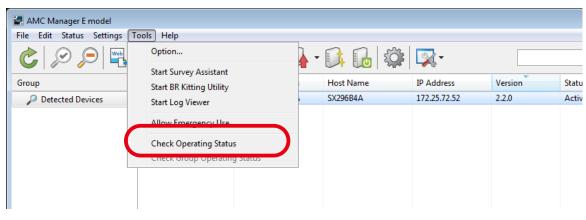
The graph is refreshed at Power ON Time, Operating Time and Number of Wireless Clients tabs.

#### (6) [Close] button

The operating status window is closed.

## **Checking Device Operating Status**

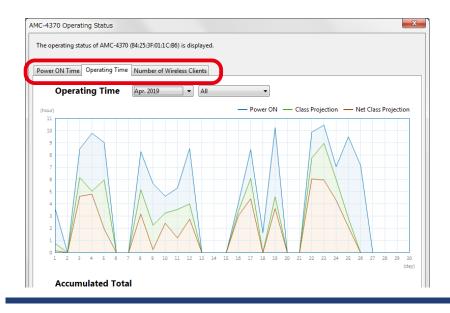
**1.** From the menu bar, click **Tools** - **Check Operating Status.** 



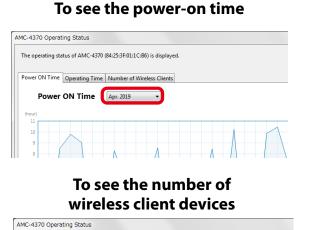
- To check the operating status of the grouped devices, select **Check Group Operating Status**.
  - The **Operating Status** window can also be displayed by the method below.



- Right-click on the device in the device list and select **Check Operating Status** or **Check Group Operating Status** from the displayed menu.
- 2. The operating status window is displayed.
  - To see the power-on time of the connected device, click the **Power ON Time** tab.
  - To see the power-on time, class projection time (length of the connected time) and net class projection time (length of the projected time) of the connected device, click the **Operating Time** tab.
  - To see the number of the connected wireless client devices, click the Number of Wireless Clients tab.



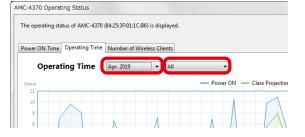
3. Click the pull-down menu (for date and graph type) to select the graph to display.



The operating status of AMC-4370 (84:25:3F.01:1C:B6) is displayed.

 Power ON Time
 Operating Time
 Number of Wireless Clients

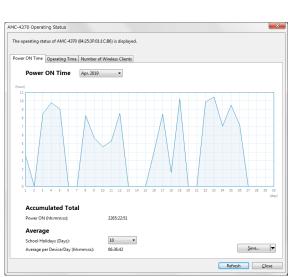
#### To see the operating time



**4.** The graph is displayed according to your selection.

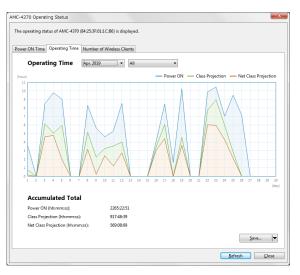
Number of Wireless Clients 4/23/2019 

Number of Total Devices

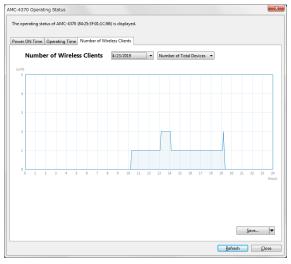


### Graph for power-on time

### Graph for operating time



# Graph for the number of wireless client devices





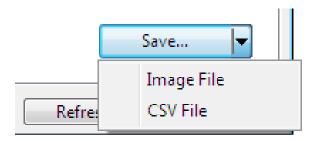
When the operating status window is displayed by clicking **Check Group Operating Status**:

- Power ON Time tab shows a graph of the total power-on time for grouped devices.
- Operating Time tab shows a graph of the total operating time for grouped devices.
- Number of Wireless Clients tab shows a graph of the maximum number of connected client devices per day for the selected group.

## Saving Graph as a File

The following explains how to save a graph to an image file.

**1.** Click Save - Image File.

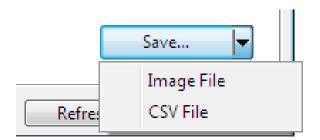


**2.** Specify the file name, file format (PNG, JPEG, Bitmap) and where to save the file, and click **Save**. The operating status will be saved as you have specified.

🛃 Save Operating Status	;		×
🔾 🗢 📕 🕨 silex		✓ 4 Searce	h silex 🔎
Organize 🔻 New	folder		:= • 🔞
🔆 Favorites	Name	Date modified	Туре
🥽 Libraries		No items match your search.	
🖳 Computer			
辑 Network			
	•	III	۰.
File <u>n</u> ame:			▼
Save as <u>t</u> ype: P	NG (*.png)		<b></b>
Hide Folders		S	ave Cancel

The following explains how to save a graph to a CSV file.

1. Click Save - CSV File.



**2.** Specify the file name and where to save the file and click **Save**. The operating status will be saved to a CSV file.

🛃 Save Operating Status					×
S v ilex			✓ ✓ Search sile	<sup>2</sup> X	٩
Organize 🔻 New fo	lder				0
🔆 Favorites	Name	*	Date modified	Туре	1
🥽 Libraries		No items ma	tch your search.		
🖳 Computer					
👽 Network					
	•				Þ
File <u>n</u> ame:					•
Save as <u>t</u> ype: CS\	/ (comma-separated) (*.c	sv)			•
) Hide Folders			Save	Canc	el

## **CSV File Format**

The statistics information for the operating status can be saved as a CSV file. The information is saved in the format below.

### **Operating Status for Each Device**

## CSV file for "Power ON Time"

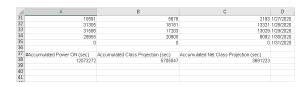
	А	В	С	D
1	#Host Name	Ethernet Address		
2	SX296B87	84:25:3F:01:1C:B6		
3				
4	#Power ON (sec)	Date		
5	0	1/1/2020		
6	0	1/2/2020		
7	0	1/3/2020		
8	0	1/4/2020		
9	0	1/5/2020		
10	31326	1/6/2020		
11	10858	1/7/2020		
12	30573	1/8/2020		

	А	В	С	D
31	10591	1/27/2020		
32	31305	1/28/2020		
33	31588	1/29/2020		
34	28955	1/30/2020		
35	0	1/31/2020		
36				
37	#Accumulated Power ON (sec)			
38	12073272			
39				
	#School Holidays	Average (sec)		
41	12	26726		

Name	Details	
#Host Name	Shows the host name.	
Ethernet Address	Shows the Ethernet Address.	
#Power ON (sec)	Chause the neuron and time in seconds (huusing and you far and dou)	
Date	hows the power-on time in seconds (by using one row for one day).	
#Accumulated Power ON	Shows the total power-on time.	
(sec)	This is the accumulated amount of time since the power-on time is recorded.	
#School Holidays	Shows the number of days for <b>School Holidays</b> that has been set at <b>Graph Window for</b>	
#SCHOOLHOIIdays	Power-ON Time.	
	Shows the average power-on time per day, which is calculated using the actual number of	
Average (sec)	operating days (number of days of the month minus the number of school holidays of the	
	month).	

# CSV file for "Operating Time"

A	В		C		D
#Host Name	Ethernet Address				
SX296B87	84:25:3F:29:6B:87				
#Power ON (sec)	Class Projection (sec)	Net Class F	Projection (sec)	Date	3
	0	0		0 1/1/2	2020
1	D	0		0 1/2/2	2020
	0	0		0 1/3/2	2020
	0	0		0 1/4/2	2020
1	0	0		0 1/5/2	2020
2	31326	24066	1	2983 1/6/2	2020
1	10858	3126		1077 1/7/2	2020
2	30573	26602	2	2126 1/8/2	2020



Name	Details
#Host Name	Shows the host name.
Ethernet Address	Shows the Ethernet Address.
#Power ON (sec)	Shows the time information below using one row for one day.
Class Projection (sec)	#Power ON (sec) : Device operating time
Net Class Projection (sec)	Class Projection (sec) : This is the time of the class that is held using SX Virtual Link Display
	for Education.
Date	Net Class Projection (sec) : Time is the time of display projection that is performed using SX
	Virtual Link Display for Education.
#Accumulated Power ON	Shows the total power-on time.
(sec)	This is the accumulated amount of time since the power-on time is recorded.
Accumulated Class	Shows the total time of <b>Class Projection</b> .
Projection (sec)	This is the accumulated amount of time since the class projection time is recorded.
Accumulated Net Class	Shows the total time of <b>Net Class Projection</b> .
Projection (sec)	This is the accumulated amount of time since the net class projection time is recorded.

## CSV file for "Wireless Clients"

	А	В	С	D
1	#Host Name	Ethernet Address	Wireless LAN I/F	
2 3	SX296B87	84:25:3F:29:6B:87	Number of Total Devices	
4	#Number of Wireless Clients	Date/Time		
5	1	1/30/2020 09:38:51		
6	1	1/30/2020 09:43:50		
7	1	1/30/2020 09:48:49		
8	1	1/30/2020 09:48:50		
9	1	1/30/2020 09:53:49		
10	1	1/30/2020 09:53:50		
11	1	1/30/2020 09:58:51		

Name	Details
#Host Name	Shows the host name.
Ethernet Address Shows the Ethernet Address.	
	Shows the information selected for Type of Graph at Graph Window for Number of
Wireless LAN I/F Wireless Clients.	
#Number of Wireless Clients	Shows the number of connected wireless clients by adding one row each time when such
Date/Time	information is retrieved from the device.

# **Operating Status for Grouped Devices**

## CSV file for "Power ON Time"

	A	В	С	D
1	#Group Name	Number of Target Devices		
2	silex primary school	9	9	
	#Power ON (sec)	Date		
5		1/1/2020		
6	-	1/2/2020		
7		1/3/2020		
9		1/4/2020 1/5/2020		
10		1/6/2020		
11		1/7/2020		
12	267279	1/8/2020		

	A	В	С	D
- 21			v	
31	98853	1/27/2020		
32	303945	1/28/2020		
33	303479	1/29/2020		
34	286226	1/30/2020		
35	0	1/31/2020		
36				
37	#Accumulated Power ON (sec)			
38	116025517			
39				
40	#School Holidays	Average (sec)		
41	12	26649		

Name	Details
#Group Name	Shows the group name.
Number of Target Devices Shows the number of devices in the group.	
#Power ON (sec)	Shows the power-on time in seconds (by using one row for one day).
Date	This is the total amount of the grouped devices.
#Accumulated Power ON	Shows the total power-on time of the grouped devices.
(sec)	This is the accumulated amount of time since the power-on time is recorded.
#School Holidays	Shows the number of days for <b>School Holidays</b> that has been set at <b>Graph Window for</b>
#SCHOOLHOILOASS	Power-ON Time.
	Shows the average power-on time for one device per day, which is calculated using the
Average (sec)	actual number of operating days (number of days of the month minus the number of
	school holidays of the month).

# CSV file for "Operating Time"

	A	В	С	D		A	4	
1	#Group Name	Number of Target Devices			31		98853	
2	silex primary school	9			32		303945	
3					33		303479	
4	#Power ON (sec)	Class Projection (sec)	Net Class Projection (sec)	Date	34		286226	
5	0	0		0 1/1/2020	35		0	
6	0	0		0 1/2/2020	36			
7	0	0		0 1/3/2020	37	#Accumulated Po		Accur
8	0	0		0 1/4/2020	38		116025517	
9	0	0		0 1/5/2020	39			
10				3 1/6/2020	40			
11	87074			7 1/7/2020	41			
12	267279	26602	2212	6 1/8/2020				

1	A	В	С	D
31	98853	5678	2193	1/27/2020
32	303945	18181	13321	1/28/2020
33	303479	17203	13029	1/29/2020
34	286226	20900	8092	1/30/2020
35	0	0	0	1/31/2020
36				
37	#Accumulated Power ON (sec)	Accumulated Class Projection (sec)	Accumulated Net Class Projection (sec)	
38	116025517	5705047	3691223	
39				
40				
41				

Name	Details
#Group Name	Shows the group name.
Number of Target Devices	Shows the number of devices in the group.
#Power ON (sec)	Shows the time information below using one row for one day.
Class Projection (sec)	#Power ON (sec) : Device operating time (total amount of time as a group)
Net Class Projection (sec)	Class Projection (sec) : This is the time of the class that is held using SX Virtual Link Display
	for Education (total amount of time as a group).
Date	Net Class Projection (sec) : Time is the time of display projection that is performed using SX
	Virtual Link Display for Education (total amount of time as a group).
#Accumulated Power ON	Shows the total power-on time of the grouped devices.
(sec)	This is the accumulated amount of time since the power-on time is recorded.
Accumulated Class	Shows the total time of <b>Class Projection</b> for the grouped devices.
Projection (sec)	This is the accumulated amount of time since the class projection time is recorded.
Accumulated Net Class	Shows the total time of <b>Net Class Projection</b> for the grouped devices.
Projection (sec)	This is the accumulated amount of time since the net class projection time is recorded.

## CSV file for "Wireless Clients"

	A	В	С	D
1	#Group Name	Number of Target Devices	Wireless LAN I/F	
2	silex primary school	9	Number of Total Devices	
4	#Number of Wireless Clients	Date		
5	0	1/1/2020		
6	0	1/2/2020		
7	0	1/3/2020		
8	0	1/4/2020		
9	0	1/5/2020		
10	36	1/6/2020		
11	24	1/7/2020		
12	26	1/8/2020		

Name	Details
#Group Name	Shows the group name.
Number of Target Devices	Shows the number of devices in the group.
Wireless LAN I/F	Shows the information selected for Type of Graph at Graph Window for Number of
	Wireless Clients.
#Number of Wireless Clients	Shows the maximum number of wireless clients connected to the grouped devices per day.
Date	One row is used for one day.

# 4-16. Radio Signal Strength Control

Silex Technology's wireless products always output radio signals at a constant level.

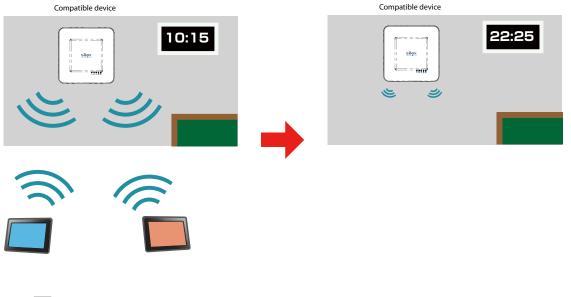
By using the radio signal strength control feature, the device can output the radio signals at the specified time and strength, and decrease it when the specified time is over.

- To use the radio signal strength control, the device needs to get the time information from the NTP server.
  - To use the radio signal strength control, the device needs to support it.
  - Only AMC Manager<sup>®</sup> E model supports the radio signal strength control.

# Radio Signal Strength Control

If this feature is used, the device operates with the specified signal strength only for the specified time period. When the specified time period is over, a lower signal strength will be used.

#### Example) When the time is set to 9:00-18:00



- By specifying the date and start/end time for TX Power Control Schedule Exception, the signal strength level can be increased for that period.
- When the specified period of time is over, the transmission power is fixed to 5%.

Note

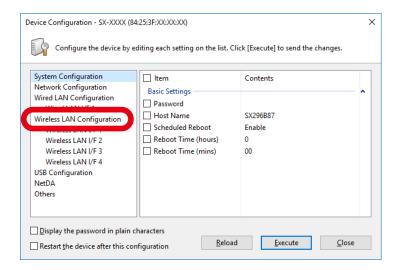
## Radio Signal Strength Control Setting

 The radio signal strength control can be configured at the device configuration window. To open the device configuration window, refer to 4-5. Individual Device Configuration - Configuring Device and follow the instructions at step 1-3.



• The following explains the configuration method for each device. If you want to use the configuration file, edit the corresponding setting on the file.

**2.** Select **Wireless LAN Configuration** or **Wireless LAN Common Configuration** from the menu.



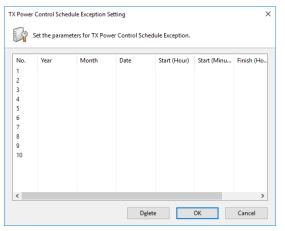
**3.** Check the check box at **TX Power Control Schedule Function** and select **Enable** from the menu.

System Configuration			^
Network Configuration	ltem	Contents	
Wired LAN Configuration	Multicast Rate IEEE802.11	. Default	
Wired LAN I/F 1	Smart Wireless Setup (Access	sPoint)	<b>~ ^</b>
Wireless LAN Configuration	Smart Wireless Setup	Enable	
Wireless LAN I/F 1	External Registrar	Disable	
Wireless LAN I/F 2	Wireless Interface	1	
Wireless LAN I/F 3	TX Power Control Settings (AccessPoint)		
Wireless LAN I/F 4 USB Configuration	TX Power Control Sched		~
NetDA	TX Power Control Sched	Enable	
Others	TX Power Control Sched	Disable	
		. , .	

**4.** Check the check box at **TX Power Control Schedule Setting** and **TX Power Control Schedule Exception**. Clicking these items will open the dialog at which you can configure the TX power control schedule. Configure the appropriate setting.

2	Control Schedule Se et the parameters fo		ntrol Schedule S	Setting.	
Day	Enable / Disable	Start (Hour)	Start (Minu	Finish (Ho	Finish (Min
Mon	Disable	0	00	0	00
Tue	Disable	0	00	0	00
Wed	Disable	0	00	0	00
Thu	Disable	0	00	0	00
Fri	Disable	0	00	0	00
Sat	Disable	0	00	0	00
Sun	Disable	0	00	0	00

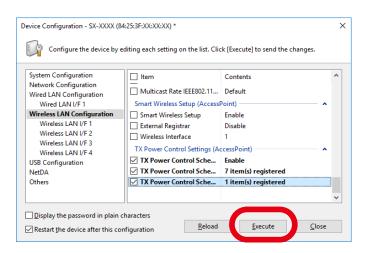
#### **TX Power Control Schedule Exception Setting**





- In the **TX Power Control Schedule Setting** window, it is possible to specify the time to strengthen the TX power for each day of the week. Enable/Disable the TX power control and specify the start/end time for each day of the week.
- In the **TX Power Control Schedule Exception Setting** window, specify the date and start/end time.
- **5.** When the edit is finished, click **Execute**.

To automatically restart the device after the configuration is done, check the check box at **Restart the device after this configuration** and then click **Execute**.



# 4-17. Registering Device Location

For devices displayed on the **Device List**, it is possible to register the locational information (text information) and the image. Once registered, it can be referred from AMC Manager<sup>®</sup> Standard or from the smartphone or tablet at which AMC Manager Plus is installed.



Only AMC Manager<sup>®</sup> Standard supports registration of the locational information.

AMC Manager<sup>®</sup> Free and AMC Manager<sup>®</sup> E model do not support this feature.

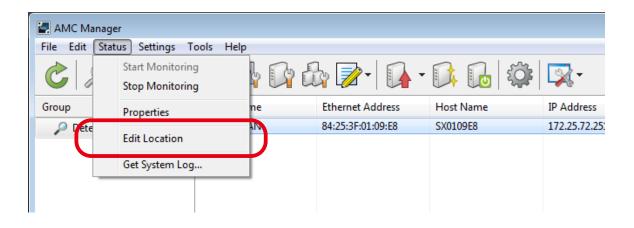
# Location Edit Window

Edit Location - BR-400AN (	84:25:3F:01:09:E8)	×
Location:		
I <u>m</u> age file:	<u></u>	<u>B</u> rowse
	Save Clear	Cancel

Name	Details
Location	Enter the text information for the device location.
Location	This information will be displayed at <b>Device List</b> and AMC Manager Plus.
	Register the image that shows the device location.
Image file	This information will be displayed at the device properties window and AMC
	Manager Plus.
icon	This icon can be clicked when the image is registered.
icon	Once clicked, the registered image is displayed.
[Save] button	The setting is saved and the edit window is closed.
[Clear] button	The saved information is deleted. For AMC Manager Plus, the locational
	information will be reset to the default one.
[Cancel] button	The edit window is closed without saving the entered setting.

## **Registering Locational Information**

**1**. From the menu bar, click **Status** - **Edit Location**.





The Edit Location window can also be displayed by the method below.
Right-click on the device in the device list and select Edit Location from the displayed menu.

**2.** In the **Edit Location** window, enter the text information to **Location**. Click **Browse** to register the image of location.

Edit Location - BR-400AN (8	84:25:3F:01:09:E8)	×
Location:		
I <u>m</u> age file:	<u> </u>	<u>B</u> rowse
	Save Clear	Cancel



• It is possible to register either a text or image for the location.

3. In the Open Image File window, select the image to use and click Open.

Open Image File					<b>x</b>
Correction Cibraries	<ul> <li>Pictures &gt; picture</li> </ul>	<b>→</b> 49	Search pict	ure	Q
Organize 👻 New fold	ler			≣≕ ▼ 🔳	?
🚖 Favorites	Pictures library		Arra	nge by: Folder 🔻	
🕞 Libraries	Name	Date	Tags	Size	Ratin
Documents Music	🛃 place01	7/24/2018 5:41 PM		730 KB	ಭಭ
Pictures		(1)			
Videos					
j툦 Computer					
📬 Network					
	•	m			•
File r	ame: place01	<b>•</b>	All image file		-
			Open		

**4.** After the locational information is entered, Click **Save**.

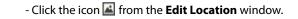
Edit Location - BR-400AN (8	34:25:3F:01:09:E8)	<b>—</b>
Location:	Working space A	
I <u>m</u> age file:	C:\Users\silex\Pictures\pictur	<u>B</u> rowse
(	<u>Save</u>	Cancel

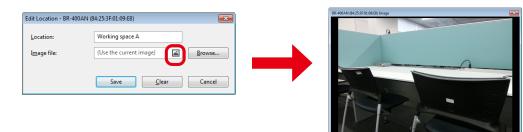
**5.** The locational information has been registered. The registered text is displayed at **Location** in the **Device List**.

AMC Manager						
File Edit Status Settings	Fools Help					
2 🖉 🔎		da 📝 - 🖌	- 🕞 🔒			٩
Group	Host Name	IP Address	Version	Status	Location	Last Update Time
Detected Devices	SX0109E8	172.25.72.251	1.1.1	Active (Factory default)	Working space A	8/2/2018 5:04:06 PM
-	1					

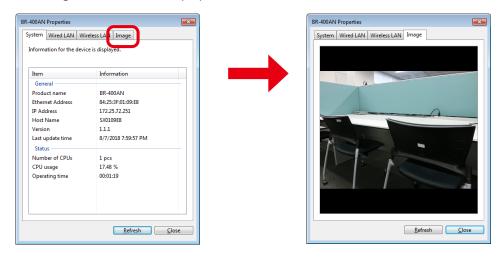
Note

• After the locational image is registered, it can be seen by the procedures below.





- Click the Image tab from the device properties window.



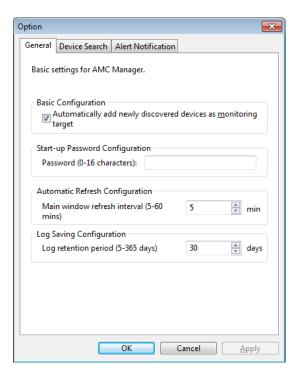
# 4-18. AMC Manager's Optional Settings

The following explains how to configure the operational settings as well as device search settings for the AMC Manager.

The operational settings can be configured at the **Option** window.

## **Option Window**

### **General Tab**



Name	Details	Default Value	
Automatically add newly	Adds the new devices as monitoring target when the AMC Manager		
discovered devices as	detected it. Once the device is added as the monitoring target, the	ON	
monitoring target	status of that device is refreshed regularly.		
Password	Sets the AMC Manager's start-up password.	None	
Passworu	The password must be 0-16 characters.	None	
Main window refresh	Sets the interval to refresh the operating status for the devices to	5 min	
interval	monitor (1-60 min).	5 min	
Log retention period	Sets the number of days to save event logs. The value must be 5 - 365.	30 days	
[OK] button	Saves the settings and closes the window.	-	
[Cancel] button	Cancels the settings and closes the window.	-	
[Apply] button	Saves the settings.	-	



• Event logs are saved for a period specified at **Log retention period** and can be accessed using Log Viewer.

## **Device Search Tab**

Option	×
General Device Search Alert Notificat	ion
By configuring addresses for device se network your computer is on can be s	
Use broadcast addresses for searc	h
Use specific addresses for search	
	Add
	Delete
	Import
	E <u>x</u> port
ОК	Cancel <u>Apply</u>

Name	Details	Default Value
Use broadcast addresses for	Check the check box when you use the broadcast address for	ON
search	searching the devices.	ON
Use specific addresses for search	Check the check box when you use the specific address for	ON
ose specific addresses for search	searching the devices.	ON
(Address field)	Enter the address to register.	None
[Add] button	Adds the address entered to the address field.	
	Up to 1024 addresses can be registered to the address list.	-
[Delete] button	Deletes the address from the address list.	-
	Reads IP address from external file and adds it to address for	
[Import] button	device search.	-
[Export] button	Outputs the registered IP address as external file.	-
[OK] button	Saves the settings and closes the option setting window.	-
[Cancel] button	Cancels the settings and closes the window.	-
[Apply] button	Saves the settings.	-

## **Alert Notification Tab**

Option	×
General Device Search Alert Notification	
Alert notification setting can be configured.	
Alert Condition	
Condition	*
For AMC Manager	<b>^</b>
System log capacity exceeded	=
Start-up password authentication failed	=
Emergency use function was executed      For Device	
Too many wireless client devices were connecte	
<ul> <li>Device setting was changed or initialized</li> </ul>	
Device firmware was changed	
Device reply was lost	-
Mail Setting Mail server and mail address are not configured. Mail <u>S</u> erver Setting <u>M</u> ail Address Set	ting
OK Cancel	Apply

Name	Details	Default Value	
System log capacity avgoaded	Alerts when syslog data size exceeded its capacity and the	OFF	
System log capacity exceeded	past logs were deleted.	OFF	
Start-up password authentication failed	Alerts when AMC Manager® E model start-up password	OFF	
	authentication failed for 3 times.	OFF	
Emergency use function was executed	Alerts when Emergency use function was executed.	OFF	
Too many wireless client devices	Alerts when 41 or more wireless client devices were	OFF	
were connected to the device	connected to the device.	OFF	
Device setting was changed or	Alerts when the device setting was changed or initialized by a	OFF	
initialized	method other than your AMC Manager® E model.	OFF	
Device firmware was changed	Alerts when the device firmware was changed by a method	OFF	
Device Infilware was changed	other than your AMC Manager® E model.		
Device reply was lost	Alerts when the device reply was lost.	OFF	
Wireless client device failed to	Alerts when the wireless client device failed to connect to the	OFF	
connect to the device	device.	UFF	
Error occurred on wireless module	Alerts when an error occurred on wireless module of the	055	
of the device	device.	OFF	
Device failed in Smart Wireless Setup	Alerts when Smart Wireless Setup failed.	OFF	
DFS function started on the device	Alerts when DFS function ran on the device.	OFF	
[Mail Server Setting] button	Opens the mail server setting window.	-	
[Mail Address Setting] button	Opens the mail address setting window.	-	
[OK] button	Saves the setting and closes the <b>Option</b> window.	-	
[Cancel] button	Closes the <b>Option</b> window.	-	
[Apply] button	Saves the setting.	-	



• Alert notification tab is displayed at AMC Manager<sup>®</sup> E model only.

## Mail Server Setting Window

Mail Server Setting	<b>—</b> ———————————————————————————————————
Mail server (SMTP) setting can	be configured.
User Information	
Mail Address:	
<u>N</u> ame:	
Logon Account for Mail Serve	r
Account Name:	
<u>P</u> assword:	
Mail Server Information	
Mail <u>S</u> erver:	
P <u>o</u> rt Number:	25
Encryption Mode:	None
Server <u>T</u> imeout:	60 sec (10-600 sec)
Sen <u>d</u> Test Mail	OK Cancel

Name	Details	Default
Mail Address	Enter the sender's address. Up to 63 characters can be used.	None
Name	Enter the sender's name. Up to 31 characters can be used.	None
Account Name	Enter the account name to logon to mail server.	
	Up to 63 characters can be used.	None
Password	Enter the password to logon to mail server.	None
rassworu	Up to 63 characters can be used.	NOTE
Mail Server	Enter the IP address or host name of mail server (SMTP).	
	Up to 127 characters can be used.	None
Port Number	Enter the port number of mail server (SMTP).	
ronthumber	The value must be 1-65535.	25
Encryption Mode	Sets the type of encryption to connect to mail server.	
	None or TLS can be selected.	None
Server Timeout	Sets the timeout period to cut off connection from mail server (SMTP).	60sec
	The value must be 10-600 sec.	ousec
[Send Test Mail] button Sends a test mail with the entered settings.		-
[OK] button	K] button Saves the settings and closes the <b>Option</b> window.	
[Cancel] button Closes the <b>Option</b> window.		-

## Mail Address Setting Window

Mail Ad	ddress Setting		×
Enter	the mail address.		
Add	dress Information		
<u>1</u> 0	:		
<u>c</u> c	:		1
<u>B</u> C	C:		
		OK Cancel	

Name	Details	Default
	Enter the receiver's address (TO).	
то	Multiple addresses can be specified by separating them with	None
	semicolon (;). Up to 1023 characters can be entered.	
	Enter the receiver's address (CC).	
СС	Multiple addresses can be specified by separating them with	None
	semicolon (;). Up to 1023 characters can be entered.	
	Enter the receiver's address (BCC).	
ВСС	Multiple addresses can be specified by separating them with	None
	semicolon (;). Up to 1023 characters can be entered.	
[OK] button	Saves the settings and closes the <b>Option</b> window.	
[Cancel] button	Closes the <b>Option</b> window.	-

## **Changing AMC Manager Settings**

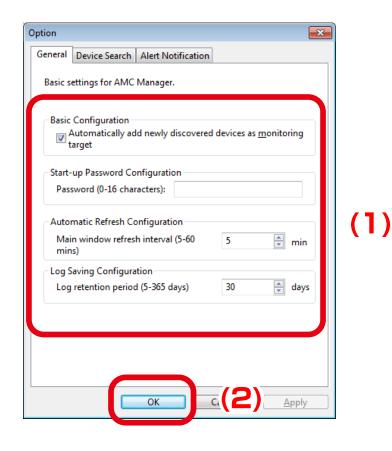
**1**. Select the **Option** icon from the toolbar.

AMC Manager E model				
<u>File Edit Status Settings T</u>	ools <u>H</u> elp			
C / P   E G   E G & P   G · G   🔅 🗭				
Group	Device Name	Ethernet Address	Ho. Name	
Detected Devices	🔮 AP-500AC	84:25:3F:12:34:56	AP500-123700	
🐹 Group A				
🧱 Group B				

• The **Option** window can also be displayed by clicking **Tools** - **Option** from the menu bar.



2. In the **Option** window, configure the settings and click **OK**.



# 4-19. License Information

The following explains how to update the license information for the AMC Manager. The license information can be displayed and changed in the **License Information** window.

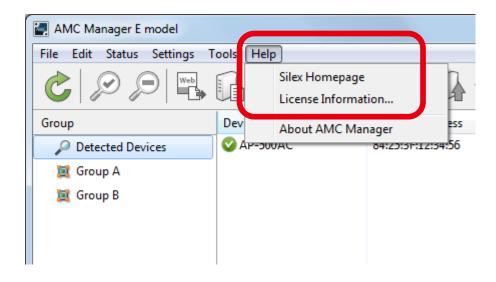
his is the AMC Manage	r E model's license information.
License Information	
License Key:	ABCDE-FGHU-KLMNO-PQRST
Expiration Date:	7/31/2015
User Information <u>C</u> ompany Name:	silex technology, Inc.
<u>N</u> ame:	silex user
Email Address:	*******@silex.com
<u>N</u> ame:	silex user

### License Information Window

Name	Details	Details				
Liconco Kov	Shows the registered lic	Shows the registered license key.				
License Key	(Up to 23 characters can	be used.)				
Expiration Date	Shows the expiration da	te for the license.				
	The followings are displa	ayed.				
	Information	Meanings				
	Indefinite	There is no expiration for the license.				
	Date (MM/DD/YYYY)	Expiration date				
	This license is evenired	The registered license is expired.				
	This license is expired.	Please get a new license key.				
	Enter the license key.	Failed to register the license key.				
	Enter the license key.	Please enter the correct license key.				
	This is a free version.	This is displayed when AMC Manager® Free is used.				
Company Name	Shows the company nar	ne (up to 64 characters).				
Name	Shows the user name (up to 64 characters).					
Email Address	Shows the email addres	Shows the email address (up to 254 characters).				
[OK] button	Registers the license info	Registers the license information.				
[Cancel] button	Cancels the settings and	Cancels the settings and closes the window.				

### **Updating License Key**

**1.** Click **Help** - **License Information** from the menu bar.



2. To change the license information, enter the new information for License Key, Company Name, Name and Email Address and click OK.

li	cense Information		x	
	This is the AMC Manager	E model's license information.		
	-License Information			
	License Key:	ABCDE-FGHIJ-KLMNO-PQRST		
	Expiration Date:	7/31/2015		
	User Information			(1
	<u>C</u> ompany Name:	silex technology, Inc.		
	<u>N</u> ame:	silex user		
	<u>E</u> mail Address:	******@silex.com	וו	
			2)]	

Blank page



This chapter explains how to use the Survey Assistant.

## 5-1. Survey Assistant's Features

The **Survey Assistant** is the plug-in exclusively designed for the AMC Manager<sup>®</sup> E model. It graphically shows the information collected by the Silex product, such as wireless status, radio interference, etc.

### Survey Assistant's Features

The **Survey Assistant** has the following features:

#### **Graphic display**

Shows a graph of wireless environment scanned by the Silex product which can run with the Survey Assistant plug-in.

#### **Diagnostic feature**

Shows the caution or warning on a radio interference.

#### Graph on a map

Shows a graph of the scanned wireless information on the map which you have specified as a background image. By using the floor map image of where the Silex product is installed, the graph can be displayed on each spot of installation on the map.

# 5-2. Starting/Finishing Survey Assistant

How to start/finish the Survey Assistant is explained.

The Survey Assistant is a plug-in exclusively designed for the AMC Manager<sup>®</sup> E model.

It is impossible to start the Survey Assistant only.

### Starting Survey Assistant

**1.** Select the device to use from the device list of AMC Manager<sup>®</sup> E model and click the **Start Survey Assistant** from the toolbar.

AMC Manager E model				
File Edit Status Settings	Tools Help			
	B B C C	by <b>≥</b> •   Gr • (	3 G   \$ \$	
Group	Device Name	Ethernet Address	Host Name	Start Survey Assistant
Detected Devices	🛇 AP-500AC	84:25:3F:12:34:56	AP500-123456	Start Log Viewer
🧝 Group A				
其 Group B				



The Survey Assistant can also be started by a method below:

Click Tools - Start Survey Assistant from the menu bar.

Note

The Survey Assistant will use a different view mode depending on how the device is selected on the AMC Manager® E model.

- When one device is selected, **Single View Mode** will used.
- When multiple devices are selected, **Multi View Mode** will be used.
- When no devices are selected, Multi View Mode will be used.

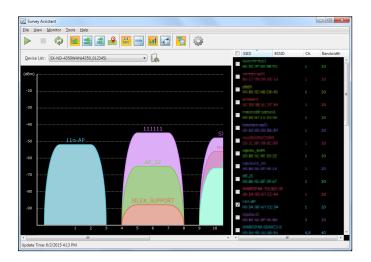
2. Click Yes to the confirmation message.



• When **No** is clicked, the scan will not perform and the graph will not appear.

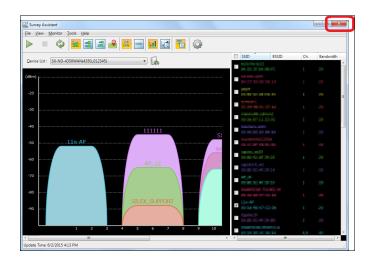


**3.** The Survey Assistant will start and the scan result of wireless environment will be displayed.



## Finishing Survey Assistant

**1.** Click the close button on top right of the window.



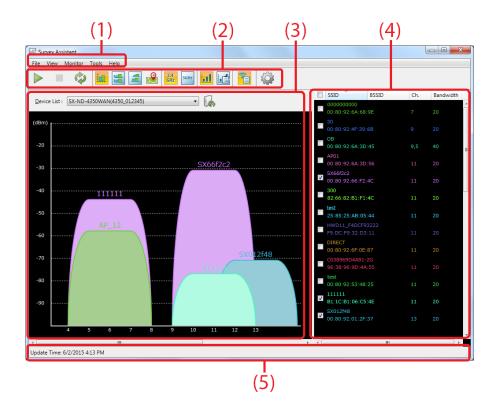


- The Survey Assistant can also be finished by a method below.
- Click File Finish from the menu bar.

Note

## 5-3. Survey Assistant's Main Window

The Survey Assistant collects the wireless environmental information and shows it as a graph. The following explains on the main window and menu of the Survey Assistant.



#### (1) Menu bar

Provides each function of the Survey Assistant such as a view mode change, etc.

#### (2) Toolbar

Provides each function of the Survey Assistant such as a view mode change, etc.

#### (3) Graph area

Shows the graph of retrieved wireless information according to the view mode.

#### (4) SSID list

Shows the SSIDs of the retrieved wireless information as a list. By selecting the SSID from the list, the corresponding graph can be displayed.

#### (5) Status bar

Shows the operating status.

#### Menu Bar

This provides each function of the Survey Assistant such as a view mode change, etc.

<u>File View Monitor Tools Help</u>

Menu	Items	Details	
File	Refresh	Refreshes the graphs by retrieving the wireless environmental	
		information from all devices.	
	Cancel Refresh	Cancels the refresh.	
	Finish	Finishes the Survey Assistant.	
View	Single View Mode	Shows the graph of one device.	
	Multi View Mode	Shows the graphs of multiple devices.	
	Historical View Mode	Shows the graph of one device with its past graphs.	
	Map Mode	Shows the graph with the specified image on the back such as a	
		floor map image, etc.	
	2.4GHz	Shows the graph of 2.4GHz wireless.	
	5GHz	Shows the graph of 5GHz wireless.	
	Color View	Shows the SSIDs in a different color for each.	
	Diagnostic View	Shows the caution or warning for the radio interference	
		according to the specified conditions.	
	SSID List	Shows a list of SSIDs.	
Monitor	Start Monitoring	Opens the setting window for device monitoring.	
		The wireless environmental information is retrieved according to	
		the monitor setting.	
	Stop Monitoring	Stops the device monitoring.	
Tools	Option	Opens the option setting window.	
Help	Silex Homepage	Opens the Silex's homepage.	
	About Survey Assistant	Shows the version information.	



• When a monitoring is in process, the refresh button is disabled.

Note

#### Toolbar

This provides each function of the Survey Assistant such as a view mode change, etc.



lcon	Item(Tooltip)	Details		
	Start monitoring	Opens the setting window for device monitoring. The wireless environmental information is retrieved according to the monitor setting.		
	Stop monitoring	Stops the device monitoring.		
Ø	Refresh graphs of all devices	Refreshes the graphs by retrieving the wireless environmental information from all devices.		
*	Cancel the refresh	Cancels the refresh.		
	Show the graph of a single device	Shows the graph of one device.		
4 <b>11</b>	Show the device graph as a list	Shows the graphs of multiple devices.		
1	Show the history of scan results	Shows the graph of one device with its past graphs.		
	Show the graph on the map	Shows the graph with the specified image on the back such as a floor map image, etc.		
2.4 GHz	2.4GHz band	Shows the graph of 2.4GHz wireless.		
5GHz	5GHz band	Shows the graph of 5GHz wireless.		
	Show the color graph	Shows the SSIDs in a different color for each.		
	Find the radio interference	Shows the caution or warning for the radio interference according to the specified conditions.		
1	SSID list	Shows/Hides a list of SSIDs.		
	Option	Opens the option setting window.		



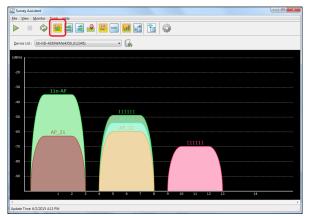
• When a monitoring is in process, the **Refresh graphs of all devices** icon is disabled.

Note

#### **Graph Area**

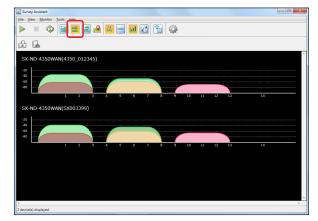
This shows the graph of retrieved wireless environmental information according to the view mode. There are 4 types of view mode; **Single View Mode**, **Multi View Mode**, **Historical View Mode** and **Map Mode**.

#### **Single View Mode**

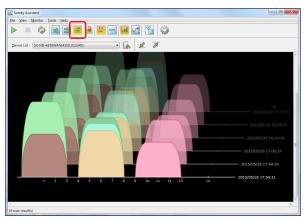


Shows the graph of one device

#### **Multi View Mode**



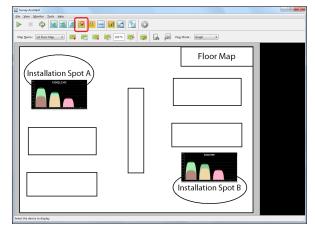
Shows the graphs of multiple devices as a list



#### Historical View Mode

Shows the history of graphs for one device

#### Map Mode



Shows the graph on the map which is selected as a background image.

#### **SSID List**

This shows the SSIDs of the retrieved wireless information as a list. The graphs will be displayed for the SSIDs whose check boxes are checked.



• If the check box is cleared, the graph of that SSID will not be displayed. When too many graphs are displayed on your wireless environment, you can hide unnecessary ones by clearing the check boxes. Note

#### **Context Menu**

If the SSID is right-clicked on the list, the context menu will be displayed. From the context menu, you can show or hide the same channels or same SSIDs as the one you select.

	SSID	BSSID	Ch.	Bandwidth
1	111111 00:1C: <mark>P1 0</mark> 5		~	20MHz
1	11111 00:1C:	Show Hide		20MHz
	11n-A 00:3A:	Show Same Cha	nnels	20MHz
1	aoyam 00:80:	Hide Same Chan		20MHz
>	AP_11 00:1C:	Show Same SSID Hide Same SSID	-	20MHz

Name	Details
Show Shows the graph by checking the check box of the SSID.	
Hide	Hides the graph by clearing the check box of the SSID.
Show Same Channels	Shows all SSIDs with the same channel as that of the SSID you select.
Hide Same Channels	Hides all SSIDs with the same channel as that of the SSID you select.
Show Same SSIDs	Shows all SSIDs with the same name as that of the SSID you select.
Hide Same SSIDs	Hides all SSIDs with the same name as that of the SSID you select.

## 5-4. Device Monitoring

The wireless environmental information can be retrieved regularly from the device by specifying it as a monitoring target. The device to retrieve the information and the interval of retrieving it can be configured at the **Monitor Setting** window. The retrieved information will be displayed as a graph using the **Historical View Mode**.

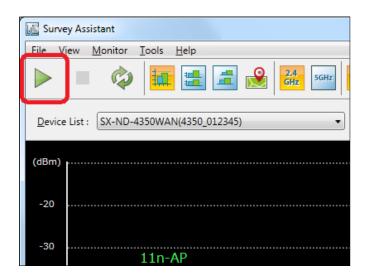
## **Monitor Setting Window**

	r Setting nfigure the device m	onitoring setting to start r	nonitoring.	
	ect the monitoring <u>t</u>	-		
	Host Name	Ethernet Address	IP Address	Device Name
	4350_012345 SX003399	84:25:3F:00:11:22 00:80:92:00:33:99	192.168.20.123 192.168.20.124	SX-ND-4350WAN SX-ND-4350WAN
St <u>a</u>	rt Time 6/1/	2015 19	▼ : 07 ▼	]
<u>E</u> nc	Time 6/1/	2015 19	▼ : 07 ▼	
Ref	resh <u>I</u> nterval: 1	▼ Hour 00 ▼ Min		
				Start Close

Name	Details
Select the monitoring	Select the device to monitor.
target If the check box is checked, the device will be added as a monitoring target.	
	Specify the time to start monitoring.
Start Time	If the time earlier than the current time is specified, the monitoring will start
	immediately.
End Time	Specify the time to finish monitoring.
Refresh Interval	Specify the interval to retrieve the wireless environmental information.
[Start] button	Starts monitoring with the specified conditions.
[Close] button	Closes the window.

## **Device Monitoring**

**1.** Click the **Start monitoring** icon from the toolbar.



2. Specify the devices to monitor as well as the start/end time for monitoring and click Start.

Μ	onitor Setting			
	Configure the device monit	toring setting to start m	nonitoring.	
	Select the monitoring <u>t</u> arge	et:		
	🕅 Host Name	Ethernet Address	IP Address	Device Name
	<ul> <li>✓ 4350_012345</li> <li>✓ SX003399</li> </ul>	84:25:3F:00:11:22 00:80:92:00:33:99	192.168.20.123 192.168.20.124	SX-ND-4350WAN SX-ND-4350WAN
	St <u>a</u> rt Time 6/1/201	5 15 19	▼ : 07 ▼	
	End Time 6/1/201	5 15 19	• : 07 •	
	Refresh Interval: 1 🔹	Hour 00 - Min		
				<u>S</u> tart <u>C</u> lose



• When a monitoring is in process, the **Refresh graphs of all devices** icon is disabled.

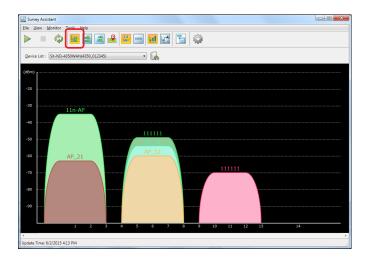
## 5-5. View Mode

The Survey Assistant can switch the view mode to display the graph of wireless information retrieved from the device.

### **Single View Mode**

Click the **Show the graph of a single device** icon from the toolbar.

The graph will be displayed for the single device you selected. In the graph, the horizontal axis represents the wireless channel while the vertical axis represents the signal strength.





The Single View Mode can also be enabled by a method below.

Select the device and click View - Single View Mode from the menu bar.

Note

l	con	Name(Tooltip)	Details
	-	Device List	Select the device from a pull-down menu.
	E CO	<b>.</b> .	Refreshes the graph of the selected device by scanning the wireless environmental information.

### Multi View Mode

Click the **Show the device graph as a list** icon from the toolbar.

The graphs will be displayed for the multiple devices you selected. The horizontal axis represents the wireless channel while the vertical axis represents the signal strength.

Survey Assistant ile <u>V</u> iew <u>M</u> onitor	Tools Help	_						
> = 🕸	) 🔝 😖	- 🖃 🛃	2.4 GHz SGH	3	£Ö¥			
			-		.4.			
36								
SX-ND-4350V	VAN(4350	012345)						4
	MN(4000_	_012545)						
-20								
-60						 		
-80								
SX-ND-4350V	VAN(SX00)	3399)						
-20								
-60						 		
-80								 
							13	
								+



The Multi View Mode can also be enabled by a method below.

Select the device and click View - Multi View Mode from the menu bar.

1	V	Ο	ιe	

lcon	Name(Tooltip)	Details
ß	Device display setting	Opens the <b>Device Display Setting</b> window.
	Refresh the graph of selected device	Refreshes the graph of the selected device by scanning the wireless environmental information.

#### **Device Display Setting Window**

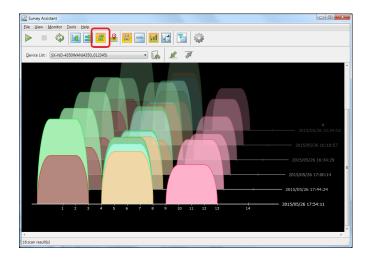
Host Name	Ethernet Address	IP Address	Device Name	Last Update	t
✓ 4350_012345 ✓ \$003399	84:25:3F:00:11:22 00:80:92:00:33:99	172.25.72.235	SX-ND-4350WAN SX-ND-4350WAN	6/8/2015 2:52 PM 6/2/2015 4:13 PM	(
					Rescan

Name	Details
(Dovice list)	Select the device to display the graph.
(Device list)	The graphs will be displayed for the devices you checked the check boxes.
🕈 🗼 button	Moves up/down the graph.
[Rescan] button	Rescans the wireless environmental information.
[Close] button	Closes the window.

### **Historical View Mode**

Click the **Show the history of scan results** icon from the toolbar.

The history of graph will be displayed in a chronological order. In the graph, the horizontal axis represents the wireless channel, the vertical axis represents the signal strength and the depth represents the scanned time.





• The Historical View Mode can also be enabled by a method below.

Select the device and click View - Historical View Mode from the menu bar.

**Note** • Up to 100 graphs can be displayed as the history.

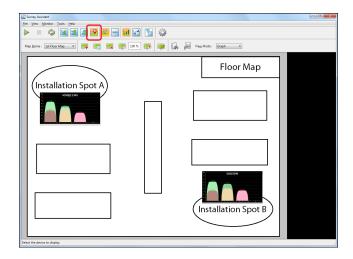
lcon	Name(Tooltip)	Details
-	Device List	Select the device from a pull-down menu.
		Refreshes the graph of the selected device by scanning the wireless environmental information. A newest graph always comes to the front.
	Move the graph to front	Moves the graph to the front.
	Move the graph back	Moves the graph to the back.

## Map Mode

Click the **Show the graph on the map** icon from the toolbar.

The graph can be displayed on the image that is specified as the background.

For details on the map setting and the graph allocation, see 5-8. Showing Device Graph on Map.





The map mode can also be enabled by a method below.

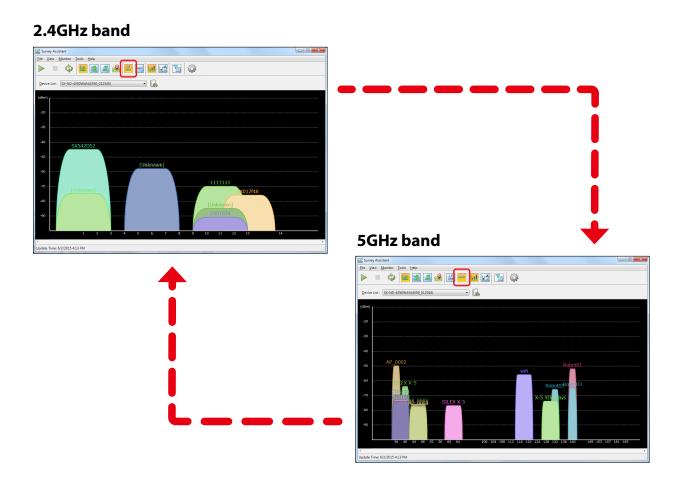
• Select the device and click **View** - **Map Mode** from the menu bar.

#### Note

lcon	Name(Tooltip)	Details
-	Map Name	Select the map to use from the pull-down menu.
	Add a new map	The new map can be created.
	Edit the current map	The current map can be edited. It is possible to change the map name and background image.
	Delete the current map	Deletes the current map
<b>S</b>	Zoom out the map	Zooms out the current map.
<b>Set</b>	Zoom in the map	Zooms in the current map.
	Switch to the graph edit mode	Transits to the graph edit mode. The graph can be shown on the map image.
E	Refresh the displayed	Refreshes the graph of the current device by scanning the wireless
	graphs	environmental information. This refreshes all graphs on the map.
1	Show the selected device	Shows the selected graph in <b>Single View Mode</b> .
	on a graph	When multiple graphs are selected, they will be shown in Multi View Mode.
_	View Mode	Switches the graph to the device information which includes a host name, IP
-		address, SSID, etc.

# 5-6. Changing Bandwidth

The bandwidth can be switched by clicking the **2.4GHz band** /**5GHz band** icons from the toolbar to show the corresponding information on the graph.





The bandwidth can also be switched by the methods below:

- Select the device and click View - 2.4GHz from the menu bar.

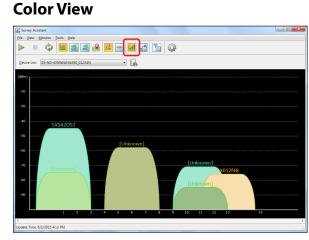
**Note** - Select the device and click **View** - **5GHz** from the menu bar.

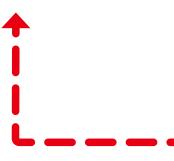
# 5-7. Changing View Mode

The view of graph can be switched by clicking **Show the color graph of wireless environment** or **Find the wireless interference** from the toolbar.

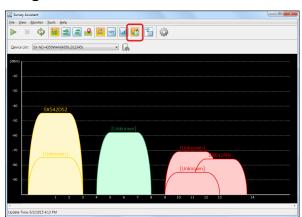
In the Color View, each graph is displayed in a different color.

In the **Diagnostic View**, the graph is displayed in yellow (for caution) or red (for warning) according to the specified conditions, or in gray for those not matching the conditions. The diagnostic settings can be configured in the option window.





**Diagnostic View** 



Color	Diagnostic result
Green	Normal
Yellow	Caution
Red	Warning
Gray	N/A

Note

- The view mode can also be changed by the methods below:
  - Select the device and click View Color View from the menu bar.
- Select the device and click View Diagnostic View from the menu bar.
- In the diagnostic view, the color will be applied in the order of Warning(Red) > Caution(Yellow) > Normal(Green). If there is one graph that matches both conditions of Warning(Red) and Caution(Yellow), a higher priority is given to Warning (Red).
- Every time when the graph is changed using the SSID list, the Survey Assistant will recheck them all with the diagnostic conditions.

## 5-8. Showing Device Graph on Map

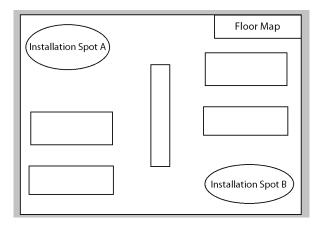
How to show the graph on the background image is explained.

The graph of wireless environmental information can be displayed on the floor map image of where the wireless devices are installed, by adding it as the background image of graph area. Two or more sets of the map and graph can be registered.

## **Before You Begin**

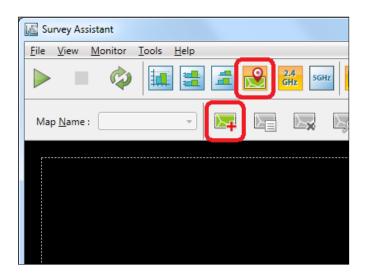
Prepare the image to use as a map. The supported file format is BMP only.

#### Sample of Image



## Creating Map

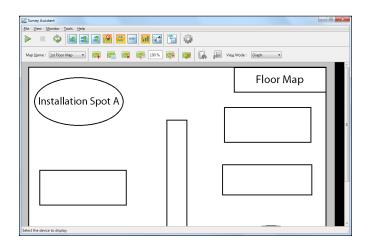
**1.** Click the **Show the graph on the map** icon and then **Add a new map** icon from the toolbar.



2. In the Add Map window, set a name of the map to add, specify where the image is saved and click OK.

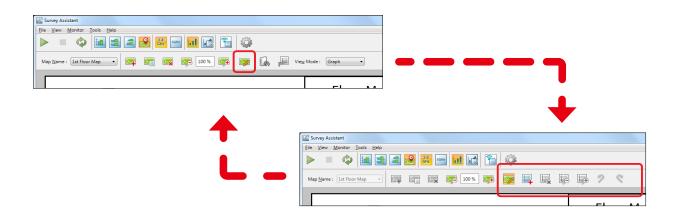
A	dd Map			×
	Specify the r	nap file to add.		
	<u>N</u> ame :	1st Floor Map		
	Path:	\\Data\map.bmp	(	Browse
			ок	Cancel

**3.** The map is created and the image is applied as the background.



## Graph Edit Mode

If the **Switch to the graph edit mode** icon is clicked when the Map Mode is used, the graph edit mode is enabled. In the graph edit mode, the graph can be added to the map.



lcon	Name(Tooltip)	Details
_	Map Name	Select the map to use from the pull-down menu.
		In the pull-down menu, the create maps are displayed.
	Zoom out the map	Zooms out the map.
	Zoom in the map	Zooms in the map.
	Finish the graph edit mode	Finishes the graph edit mode.
	Add the graph to the map	Adds the graph to the map.
	Delete the graph	Deletes the selected graph from the map.
<b>1</b>	Zoom out the graph	Zooms out the graph.
<b></b>	Zoom in the graph	Zooms in the graph.
2	Undo	Undoes the last action.
9	Redo	Redoes the last action.

## Adding Graph to Map

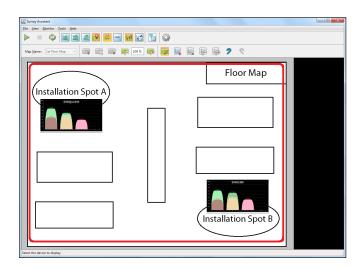
**1.** When the **Switch to graph edit mode** icon is clicked, the graph edit icons are displayed. Click the **Add the graph to the map** icon then.

Survey Assistant						
<u>File View Monitor Tools</u>	Help					
🕨 🔳 🔯 🛄	📑 🛋 💦 🚰		ŝ			
Map <u>N</u> ame : 1st Floor Map	- 4 6 5	100 % 🏹		i i	}	2
						Fl
🛛 (Installati	on Spot A)					

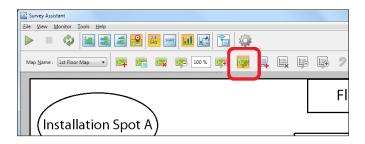
2. Select the device to display the graph on the map from the list and click Add.

Host Name	Ethernet Address	IP Address	Device Name	Last Update
4350 012345	84:25:3F:01:23:45	172.25.72.235	SX-ND-4350WAN	6/11/2015 10:56 AM
SX003399	00:80:92:00:33:99	172.25.64.169	SX-ND-4350WAN	6/11/2015 10:56 AM

The graph of the selected device is shown on the map.
 Move the graph to a desired position on the map by dragging it.
 To add more graphs, repeat the same process from 1.



**4.** Click the **Finish the graph edit mode** icon from the toolbar.

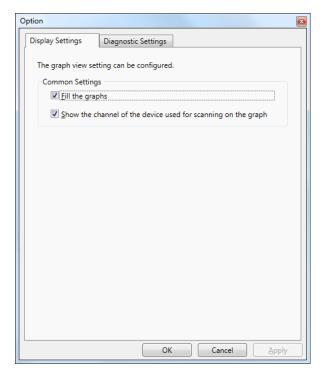


## 5-9. Survey Assistant's Optional Settings

The following explains how to configure the graph display settings as well as diagnostic mode settings. The operating settings can be configured from the option window.

### **Option Window**

#### **Display Settings Tab**



Name	Details	Default Value
	Paints out the graphs.	
Fill the graphs	When the check box is cleared, overlapping graphs can easily be	ON
	distinguished.	
Show the channel of the	Adds a red line for the channel of the device used for wireless	
device used for scanning on	survey. The red line is shown under the channel on the horizontal	ON
the graph	axis.	
[OK] button	Saves the settings and closes the window.	-
[Cancel] button	Cancels the settings and closes the window.	-
[Apply] button	Saves the settings.	-

### **Diagnostic Settings Tab**

ion		1	
Display Settings Dia	gnostic Settings		
The diagnostic mode se Configure the following (colored in yellow) or w Common	conditions to dis arning view (color	olay the graphs i ed in red).	
Enable the cauti		SSID is running	at 40MHz
Enable the caution SSIDs on the same	on view or warnin ne channel than t		
Threshold value	(caution):	8	
Threshold value	( <u>w</u> arning):	20	
<b>I</b> gnore the signa	l strength lower t	nan specified	
<u>S</u> ignal Strength		-90 dBm 🔹	
2.4GHz band			
📝 Enable the warn	ing view for the S	SIDs with <u>u</u> nspec	ified channels
Channel <u>l</u> ist :		1,6,11	
Enable the caution	on view for adjace	nt graphs.	
5GHz band	on view for adjace	nt g <u>r</u> aphs.	
	OK	Can	cel Appl

Name	Details	Default Value
	Includes the device used for wireless survey as the target of radio	
Include the device used for	interference search.	ON
scanning as the diagnostic target	The Survey Assistant shows the graphs of wireless environment	
	excluding the device used for the scanning.	
Enable the caution view when one	In 802.11n, two channels can be combined together to use as	
SSID is running at 40MHz band	40MHz band. If both channels are used by other SSIDs, it will be	ON
while other SSIDs are already using	notified in the caution view (yellow).	
the both channels of it		
Enable the caution view or warning	When there are more SSIDs on one channel than the specified	
view when there are more SSIDs on	threshold value, it will be notified in the caution view (yellow) or	ON
the same channel than the specified		
threshold value	warning view (red).	
Threshold value (caution)	Specify the number of SSIDs to display in the caution view (yellow).	8
Threshold value (warning)	Specify the number of SSIDs to display in the warning view (red).	20
Ignore the signal strength lower	Shows the SSIDs with a lower signal strength in gray. Such SSIDs	ON
than specified	will not be included to the radio interference search.	ON
Signal Strength	Specify the threshold value for the signal strength to ignore.	-90dBm
Enable the warning view for the	In 2.4GHz band, if the SSIDs are running at the channel which	
	is not specified by the channel list, they will be notified in the	ON
SSIDs with unspecified channels	warning view (red).	
	Specify the channel not to show in the warning view in 2.4GHz	
Channel list	band. For 2.4GHz band, it is recommended to keep 5 or more	1611
	channel interval between each channel for the bandwidth not to	1,6,11
	overlap (e.g. " <b>1, 6,11</b> ").	

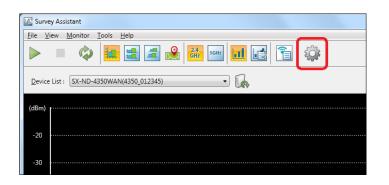
Name	Details	Default Value	
Enable the caution view for	In 2.4GHz, the SSIDs of adjacent graphs will be shown in the	OFF	
adjacent graphs	caution view (yellow).	OFF	
Enable the caution view for	In 5GHz, the SSIDs of adjacent graphs will be shown in the caution	OFF	
adjacent graphs	view (yellow).	OFF	
[OK] button	Saves the settings and closes the window.	-	
[Cancel] button	Cancels the settings and closes the window.	-	
[Apply] button	Saves the settings.	-	

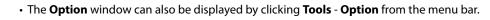


- In 2.4GHz, overlapping graphs will always be notified in the warning view (red) when the channel interval is equivalent to or less than 3 channels.
- **Note** As the number of available channels is often not enough in a wireless environment, it is recommended to use the same channel than the channel of the overlapped bandwidth. When the channels of the overlapped bandwidth are used, they may break the wireless packet of each other, while the bandwidth can be shared between the channels because of the carrier sense if the same channel is used.

## **Changing Survey Assistant Settings**

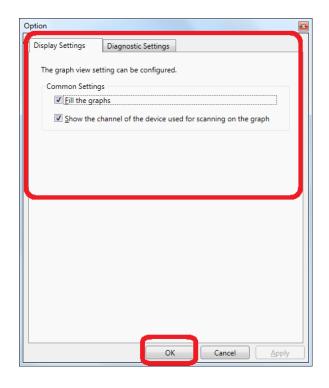
**1.** Click the **Option** icon from the toolbar.







2. In the **Option** window, edit the settings and click **OK**.





# A-1. Uninstalling AMC Manager

How to uninstall the AMC Manager is explained.

Follow the instructions below to uninstall the AMC Manager.



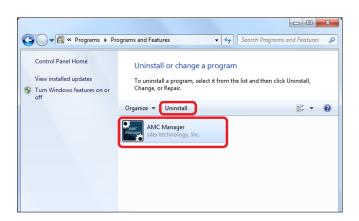
Note

• For uninstallation, you must login to the PC with administrative privileges.

#### 1. Click Start - Control Panel - Uninstall a program.

- When Windows 8 / 8.1 is used, go to **Control Panel** from the app screen.
  - For Windows 8, right-click on the start screen and click **All apps** from the app bar.
  - For Windows 8.1, move the cursor on the start screen and click [] button when it is displayed on the bottom left.
- For Windows 10, click Start (All apps) Windows System Control Panel.

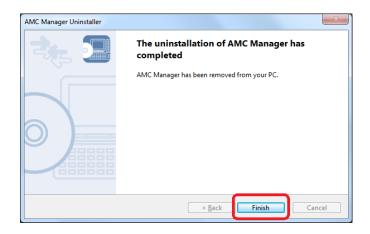
2. Select the AMC Manager from the list and click Uninstall.



**3.** Click **Next** to begin the uninstallation.

AMC Manager Uninstaller	x
	Welcome to AMC Manager Uninstallation
	This wizard will guide you through the process of uninstalling the AMC Manager from your computer.
	Before starting the uninstallation, please close all other applications running on your Windows PC. Click [Next] to start the uninstallation.
	< Back Next > Cancel

## **4.** Click **Finish**.



## A-2. Latest Firmware Downloads

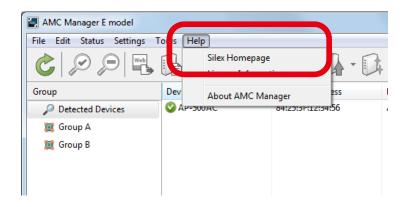
The latest firmware file can be downloaded from the Silex homepage.

Please access our homepage and go to the support & download section.

	URL
USA/Europe	https://www.silextechnology.com/
Japan	https://www.silex.jp/



- Silex homepage can also be accessed by the methods below:
- On the AMC Manager, click Help Silex Homepage from the menu bar.
- On the Survey Assistant, click Help Silex Homepage from the menu bar.



# A-3. Customer Support Center

Customer Support is available for any problems that you may encounter. If you cannot find the relevant problem in this manual or on our website, or if the corrective procedure does not resolve the problem, please contact Silex Technology Customer Support.

Contact Information		
USA	support@silexamerica.com	
Europe	support@silexeurope.com	
Japan	support@silex.jp	



Please also visit our homepage for the latest FAQ and product information.

Blank page