

Software name	SNC toolbox
Version	1.7.0.0
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File name	SNCToolboxV1.7.0.0.zip
Support OS	Microsoft Windows 7 (32-bit version, 64-bit version) Microsoft Windows 8.1 (32-bit version, 64-bit version) Microsoft Windows 10 (32-bit version, 64-bit version) Authorized editions: Microsoft Windows 7: Ultimate, Professional Microsoft Windows 8.1: Pro Microsoft Windows 10: Pro

SNC toolbox release notes

[Note]

1. Supported cameras are written in Sony SNC toolbox Applicable model list, please refer it.
2. If you want to use an older version of SNC toolbox, please be sure to uninstall the current version first before you install the older version.
3. "High framerate mode" of "Installation" page in 'Device Setting' could not be set "On" successfully if "Wide dynamic range (View-DR) level" is set "90db" or "130db". So if you want to set "On" of "High framerate mode", please make sure "Wide dynamic range (View-DR) level" is set "60db".
SNC G6 Series devices in Sony SNC toolbox Applicable model list
4. If you want to connect by SSL, please also configure SSL setting at SNC toolbox.
 - a. Configuration when add "My device" using "Add Device Entry"
Configure "Protocol" and "Client certificate".
 - b. Configuration of single camera
Select camera in "My device" or "Search result" and configure "Protocol" and "Client certificate" in "Modify Device Entry" on mouse right button click.
 - c. Configuration of multiple cameras
Configure "SSL setting" of "Network" tab in "Tools". Cameras in "My device" are reconfigured automatically. But, cameras in "Search result" are not reconfigured automatically, so please select cameras and drag and drop to "My device" to add.
5. If you enable "IPv6" and "Client certificate" of "SSL", and if you upgrade from under Ver1.3.5.0 to over Ver.1.3.6.0, the wrong "client certificate information" will be keep. So, please reconfigure used SSL camera from "Client certificate" in "Modify Device Entry" on mouse right button click of each cameras.
6. In "Network Setting", camera network setting will be failed by "Setting of some device is failed, please confirm it by tool log". Then, possibly camera user name and password might be changed, please make sure it.
7. About the setting of "Open the setting screen when opening the device homepage", the device web setting menu doesn't be opened correctly under the following condition when the device homepage is opened.
 - a. Installer of ActiveX viewer is displayed.
 - b. Dialog of SSL client certificate is displayed.
8. On occasion firmware upgrade was failed when connecting from different network segment and enabling SSL function for the following software version's device. For sure upgrading, please making "Allow HTTP connection at the some clients" "on" or making "SSL function" "off" in "Setting" of "SSL" page in "Device Setting" before firmware upgrading.
SNC G6 Series devices in Sony SNC toolbox Applicable model list of software version 1.12 or earlier.
9. When the devices outside the network segment are not found, check the following items:

- a. Can search only for the following models:
SNC G5 Series devices of software version 1.30 or later, SNC G6 Series devices of software version 1.4.0 or later and SRG Series devices of software version 1.0.0 or later in Sony SNC toolbox Applicable model list.
 - b. When searching for SNC-HMX70/72 or SNC-EMX30/30R/32R/50/50R/52R, in order to eliminate the influence due to customer's environment dependence and stably search, we recommend not to enable "Search external network device(s)". It is recommended to search from a PC connected to the same network segment.
 - c. Check the multicast setting of the router to search the devices by using multicast.
 - d. If the IP address of the device to be searched is set correctly.
 - e. If the SSL setting is set on the device, it cannot be searched as a device outside the network segment. Disable the SSL setting of the device.
10. If "Search external network device(s) is enabled, the network load can be higher as the multicast packet flows on the network on a regular basis.
 11. If you configure Administrator name and Administrator password in Default device account in "Option", please reboot SNC toolbox to enable setting.
 12. Upgrading with SNC-VM772R's SSL function enabled may fail. It is recommended that you disable the SSL function of SNC-VM772R and then perform the upgrade. After the upgrade, please use the SSL function setting back to original.
 13. There are the following limitations when upgrading simultaneously including SNC-HMX70/72, SNC-EMX30/30R/32R/50/50R/52R.
 - a. The maximum number of cameras that can be upgraded simultaneously is 64.
 - b. Please restart SNC toolbox for stability before running upgrade.

Ver1.7.0.0 (Jun 27, 2019)

1. The SNC-HMX72, SNC-EMX30/30R/32R/50/50R/52R are now supported.
 - a. When the DHCP setting is on in the camera setting, and DHCP server is not running, the camera works with AutoIP. In this case, the camera cannot be searched. To search the camera, select "Obtain an IP address automatically" in the network setting of the PC so that the PC also works with AutoIP, then the camera can be searched. If necessary, set the network setting of the camera, then set proper network setting of the PC.
 - b. When upgrading of SNC-HMX72, SNC-EMX30/30R/32R/50/50R/52R, if the SVU file is not for the camera, SNC toolbox uploads it to the camera, then it is handled as error by the camera.
2. The SNC-WL862 is now supported.
3. The following issue has been resolved.
 - a. Couldn't upgrade to software version 3.0.0 or later from software version 1.1.1(SNC G6 Series and SRG Series).
 - b. Problems when trying to register an unsupported camera with My Device.
 - c. Problems searching for more than 500 devices.
4. Known issues
 - a. When SNC-HMX70/72 or SNC-EMX30/30R/32R/50/50R/52R are included, it may not be possible to upgrade 65 or more simultaneously.
 - b. If SNC-HMX70/72 or SNC-EMX30/30R/32R/50/50R/52R are included, it may fail if you perform upgrades continuously.

Ver1.6.1.0 (Nov 28, 2018)

1. Letters that can be used with the user name and password of the device are alphanumeric characters and! "# \$% '() * +, -. /; <=>? @ [¥] ^ _ ` {} ~.
2. The following issue has been resolved.
 - a. SNC-VM772R and SNC-VB770 couldn't be upgraded to the same version at the same time.

Ver1.6.0.0 (June. 7, 2018)

1. The SNC-HMX70 is now supported.
 - a. When the DHCP setting is on in the camera setting, and DHCP server is not running, the camera works with AutoIP. In this case, the camera cannot be searched. To search the camera, select "Obtain an IP address automatically" in the network setting of the PC so that the PC also works with AutoIP, then the camera can be searched. If necessary, set the network setting of the camera, then set proper network setting of the PC.
 - b. When upgrading of SNC-HMX70, if the SVU file is not for the SNC-HMX70, SNC toolbox uploads it to the camera, then it is handled as error by SNC-HMX70.

Ver1.5.1.0 (Nov 17, 2017)

1. The following issue has been resolved.
 - a. Couldn't upgrade to software version 3.0.0 or later from software version 1.0.0(SNC G6 Series and SRG Series).

Ver1.5.0.0 (Oct 13, 2017)

1. The security has been enhanced.
2. Add "Device information download" to "Device Log".

Ver1.4.4.0 (May 27, 2016)

1. Add "Hours meter" to "Device Setting"/"System"/"System" and "My Device" (SNC-VB770).
2. Add "Full HD" to "Operation Mode" of "System"/"Installation" in "Device Setting" (SNC-VB770).
3. Windows10(32bit/64bit) is now supported.
4. The following issues have been resolved.
 - a. Couldn't register SNC-HM662 to "My Device" with Drag&Drop.
 - b. Couldn't import more than 1024 devices to "My Device". Cameras of the maximum number 8192 can be imported/exported and displayed in "My device" folder.
 - c. Couldn't download "Access Log" and "System Log".
 - d. Couldn't change IP address which starts from 24. or 25.
 - e. "Synchronize with PC" setting for "Date&Time"/"Adjust" in "Device Setting" made camera clock 1 hour ahead.
 - f. The date of the downloaded "Device Log" file was incorrect.

Ver1.4.3.0 (Jul. 9, 2015)

1. Add "VISCA Interface" setting of "Network" in "Network" page in "Device Setting".

SRG Series devices of software version 2.0.0 or later in Sony SNC toolbox Applicable model list.

2. Support for multiple devices “Restore setting” in “Initialize Device” of “Tools”
3. Add “Device batch setting” in “Tools”
4. Add “Video frequency”, “Aspect ratio”, “Operation Mode”, “Resolution” and “Color space” setting of “Installation” in “System” page in “Device Setting” for the following models.
SNC G7 Series device.in Sony SNC toolbox Applicable model list.
5. Add “NR mode”, “2D NR Level” and “3D NR Level” setting of “Picture” in “Device” page in “Device Setting” for the following models.
SNC G7 Series device.in Sony SNC toolbox Applicable model list.
6. Add “White balance : ATW-PRO-SODIUM” setting of “Picture” in “Device” page in “Device Setting” for the following models.
SNC G7 Series device.in Sony SNC toolbox Applicable model list
7. Add “Codec4” and “Codec5” setting of “VideoCodec” in “Device” page in “Device Setting” for the following models.
SNC G7 Series device.in Sony SNC toolbox Applicable model list
8. Add “Video port number4”, “Video port number5”, “RTSP video port number4”, “RTSP video port number5”, “RTSP multicast video port number4”, and “RTSP multicast video port number5” setting of “Streaming” in “Device” page in “Device Setting” for the following models.
SNC G7 Series device.in Sony SNC toolbox Applicable model list
9. Not supported Windows XP/Vista (Feb. 29, 2016)

Ver1.4.1.0 (Dec. 24, 2014)

1. Add “Eflip” setting of “Installation” in “System” page in “Device Setting”.
2. Add “Image rotate” and “Mirroring” setting of “Installation” in “System” page in “Device Setting” for the following models:
SNC G6 Series devices except for the W series of software version 2.4.0 or later in Sony SNC toolbox Applicable model list.
3. Add “Auto clear” and “Auto clear time” setting of “Device tampering detection” in “Event detection” page in “Device Setting” for the following models:
SNC G6 Series devices of software version 2.4.0 or later in Sony SNC toolbox Applicable model list.
4. Extend configurable number to 24 in “Privacy Masking” for the following models:
SNC G6 Series devices of the W series of software version 2.4.0 or later in Sony SNC toolbox Applicable model list.
5. Support “Privacy Masking” when “Image rotate” or “Mirroring” are enable for the following models:
SNC G6 Series devices except for the W series of software version 2.4.0 or later in Sony SNC toolbox Applicable model list.
6. Add !"\$%&'()*=~-^¥|@[{ }_/?<>+*. for usable characters for username and password of devices for the following SNC toolbox's functions:
 - a. Device Account
 - b. Default device account at “General” tab of “Options”.
 - c. Device Account in “Add Device Entry” or “Modify Device Entry”
 - d. “Administrator” and “User1 ~ 9” setting of “Setting” in “User” page in “Device

Setting”

Cannot be used added characters for username and password because alphanumeric is only supported for the following models:

SNC G2, G3, G4 and G5 Series devices in Sony SNC toolbox Applicable model list.

7. Support SSL communication with devices which are configured to TLS1.0.

Ver1.4.0.0 (Oct. 27, 2014)

1. Add “Select Display Series” in “View”. Accordingly, device series shown in Search result folder can be selected.

Ver1.3.9.0 (Aug. 04, 2014)

1. Add Search devices in external network. Accordingly, add “Search external network device(s)” and “TTL” which can be configured searching range setting of Search Setting at “Network” tab of “Option”.
2. Add “Device Log Download” in “Device Log”.
3. Add “Download” to Access Log and System Log in “Device Log”.
4. Add to show “Tips” when SNC toolbox starts.
5. Add “Log level” and “Log size” setting of “Access Log” and “System Log” in “System” page in “Device Setting” for the following models:
G6 Series devices of software version 2.2.0 or later in Sony SNC toolbox Applicable model list.
6. Add “Discovery” setting of “UPnP” in “System” page in “Device Setting” for the following models:
G6 Series devices of software version 2.2.0 or later in Sony SNC toolbox Applicable model list.

Ver1.3.8.0 (Apr. 25, 2014)

8. Add following Voice Alert function.
 - a. Create
 - b. Upload
 - c. Test play of Voice Alert file of deviceAdd sample files of Voice Alert in SNC toolbox.
9. Support communication with devices which are enabled Referrer check.
10. Add Digest authentication to authenticate with devices.
11. Add “Authentication mode” setting of “User” page in “Device Setting” for the following models:
G6 Series devices in Sony SNC toolbox Applicable model list.
12. The following issues have been resolved:
 - a. Could not add device to “My device” when connecting with Wireless for all models.
 - b. Could not add device in different network segment to “My device” for the following models:
G2, G3, G4 Series devices in Sony SNC toolbox Applicable model list.
 - c. Could not refresh version number of devices in “My device” in device list after firmware upgrading for all models.
 - d. On occasion, when connecting HTTP proxy, downloaded setting file could not read because of changed to gzip in “Backup setting data” in “Initialize Device” for all

- models.
- e. Could not do Firmware Upgrading for the following models:
G4 Series devices in Sony SNC toolbox Applicable model list.
- f. Could not do CGI Sending when enabling SSL for the following models:
G5 and G6 Series devices in Sony SNC toolbox Applicable model list.
- g. Could not do some functions because of failing HTTP to HTTPS automatically in spite of "When SSL function of device is SSL only, allow to switch from HTTP protocol to HTTPS protocol automatically" was enabled.
 - Firmware upgrade
 - Send in Panorama Creator
 G5 and G6 Series devices in Sony SNC toolbox Applicable model list.

Ver1.3.7.0 (Jan. 22, 2014)

1. Add timeout setting of firmware upgrading at "General" tab of "Options".
2. More detail information is added to the "Tool Log" while firmware upgrading.
3. Status of device search is displayed at status bar.
4. Add the setting of direct access to the device web setting menu at "General" tab of "Options".
5. Improve the HTTP proxy setting to be available to acquire the following settings from Internet Explorer.
 - a. Automatic configuration
 - b. Exceptions
 Accordingly, change the item name of the setting from "Auto detect" to "Acquire Internet Explorer settings" at the "Network" tab of "Options".
6. The following issues have been resolved:
 - a. There was "Wide dynamic range (View-DR)" setting in "Device Setting" for the following models:
SNC-CX600/CX600W
 - b. Could not turn "Visibility Enhancer" off at "Device Setting" for the following models:
G6 Series devices except for SNC W series in Sony SNC toolbox Applicable model list.
 - c. Warning dialog wasn't displayed when firmware upgrading of the camera with SSL.
 - d. IPv6 setting was visible for the following models though SNC toolbox was not supported these IPv6 function:
G6 Series devices in Sony SNC toolbox Applicable model list.
 - e. SNC toolbox could not be started in Windows XP PC which was not installed "Microsoft Visual C++ 2005 SP1 Redistributable Package (x86)".
 - f. On occasion, "Search" button displayed as auto searching status even though searching was stopped.
 - g. "Solid PTZ" was invisible at "Codec 3" in "Video codec" page of 'Device Setting' for the following models:
G6 Series devices except for SNC W series in Sony SNC toolbox Applicable model list.
 - h. Could not change "Time zone" setting at "Date & Time" on the "System" page in 'Device Setting' of "Task" creation for all models.

Ver1.3.6.0 (Nov. 26, 2013)

1. At SNC-VB635, "Serial" setting was added in "Setting" of "Serial" page in 'Device Setting'.
2. At "G6 Series" cameras in "SNC Toolbox Applicable Model List", "Adaptive rate control" and its "Min" and "Max" setting were added in "VideoCodec" of "Device" page in 'Device Setting'.
3. At "G6 Series" SNC W series cameras in "SNC Toolbox Applicable Model List", "Defog" setting was added in "Picture" of "Device" page in 'Device Setting'.
4. The following issues have been resolved:
 - a. Cameras in "G6 Series" of "SNC toolbox Applicable Model List" in same network segment cannot connect using IPv6 and SSL with client certificate.
 - b. Cameras in different network segment do not be added to "My device" with IPv6
 - c. Some specified "Administrator password" such as "adminadmin" do not save correctly.

Ver1.3.5.0 (Oct. 31, 2013)

(The installer is not changed. This document have been revised.)

1. The SNC-VB635 of software version 1.10 is now supported.

Ver1.3.5.0 (Sep. 17, 2013)

2. The SNC-EM602R/EM632R/VM602R/VM632R of software version 1.8 are now supported.
3. The SNC-WR630/WR632 of software version 1.9 are now supported.
4. Maximum "Paralleled upgrade quantity" of "Firmware Upgrade" has been restored from 4 to 16.
5. The following issues have been resolved:
 - a. The checkbox of "Restore privacy masking settings" or "Restore preset position and privacy masking settings" checkbox was not shown when "Restore setting" through the menu 'Initialize device' in the 'Tools' for the following models:
SNC-CX600W /EB600/EB600B/EB630/EB630B/EM600/EM601/EM630/EM631/
VB600/VB630/VB600B/VM600/VM600B/VM601/VM601B/VM630/VM631
 - b. On occasion "Codec2" was not shown when "VideoCodec" page of "Device" in 'Device Setting' was selected for multiple cameras.
 - c. Even if "Cancel" was clicked in 'Device Account' dialog, 'CGI Sending', 'Firmware Upgrade', 'Custom Homepage', 'Network Setting' dialog could be entered.

Ver1.3.4.0 (Aug. 5, 2013)

1. The SNC-EB600/EB600B/EB630/EB630B/EM600/EM601/EM630/EM631 of software version 1.7 are now supported.
2. The SNC-CX600W of software version 1.7 is now supported in "Network Setting" and "Firmware Upgrade".
3. The software version 1.7 of the following models is now supported.
SNC-VB600/VB630/VB600B/VM600/VM600B/VM601/VM601B/VM630/VM631
4. Maximum "Paralleled upgrade quantity" of "Firmware Upgrade" has been reduced from 16 to 4. Because the size of SVU file increased, firmware upgrade will fail when

- "Paralleled upgrade quantity" is 16.
5. The following issues have been resolved:
 - a. The following models of software version 1.3 could not be added in "My device" folder:
SNC-VB600/VB630/VB600B/VM600/VM600B/VM601/VM601B/VM630/VM631
 - b. "Backup setting data..." through the menu 'Initialize device' in the 'Tools' would fail for the following models: SNC-VB600B/VM600B/VM601B.
 - c. Message of "Custom Homepage" dialog was not correct in French.
 - d. "Superimpose" of "System" page in 'Device Setting' could not be shown for the following model: SNC-CM120.
 - e. Network setting could not be restored after "Factory default" of "Initialize" page in 'Device Setting' was clicked even when "Restore network settings" was set.
 - f. "NTP server name" of "Date&Time" page in 'Device Setting' could not be shown for the following models: SNC-RZ25/RZ50/CM120.
 - g. Incorrect note "Frame rate is reduced by half when Stabilizer is on." was shown when "Stabilizer" of "Common" page of "Device" in 'Device Setting' was selected for the following models:
SNC-VB600/VB630/VB600B/VM600/VM600B/VM601/VM601B/VM630/VM631.
 - h. "Audio port number" of "Streaming" page in 'Device Setting' could not be shown for the following models:
SNC-EP520/EP521/EP550/EP580/EP585/EP585H/ER520/ER521/ER550/ER580/ER585/ER585H/ZP550/ZR550.
 - i. No option was selectable in "Conditions1" of "Edge Storage" page in 'Device Setting'.

Ver1.3.3.0 (Mar. 29, 2013)

1. The software version 1.4 of the following models is now supported.
SNC-VB600/VB630/VB600B/VM600/VM600B/VM601/VM601B/VM630/VM631
2. Windows 8(32bit/64bit) is now supported.
3. "IPv6 Setting" of 'Network Setting' is supported for the following models if they are in "My device" folder.
SNC-VB600/VB630/VB600B/VM600/VM600B/VM601/VM601B/VM630/VM631
4. Cameras of the maximum number 8192 can be imported/exported and displayed in "My device" folder.
5. The following issues have been resolved:
 - a. 'Device Account' dialog did not pop-up when the firmware upgrade failed due to unauthorized.
 - b. Unauthorized error was not shown in "Status" of 'Firmware Upgrade' dialog when the firmware upgrade failed due to unauthorized.
 - c. The application would stop responding when "Upgrade" was clicked after all cameras in "My device" folder were removed.
 - d. On occasion it didn't not show "Failed" in "Status" of 'Firmware Upgrade' dialog even when the firmware upgrade failed.
 - e. "IPv6 Setting" of 'Network Setting' was not displayed correctly after the camera was added successfully if the camera was in a different network segment.

- f. On occasion the application would stop responding when "Device Setting" was set at task wizard after "Device(s) in task" was modified.
- g. On occasion "NTP server name" of "Date&Time" page in 'Device Setting' could not be set successfully.

Ver1.3.2.0 (Dec. 19, 2012)

- 1. The SNC-VB600B/VM600/VM600B/VM601/VM601B/VM630/VM631 are now supported.
- 2. The following issues have been resolved:
 - a. On occasion, Internet Explorer would stop responding when monitoring a camera, under the environment that SNC toolbox v1.3.0.0 or v1.3.1.0 was installed.
 - b. On occasion 'Factory Default' through the menu 'Initialize device' in the 'Tools' would fail.
 - c. On occasion an error message would pop-up when the setting was changed in 'Network Setting' dialog even if it was set successfully.

Ver1.3.1.0 (Nov. 22, 2012)

- 1. The SNC-ER585/ER585H are now supported.
- 2. The following issues have been resolved:
 - a. The application would stop responding when "Video codec" of "Camera" page in 'Device Setting' was set for multiple cameras.
 - b. SNC-RX530/RX570 could not be upgraded.
 - c. On occasion 'Reboot' or 'Factory Default' through the menu 'Initialize device' in the 'Tools' would fail when device was connected via SSL.
 - d. On occasion the application would stop responding in "Privacy masking" dialog when device was connected via SSL.

Ver1.3.0.0 (Oct. 05, 2012)

- 1. The SNC-VB600/VB630 are now supported.
- 2. The software version 1.1 of the SNCA-ZX104 is now supported.
- 3. Registering of SNCA-ZX104 to 'My device' is now supported.
- 4. The folders/files that were not automatically created by SNC toolbox installer are not deleted by uninstall operation
- 5. Add 'CGI Sending' dialog to send a command.
- 6. Add "Upgrade" button in the main dialog.
- 7. "Codec", "Image size", "FPS", "Bitrate" are added in "Column of My device" of 'Column Setting' dialog.
- 8. "Multi device" is added in 'Add Device Entry' dialog.
- 9. Default "Device setting backup folder" of "General" tab in 'Option' dialog is changed from "\$Installer Folder¥cfg" to "\$My Documents¥Sony¥SNC toolbox¥cfg".
- 10. "Subnet mask" is automatically filled in when "IP address" is input in 'Network Setting' dialog.
- 11. Progress shown in "Progress bar" of 'Firmware Upgrade' dialog is improved.

12. The following issues have been resolved:
 - a. Device information of the "Device tree" could not be updated successfully if device was set the existed
"Device address" in 'Modify Device Entry'.
 - b. The "Privacy Masking" and "Panorama Creator" were not supported in right-click menu when device was connected via IPv6 and SSL.
 - c. On occasion 'Default Device Account' of 'Device Account' dialog was not updated when "Default device account" in "General" tab of 'Option' dialog was modified.
 - d. On occasion an error message would pop-up even it set successfully when "Video output mode" of "Installation" page in 'Device Setting' was set.
 - e. The option "On" was selectable in "Blink" of "Superimpose" page in 'Device Setting' with unsupported models.
 - f. On occasion "Font size" of "Superimpose" page in 'Device Setting' could not be shown.
 - g. On occasion "Superimpose format" of "Superimpose" page in 'Device Setting' could not be set successfully.
 - h. "Preset position" was selectable in "Viewer mode" of "User" page in 'Device Setting' on unsupported models.
 - i. On occasion "Administrator e-mail address" of "Image memory" page in 'Device Setting' could not be shown.

Ver1.2.6.0 (Jun. 29, 2012)

1. The SNCA-ZX104 is now supported.
2. The following issues have been resolved:
 - a. Firmware upgrading would fail in retaining the current settings if the device account had been changed from the default.
 - b. Incorrect note "Frame rate is reduced by half when Stabilizer is on." was shown when "Stabilizer" of "Common" page of "Device" in 'Device Setting' was selected.
 - c. "Select All","Remove" and "Delete" of "Edit" menu were not disabled when all devices of "My device" folder had been deleted from device list.
 - d. "General" tab in 'Option' dialog could be changed to other tab even if folder input in "Device setting backup folder" didn't exist.
 - e. On occasion the application stopped responding when "System Log" of "Device Log" in "Tool" menu was clicked while device was disconnected.

Ver1.2.5.0 (Dec. 16, 2011)

6. The SNC-ZB550/ZM550/ZM551/ZP550/ZR550 are now supported.
7. The software version 1.70 of the following models are now supported.
SNC-EP520/ER520/EP521/ER521
8. Add "Device setting backup folder" item into 'Option' dialog for "Firmware Upgrade" function.
9. The following issues have been resolved:

- a. "IPv6 Setting" of 'Network Setting' was not displayed correctly when opened it again after setting successfully.
- b. "PIN No." of "Wireless" page in 'Device Setting' could be set even it was an invalid value.
- c. On occasion the firmware upgrade failed when multiple cameras upgraded at the same time.
- d. On occasion "Termination" and "Camera ID" of "Serial" page in 'Device Setting' could not be set.
- e. On occasion "Min. shutter speed" of "Picture" page in 'Device Setting' could not be set successfully.
- f. On occasion "Schedule" of "Tour(Position)" page in 'Device Setting' could not be set successfully.
- g. On occasion "Video output mode" of "Installation" page in 'Device Setting' could be shown even if the camera didn't have this function.

Ver1.2.4.0 (Aug. 19, 2011)

- 1. The SNC-EP550/ER550/EB520/EM520/EM521 are now supported.
- 2. The following issues have been resolved:
 - a. On occasion the application stopped responding when displaying snapshot.
 - b. On occasion the application stopped responding when "Tour" of "Tour(Position)" page in 'Device Setting' was set to "On".
 - c. On occasion the application stopped responding when a firmware file was chosen.
 - d. On occasion 'Network Setting' did not work properly if the wrong device accounts were set.
 - e. On occasion "Version No." was not updated after firmware was upgraded successfully.
 - f. On occasion progress bar was not updated when firmware upgrade as a task was running.
 - g. On occasion certificate set by "Default client certificate" in 'Option' disappeared.
 - h. "STARTTLS" of "Image memory" page in 'Device Setting' could not be set successfully.
 - i. "Default certificate" in 'Modify Device Entry' could not be set successfully.
 - j. "Stop" button in 'Task List' was disabled when task was running.
 - k. Prohibited an operation with error message when the disk was full or write-protected.

Ver1.2.3.0 (Jun. 17, 2011)

- 1. The SNC-ER520/ER521/ER580 are now supported.
- 2. The following issues have been resolved:
 - a. On occasion the firmware upgrade failed.
 - b. On occasion some items of "Installation" page in 'Device Setting' could not be set successfully.
 - c. On occasion "Auto flip" of "System" page in 'Device Setting' could not be set successfully.

- d. "Horizontal tilt limit" of "System" page in 'Device Setting' was not displayed.
- e. "Schedule" button of "Tour(Position)" and "Tour(Shadow)" pages in 'Device Setting' was not displayed.
- f. When setting "Duration" of "Edge Storage" page in 'Device Setting', invalid values were accepted.

Ver1.2.2.0 (Mar. 11, 2011)

- 1. The SNC-EP520/EP521/EP580/CH115/CH135 are now supported.
- 2. The software version 1.31 of the following models are now supported.
SNC-CH110/DH110/DH110T/CH210/DH210/DH210T
- 3. The following issues have been resolved:
 - a. On occasion the application shut down after 'Network Setting' dialog was closed.
 - b. On occasion 'Failed' was displayed in the status of 'Firmware Upgrade' dialog after firmware upgrades with 'Retain the current setting'.

Ver1.2.1.0 (Dec. 06, 2010)

- 1. The software version 1.30 of the following models are now supported.
SNC-RS44N/P, RS46N/P, RS84N/P, RS86N/P, RH124, RH164, CH140, DH140, DH140T, CH180, DH180, CH240, DH240, DH240T, CH280, DH280, CH120, DH120, DH120T, CH160, DH160, CH220, DH220, DH220T, CH260, DH260
SNT-EP104, EP154, EX101, EX101E, EX104, EX154
- 2. Portuguese is now supported.
- 3. The import/export function of folder structure is now supported.
- 4. The following issues have been resolved:
 - a. Some error/warning dialogs were not displayed correctly.
 - b. The device tree was not displayed correctly when the list to be imported contains duplicated MAC addresses.

Ver1.2.0.0 (Nov. 08, 2010)

- 1. The SNC-DH110/DH110T are now supported.
- 2. Maximum "Paralleled upload/upgrade quantity" of "Firmware Upgrade" and "Custom Homepage" have increased from 4 to 16.
- 3. The panorama creator setting via IPv6 and SSL is supported.
- 4. Update status of device entry in "My device" folder every two hours.
- 5. The following issues have been resolved:
 - a. In some items regarding IPv6, the display might not be correct.
 - b. On occasion the application stopped responding when the downloaded snapshot was incompleted.
 - c. On occasion the device names were incorrect after importing devices.
 - d. On occasion status became to Unaccessible after changing time of PC.
 - e. On occasion the "Administrator name"/"Administrator password" in 'Modify Device Entry' dialog could not be modified.
 - f. On occasion the application stopped responding after using "Network Setting".

- g. On occasion the firmware upgrade as a task was failed when firmware file path includes double-byte character.
- h. On occasion the port number of device via NAT in 'Network Setting' dialog was not correct.

Ver1.1.4.1 (Oct. 08, 2010)

- 1. The SNC-DH210/DH210T/CH110 are now supported.
- 2. The software version 2.44/3.14 of the SNC-RX530/RX550/RX570 are now supported.
- 3. The following issues have been resolved:
 - a. In some items of the device setting, neither the display nor execution might be correct.
 - b. A task was executed another one more time after "End after" setting count was completed.
 - c. On occasion a firmware upgrade stopped responding or failed when CPU usage is high.

Ver1.1.3.0 (Jul. 28, 2010)

- 1. The SNC-CH220/DH220/DH220T/CH260/DH260/CH280/DH280 are now supported.
- 2. The software version 1.20 of the following models are now supported.
SNC-RS44N/P, RS46N/P, RS84N/P, RS86N/P, RH124, RH164
SNT-EP104, EP154, EX101, EX101E, EX104, EX154
- 3. Traditional Chinese and Korean are now supported.
- 4. "F5" key can refresh the "Status" and the snapshot image of device list.
- 5. Change the order of logs in the Tool Log.
- 6. The following issues have been resolved:
 - a. In some items of the device setting, neither the display nor execution might be correct.
 - b. On occasion check rule of "Range of recurrence" on task wizard was incorrect.
 - c. On occasion the ping check function did not work properly.
 - d. The checkbox of device account dialog were not displayed correctly while scrolling.
 - e. Default device accounts were displayed when device accounts were blanked in "My device" folder.

Ver1.1.2.0 (Jul. 02, 2010)

- 1. The SNC-CH160/DH160 are now supported.
- 2. Improve the speed of firmware upgrade of following models.
SNC-RS44N/P, RS46N/P, RS84N/P, RS86N/P, RH124, RH164, CH140, DH140,
DH140T, CH180, DH180, CH240, DH240, DH240T, CH210, CH120, DH120, DH120T
SNT-EP104, EP154, EX101, EX101E, EX104, EX154
- 3. Improve the display flicker of main dialog and task list.
- 4. Change the check policy of the security settings.
- 5. The following issues have been resolved:
 - a. In some items of the device setting, neither the display nor execution might be

- correct.
- b. In some items of the task wizard, the display might not be correct.
- c. On occasion the check of existence of SVU file did not work properly at task wizard.
- d. On occasion the application stopped responding when a registered device was deleted from the "My device" folder during a device setting that was scheduled as a task.

Ver1.1.1.0 (Jun. 1, 2010)

1. The SNC-CH210/CH120/DH120/DH120T are now supported.
2. The software version 3.00 of the SNC-RX530/RX550/RX570 are now supported.
3. Improve the application startup time.
4. The following issues have been resolved:
 - a. Some items of device setting were not displayed correctly and did not work properly.
 - b. On occasion the application stopped responding when selected devices disappeared from the device list.
 - c. The application stopped responding when setting to many devices as a task.
 - d. On occasion "Next run time" of task was incorrect.
 - e. On occasion a part of task wizard did not be displayed correctly.
 - f. Device list did not be sorted properly by "Device address(IPv6)".

Ver1.1.0.0 (Mar. 29, 2010)

1. The SNC-CH180/CH240/DH240/DH140T/DH240T are now supported.
2. The software version 1.10 of the following models are now supported.
SNC-RS44N/P, RS46N/P, RS84N/P, RS86N/P, RH124, RH164, CH140, DH140, DH180
SNT-EP104, EP154, EX101, EX101E, EX104, EX154
3. Windows 7(32bit) is now supported.
4. Add "Restore setting" into the "Initialize Device" menu.
5. The following issues have been resolved:
 - a. Some items of device setting were not displayed correctly and did not work properly.
 - b. Device information of the "My device" folder were not updated after changing network settings.
 - c. On occasion the ping check function did not work properly at IP range settings.
 - d. On occasion the cancel button of 'Firmware Upgrade' dialog box were not displayed.
 - e. On occasion over 100 devices could not be registered to the "My device" folder.
 - f. Over 100 devices could not be exported.
 - g. CPU usage was high when executing scheduled tasks.
 - h. On occasion the correct firmware version was not displayed after a firmware upgrade that was scheduled as a task.
 - i. On occasion the application stopped responding when a registered device was deleted from the "My device" folder during a firmware upgrade that was scheduled

as a task.

- j. On occasion the application stopped responding when displaying large snapshot.

Ver1.0.2.1 (Feb. 10, 2010)

1. The SNC-DH180 is now supported.
2. Add system/access log items into right-click menu.
3. Improve the sequence of firmware upgrade via HTTP proxy.
4. The following issues have been resolved:
 - a. Any cameras via NAT could not be managed.
 - b. Some items of device setting were not displayed correctly and did not work properly.
 - c. On occasion the path name of firmware file was not displayed correctly.
 - d. On occasion the task of firmware upgrade did not work properly.
 - e. Invalid period could be inputted in task.
 - f. The name of import/export dialog box was incorrect.
 - g. On occasion the device name of imported device from CSV file was incorrect.

Ver1.0.1.0 (Dec. 15, 2009)

1. The SNC-CH140/DH140 are now supported.
2. Improve the speed and efficiency of firmware upgrades.
3. The privacy masking setting via IPv6 and SSL is supported.
4. The following issues have been resolved:
 - a. Some items of device setting were not displayed correctly and did not work properly.
 - b. On occasion the .cfg file was not saved into the correct location.
 - c. The panorama image was not created properly when the home position setting was changed from the default setting.
 - d. When setting multiple camera IPv6 addresses, in some cases invalid ranges were accepted.
 - e. The IPv6 "Default gateway" setting was not allowed even though it was a correct IPv6 address.
 - f. Privacy masking could not be set correctly when cropping was set to "On".
 - g. Privacy mask area numbers were not displayed correctly in the panorama image of the privacy masking dialog.
 - h. If the camera was disconnected when setting privacy masks, the application stops responding.
 - i. The "T" button on the privacy masking dialog did not work properly.

Ver1.0.0.3 (Nov. 04, 2009)

1. The following issues have been resolved:
 - a. On occasion the "Retain the current setting" function of firmware upgrade did not work properly.
 - b. On occasion the application did not work properly after firmware upgrade failed.

- c. On occasion the .cfg file could not be saved into correct location.
- d. The "SNT-EX101E" could not be displayed at "Model name" of 'Firmware Upgrade' dialog box.
- e. The "Wireless" settings of "802.1X" were displayed on SNT-EP/EX series.
- f. The "Network" settings were not displayed on SNT-EP/EX series.

Ver1.0.0.2 (Sep. 28, 2009)

1. The SNT-EX101E is now supported.
2. The following issues have been resolved:
 - a. The camera time setting was based on GMT. It now takes into account the PC timezone.
 - b. The application used to shut down when "24:00:00" was entered in the "Date&Time" field.
 - c. The firmware upgrade progress bar was not synchronized with the actual firmware upgrade status.
 - d. The preset positions and privacy mask settings were not retained after firmware upgrades.
 - e. On occasion the application shut down during the reboot process after firmware upgrades.
 - f. On occasion the "Stop Upgrading" button did not work properly.
 - g. On occasion the correct firmware version was not displayed in the application after firmware upgrades.
 - h. On certain camera models, the "Factory Default" setting did not work properly.
 - i. The "Logo" upload feature on the "Superimpose" settings did not work properly.
 - j. The "Panorama" button was selectable on unsupported models.
 - k. The "Sync with DayNight" function was selectable on unsupported models.
 - l. Square brackets "[]" were required when adding new devices with an IPv6 address.
 - m. The application did not display correctly when using the Microsoft Windows multiple-display feature.
 - n. On occasion the application shut down when "IPv6 priority" was selected.
 - o. The "Total period (sec.)" value in the "Alarm buffer" feature was not displayed correctly in some models.
 - p. The "Generate" button of the "Self-signed certificate" in "SSL" was always disabled.
 - q. The message in the dialog box of "Format USB memory" was incorrect.
 - r. The "Username/Password" of "SMTP authentication" could not be set correctly.
 - s. The "Administrator e-mail address" of "Image memory" could not be set correctly.
 - t. On occasion an error message would pop-up even when the correct "Prefix" setting was entered in "IPv6 QoS."
 - u. On occasion a memory leak would occur when using Windows Vista.

Ver1.0.0.0 (Sep. 14, 2009)

* First release