

SAMSUNG TECHWIN

Samsung Security Manager

User Manual



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INTRODUCTION ON SAMSUNG SECURITY MANAGER

Samsung Security Manager is an application software that enables the accessing and controlling Samsung's network devices from a remote PC.

Using this program, you may access and control your network devices via the Internet from anywhere, as well as monitoring connected camera.

It provides users with remote access and playback/search an environment for remote monitoring that employs ease and effectiveness.

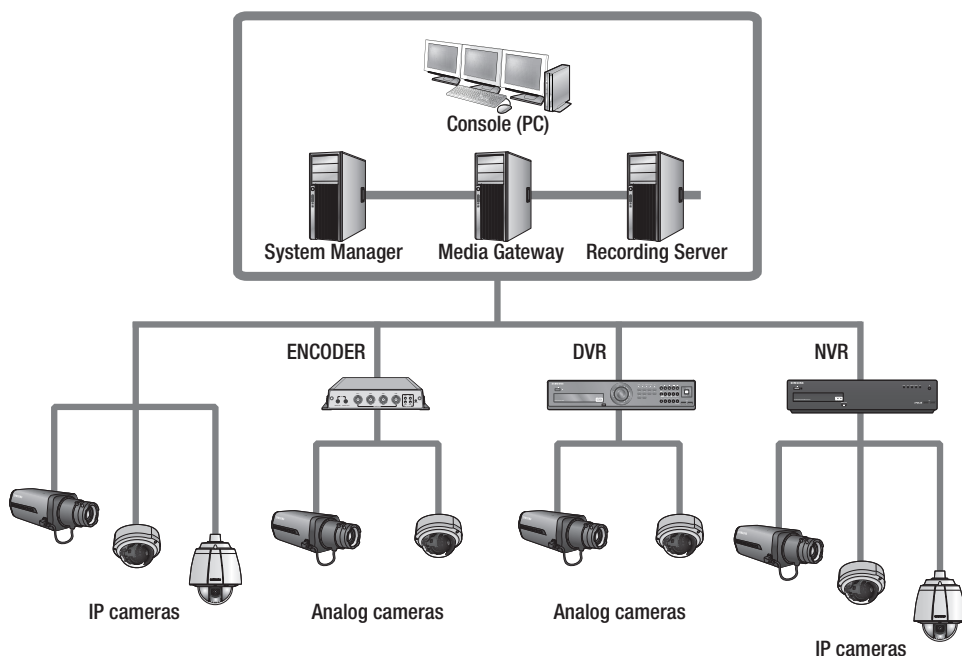
Samsung Security Manager Structure Overview

Samsung Security Manager consists of the Console program in the client area and System Manage, Media Gateway and Recording Server in the server area.

- Console : Console provides monitoring and controlling user interface.
- System Manager : System Manager provides administration on all devices and users of the system.
- Media Gateway : Media Gateway's role is as the centralized relay server for the transmitting of video, PTZ control and events.
- Recording Server : It acts as a server that saves and broadcasts video from a camera.

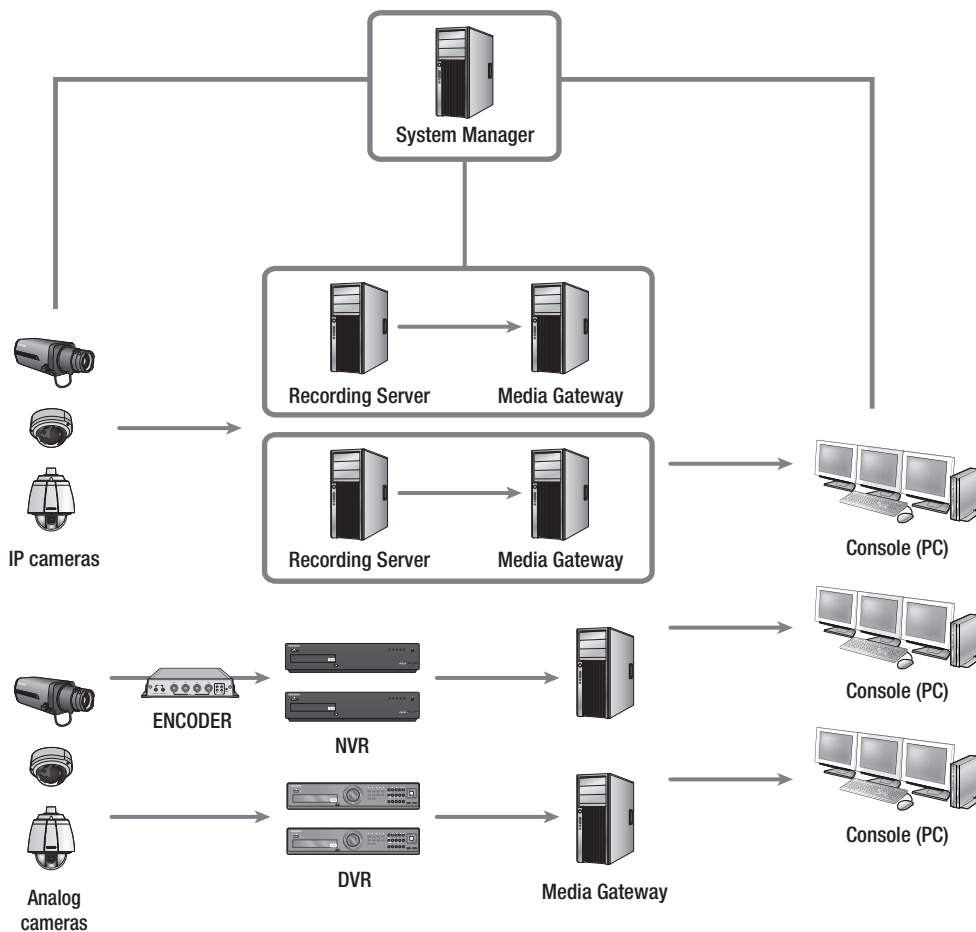
Standalone type

All server components Installed onto one computer.



Multi type

In case of distributed installation of the System Manager, Media Gateway and Console on multiple computers:



Supported Products

DVR

SRD-1670(D/DC)/1650(D/DC)/870(D/DC)/850(D/DC)/470(D)/440, SRD-1630(D)/1610(D)/830(D), SRD-1652D/852D, SRD-480D, SVR-1670/3200/1680(C)/1660(C)/1645/960(C)/945/480, SHR-2000/5000/6000/7000/8000 series, SVR-1650E/1640A/950E, SRD-1640/840/1641P/841P, SRD-442, SRD-873D/1653D/1673(D)

Network Camera

SNB-7000/5000/3000/2000/1000/1001/3002, SNZ-5200, SNO-7080R/5080R/1080R, SNC-B2335/B2331/M300/1300/550/570, SND-7080/5080(F)/3080(F)/3080C(F)/1010/1080/1011/3082, SNV-7080/5080/3080/5010/3120/5080R/3082/1080/1080R, SND-560/460V, SNC-B5368/B5399, SNP-5200(H)/3430H/3370(TH)/3301(H)/3120(V/VH)/3302(H), SNC-C6225/C7225/C7478, SNP-3300A/1000A/3750/3350, SNB-5001/7001/7002, SNP-6200/H, SNP-5300/H, SNO-7082RV, SNV-7082V, SND-7082V/7082FV, SND-7061/7011, SND-7082/F, SNV-7082, SNO-7082R

NVR

SRN-6450/3250, SNR-6400/3200, SRN-1670D/470D, SRN-1671, SNS-SF064/032/016/008/004, SRN-1000

Encoder

SPE-400/100/101, SPE-1600R, SNS-400/100

Controller

SPC-2000

Panomorph Lens

IMV1-1/3 Panomorph CS mount (SNB-5000 compatible)

System Requirements

Item	Minimum	Recommended
CPU	Intel Core 2 Duo 2.83 GHz	Intel i7 (Sandy bridge)
RAM	2 GB or more	4 GB or more
HDD	More than 20 GB of free space for installation - For operation, the system log database requires 10 GB or more free space.	
VGA Memory	512 MB or more	1 GB or more
OS	Console : Windows XP 32bit, Windows 7 32bit, Windows 7 64bit, Windows 8 32bit, Windows 8 64bit System Manager, Media Gateway : Windows XP 32bit, Windows 7 32bit, Windows 7 64bit, Windows 8 32bit, Windows 8 64bit, Windows Server 2003, Windows Server 2008	

Configurable monitoring systems according to the system performance:

- Minimum Specifications : Allows access to 16 channels, with monitoring 16 channels at CIF resolution.
- Recommended Specifications : Allows access to 64 channels, with monitoring 64 channels at 4CIF resolution.

MAIN FEATURES SAMSUNG SECURITY MANAGER

- Live Viewer
 - Supports simultaneous video display of up to 64 monitoring tiles per monitor, maximum 4 monitors for 100 monitoring tiles
 - One footage file can save up to 1 hours worth of video
 - Supports full-screen mode
 - Place video feed at any desired tile using drag-n-drop
 - A simple double-click adds a video feed to the video screen
 - Supports sequenced automatic source switching
- Event Viewer
 - Provides search function for events and real-time logs
 - Provides 1-channel playback for events
 - Provides methods of acknowledging, recording, and search on an event
- Search Viewer
 - Up to 16 videos can be played simultaneously
 - Supports periodic backup (self-executable footage)
 - Search for and play the data for each event stored in the storage device
- Configuration Manager
 - User login and restrictions according to privilege
 - Equipment registration and allocation
 - Layout setting and allocation
 - Scheduled backup setting
 - Schedule setting
 - Easy guide
 - Device configuration file
 - SSM configuration file
 - Recording Server Schedule Setting
- Console setting
 - SSM console local setting
 - Screen and event local setting
- Updating
 - Supports remote updating of software using update server

TERMS FREQUENTLY USED

- Tree : Display area that shows a list of registered objects and their hierarchy.
- Context Menu : Pop-up menus that appears when right mouse button is clicked.
- Device : Includes DVR, NVR, Video Server, and Network Camera.
- Tile : Unit screen cell that displays video.
- Object : Object is an overall term for the device, camera, site, layout, sensor, etc.
- SSM : Abbreviation of Samsung Security Manager.

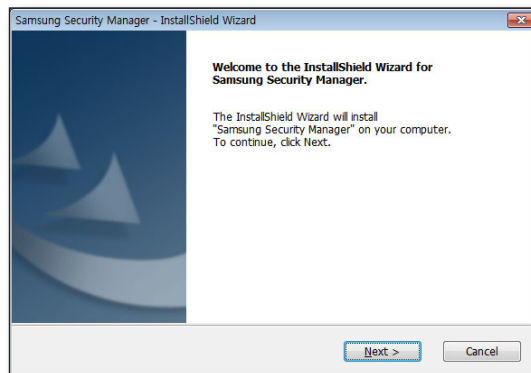
installation

INSTALLATION

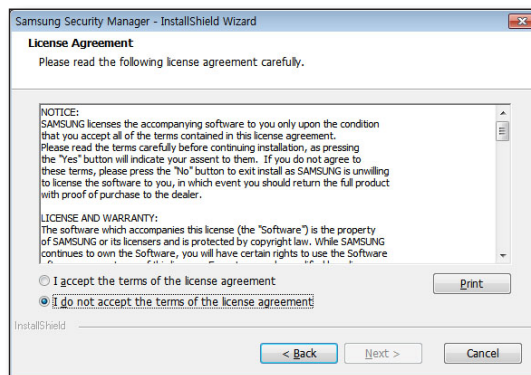
Installing the SSM

Run the Samsung Security Manager installer program on a local PC to install the Samsung Security Manager. Software installation requires about 20 minutes, depending on installation conditions.

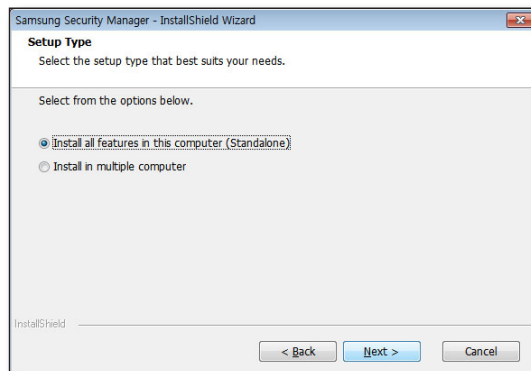
1. Use provided CD or download and run Samsung Security Manager installer, "**SSM_vx.xx_xxxxxx.exe**".
2. When the installation screen appears, click **[Next >]** button.



3. Check license agreement and then click **[Next >]** button to proceed to the next step.



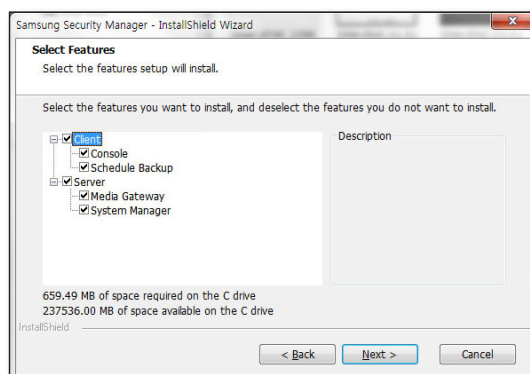
4. Choose whether to install all or partial components.
 - Install all features in this computer (Standalone) : System Manager, Console and Media Gateway are installed on a single computer.



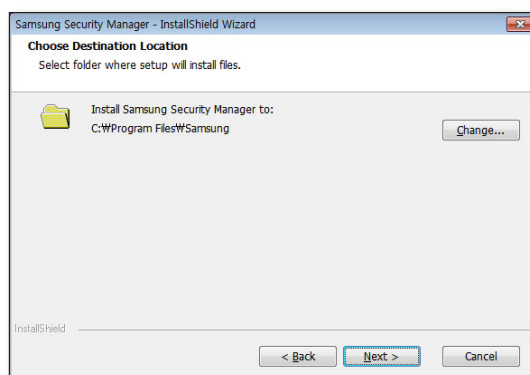
- Install in multiple computer : Installs only selected components of System Manager / Console / Media Gateway onto the PC.



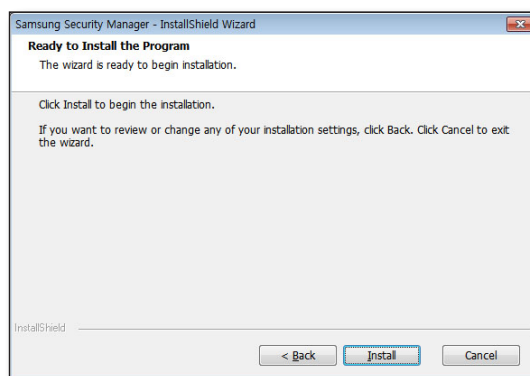
- For information on complete structure according to the installation type, refer to "**Samsung Security Manager Structure Overview**". (Page 4)



5. Specify the folder path to save the installation program.
By default, it is set to "**C:\Program Files\Samsung**".
- To change the path, click [**Change...**] button and enter the desired path directly or browse to select one.
6. To proceed to the next step, click [**Next >**] button.

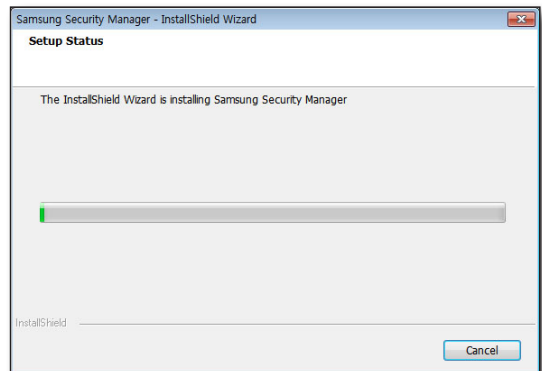


7. Click [**Install**] button to begin installation.

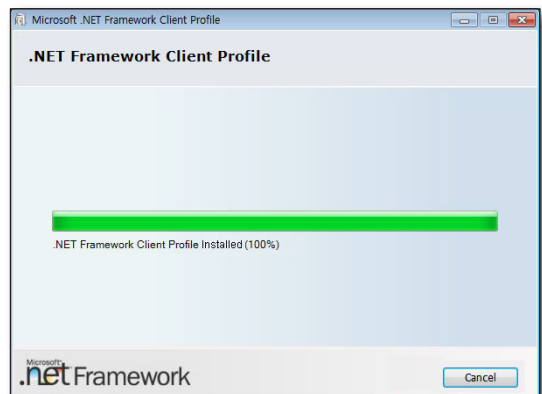


installation

8. Samsung Security Manager begins its installation.

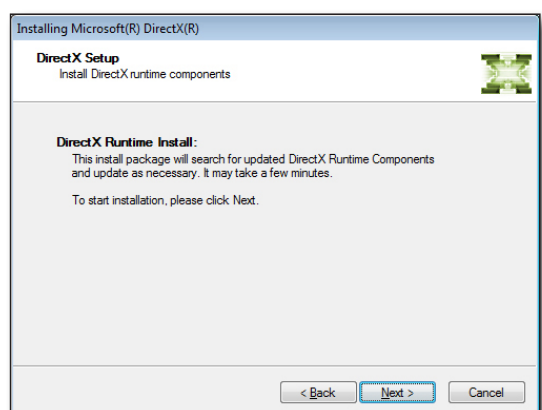


9. When prompted with .NET Framework license agreement, agree and proceed to the next step.

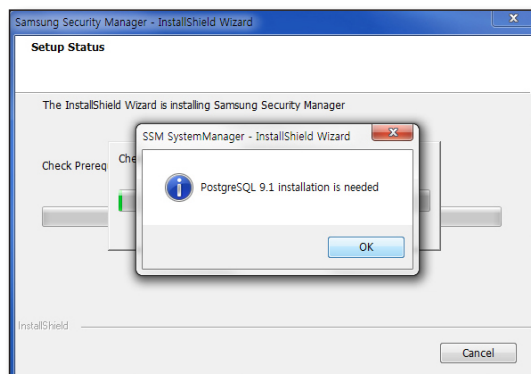


10. DirectX installation package, agree to the license agreement and click [Next >] when prompted with license agreement.

11. Upon completion of DirectX installation, click [Finish] to proceed.



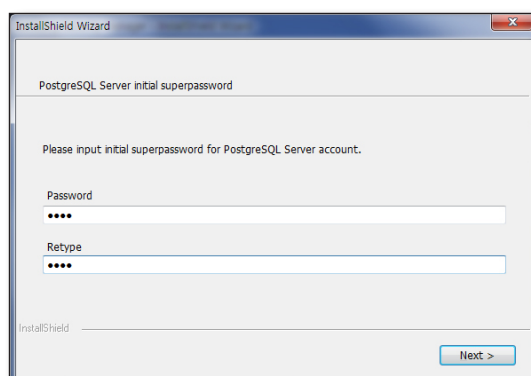
12. Install PostgreSQL.



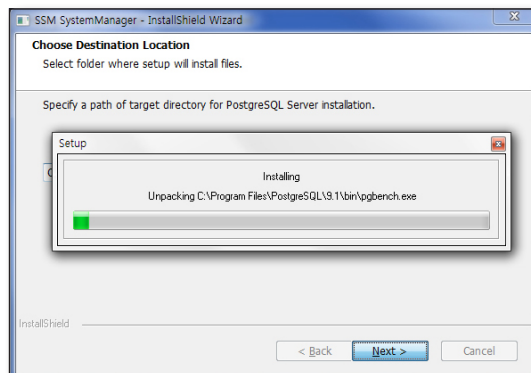
13. Enter the initial password for PostgreSQL.



- A password must be a combination of letters and numbers that is at least 8 characters in length.



14. Continue the PostgreSQL installation. When installation is complete, the SSM administrator password input window is displayed.

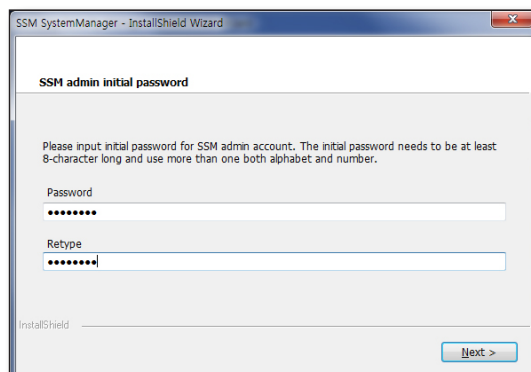


installation

15. Enter the password.



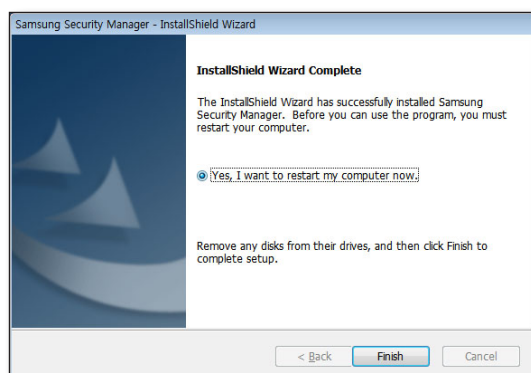
- A password must be a combination of letters and numbers that is at least 8 characters in length.



16. Upon completion, click [Finish] button.



- If installed with required prerequisites, no further installation popup will appear.



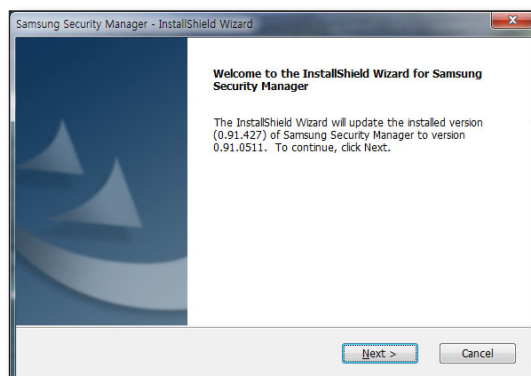
Updating

If Samsung Security Manager is already installed, you may update the application by running the update program to the latest version.

1. Run the update installer "**SSM_vx.xx_XXXXXX.exe**".
The Update dialog should appear.
2. Click [**Next >**] button to proceed.

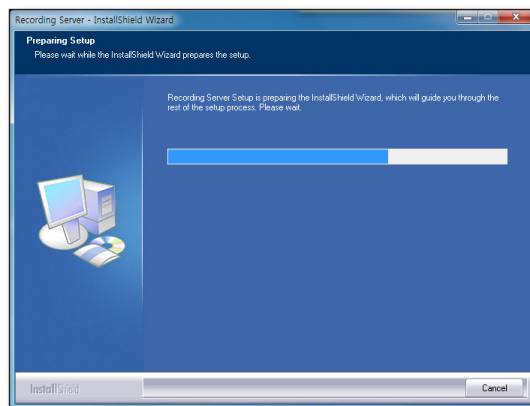


- After updating the software application, restart the PC.

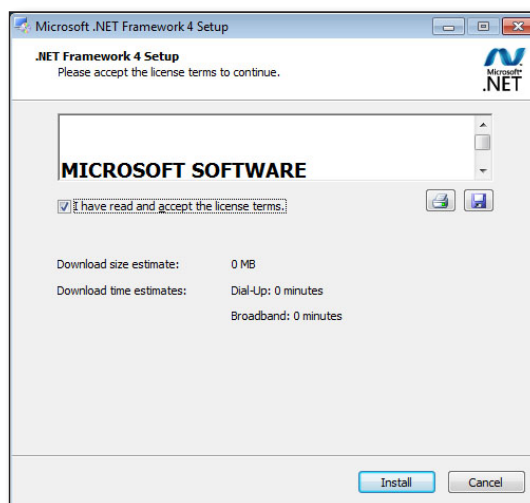


Installing the SSM Recording Server

1. Insert the dongle key into one of your computer's USB ports.
 - During installation, do not remove the dongle key. If you do, installation will fail.
2. Run Setup.exe the Recording Server installation program included in the DVD or user's PC.
3. Get ready to install the Recording Server.

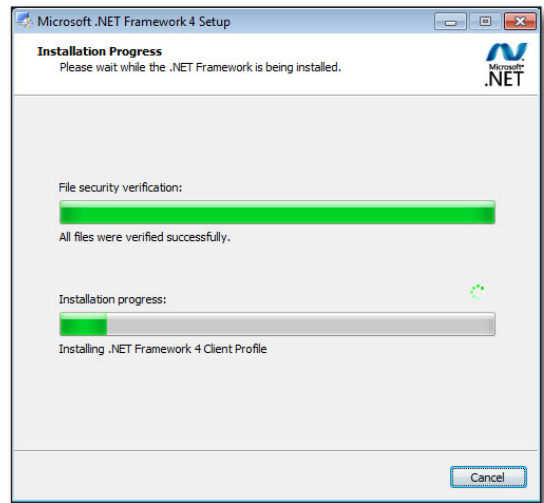


4. If .NET Framework 4.0 is not installed on the user's PC, installation of .NET Framework 4.0 will begin.
 - If NET Framework 4.0 is not installed the Recording Server will not operate properly.
 - .NET Framework can be downloaded and installed at the MS download center.
- ① In the A NET Framework S/W installation window click on the **[Agree (A)]** button.

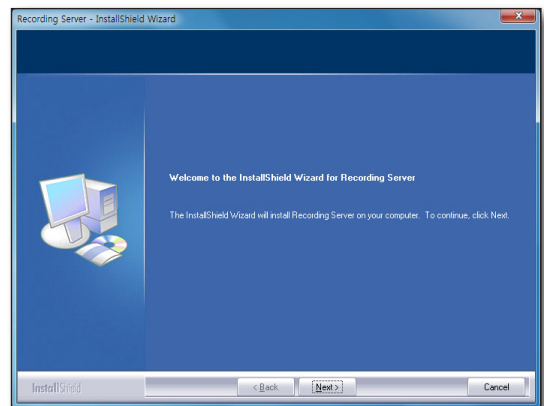


installation

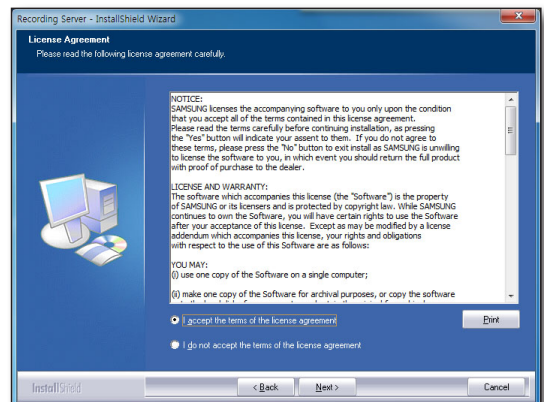
- ② The installation indicator will be displayed in the window while .NET Framework is being installed.
 - After finishing installing - .NET Framework 4.0, you can restart the system depending on the PC conditions.



5. If the dongle key driver is not installed in the user's PC, installation of HASP SRM run-time will begin.
 - If HASP SRM run-time is not installed, the Recording Server will not operate properly.
 - The HASP SRM run-time installation program can be downloaded from <http://www.safenet-inc.com>.
- ① In the HASP SRM run-time installation menu, click on the [Next >] button.
6. Click on the [Next >] button to move to the license agreement menu.

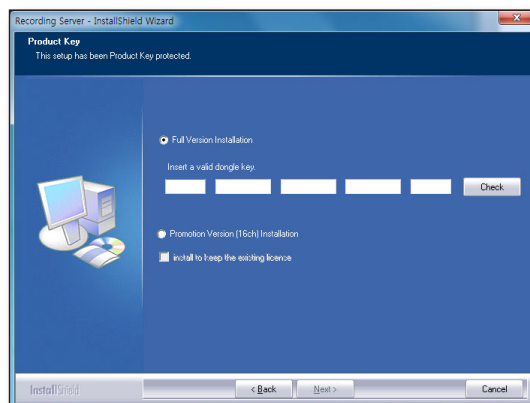


7. Read the license agreement menu carefully, and select the option "I accept the terms of the license agreement". When you want to proceed to the next step, click on the [Next >] button.



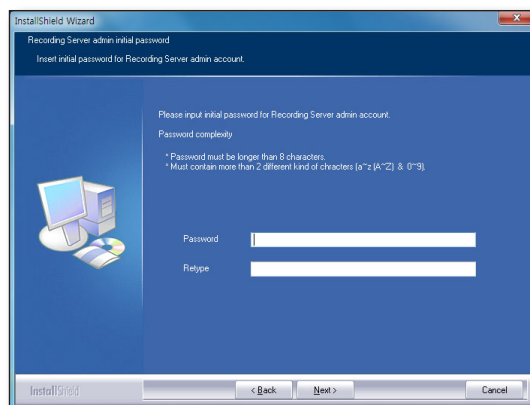
8. To use the Recording Server, you need to enter the product key (26 characters) and click the **[Check]** button.

- The product key can be found on the DVD case included with the product.
 - If you switch from a model with many channels to a model with fewer channels, some of the settings or recording information can be damaged.
 - Select Promotion Version (16ch) Installation to use the 16 channel model for the Recording Server without using the USB dongle key.
 - 'Install to keep the existing license' should be used to maintain the existing product key and perform updates.

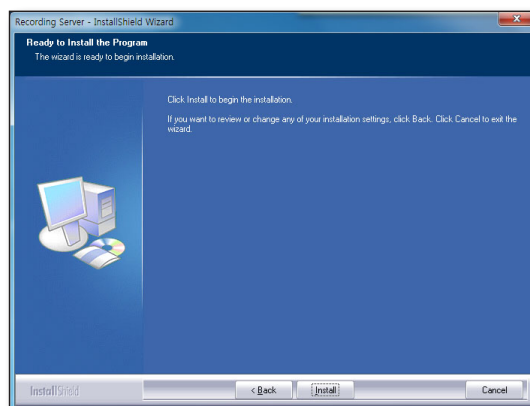


9. Enter the admin password for the Recording Server and click on the **[Next >]** button.

- Password should be a combination of characters and numbers with at least eight digits and no more than 32 characters.
- Admin password is used for authentication when registering the Recording Server in SSM Configuration Manager and after installation you can change it in Service Manager.

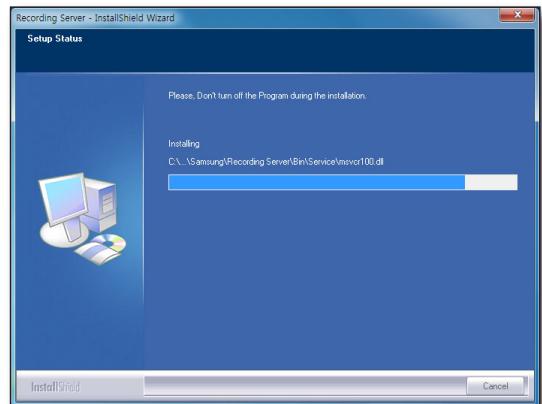


10. Click on the **[Install]** button to install the program.



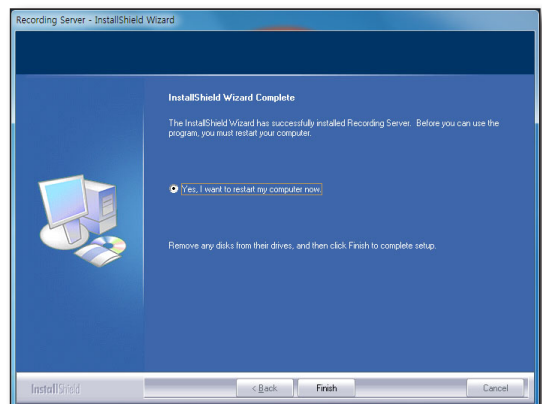
installation

11. Preparing to install the Recording Server.



12. When the installation has finished successfully, click on the **[Finish]** button to terminate.

- After installation is finished, the PC will restart.



Upgrade

If the Recording Server is already installed on the PC. You can run the upgraded program file or use Update Manager to perform upgrades.

- After updating software applications, restart the PC to prevent malfunctions.

getting started

CHECKING INSTALLED INSTALLATION

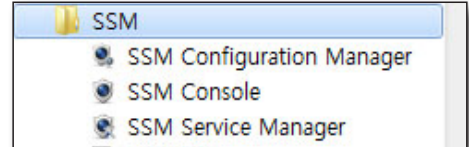
SSM

Check whether the Samsung Security Manager installation has been successfully installed.

1. Click <Start> Windows menu.
2. If Samsung Security Manager has been successfully installed, SSM submenu should show 3 items of <SSM Configuration Manager>, <SSM Console> and <SSM Service Manager>.



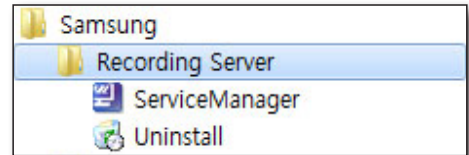
- For distributed installation, only those menu items selected in installation will appear. Refer to the "Installation" section. (Page 8)



Recording Server

After finishing the installation, check if the Recording Server is installed properly.

1. Click <Start> Windows menu.
 2. If the Recording Server is installed properly, you will see the two items, <ServiceManager> and <Uninstall> below the Recording Server.
- When you run the program for the first time, the language for the Recording Server is automatically set to the OS language.



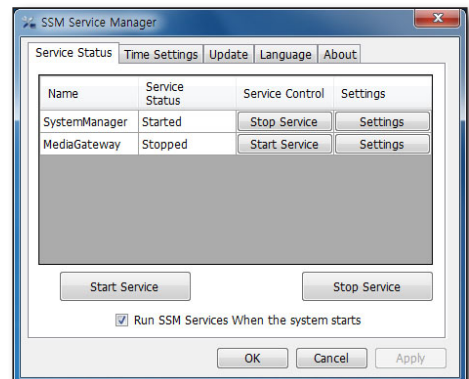
GETTING STARTED WITH SAMSUNG SECURITY MANAGER

In case of Standalone installation

1. Click <SSM Service Manager> shortcut icon or expand and click "Start > Samsung > SSM > SSM Service Manager".
 - SSM Service Manager : A software program that manages server software products. To use SSM Console, the server should be ready.
2. Double click <SSM Service Manager> icon on the task tray or click right mouse button on it to open context menu and click <View Service Status>.
3. Click <Start Service> button.
If successfully installed, each installed program component should show its <Service Status> as <Started>.
4. Run the SSM Configuration Manager to utilize the SSM Console program after the initial installation.



- If the program is already set, Start SSM Console right away.



getting started

In case of multi installation

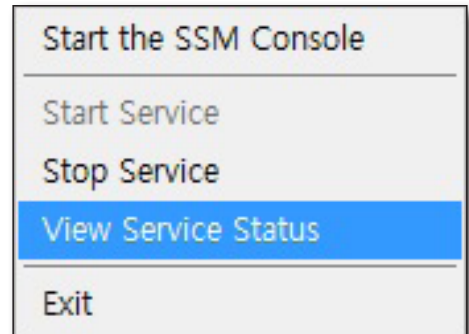
A Media Gateway server computer can connect to only 1 System Manager. A System Manager accepts connections from multiple Media Gateway servers. A System Manager accepts connections from multiple Console clients.

1. Run the Service Manager on the computer installed with the System Manager. (Page 119)
2. Click <**Start Service**> button.
 - If successfully installed, the System Manager should show its <**Status**> as <**Started**>.
3. Run the Service Manager on the computer installed with the Media Gateway. (Page 119)
4. Run the Service Manager on the computer installed with the Media Gateway and click <**Start Service**> button.
 - If successfully installed, the Media Gateway should show its <**Status**> as <**Started**>.

5. Run the SSM Configuration Manager to utilize the SSM Console program after the initial installation.



- If the program is already set, Start SSM Console right away.



SSM configuration manager

This function is used to register the SSM console users and devices, configure the screen layout, and set up the schedule and backups.

Use <**Standard Setup**> to set up the whole system, or <**Easy Guide**> to setup only the basic guide for monitoring.

LOGIN/LOGOUT

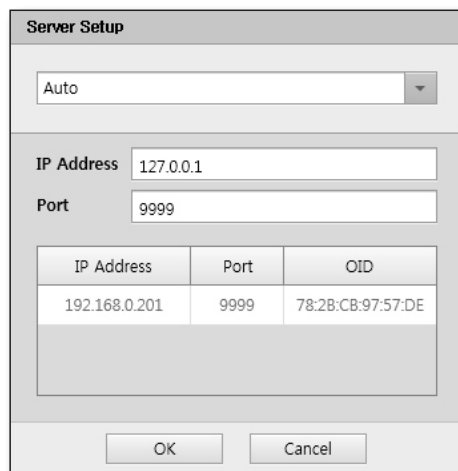
Login

SSM Configuration Manager requires the user to log in after the program is started for normal operation.

1. Click the SSM Configuration Manager icon.
The login authentication window is displayed.
2. Enter the user ID and password in the login window.
 - Default ID: admin
 - Password: Enter the password registered during the installation step.

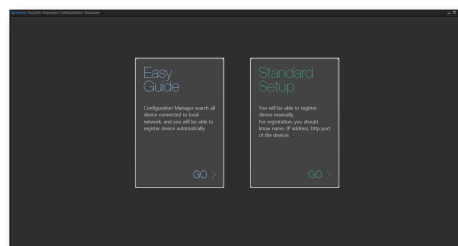


- If the SSM is installed in distributed mode and you need to start a program installed in another server, click the [] button located below the login button in the login window to register the server to either <**Auto**>, <**Manual**> or <**DDNS**>.
- If it is set to <**Auto**>, SystemManager is automatically selected. If it is set to <**Manual**>, System Manager can be selected from the list, or IP address and Port information can be set.
- If it is set to <**DDNS**>, then the DDNS input field will be activated.



3. The selection menu is displayed when the program is started for the first time.
Select a menu option according to the desired configuration.

- After the initial run, the program will be started in <**Standard Setup**> mode.

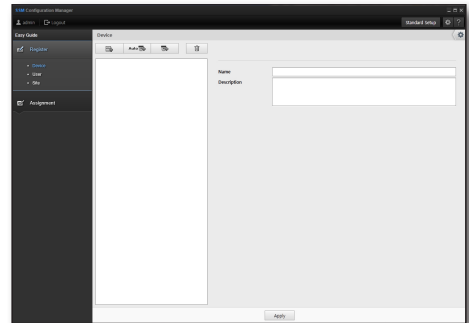


SSM configuration manager

Easy Guide

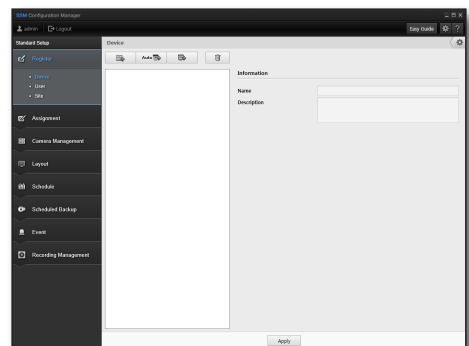
This only shows the minimum menu options needed for monitoring, such as device registration and allocation.

Only device, user group, user, and site registration and allocation are enabled in this mode.



Standard Setup

All functions of Configuration Manager can be set up.



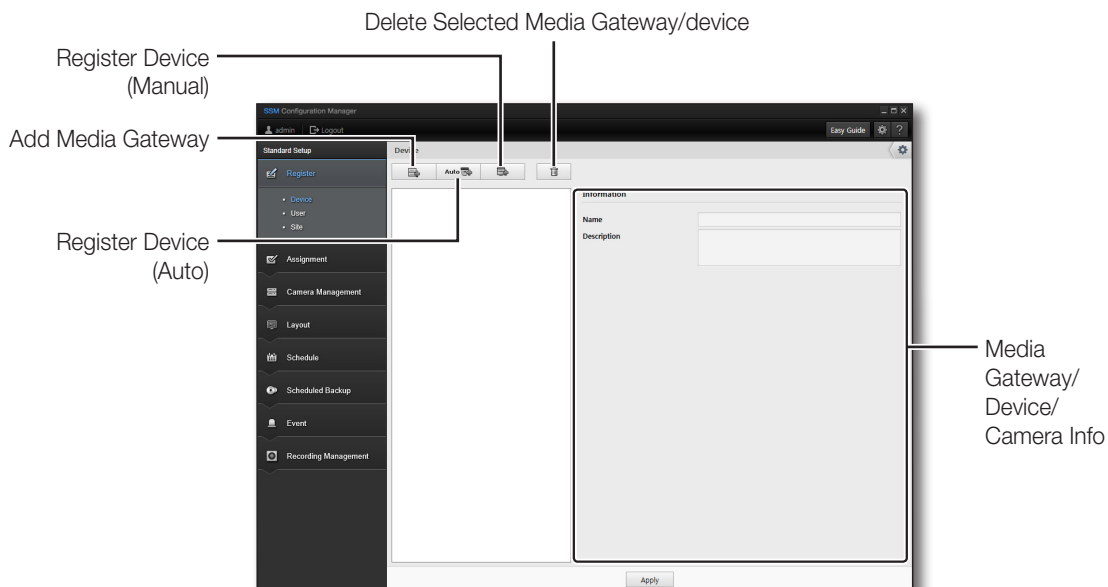
REGISTRATION

Device

You can register the Media Gateway and the Recording Server and a device below it.

This lists the devices registered by the user.

A device can be added when <MediaGateway> is selected in the tree menu.



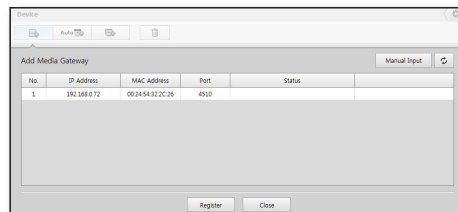
- The Media Gateway connects to cameras, DVRs and other devices and relays media communication. Proper Media Gateway should be selected when registering device to the Console since a Console should be connected to the Media Gateway for communication instead of connecting to actual devices.

SSM configuration manager

Setting the Media Gateway for Standalone Installation

To add a Media Gateway :

1. Click [] button in device setup page.
2. Select a desired Media Gateway from the list and click [Register] button.
 - If Media Gateway IP address is displayed as 0.0.0.0, be sure to check your PC's network settings.
3. If the information of MG to be registered is not in the list, check <Manual Input>, and then enter the IP and port number.
4. To finish registration and close the window, click [Close] button.



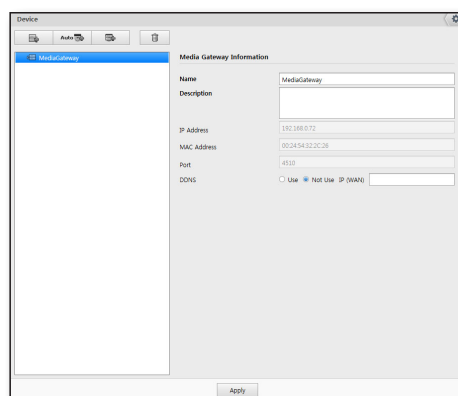
To edit Media Gateway information:

The right pane shows information on the Media Gateway selected from the tree menu, which is available to edit.

1. Click on a desired Media Gateway to be edited.
2. Edit name and description of the selected Media Gateway.
 - DDNS Use/Not Use: To use DDNS in the mobile viewer and Web studio, the gateway must also be set up to use DDNS.
 - IP (WAN) : Enter IP (WAN) generated for each media gateway.



- IP address, MAC Address, and port number are for display only and cannot be modified.



To delete a Media Gateway:

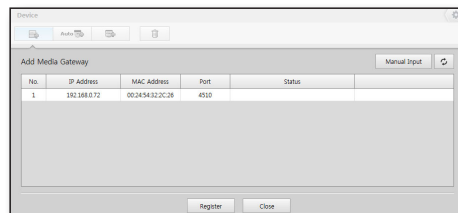
Select a Media Gateway to be deleted, and click [] button.

Setting the Media Gateway for Distributed Installation

1. Run the Service Manager on the computer installed with the System Manager. (Page 119)
2. Run the Service Manager on the computer installed with the Media Gateway. (Page 119)
3. On the Media Gateway server, set the IP address and port number of computer installed with the System Manager.

To add a Media Gateway

1. Click the [] button in the device setup window.
2. The list of media gateways that can be registered in System Manager that the console accesses will be displayed.
3. Select a desired Media Gateway from the list and click [Register] button.
 - If Media Gateway IP address is displayed as 0.0.0.0, be sure to check your PC's network settings.
4. If the information of MG to be registered is not in the list, check <Manual Input>, and then enter the IP and port number.
5. To finish registration and close the window, click [Close] button.



Adding Devices

To add a device automatically:

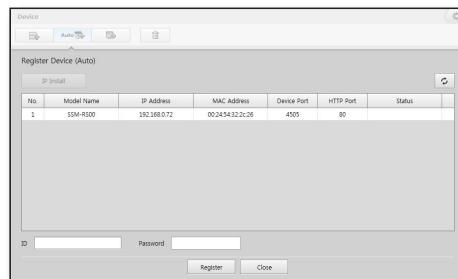
You can search add a device connected to your local network automatically.

1. Click [] button.
All discovered devices or Recording Servers from the local network are shown in the "Register Device (Auto)" list.
2. Select a device or Recording Server to register from the list.
3. Enter the ID and password, and click [Register] button.



- The User ID and password should be the account registered to the corresponding device.
- If connection encounters error, corresponding message of cause is displayed in the status tab.

4. Once registered, it is marked as "Registered" in status tab, and added under the Media Gateway list.
5. To finish registration and close the window, click [Close] button.



SSM configuration manager

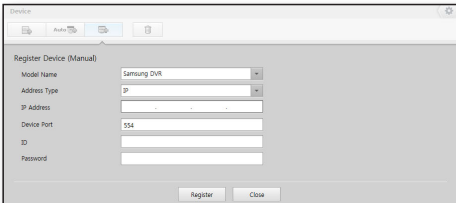
If you want to add a camera to the Recording Server

You can automatically search for a camera registered in the Recording Server.

1. From the device list, select a Recording Server to register a camera for.
2. Click on the [] button.
 - When you register a camera for the Recording Server, you can select the model name as <ONVIF> to search for and register <ONVIF> type cameras.
3. Select a camera to register from the list of cameras.
4. Enter a user ID/password and click on the [Register] button.
 -  ■ User ID and password are the ones saved in a camera that you want to register.
 - If connection problems are encountered, a corresponding message of the cause will be displayed in the status tab.
5. Once registered, it is marked as "Registered" in status tab, and added in the sub list of the Recording Server in the tree menu.
6. To finish registration and close the window, click [Close] button.

To add device manually:

Device can be registered manually by a user, by directly entering required information.

1. Click [] button.
"Register Device (Manual)" window should appear.
 2. Select the model name for a device or Recording Server that you want to access.
 3. Select the address type.
 - Available types are static IP, URL, Samsung DDNS, S1 DDNS, and iPOLIS DDNS.
 - Available address type can be different depending on the device.
 4. Provide required information for connection to the device.
 - Required information is dependant to the set address type.
 5. Enter the ID and password.
 - The User ID and password should be the account registered to the corresponding device.
 6. Click [Register].
 - If connection encounters error, corresponding message of cause is displayed.
- 
-  ■ When a device is registered in Easy Guide mode, the site and administrator group are automatically assigned. In Standard Setup mode, the administrator group is automatically assigned after the device is registered and the site is assigned.

If you want to manually add a camera to the Recording Server

You can directly enter the information of a camera registered in the Recording Server.

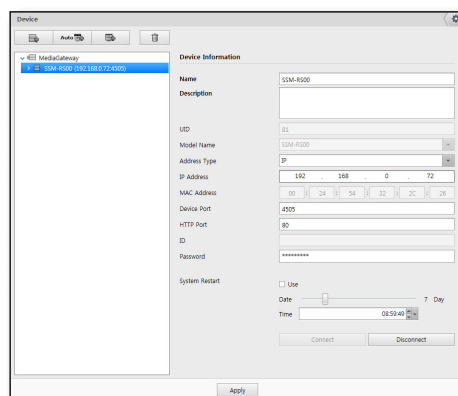
1. From the device list, select a Recording Server to register a camera for.
2. Click on the [] button.
3. Select the desired camera's model name.
 - If you select the <ONVIF> model, you can register an <ONVIF> camera.
4. Select the address type.
 - The available address types are: IP Address, URL, websamsung.net, samsungipolis.com.
 - The available address types may vary depending on the camera model.
5. Set the necessary information for connecting a camera.
 - Different information is required for each address type.
6. Enter user ID and password.
 - User ID and password are the ones saved in the camera that you want to register.
7. Click on the [Register] button.
 - If connection issues are encountered, the corresponding cause message is displayed.

Editing Device Information

You can edit information of a device registered.

To edit device information:

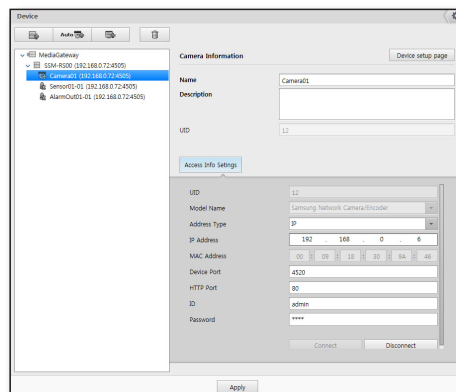
1. Select a desired device to be edited.
2. In the right information pane, edit the device information.
3. When finished, click [Apply] button.
 - System Restart setting : You can set the period and the execution time to restart the system (PC) periodically.



SSM configuration manager

If you want to modify the camera access information registered in the Recording Server

1. Select a camera registered in the Recording Server.
2. Click on the **[Access Information Setting]** button in the device information menu on the right hand side of the screen.
3. Modify the camera information displayed in the bottom right of the screen.
4. When finished, click **[Apply]** button.

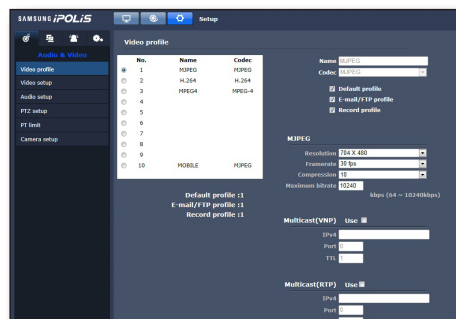


Viewing the Device Settings

You can see the device related settings information on the Settings Page provided by each device.

To edit device settings:

1. In the right information pane, click **[Device setup page]** button.
The selected device's settings page should appear.
2. Edit settings as required.
3. When finished with device settings, click **[Apply]** button of the device settings page.
4. To close the device's settings page, click **[X]** button on the top right corner.
 - Device settings page differs from devices connected. For further details, refer to the user manual of each device.

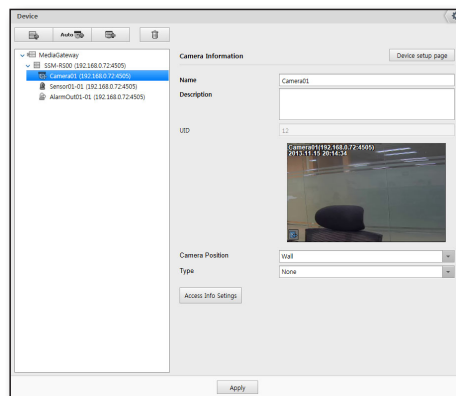


Camera Info View

Select a device and then a camera under it to check the connected camera information and video.

To Change Camera Info

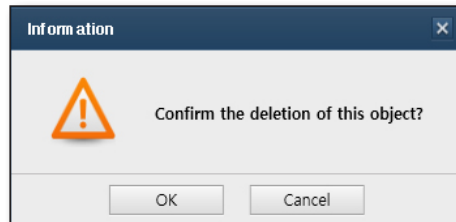
1. Select a camera under the selected device.
2. Enter the name and description in the camera info window.
 - If the Panomorph lens is installed, specify the camera position and lens type.
Check to ensure the camera model is compatible with the Panomorph lens.
3. When done, click **[Apply]** button.



Deleting a Device

A device can be selectively deleted.

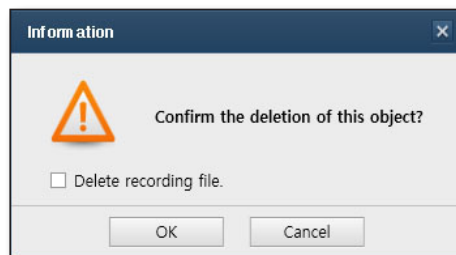
1. Select a device to delete from the tree.
2. Click [] button.
3. When confirmation prompts, click **[OK]**.
 - If the related camera is in playback or recording, it automatically aborts.
 - A camera or sensor object cannot be deleted.



Select a camera registered in the Recording Server

You can select and delete each camera.

1. Select a camera to delete from the tree.
2. Click on the [] button.
3. When the camera delete confirmation window appears, click **[Yes]**.
 - When you want to delete a camera registered in the Recording Server, in the device delete popup window, you can select to delete the recording file.
 - If you chose to delete the recording file, the recording data will be also deleted.



SSM configuration manager

Recording Server Setting Information Management

You can import the Recording Server settings or export them as a .cab file or update the firmware for a registered camera.

Initializing the Recording Server system

1. Select the Recording Server to initialize.
2. Select initialization and click on the **[Restore the Default]** button.

Recording Server settings information management

You can import the Recording Server's settings information from a file.

1. Click on the [...] button to select the setting to retrieve.
2. Select a saved file.
3. Click on the **[Import]** button.
4. Imports the settings from the selected file.



- If you select the **<All>** checkbox, then you can retrieve **<Hardware>**, **<Record>**, **<Network>** and **<System>** items from the Recording Server. You can check and select each set of information.
- You can import multiple Recording Servers at the same time, but only one Recording Server can be exported at a time.

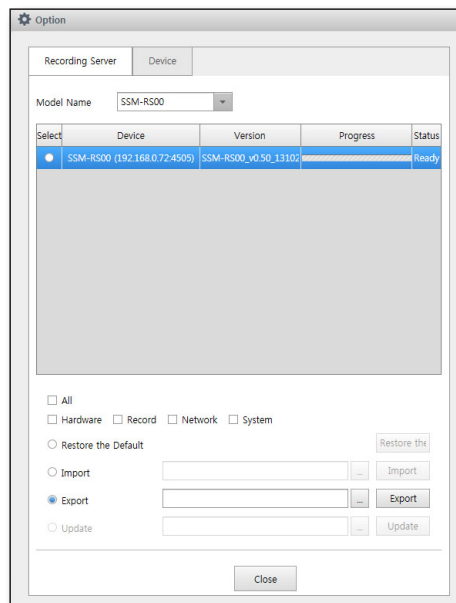
The screenshot shows a window titled "Option" with two tabs: "Recording Server" and "Device". The "Recording Server" tab is active. It features a "Model Name" dropdown menu set to "SSM-R500". Below this is a table with columns: "Select", "Device", "Version", "Progress", and "Status". The table contains one row with a checked checkbox, "SSM-R500 (192.168.0.72-4505)", "SSM-R500_v0.50_1310", a progress bar, and the status "Ready". Below the table, there are checkboxes for "All", "Hardware", "Record", "Network", and "System". There are also radio buttons for "Restore the Default", "Import", "Export", and "Update". Each radio button is followed by a text input field and a corresponding button. The "Import" radio button is selected. At the bottom right, there is a "Close" button.

Select	Device	Version	Progress	Status
☒	SSM-R500 (192.168.0.72-4505)	SSM-R500_v0.50_1310		Ready

Importing the Recording Server settings

You can save the Recording Server settings as a file.

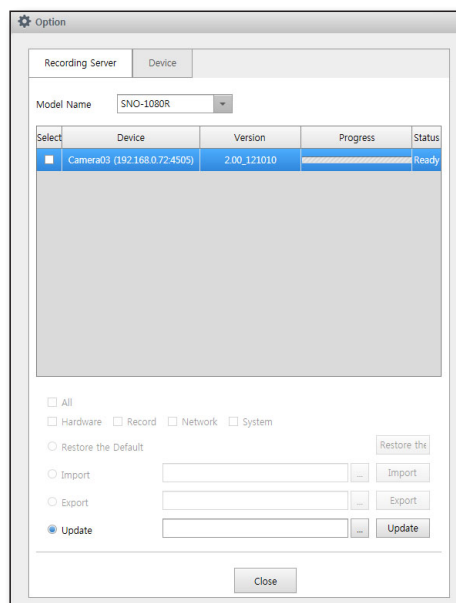
1. Select the Recording Server to be saved as a file.
2. Click [...] button to browse and set the desired file path.
3. Click on the **[Export]** button.
Settings are saved as a file and the result is displayed as a message.



Updating camera firmware

You can update the firmware for a camera registered below the Recording Server.

1. Select a model to update.
2. Click on the [...] button to select the new Firmware to update.
3. Click on the **[Update]** button.
4. While it is updating, the progress bar indicates the progress.



SSM configuration manager

Managing Device Settings

You can import device settings from a file, or export it in *.dat format.

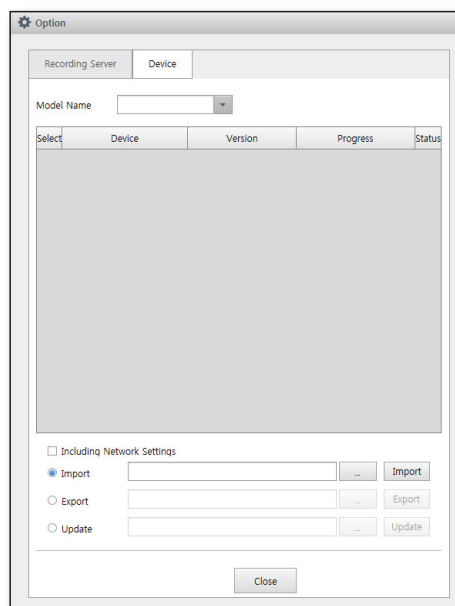
Importing Device Settings

You can import device's settings information from a file.

1. Click [...] button to browse and set the desired file path.
2. Select a settings file.
3. Click [Import] button.
4. Imports the settings from the selected file.



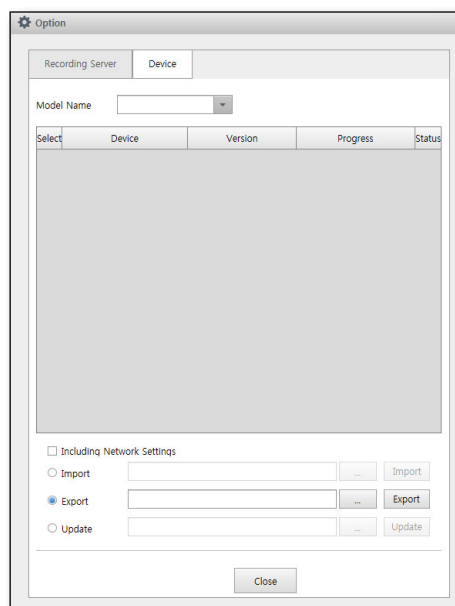
- If checked <Including Network Settings>, imports network environment settings too.
- Importing for multiple devices is allowed, where exporting limits to one device at a time.



Exporting Device Settings

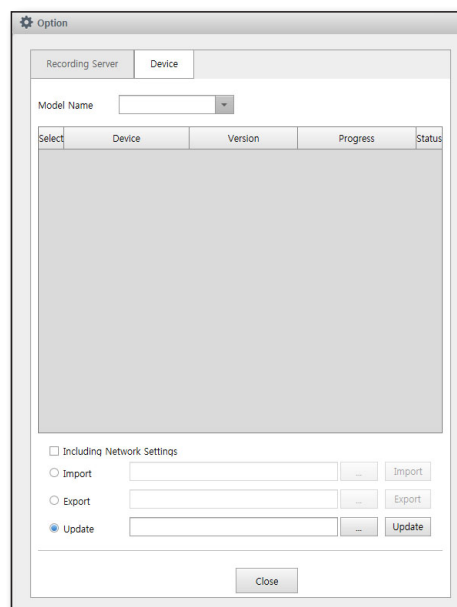
You can save your device's settings information as a file.

1. Select desired device to export its settings.
2. Click [...] button to browse and set the desired file path.
3. Click [Export] button.
The settings are exported into a file, and its result is displayed as a message.



Updating the Device Firmware

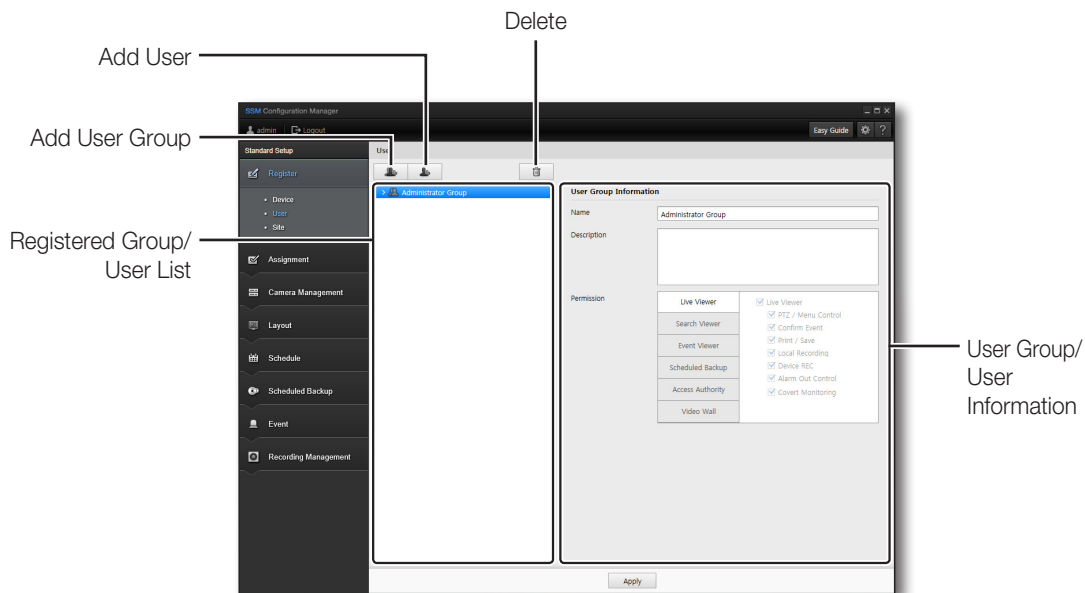
1. Select a device to update.
 2. Click [...] button to select update software of newer version.
 3. Click [Update] button.
 4. During the updating, the progress bar shows the progress.
-  ■ Devices of the same model can be selected together from the list and updated at the same time.



SSM configuration manager

User

This function is used to generate the user group, set up the privilege of each user group, and add users to the group.

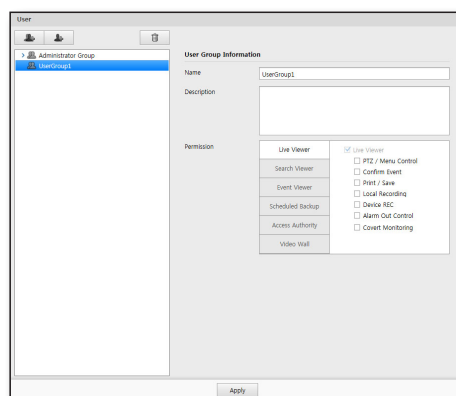


Setting a User Group

To add a User Group:

1. Click the [] button.
2. After a user group is generated, enter the name and description in the info field on the right hand side and configure the privilege.
3. When done, click [Apply] button.

! ■ The default "Administrator Group" is created in program installation process, which is not to be deleted.



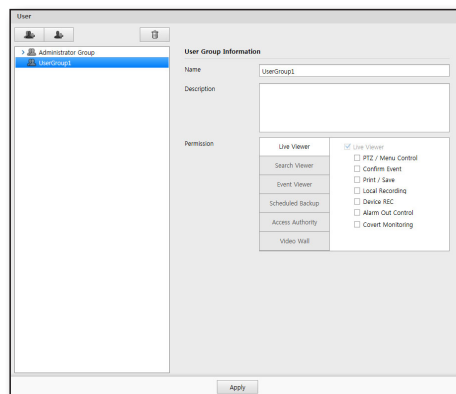
To edit User Group privilege:

1. Select a user group under a site from the tree.
2. Edit the user group's information on the right pane.
3. Select allowed privileges by checking checkboxes.



- For **"Administrator Group"**, changing privilege is not allowed.
- Setting privilege is only available in user group information.
- Live Viewer is allowed by default, and cannot be disallowed.

4. When done, click **[Apply]** button.



To delete a User Group:

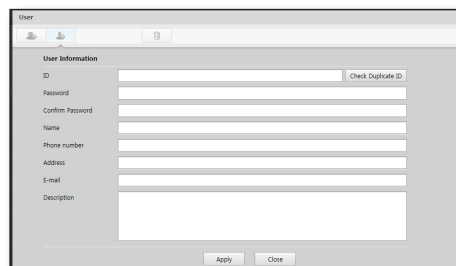
Select a user group to be deleted, and click [] button.

To add a User:

1. Select a user group from the tree.
2. Click the [] button.
3. Enter the user information.
4. When done, click **[Apply]** button.



- The default **"admin"** account is created in program installation process, which is not to be deleted.

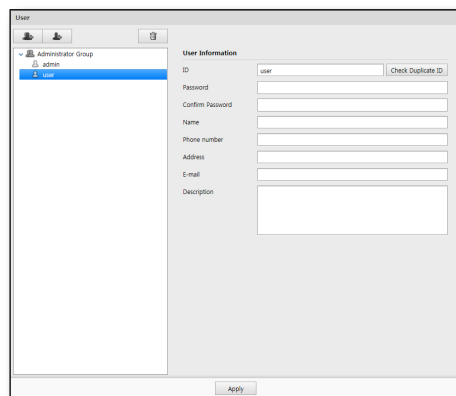


To edit user:

1. Select a user from a user group in the tree.
2. Edit user ID, password, name and other fields on the right pane.
3. When done, click **[Apply]** button.



- The **"Administrator Group"** has all privileges, and users in the **"Administrator Group"** are allowed with all privileges accordingly.



To delete a user:

You can select users registered to a group to delete. Select a user to be deleted, and click [] button.

SSM configuration manager

Site

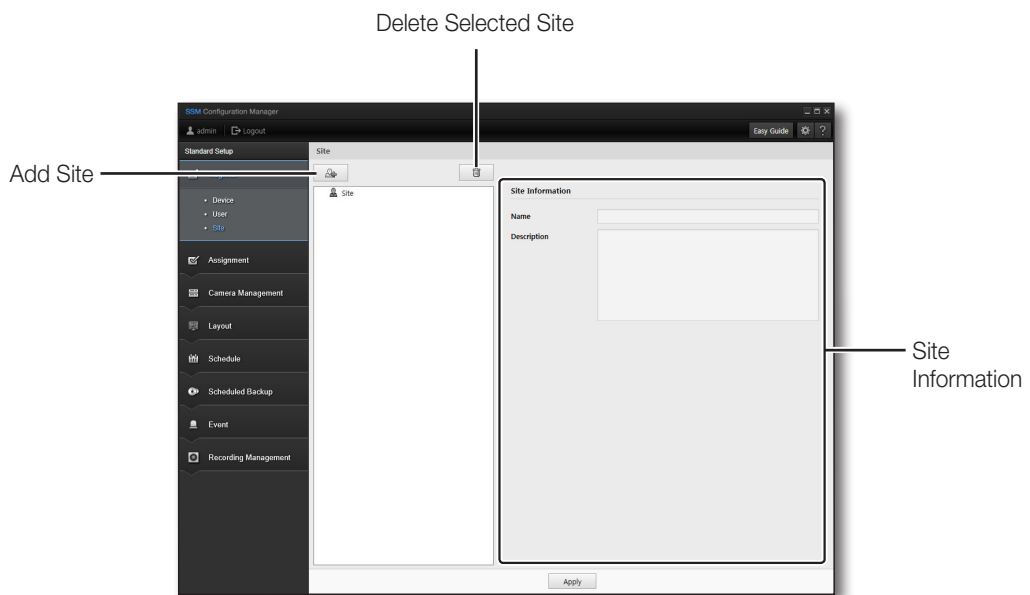
In SSM, user accounts are administered for each Site where a site is considered to be a physical administrative unit.

Using Site

- Administration by locations grouped by Sites
- Permission management for viewer functions
- Site Management (Add / Edit / Delete)
 - Name, Description

Managing Sites

In the logical tree, a site can group camera and alarm out by location and it can help easier locating desired camera if there are many camera devices.



- The default topmost site is created in program installation process, which is not to be deleted.

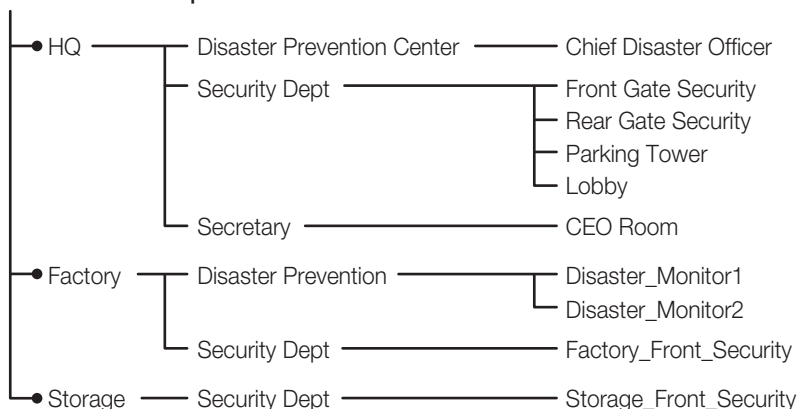
Using Site/User Group

You can configure a site and user groups at your preference.

Ex.) Below sample construction shows sites of "HQ", "Factory" and "Storage", where each site includes user groups of "Disaster Prevention" and "Security Dept", and added with users of "Chief Disaster Officer", "Front Gate Security" and "Rear Gate Security" and "Parking Tower" and "Lobby".

• Site

Administrator Group



Setting a Site

To add a site:

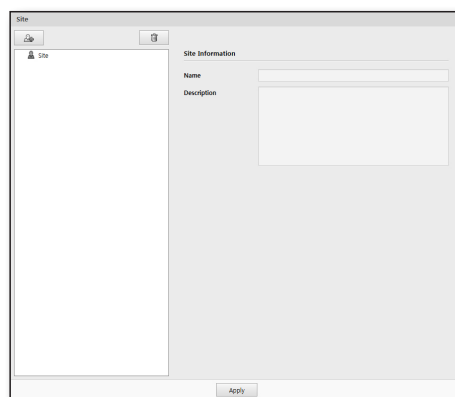
1. Click [] button.
2. Enter the site name and description in the right pane.

To edit a site:

1. Select a site from the tree.
2. Edit site name and information on the right.
3. When finished, click [Apply] button.

To delete a site:

1. Select a site from the tree.
2. Click [] button.



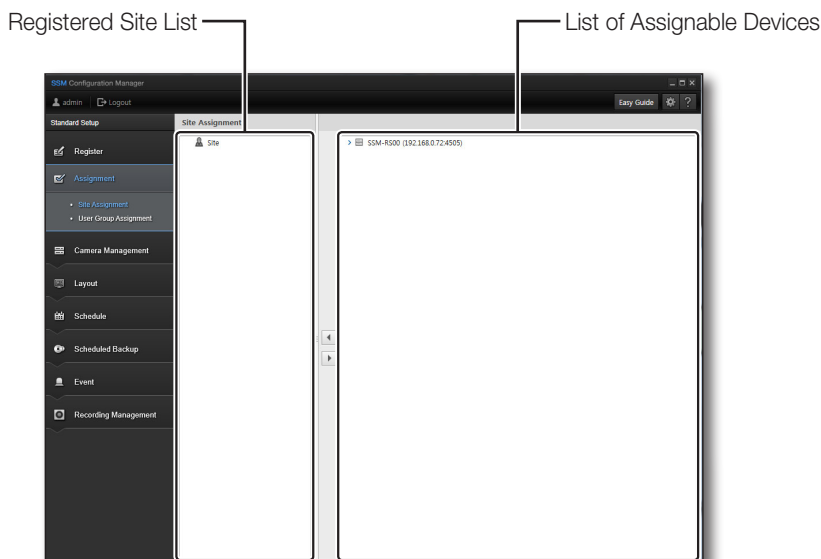
SSM configuration manager

ASSIGNMENT

Site Assignment

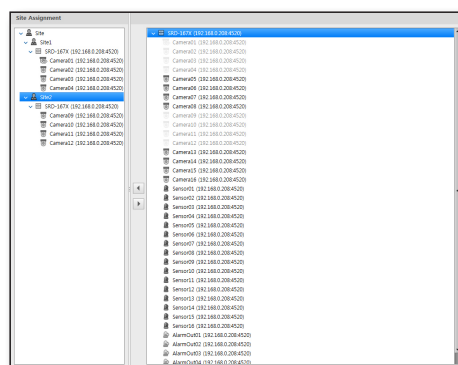
A device for the site is assigned.

A device can be selected and assigned to the site.



To Assign Cameras to a Site

1. Select a site.
The site must have been registered in "Register > Site".
2. Select a device and camera for the site.
To select multiple cameras, press the [Ctrl] key and then select the cameras.
3. Click the [◀] button after the camera(s) is(are) selected.
4. Select the device and then click the [▶] button to release the assignment.



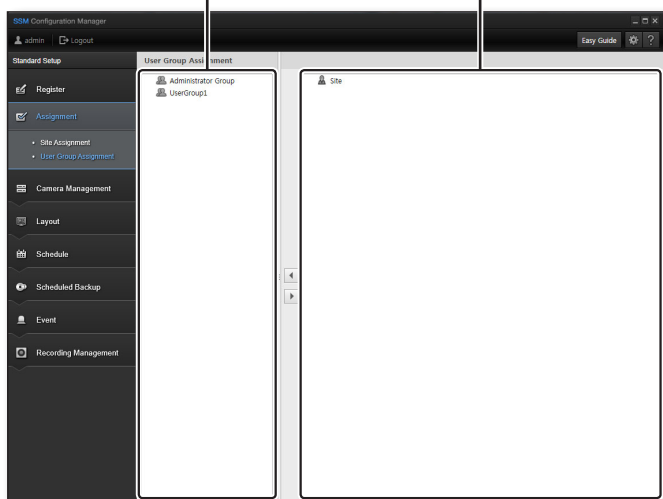
User Group Assignment

A device registered in the site can be assigned to a user group.

The list of devices assigned to the selected site is displayed.

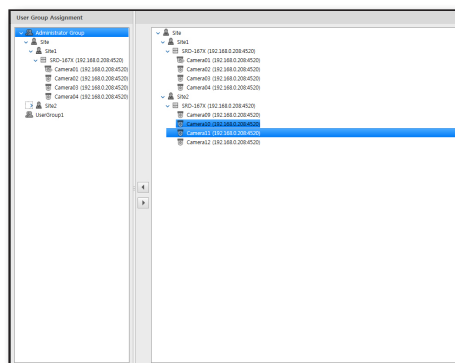
A device can be selected and registered to the selected user of the group.

Registered User Group List Assignable Site List



To Assign a Device Registered in the Site to a User Group

1. Select a user group to assign the site.
2. Select a site or camera to be assigned from the site list.
The list for selection displays only the cameras registered to the site, not all cameras connected to the device.
3. Click the [◀] button.
4. Select an assigned camera and then click the [▶] button to release the assignment.



SSM configuration manager

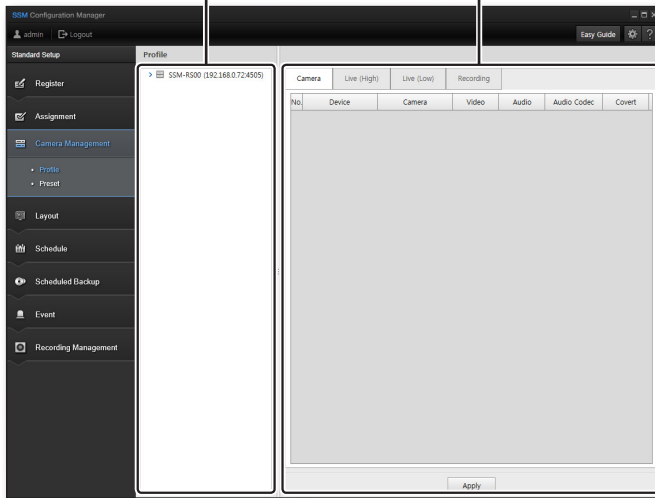
CAMERA MANAGEMENT

Profile

The profile of a camera assigned to the site can be checked and modified.

List of registered devices

Camera Profile List



Camera

Video

1. Click on the **<Video>** menu of a camera to change video settings.
2. Select either **<Used>** or **<Not Used>**.
 - If you set the camera's video to **<Not Used>**, you cannot listen to the live voice.
 - If you set the camera's video to **<Off>**, audio will be turned off automatically.

Audio

1. Select the **<Audio>** menu of a camera to change audio settings.
2. Select either **<Used>** or **<Not Used>**.
 - If you set the camera's Audio to **<Off>**, you cannot listen to the live voice.
 - You can set audio recording in **[Recording Management] > [Camera Setup] > [Camera]** tab.

Covert

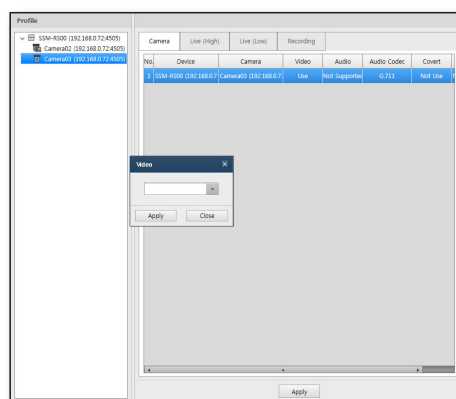
1. Click on the **<Covert>** menu of a camera to change covert settings.
2. Check it.
<Covert> will be turned **<On>**.
 - If you check **<Covert>** of a camera, you cannot view live/searched video or listen to voice, but you can still record video or voice.

If you want to change the camera profile, high resolution, low resolution, and the recording profile

1. Select the camera whose profile is to be modified from the list of cameras registered to the site.
 The profile of the camera under the device can be set up, or the camera can be selected individually.
2. Select an item to modify from the camera info in the list.
3. Select a value when the selectable values are displayed.
4. To change the profiles of the cameras in the list, press the **[Ctrl]** or **[Shift]** key on the keyboard, select the cameras to change and then click the header of the item to be modified.
5. Click the **[Apply]** button after the setup is complete.



- You can only set the recording profile for a camera registered in the Recording Server.
- You can set the Live (High), Live (Low) and Recording properties for each camera.
 - In Video Properties, there are Resolution, Tx Quality, Frame Rate, Compression, Bitrate Control, Bitrate and GOP size.

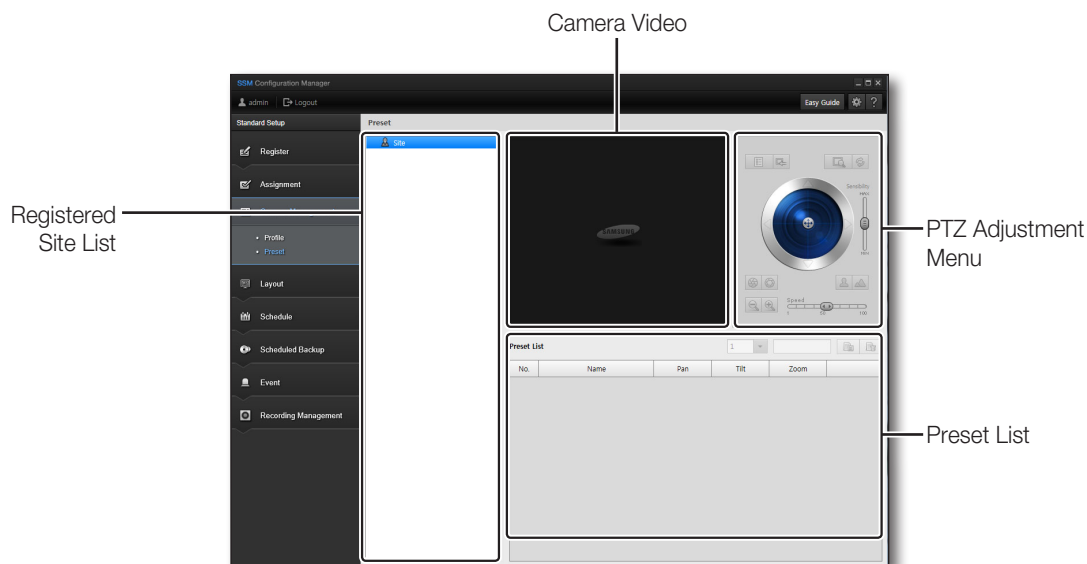


SSM configuration manager

Setting Presets

For PTZ control supporting cameras, you can add or delete preset positions for direct camera framing.

- The PTZ preset screen becomes available for settings, only when a PTZ supporting camera is selected.
- You can distinguish PTZ controllable cameras by icon appeared on the device list.
- 20 ~ 255 presets can be configured depending on the camera, DVR or NVR model. Check the specifications of the device for the maximum presets supported.



If you want to add or delete a preset

1. Select a desired camera from the Device List to define a preset.
2. Use PTZ controller to set the camera framing to a desired point, and enter the preset name.
3. Click [] button.
In the preset list, added one appears.
4. To delete a preset, select the preset to be deleted, and click [] button.

- For further information on PTZ controller, refer to "PTZ Control". (Page 85)

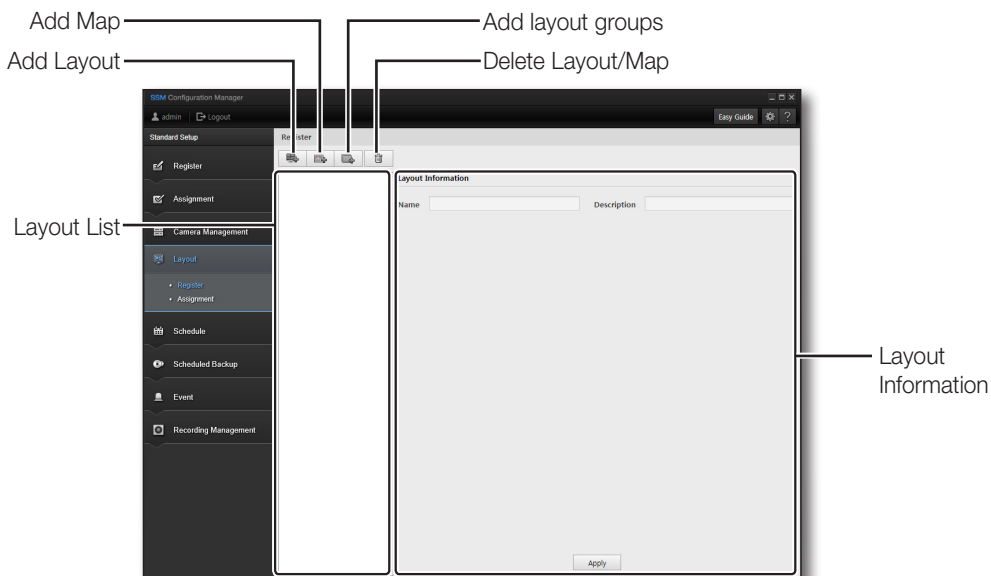


LAYOUT SETTING

Users can select the camera videos to be displayed on one screen.

A layout is generated, and the camera and site configuration included in the layout can be checked.

User can configure the screen specifically for a region, and select it for viewing whenever needed.

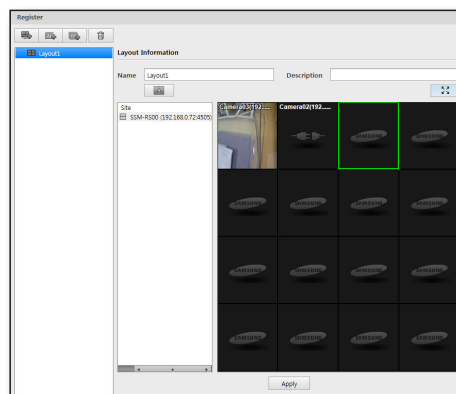


Registration

Camera Layout

Create a Camera Layout, and place the cameras in the desired tile of split screen to compose various layouts.

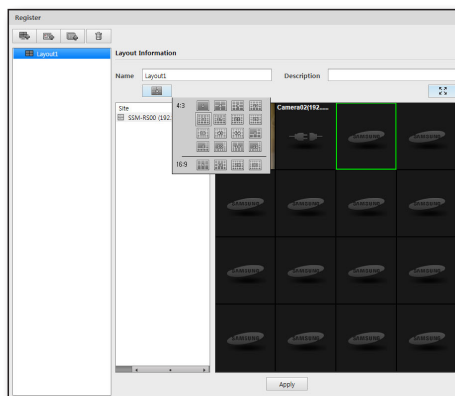
The device list only shows devices available for adding to the layout currently being edited, in a tree format.



SSM configuration manager

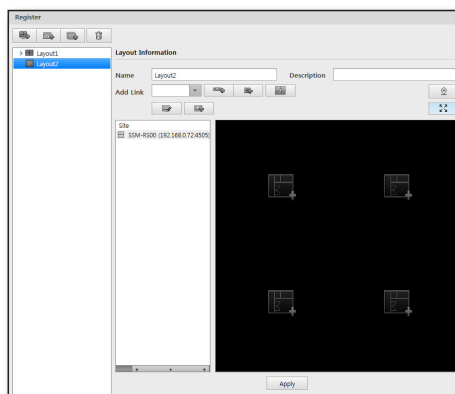
To add a camera layout:

1. Click the [] button to generate the camera layout.
2. Click [Split Screen] button and select a desired layout split mode.
3. Drag a desired device from the device list, and drop in onto a tile.
Double-click a camera to add it to the layout. Double-click a system to add all cameras in the system to the layout.
4. When done, click [Apply] button.



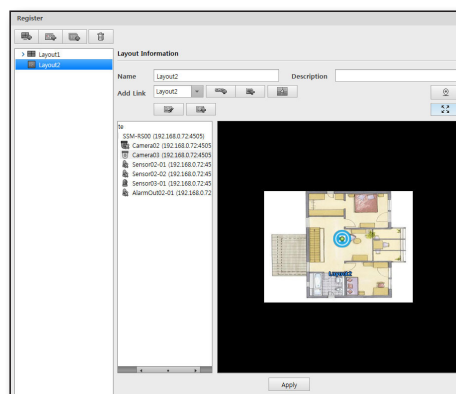
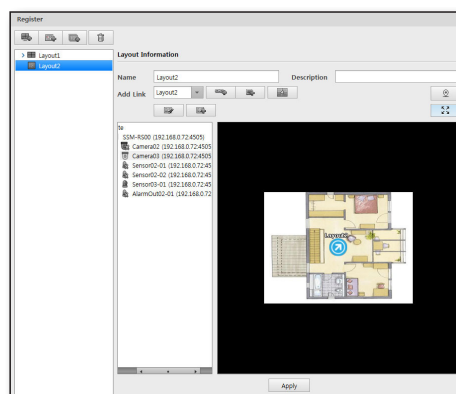
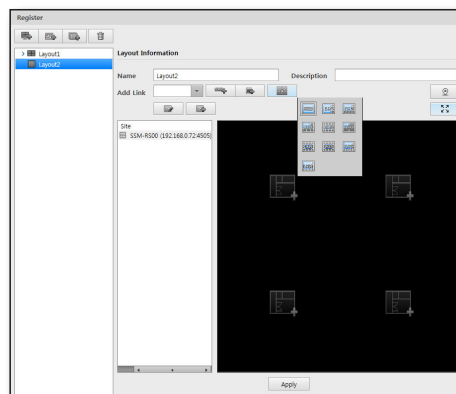
Map Layout

Place the camera and sensor icon in the position on the image of the registered map to complete the layout.



To add a map and place links:

1. Select a user group to be added with a map layout, and click [] button to create one.
2. Select a newly-generated map.
3. Click [Split Screen] button and select a desired layout split mode.
 - In the split screen selection pane, the tile marked with sky blue is the destination tile of added map image.
4. Click [] button to browse and set the desired map image file.
5. Select a layout in <Add Link> and click the [] button.
6. The link icon is registered in the map. Click the icon in the map layout of live viewer to move to the selected map link.
 - Place mouse cursor on the top right corner of the map layout to display screen adjustment dialog. For further details screen adjustment on map layout, refer to "Layout". (Page 78)

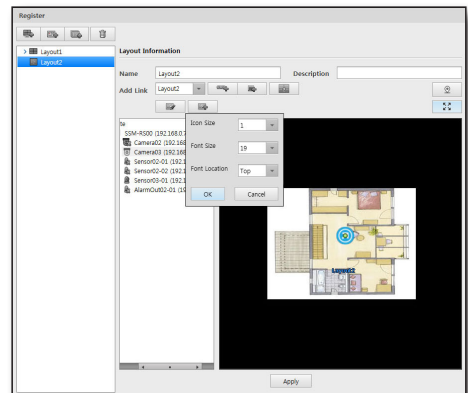


SSM configuration manager

- If you want to change the size/location of an icon, click on the [] button.

You can change the icon size and the font size and location.

- If you want to add a user icon, click on the [] button.
 - You can set the icon name. (32 Korean letters, 64 Roman alphabet letters)
 - You can designate the file to be used for the icon. (jpg, bmp or png format and size of less than 50Kbytes.)



To add devices to a map:

- Once completed with adding a map, click devices to be added from the device list.
 - In the device list, devices included in the group to where the layout is registered.

- Click a device and drag it onto the desired position on the map, and release the mouse.

You can add any device of camera, alarm or sensor.

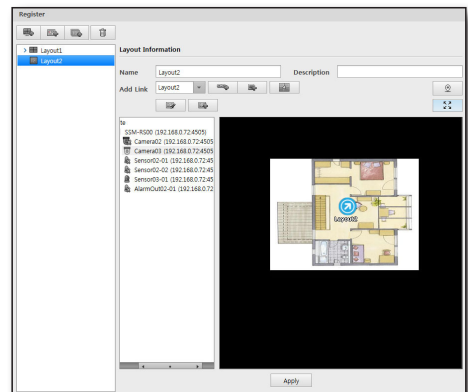
• Camera

- You can distinguish cameras, and identify whether the camera is connected to the network.
- You can identify cameras with events.
- The camera name is identified in the live viewer.
- The camera information is displayed in the live viewer.

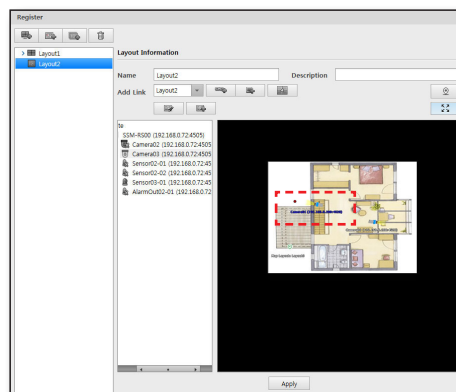
• Alarm Out

- You can distinguish alarms, and identify whether the alarm device is connected to the network.
- You can identify alarm device names.
- You can turn on or off Alarm Out in the live viewer.

- Click device icon with your left mouse button.
Green ball that controls camera framing appears.



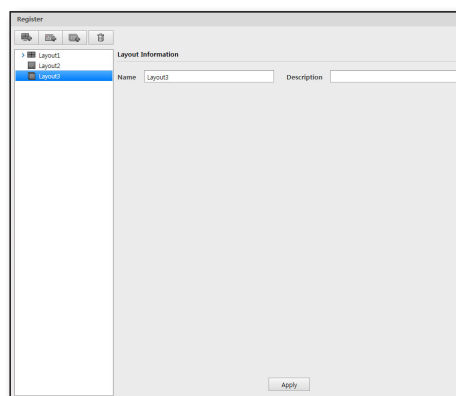
4. Click the green ball, and it turns red. While in red, drag and drop the ball to adjust camera's viewing direction.
 - Click a camera, drag and drop while holding to move the camera's position.
-  ▪ "Refer to "Using Map Layout" on how to use the arrow keys." (Page 80)
5. When done, click [Apply] button.



If you want to add a layout group

Add a layout group that can be used to group map layouts.

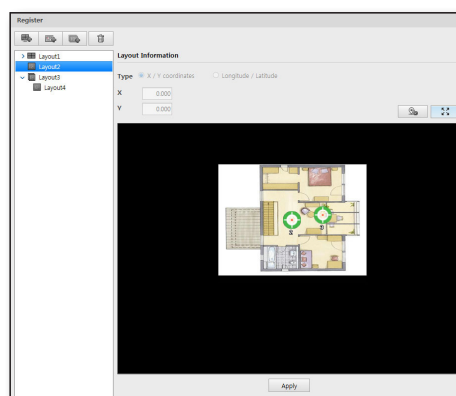
1. Click on the [] button.
 2. Enter the name and description in the layout information filled on the right side.
-  ▪ If the camera or map layout does not exist, you cannot add a layout group. If you want to add a layout group, there must be at least one camera or map layout.
- You can add a map layout below a layout group. If a layout group is deleted, its sub map layouts will be also deleted.



Layout coordinate settings

Click on the [] button to set the layout coordinates.

- A coordinate is displayed as three points on the map. When you set a coordinate, enter the reference coordinate value for each point.
- The range of layout coordinate input is shown as follows.
 - X/Y coordinate system
X : 0 ~ 10000, Y : 0 ~ 10000
 - Longitude/latitude coordinate system
Longitude - East/West, deg: 0 ~ 180, min : 0 ~ 59, sec : 0 ~ 59 (first decimal point)
Latitude - North/South, deg: 0 ~ 90, min : 0 ~ 59, sec : 0 ~ 59 (first decimal point)



Deleting Layouts

Select layout to be deleted, and click [] button.

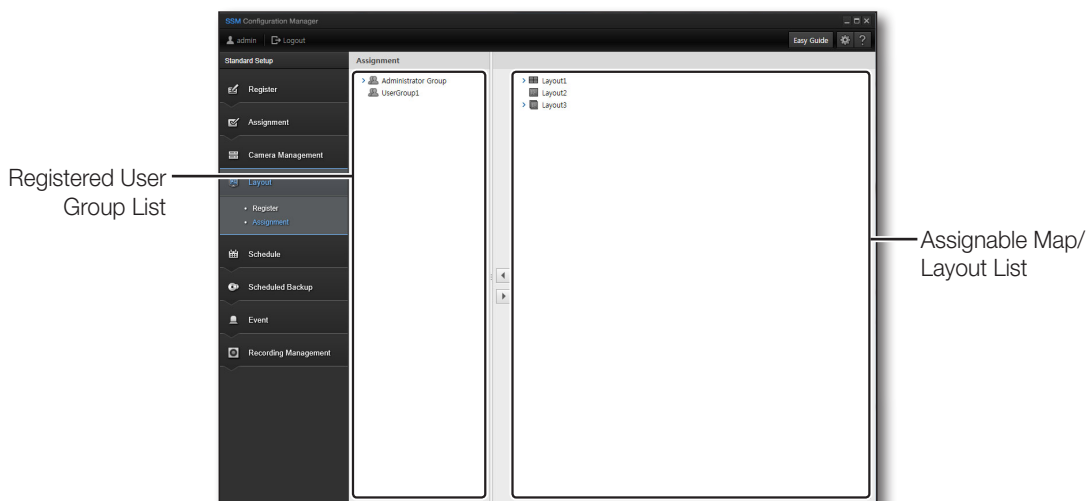
SSM configuration manager

Layout Assignment

A layout is assigned to the user group.

A list of layouts available to the selected user group is displayed.

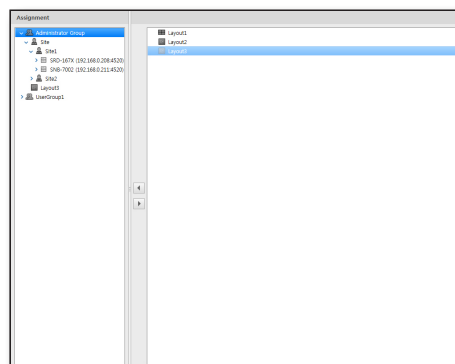
Select a layout and register it to the user group.



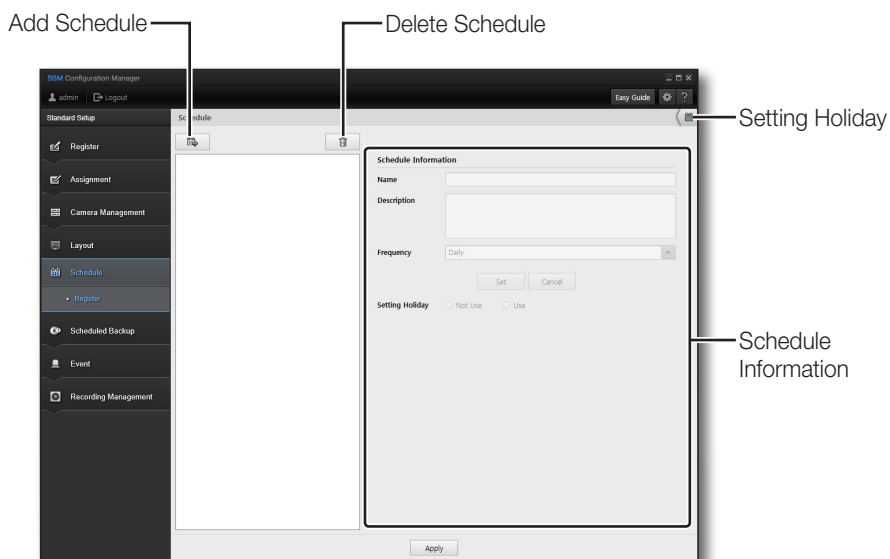
To Assign Cameras

1. Select a user group to assign the layout.
2. Click to select a layout to assign from the layout list.
3. Click the [◀] button.
4. Click the [▶] button to release the assignment.

- After a layout assigned to the user group has been selected, another layout under it can be assigned.

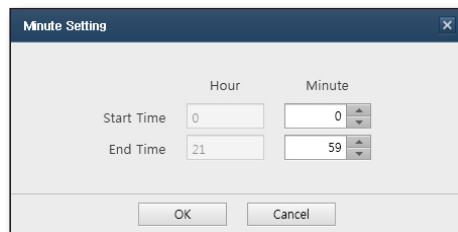
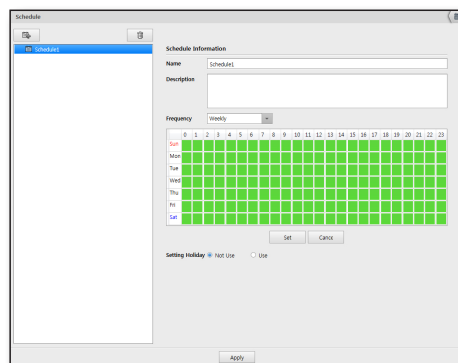


SCHEDULE SETUP



To Set up a Schedule

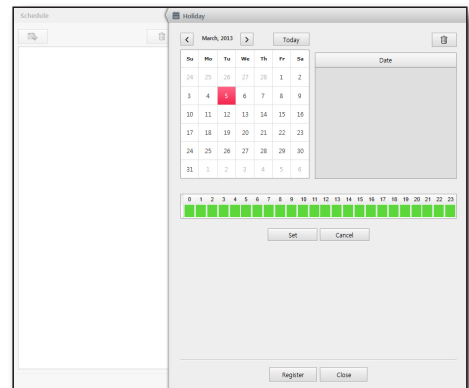
1. Click the [] button.
2. Select the generated schedule.
3. Enter the <Name> and <Description> in the list on the right hand side.
4. Select <Frequency>.
 - Daily : The schedule is set up in one-day units.
 - Weekly : The schedule is set up in one-week units.
5. Select a schedule area from the time selection cell, drag it with the mouse, and click the [Set] button.
To cancel the schedule, drag the area and click the [Cancel] button.
 - Multiple time cells can be selected by using the [Ctrl] key.
6. Double-click the time selection cell and then select the minutes of <Start Time> and <End Time>.
7. Select whether the holidays will be used.
8. Click the [Apply] button after the setup is complete.



SSM configuration manager

To Set up Holidays

1. To use holidays, select **<Use>**.
2. Click [] in the upper-right corner.



3. Select the dates that are holidays, and indicate the type of holiday.
4. Click the schedule area in the time selection cell, drag it with the mouse, and click the **[Set]** button.
To cancel the schedule, drag the area and click the **[Cancel]** button.
5. Double-click the time selection cell and then select the minutes of **<Start Time>** and **<End Time>**.
6. Click the **[Register]** button after the setup is complete.



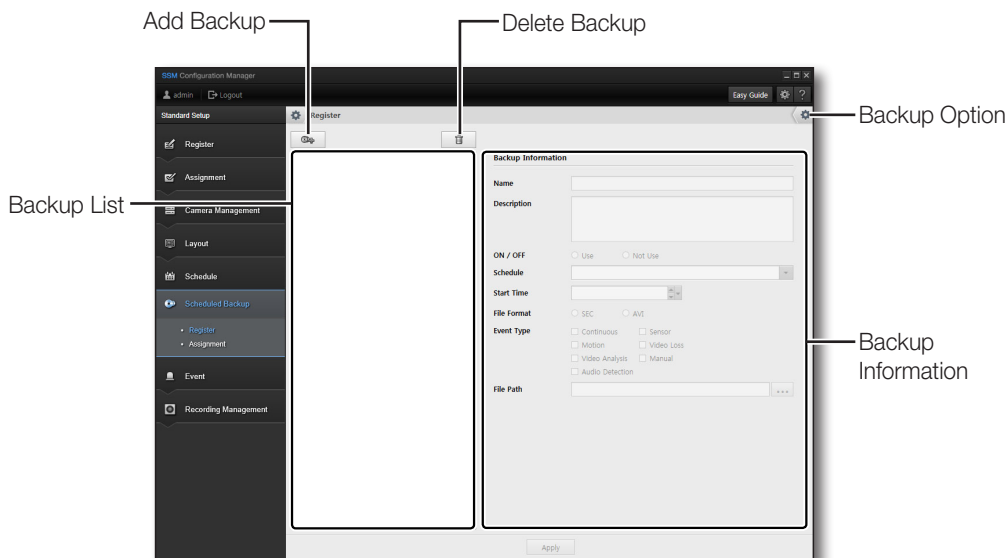
- Holiday setting is set at higher priority when **<Setting Holiday>** is set to **<Use>** in schedule setup.

To Delete Schedule

1. Select the schedule to delete from the schedule list.
2. Click the [] button.
3. Click the **[Apply]** button after a schedule is deleted.

SCHEDULED BACKUP

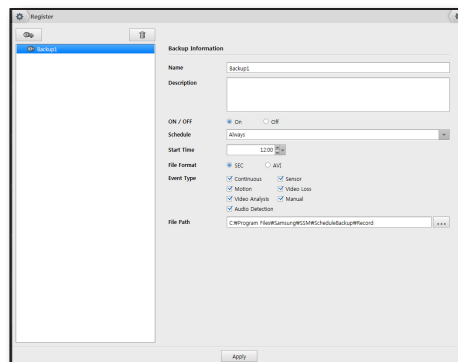
The data of a specific period can be saved in the PC running the program.



To Set up Video Backup

The specified event backup can be set up to run at the specified time.

- Click the [] button.
A new backup is added to the list.
 - Only the connected devices can be backed up.
- Click a backup from the list to select it.
- Enter the name and description of the backup to set up.
- Select whether the backup will be used.
- Select a schedule.
One of the schedules registered in schedule setup can be selected.
- Set up the backup time.
 - If the schedule is set to **<Weekly>**, the day of the week selection menu is displayed.
 - If the schedule is set to **<Daily>** and the backup schedule is set up for within 24 hours from the time selected as the backup start time, the backup begins with the data of the previous day.



SSM configuration manager

7. Select the format of the saved file.

“*.sec” and “*.avi” are available as the backup file format.

- AVI : General purpose format. This can be played by Window Media Player.
- SEC : Samsung's own format. Player is provided with the video data.



- Window Media Player does not support avi files with a resolution of 3 megapixels or higher. SEC backup is recommended for high-resolution videos of 3 megapixels or more.
- A new AVI backup file is created in the following cases.
 - When you change the video's resolution
 - When you change the audio or video codec
 - When the file size is greater than 2GB

8. Select the event type to run a backup.

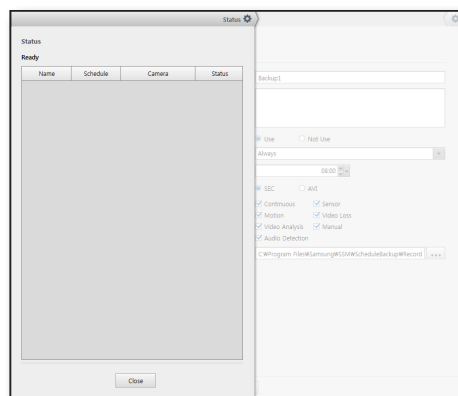
9. Click the [...] button to select the path of the backup file.

10. Click the [Apply] button after the setup is complete.

To Check Scheduled Backup Status

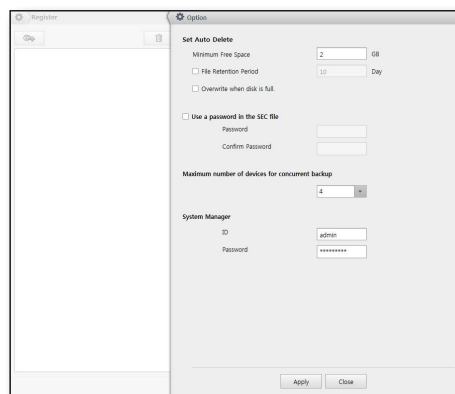
1. Click the [⚙] button in the upper-left section of the screen.

2. Check the progress of the registered backup.



To Set up a Backup Option

1. Click the [] button in the upper-right section of the screen.
 2. Specify the automatic backup file delete capacity and period.
 - Minimum Free Space : Configure the minimum free space.
 - File Retention Period : Configure the automatic delete period.
Data recorded prior to the specified period are automatically deleted.
 3. Check to use the password in the <Use password in the SEC file> menu.
Set or check the password after checking use.
 4. Select the number of devices to be backed up at the same time in <Maximum number of devices for concurrent backup>.
 5. Configure the Configuration Manager login ID and password.
-  ■ Only the ID with the scheduled backup privilege can use the scheduled backup.
6. Click the [Apply] button after the setup is completed.



To Delete a Scheduled Backup

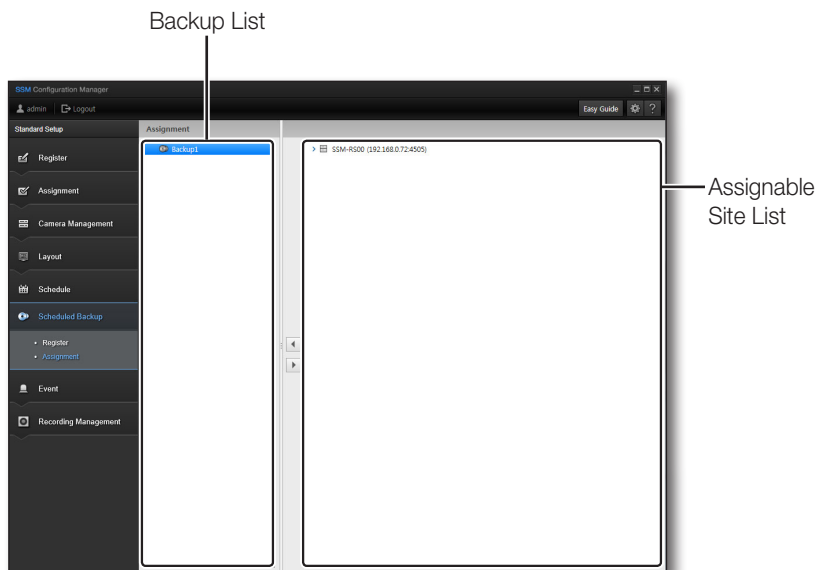
1. Select the scheduled backup to delete from the backup list.
2. Click the [] button, and then click the [OK] button in the confirmation window.
3. Click the [Apply] button after the scheduled backup is deleted.

SSM configuration manager

Device Assignment

A device is selected and assigned to the scheduled backup.

A device can be selected to be assigned to a scheduled backup.

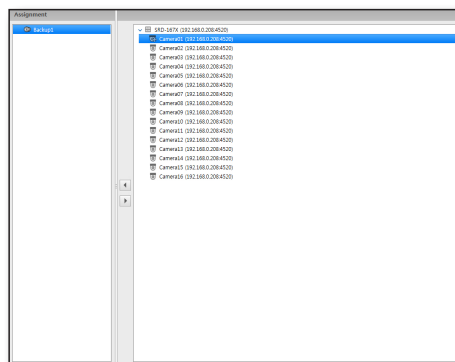


To Assign a Device

1. Select the backup schedule to assign to the camera.
2. Click to select a device to be assigned from the device list.
 - Cameras connected to the device can also be individually assigned.
3. Click the [◀] button.
4. Click the [▶] button to cancel the assignment.



- Only the devices assigned to the account set up in the scheduled backup option can be backed up.



EVENT

The event action defines how the system acts (output) upon a specific event (input).

- Event Settings

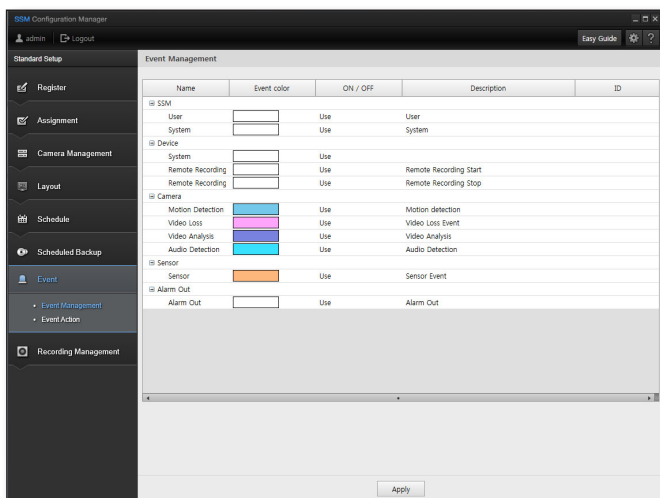
- A single monitoring setting. Upon an event, the Live Viewer monitoring screen automatically switches to Single mode with the event-generating channel for the specified period.
- For specified interval (5~60 seconds), system ignores the same continuing event.
- You can set whether to use the device's event settings.

- Event Action

- Event Action Management (Add / Edit / Delete)
 - Name, Description, Event (Input), Action (Output)
- You can define various system actions (output) for events (input) from devices.
 - Event (input) types: Device connection release, Motion Detection, Video Loss, Video Analysis, Audio Detection and Sensor
 - Action (output) types: Instant Viewer, Preset, Alarm Out, Pop-up, Sound and E-mail notification

Managing events

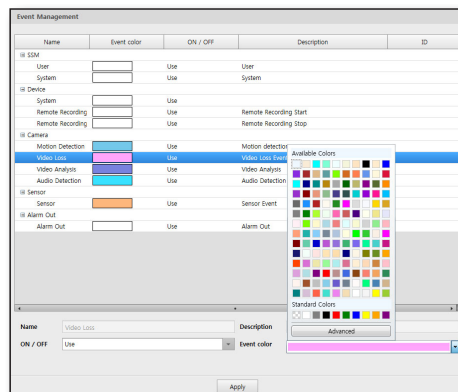
You can select to display events that occur, and set the color for an event that occurs.



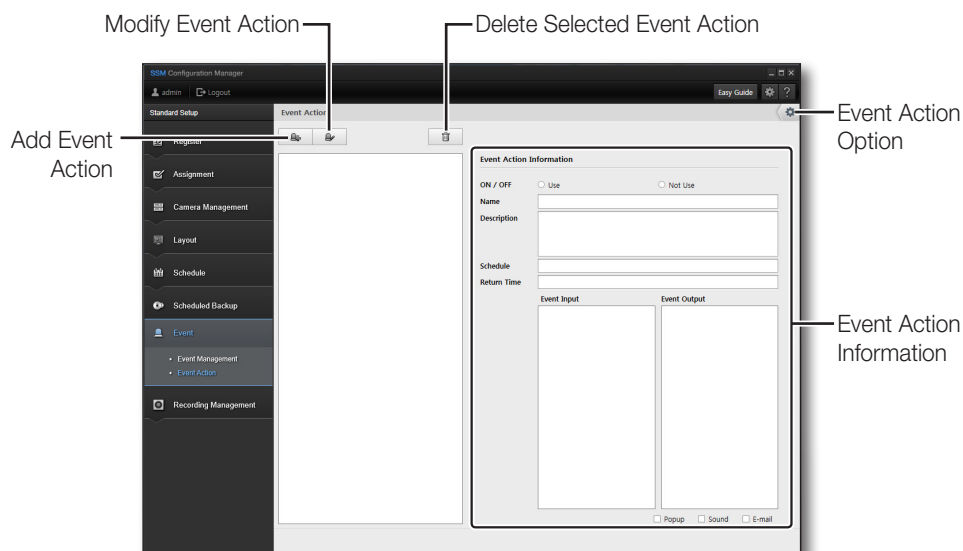
SSM configuration manager

To set the event color

1. Select an event to set the color for.
2. Select whether to use the information displayed in the bottom.
3. Click on the **<Event Color>** menu.
4. Click on the desired color in the color chart displayed.
5. After finishing settings, click on the **[Apply]** button.



Setting Event Action

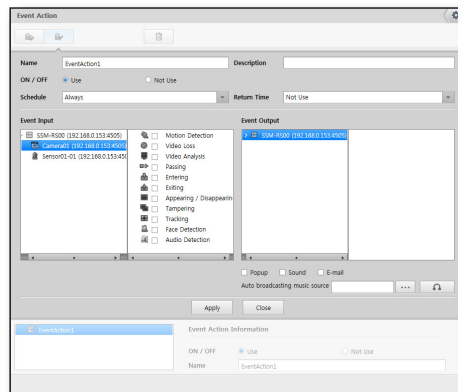


To add an event action:

You can add/edit event actions.

Select event type, device of action, and specify action details accordingly.

1. Click the [] button to add an event action.
2. Select an event action and click the [] button.
The "Event Action" setup window appears.
3. Use <ON/OFF> to determine the use of this function.
4. Enter the name and description of the event action added.
5. Select the usage and event action schedule.
6. Select the return time.
7. In the <Event Input>, select devices and their event types by checking the checkboxes.



- Video Loss : If the video recording is interrupted, an event is generated.
- Motion Detection : If the device detects a motion, an event is generated.
- Passing : An object passing through the area specified by the user is recognized as an event.
- Entering : An object entering the area specified by the user is recognized as an event.
- Appearing/Disappearing : Object appearing in or disappearing from the specified area is recognized as an event.
- Tampering : A situation hindering the video monitoring is recognized as an event.
- Tracking : Recognize the situation of tracing moving objects on the screen as an event.
- Face Detection : Recognize the situation of sensing a face in the user selected area as an event.
- Video Analysis : Intelligent video analysis is recognized as an event.
- Audio Detection : If the device detects sound, an event is generated.



- If you selected an upper ranked device that you registered a camera for, events related to device operation will be displayed.

8. Set the action device and action method of an event type.
 - Instant Viewer : Opens the "Instant Viewer" window in the Live Viewer, which shows the occurred event's video.
 - Preset : Runs selected preset on the selected camera.
 - Popup : Automatically selected along with Instant Viewer option. If selected individually without selecting Instant Viewer, an empty Instant Viewer having no video displayed upon an event only for reacting to the occurred event.
 - Sound : Generates sound alarm upon events.
 - E-mail : Sends out event notification e-mail upon events.
 - Auto broadcasting music source : Search for and select and preview the music file to be played when an event occurs.
9. To finish settings and close the window, click [Apply] button.

To delete an event action:

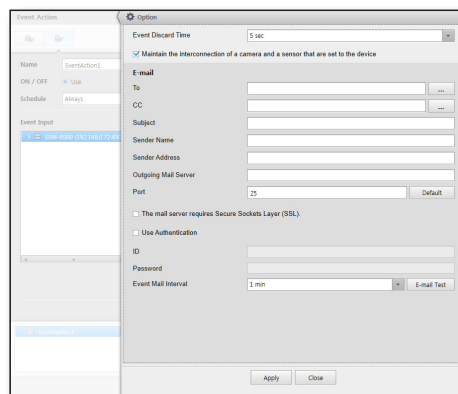
Select an event action to be deleted, and click [] button.

SSM configuration manager

To Set up Event Option

The ignore time and e-mail send time options of the event action can be set.

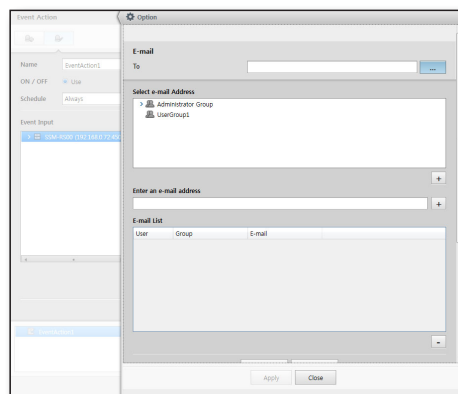
1. Click the [] button.
2. Specify the event ignore time.
3. Specify whether the device event action setting will be used.
4. Enter the recipient and sender e-mail addresses and e-mail sending interval when an event is generated.
5. Click the [Apply] button after the date input is complete.



To Select an e-Mail Recipient or CC

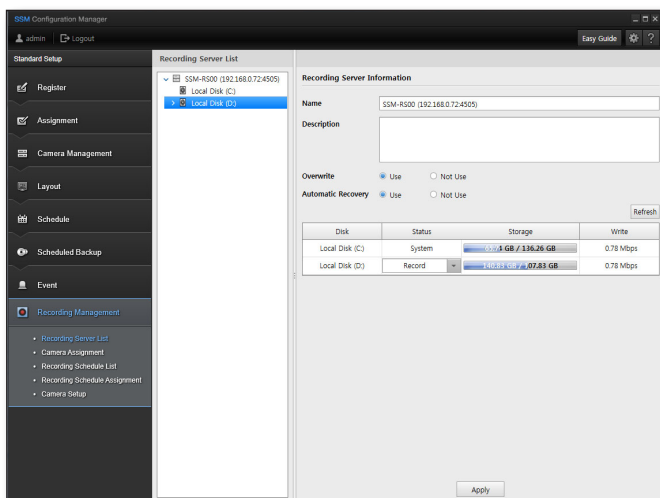
Recipient and CC of the event e-mail can be selected from the user group list, or their e-mail addresses can be input.

1. Click the [] button.
2. Click the [] button to the right of the <To> or <CC>.
3. Select the recipient of the e-mail from the users in the user group.
4. Click the [] button.
The e-mail address of the recipient selected from the e-mail list is displayed.
5. To register the e-mail address of the user not in the user group, enter the address in <Enter an e-mail address>.
6. Click the [] button.
7. Click the [Confirm] button after the recipient and CC are selected.



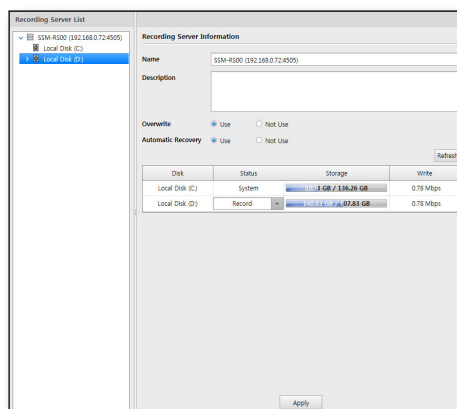
RECORDING MANAGEMENT

Recording Server list



To set the Recording Server information

1. **Overwrite** : If there is no extra disk space, select whether or not to overwrite the recording file.
2. **Auto recovery** : If you record it in network external storage (iSCSI), select whether to auto recover the recording when a storage connection is cut off and stored again.
3. **Recording Server disk information settings** : Shows the disk information of the selected Recording Server.
 - **Record** : When the disk status is set to **[Record]**, you can search for and play the recording.
 - **Released** : When the disk status is set to **[Released]**, you can search or play only but cannot record. Any ongoing recording will be stopped.
 - You cannot allocate a **[System]** disk where the OS is installed.
 - You cannot record if there is no **[Record]** disk as well as the **[System]** disk.
4. **Refresh** : Click on the **[Refresh]** button to update the local disk information with the latest information.



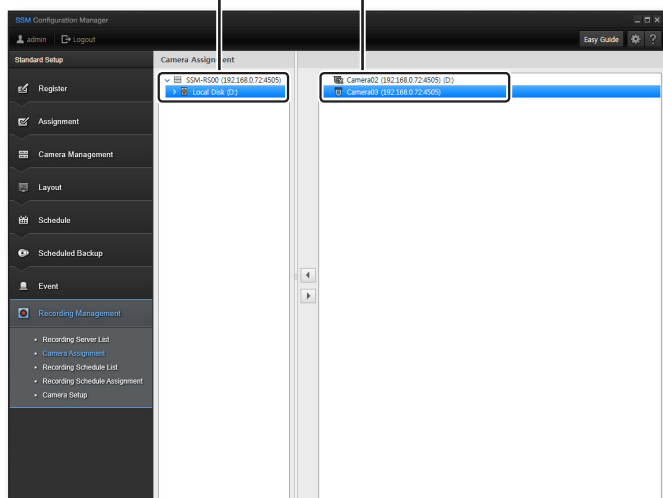
SSM configuration manager

Camera Assignment

You can distribute camera to each **[Record]** disk of the Recording Server.

List of registered recording disks

List of allocatable cameras

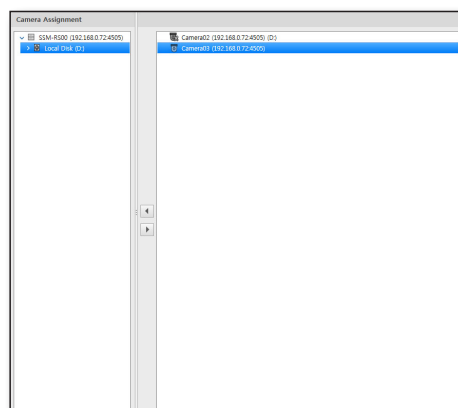


If you want to assign a camera to the **[Record]** disk

1. Select the Recording Server to initialize.
2. Select the **[Record]** disk to assign a camera to.
3. In the list of cameras registered in the Recording Server on the right, select a camera to be assigned to the disk.
4. Click on the [←] button.
The selected camera will be copied below the **[Record]** disk.
You can assign the same camera to multiple disks.
 - You cannot record with a camera not distributed to the disk.

If you want to cancel assigning a camera to the **[Record]** disk

1. Select the Recording Server from the list on the left..
2. Select an item to cancel from the list of cameras registered within the **[Record]** disk.
3. Click on the [→] button.
The selected disk will be deleted from the **[Record]** disk.

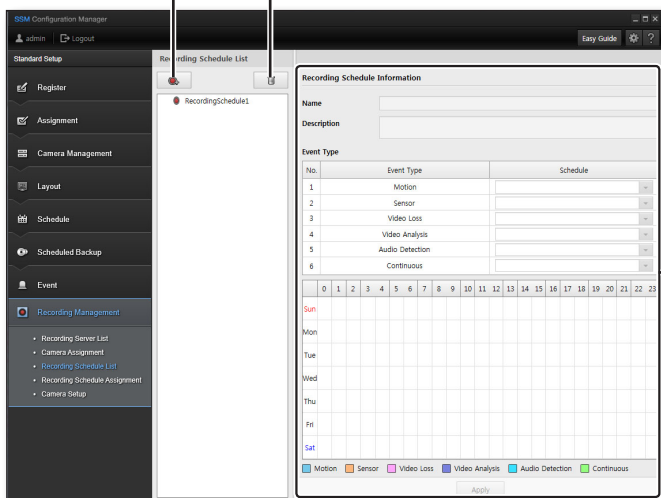


Recording Schedule List

You can create, modify or delete the recording schedules.

Add a recording schedule

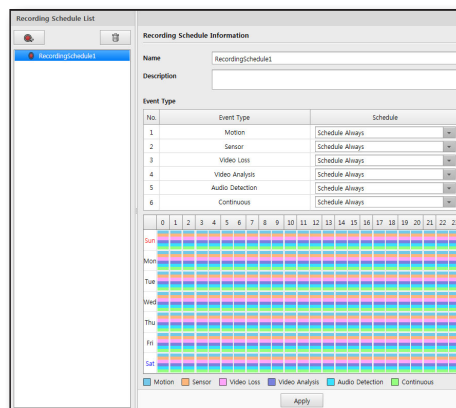
Delete a schedule



Recording schedule information

If you want to set the schedule

1. Click on the [] button.
2. Select a created schedule.
3. In the list on the right of the screen, enter <Name> and <Description>.
4. Select a schedule for each event type.
 - Schedule Always : Recording will be done on every day/time.
 - For more detailed information on schedule setting, refer to "Schedule Setup". (Page 47)
5. Click the [Apply] button after setup is completed.



If you want to delete a recording schedule

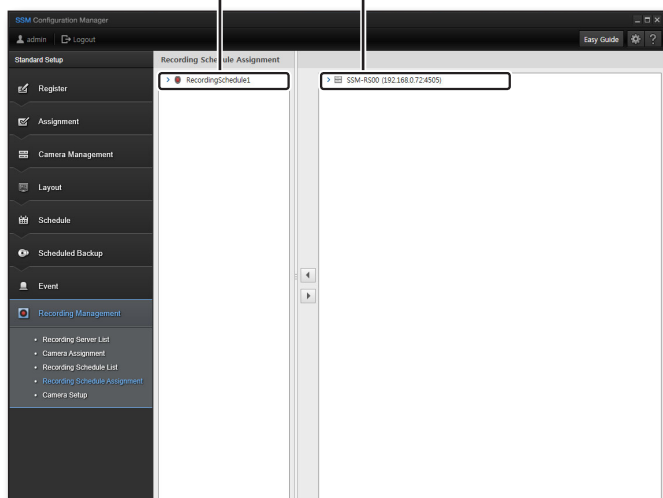
1. Select a schedule to delete from the schedule list.
2. Click on the [] button.
3. Click the [Apply] button after deleting it.

SSM configuration manager

Recording Schedule Assignment

You can distribute a camera for each Record disk of the Recording Server.

Recording schedule list List of allocatable cameras

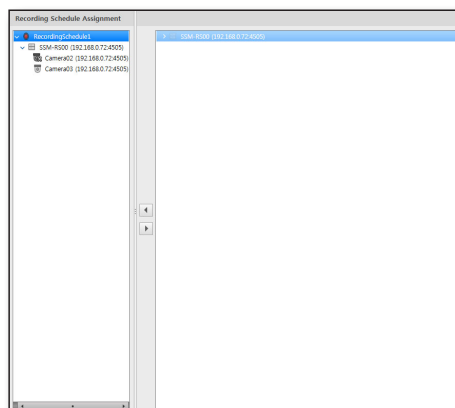


If you want to assign a camera to the recording schedule

1. Select a user recording schedule to which a camera will be assigned.
2. Select the Recording Server or camera to assign from the list of camera/Recording Servers on the right side of the screen.
 - If you select a Recording Server, the list of cameras below it will be shown on the right side of the screen.
3. Click on the [◀] button.
4. Click on the [▶] button to cancel assignments.
5. If you want to set all cameras in the list at once, press the [Ctrl] or [Shift] key to select cameras.



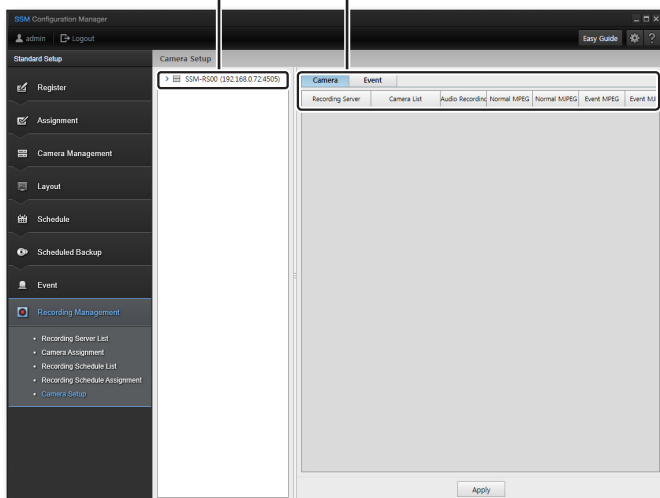
- Only the cameras assigned to the recording disk can be assigned to a recording schedule.



Camera Setup

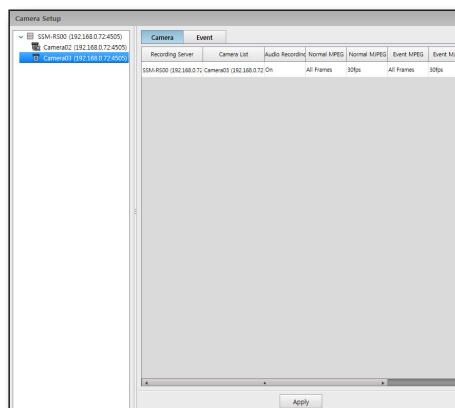
You can check or change the settings of cameras assigned to the server.

List of available camera settings Displaying the camera settings information



If you want to change camera settings

1. Select a camera registered in the Recording Server that you want to change the setting for.
2. Press the **[Ctrl]** or **[Shift]** key to select the camera to change the setting for.
3. Click on the item to change in the camera list.
4. Select a desirable value when the option appears.
5. If you want to change the settings of the cameras in the list at the same time, then press the **[Ctrl]** or **[Shift]** key to select a camera to change and click on the header for the item to be changed.
6. Click the **[Apply]** button after setup is completed.
 - You can set the fps used for each camera and recording type (general/event) registered in the Recording Server.
 - You can turn the audio recording on or off.
If you set the camera's Audio Recording to **<Off>**, you cannot record voices.
 - General recording types includes manual recording and continuous schedule recording.
 - Event recording type includes : motion/alarm/video loss/intelligent video analysis/audio.
You can set the recording file storage period for each camera activated.
 - A recording file that exceeds the storage period will be automatically deleted.
You can check the recording file storage period for each camera activated.
 - Press the Refresh button to renew the available storage period that is displayed.



SSM configuration manager

Video settings	Options	Descriptions
MPEG	ALL FRAMES	Saving all frames received.
	KEY FRAMES	Only saves the I-frame received.
MJPEG	1 ~ 30	Uses the selected fps to save.

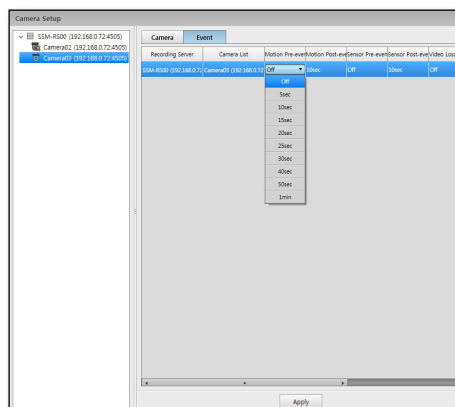
This setting will not overwrite the device video setting.

The actual frame rate used to receive and save data from a device may differ from the frame rate set here. If a smaller amount of data is received, only that much will be saved.

- The max throughput is 400Mbps.
- It supports recording with a resolution of 3MB within the throughput range.
- For recording stability, using HDD with SATA2 7200rpm or higher is recommended.
(Each HDD's max recording processing should not exceed 100Mbps.)
- The recording data can be searched or played by using the SSM console.

To change an event setting

1. Select an event item camera registered in the Recording Server that you want to change the recording setting for.
2. Click on the item you want to change for a camera in the list.
Select the pre/post time to record and set the recording time for each event.
3. Select a desirable value when the option appears.
 - If you turn off the time setting, nothing will be recorded.
4. If you want to change multiple settings in the list at the same time, then press the **[Ctrl]** or **[Shift]** key to select an event to change and click on the header of the item you want to change.
5. Click the **[Apply]** button after the setup is completed.
 - You can set pre/post recording time with respect to the time the event occurs so that users can easily understand the situation when an event occurs.
Video during the pre/post time set based on the time the event occurs will be recorded.
 - Motion, alarm, intelligent video analysis, audio event : You can set both the pre/post time.
 - Video loss event : As there is no video to record after an event occurs, you can only set the pre time.
 - A video loss event only occurs in an encoder.



Option Setup

To Set up Option

1. Click the [] button at the upper-right section of the SSM Configuration Manager screen.
2. Configure each option item.
 - Log
You can set the log retention period, which sets to delete expired log files automatically.
 - Backup/Restore
You can back up the current settings or restore the SSM Configuration Manager setups from a saved file.
 - Backup : Selecting this item disables the button. Set the backup file path and click [**Backup**] button to start backup into the specified file path.
 - Restore : Selecting this item disables the button. Set the restoration file path and click [**Restore**] button to load setup from the specified backup file.
 - Restore the Default
Initializes SSM Configuration Manager program's setup to the default settings.
 - Language
Display language can be specified.
 - Use Device's Default Name
When it is checked, the name of the camera registered to the device is displayed in the list or the screen.

SSM configuration manager

- Login Restrictions

Login restrictions can be specified.

- Number of Failures : Login is restricted when the specified number of login attempts is exceeded.
- Time Limit : Login is restricted for a specified time after a login failure.

- Password Change Notification

Password change notification can be sent.

After it is turned <Use>, the notice is sent at the interval specified in <Frequency>.

- Server Information

- SM DDNS Use/Not Use : This option specifies whether the DDNS login function will be used by the system manager in Mobile Viewer and Web Studio.
- DDNS ID : Enter the ID to be used for DDNS login.

3. When done, click **[Apply]** button.

SSM console

This is a program to monitor the camera images registered and assigned to Configuration Manager, check the event, and search the data stored in the device.

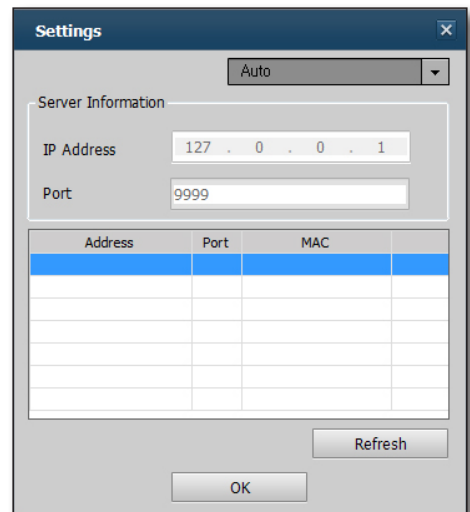
LOG IN / OUT

Logging In

Once the program is started, a user must log in for correct use of the SSM Console.

1. Click SSM Console icon.
The Login dialog should appear.
 2. <LIVE>, <EVENT> and <SEARCH> viewer types are shown when viewer selection tab is clicked. Select one and log in to start the selected viewer.
 3. Enter the user ID and password in the login window.
 - Default ID : admin
 - Password : Enter the password registered during the installation step.
- ! ■ If SSM is installed in distributed mode and you need to start the program install in another server, click the [] button located below the login button in the login window to register the server to either <Auto> or <Manual>.

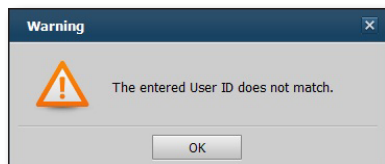
■ If it is set to <Auto>, SystemManager is automatically selected. If it is set to <Manual>, SystemManager can be selected from the list, or IP and Port information can be set.



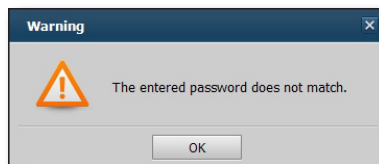
SSM console



- Select <Save Login ID> to avoid account input from the next login.
- Set <Auto Login> in Settings to log in automatically upon starting the program.
- In the cases below, login will fail and the user will be prompted with login information.



< If entered unregistered user ID >



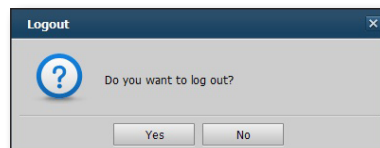
< If entered password does not match >

Logging Out

For safer use of SSM Console, please log out when the work period is finished.

Logging out saves the last screen composition and then closes all windows, and returns to the login prompt.

1. On the main window, click [] button.
The Logout dialog should appear.
2. On the dialog, click [Yes] button.
It logs out.
Terminating SSM Console automatically logs out the user.



SSM CONSOLE SCREEN COMPOSITION



Item	Description	
1	ID	Shows the User ID currently logged in.
2	UI LOCK	Locks the user interface. When attempted to use the program while locked, password dialog appears to unlock.
3	S/W Title	Shows the software title.
4	Logout	Logs out and exits.
5	Virtual matrix Controller	Run or terminate Virtual Matrix Controller.
6	Selecting the Viewer	You may select and run a desired viewer from <LIVE>, <EVENT> and <SEARCH>, or you can add a shortcut link to external program. Added external shortcut is shown in a list.
7	Check the System Status	You may check the system status of computers installed with each program component.

SSM console

Item		Description
8	Settings	Opens the system settings menu screen.
9	Close	Exits the program.
10	Help	Shows the SSM Console application's information.
11	Menu Bar	Loaded with executable menu buttons.
12	Display Pane	Shows the screen according to the selected viewer.

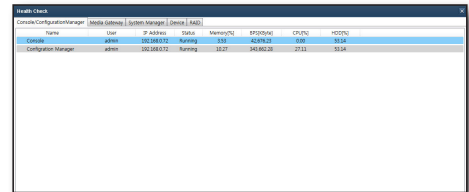
Check the System Status

You may check the status of the computers installed with each program component.

1. Click [] on the top side of SSM Console.
2. Check each component's IP address and its status from the popped Health Check window.

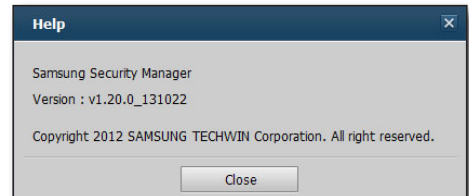


- The device status in the health check window is displayed only for systems supporting SNMP.



Help

Click Help button to display program version and date information window.



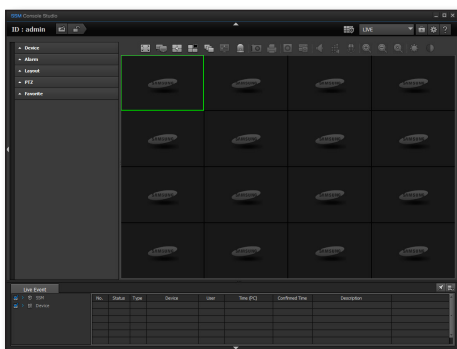
Checking up Console Configurations

The Console consists of Live, Search and Event Viewer.

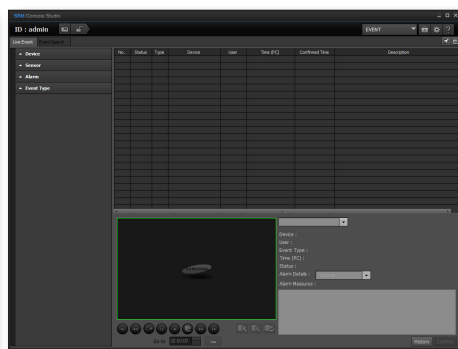
Understand the role of each component and run the appropriate one as required.

Console Structure

- Live Viewer : Provides real-time video and event information for monitoring, as well as PTZ control interface.
- Event Viewer : Provides viewing of real-time events and the searching / playing of device's events.

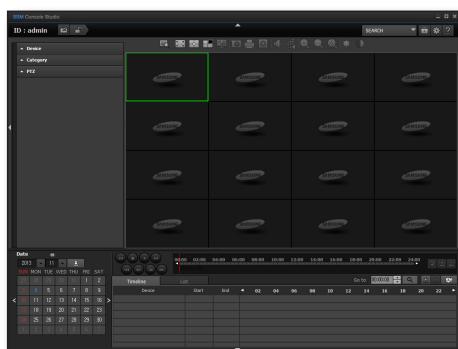


< Live Viewer >



< Event Viewer >

- Search Viewer : You can search and play video footage stored in your local computer or in the device.

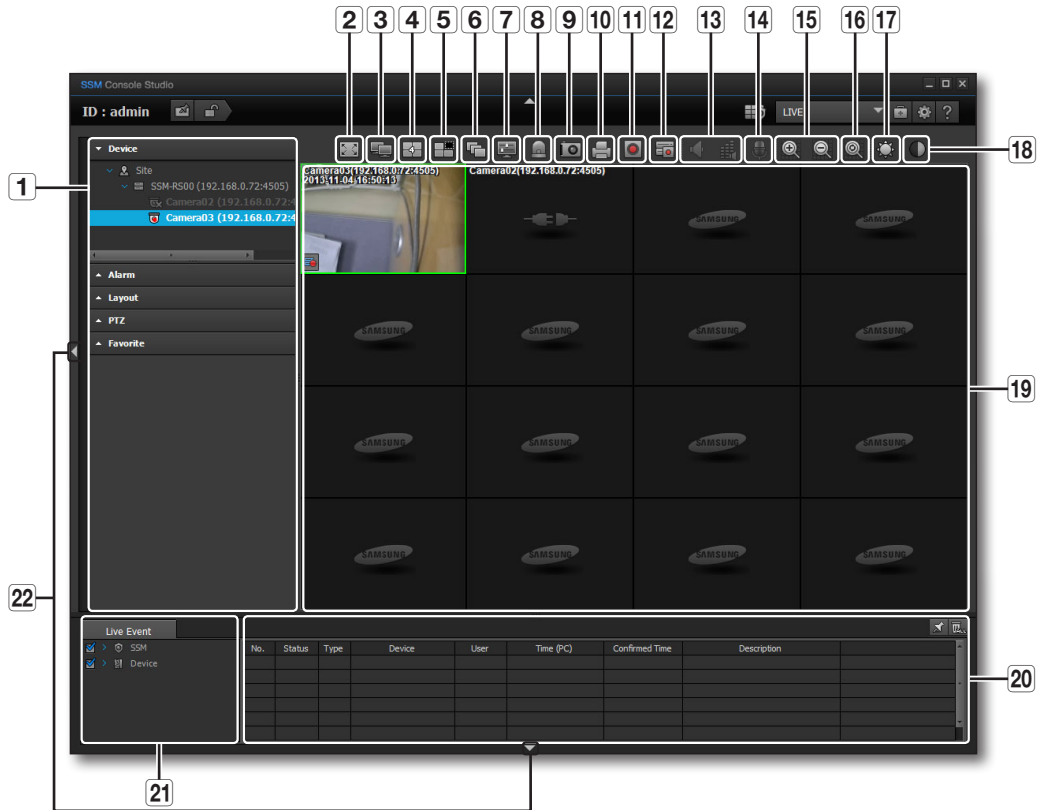


< Search Viewer >

live viewer

Provides real-time video and event information for monitoring, as well as PTZ control interface. Select **[LIVE]** menu of the viewer selection tab on the top right side of SSM Console. Initially, SSM Console's default viewer is set to the Live Viewer.

NAMES AND FUNCTIONS OF LIVE VIEWER



Item	Description	
1	List Menu	Shows registered devices and their connection status.
2	Full Screen	Fills the monitor's full area with video screen.
3	Multi Monitor	Enables expanded monitor configuration for monitoring.
4	Change Tile Pattern	Selects the split screen mode of the live viewer's video area.
5	Deletes the video tile.	Deletes all open video tiles.
6	Sequence	Screen switches its display layout mode automatically in order and interval defined in " Settings > Screen > Monitor > Sequence ".

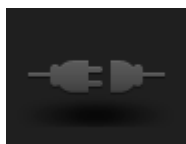
Item		Description
7	OSD On/Off	Show or hide displayed indicators.
8	Initialize Events	Clears out all event indicators from all video tiles.
9	Capture	Captures the selected video tile's current screen as an image file.
10	Print	Prints out the selected video tile's current screen.
11	Record	Starts or stops recording of the selected video tile.
12	Device REC	Starts or stops recording with connected device remotely.
13	Speaker	Turns on or off the speaker.
	Volume	Adjusts audio volume.
14	Talk	If supported by the connected device, activates microphone to talk.
15	Zoom In/Out	Enlarges or reduces video size using digital zoom.
16	Original Size	Resizes zoomed screen to its original 100% size.
17	Brightness	Adjusts the current video tile's brightness.
18	Contrast	Adjusts the current video tile's contrast.
19	Display Pane	Shows the Live Viewer screen.
20	Event List	Shows events occurred on connected devices.
21	Event Filter	You can select event types to be displayed on the event list.
22	Show/Hide Tools	Use these buttons to show or hide menu pane and control buttons.

Camera status indicator

Indicators shown on the video tile tells the connected camera's input status.



< Video Loss >



< Disconnected >



< Exceeded max
user >



< Camera Off or
Covert >

NAMES AND FEATURES OF SCREEN INDICATORS



Item		Description
1	Camera Name	Shows the name and IP address of camera connected to the corresponding video tile. If <Use Device's Default Name> is set, the name registered to the device is shown as the camera name.
2	Date & Time	Shows the video's date and time information.
3	Icon	 Shows the device supports PTZ control.
		 Display the status of audio output.
		 Display the status of using the microphone.
		 Appears when a sensor event is generated.
		 Appears if motion event is detected by the corresponding camera.
		 Appears if a video analysis event has occurred on the corresponding camera.
		 Appears if audio event is detected by the corresponding camera.
		 Shows that recording is in progress on the computer running SSM Console.
		 Shows that recording is in progress on a remotely connected device.

DEVICE

Add a networked device and allocate a registered camera to the user's device list. Select the device to view the in a tile.

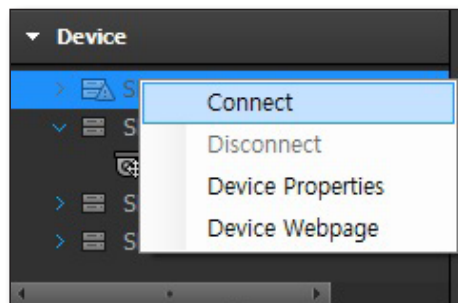
In registration step, set to **<Connect>** to display the device in the list as connected.

Connecting Devices

1. Select a device to be connected to.
2. Right mouse click on it.
Upon the context menu, select **<Connect>**.

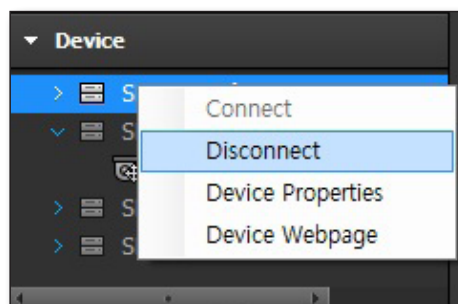


- For further information on adding devices, refer to "**Registration > Device**". (Page 21)
- If logged out while connected to a device, logging in again revives previously connected devices and groups automatically.
- If you select a list and enter text (keyword), only those groups and devices that contain the text will be displayed in the search result. This is useful if you do the search for a long list of devices or groups.



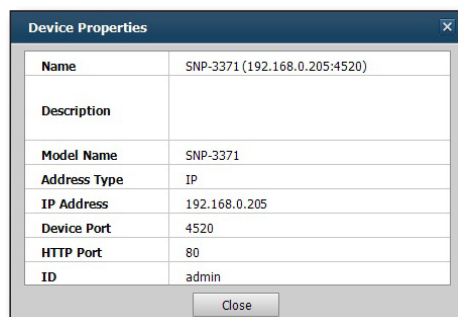
Disconnecting Devices

1. Select a device to be disconnected.
2. Right mouse click on it.
Upon the context menu, select **<Disconnect>**.



Device Properties

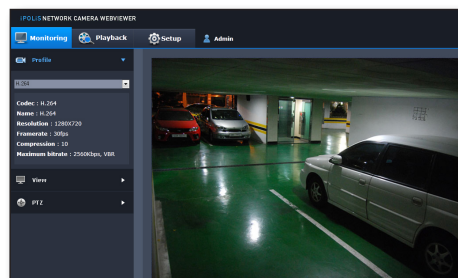
1. Select a device.
2. Right mouse click on it.
Upon the context menu, select **<Device Properties>**.
3. Check the device information.



Device Webpage

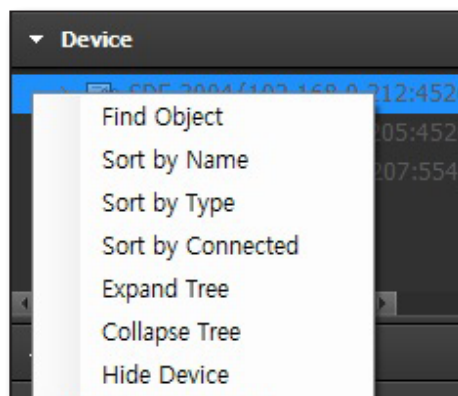
Runs the device on a web viewer.

1. Select a device.
2. Right mouse click on it.
Upon the context menu, select **<Device Webpage>**.
3. Enter the access information to the device, ID and password.
4. Moves to the connected device's web viewer starter page.



Device Context Menu

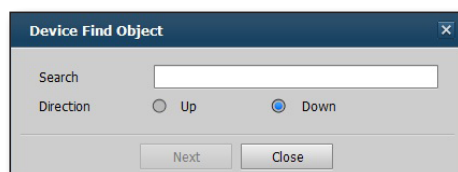
Right mouse click on an empty area within the device list to open device context menu.



Find Objects

You may find a device by name from the registered devices.

1. From the context menu, select **<Find Object>**.
2. Once the Find Object window appears, select the searching direction.
3. Enter the keyword for name and click **[Next]** button.



- **[Ctrl]+[F]** also brings the find object window.
- Find object opens only when the object tree has the focus (highlighted).
- The **[Next]** button is activated only if a keyword exists.

Sort by Name

From the context menu, select **<Sort by Name>** to sort devices by name.

Sort by Type

From the context menu, select **<Sort by Type>** to sort devices by type, while the device tree collapses.

Sort by Connected

From the context menu, select **<Sort by Connected>** to sort devices by the order of connection establishment.

Expand / Collapse Tree

From the context menu, select **<Expand Tree>** or **<Collapse Tree>** to show or hide tree list of registered devices.

Show / Hide Devices

From the context menu, select **<Hide Device>** to hide registered devices.

If hidden, the menu switches to **<Show Device>** automatically, and selecting it reveals the hidden devices.

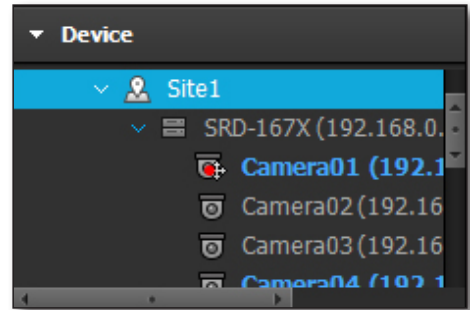
CAMERA LIST

If connecting to the device was successful, a list of connected cameras appears.

Camera Indicators

Indicators that appear by each camera in the list show the camera's status information.

-  : General camera
-  : Camera supports PTZ control
-  : In recording
-  : Camera disconnected by a user
-  : Camera is disconnected / unreachable



Camera Context Menu

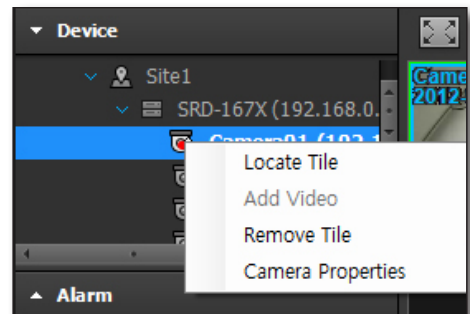
From the device list, select a camera and right click on it to open the camera context menu.

Locate Tile

Highlights the selected camera's video tile.

Add Video

Selected camera's video is displayed on an unoccupied tile.

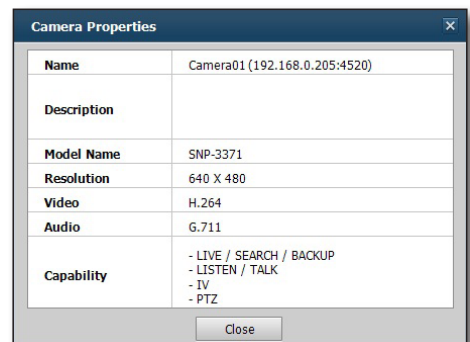


Remove Tile

Select a camera and open context menu to select **<Remove Tile>** to remove the corresponding tile.

Camera Properties

Select a camera and open context menu to select **<Camera Properties>** to display the camera's properties.



ALARM OUT AND CONTROL

Once a device's connection is established successfully, the device appears in the Alarm Out list. You may turn on or off each device's alarm.

Alarm Out Context Menu

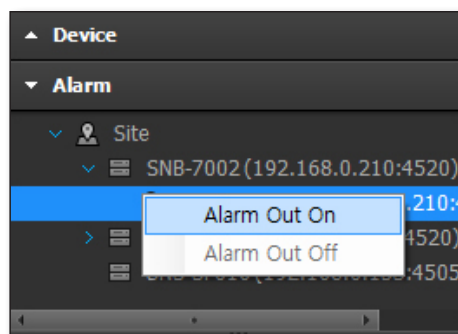
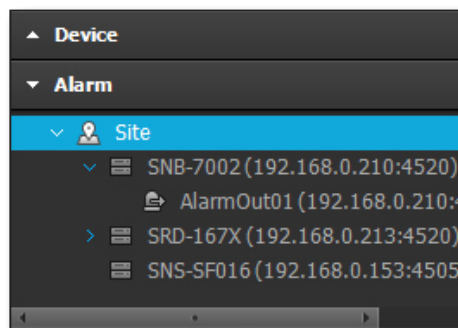
Select an alarm and right click on it to open its context menu that enables alarm control.

Turning On Alarm Out

Select an alarm and open context menu to select **<Alarm Out On>** to turn on the selected alarm's alarm output.

Turning Off Alarm Out

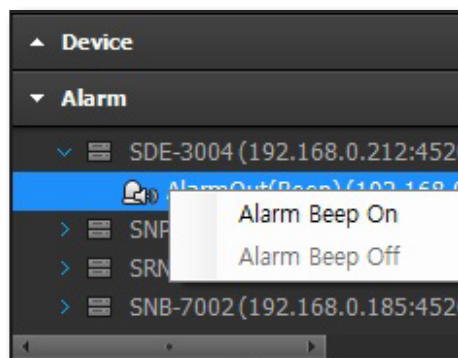
Select an alarm and open context menu to select **<Alarm Out Off>** to turn off the selected alarm's alarm output.



Turning On / Off Alarm Beep

For devices supporting Alarm beep speaker, **<Alarm Beep On>** or **<Alarm Beep Off>** menu appears.

Upon such device's alarms, you can turn on or off beep sound output.



SELECTING TILE PATTERN

You can set the video pane's split-screen mode.

- 4:3 screen modes : 1/4/6/8/9/10/13/16/17/21/25/36/49/64



- 16:9 screen modes : 6/12/20/30



- While in multi-monitor environment, layouts and split modes for less than 100 channels will be available. Other modes will be disabled.
- Modes having more splits than the number defined in **<Split Screen>** will be disabled. (Page 116)

LAYOUT

You can configure SSM software to display in multiple monitoring devices with defined layout.

From the top side menu, select [] button then select a desired multi monitor type, and configure the layout as preferred on the expanded monitor.

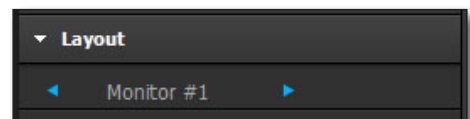
Apply a layout for the multi monitors

Selecting the multi monitors

1. From the top side menu, click [] button.
2. Select the number of monitors.
As many monitors as specified are displayed on the screen.
3. Select a monitor to be applied with the layout settings by clicking arrows beside the monitor name.



- Monitor #1 is the default monitor, and Monitor #2 and others are expanded monitors.
- You can set expanded monitor in **"Screen > Monitor"**. (Page 116)

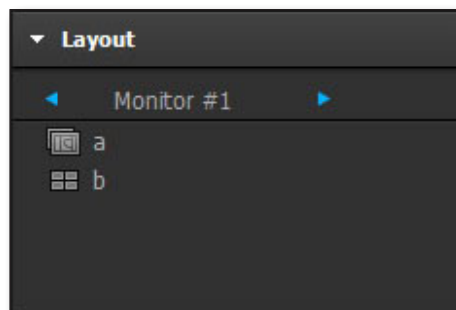


Setting the Tile Pattern for the expansion monitor

1. Click a tile of an expansion monitor to activate the corresponding monitor.
2. From the top side menu, click [] button.
3. Select a desired tile pattern to apply it.

Applying Layout

Select a monitor and then double click the desired layout.
The selected monitor is applied with the layout.



To add a layout

You can add multiple layouts to a desired monitor.

The layout can be registered in "**Layout > Register**" of SSM Configuration Manager.

For further information on adding layouts, refer to "**Layout Setting**". (Page 41)



< Camera Layout >



< Map Layout >

Using Map Layout

Selecting Split View Mode for Map Layout

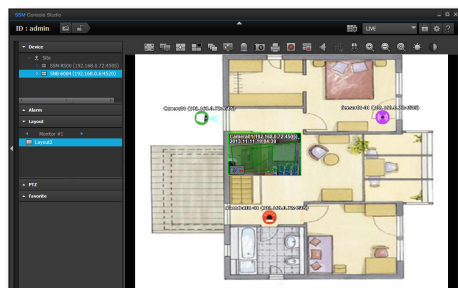
When selecting a Map Layout, up to 10 split view modes are available for the corresponding.



Utilizing the Map Layout

In the split view mode, a desired layout can be applied quickly.

- The Free mode places the video right upon the camera icon when the icon on the map layout is clicked.
- The other 9 modes place the camera's video on the first unoccupied tile when clicked the camera icon.
- To delete the selected video, press the **[Delete]** key on the keyboard.
- To exit Map Layout mode, click [] button.
- If you select a layout group in the layout tree, the first map that belongs to it will be displayed. Also, the screen will display the button you can press to move to the map that belongs to the group.

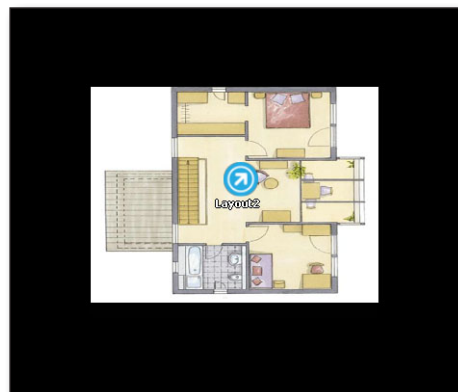


To initialize the angle

Click on the [] button and then the Move to Map button to initialize the angle.

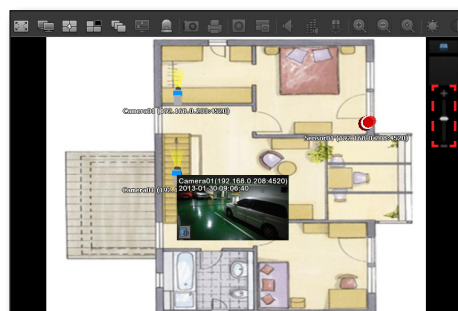
To move around the map

- While holding down the mouse's right click, move your mouse to change the map angle.
While holding down the mouse's left click, move your mouse to change the map location.



To zoom in/out

Use zoom control bar to zoom in/out the current map screen.
To zoom in/out, click the control bar in the middle and drag.
Mouse wheel button zooms in/out the map too.



Instant Viewer

The camera icon on the map layout blinks if an event occurs. Double click the camera icon to display "**Instant Viewer**".

It enables checking the event and digital zooming on the video screen.



- For further information on using the Instant Viewer, refer to "**Instant Viewer**". (Page 89)

VIRTUAL MATRIX CONTROLLER

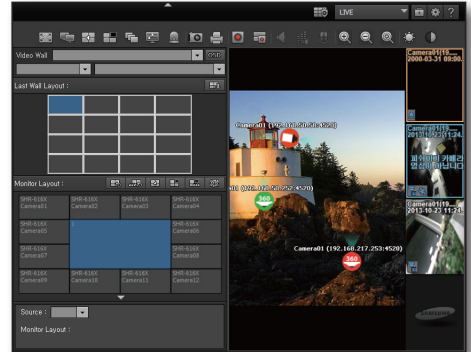
Virtual Matrix Controller is used to control the SVM (Samsung Virtual Matrix) S/W and it requires installation of the SVM.

Virtual Matrix Controller can only retrieve the settings in the SVM and apply or edit them. It cannot save the modifications. If you want to save the changed settings, you need to use the SVM.

1. Click on the [] button in the top of the SSM Console screen.
2. In the right hand side of the video window, the Virtual Matrix control screen will be displayed.

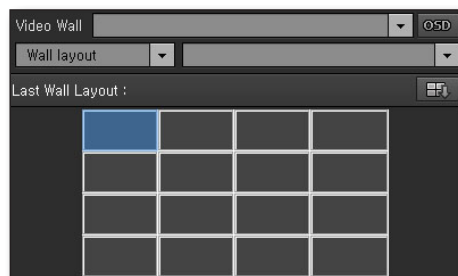
Functions of the monitor layout viewer button

-  /  : Loads the video displayed on the wall monitor into the program.
Runs or stops sequences/spots while sequence/spot is selected.
 -  : Removes the event displays from the selected tile.
 -  : Removes the event displays from the selected monitor.
 -  : Changes the monitor layout pattern.
 -  : Deletes the displayed content from the selected tile.
 -  : Deletes the displayed content from all the tiles.
 -  : Reverts to the last saved monitor layout.
-  ■ A tile is a single unit of video displayed in the monitor.
- While editing the monitor layout, if you want to work on another monitor layout, then click on it to move to it immediately.
- The information display window in the bottom of the monitor layout will display the <Wall Layout> if you click on it and will display the <Monitor Layout> if you click on it.

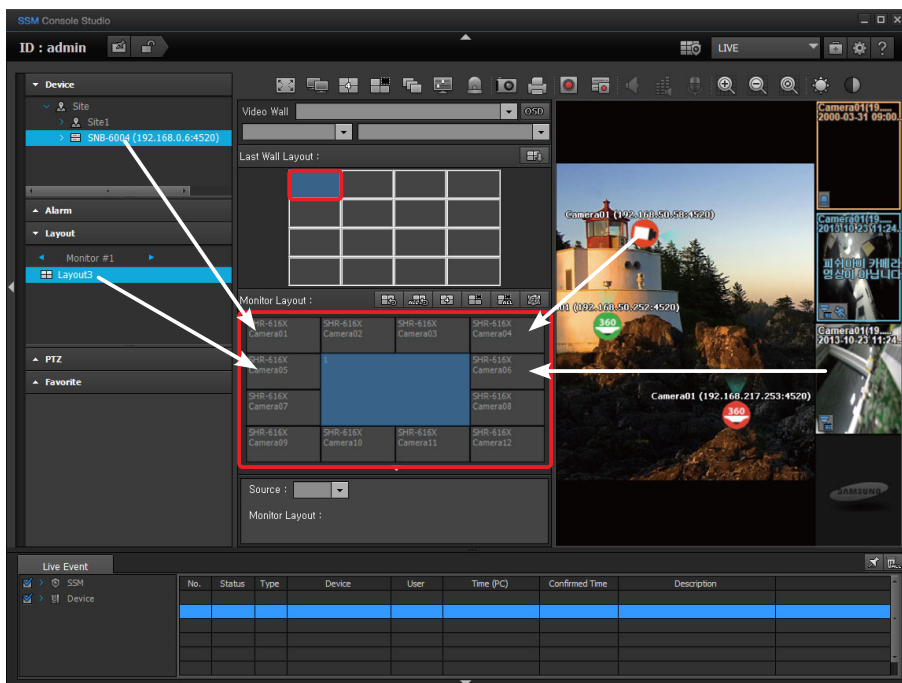


To apply a Wall Layout

1. Select a registered wall.
2. Set the wall mode to Wall Layout.
3. Select a wall layout to use.
The wall layout will be immediately applied to the wall.
4. The selected Wall Layout name will be displayed.



To edit the Monitor Layout



1. Select a specific tile of the Wall Layout and double click on it.
The selected tile's monitor layout will be displayed.
2. Drag and drop the device/layout/map icon/live video to the monitor layout.
It will be reflected in the wall on a real time basis.
 - Video that can be assigned by dragging and dropping
 - Drag a device and assign it to the monitor layout
 - Drag a layout and assign it to the monitor layout
 - Drag an event and assign it to the monitor layout
 - Drag a map layout icon and assign it to the monitor layout
 - Drag video played in the SSM and assign it to the monitor layout

live viewer

To run a wall sequence

A wall sequence is a function to shift multiple wall layouts in order to view multiple layouts on a single wall.

1. Set the Wall Mode to sequence.
2. Select a specific wall sequence from the wall sequence list.
3. If you press it once, a wall sequence will appear. Press it one more time to terminate it.

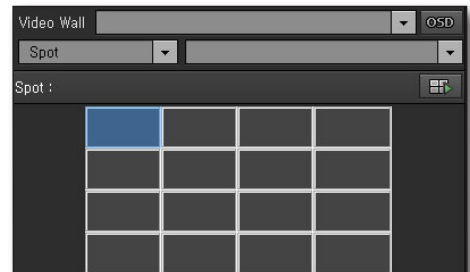


If you want to run a spot

A spot is a function to change the wall video when an event occurs on a specific device.

- Wall spot : When an event occurs on a device, a specific wall layout is displayed on the wall.
- Monitor spot : When an event occurs on a device, a specific monitor layout is displayed on a specific monitor.
- Tile spot : When an event occurs on a device, a camera with an event occurring in it will be displayed on the tile or a specific monitor layout.

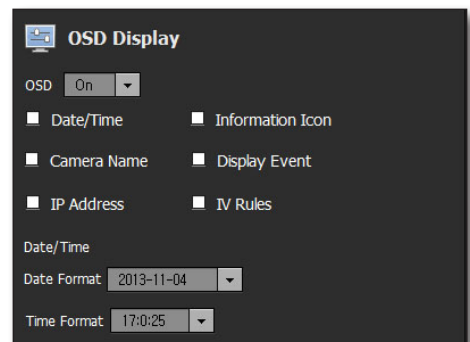
1. Set the wall mode to sequence.
It will display wall/monitor/tile spots added in the SVM.
2. Select a specific spot.
3. If you press it once, a spot will begin. Press it one more time to terminate it.



If you want to set the OSD on the wall

Set the OSD to be displayed on the video wall.

1. Click on the [OSD] button.
The OSD settings screen will be displayed.
2. Select an OSD item to be displayed in the video.
3. Click on the [OK] button after settings are completed.
Click on the [Cancel] button to return to the previous screen.

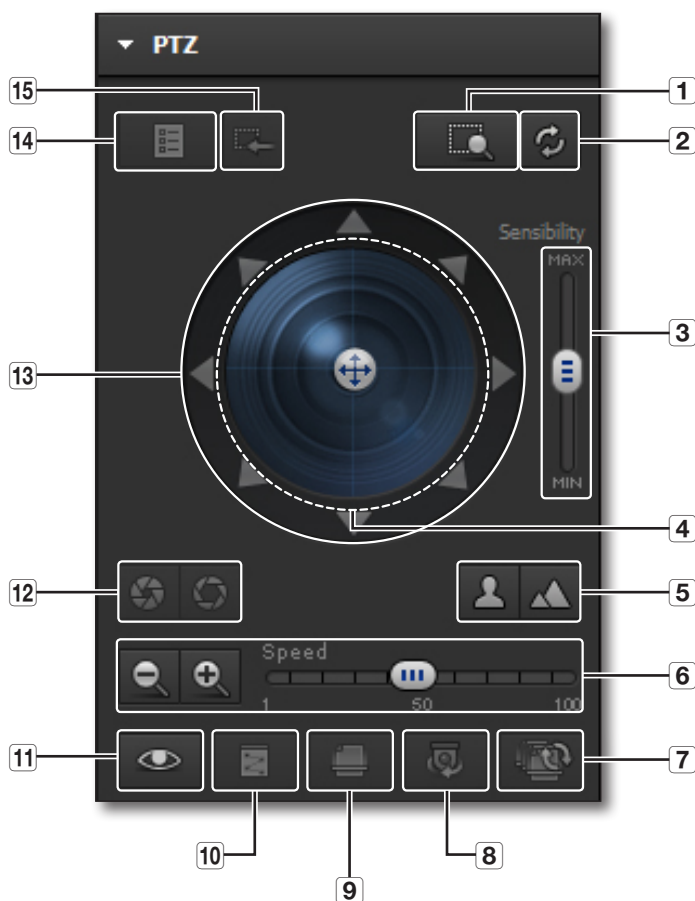


PTZ CONTROL

If the connected device supports PTZ functions, you can control PTZ camera remotely.

- Even if the box camera does not have the PTZ feature, it can still use some of the functions if <Use Panomorph Lens> is set.
- Depending on camera model used, PTZ control may not be supported. For further information, refer to the camera's user manual.

Names and Functions of PTZ Control Window



Item		Description
1	Area Zoom	Controls PTZ to fill in tile with the dragged area on the video.
2	Go to 1x Zoom	Restores the original 1x zoom from Area Zoom screen.
3	PTZ Sensitivity Controller	Adjusts the PTZ ball control sensitivity to faster or slower.
4	PTZ Ball	While operating PTZ, click and hold the ball and drag to desired direction to adjust the camera's framing.

Item		Description
5	Focus Adjustment	Adjusts the camera's focus manually. - Focus Near : Adjusts the focus range to closer distance. - Focus Far : Adjusts the focus range to farther distance.
6	Zoom Adjustment	Zooms in / out with controllable zooming speed. Zooming activates only if clicked at the speed set by speed slider. - Zoom Speed Slider : Sets the zooming speed out of 1 – 100 range. - Zoom In : Zooms in to enlarge the image. - Zoom Out : Zooms out to reduce the image.
7	Patrol	This is to call a group and its presets in order for monitoring. You can only activate or deactivate the <Tour> option of the camera.
8	Swing/Autopan	Sets the camera to repeat swinging from a certain position to another. According to the configuration, you can set to rotate or swing. You can only activate or deactivate <Autopan> option of the camera.
9	Group/Scan	Controls the camera according to the added preset groups in order, where a preset group can be of multiple presets. You can only activate or deactivate <Scan> option of the camera.
10	Trace/Pattern	Moves and zooms the camera with a predefined settings automatically. You can only activate or deactivate <Pattern> option of the camera.
11	Preset	You can save specific camera's view as a preset, or recall a preset to set camera framing.
12	Iris Control	Controls the amount of light travels through the lens. - Close Iris : Sets to bigger F number for less light exposure, resulting in darker image. - Open Iris : Sets to smaller F number for more light exposure, resulting in brighter image.
13	Camera Menu Traversal	While opening the camera menu, adjust the selected position.
14	Switch to the Menu Mode	Moves to the connected camera's settings menu screen.
15	Exit the Menu Mode	Exits the menu setup.

Using the Camera Menu

Click Camera Menu button to toggle display of the connected camera's menu on the screen.

1. Using the PTZ Ball up/down/left/right control button, move to a desired menu.
2. To select the menu, click PTZ ball control.
3. To exit camera menu mode, click [] button.

Preset Control

Click [] button to display saved list of presets.

Select one from the list to set the camera's view to the saved location.



- Presets can be saved in Settings menu.
For further information on preset, refer to "**Setting Presets**".
(Page 40)

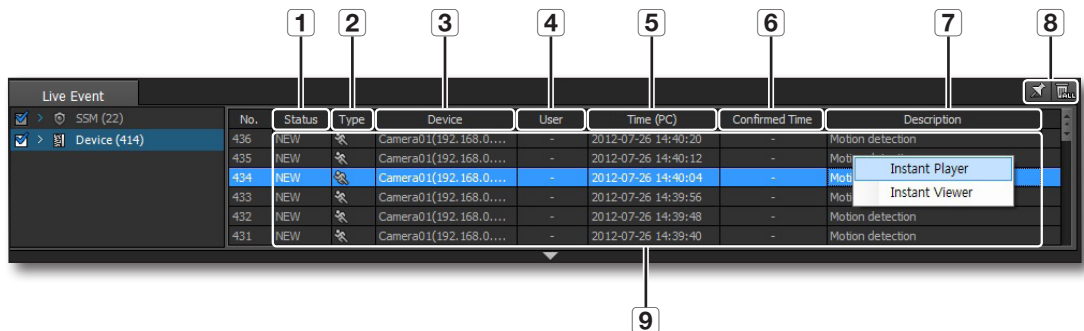
Preset	
No.	Name
01	TEST
02	SH

EVENT LIST

Lists up device events in real-time.

Viewing Real-time Events

You can check device events from all connected devices in the list.
Filter the events by selecting type of events for the Event List.

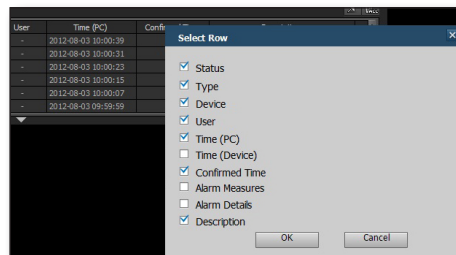


Item		Description
1	Status	Shows the event status.
2	Type	Shows occurred event's type as icon.
3	Device	Shows the device type.
4	User	In SSM system, it shows the current SSM user's account information. For general device-related events (motion detection, sensor, etc.), the user ID who acknowledged the event is shown.
5	Time (PC)	Shows the event time.
6	Confirmed Time	Shows the time acknowledged.
7	Description	Describes the meaning of the event.
8	Scroll Lock	 Locks the list not to automatically scroll.
	Clear List	 Fully clears out the event list.
9	Event List	Shows real-time events of the device selected in the left pane. Double click a listed item to open "Instant Viewer" pop-up window. Right mouse clicking on an item opens context menu of "Instant Viewer" and "Instant Player".

Selecting displayed items

You can select items to be displayed in the event list.

1. Select the title on top of the event list, and right click on it.
2. Select event items to be displayed in the list, by checking the checkbox.
Items such as event time (device), measures taken and alert history can be listed additionally.



PLAYING RECORDED EVENTS

Select an event item from the list and right click on it to open context menu of <Instant Viewer> and <Instant Player>. Select either one of them to check the video.

No.	Status	Type	Device	User	Time (PC)	Confirmed Time	Description
436	NEW	N	Camera01(102, 108, 0, 0)	-	2012-07-26 14:40:20	-	Motion detection
435	NEW	N	Camera01(102, 108, 0, 0)	-	2012-07-26 14:40:12	-	Motion detection
434	NEW	N	Camera01(102, 108, 0, 0)	-	2012-07-26 14:40:04	-	Motion detection
433	NEW	N	Camera01(102, 108, 0, 0)	-	2012-07-26 14:39:56	-	Motion detection
432	NEW	N	Camera01(102, 108, 0, 0)	-	2012-07-26 14:39:48	-	Motion detection
431	NEW	N	Camera01(102, 108, 0, 0)	-	2012-07-26 14:39:40	-	Motion detection

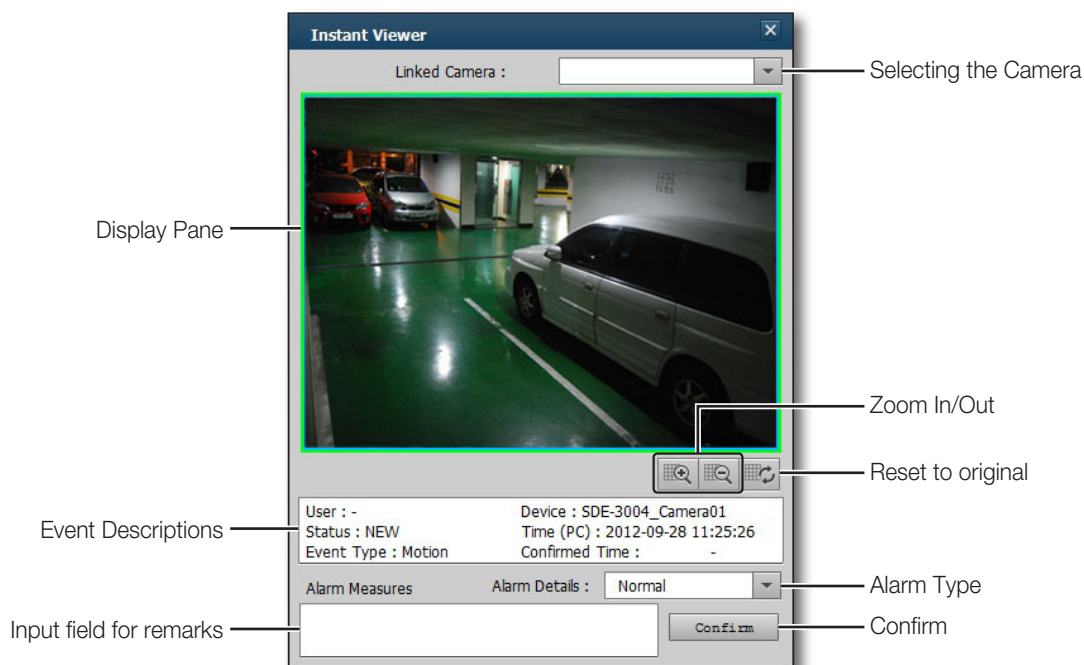


- The <Instant Player> is playable only if the corresponding device contains saved data.

Instant Viewer

Double click a listed item to open "Instant Viewer" pop-up window.

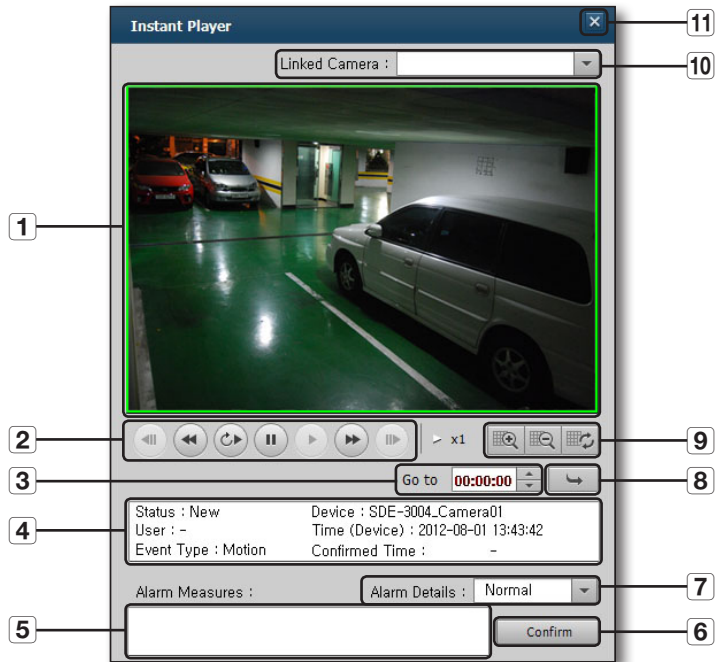
You can confirm the event, record event remarks and end the event status.



Instant Player

Select an event item from the list and right click on it to open context menu and click **<Instant Player>** to open it and play the corresponding camera's video image.

Names and Functions of the Instant Player



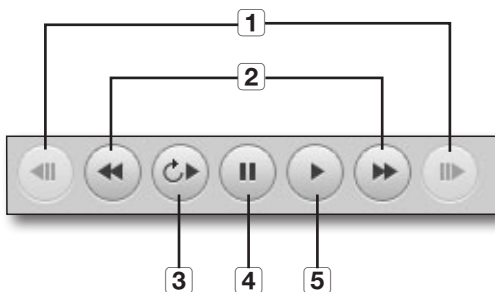
Item	Description	
1	Display Pane	Shows the video.
2	Video control buttons	Controls the current event playback.
3	Time Selection	Plays video of the selected time.
4	Event Information	Shows the event information.
5	Input field for remarks	Enter the measures taken or remarks regarding the occurred event.
6	Confirm	Confirms and acknowledges the event.
7	Alarm Details	You can selectively record alarm event's type when confirming the event.
8	Playback by time	Moves to the selected time.

Item	Description
9 Video Control	Controls digital zooming of the player screen.
10 Linked Camera	For a sensor event, the video of the camera connected to the camera video/sensor specified as the action (output) type in event action can be selected for viewing. For a camera related event, the camera image specified as the action (output) type in the camera video/event action of the generated event can be selected for viewing.
11 Exit	Closes and exits the Instant Player. If [Confirm] button is not clicked, exiting the player does not confirm the event.



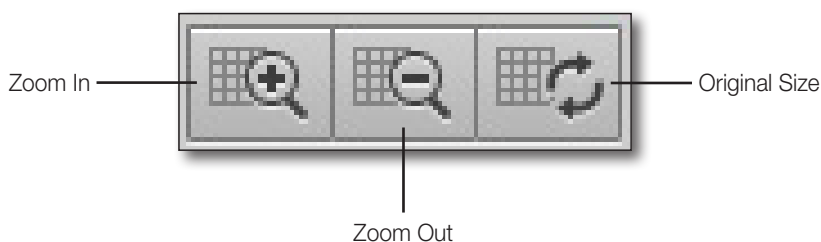
- Recorded video footage can be played with Event Viewer, Search Viewer and Instant Player. Note that one saved footage cannot be played with multiple viewers at the same time.

Names and Functions of Video Control Buttons



1	Step by frames
2	Forward/backward fast play
3	Play from event time (reset to event time)
4	Pause
5	Play

Video Control / Zoom In / Zoom Out Buttons



LIVE VIDEO SCREEN

Live feed from the connected device is displayed in the selected tile.

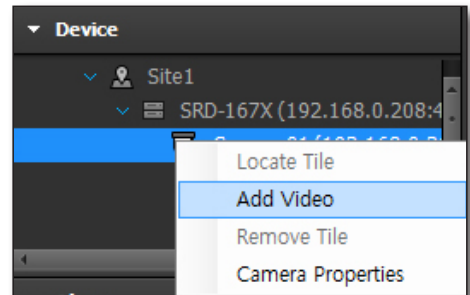
Monitoring by Selecting Cameras

To display video feed from a camera on an unoccupied tile:

- Double click a camera from the device tree to display its video feed on the first unoccupied tile.
- Select a tile, and open the context menu to select **<Add Video>**.



- In case of using multiple monitors, it is added to the monitor which is activated.
- When there's no empty tile, the video is displayed on the focused (selected) tile.



To display video feed from a camera on a specific tile:

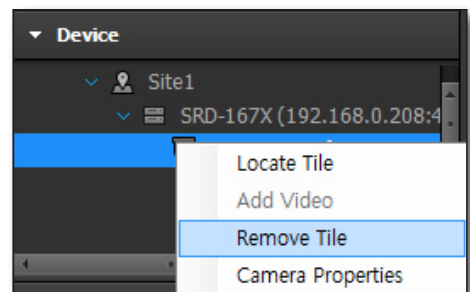
1. Select a camera from the device tree.
2. Drag it and drop on a desired tile.

To change the video tile:

1. Select a tile.
2. Drag it and drop on a desired tile.
Selected two tile's video display swaps each other.

To remove video feed from a tile:

1. Select a tile or camera to delete and right click on it.
 - Or, press the **[Delete]** key of the keyboard to promptly delete.
2. From the context menu, select **<Remove Tile>**.
The selected camera's video is removed from the tile and it becomes unoccupied.
3. To remove all video feeds from every tile, click [] button on top of video pane.
Entire tiles become unoccupied.



Using the Tile Context Menu

Select a video tile from the video pane and right click on it to open the context menu.

Click to select desired ones from the appeared list of available menu items.

Remove Tile

Removes the video from the selected tile.

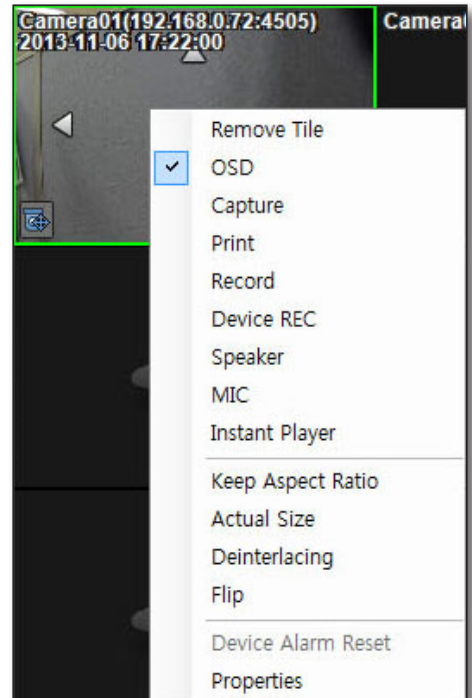
OSD

Sets whether to display on-screen display menu and icons on the video screen, such as date, camera name and other information.

It acts the same to that of the [] button on top side of video pane.



- For OSD information selection, check the item in the <OSD Display> selection menu of <Environment>. (Page 116)



Capture

Captures and saves the currently selected tile's video image in the specified destination file path.

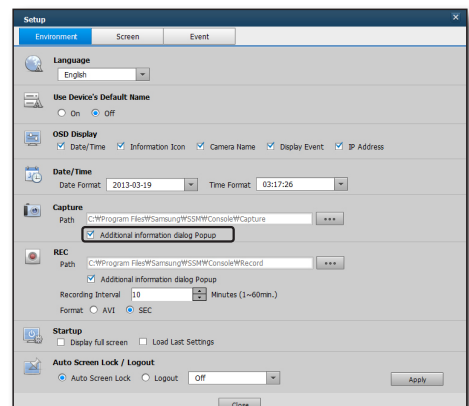
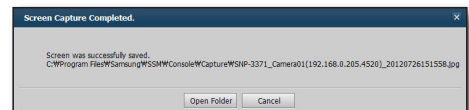
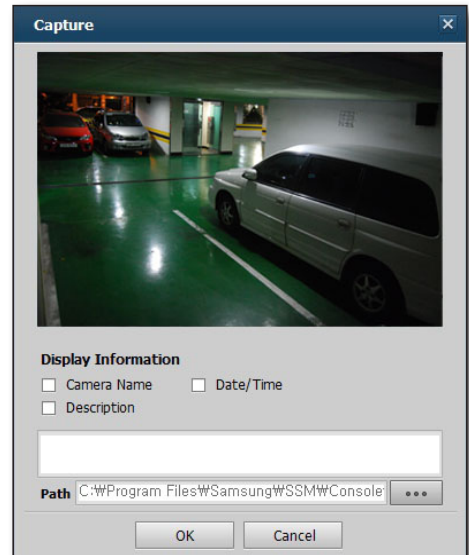
It acts the same to that of the [] button on top side of video pane.

To save the captured screen:

1. Select a tile to be captured.
"Capture" window appears.
 - Depending on system configuration, saves immediately without displaying the screen capture setup step.
2. In <Display Information>, check to select information items to be saved with the captured image.
 - Camera Name : If checked, saved capture contains the camera name at the top of the image.
 - Date/Time : If checked, saved capture contains the time captured at the top of the image.
 - Description : If checked, saved capture contains the description recorded in the Description text field.
 - Up to 50 characters can be entered.
 - Path : Sets the destination file path of the captured file.
3. When done with setup, click [OK] button.
A popup saying save completed appears.
4. To check saved capture file, click [Open Folder] button.



- If <Additional information dialog popup> option in "Environment > Capture" is selected, every capturing prompts with file path and image information on the popup dialog.
- If not selected, capturing directly saves the captured image without prompting with additional information dialog and completion dialogs appears.



Print

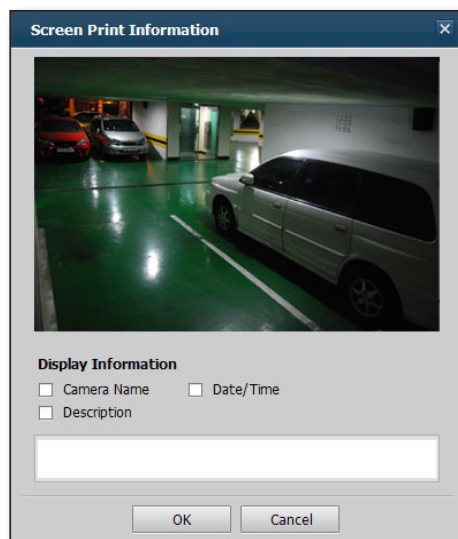
Prints out the selected tile's current video image to the printer connected with your computer.
It acts the same to that of the [] button on top side of video pane.

To print the screen:

1. Select a tile to be printed.
"Screen Print Information" window appears.
2. In <Display Information>, check to select information items to be printed with the screen image.
3. Click [OK].
Print window of the printer connected to your computer appears.



- For further details on <Display Information>, refer to "Capture". (Page 94)



Record

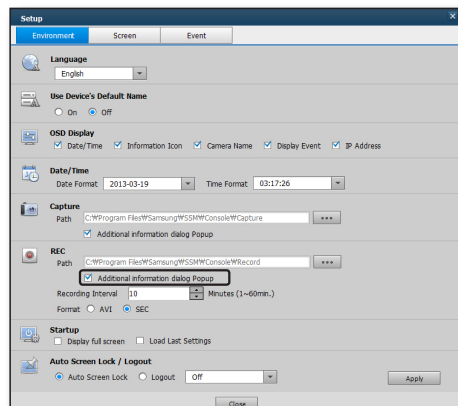
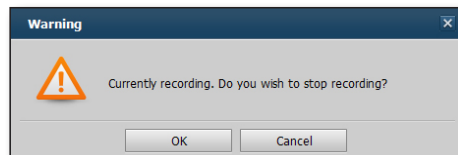
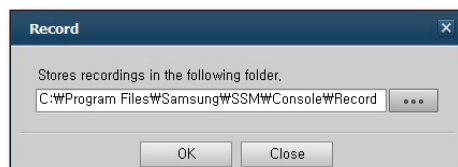
Starts and stops recording of the currently selected tile.
It acts the same as the [] button on top side of video pane.

To start recording:

1. Click <Record>.
The "Record" window appears.
 - Depending on system configuration, records immediately without displaying the record setup step.
2. Set the file path and click [OK] button.
The record indicator appears on the tile and starts recording.
3. To stop recording, click <Record> again.
A "Warning" dialog appears.
4. Click [OK].
Unchecking the checkbox in front of <Record> stops the recording.



- If <Additional information dialog popup> option in "Environment > REC" is selected, every recording prompts with file path on the popup dialog.



Device REC

Starts or stops recording onto the device connected to the tile's camera.
It acts the same as the [] button on top side of video pane.

Speaker

Transmits or stops Transmitting sound from the selected camera.
It acts the same to that of the [] button on top side of video pane.

Microphone

Produces sound through the microphone at a remote device.
It acts the same to that of the [] button on top side of video pane.

Instant Player

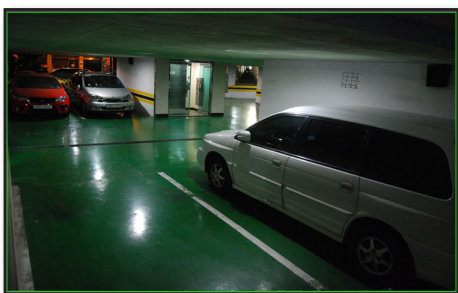
Displays the Instant Player window for the selected channel.



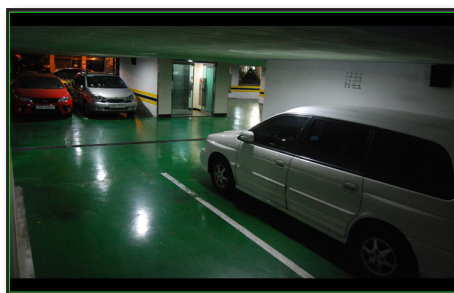
- Only playable if the device contains recorded footage data.
- For further use of the Instant Player, refer to "Instant Player". (Page 90)

Keep Aspect Ratio

Keeps original video's aspect ratio.
If not selected, the video is filled into the video pane.



< Variable Aspect Ratio >



< Keep Aspect Ratio >

Actual Size

If selected, the video is reset to the original size.
If the video's size is bigger than the screen, you can move it with mouse dragging.

Deinterlacing

Sets or cancels deinterlacing of the tile's video.

Flip

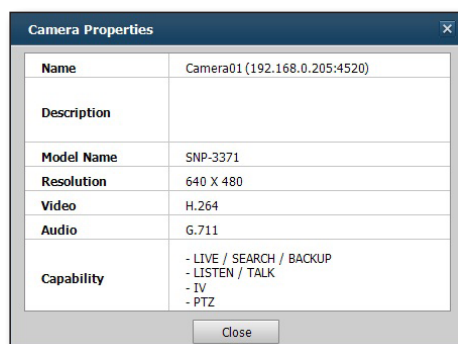
Flips the video vertically.

Device Alarm Reset

Initialize the alarm settings.

Properties

Shows the selected camera's property information in a pop-up window.



DIGITAL ZOOM

Digital zooming allows the enlarging of the video as if using a magnifier.

It works on the displayed image by enlarging it digitally, which is different than optical zooming of lens.

Digital zooming provides magnification up to 16 times of the original.

Setting Digital Zoom Area

1. From the top side menu, click [] button.
It switches to digital zooming mode, and every clicking magnifies the image by 50%.
2. Click a desired video and then drag it or click Zoom In button for further zooming.
Enlarged image is centered by the point you clicked.
When an area is selected by dragging, the selection fills the screen.



Digital Zooming Out

1. From the top side menu, click [] button.
2. Click a video.
Reduced image is centered by the point you clicked.
Every clicking of Zoom Out button reduces the image by 50%.



Exiting Digital Zoom

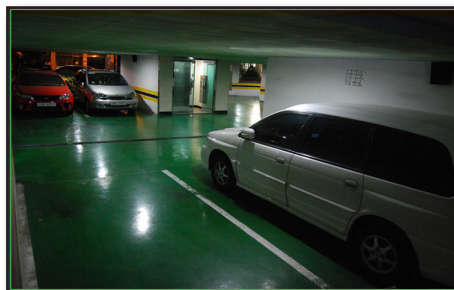
1. From the top side menu, click [] button.
2. Digital zooming ends, and the video is reset to the original.

Moving Video Area with Pan Cursor

1. While in digital zooming, click on the zoomed area marker shown near the bottom of digital zoom screen.
2. While holding mouse button, drag to move it to a desired area.



< In Digital Zooming >



< Released Digital Zooming >



- If clicked Zoom In/Out button, it resizes by 50%.
- Restoring to the Original Size exits digital zooming.

Switching to Full Screen Mode

1. From the top side menu, click [] button.
Only the video pane fills the screen.
2. To exit the full screen mode, press [Esc] on the keyboard.

Running Sequence

This function enables an automatic sequence display of channels in a pre set time.

Used when there are more connected channels than the current screen splits. It switches to the next set of channels according to the current screen split mode.

1. From the top side menu, click [] button.
Runs sequenced display in the current split screen mode.
2. To exit sequence mode, click [] button again.



- While in sequence mode, Map Layout becomes unavailable.
- The Sequence mode supports split screen mode up to 16-splits. If you configure Sequence mode to include a layout having more than 16 splits, actual Sequence mode operation limits playback to 16-split mode.
- You can define the order of layouts and their dwell time for sequence mode in "**Settings > Screen > Monitor**". (Page 116)

Use of Panomorph Lens

The function supports a viewing angle of 360° using the mouse in the video tile of the camera on which the Panomorph lens is enabled.

1. Pan/Tilt Operation: Click on a tile and drag it to move the camera along the mouse drag.
2. Zoom Operation: Right-click and drag the mouse up or down to zoom in or out.
3. The PTZ panel can be used like a conventional PTZ camera.
4. It supports the Area Zoom and Preset functions like a conventional PTZ camera.
5. It supports the zoom function using the mouse wheel like a conventional PTZ camera.

event viewer

It provides viewing of real-time events and searching / playing events of devices.
Select [EVENT] menu of the viewer selection tab on the top right side of SSM Console.
Or, select [EVENT] viewer on login screen of SSM Console.

NAMES AND FUNCTIONS OF EVENT VIEWER



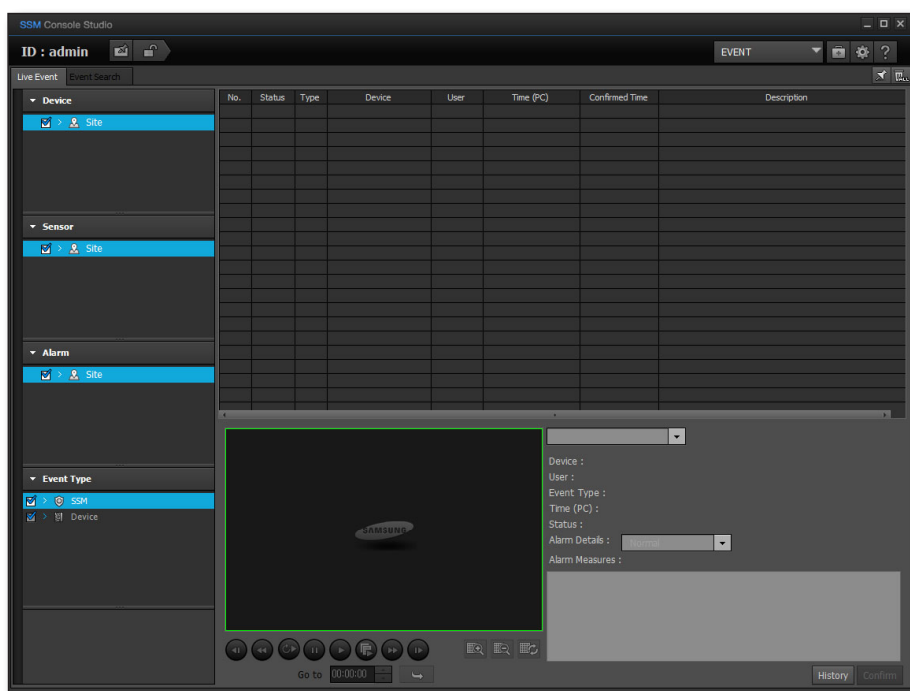
Item		Description
1	Live Event / Event Search Tabs	Select either one of real-time event and event search.
2	Device List	Select a device to display events of the selected device in the event list.
3	Sensor list	Select a sensor to be displayed in the event list window.
4	Alarm list	Select an alarm to be displayed in the event list window.
5	Event Type	Shows selected type of events only in the event list.
6	Scroll Lock, Clear List	Locks the list not to scroll, and clears all events listed.

Item		Description
7	Event List	Shows events, click column header to sort events by the selected one.
8	Event Details	It displays the detailed information and video of the selected event. ■ It displays the information of all events.
9	Confirm	When clicked after confirming the event searched, acknowledges the event. All events other than log, SSM (User, System) and Device (System, Alarm Out) can be confirmed as cleared event.
10	History	Shows the event history of the selected.

EVENT SEARCH

Viewing Live Events

You can check real-time events in the event list.

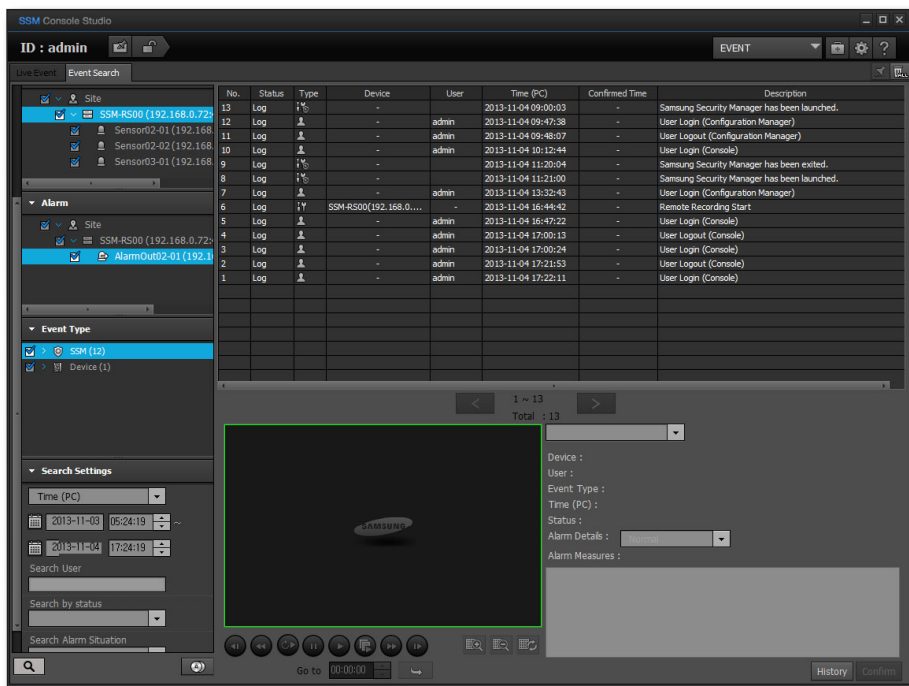


- For further details on checking events, refer to "Searching Events". (Page 102)

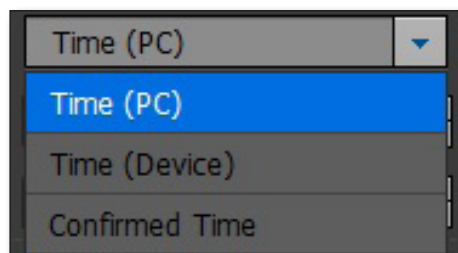
event viewer

Searching Events

Click Event Search tab to display event search menu.
You can specify event type and time for search.



1. Select desired event types by checking the checkboxes.
 - SSM : User, System
 - Device : System, Camera, Sensor, Alarm Out
 - Camera : Video Loss, Motion Detection, Audio Detection, Passing, Entering, Exiting, Disappearing (Appearing), Tampering, Tracking, Face Detection
2. Filter by time to search logs.
 - Time (PC) : You can search for occurred time.
 - Time (Device) : You can run event search based on the device time.
 - Confirmed Time : You can run event search based on the confirmed time.
3. Use calendar to specify search date.
4. Specify the start time and end time.
5. Click the [] button.
Events match the search criteria are listed.

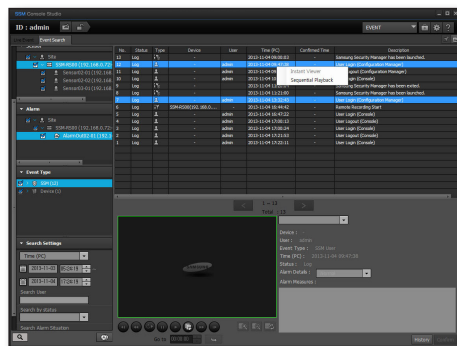


- Recorded video footage can be played with Event Viewer, Search Viewer and Instant Player. Note that one saved footage cannot be played with multiple viewers at the same time.
- Maximum of 10,000 event search results are displayed.

Consecutive playing of events

Select events in the list to be played consecutively.

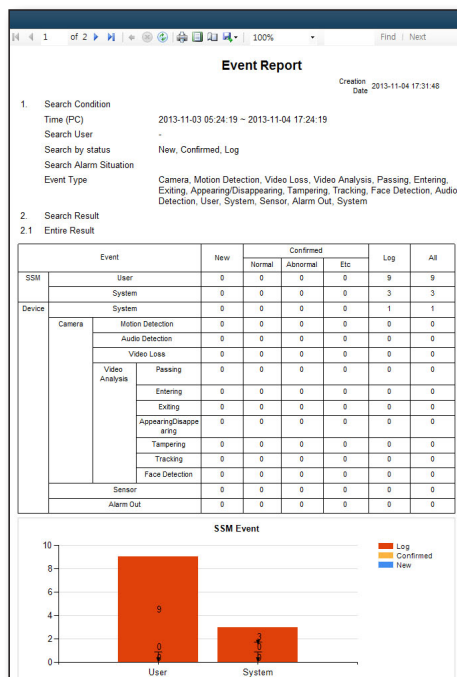
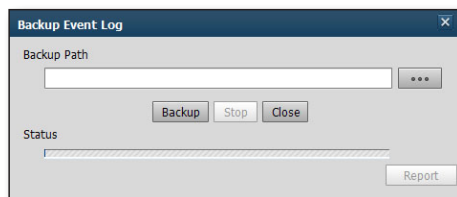
1. Select events for consecutive playing from the list of searched events.
2. Select an event and right click on it to select **<Sequential Playback>**.
3. The selected events will be consecutively displayed on the window.



Backing up event logs

You can backup all the events searched in the list.

1. Press the [] button.
2. When the **<Backup Event Log>** window appears, press the [] button to set the backup path and then press the [] button.
3. When the backup is finished, press the [] button to check the full event details and a stat report.
4. As needed, use shortcut buttons on the top side of the report to print, or save the report as an Excel, PDF or Word file.



event viewer

Confirming Events

You can check details of event searched in the list, and confirm it to end the event situation.

1. Double click an event to see its details from the list.
In the event details pane, the event video is played as well as its details.
 - Or, select an event and right click on it to open <Instant Viewer>.
 - For further information on playback control, refer to "Instant Player". (Page 90)
2. Check event details and set <Alarm Details> to either one of <Normal>, <Abnormal> and <Etc>.
3. Describe the measures taken.
4. Click [Confirm] button.
Once confirmed, it is marked in the list.

Information

Device : SDE-3004_Camera01(192.168.0.212:4520)

User : -

Event Type : Motion

Time (PC) : 2012-08-01 09:49:40

Status : NEW

Alarm Details :

Alarm Measures :

History

For confirmed events, you can see the confirmed details of the selected event from the list.

1. Select an event to see its history from the list.
2. Click [History] button.
3. Check event confirmation details.

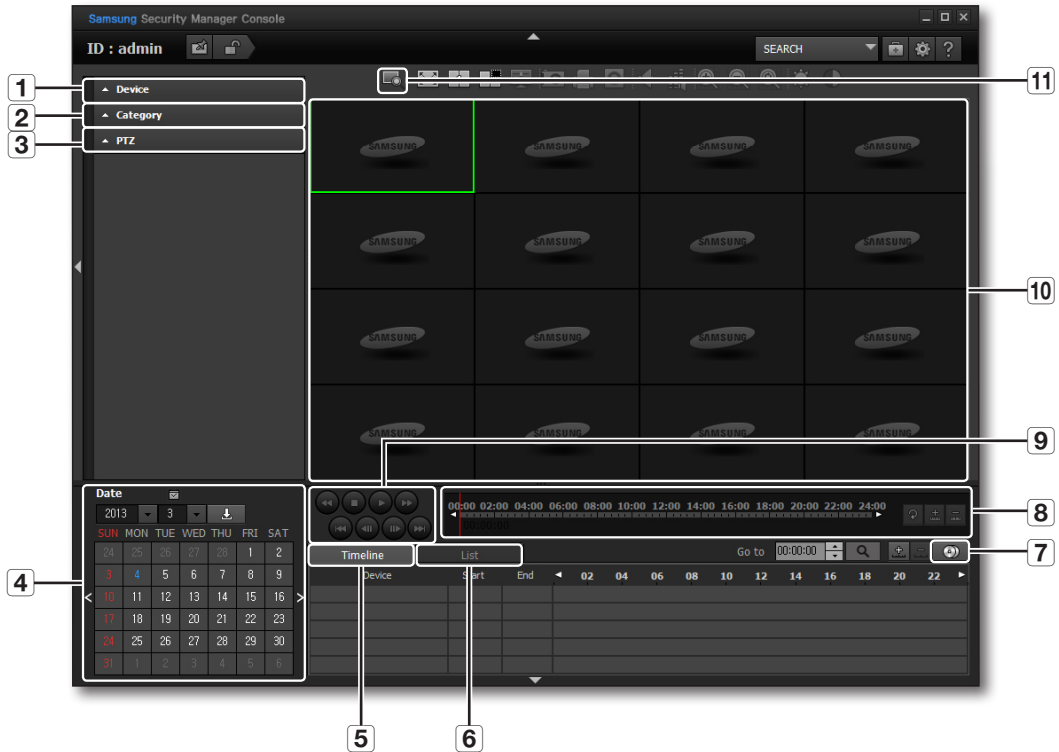
No.	Status	Type	Device	User	Time (PC)	Confirmed Time	Description
1	NEW		Camera01(192.168.0.212:4520)	-	2012-07-26 14:02:36	-	Motion detection

-  If user A described intrusion path in the Alarm Measures for an event, and user B added notes on further details of taken measure and confirmed that event, such process of alarm measure can be checked afterwards with History function.

search viewer

You can search and play footages stored in your local computer or in the device.
Select **[SEARCH]** menu of the viewer selection tab on the top right side of SSM Console.
Or, select **[SEARCH]** viewer on login screen of SSM Console.

NAMES AND FUNCTIONS OF SEARCH VIEWER



Item	Description	
1	Device List	Shows devices that can be searched over.
2	Category	Shows available event types for search.
3	PTZ	The PTZ panel is enabled to use PTZ when replaying the recorded file on a camera set up to use the Panomorph lens. The PTZ, AreaZoom, and preset functions can be used. ■ Refer to "Use of Panomorph Lens" for more details. (Page 99)
4	Date/Time	Dates with found matches from the selected device is marked on the calendar.
5	Timeline	Sets the search result list to timeline format.
6	List	Sets the search result to a list of events sorted by events.

search viewer

Item		Description
7	Backup	Sets the time period for backing up searched data.
8	Detailed Timeline	Use this timeline slider to move selected search result's specific moment, or zoom in/out the timeline.
9	Playback Control	Playback controls for playing back search result.
10	Display Pane	Shows the video of searched result.
11	Change Search Mode	Select either one of Basic, Smart, Folder and POS search mode.

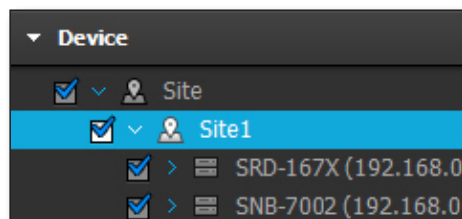


- The context menu appeared when right clicked on each menu item is the same to that of Live Viewer.

Device List

From the device list, you can select desired device for your search.

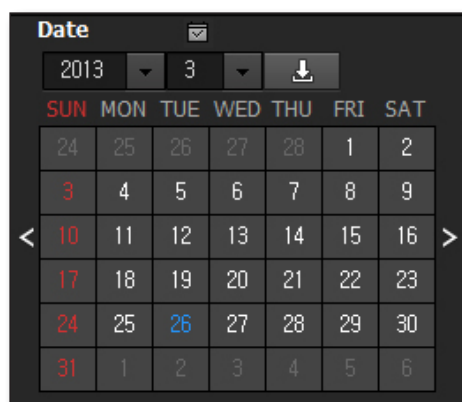
1. Search desired device from registered devices.
2. Refine your search by checking checkboxes of groups or devices.



Date Search

If selected device contains recorded data on a date, it is marked on the calendar.

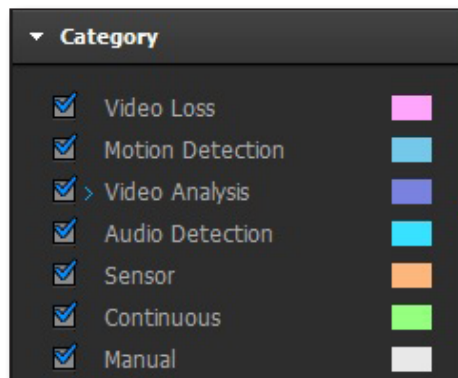
1. Select a device and click [] button.
2. Select year and month for your search.
If a date has recorded data, it is marked in color.
3. Click to select a date to be searched.
Detailed time period of recorded data is shown in the search result area.



Category

You can set the search criteria with event types.

1. Click Category.
Category items appear.
2. Select desired search category items.
 - Video Loss, Motion Detection, Video Analysis, Audio Detection, Sensor, Continuous, Manual : Searches selected items for the highlighted tile in the video display pane.
3. Search results matching selected items are shown in timeline.



Digital Zoom

Digital zooming provides enlarging the video as using a magnifier.

1. Click a desired camera's video.
2. Use digital zoom button to magnify/reduce desired portion of the video.
3. Brightness and contrast can be adjusted too.
 - Click [] button to reset to the original.



- For further details on using digital zoom, refer to "Digital Zoom". (Page 97)

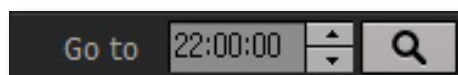


Playing Searched Data

Setting the playback point of time

In the timeline of search result, the red vertical line means the current playback point of time.

1. Set the time to play.
2. Click [] button on the right.
The point of time for your playback is set to the chosen time.

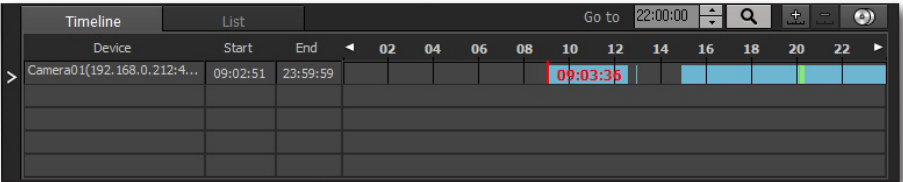


- Or, drag the red strip or click on a desired point in the timeline to set playback point of time.
- The time display shows the current playback's record time.

search viewer

Selecting Camera for Playback

By default, the search result shows 5 channels in the list. You can resize it to show more or scroll down it. Video playback supports up to 16 simultaneous channels.

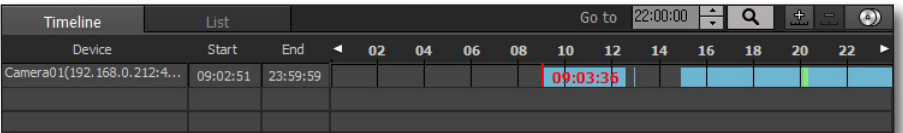


1. Double click desired camera in the search result.
2. Selected camera's video fills the first unoccupied video tile.

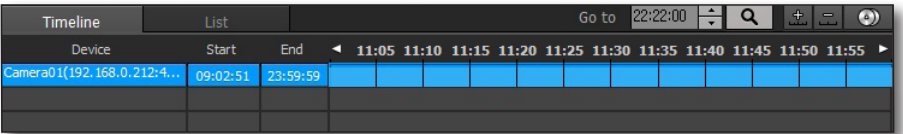


Or, drag a camera from the search result to a tile and drop in the video display pane to add the selected channel's video to the tile.

Enlarging the Timeline Scale



< 24 Hours >



< 1 Hour >

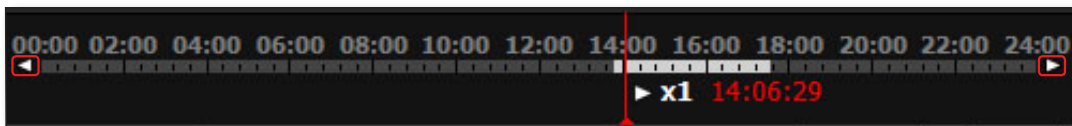
1. Click [] button in the top right corner of the search result area.
2. It enlarges the timeline scale of searched data from 24 hours to 5 minutes, the button becomes disabled when the maximum limit is reached.

Reducing the Timeline Scale

1. Click [] button in the top right corner of the search result area.
2. It reduces the timeline scale of searched data from 5 minutes up to 24 hours, the button becomes disabled when the minimum limit is reached.

Moving the playback point

When a search result is found, the playback point is set to the time currently selected.

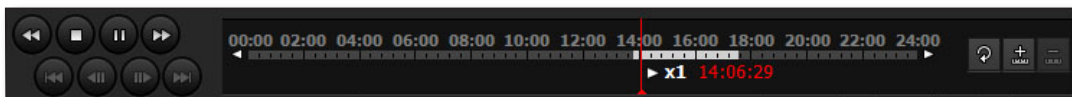


1. Select a search result.
The playback point is set to the time currently selected, marked with a red vertical line.
2. Drag the red vertical line to a desired point of time in the timeline.
When in enlarged timeline, you can use < ◀, ▶ > arrows on both ends of the timeline to move backward/forward.

Playback Control

Pause or control playback speed.

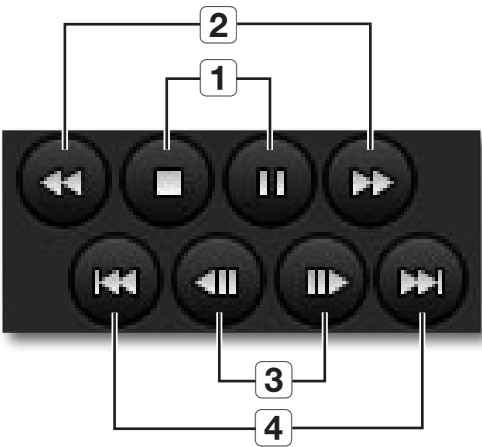
Playback



1. Select a search result and click [▶] button.
In the playback progress bar, the current playback speed is indicated.
2. Use playback control buttons to control playback faster or slower.

search viewer

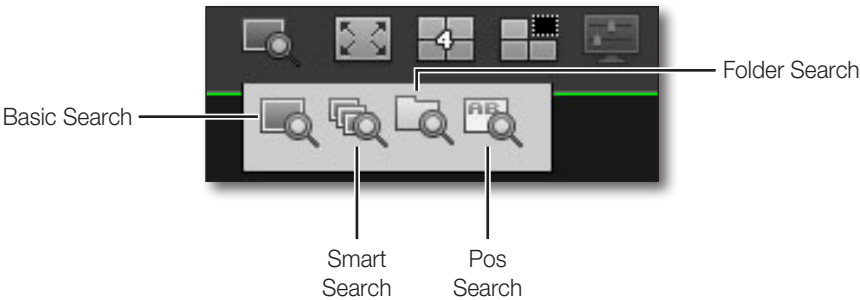
Names and Functions of Playback Controls



1	Start / stop playback, Pause
2	Faster forward / backward playback Sets the forward/backward playback speed to x1, x2, x4, x8, x16, x32, x64, and then x1 again on every click. When in paused, it switches to slower forward / backward playback button.
3	Step Forward / Backward Moves the video frame by frame. While in playback, these buttons are disabled.
4	Skip Forward / Backward Skips to previous or next event. While in playback, these buttons are disabled.

Selecting the Search Mode

Click Search Mode icon to select among Smart, Folder and POS search modes.

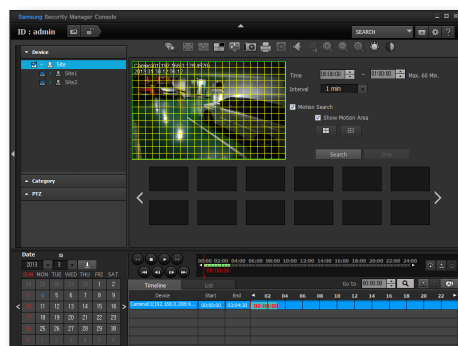
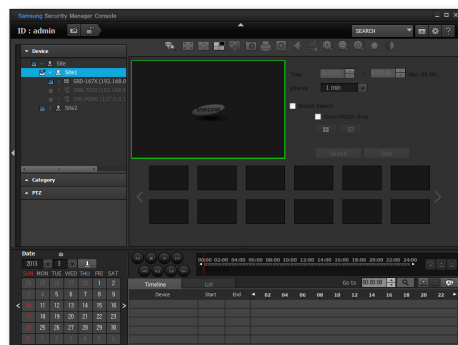


SMART SEARCH

You can run a time-based search over devices, which will show results in thumbnails.

Searching in Smart Search Mode

1. Set to Smart Search mode and select devices from <Device> list.
2. Set search year and month, and click [] button. Dates with recorded data are marked in the calendar. Select one to display data in timeline list.
3. In the timeline list, select a desired data item.
4. Use timeline bar to control preview display.
5. Specify the start time and end time for thumbnail view.
 - Up to 60 minutes can be assigned with start and end times.
6. Set the time interval.
 - In case the selected device supports motion detection, check <Motion Search> checkbox for motion search. For other devices not supporting motion search, the button is disabled.
7. Click [] button.
8. Select a searched thumbnail to start playback in preview screen automatically.



search viewer

FOLDER SEARCH

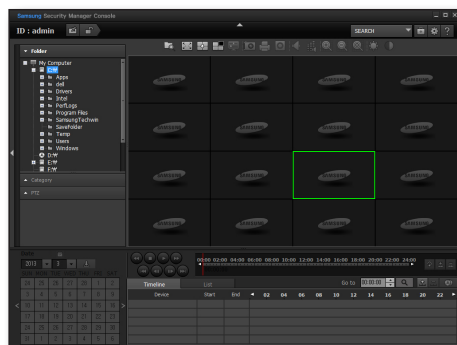
Search for the data in the folder which contains the data that were saved as SEC files in the PC used for SSM Console execution.

Searching Folders

1. Set to Folder Search mode and select a folder from <Folder> list.
Resulting footages are automatically listed in the timeline list.
2. Select a desired data from the timeline list.
3. Use playback control to play selected data.



- If the selected folder has more than 64 SEC files, then the popup window will ask you to select the files to be played. But if you double click on the timeline, you can play a maximum of 16 sets of video at a time.
- If the SEC file you want to play video for has a password, then the popup will prompt you to enter the password. You must enter the correct password before you can play the video.



POS SEARCH

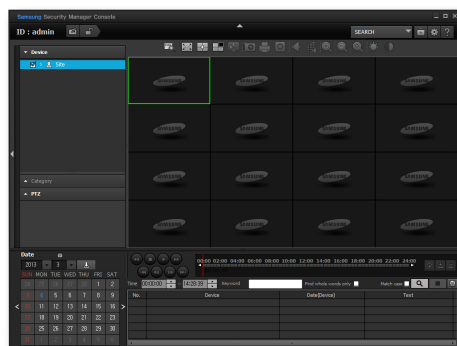
You can search POS records based on time and text keyword.



- The Search function is available only for the device supporting the POS function.

Searching POS data

1. Set to POS Search mode and select date and time for your search.
2. Enter a search <Keyword>.
3. Set the search condition.
 - Find whole words : If not selected, blanks between keywords act as AND operator.
Ex) If entered "Cash 2500", finds data contains both "Cash" and "2500" from the database.
 - Match case : If selected, the search becomes case sensitive, distinguishing upper and lowercase letters.
4. Click [] button.



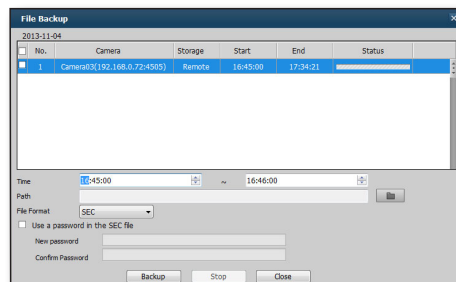
BACKUP

You can back up the search data onto the computer that is running the program.

Backing Up Search Data

You can back up searched footage of selected period into a desired folder.

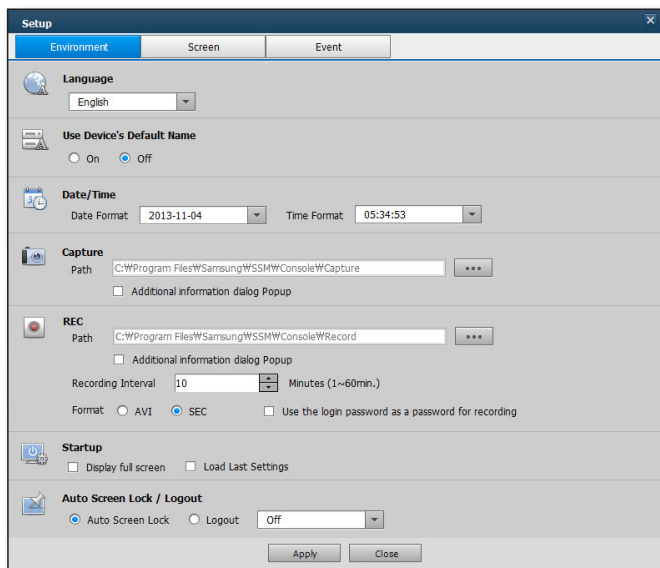
1. Click [] button.
The backup pop-up appears.
 - Backup is only available for devices currently connected.
 2. Select a channel from the backup window.
 3. Click [] button to browse and set the desired backup storage path.
 4. Specify the start time and end time.
 5. Set the backup file format.
Backup supports "*.sec" and "*.avi" formats.
 - AVI : A general video format. Can be played with Windows Media Player.
 - A new AVI backup file is created in the following cases.
 - When you change the video's resolution
 - When you change the audio or video codec
 - When the file size is greater than 2GB
 - SEC : Samsung's proprietary format. Embeds self-executable video player with data.
 - Check <Use Password in the SEC file> to set the password.
-  ■ The Microsoft Windows Media Player does not support AVI files having resolutions higher than 3Mega pixels. For high-resolution videos of more than 3 Mega pixels, SEC backup is recommended.
6. Click [Backup] button to start backing up.
 7. Click [Stop] button to stop backup in the middle.
 8. To end backup, click [Close] button.
The backup stops and saves the file backed up at the moment, and closes the backup window.



setting console

SETTING SSM CONSOLE

Environment



Language

Sets the language used for Samsung Security Manager's user interface.

Use Device's Default Name

When it is checked, the name of the camera registered to the device is displayed in the list or the screen.

OSD Display

Sets whether to display on-screen display menu and icons on the video screen, such as date, camera name and other information.

Date/Time

Set the date and time format displayed on OSD.

Date / Time indication is based on the time of running the pop-up window.

- Date formats
 - 2010-04-19 (yyyy-mm-dd)
 - 04-19-2010 (mm-dd-yyyy)
 - 19-04-2010 (dd-mm-yyyy)
- Time formats
 - 08:06:04 (hh:mm:ss)
 - 08:06 (hh:mm)

Capture

You can set the captured image file's path.

- Path : Shows the current file path, click [] button to set to another file location.
 - Click <**Additional information dialog popup**> to display saved path and additional capturing information on a popup window separately when capturing a monitoring window.

REC

Set the selected recording data's file path and recording interval.

- Path : Shows the current file path, click [] button to set to another file location.
- Recording Interval : Sets how long the recording will continue.
- Format : Sets the file format for recording.
 - Click <**Additional information dialog popup**> to display saved path and additional recording information on a popup window separately when recording a monitoring window.
 - If you check <**Use the login Password as a password for recording**>, you can use the login password for recording.

Startup

Configures the screen display and its settings when the program is started.

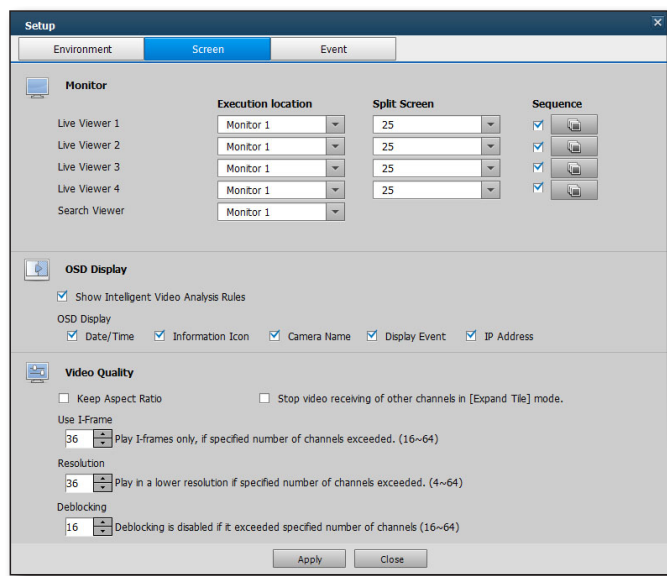
- Display full screen : On the program's startup, it fills the entire screen automatically.
- Load Last Settings : When restarting, it loads the last displayed camera's video layout.

UI Auto Lock / Logout

- UI Auto Lock : If there is no keyboard or mouse action for the specified period, it locks user interface automatically which prevents unintended access.
- Logout : If there's no keyboard or mouse action for the specified period, it logs out automatically to prevent unintended access.

setting console

Screen



Monitor

The monitor layout can display up to 100 channels on a maximum of 4 monitors.

Execution location

Select the number of monitors to connect. Up to 4 monitors can be connected.

Split Screen

Sets the split screen mode for each viewer / monitor.
The available split screen modes differ by maximum number of channels and connected monitors.

- 
- The default settings may not be appropriate to your configurations; user must configure the system appropriately for proper operations.

Sequence

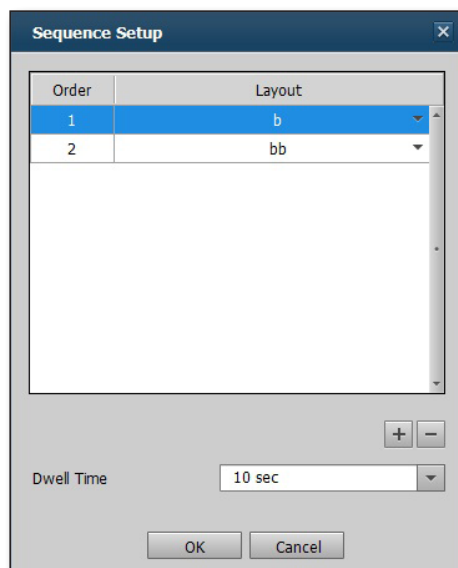
Distributes camera feeds to fit the selected split screen mode in sequenced order automatically, at the specified duration.



- Sequenced mode is available only for a camera layout.

To define sequence:

- Click [] button on the top right corner of the target monitor.
- To add a layout, click [] button. To delete a layout, click [] button.
- Click <Dwell Time>'s [] button and set the dwell time of each layout added.
- When done with setup, click [OK] button.
- To apply the sequence mode, check the checkbox in front of the sequence setup button.



OSD Display

You can select the information (OSD) displayed on the monitor.

Video Quality

Use I-Frame

Set the number of channels, the I-Frame mode will be applied for more than the specified channels. It is applied to each monitor of each viewer. It is used to avoid system overload of multi-channel video monitoring.



What is I-Frame?

Video compression methods hiring H.264 and MPEG4 codecs produces compressed video of one base frame (Intra-frame) and multiple predictions (predicted frames) only containing differences between each frame's previous one.

Resolution

Set the number of channels, low-resolution will be applied for more than the specified channels for better communication. It is applied to each monitor of each viewer.

Deblocking

This specifies the channel number to begin deblocking. It is applied to the monitor of each viewer separately. It is used to prevent overloading of the system during multi-channel video monitoring.



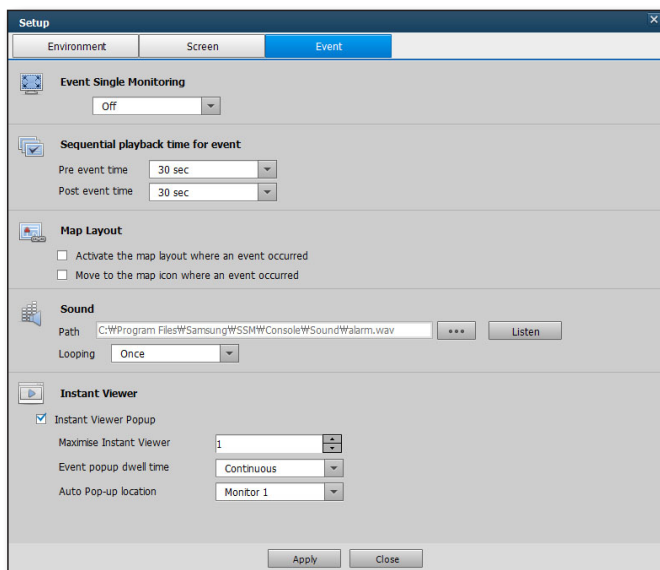
What is deblocking?

Video compression using the H.264 codec compresses the screen image into multiple blocks. When this is applied, the boundary between the blocks may become visible, degrading the image quality. Deblocking eliminates this boundary between blocks to improve the image quality.

- Show Intelligent Video Analysis Rules : Sets whether to display Intelligent Video Analysis Rule applied for the video.
- Stop video being receiving of other channels in [Expand Tile] mode. : Sets whether to receive video from channels other than the expanded when viewing one channel in [Expand Tile] mode of Live Viewer.

setting console

Event



Event Single Monitoring

Upon an event, the Live Viewer monitoring screen automatically switches to Single mode with the event-generating channel for the specified period, which returns to previous mode afterwards.

Sequential playback time for event

You can set the consecutive event playing time as the pre/post event time.

Map Layout

If this option is set and an event occurs while viewing a map layout, the view automatically switches to the corresponding map which contains the event-generating device's icon on it.

Sound

Set the sound device for the event, and how the sound repeats.

Instant Viewer

If selected <Instant Viewer>, set the maximum number of simultaneous instant viewers allowed and minimum dwell time of event pop-up dialog.

SSM service manager

You can check SSM related services, and stop them.

The Service Manager should run while the Samsung Security Manager is running at the same time, and an icon appears in the task tray.

SERVICE MANAGER

Resides in the task tray, and provides access to Samsung Security Manager services.

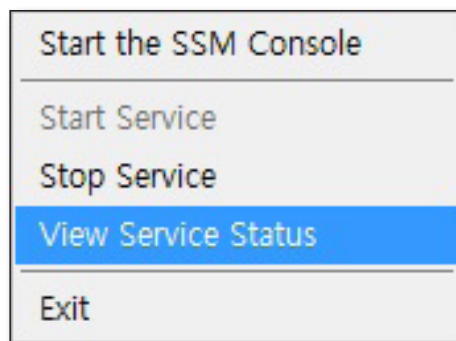
Managing the Services

Select the icon and right mouse click.

Service menu should appear.

You can start or stop services.

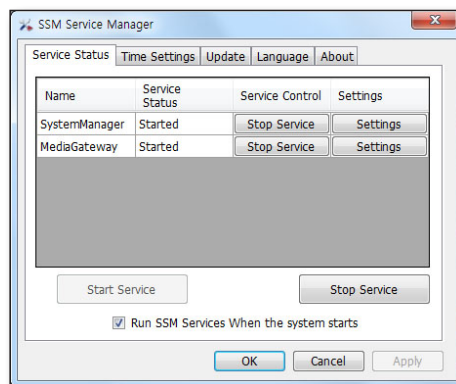
- Start the SSM Console : Runs SSM Console program.
- Start Service : Starts Media Gateway and System Manager services.
- Stop Service : Stops Media Gateway and System Manager services.



Service Status

Click [Service Status] to open SSM Service Manager information dialog.

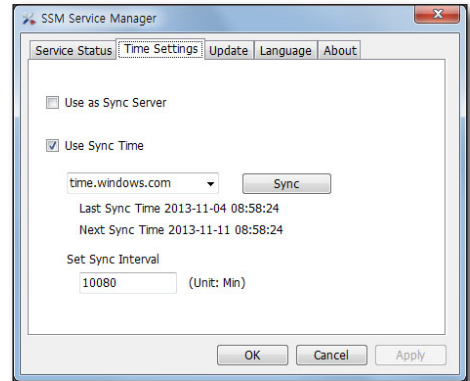
- Start Service : Disabled if the service is running.
- Stop Service : Disabled if the service is stopped.
- OK : Applies the changes, and closes the window.
- Cancel : Does not applies the changes, and closes the window.



SSM service manager

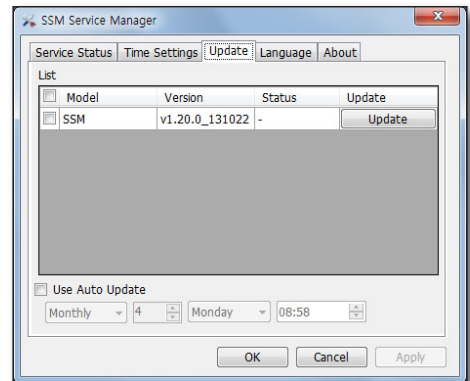
Time Settings

You can set the computer installed with SSM to be the NTP time server, and its checking frequency.



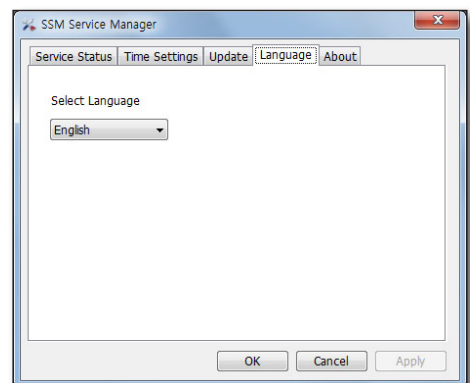
Updater

If the server has the latest version, the update list will appear. A user can check the release note and the content of the latest updates before deciding whether to proceed with the updates. Click on the <Auto Updates> and set the auto update settings.



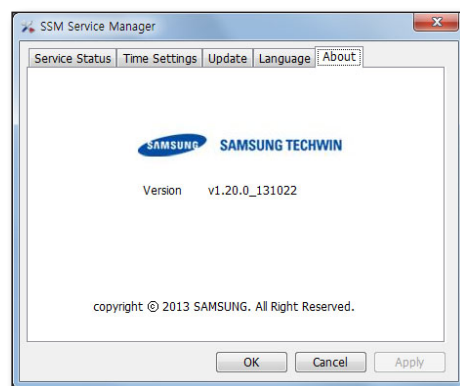
Language

You can set the program language.



About

Shows the Service Manager's version information.



SSM Recording Server

SSM RECORDING SERVER SERVICEMANAGER

You can check the execution status of the SSM Recording Server related service and terminate it if you want to. You can change the SSM Recording Server related settings.

As soon as the SSM Recording Server runs, the service manager program will run. The task bar will automatically show the icon.

Service manager

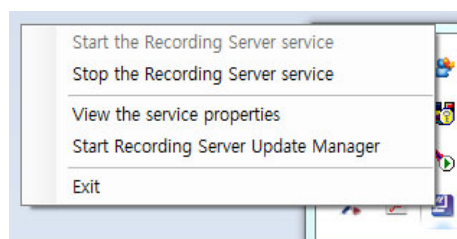
It is in the task bar and manages the SSM Recording Server service.

Service management

Select an icon and right click with your mouse button on it. Service menu will appear.

You can start or stop the service.

- Start the Recording Server service : Starts the service.
- Stop the Recording Server service : Stops the service.



Service starts

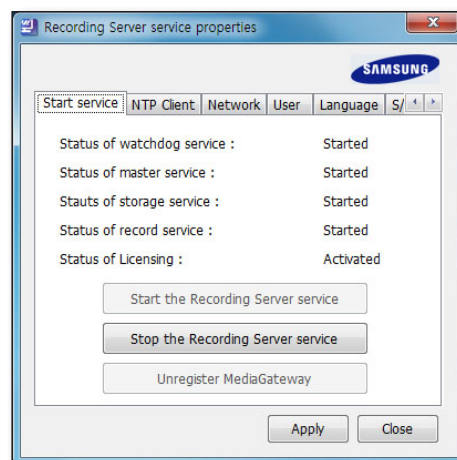
Click on the **[View Service Properties]** to launch the Recording Server Service Properties window. You can check the current status of the Recording Server service.

- Start the Recording Server service : Starts the service.
- Stop the Recording Server service : Stops the service.
- Unregister MediaGateway : Cancel registration of the Media Gateway and initialize the Media Gateway information box.
 - Recording Server can be registered and accessed in a single Media Gateway.

If the Recording Server is already registered and connected to the Media Gateway, and if you want to register in another Media Gateway, you need to delete (cancel registration) the Recording Server in the SSM.

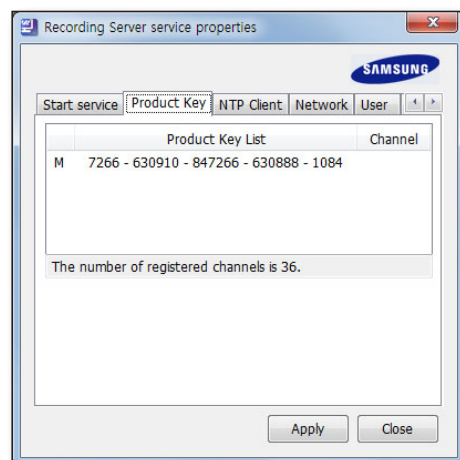
When registration is cancelled, the Media Gateway information is initialized. So, you can register in another Media Gateway.

If the registered Recording Server is not connected to the Media Gateway, you need to delete the Recording Server from the SSM and click on the **[Unregister MediaGateway]** button in the Recording Server Service Manager to initialize the registered information.



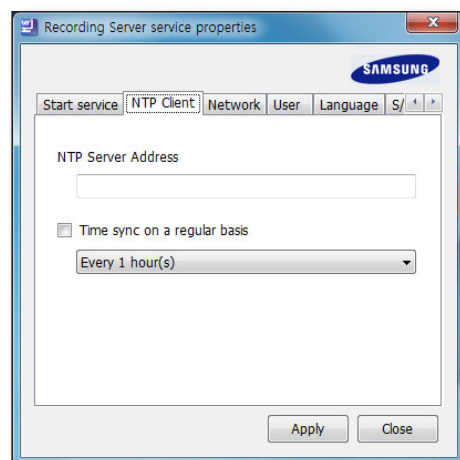
Product key

You can check the product key for the SSM Recording Server installed.



NTP Client

You can set the NTP server to synchronize the time of the PC where the Recording Server is installed.
You can change the setting to make sure time synchronization is performed periodically.



SSM Recording Server

Network

You can retrieve the Recording Server setting information from a file.

Setting the number of networks used

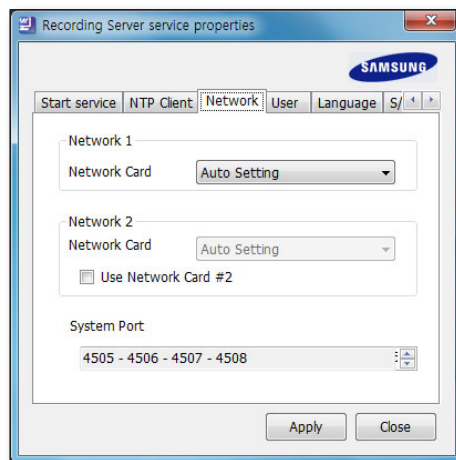
You can set the number of networks used.

1. Check the network to be used.
 - 1 used : Uncheck network 1 used.
If one network is used, it means that a single network will communicate with the SSM and the device.
 - 2 used : Check network 2 used.
If two networks are used, it means that network 1 will communicate with the SSM and network 2 will communicate with the device to evenly distribute the communication load.
2. Click on the **[Apply]** button to save changed settings.

Network selection

Select network 1/2 from the list of available networks on the PC.

- If you want to change the network setting, the Recording Server service will resume.



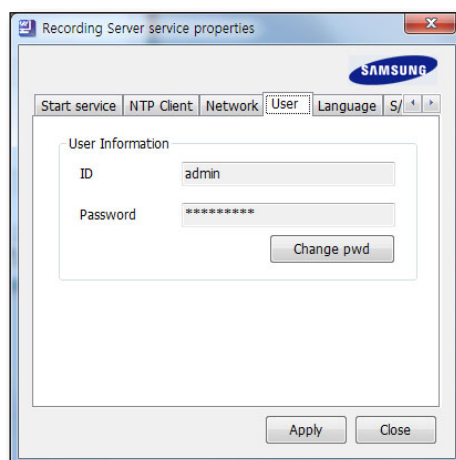
Port setting

You can set the system port range that the Recording Server will use.

User

You can change the password for a user who will access the Recording Server.

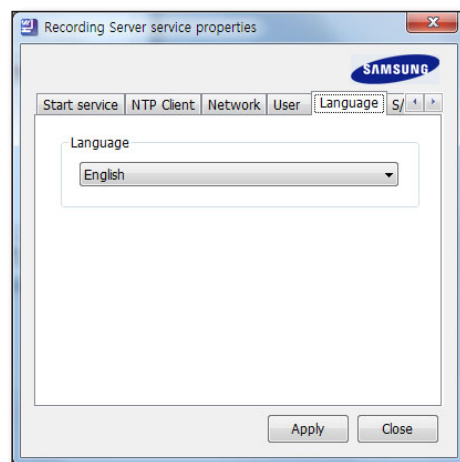
- Password changes : Click on the **[Change pwd]** button to switch to a new password.



Language

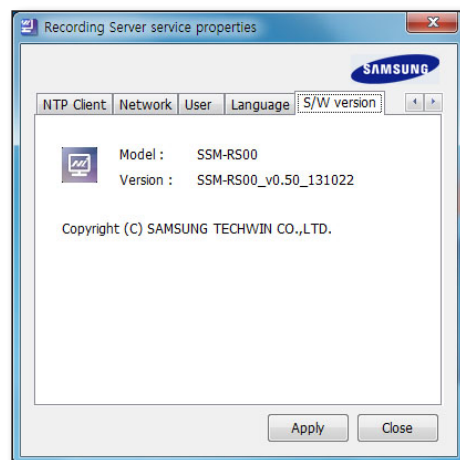
You can select the language to display the program (SSM Recording Server service manager and update manager).

- Basically, it is automatically set to the OS language. If not available, it is set to English.



S/W version

Shows the latest version information for the SSM Recording Server.



SSM Recording Server

RECORDING SERVER UPDATE MANAGER

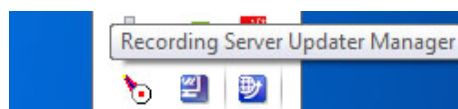
Installation

Run the SSM Recording Server installation file to install them all.

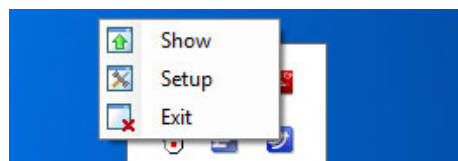
Execute

In the Recording Server Service Manager, click on the Recording Server Update Manager <Start menu> to run the program. If the program is already running, as shown in the figure below, in the task bar you can see the tray icon of the “Recording Server Updater Manager” program.

1. Place your mouse cursor over the icon.
The tool tip will appear on the right hand side.



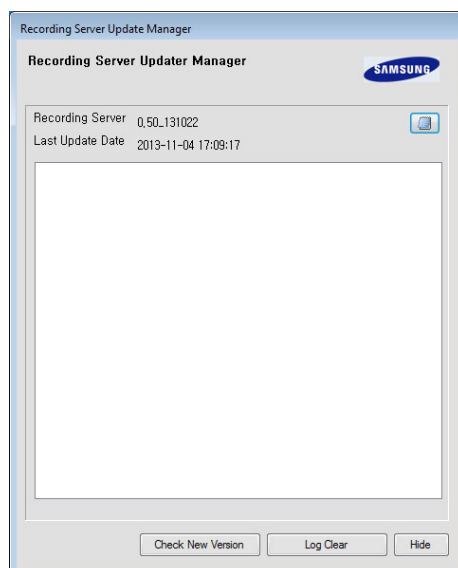
2. Right click with your mouse button on the tray icon.
The context menu as shown on the right hand side will be displayed.



Latest updates

Regardless of the auto check function, you can access the update server anytime to check the availability of the latest version.

1. In the [Recording Server Update Manager] tray icon, right click with your mouse button.
2. In the Context menu, select the [Unhide Window] menu.
The Recording Server Update Manager window will appear.
3. In the “Recording Server Updater Manager” window, click on the [Check Latest Update] button.
 - 1) In this window, you can check the current version and the installation date.
 - 2) Press the [] button to check the release note for the current version installed.
 - 3) You can check the communication log.
Using this log, a user can find out about the cause of failures.
 - 4) Click on the [Check New Version] button to check if there is a more recent version released than the currently used version.
 - 5) Click on the [Log Clear] button to delete the log.
 - 6) Click on the [Hide] button to make the window disappear.



Setting the auto updates

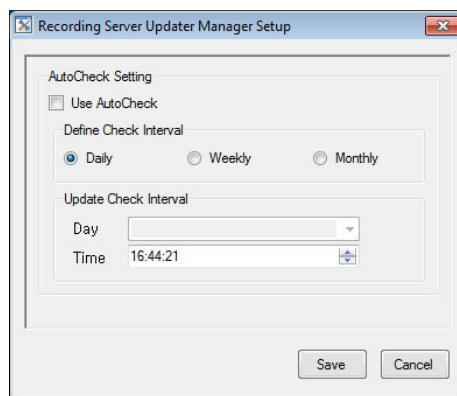
You can check the update check period for automatic checkout.

1. In the **[Recording Server Update Manager]** tray icon, right click with your mouse button.
2. In the Context menu, click on the **[Unhide Windows]** menu.
3. After changing the setting in the setting window, click on the **[Save]** button.

Selecting the auto checkout period

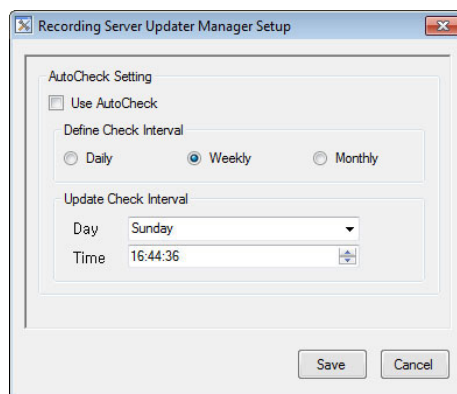
You can change the settings so that updates are checked every day.

1. Click on every day.
2. Select the auto update time.
Ex) The figure on the right shows the settings to update at 16:44:21 AM every day.



You can change the settings so that updates are checked every week.

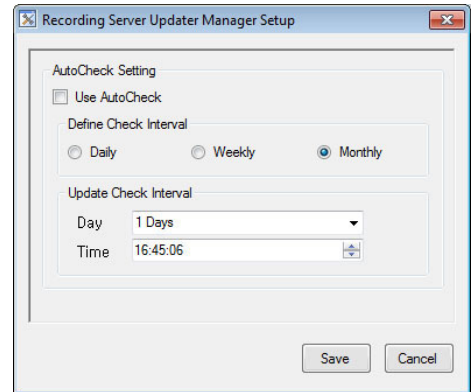
1. Click on every week.
2. Select the auto update day.
3. Select the auto update time.
Ex) The figure on the right shows the setting to update at 16:44:36 AM every Sunday.



SSM Recording Server

You can change the setting so that updates are checked every month.

1. Click on every month.
2. Select the auto update day.
3. Select the auto update time.
Ex) The figure on the right shows the setting to update at 16:45:06 AM on the 1st of every month.

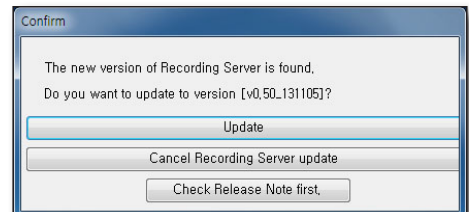


RECORDING SERVER UPDATES

Auto Update Scenario

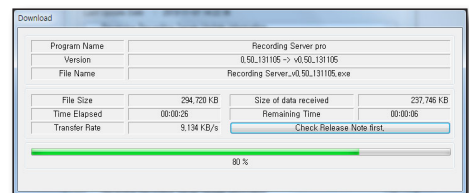
Latest version alerts

If the server has the latest version, the update list will appear. A user can check the release note and the content of the latest updates before deciding whether to proceed with the updates.



Download steps

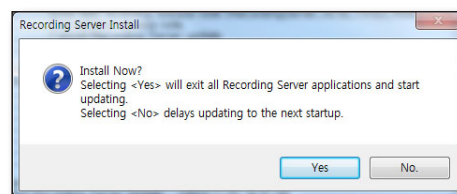
If you select the [Download Now] button, the installation file will be downloaded.



Checking installation

When the download finishes, the user will be asked whether or not to install it now.

Assume a user selected **[No]**, then when the program runs again, if the latest installation file is downloaded, then as shown above, the “**Recording Server Installation Confirmation**” window will appear.



In the “**Recording Server Installation Confirmation**”

window, select **[No]** and run the program. Then, the **[Recording Server Update Manager]** program will check the latest version from the server and it will download the new one in case that a later version than the current one exists in the server.

Installation

If you select **[Yes]** in the Installation Confirmation window, all the Recording Server programs will be automatically terminated and the installation file will run.

PRODUCT SPECIFICATION

Features		
Video	Supported Video Compression Format	H.264, MPEG-4, MJPEG
	Supported resolution	Depending on the device
Audio	Supported Audio Compression Format	G.711 μ -law (PCM), G.723, G.726 (ADPCM)
	Functions	Bi-directional audio (Listen/Talk)
Live Monitoring	Multi-monitor	Up to 4 monitors (Follow the recommended system requirement)
	Screen-split mode	4:3 screen modes : 1/4/6/8/9/10/13/16/17/21/25/36/49/64 16:9 screen modes : 6/12/20/30 Full screen mode * While in multi-monitor environment, layouts and split modes for less than 100 channels will be available.
	Sequence mode	up to 16-splits per monitor
	PTZ Control	Area Zoom, Go to 1x zoom, PTZ Sensitivity, Focus, Zoom, Patrol, Swing/Autopan, Group/Scan, Trace/Pattern, Preset, Iris control
	Map monitoring	Split View Mode for Map Layout, Zoom in/out, video popup(Instant viewer), Camera/Sensor/Alarm Out icons on the map
	Simple Recording	Recording of the selected video tile during 1 hour
	Functions	OSD On/Off, Snapshot / Prints Image, Brightness/Contrast control, Keep Aspect Ratio/Original size, Deinterlacing, Flip, Digital zoom
Search & Playback	Search mode	Date, Event, Smart Search, POS Search based on DVR, NVR, Local folder
	Screen-split mode	Up to 16 footages can be played simultaneously
	Video Control	Start/stop, Pause, Faster/Slower forward/backward, Step Forward/Backward, Skip Forward/Backward
	Functions	Snapshot / Prints Image, Digital zoom
	Backup	Local storage, back up format(AVI, SEC) Configurable schedule for backup (*supported model only)

Features		
Event Monitoring	Real-time event list	Shows real-time event list of the device(event status, type, device, user, time(PC)), Viewing instant video image
	Searching events	- SSM : User, System - Device : System, Camera, Sensor, Alarm Out - Camera : Video Loss, Motion, Passing, Entering, Exiting, Disappearing (Appearing), Tampering, Tracking, Face Detection, Audio Detection
	Reporting	Manual report (show events and statistics) print & Save function, format(excel, PDF, word)
	Confirming	set alarm details Normal/Abnormal/Etc, confirm action
	History	the confirmed details of the selected event from the list
	Instant Viewer	Display the selecting camera. Confirm the event, record event remarks and end the event status.
	Instant Player	Plays the corresponding camera's video image
	Event Action	Define various system actions (output) for events (input) from devices, action (output) types: Instant Viewer, Preset, Alarm Out, Pop-up, Sound and E-mail notification
Configuration		
Site/User management		Site/User group/User account management, Permission management for viewer functions
Device management		Automatic device IP scanning, Viewing the device settings(Device webpage), Exporting/Importing devices settings, Updating the device firmware
Screen management	Layouts	Setting/Adding/Deleting Layouts, Map/Video Layout
	Monitor	Multi Monitor, Split Screen, Sequence, Using I-Frame, Using low-resolution
Environment		OSD display, Date/Time, Capture, Recording, Sartup, Language, UI auto lock, Log
System settings		Backup/Restore SSM setups, Restore the devault settings
Time synchronization		NTP Server, Client
Update		Automatic self upgrade(Connection to Samsung upgrade server)
General		
Supported devices		Samsung's N/W Camera, Encoder, DVR/NVR
Maximum number of Media Gateways per system		Default 4 Media Gateway
Maximum number of Free NET-i ware/Recording Server per system		1 NET-i ware/Recording Server

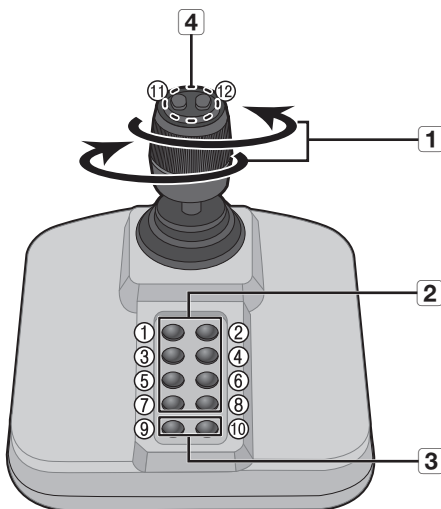
appendix

Configuration		
Maximum number of cameras per Media Gateway		N/W Camera 72channels or DVR/NVR 288channels(36)
Maximum number of clients per Media Gateway		5 Clients
Modules		System Manager, Media Gateway, Console, Service Manager, Configuration Manager
Language		Total 23 languages support English, French, German, Spanish, Italian, Russian, Chinese, Japanese, Korean, Turkish, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek, Swedish, Danish, Finnish, Norwegian, Bulgarian
System Requirement	Recommended	- System manager, media gateway, console : CPU Intel i7 (Sandy bridge) above RAM 4 GB above, Video memory 1GB above, HDD More than 20 GB of free space for installation. (For operation, the system log database requires 10 GB or more free space.), DirectX 8.1 above. Display resolution : 1,280 x 1,024 above, OpenGL compatible - Recording Server : CPU Intel i7 (Sandy bridge) or higher, RAM 8G or higher, HDD SATA2 7200rpm 64MB, 5 units or more (1 OS Disk, 4 or more Recording Disks)
	Minimum	- System manager, media gateway, console : CPU Intel Core 2 Duo 2.83 GHz above, RAM 2GB above, Video memory 512MB - Recording Server : CPU Intel i3 (Sandy bridge) or higher, RAM 8G or higher, HDD SATA2 7200rpm 64MB, 2 units or more (1 OS Disk, 1 or more Recording Disks)
	Operating System	- Console : Windows XP 32bit, Windows 7 32bit, Windows 7 64bit, Windows 8 32bit, Windows 8 64bit - System Manager, Media Gateway : Windows XP 32bit, Windows 7 32bit, Windows 7 64bit, Windows 8 32bit, Windows 8 64bit, Windows Server 2003, Windows Server 2008 R2 - Recording Server : Windows XP SP2, Windows 7, Windows 8, Windows Server 2003 SP2, Windows Server 2008 R2, Windows Server 2012

USE JOYSTICK

The SPC-2000 joystick is operated as follows:

- SPC-2000 must be connected to the PC before the console is launched in order to be recognized.
- SPC-2000 can run in PTZ or Screen mode.
- In Screen mode, the layouts assigned to the console are numbered 1~8 in the order of assignment.



Name		Function
1	Up/Down/Left/Right	In PTZ mode, the camera can be panned, tilted, and controlled in 8 directions. In Screen mode, the top/bottom/left/right tile can be selected.
	Rotation	In PTZ mode, the screen is zoomed in when it is rotated clockwise and zoomed out when it is rotated counterclockwise.
2	1 ~ 8	In PTZ mode, presets number 1~9 are run. In Screen mode, the layout corresponding to the button number is run.
3	9~10	PTZ mode and Screen mode are switched.
4	11, 12	In PTZ mode, Focus Near/Far operation is run. In Screen mode, multiple monitors can be selected and changed.



- To set the correct image, the axis calibration is needed.

Select **[Start]** → **[Set]** → **[Control Panel]** → **[Game Controller]** → **[Property]** → **[Set]** via the PC, click the **[Compensation]** button to run the “**System Compensation Wizard**” and then follow the guide on the screen to complete axis compensation.

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