

CAYIN TECHNOLOGY

CONTENT MANAGEMENT SERVER (CMS)

Version 7.5 Version 8.0

User Manual

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CAYIN Technology offers a complete portfolio of digital signage solutions, including media players, servers, and software, for various commercial applications, such as education, transportation, retail, hospitality, corporate communication, and financial and public institutions. CAYIN is committed to being a reliable partner to its clients worldwide, and has successfully set up various application references internationally. In order to best facilitate the deployment of CAYIN products, the Company also provides tailord services to satisfy the ascending market demand for almost limitless applications.

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■ CMS Overview

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CAYIN CMS (Content Management Server) server is especially designed to manage digital signage players in medium or large-scale deployment. It offers automatic content update, playlist editing and advanced central scheduling functions for applications which require centralized management and grouping content distribution over LAN or the Internet. With CMS's access right management, administrators can use authentication and access control functions to assign authorization to each user to manage respective groups of players. In addition, CMS server can also support real-time broadcast function (e.g. live streaming of a TV channel).

1-1 CMS-PERFORMANCE

1-1-1 Specifications

Dimension	88 (H) x 482 (W) x 450 (D) mm; 2U Rack
Material	Steel
Color	Black
Weight	13.5 Kg (May differ between models)
Storage	160G 3.5" HDD (Can be upgraded by user's request)
Video streaming	Max. 8 channel
User Account	Unlimited accounts (include 3 default accounts)
Content Management	Support to manage 250 SMP players

1-1-2 Front View



1. Power/HD Indicator 2. USB×2 3. PS/2 4. Power 5. CD-ROM

1-1-3 Rear View



- **1.** Video-In×4 (optional) **2.** Line In×4 (optional) **3.** COM **4.** Ethernet
- **5.** VGA **6.** PS/2 **7.** Power Connector



1-2 CMS-MINI

1-2-1 Specifications

Dimension	65 (H) x 320 (W) x 334 (D) mm
Material	Aluminum
Color	Black
Weight	4 kg
Storage	160G 3.5" IDE-HDD
Video streaming	Max. 4 channels
User Account	Max. 30 accounts (include 3 default accounts)
Content Management	Support to manage 40 SMP players

1-2-2 Front View



1. USB×2 2. Network Indicator 3. HDD Indicator 4. Power Indicator 5. Power

1-2-3 Rear View



1. PS/22. Ethernet3. USB×24. VGA5. Power Connector6. Video In x 4 (optional)7. Audio In (with an extra cable, optional)



1-3 Major Features

Media Player Management

- · Provide a completed client list, detailing all media players controlled by this CMS server
- · Create media player groups for easy systematized management
- · Remotely manage media players in two major aspects: content update and playlist scheduling

Access Control

- · Create multiple user accounts and authorize each account to possess different access rights
- · Secure the access to Web Manager and Media Folder by username and password

Content Update

- Update and synchronize content automatically to all media players in groups and aggregations (two-layer groups)
- · Synchronize playlist, skin, font, and all multimedia contents in the Media Folder to SMP players
- · Support to create folders and sub-folders to store and organize multimedia content
- Upload contents by FTP and Network Neighborhood

Central Scheduling

- Centrally control the playlists of all media players in groups and aggregations (two-layer groups)
- Edit playlists of video, image, ticker, skin, and volume for SMP-PRO series
- · Edit playlists of video, web playlist, program, and volume for SMP-WEB series
- Schedule the playlist to minutes by weekly basis or schedule an one-time event
- Edit unlimited number of client groups
- · Edit Emergency Scheduling

RTB (Real Time Broadcast)

- Assign each video signal (NTSC and PAL) to a particular channel
- Real-time video/audio signal transcoding and broadcasting
- Transmit streaming data to media players by means of LAN broadcasting, multi-casting, or unicasting
- (CMS-PERFORMANCE) Manage up to 8 video signals per server; up to 64 inputs for the whole system
- Support DVD quality MPEG-2 and MPEG-4 transport streaming; bit-rate from 1 Mbps to 5 Mbps (1Mbps for CIF; 2Mbps or up for Full D1)

1-4 Install CMS

- 1. Open CMS package.
- 2. Connect the power cord.
- 3. Connect the Ethernet to LAN port. (By default, CMS will get IP address from DHCP server)
- 4. Press the power button to turn on the system.
- 5. After the system boots up, enter "**Network Management**" in text console to check the server's IP address. CMS will get the IP address from DHCP server automatically.
- 6. Open "Web Manager" from your PC's browser type http://server_ip_address in the address bar of the browser. The default administrator's account is "administrator", and the password is "admin".

You can also open the Media Folder of any player by **CAYIN Device Seeker**. Select the player you want to connect, and click [**Open Folder**].

NOTE

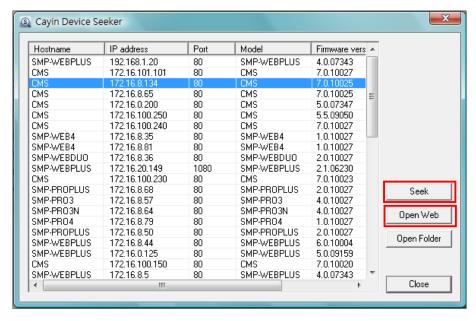
To connect to CMS and SMP, make sure your PC and the machine are in the same subnet. If not, you can adjust either the IP address of your PC or the one of the devices.

want to connect, and

After installing CMS, please login and start to manage CMS remotely on your own PC.

1-5 Start and Login

- Insert the product CD into your CD-ROM, and run "CAYIN Device Seeker" (\Tool\Device Seeker\seeker.exe). You can also copy this file to your PC for future management.
- Click [Seek] and the seeker will search all available SMP clients or CMS servers in the same LAN. Select one CMS server and double click the server's name. Or, you can also click a server's name, and click [Open Web].



3. Click LOGIN on CMS Server's main page. Enter a username and password.

Default web username: administrator

Default password: admin

Upon successful login, you can start to manage CMS Server.

NOTE

We recommend using IE 5 (or above) or Mozilla Firefox.

NOTE

If you forget the password, you can plug a keyboard to CMS, and enter the text management console. You can manually reset the password to "admin".

Access Control

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CMS server enables administrators to manage the access right. Via access control, administrators can create accounts and assign authorization each account to manage respective groups of media folders. Please follow these steps:

- Add a new folder in the "FOLDER MANAGEMENT" page;
- Create a group in the "GROUP" page and associate this group with one media folder;
- Create user accounts in the "ACCOUNT" page and configure each account's access right of media folder(s) and functions.

2-1 Create and Manage Folders

You can add, delete, or edit the media folder and also configure the access mode in the "**FOLDER MANAGEMENT**" page.

2-1-1 Add/Delete Media Folder

Use the following steps to add a new folder.

- Login CMS server with the account which is allowed to access the function: "ACCESS CONTROL > FOLDER MANAGEMENT".
- Click [ACCESS CONTROL] on the main page, and select the sub-page, "FOLDER MANAGEMENT".
- 3. Enter a name in the "Media Folder Name" text box; then, click

NOTE

Please refer to "2-4 Create and Manage Account" for detailed settings about accounts.

[Create].

Use the following steps to delete a folder.

- Login CMS server with the account which is allowed to access the function: "ACCESS CONTROL > FOLDER MANAGEMENT".
- Click [ACCESS CONTROL] on the main page, and select the sub-page, "FOLDER MANAGEMENT".

Media Folder Access Management Configure accessing Media Folder(s) by Network Neighborhood and/or by FTP. Create Media Folder(s) first. Then use GROUP functions to associate a group to a folder. Use ACCOUNT functions to configure account access. Media Folders Media Folder Name MyFolder-1 PRO3 Rename Rename Delete default Add a new folder: Media Folder Name GROUPA Create

Locate the "Media Folder Name" of the folder that you would like to delete. Then, click [Delete] on the command column.

NOTE

You cannot delete the "default" folder and those folders which are associated with any groups.

2-1-2 Assign Folder Access Mode

You can assign the access mode of all folders in CMS, so that users can access folders with suitable authorization.

You can select one suitable access mode from the following table and upload contents by "**Network Neighborhood**" or "**FTP**".

- Login CMS server with the account which is allowed to access the function: "ACCESS
 CONTROL > FOLDER MANAGEMENT".
- Click [ACCESS CONTROL] on the main page, and select the sub-page, "FOLDER MANAGEMENT".
- 3. Select a suitable access mode.

Choose one mode for accessing Media Folder by Network Neighborhood:	
Do not share Media folder	
Share mode (no authentication required)	
Controlled access (authentication required)	
Access is only allowed by IP Address Add / Edit	

Do not share Media folder	No one can access the Media Folder
Share mode (no authentication required)	All users can access the Media Folder without authentication.
Controlled access (authentication required)	Only authorized users can access the Media Folder. A user can only access those folders which are associated with the groups which he is able to manage. Users need to login with username and password.

Access is only allowed by specified IP Address:

Enable this function in order to allow access from a particular IP address or subnet in the "share mode" or "controlled access mode". Click [Add / Edit] and you will see a pop-up window.

Enter the IP address or partial IP address, e.g. type "**172.16.0.1**" to allow access only from this IP address, or type "**172.16.0.**" to allow access from all computers in this subnet.



NOTE

CMS does not support anonymous FTP.

NOTE

Encoding Type of File Name: CMS and SMP all use UTF-8 as the encoding of file names. If you include any non-English character in the file name, we suggest you upload files in a PC with Windows XP or the latest OS and the FTP software need to support UTF-8, too. If you do not know whether your OS or software support UTF-8 or not, please only use English or numbers as the file name, such as "abc01.mpg".

4. If you would like to access Media Folder by FTP, please click

"Enable FTP access".



Disable FTP access	Users can not access Media Folder by FTP.
Enable FTP access	Users can access Media Folder by FTP. Users who want to use FTP service should have the accounts which are allowed to access the function, " Media Folder access by FTP ". Users have to login with username and password before using it.

Click [Save] on the bottom to save the settings, and then click [Apply] on the left column so that those settings will come into effect.

You can only download **8192 files** and **256 folders** in maximum for each mapping group.

NOTE

You can choose to manage Media Folder(s) by FTP or Network Neighborhood. You will access the same Media Folder and upload/download the same data either way.

NOTE

The maximum single file size in Media Folder is 2G Bytes. SMP player cannot synchronize any file bigger or equal to 2G Bytes.

NOTE

If you set the access mode as "Controlled Access", you need to enter username and password while building the connection.

NOTE

We strongly suggest you use the FTP client software which supports UTF-8 encoding.

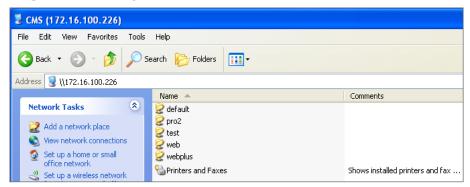
2-1-3 Upload Files to CMS Server

After configuring the Media Folder and the access mode, you can choose to use one of the following methods to upload your files to a CMS server.

Access Media Folder by Network Neighborhood

You can use the File Explorer or Network Neighborhood in your PC and enter \\cms.ip.address (ex. \\10.1.2.3) in the address bar. Then, you can see the Media Folder you created and start to manage it.

You can also use **CAYIN Device Seeker** to open the folder if CMS and your PC are in the same LAN. Please refer to "1-5 Start and Login" for the usage of **CAYIN Device Seeker**.



Use FTP Client Software

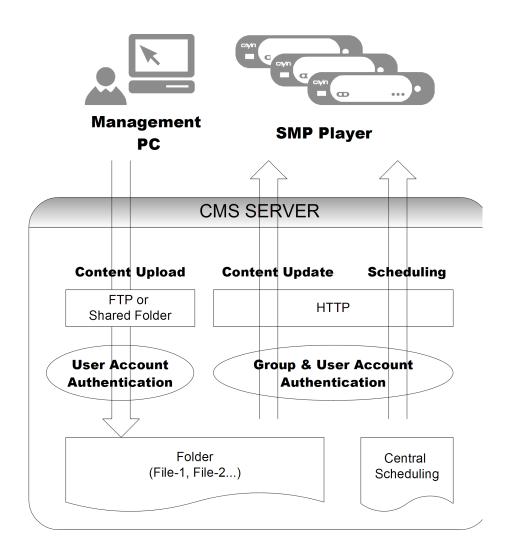
If you enable FTP access to Media Folder(s) in **2-1-2** section, you can choose your familiar FTP client software in your PC. After entering username and password, you can upload/delete files in Media Folder(s).

Group and aggregation names are case sensitive and have to be in English.

2-2 Create and Manage Groups

You can group players for easy management. Assign a folder to a group; then, players in the same group can automatically retrieve information and synchronize contents in the corresponding folder located in CMS.

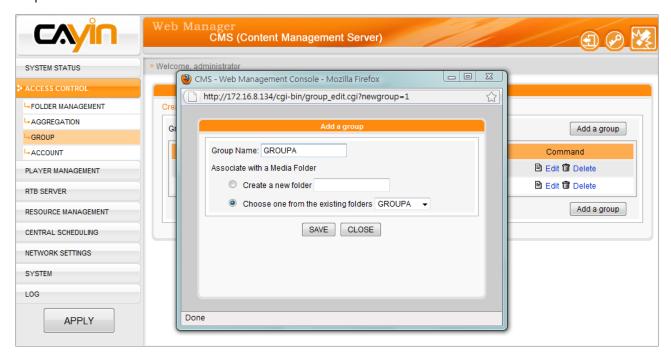
In many cases, Group is easy and sufficient for player management. If you need one more layer for your player management, you can consider **Aggregation** which will be introduced in **Section 2-3**.



2-2-1 Add Group

Please follow the below steps to add a new group.

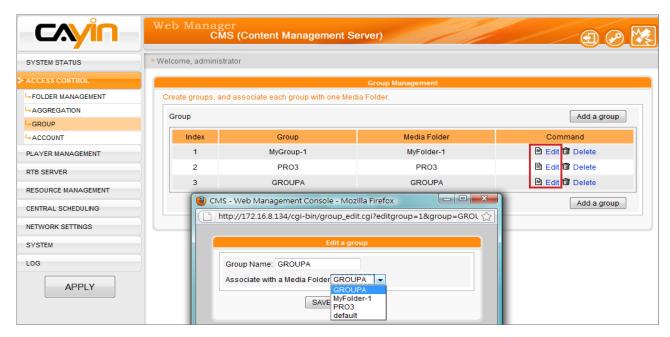
- Login CMS server with the account which is allowed to access the function: "ACCESS
 CONTROL > GROUP".
- 2. Click [ACCESS CONTROL] on the main page, and select the sub-page, "GROUP".
- 3. Click [Add a group] and you will see a pop-up window. Enter a group name in the "Group Name" box. Select "Create a new folder" and enter a folder name. Click [SAVE]; then, you just create a new group and a new folder.
- 4. If you have already created a folder in CMS server, you can click "Choose one from the existing folders" and select one folder in the drop-down menu. Click [SAVE] to complete the procedure.



2-2-2 Edit Group

You can modify the settings of "Group". Please follow below steps:

- Login CMS server with the account which is allowed to access the function: "ACCESS
 CONTROL > GROUP".
- 2. Click [ACCESS CONTROL] on the main page, and select the sub-page, "GROUP".
- Locate the group name and click [Edit] in the "Command" column. Then, you can change the settings in the pop-up window.

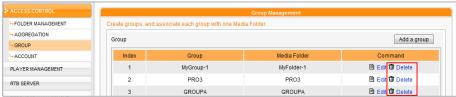


4. Click [SAVE] and go back to the main page. Click [APPLY] and complete the setting.

2-2-3 Delete Group

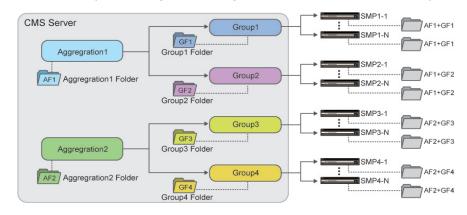
You can remove those groups which you do not need anymore.

- Login CMS with the account which is allowed to access the function:
 "ACCESS CONTROL > GROUP".
- Click [ACCESS CONTROL] on the main page, and select the sub-page, "GROUP".
- 3. Locate the group name and click [**Delete**] in the "**Command**" column. Then, you can delete the group.



2-3 Aggregation

You can create and manage "Aggregation" here. Briefly, "Aggregation" is a concept of "group of groups", which means you can add a group to an aggregation and manage contents and schedules for multiple groups at the same time. For example, if you assign player1 to group1, and group1 to aggregation1, the player1 will playback the files in group1 and aggregation1 according to the priority you set. This is convenient for users who want players within different groups play the same multimedia files. You can add / edit aggregation here to help you manage multiple groups in a fast and flexible way.



NOTE

If the schedule of aggregation overlaps with schedule of group, SMP player will play the group schedule by default. You can also configure the aggregation "High Priority" option to overide group scheduling when setting up the schedule.

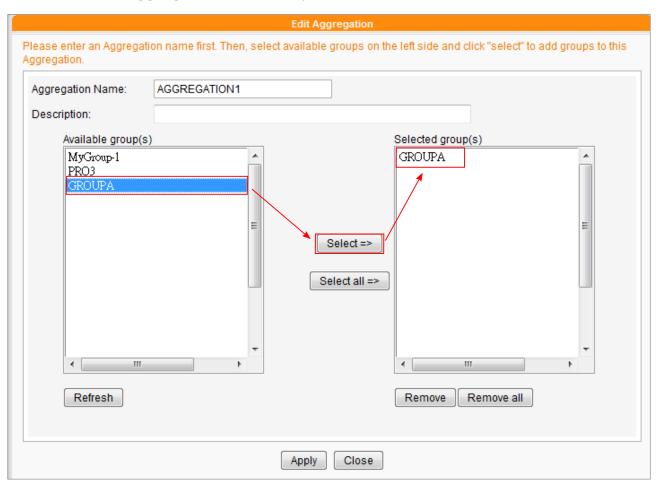
NOTE

You cannot include one group into different aggregations. If you do not want the aggregation administrator to access their groups, please refer to chapter **2-4** for further information.

Login CMS with the account which is allowed to access the function: "ACCESS CONTROL >
 AGGREGATION".



2. Click [Add an Aggregation] button and you will see a pop-up window.



3. Name your aggregation here and choose groups you want to add in the aggregation. Click [Select=>] to move them to the "select" column. You can also click [Select all=>] to choose all available groups.

- Click [Refresh] to get the latest groups if needed. If you want to remove selected groups, please click [Remove] or [Remove all].
- 5. Click [Apply] to adopt the change and go back to "aggregation" page.
- 6. Now you can see the newly added aggregation in the list. You can click [Edit] to make changes of your aggregation or [Delete] to take out the selected aggregation.



7. After aggregation is created, system will create a Media folder in Aggregation's name. Every file will be stored in the aggregation's folder. SMP players within the aggregation's group list will download those files to their own local Media Folders.



If you want to login Web Manager with another account, you can click the [**Logout** a] icon to leave the current page. Then, you can use another account to login Web Manager again.

2-4 Create and Manage Accounts

In CMS server, you can create accounts for different users and assign appropriate management authority to each account. Please follow the steps to add a new account.

- Login CMS server with the account which is allowed to access the function: "ACCESS CONTROL > ACCOUNT".
- Click [ACCESS CONTROL] on the main page, and select the sub-page, "ACCOUNT".
- 3. Click [Add a new account] and you will see a pop-up window.
 Enter the account name in the "Username" text box. Enter a password in the "New Password" text box and enter it again in the "New Password Confirm" text box.

Username (5~16 letters): user1 New Password (4~16 letters): New Password Confirm: Access to groups All groups Select groups Groups Selected Groups GROUP1 (Aggregation) GROUPA MyGroup-1 Select => Select all => Refresh Remove Remove all

NOTE

Username has to contain lower case English character.

NOTE

You can change the password of current account by clicking the [Change password []] icon.

You can also assign aggregation access right here. If you choose aggregation only but not groups belong to this aggregation, you can only access to the aggregation but not groups belong to that aggregation.

NOTE

There are three default accounts in a CMS server: administrator, webadmin, and smbuser. "administrator" is the default account for the main administrator. "webadmin" and "smbuser" are accounts for compatible older version of SMP players. You can only edit the settings of these three accounts, but cannot remove them.

The default password for "administrator" and "webadmin" is "admin"; the one for "smbuser" is "smbuser".

- 4. In the "Access to groups" area, you can assign the management authority of group(s) to this account. If you authorize this account to manage all folders in this CMS server, please select "All groups".
- 5. If you want this account to manage only selected folders, please enable "Select groups". All groups in this CMS server will be listed in the "Groups" area on the left-hand side. You can select groups and click [Select =>]; then, all selected groups will be duplicated to the right-hand side, "Selected Groups". This account can only manage those folders which are in the "Selected Groups".
- 6. To cancel selected items in the right column, you can select those items and click [Remove] to delete them. You can also click [Remove all] to delete all selected items.

7. Finally, in the "**Function Access**" area, choose those management activities this account is authorized to do. If you do not enable any function for this account, the user with this account cannot login Web Manager, but still can synchronize contents with the CMS server.

Function Accesses
✓ System Status
✓ Player Manager - Client List
▼ RTB Server
Resource Manager - Skin Manager
Resource Manager - Program Manager
Resource Manager - Video Playlist Manager
Resource Manager - WEB Playlist
Resource Manager - Font Manager
☑ Central Scheduling - Multimedia
☑ Central Scheduling - Image Slide Show
☑ Central Scheduling - Ticker
☑ Central Scheduling - WEB Playlist
☑ Central Scheduling - Volume
Access Control - Folder Management
Access Control - Group
Access Control - Aggregation
Access Control - Account
☐ Network Settings
✓ System - System Settings
✓ System - System Maintenance
Log
Media Folder access by Network Neighborhood under 'controlled access' mode
✓ Media Folder access by FTP
Allow Super Monitor to monitor this CMS
Trigger Emergency Schedule

8. Click [SAVE] and [CLOSE] to go back to the main page. Then, click [APPLY] so that those settings will come into effect.

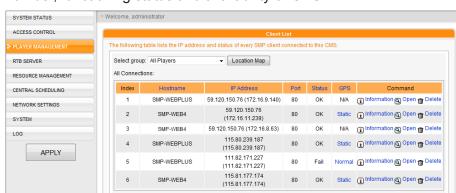
Player Management

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Players in a special Group, "Players without group info." belong to old versions, so they do not have the Group information.

3-1 Client List

All SMP players which connect to this CMS server will be listed here. You can check the player's name, IP address, web manager port number, functioning status and availability of GPS.



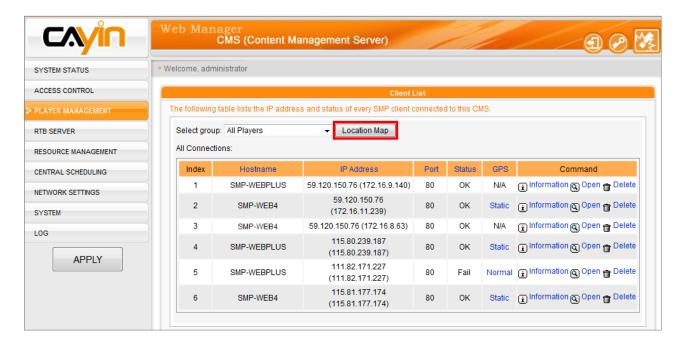
Host name	Hostname of SMP client
IP Address	The IP address of SMP client. If the SMP is deployed behind a firewall, the first IP will be the physical IP and the second one, in the brackets, will be the virtual IP (the IP that SMP really owns). Other than the above situation, the first and second IP addresses are usually the same.
Port	The Web Manager's port number
Status	OK: SMP client functions normally.
	Fail: SMP client no longer sends connection signals to the server. The "Fail" status usually occurs when the network is disconnected or the SMP client is shutdown abnormally.
GPS	You can check SMP's GPS status here if this function is enabled.
	N/A: No GPS or location is configured in this SMP player.
	Normal: The GPS function works normally in this SMP player.
	No Signal: The SMP player is configured to use GPS function but the GPS receiver can't receive any signal right now.
	Static: The SMP player is assigned a static location.
Command (Information)	You can preview the detailed information for each SMP player that belongs to the CMS server here, including model, firmware and other descriptions.
Command (Open)	Open a browser to connect to SMP's Web Manager. The program will try to connect to the physical IP address here.
Command (Delete)	Manually remove the item

When you move the mouse cursor on top of the player item in the "**Status**" column, you can see the tool-tip shows the last heart-beat and register time of that player.

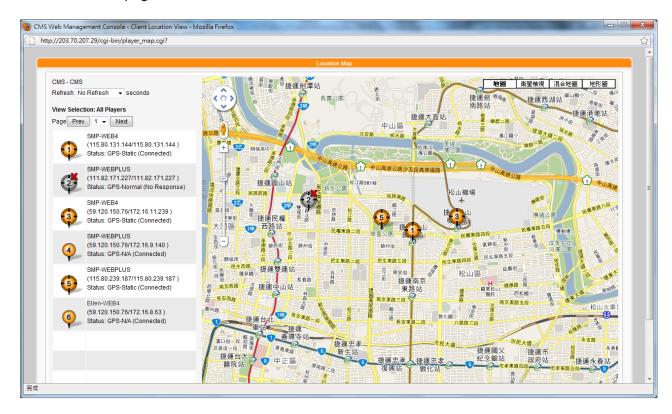


3-2 Monitor SMP Players on Google Maps

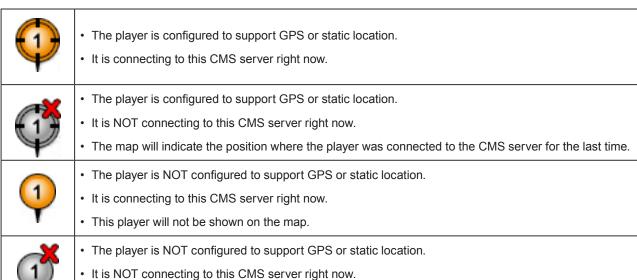
1. Login to CMS Web Manager and click "PLAYER MANAGEMENT".



Click [Location Map]; then you will see Google Maps in the pop-up window. You can also set how often the page refreshes.

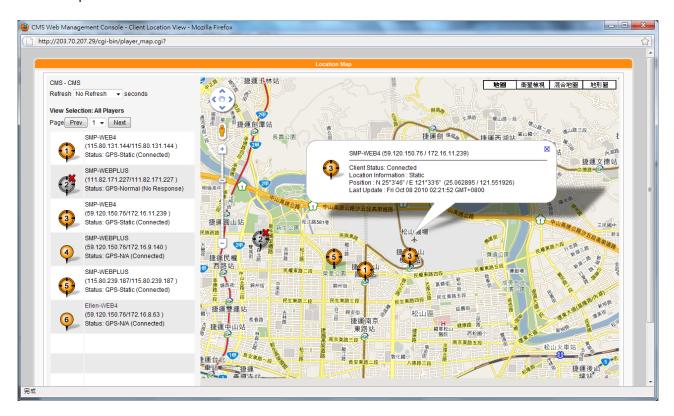


3. The status and IP address of all connected SMP players are listed on the left-hand side. One page will show up to 10 SMP players. If you want to see more other players, please click [Prev], [Next], or select the page number directly. Now, we explain the meaning of each icon as follows:



4. If you want to see more detailed information about any specific player, you can click the icon on the map.

· This player will not be shown on the map.



RTB Server

The number of media inputs in the "RTB SERVER" page is decided by the specification of the multimedia streaming card which you purchase for the CMS server. If you see four media inputs in the page, it means that this CMS can manage four streaming signal inputs.

NOTE

Do not add a client that does not exist, because it will waste your network bandwidth. Do not send packet to Microsoft Windows PC, because Windows send mass "ICMP port unreachable" packets back to server when process listening the udp port.

NOTE

Theoretically, you can use broadcast, multicast, and unicast at the same time. However, we suggest you choose only one way to send streaming signals unless you are good at network protocols and operation.

CMS server is equipped with the RTB server function only when you purchase a CMS server installed with CAYIN's multimedia streaming card. In RTB SERVER page, you can assign each media input to a particular channel and add/edit streaming clients. Please follow the steps:

 Login CMS server with the account which is allowed to access the function: "RTB Server". Then, switch to "RTB SERVER" page.



- 2. Enable media inputs and assign each input to a particular channel.
- Select a signal format (NTSC/PAL), codec and bandwidth based on your own TV signal.
- Click [Add/Edit] and assign streaming modes of players. Please refer to the following table for detailed information.

Broadcast	All clients in the network area will receive streaming contents.
Multicast	Enable multicast and send streaming packets to those players which enable this function. Multicasting IP address ranges between 224.0.0.1 and 239.255.255.255.
Unicast	Send signals to the player with the particular IP address. To add a unicast client, please enter a client's name and its IP address, and click [Add]. This item will be added into the "Unicast" table. To delete the existing client in the table, please locate the item and click [Remove] in the command column.

Regarding "Please contact your dealer or CAYIN Technology for buying this option." Message.

There are two possibilities that you read this message on webpage:

- 1. You have not purchased any RTB license or video capture card from CAYIN. Please contact our salespeople if you are interested in using real-time broadcasting function.
- 2. If you have purchased a model with RTB function but the purchase web page is still shown, it may due to improper connection of the PCI Video capture card inside the server. Please consult our reseller or distributor.

RTB Server

In the RTB Server section, you can assign each real-time broadcast input to a particular channel. To detail streaming mode (unicast/multicast/broadcast), click the button Add/Edit and then select suitable profile (type of streaming) for the input.

Please contact your dealer or Cayin Technology to buying this option. Cayin's Technology website -- http://www.cayintech.com

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The resolution of the skin and the display set in the SMP player should be the same. You can produce a skin file (.csk) which supports multiple resolutions. Please refer to the user manual of SMP players for detailed information regarding the usage of CAYIN's Skin Editor.

NOTE

SMP-WEB player use Skin via "**Program**" function.

You can manage skins and playlists of SMP players in "**RESOURCE MANAGEMENT**" section.

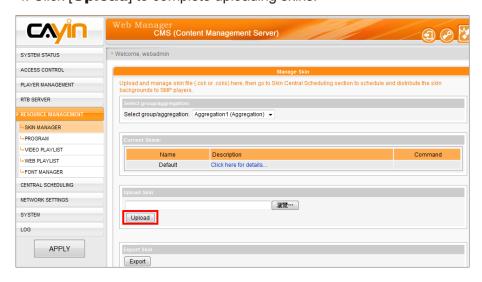
5-1 Skin Manager

For SMP player, users can change skins to have various presentations. You can upload well-designed .csk/.cks files to a CMS server, and manage each SMP player's skin centrally by CMS.

Upload Skin

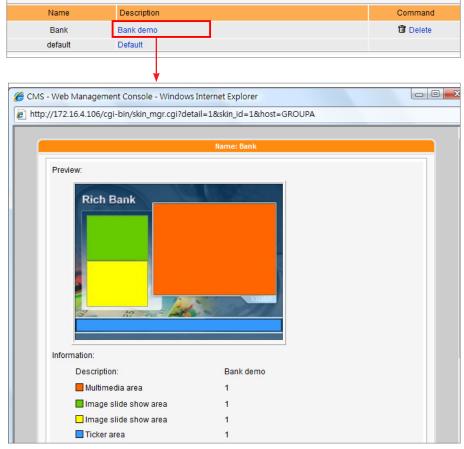
Please follow the following steps to upload skin files (.csk/.csks) into the CMS server.

- Login CMS server with the account which is allowed to access the function: "RESOURCE MANAGER > SKIN MANAGER".
- Click [RESOURCE MANAGEMENT] on the main page, and select the sub-page "SKIN MANAGER".
- Select [Group/Aggregation] and click [Browse...] to select a skin file (.csk or .csks). CMS will apply the skin(s) to players in the selected group or aggregation.
- 4. Click [Upload] to complete uploading skins.



Skin files (.csk) are created by CAYIN's Skin Editor. All uploaded skins will be listed in the "Current Skins" table. Please refer to the user manual of SMP players to learn more about this editing tool.

5. Now, you can see the skin listed in the "Current Skins" table.
The column "Name" and "Description" show the skin name and description of a skin that you create in CAYIN's Skin Editor. You can click the description of each skin to preview it.



6. If you want to remove a skin, please click [**Delete**].

NOTE

You can export a Skin to a **CSK** file or multiple Skins to a **CSKS** file. The CSKS file can be uploaded to another SMP player or CMS server but cannot be opened by CAYIN Skin Editor for further modification.

Export Skin

You can export skins, save them in your PC, and then upload to other SMP players or CMS servers. You can also open those skin files and modify them in Skin Editor. Click [**Export**] and you will see all skins in the pop-up window. Please select those skins you want to export and click [**Export**].



This function only works with SMP-WEB series.

NOTE

If you have not created any group or aggregation, please go to "ACCESS CONTROL > GROUP" or "ACCESS CONTROL > AGGREGATION" page to add a group or an aggregation.

NOTE

You can create a program set to classify your program. Program set is only for easy management. It can't be used for scheduling or content update.

NOTE

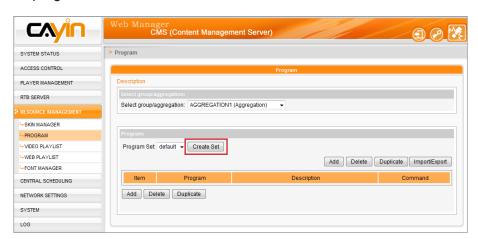
The steps for creating a program will be based on the skin you choose. System may skip some steps if the skin you choose does not reserve areas for some multimedia types.

5-2 Program

5-2-1 Create a Program Set

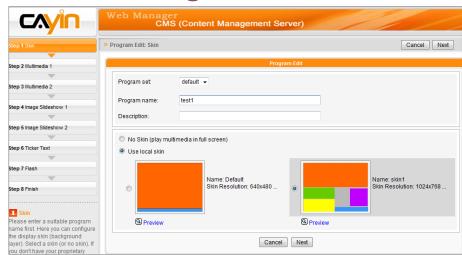
You can divide all SMP players into groups and edit programs for each group. Then, all players in the same group will apply the same program. Please follow steps below to edit program.

- Login CMS server with the account which is allowed to access the function: "RESOURCE MANAGER > PROGRAM"
- Click [RESOURCE MANAGEMENT] on the main page, and select the sub-page "PROGRAM".
- Select a group or aggregation in the drop-down menu. CMS will apply the program to players in the selected group or aggregation.
- 4. Choose a program set and the program you are going to create in the following steps will be included in this category. If you haven't created any program set, please click [Create Set] and enter a program set name.



5. Then, click [Add] and you can start to edit a program step by step.

5-2-2 Edit Program: Skin



- Before you start to select a Skin, please enter a program name and description.
- Choose the skin type you want to apply to this program. Click
 [Preview] for detailed information of the skin. If you choose "No
 Skin", SMP players will playback multimedia in full screen. Click
 [Next] to the next step.

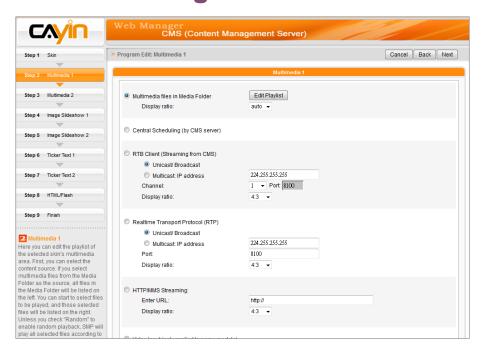
NOTE

You can create your own skin by using CAYIN Skin Editor and upload it to CMS for future use. Please go to "RESOURCE MANAGER" to upload skins.

NOTE

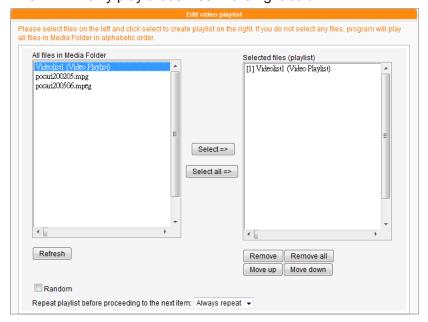
Please remember to go to the "SKIN MANAGER" page and select a skin with a pre-edited Multimedia area.

5-2-3 Edit Program: Multimedia



(A) Multimedia Files in Media Folder:

- Tick "Multimedia files in Media Folder" and click "Edit Playlist", you will see a popup window. All video files in the Media Folder will be listed in the left column. If the left column is empty, that means there is no file in the Media Folder. Please upload video files to Media Folder first.
- 2. Select the files you want to play. You can select multiple files at one time by holding the Shift or Ctrl key, or just select files one by one. In the left column, the item with "*" sign represents a folder's name. If you choose this item, it means you will select all files in this folder.
- Click [Select=>], and all selected files in the left column will be duplicated to the right column.SMP will only play those files in the right column.



- 4. If you want to play all files in the media folder, you can simply click the [Select all=>] button.

 Then, all files in the left column will be duplicated to the right column.
- 5. Now, you can arrange the order of those selected files. In the right column, each file will be added a serial number. SMP will play media files in the sequence, 1, 2, 3 ... N. Please refer to the following table for more functions. You can change the sequence of the playlist by using [Move up] and [Move down], or delete items in the playlist by using [Remove] and [Remove all].

Move up	Select one item in the right column. Click [Move up], and this item will be moved forward in the playlist.
Move down	Select one item in the right column. Click [Move down], and this item will be moved backward in the playlist.
Remove	If you want to remove files from the " Selected Files " in the right column, please select files and click [Remove]. Then, those files will be removed from the right column, but will not be deleted from the Media Folder.
Remove all	Click [Remove all], and all items will be removed from the right column, but all files will still be kept in the Media Folder.
Random	If you select " Random ", all files in the right column will be played randomly, without following the sequence.

6. If you want to play all multimedia files in the Media Folder more than once, please enable "Repeat playlist before proceeding to the next item" and set repeat number of times here. If you select "Always repeat", SMP player will keep playing this program without playing next items in the web playlist. If you select "3", SMP player will repeat playing those multimedia files in the Media Folder for three times and then move on to the next item in the playlist.

NOTE

If you want to enable the function, "**Repeat playlist before proceeding to the next item**", please remember to set the duration of this program as "**Always**" in the web playlist (**RESOURCE MANAGEMENT > WEB PLAYLIST**). If you set a certain duration for this program (e.g. 50 seconds), SMP may not be able to repeat playing all files in the Media Folder within the configured time period. Then, this function may not be able to function properly as you expect.

(B) Central Scheduling (by CMS Server):

Please tick this option if you want the playlist of media files can be centrally scheduled and controlled by CMS server. Enable this function and you can play selected media files once or weekly at certain time or periods. Please refer to the section "**CENTRAL SCHEDULING**" in CMS server for further settings.



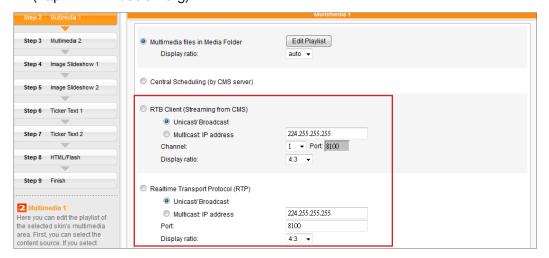
(C) RTB/RTP Streaming

To play streaming video as RTB (Real-Time Broadcast) client, you need to select the channel corresponding to the client's server, i.e. CMS server. To play Real-time Transport Protocol (RTP) streaming, please enter the port number of the relevant RTP server. Select the broadcast mode for the source.



RTB and RTP are different protocols.

- 1. RTB Client only works with CMS's RTB Server function.
- You can use RTP compliant software sending RTP streaming to SMP, e.g. VideoLAN client/server (http://www.videolan.org)



(D) HTTP/MMS Streaming

To play video file via HTTP or MMS streaming, e.g. video file on a web server or MMS server, enter the URL of the file in this option.

(E) Video Input (only applied to some models)

To play AV-IN signal on the multimedia area, please select this item, and refer to section **7-4-8** in SMP-WEB series manual for detailed video input configurations.

(F) Mute Function

If you do not want to play the audio of the multimedia source, please tick [**Mute**] option to stop the audio playback.



After finishing all configurations, please click [Next] to proceed.

Please complete "Multimedia 2" settings according to the previous steps.

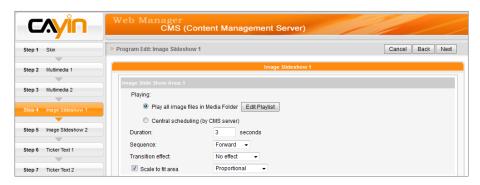
Please remember to go to the "SKIN MANAGER" page and select a skin with a pre-edited Image Slideshow area.

5-2-4 Edit Program: Image Slide Show

 You can assign the content source and configure related settings here and refer the following table for detailed descriptions:

Play all image files in Media Folder	Play all files in the media folder, including the top- level directory and subfolders (depend on your
Modia i oldoi	configuration.). Click [Edit Playlist] to further configure your playlist.

- 2. Set the "Duration" in seconds for playing each picture.
- Set the "Sequence". You can select to play files in forward or backward order, or random.
- Set the "Transition effect". You can shoose one transition effect here to make the transition more visually compelling.



5. If you enable the function "Scale to fit area", the system will automatically adjust the size of each image to fit the display area of image slide show which you define in the skin. There are two methods for you to choose:

proportional	Image will be resized according to its original ratio.
non-proportional	Image can be resized by its width or length separately.

6. Click [Next] to proceed.

Please complete "**Image slideshow 2**" settings according to the previous steps.

Please remember to go to the "**SKIN MANAGER**" page and select a skin with a pre-edited ticker area.

5-2-5 Edit Program: Ticker

Select from multiple sources for the ticker text, and set up the font and the color of the ticker area. Please refer the following table to configure the source and content of the ticker.



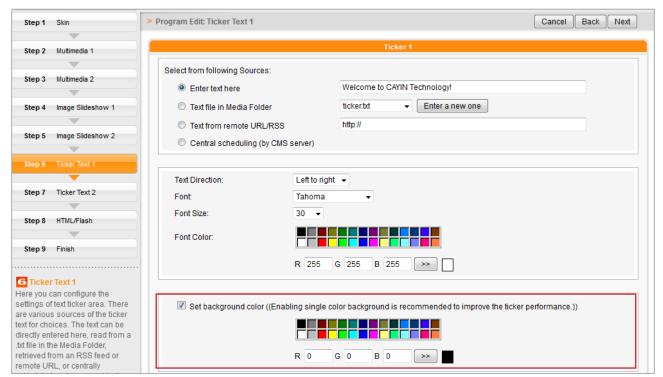
Enter Text here	You can enter a text message. Save the settings and the text will be displayed on the screen.
Text file in Media Folder	You can type your message in a text file and upload the file into Media Folder. When you enable this option, system will find all files with the extension " .txt " for your choices. The message in the text file will be displayed.
	SMP now supports UTF-8 character encoding. If the content is not written in English, please choose encoding type " UTF-8 " when you save the text file.
Text from remote URL/RSS	To show a text message available on a URL, enter the URL address in the option, e.g. http://your_server/message.txt. If you use the server side script to generate the dynamic text, we suggest you only send the text result (mime type txt/plain) back to the SMP player. You can also retrieve live RSS messages. Enter the URL address in the option, e.g. http://rss.cnn.com/rss/cnn_us.rss. The format of non-English RSS link should be in the UTF-8 character encoding.
Central Scheduling (by CMS Server)	Control ticker text from CMS server's Central Scheduling Ticker area.

You can change the font type, size, and color of the ticker.

- In "Text Direction" drop down menu, you can change the direction of the text from "left to right" or "right to left" to suit your own language configuration.
- You can also select Font and Font Size as well as the Font Color by entering the R, G, B code directly. Click [>>] to preview the accurate color.

Furthermore, you can enable single color background and choose a suitable color for your ticker. Otherwise, the ticker background area will be transparent to Skin background.

Click "Set background color" and enter the R, G, B code directly. Then, click [>>] to see the
accurate color.



2. If you want to change the scrolling text for ticker, please choose one of options from "No scrolling effect", "Simple crawl", "Simple bottom-up", and "Bottom-up and crawl".
Set a suitable speed. "1" represents the slowest speed, and "6" represents the fastest one.

No scrolling effect	The text is static without moving
Simple crawl	Text moving either from left to right or right to left. The next line will follow the previous line.
Simple bottom-up	Text moving from bottom to top. If your sentences are too long, the system will break them automatically into the next lines.
Bottom-up and crawl	First, the text is moving from bottom to top and pause; then it is moving from left to right to finish a line.

- 3. Set duration of "Pause" when you choose "Simple bottom-up" or "Bottom-up and crawl". This option will let text pause specific seconds when finish a line.
- 4. Click [Next] to proceed.

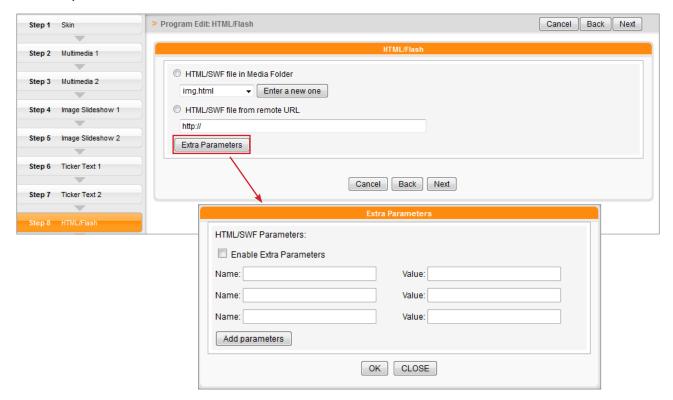
Please complete "**Ticker Text 2**" settings according to the previous steps.



5-2-6 Edit Program: HTML/Flash

Only SMP-WEB series supports HTML/Flash playback. If you select a skin with Flash area, you can add and edit your Flash content here.

1. "HTML/Flash file in Media Folder": If you tick this option, you can choose one .html or .swf file you want to playback in the drop-down menu. You can also set the file name by clicking [Enter a new one] if you haven't upload the file into CMS's Media Folder. If you want to add any other new extra parameters, please click [Extra Parameters] and fill in the required fields to add extra parameters.



- 2. "HTML/SWF file from remote URL": If you tick this option, please enter an URL address of your HTML/Flash file. If you want to add any other new extra parameters, please click [Extra Parameters] and fill in the required fields to add extra parameters.
- 3. Click [**Next**] to proceed.

5-2-7 Finish your Program

After finishing all the configurations based on your selected skin, you will see the preview of your skin together with other related information. Press [**Finish**] to finish the Program Wizard settings.

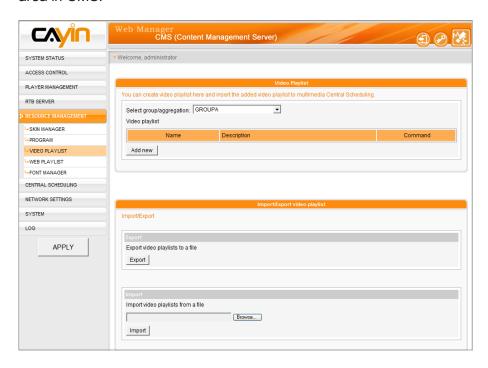
Now you can see the new program showing in the program table. Click [**Edit**] to modify your program or [**Info**] to review the detailed program information. If you want to delete the program, please click [**Delete**]. You can also copy one or more programs to the program set you choose. Simply click [**Duplicate**] and choose those programs and program set that you want to move your selected programs in. Click [**Duplicate**] to finish.

NOTE

If you copy the program to the same program set, the "-copy" will be added in the program name for distinction.

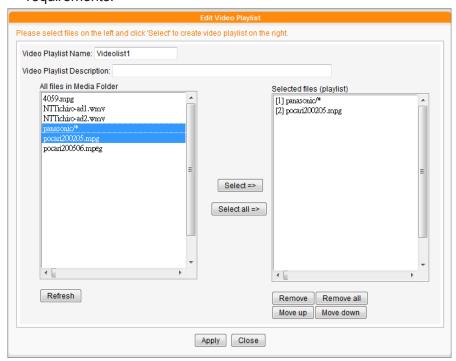
5-3 Video Playlist

Here you can create a video playlist to insert the added video playlist to the multimedia section in Central Scheduling or Program's Multimedia area in CMS.

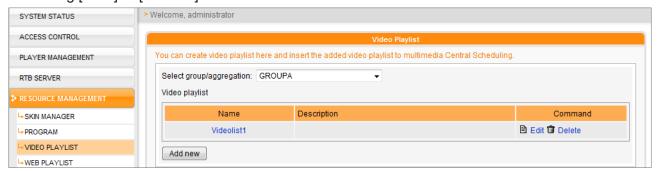


5-3-1 Edit Video Playlist

- Select a group or aggregation first; you can see and edit the existing video playlist in the group you choose. You can also choose a group or aggregation that you want to add your new video playlist in.
- Click [Add new], and then you will see a pop-up window. Please enter a video playlist name and a description (optional) here.
- 3. Now you can see all files in Media Folder in the left column. Choose files you want to add in the new video playlist, click [Select =>], and you will see those selected files in the right column. If you would like to select all files in Media Folder, please select [Select all=>]. Furthermore, you can also click [Refresh] to get the latest file list.
- 4. If you would like to delete any files you've chosen or change the sequence of the selected files, please click [Remove], [Remove all], [Move up], [Move down] according to your requirements.

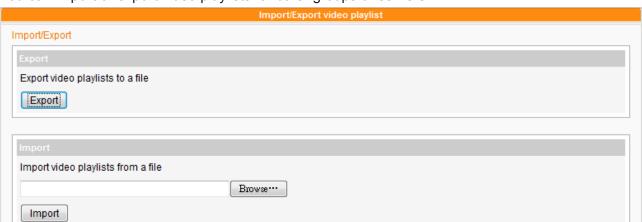


Finally, click [APPLY] to adopt the changes or [CLOSE] to leave the window without saving any changes. 6. Now you can see your new video playlist in the main page. You can choose to edit or delete it by clicking [Edit] or [Delete] button in the command column.



5-3-2 Import/Export Video Playlist

You can import or export video playlists for other groups or servers.



Export

- 1. Select a group or aggregation in the drop-down menu, "Select group/aggregation".
- Click [Export]; then, you can export the playlist of this group to a file (.cps) and store it in yourPC.

Import

- Please select the group that you want to apply a pre-edited video playlist from another group or CMS server.
- 2. Click [Browse...] to select the video playlist file (.cps).
- 3. Click [Import] and you will see the video playlist on the above table.

Only SMP-WEB series supports this feature.

5-4 Web Playlist

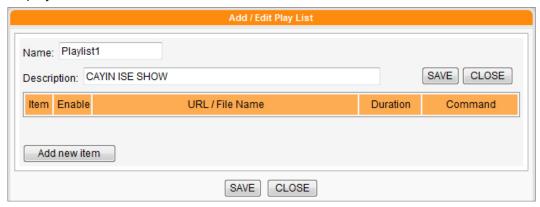
5-4-1 Edit Web Playlist

You can divide all SMP players into groups and edit web playlists for each group. Then, all players in the same group will apply the same playlists. Please follow the steps below to edit web playlists for each group.

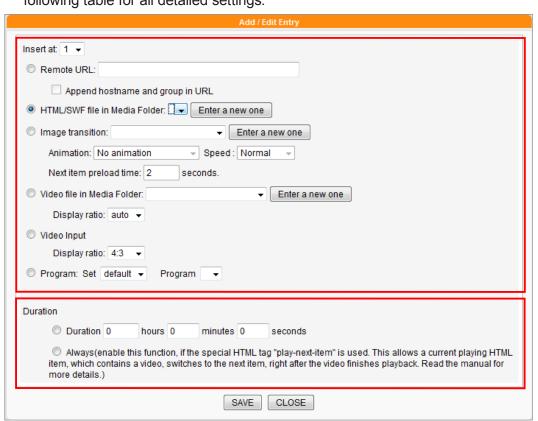
- Login CMS server with the account which is allowed to access the function: "RESOURCE MANAGER > WEB PLAYLIST".
- Click [RESOURCE MANAGEMENT] on the main page, and select the sub-page, "WEB PLAYLIST".
- 3. Select a group in the drop-down menu, "Select group". If you have not created any group, please go to "ACCESS CONTROL > GROUP" page to add a group.



 Then, we can start to add a new web playlist. Click [Add new] and edit a playlist in the pop-up window. 5. Enter the name of this playlist in the "Name" text box and a short description in the "Description" text box. Click [Add new item] and edit an item in a playlist. You can add up to 99 items to a playlist.



6. In the "Add / Edit Entry" window, you can decide the sequence of this new item in the playlist. By default, the new item will be inserted as the last one. For example, if you already have five items in this playlist, the system will automatically place this new item at the sixth place by default. You can also choose to insert this new item between the first and fifth place. Please refer the following table for all detailed settings:



This method is similar to the way you use in your PC browser. SMP-WEB products support HTTPS (SSL) protocol.

Remote	Specify a URL where SMP-WEB can connect to the html content, e.g.
URL	http://remote_web_server/path/to/your.html.
	You can also use dynamic server script, such as ASP, PHP, or CGI to generate the HTML page. Check the box "Append Hostname Parameter" and the system will append hostname/group parameter to the end of the html URL automatically. For example, you enter http:// remote_web_server/test.php in this option, SMP-WEB will actually send a request as http://remote_web_server/test.php?hostname=hostn ame&group=groupname The hostname here is the hostname that you configure in "7-3 NETWORK SETTINGS".
HTML/	Select to play an html or swf file in the Media Folder.
SWF file in Media Folder	By default, CMS will automatically list all html and swf files in the Media Folder, so you can select an item here.
, Gladi	If you haven't uploaded your files in the Media Folder, you can also pre-edit the playlist by clicking [Enter new one] and entering the item (e.g. /cayin/main.html) directly in the text box.
Image transition	You can insert an image file (JPEG) as a display item or a transition between two HTML files by enabling this function. You can also configure the transition effect as follows. By default, CMS will automatically list all image files in the Media Folder, so you can select one here. If you haven't uploaded your files in the Media Folder, you can also pre-edit the playlist by clicking [Enter a new one] and entering the item (e.g. /cayin/cartoon.jpg) directly in the text box.
	* Animation: The transition effect when the image enters and leaves the screen. We now provide four animations: "fly from top to bottom", "fly from bottom to top", "fly from left to right" and "fly from right to left".
	* Speed: The speed of animation effect.
	* Next item preload time: You must set the time when you want the system to start pre-loading the next item (e.g. an html file) before the image disappears. For example, the duration of this image is 20 seconds and you want the system to start pre-loading the next item at the 15th seconds, you need to set the number " 5 (seconds) " in the field. The number here depends on the loading time of the next item (html).
Video file in Media	You can insert a video file as one of the items in the playlist, and display a full-screen video.
Folder	By default, CMS will automatically list all video files in the Media Folder, so you can select one here.
	If you haven't uploaded your files in the Media Folder, you can also pre-edit the playlist by clicking [Enter a new one] and entering the item (e.g. /cayin/cartoon.mpg) directly in the text box.
	Display ratio: You can choose display ratio as "auto", "4:3" or "16:9"
Video Input	You can choose 4:3 or 16:9 as the video display ratio.
Program	You can choose to play a program set or a program itself.

NOTE

If you choose to play video files in Media Folder, you will not be able to set the duration of this video. The system will automatically play the next item in this playlist after the system finishes playing the whole video.

- 7. Finally, set the duration of each playback item. After the time is up, SMP player will play the next item. If you configure the duration as "Always", the playlist will stop here, which means that SMP player will keep playing this item without moving to the next item. You can still use JavaScript or 'play-next-item' tag to change the playlist item. Click [SAVE] and [CLOSE] to complete the settings.
- After adding items, you can adjust the order by clicking the [Up] or
 [Down] button in the Command column.



5-4-2 Import/Export Web Playlist

You can import or export web playlists for other groups or servers.



Export

NOTE

[CLOSE].

Remember to click the check box to enable those

items that you want to play.

Then, click [SAVE] and

- 1. Select a group in the drop-down menu, "Select group".
- Click [Export]; then, you can export the playlist of this group to a file (.cps) and store it in your PC.

Import

- Please select the group, which you want to apply a pre-edited Web Playlist from another Group or CMS server.
- 2. Click [Browse...] to select the Web Playlist file (.cps).
- Click [Import]. Then, you will see the Web Playlist listed in the above table.

5-5 Font Manager

You can upload new fonts to SMP players via a CMS server, so that you can choose your favorite text fonts for a better presentation.

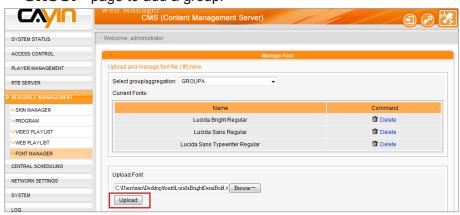
NOTE

You can only upload Windows® TTF font with UTF-8 character encode. You will fail to upload fonts if you choose incorrect font files. We don't guarantee all font files can work normally in SMP player.

5-5-1 Add Fonts to SMP Players

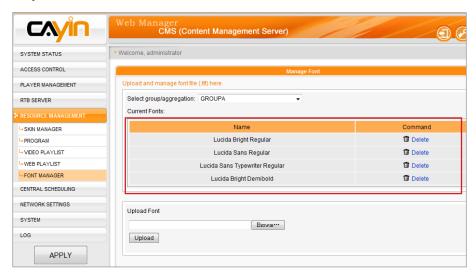
- Login CMS server with the account which is allowed to access the function: "RESOURCE MANAGER - FONT MANAGER".
- Click [RESOURCE MANAGEMENT] on the main page, and select the sub-page, "FONT MANAGER".
- Select a group in the drop-down menu, "Select group". If you have not created any group, please go to "ACCESS CONTROL >

GROUP" page to add a group.



Not all fonts that you upload to CMS will be stored in SMP players. It will depend on the capacity of SMP partition.

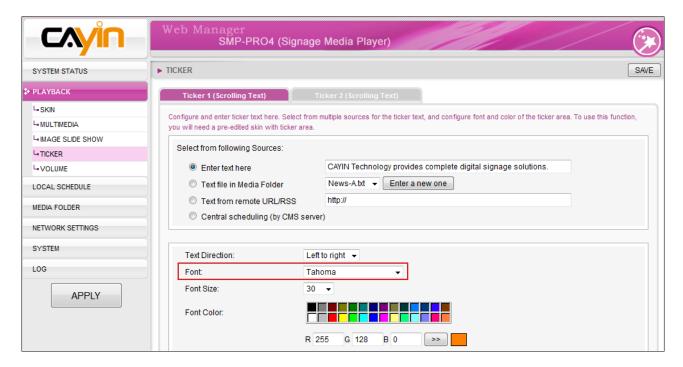
- 4. You can start to upload selected fonts one by one. Click [Browse] and select a font file; then, click [Upload]. After that, you can see all uploaded fonts in the table.
- 5. After uploading TTF font to CMS, the uploaded font files will be synchronized to SMP together with contents. After synchronization, you can choose these fonts in SMP.



5-5-2 Apply Fonts in SMP-PRO Series Players

After fonts are synchronized to SMP-PRO series players, you can use the font by the following steps:

- 1. Click [PLAYBACK] on the main page, and select the sub-page, "TICKER".
- 2. Then, you can see all available fonts here for your choice.



5-5-3 Apply Font in SMP-WEB Series Players

After a font is synchronized to SMP-WEB series players, you can use that font in HTML by the following steps:

- 1. Open HTML file by text editor or HTML editor (e.g. Adobe® Dreamweaver®).
- 2. Copy font name from CMS's User Interface and specify the font face HTML tag:

e.g.

This is a sample text.

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Schedules in different scheduling periods represent individual ones. Please make sure that you select a correct scheduling period before you start to edit a schedule. Period scheduling only affects the weekly schedule, but won't affect the "play once" one.

CMS server will periodically update the playlists to SMP players and centrally manage playlists, media files, tickers, etc. of SMP players.

6-1 Add Scheduling Period

You can apply different schedules to specific dates or periods and edit schedules in advance. For those dates without particular settings, players will play the "**default**" schedule. All scheduling functions in CMS support period scheduling.

- Login CMS server with the account which is allowed to access the function: "CENTRAL SCHEDULING".
- Click [CENTRAL SCHEDULING] on the main page, and go to the sub-page that you want to edit.



- If you want to schedule particular players in groups, please select a group here.
- Click [Add] in the "Scheduling period" area. You will see a popup window.



- 5. Select a beginning and an ending date for this schedule.
- 6. If you want to duplicate a schedule from an existing one, please enable "Copy one another period" and select the schedule from the drop-down menu. Then, they system will copy all contents in the selected schedule to the new one.

Please go to "RESOURCE MANAGEMENT > SKIN MANAGER" and upload skins to the CMS server before you schedule skins here.

6-2 Skin

With CMS server, you can schedule pre-designed skins for each client group. Please follow the steps to configure settings:

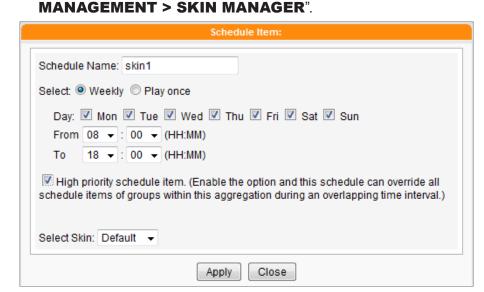
- Login CMS server with the account which is allowed to access the function: "CENTRAL SCHEDULING > SKIN".
- Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, "SKIN".
- Select a group or aggregation from the drop-down menu to decide which players will apply this schedule.
- 4. Select or add a scheduling period. Please refer to **6-1** for details.
- 5. Click [Add Schedule] and start to edit a new schedule for skins.



6. Enter a "Schedule Name" and select a schedule type: "Weekly" or "Play once". Weekly schedule repeats itself every week. "Play once" schedule only occurs once. After the task is finished, the schedule will expire. For weekly schedule, choose the days of the week that you want to play the selected files. Set the start and end time of the schedule within a day. For play-once schedule, enter the start time, with date/time, of the schedule, and enter the duration of this schedule.

You will only see "**High priority schedule item**" function when you choose an aggregation.

- 7. If you choose an aggregation from the group drop-down menu, you will see the "High priority schedule item" function here. Enable this option and this schedule can override all schedule items of groups within this aggregation during an overlapping time interval.
- 8. Select one of the uploaded skins in the drop-down menu, "Select Skin". You will see all skins which you upload at "RESOURCE



Finally, click [APPLY] to adopt the changes or [CLOSE] to leave the window without saving any changes.

Only SMP-PROPLUS and SMP-WEBDUO / SMP-WEBPLUS support Multimedia-2 Central Scheduling.

6-3 Multimedia

In this section, you can configure a time-line of playlist for each client group (clients with the same group). Central Scheduling schedules image and video as Multimedia playlist for each client group.

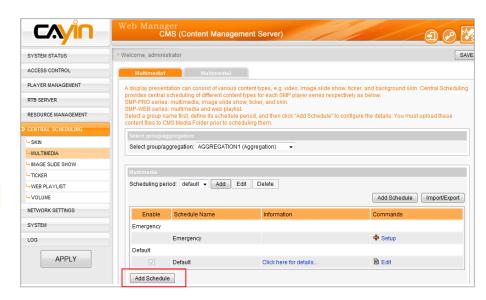
NOTE

You must upload multimedia files to Content Update folder prior to scheduling them.

6-3-1 Add Schedule - Video

Please follow the steps to add a schedule for a group and edit the playlist of video.

- Login CMS server with the account which is allowed to access the function: "CENTRAL SCHEDULING > MULTIMEDIA".
- Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, "MULTIMEDIA".
- Select a group or aggregation from the drop-down menu to decide those players which will apply this schedule.
- 4. Select or add a scheduling period. Please refer to **6-1** for details.
- 5. Click [Add Schedule] and start to edit a new schedule.



6. Enter a "Schedule Name" and select a schedule type: "Weekly"

NOTE

When the schedule task expires or contains invalid settings (e.g. The selected files no longer exist), the item will become red.

or "Play once". Weekly schedule repeats itself every week. "Play once" schedule only occurs once. After the task is finished, the schedule will expire.

Weekly	Choose the days of the week that you want to play the selected files. Set the start and end time of the schedule within a day.
Play once	Enter the start time, with date/time, of the schedule, and enter the duration of this schedule.

- 7. If you choose an aggregation from the drop-down menu of group, you will see the "High priority schedule item" function here. Enable the option and this schedule can override all schedule items of groups within this aggregation during an overlapping time interval.
- Select a media type: Video, Image, RTB, or HTTP/MMS. Please enable "Video" here; then, you will see all available video files in the Media Folder.
- Choose the display ratio here. You can select auto, 4:3 or 16:9 according to your display.
- 10. Select files you want and click [Select=>]. Those selected files will be duplicated to the "Selected files" column. You can also select video playlist directly here. If you want to play all files in the media folder, please tick "Play all files".
- 11. You can use [Move up] and [Move down] to arrange the order of those selected files. If you want to remove files from the "Selected Files" in the right column, please select files and click [Remove]. Or, you can click [Remove all] to remove all items. Click [Random] to play selected files randomly.

NOTE

You can see "High priority schedule item" function only when you choose an aggregation.

NOTE

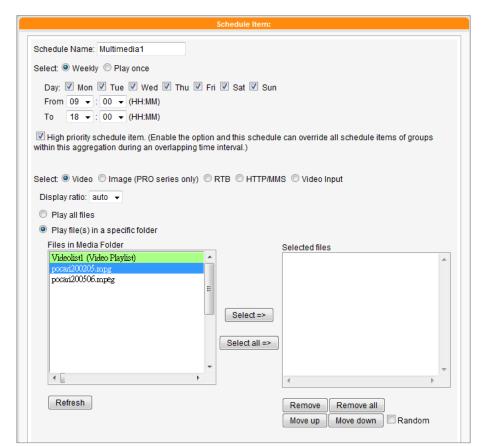
You can also select the Video Playlist here along with the video files.

NOTE

You cannot play video and image files in the same playlist.

NOTE

If you select files which include a symbol "*" in the path, it means that you select all files of the same media type under that folder.



12. Finally, click [APPLY] to adopt the changes or [CLOSE] to leave the window without saving any changes.

6-3-2 Add Schedule - Image

SMP-PRO series products can display static images. Please follow the steps to add a schedule for a group and edit the playlist of images.

- Login CMS server with the account which is allowed to access the function: "CENTRAL SCHEDULING > MULTIMEDIA".
- Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, "MULTIMEDIA".
- Select a group from the drop-down menu to decide those players which will apply this schedule.
- 4. Select or add a scheduling period. Please refer to **6-1** for details.

NOTE

Please remember to select the function "Central Scheduling by CMS Server" on Web Manager of SMP-PRO series (Playback > Multimedia). For SMP-WEB series, please remember to add the attribute "play-server-schedule" in media player's tag in a HTML file. Please refer to the user manual of SMP-WEB series.

NOTE

Only the latest SMP-PRO series products support the image file type in the Multimedia section.

5. Click [Add Schedule] and start to edit a new schedule.



- 6. Enter a "Schedule Name" and select a schedule type: "Weekly" or "Play once". Weekly schedule repeats itself every week. "Play once" schedule only occurs once. After the task is finished, the schedule will expire.
- 7. If you choose an aggregation from the drop-down menu of group, you will see the "High priority schedule item" function here. Enable the option and this schedule can override all schedule items of groups within this aggregation during an overlapping time interval.
- 8. Select a media type: Video, Image, RTB, or HTTP/MMS. Please enable "Image" here; then, you will see all image files which are available in the Media Folder. You can display images as the image slide show and set the "Duration" in seconds for it.
- 9. Please tick "Scale to fit area" if you would like to adjust all images sizes automatically according to your designated display area. You can choose "Proportional" or "Non-proportional" for your image from the drop-down menu.
- 10. Select those files you want and click [Select=>]. The selected files will be duplicated to the "Selected files" column. If you want to play all files in the media folder, please tick "Play all files". You can use [Move up] and [Move down] to arrange the order of those selected files. If you want to remove files from the "Selected"

NOTE

You can see "High priority schedule item" function only when you choose an aggregation.

NOTE

When the schedule task expires or contains invalid settings (e.g. the selected files no longer exist), the item will become red.

NOTE

You cannot play video and image files in the same playlist.

Files" in the right column, please select files and click [**Remove**]. Or, you can click [**Remove all**], and all items in the right column will be removed. Click [**Random**] if you would like to play selected files randomly.

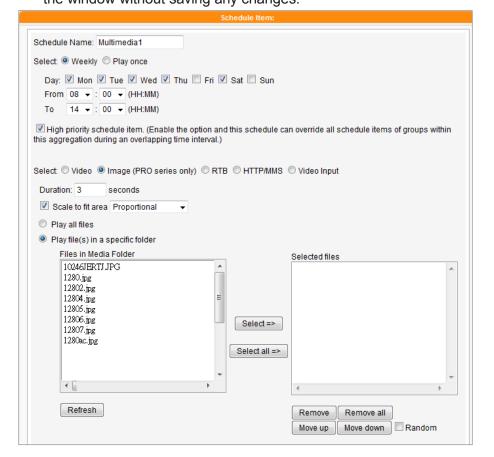
11. Finally, click [APPLY] to adopt the changes or [CLOSE] to leave the window without saving any changes.

NOTE

If you select "**Random**", all files in the right column will be played randomly, without following the sequence.

NOTE

Please remember to upload multimedia files to CMS server's folder prior to scheduling them, or you will not see any file here.

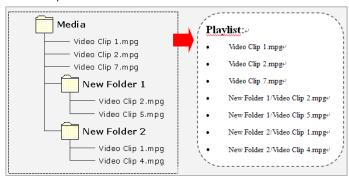


The playlist is the order how all multimedia files in the folder "**media**" are played. If you do not edit your own playlist, SMP will play all files in the Media Folder in the alphabetical order.

If you create sub-folders under the folder "**media**", all media files in these sub-folders will also be added together to the play list according to the following sorting rules: (the former rules have higher priority than the later ones)

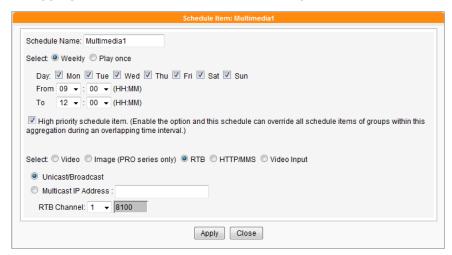
- 1. Files in the folder "media" will be played prior to any files located in sub-folders.
- 2. Files in the folder "media" will be sorted and played following alphabetical order.
- 3. Sub-folders will be sorted by alphabetical order.
- 4. Files in the sub-folders will be sorted and played following alphabetical order.

For example:



6-3-3 Add Schedule - Streaming Video

You can also display streaming video by CMS. Please select RTB or HTTP/MMS as your media type and enter suitable settings. You can enable "**High priority schedule item**" function to override all schedule items of groups within this aggregation during an overlapping time interval if you choose an aggregation from the drop-down menu of group,



6-3-4 Add Schedule - Video-In

You can also display video input signal. Please select Video-in as your media type. You can select display ratio from its drop down menu.

Schedule Item: Multimedia1
Schedule Name: Multimedia1
Select: Weekly Play once
Day: Mon Tue Wed Thu Fri Sat Sun From 09 : 00 (HH:MM) To 12 : 00 (HH:MM)
High priority schedule item. (Enable the option and this schedule can override all schedule items of groups within this aggregation during an overlapping time interval.)
Select: ○ Video ○ Image (PRO series only) ○ RTB ○ HTTP/MMS ◎ Video Input Display ratio: 4:3 ▼
Apply Close

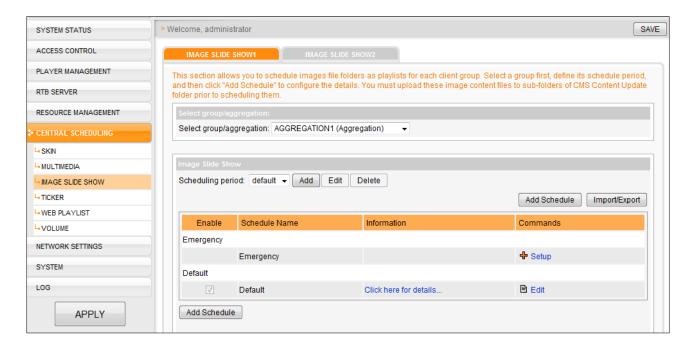
6-4 Image Slide Show

NOTE

SMP-WEB series player support Image Slideshow Central Scheduling by **Program** function or **HTML image tag**.

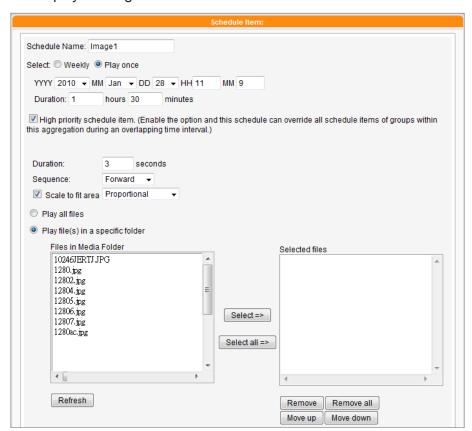
SMP players are capable of displaying images in different areas on the skin background. You can play image files in the Multimedia area (refer to **6-3-2**). You can also display image slide shows in different areas except for the Multimedia area. Please follow the steps:

- Login CMS server with the account which is allowed to access the function: "CENTRAL > SCHEDULING > IMAGE SLIDE SHOW".
- Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, "IMAGE SLIDE SHOW".
- Select a group or aggregation from the drop-down menu to decide which players will apply this schedule.



- 4. Select or add a scheduling period. Please refer to **6-1** for details.
- 5. Click [Add Schedule] and start to edit a new schedule.
- 6. Enter a "Schedule Name" and select a schedule type: "Weekly" or "Play once". Weekly schedule repeats itself every week. "Play once" schedule only occurs once. After the task is finished, the schedule will expire. For weekly schedule, choose the days of the week that you want to play the selected files. Set the start and end time of the schedule within a day. For play-once schedule, enter the start time, with date/time, of the schedule, and enter the duration of this schedule.
- 7. If you choose an aggregation from the drop-down menu of group, you will see the "**High**priority schedule item" function here. Enable the option and this schedule can override all schedule items of groups within this aggregation during an overlapping time interval.
- 8. You can also configure the time that you want each image slide show to play, and the play sequence of the files in folders from the drop-down menu. If you would like to adjust all images sizes automatically according to your designated display area, please tick "Scale to fit area". You can choose "Proportional" or "Non-proportional" for your image from the drop-down menu.

9. Now please select files. If you enable "Play all files", it means that you will play all image files in the Media Folder. If you want to play all image files in a selected folder, choose one folder, and SMP players will play all image files in the selected folder.



NOTE

SMP player can support two image slide show areas. If you assign more than 1 image slide show areas in your skin, you can follow the above steps to configure settings in "Image Slide Show 2".

 Finally, click [APPLY] to adopt the changes or [CLOSE] to leave the window without saving any changes.

SMP-WEB series player support Ticker Central Scheduling by **Program** function or **HTML image** tag.

6-5 Ticker

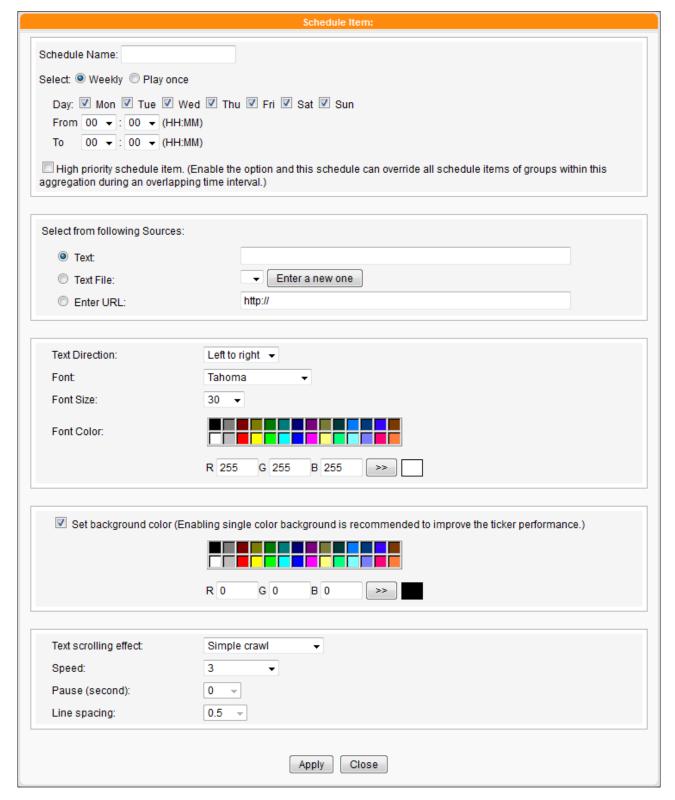
With CMS server, you can schedule ticker text for each client group from each or a combination of three different text sources: text box, text file, and URL. Please follow the steps to configure settings:

- Login CMS server with the account which is allowed to access the function: "CENTRAL SCHEDULING > TICKER".
- Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, "TICKER".



- Select a group or aggregation from the drop-down menu to decide those players which will apply this schedule.
- 4. Select or add a scheduling period. Please refer to **6-1** for details.
- 5. Click [Add Schedule] and start to edit a new schedule.
- 6. Enter a "Schedule Name" and select a schedule type: "Weekly" or "Play once". Weekly schedule repeats itself every week. "Play once" schedule only occurs once. After the task is finished, the schedule will expire. For weekly schedule, choose the days of the week that you want to play the selected files. Set the start and end time of the schedule within a day. For play-once schedule, enter the start time, with date/time, of the schedule, and enter the duration of this schedule.

7. If you choose an aggregation from the drop-down menu of group, you will see the "High priority schedule item" function here. Enable the option and this schedule can override all schedule items of groups within this aggregation during an overlapping time interval.



If the content in a text file is not written in English, please choose encoding type "**UTF-8**" when you save the text file.

The format of non-English RSS link should also be in the UTF-8 character encoding.

8. Please select a source of the ticker.

Text	Directly enter your ticker text here.
Text File	Read ticker text from a text file in the Media Folder. Click [Enter a new one] to enter a new ticker text and then you can just choose from the list every time when you edit the ticker text.
Enter URL	The text source comes from a remote http server (web server). Enter an http URL here to retrieve the ticker text. You can also retrieve live RSS messages. Enter the URL address in the text box, e.g. http://rss.cnn.com/rss/cnn_us.rss.

- 9. Set the font type, size, and color.
- 10. If you want to use a single color on the background of the ticker zone, you can set background color here.
- 11. Set a text scrolling effect. You can choose one of options from "No scrolling effect", "Simple crawl", "Simple bottom-up", and "Bottom-up and crawl".
- 12. Set a suitable speed. "1" represents the slowest speed, and "6" represents the fastest one.
- 13. Set duration of "Pause" when you choose "Simple bottom-up" or "Bottom-up and crawl". This option will let text pause specific seconds when finish a line.
- 14. If you choose "Simple bottom-up" as your text scrolling effect, please set proper "Line spacing" value here.
- 15. Finally, click [APPLY] to adopt the changes or [CLOSE] to leave the window without saving any changes.

SMP player can support two ticker areas. If you assign more than 1 ticker areas in your skin, you can follow the above steps to configure settings in "**Ticker 2**".

Please go to "RESOURCE MANAGEMENT > WEB PLAYLIST" and edit the Web Playlist on the CMS serve before you schedule the Web Playlist here.

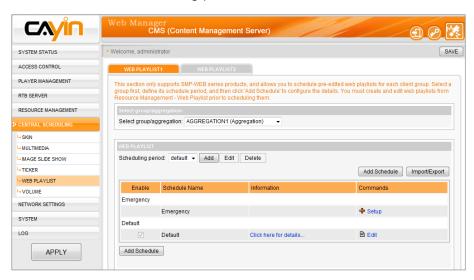
NOTE

Only SMP-WEBDUO can support Web Playlist 2 Central Scheduling.

6-6 WEB Playlist

This section only applies to SMP-WEB series products. With CMS server, you can schedule pre-edited playlists for each client group. Please follow the steps to configure settings:

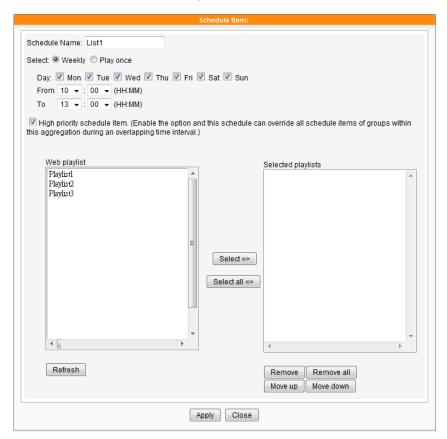
- Login CMS server with the account which is allowed to access the function: "CENTRAL SCHEDULING > WEB PLAYLIST".
- Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, "WEB PLAYLIST".
- Select a group or aggregation from the drop-down menu to decide which players will apply this schedule.
- 4. Select or add a scheduling period. Please refer to **6-1** for details.



- Click [Add Schedule] and start to edit a new schedule for Web Playlist.
- 6. Enter a "Schedule Name" and select a schedule type: "Weekly" or "Play once". Weekly schedule repeats itself every week. "Play once" schedule only occurs once. After the task is finished, the schedule will expire. For weekly schedule, choose the days of the week that you want to play the selected files. Set the start and end

time of the schedule within a day. For play-once schedule, enter the start time, with date/time, of the schedule, and enter the duration of this schedule.

- 7. If you choose an aggregation from the drop-down menu of group, you may see the "High priority schedule item" function here. Enable the option and this schedule can override all schedule items of groups within this aggregation during an overlapping time interval.
- 8. Select the pre-edited Web Playlists in "Web playlist" and click [Select=>]. The selected files will be duplicated to the "Selected playlists" column. You can use [Move up] and [Move down] to arrange the order of those selected files. If you want to remove files from the "Selected Playlist" in the right column, please select files and click [Remove]. Or, you can click [Remove all], and all items in the right column will be removed.



Finally, click [APPLY] to adopt the changes or [CLOSE] to leave the window without saving any changes.

6-7 Volume

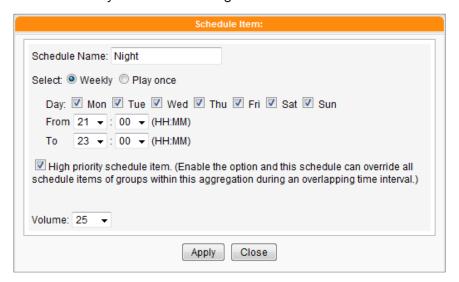
With CMS server, you can schedule pre-defined system volume for each group. Please follow the steps to configure settings:

- Login CMS server with the account which is allowed to access the function: "CENTRAL SCHEDULING > VOLUME".
- 2. Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, "VOLUME".
- 3. Select a group or aggregation from the drop-down menu to decide those players which will apply this schedule.
- 4. Select or add a scheduling period. Please refer to 6-1 for details.
- 5. Click [Add Schedule] and start to edit a new schedule for volume.



6. Enter a "Schedule Name" and select a schedule type: "Weekly" or "Play once". Weekly schedule repeats itself every week. "Play once" schedule only occurs once. After the task is finished, the schedule will expire. For weekly schedule, choose the days of the week that you want to play the selected files. Set the start and end time of the schedule within a day. For play-once schedule, enter the start time, with date/time, of the schedule, and enter the duration of this schedule.

- 7. If you choose an aggregation from the drop-down menu of group, you will see the "High priority schedule item" function here. Enable the option and this schedule can override all schedule items of groups within this aggregation during an overlapping time interval.
- 8. Select the system volume. Larger numbers mean louder sounds.



Finally, click [APPLY] to adopt the changes or [CLOSE] to leave the window without saving any changes.

6-8 Add Emergency Scheduling

Emergency Scheduling (or Emergency Event) is a special scheduling item, which is triggered manually, rather than automatically based on the pre-set time. After you configure the Emergency Scheduling, you can trigger it anytime by CMS or SuperMonitor. The Emergency Scheduling has the highest priority than any other scheduling type.

6-8-1 Set Emergency Schedule

You can setup emergency schedule item in every media type (Multimedia, Image Slide Show, Ticker, Skin, Web Playlist, and Volume) for a specific Group.

 Login CMS server with the account which is allowed to access the function: "CENTRAL SCHEDULING". 2. Click [CENTRAL SCHEDULING] on the main page, and select a sub-page from the six items: Multimedia, Image Slide Show, Ticker, Skin, Web Playlist, and Volume. When you trigger the emergency mode for a group, all emergency scheduling of this group will be activated simultaneously no matter in any of the above items.

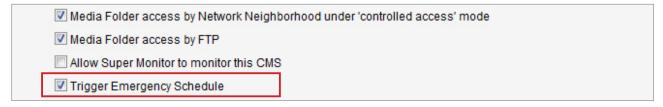


- Select a group or aggregation from the drop-down menu to decide which players will apply this schedule.
- 4. Click on [Setup] on the Command column of the special schedule item "Emergency".
- Follow the instructions on the pop-up window and setup scheduling task as other normal scheduling.

6-8-2 Trigger Emergency Schedule

1. Login CMS server with the account which is allowed to access the function: "Trigger

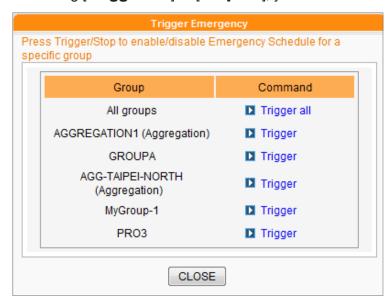
Emergency Schedule".



On the right top of CMS Web Manager, you can see the button to trigger the Emergency Schedule. Click on it.



 You can trigger or stop emergency schedule here by clicking on [Trigger] or [Stop] button. By clicking [Trigger All] or [Stop All], you can enable or stop emergency schedule for all groups.



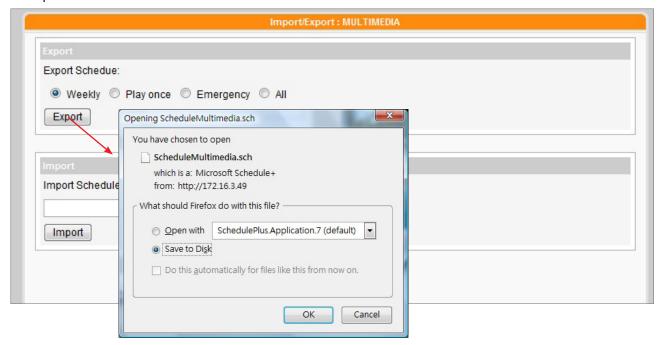
4. If any one of the groups is in the emergency mode, the Emergency button on the top of Web Manager will start to flash.



5. If the Group's emergency schedule is in the triggered mode, players belong to that group as well as are configured as central scheduling will switch to play the pre-configured scheduling item.

6-9 Import/Export Schedule

You can click on [**Import**] / [**Export**] button at Central Scheduling page of Web Manager to import or export Schedule table.



After the schedule file is exported, you can import the schedule table to other Groups or other CMS servers.

6-10 Schedule Priority

SMP players run schedules based on the following proiority rules:

With Aggregation's High Priority:

Emergency (Aggregation) > Emergency (Group) > Play once (Aggregation) > Play once (Group) > Weekly (Aggregation) > Weekly (Group) > Default (Aggregation) > Default (Group)

Without Aggregation's High Priority:

Emergency (Group) > Emergency (Aggregation) > Play once (Group) > Play once (Aggregation) > Weekly (Group) > Weekly (Aggregation) > Default (Group) > Default (Aggregation)

System and Network Settings

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Please refer to "**7-4 CMS** and NAT Firewall" if you place the CMS server behind a NAT firewall.

You have to configure network settings, update firmware, or use other management tools when you first install CMS. In "SYSTEM STATUS", "SYSTEM SETTINGS", and "NETWORK SETTINGS" pages, you can check the system information of the CMS server, manage the system, and configure the network settings.

7-1 System Status

In the "SYSTEM STATUS" page, you can access all related system information from three parts: "Basic Information", "Advanced Information", and "Firmware Information".

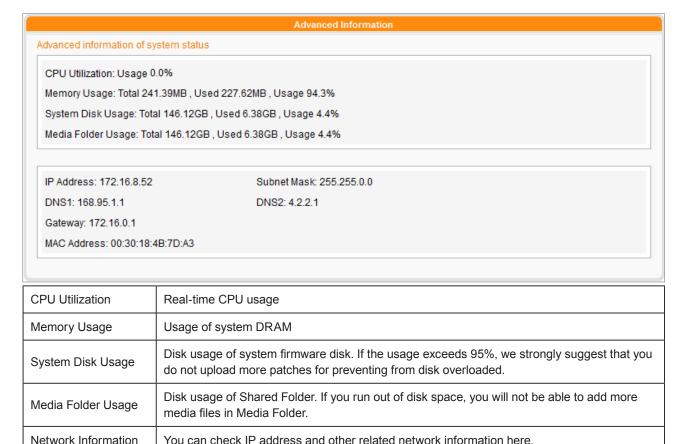
7-1-1 Basic Information

Hostname, Product Model, Firmware Version, and Current Date/time are information about the current status of the CMS server. Please refer "7-3 Network Settings" for how to specify the hostname and "7-2 System Settings" for how to change the date/time/time-zone.



7-1-2 Advanced Information

You can check related hardware usages in the "Advanced Information".



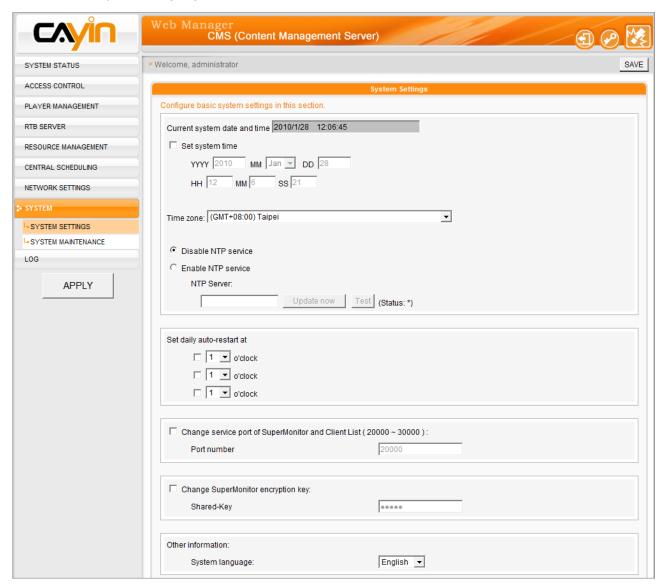
7-1-3 Firmware Information

You can check all updated patches information here. If you want to update your firmware, please refer to the section "**7-2-6 System Maintenance**".



7-2 System Settings

In the "**SYSTEM SETTINGS**" page, you can re-set the date and time of the system, auto-restart time, and the system language.



7-2-1 Set System Time

Please follow the steps to set the system time.

- Login CMS server with the account which is allowed to access the function: "SYSTEM SETTINGS".
- 2. Enable "Set system time" and enter the system date for the server. "YYYY" represents

"Year", "MM" means "Month", and "DD" is "Date".

- 3. Enter the time for the server. "HH" represents 24-hour system clock. "MM" represents "Minute" and "SS" represents "Second".
- 4. You can also choose NTP function to synchronize the clocks of media players from an NTP server automatically (e.g. time.nist.gov).
 CMS will update the system time from NTP server every 7 days or when the system restarts. You can also click [Update now] to update the time immediately. Click [Test] to verify the availability of the NTP server.
- 5. After completing the settings, please click [SAVE] and [APPLY].



7-2-2 Set Auto-Restart

You can also assign one to three particular time sections within a day that the server will restart automatically. Check the box and select the time. Then click [Save] to save the settings.



NOTE

Please check DNS settings when you update the system time from NTP server with domain name.

7-2-3 Change SuperMonitor 3 Service Port

You can change service port of SuperMonitor 3 here (default is 20000).



NOTE

This function only available for SuperMonitor 3 and CMS v. 7.0, 6.5 and above.

7-2-4 Change SuperMonitor 3 Encryption Key

You can change SuperMonitor 3 encryption key here to avoid other SuperMonitor 3 users accessing your CMS server. The default key will be the same as all shipped CMS server. Please remember to reset your password here if you would like to enable this function.



7-2-5 Set Language

You can select the system language here. We provide 10 system languages, which are English, French, Germany, Spanish, Italian, Japanese, Polish, Thai, Traditional Chinese, and Simplified Chinese. Select a system language. Then click [SAVE] to save the settings.

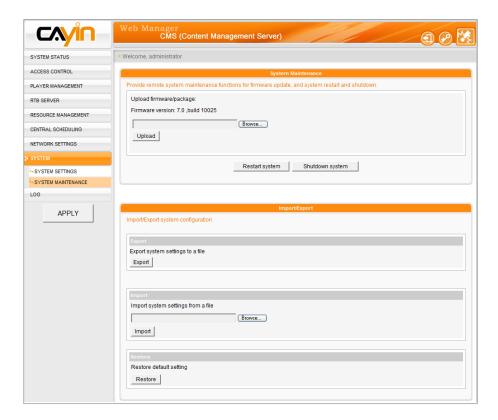


Remember to click [SAVE] on the bottom of every section to save the settings, and then click [APPLY] on the left column, so that those settings will come into effect.

7-2-6 System Maintenance

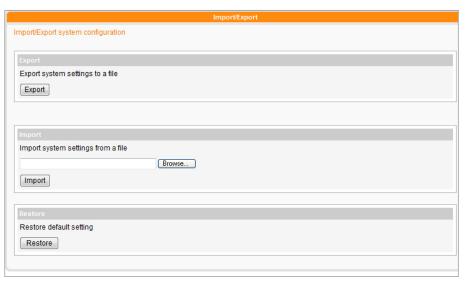
You can update the system firmware by uploading CAYIN's patch file. To update the firmware version of the server, select the file and click **[Upload]**.

You can also restart or shut down the system by clicking the corresponding button at the end of the page.



7-2-7 Import/Export/Restore Configurations

You can export system settings to a local file and import it to the same or different machines later. You can only upload the setting file to those devices with the identical model and firmware version.



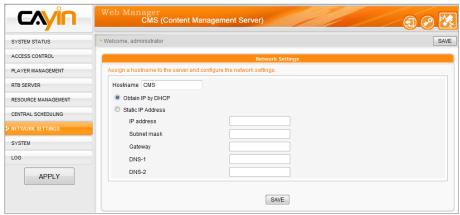
NOTE

For using RTB Server multicasting function, you must set Gateway IP properly.

7-3 Network Settings

Here you can assign a hostname for the server and define the network connection mode. You can select "**Obtain IP by DHCP**" for the server to retrieve IP settings automatically. To use static IP setting, please select "**Static IP Address**" and enter the information such as subnet mask, gateway and DNS server IP.

Click [**Save**] on the bottom to save the settings, and then click [**Apply**] on the left column so that those settings will come into effect.



7-4 CMS and NAT Firewall

CMS provides many services to your PC and SMP players via TCP/UDP protocols. Therefore, you have to forward the service port into CMS IP address, if you deploy CMS behind a NAT firewall and access CMS services via Internet.

Service	Function	Port
HTTP (WEB)	Content Update	80 (TCP)
	Web manager	
	Client List	
FTP	FTP	20, 21 (TCP)
SMB	Share Folder	139 (TCP+UDP)
SMP/CMS Command	Client List	20000 (TCP)
	Super Monitor	

Please refer to the manual of your firewall for detailed firewall settings. You can check the chapter related to Virtual Server or Port Forwarding.

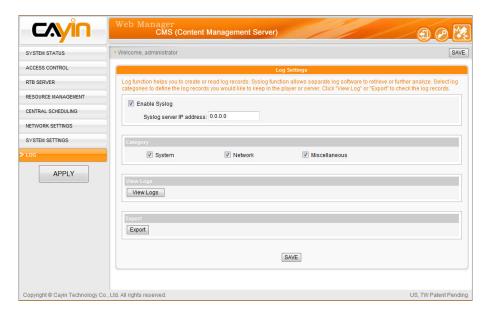
For Example:

Local IP Address	Protocol	Port
192.168.1.2	TCP	20-21
192.168.1.2	TCP+UDP	139
192.168.1.2	TCP	80
192.168.1.2	TCP+UDP	20000

8 Log

You can use a syslog compatible software to receive syslog records in a PC, for example, CAYIN SuperReporter.

In this section, you can configure related settings for log files, which are the records of the CMS activities used for statistical purposes. Syslog function allows separate log software to retrieve and further analyze the log files.



- If you want to store logs in the Syslog server, please click "Enable
 Syslog" and enter the IP address of the Syslog server.
- Select log categories to define those log records you would like to keep in the player or server.

System	system status change or system error
Network	network status or configuration change
Miscellaneous	other log files

- 3. Click [View Logs] to see log records.
- 4. Click [Export], then you can export and save the log files as xx.log. The log file is a text file, which you can edit and analyze with your favorite text editor software, such as Notepad, Excel, etc. The export procedure will vary from browser to browser. Please follow the instructions of your browser.

NOTE

If you configure the Pop-up Blocker in your browser, the "Export" function will not be able to function properly. Please turn off your "Pop-up Block" or add CMS Web Manager in the "Allow Web Sites List".