



CAYIN TECHNOLOGY
CONTENT MANAGEMENT SERVER (CMS)

Version 4.0
Version 3.5

User Manual

CAYIN TECHNOLOGY CO., LTD.
8F, NO. 577, Linsen N. Rd.,
Taipei City 104, Taiwan, R.O.C.
TEL: +886-2-2595 1005
FAX: +886-2-2595 1050
2007 © Cayin Technology Co., Ltd.
All Rights Reserved



About Cayin

Cayin Technology is established by a group of professionals specializing in development, researches, engineering, and sales/marketing. Cayin devotes itself to providing complete digital signage solutions in various applications, such as transportation, education, retail, hospitality, corporation, financial and public institutions. In order to best facilitate the deployment of Cayin products, we also provide tailored hardware and software services to satisfy customers' demands for almost limitless applications.

Copyright Notice

Copyright © 2007 CAYIN TECHNOLOGY CO., LTD. All Rights Reserved.

All the contents in this manual are the intellectual property of Cayin Technology Co., Ltd (“Cayin”). No part of this manual, including the products and software described in it, shall be reproduced, transferred, distributed, stored in any form, or translated into any language without the prior written permission of Cayin. Specifications and information in this manual are subject to change at any time without obligation to notify any person of such revision or changes.

Trademark Notice

All brand names, icons, and trademarks appeared in this manual are the sole property of their respective holders.

Disclaimers

THE CONTENTS OF THIS MANUAL ARE PROVIDED “AS IS.” CAYIN MAKES NO OTHER REPRESENTATION OR WARRANTIES, EITHER EXPRESSED OR IMPLIED WITH RESPECT TO THE CONTENTS HEREOF AND SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL CAYIN, ITS DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF PROFITS, LOSS OF USE OR DATA, AND THE LIKE), EVEN IF CAYIN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES ARISING FROM ANY DEFECT OR ERROR IN THIS MANUAL OR PRODUCT.

Contents

About Cayin	2
Copyright Notice.....	2
Trademark Notice.....	2
Disclaimers	2
1. CMS Overview	6
1-1 CMS-Performance	7
1-1-1 Specifications.....	7
1-1-2 Front View	8
1-1-3 Rear View	8
1-2 CMS-Mini	9
1-2-1 Specifications.....	9
1-2-2 Front View	10
1-2-3 Rear View	10
1-3 Major Features.....	11
1-4 Install CMS	12
1-5 Start and Login	13
2. Access Control	14
2-1 Create and Manage Folders.....	15
2-1-1 Add/Delete Media Folder	15



2-1-2 Assign Folder Access Mode	17
2-1-3 Upload Files to CMS Server	20
2-2 Create and Manage Groups	21
2-2-1 Add Group	21
2-2-2 Edit Group	22
2-2-3 Delete Group.....	23
2-3 Create and Manage Accounts	25
3. RTB Server	27
4. Resource Management	30
4-1 Skin Manager	31
4-2 Edit Web Playlist	33
5. Central Scheduling	37
5-1 Add Scheduling Period.....	38
5-2 Multimedia	39
5-2-1 Add Schedule - Video	39
5-2-2 Add Schedule - Image.....	41
5-2-3 Add Schedule – Streaming Video	44
5-2-4 Add Schedule – Video-In.....	44
5-3 Image Slide Show.....	45
5-4 Ticker.....	47

5-5 Skin.....49

5-6 WEB Playlist51

6. System and Network Settings53

6-1 System Status54

 6-1-1 Basic Information54

 6-1-2 Advanced Information55

 6-1-3 Firmware Information56

 6-1-4 Client List56

6-2 System Settings58

 6-2-1 Set System Time59

 6-2-2 Set Auto-Restart.....60

 6-2-3 Set Language61

 6-2-4 System Maintenance.....61

6-3 Network Settings62

6-4 CMS and NAT Firewall.....63

7. LOG64

1. CMS Overview

1-1 CMS-Performance	7
1-1-1 Specifications	7
1-1-2 Front View	8
1-1-3 Rear View	8
1-2 CMS-Mini.....	9
1-2-1 Specifications	9
1-2-2 Front View	10
1-2-3 Rear View	10
1-3 Major Features	11
1-4 Install CMS.....	12
1-5 Start and Login	13

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).

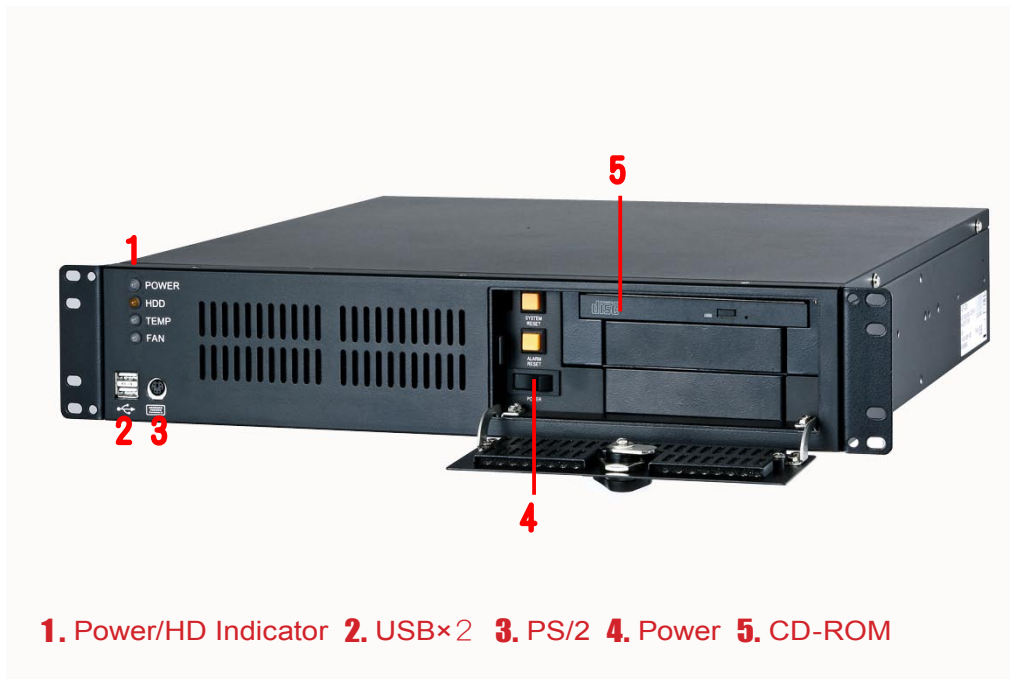
1-1 CMS-Performance

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



1-1-3 Rear View



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. 1 channel
User Account	Max. 6 accounts (include 3 default accounts)
Content Management	Support to manage 40 SMP players

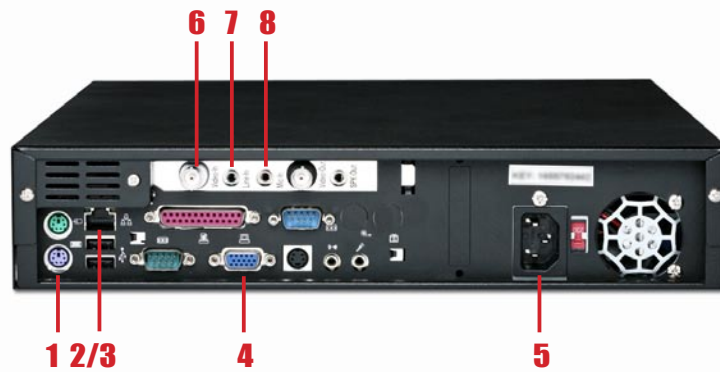


1-2-2 Front View



- 1.** USB×2 **2.** Network Indicator **3.** HD Indicator **4.** Power Indicator **5.** Power

1-2-3 Rear View



- 1.** PS/2 MOUSE **2.** Ethernet **3.** USB×2 **4.** VGA **5.** Power Connector
6. Video In (optional) **7.** Audio In (optional) **8.** Mic In (optional)

1-3 Major Features

Account Management and Access Control

- Assign authorization to each account to manage respective groups of players

Content Update and Management

- Manage content in groups
- Automatic content update and synchronization
- Easy content management even for large scale environment
- Support HTTP authentication
- Support content upload by Network Neighborhood or FTP

Central Scheduling

- Edit video/streaming/image/ticker/skin play-list for SMP-PRO series
- Edit video/streaming/webpage play-list for SMP-WEB series
- Scheduling by weekly basis or “play once”
- Edit future schedule in advance

RTB (Real Time Broadcast) server

- Real-time video/audio signal transcoding and broadcasting
- Administrate up to 8 inputs per server (CMS-Performance); up to 64 inputs for whole system
- MPEG-2 transport streaming, bit-rate from 1 Mbps to 5 Mbps
- DVD quality (Full D1) video streaming



1-4 Install CMS

1. Open CMS package.
2. Adjust to the correct voltage and then 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**”.

NOTE

Please make sure that the product voltage is switched to your local norms.

1-5 Start and Login

NOTE

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.

NOTE

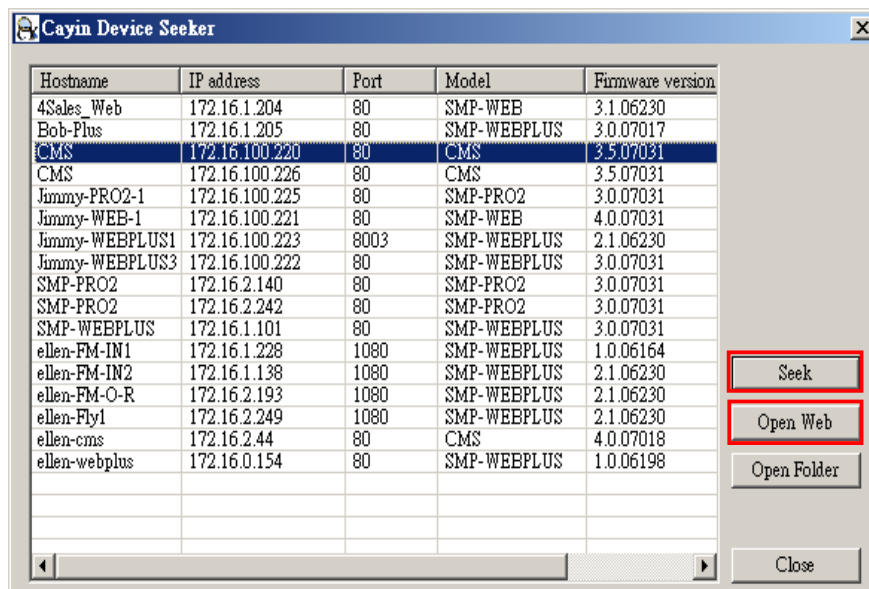
We recommend using IE 5 (or above) or Mozilla Firefox.

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".

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

1. Insert the product CD into your CD-ROM, and run "Cayin Device Seeker" (\Tool\Device Seeker\cysrch.exe). You can also copy this file to your PC for future management.
2. 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.

2 ■ Access Control

2-1 Create and Manage Folders	15
2-1-1 Add/Delete Media Folder	15
2-1-2 Assign Folder Access Mode	17
2-1-3 Upload Files to CMS Server	20
2-2 Create and Manage Groups	21
2-2-1 Add Group	21
2-2-2 Edit Group	22
2-2-3 Delete Group	23
2-3 Create and Manage Accounts	25

control, administrators can create accounts and assign authorization to each account to manage respective groups of media folders. Please follow these steps:

1. Add a new folder in the “FOLDER MANAGEMENT” page;
2. Create a group in the “GROUP” page and associate this group with one media folder;
3. 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.

1. Login CMS server with the account which is allowed to access the function: “Access Control - Folder Management”.
2. 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 **[Create]**.

NOTE

Please refer to "2-3 Create and Manage Account" for detailed settings about accounts.

Welcome, webadmin

SYSTEM STATUS

▶ ACCESS CONTROL

RTB SERVER

RESOURCE MANAGEMENT

CENTRAL SCHEDULING

NETWORK SETTINGS

SYSTEM SETTINGS

LOG

APPLY

FOLDER MANAGEMENT GROUP ACCOUNT

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	Command
default	Rename Delete

Add a new folder:

Media Folder Name

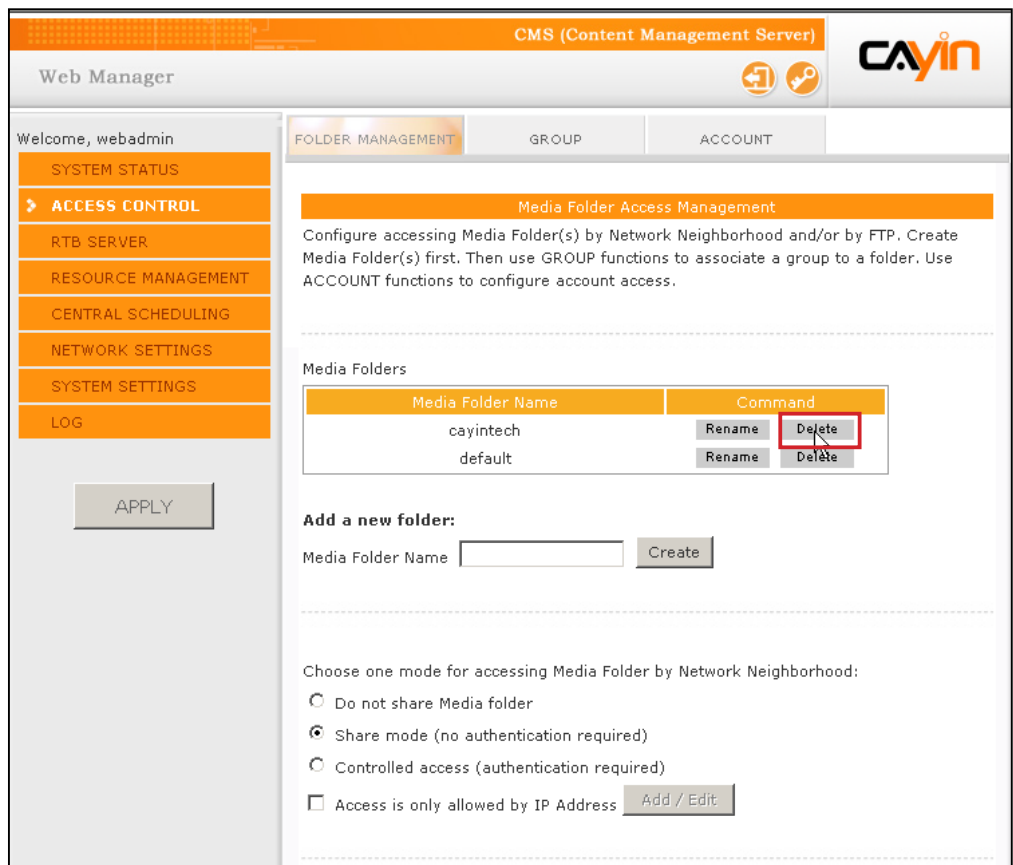


NOTE

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

Use the following steps to delete a folder.

1. Login CMS server with the account which is allowed to access the function: “Access Control - Folder Management”.
2. Click [ACCESS CONTROL] on the main page, and select the sub-page, “FOLDER MANAGEMENT”.
3. Locate the “Media Folder Name” of the folder, which you would like to delete. Then, click [Delete] on the command column.



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.

1. Login CMS server with the account which is allowed to access the function: "Access Control - Folder Management".
2. 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

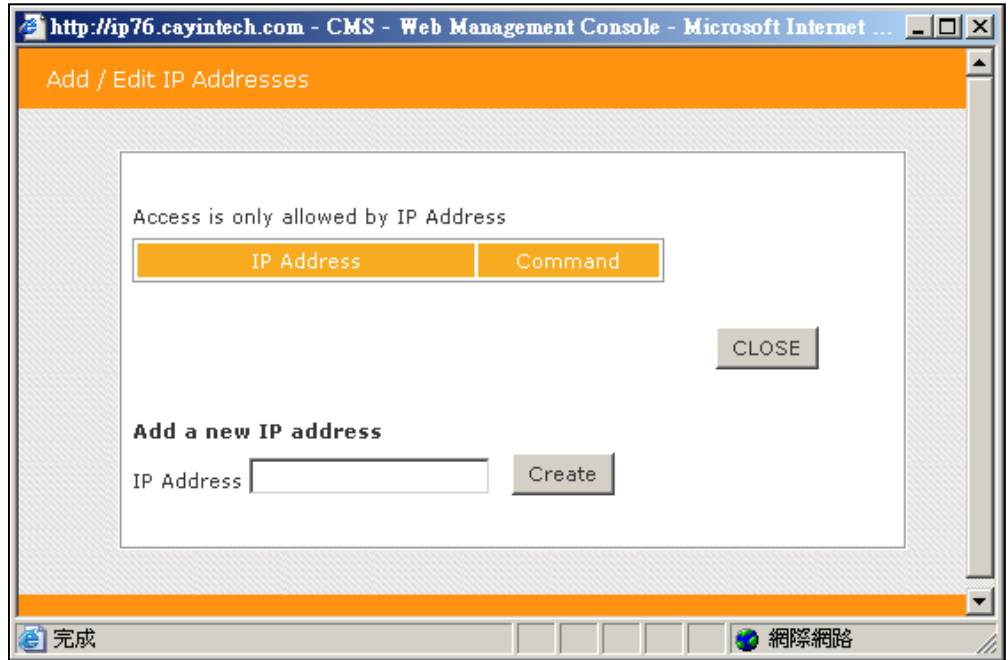
Do not share Media folder	No one can access the Media Folder
Share mode (no authentication required)	All users can access the Media Folder without authentication.
Controlled access (authentication required)	Only authorized users can access the Media Folder. A user can only access those folders which 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.



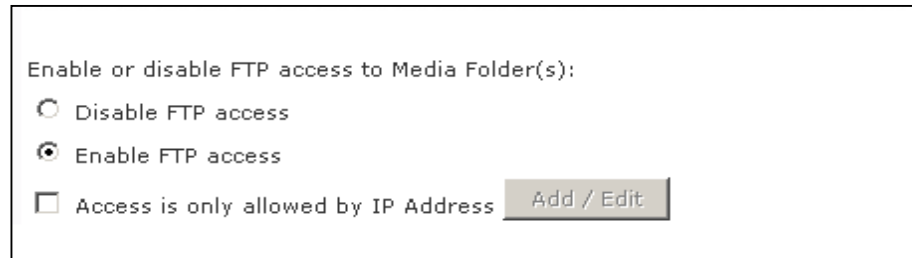
Enter the IP address or partial IP address, e.g. type "172.16.0.1" to allow access only from this IP address, or type "172.16.0." to allow access from all computers in this subnet.



NOTE

CMS does not support anonymous FTP

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.

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”.

Access is only allowed by specified IP Address: Enable this function, you can 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-out 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 .

5. 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.



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

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

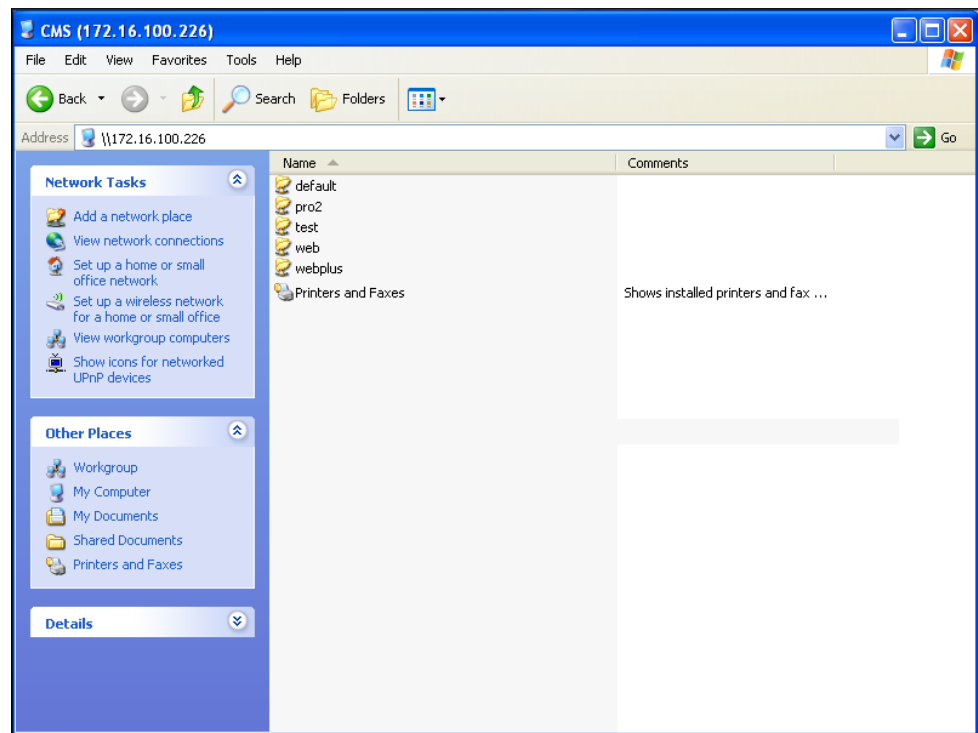
2-1-3 Upload Files to CMS Server

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 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 Seeker.



NOTE

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

Use FTP Client Software

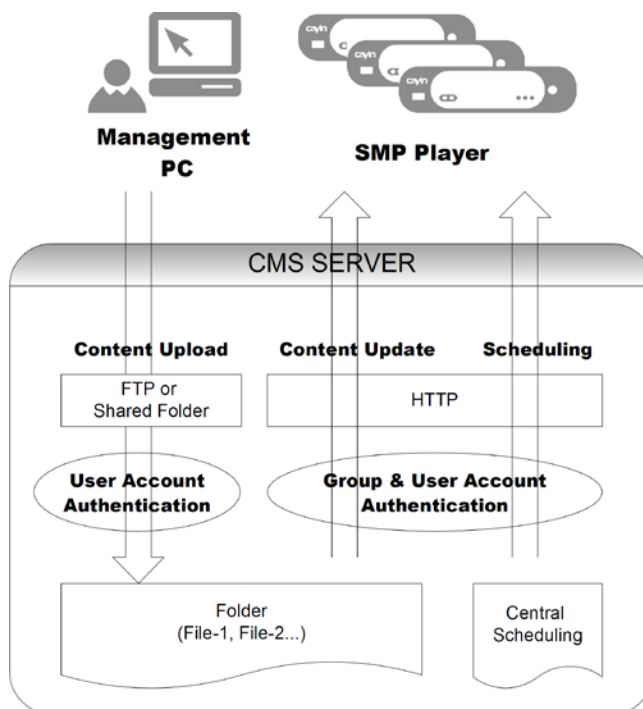
If you enable FTP access to Media Folder(s) in 2-1-2 section, you can choose your familiar FTP client software in your PC. After entering username and password, you can upload/delete files in Media Folder(s).

NOTE

Group 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.



2-2-1 Add Group

Please follow the below steps to add a new group.

1. 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.



Add a group

Group Name:

Associate with a Media Folder

Create a new folder

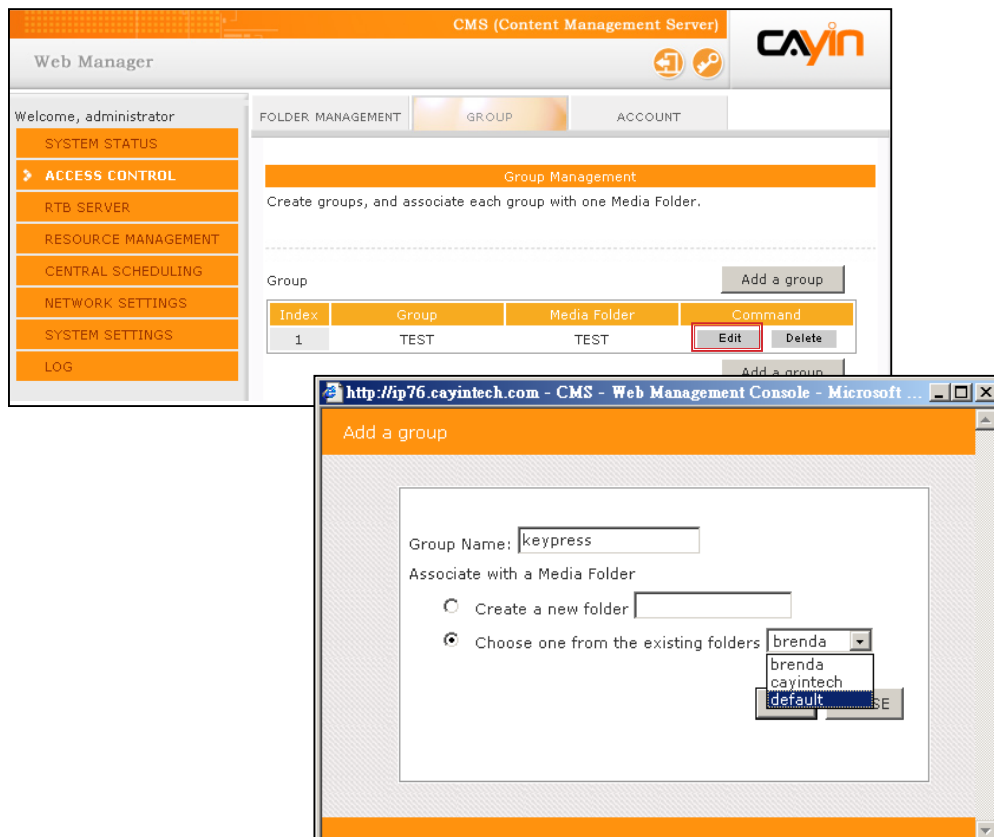
Choose one from the existing folders

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:

1. 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. 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.

1. 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. Locate the group name and click **[Delete]** in the "Command" column. Then, you can delete the group.



CMS (Content Management Server)

Web Manager

Welcome, webadmin

SYSTEM STATUS

ACCESS CONTROL

RTB SERVER

RESOURCE MANAGEMENT

CENTRAL SCHEDULING

NETWORK SETTINGS

SYSTEM SETTINGS

LOG

APPLY

FOLDER MANAGEMENT **GROUP** ACCOUNT


Group Management

Create groups, and associate each group with one Media Folder.

Group

Index	Group	Media Folder	Command	
1	cayintech	cayintech	Edit	Delete
2	newage	brenda	Edit	Delete
3	effective	effective	Edit	Delete
4	SN-GROUP	cayintech	Edit	Delete


NOTE

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

NOTE

Username has to contain lower case English character.

NOTE

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

2-3 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.

1. Login CMS server with the account which is allowed to access the function: “Access Control - Account”.
2. Click [**ACCESS CONTROL**] on the main page, and select the sub-page, “GROUP”.
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.

Add/Edit a user account

Username (5~16 letters):

New Password (4~16 letters):

New Password Confirm:

Access to groups

All groups

Select groups

Groups

TEST

Select =>

Select all =>

Refresh

Selected Groups

Remove Remove all

Function Accesses

System Status

Client List



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
<input checked="" type="checkbox"/> System Status
<input checked="" type="checkbox"/> Client List
<input checked="" type="checkbox"/> RTB Server
<input checked="" type="checkbox"/> Resource Manager - Skin Manager
<input checked="" type="checkbox"/> Resource Manager - WEB Playlist
<input checked="" type="checkbox"/> Central Scheduling - Multimedia
<input checked="" type="checkbox"/> Central Scheduling - Image Slide Show
<input checked="" type="checkbox"/> Central Scheduling - Ticker
<input checked="" type="checkbox"/> Central Scheduling - Skin
<input checked="" type="checkbox"/> Central Scheduling - WEB Playlist
<input type="checkbox"/> Access Control - Folder Management
<input type="checkbox"/> Access Control - Group
<input type="checkbox"/> Access Control - Account
<input type="checkbox"/> Network Settings
<input type="checkbox"/> System Settings
<input type="checkbox"/> Log
<input checked="" type="checkbox"/> Media Folder access by Network Neighborhood under 'controlled access' mode
<input checked="" type="checkbox"/> Media Folder access by FTP
<input checked="" type="checkbox"/> Allow Super Monitor to monitor this CMS

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

3 ■ RTB Server



NOTE

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:

- 1. 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.
- 3. Select a signal format (NTSC/PAL) and bandwidth based on your own TV signal.
- 4. Click [Add/Edit] and assign streaming modes of players. Please refer to the following tables for detailed information.

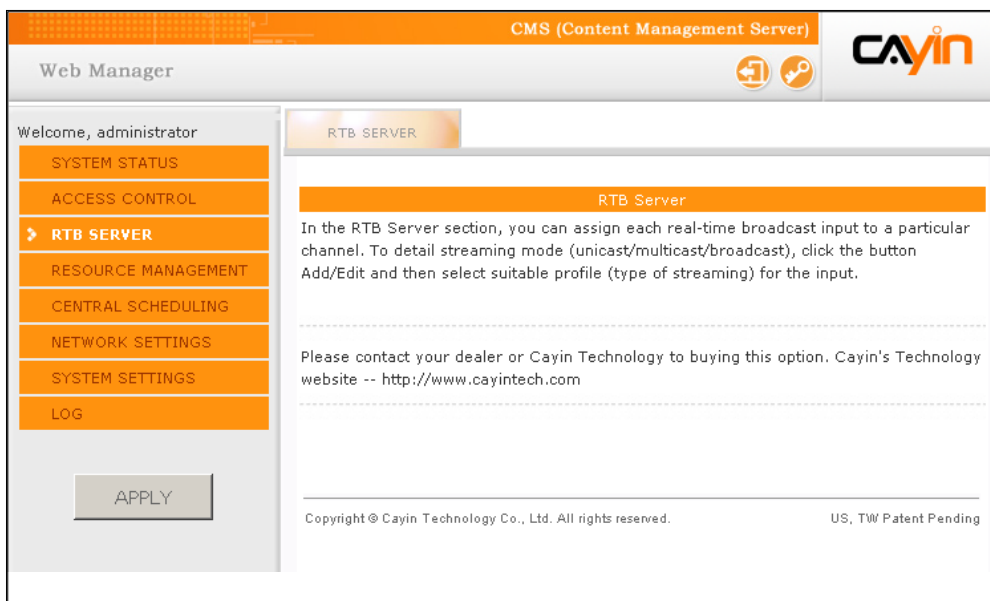
Broadcast	All clients in the network area will receive streaming contents.
Multicast	Enable multicast and send streaming packets to those players which enable this function. Multicasting IP address ranges between 224.0.0.1 and 239.255.255.255.
Unicast	Send signals to the player with the particular IP 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.

NOTE

Note on “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.



4. Resource Management

4-1 Skin Manager.....	31
4-2 Edit Web Playlist	33

You can manage skins of SMP-PRO series and playlists of SMP-WEB series in “RESOURCE MANAGEMENT” section.

4-1 Skin Manager

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

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

NOTE

1. This function only applies to SMP-PRO series products.

2. The resolution of the skin and the display set in the SMP-PRO player should be the same. You can produce a skin file (.csk) which supports multiple resolutions. Please refer to the user manual of SMP-PRO series for detailed information about the usage of Cayin’s Skin Editor.

- 1.** Login CMS server with the account which is allowed to access the function: “Resource Manager - Skin Manager”.
- 2.** Click **[RESOURCE MANAGEMENT]** on the main page, and select the sub-page, “SKIN MANAGER”.
- 3.** Click **[Browse]** and select a skin file (.csk).
- 4.** Click **[Upload]**; then, complete uploading a skin.

The screenshot displays the 'Web Manager' interface for the CMS (Content Management Server). The top navigation bar includes the 'CMS (Content Management Server)' title and the 'Cayin' logo. The main content area is divided into two tabs: 'SKIN MANAGER' (active) and 'WEB PLAYLIST'. Under the 'SKIN MANAGER' tab, there is a 'Manage Skin' section with instructions: 'Upload and manage skin file (.csk) here, then go to Skin Central Scheduling section to schedule and distribute the skin backgrounds to SMP-PRO2 clients.' Below this, a table titled 'Current Skins' shows one entry: 'default' with the description 'Default'. At the bottom of the main content area, there is an 'Upload Skin' section with a text input field, a 'Browse...' button, and an 'Upload' button. The footer of the page contains the text: 'Copyright © Cayin Technology Co., Ltd. All rights reserved. US, TW Patent Pending'.



NOTE

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

- 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 which you create in Cayin's Skin Editor. You can click the description of each skin to preview it.

The screenshot shows the CMS (Content Management Server) Web Manager interface. The left sidebar contains navigation options: SYSTEM STATUS, ACCESS CONTROL, RTB SERVER, RESOURCE MANAGEMENT (highlighted), CENTRAL SCHEDULING, NETWORK SETTINGS, SYSTEM SETTINGS, and LOG. The main content area is titled 'SKIN MANAGER' and includes a 'Manage Skin' section with instructions to upload and manage skin files. Below this is a table of 'Current Skins':

Name	Description	Command
library	library	Delete
default	Default	

The 'library' row is highlighted with a red box. Below the table is an 'Upload Skin' section with a text input field and an 'Upload' button. A preview window is open, showing a skin layout with a green slide show area, a yellow slide show area, and a blue ticker area. Below the preview, technical details are listed:

- Skin Resolution: 640x480 800x600 1024x768 1280x1024 1280x768 856x480
- Multimedia Area: Position(387,96) Size(601,451)
- Image Slide Show Area: Area 1:Position(59,157) Size(300,220)
- Image Slide Show Area: Area 2:Position(59,382) Size(300,220)
- Ticker Area: Position(4,665) Size(1017,61)

A 'Close' button is located at the bottom right of the preview window.

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

4-2 Edit Web Playlist

NOTE

This feature only works with SMP-WEB series.

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 following steps to edit web playlists for each group.

1. Login CMS server with the account which is allowed to access the function: “Resource Manager - WEB Playlist”.
2. 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.

The screenshot displays the CMS (Content Management Server) Web Manager interface. The top navigation bar includes the title 'CMS (Content Management Server)' and the 'CAYIN' logo. The main content area is titled 'Web Manager' and contains a sidebar with a navigation menu. The 'RESOURCE MANAGEMENT' option is highlighted with a red '2'. The main content area shows the 'WEB PLAYLIST' configuration page. The 'Select group:' dropdown menu is set to 'cayintech' and is marked with a red '3'. Below this is a table with columns 'Name', 'Description', and 'Command'. An 'Add new' button is visible and marked with a red '4'. The footer contains copyright information for Cayin Technology Co., Ltd.



- Then, we will start to add a new web playlist. Click **[Add new item]** and you can start to edit a playlist in the pop-up window. Enter the name of this playlist in the “Name” text box and a short description of this playlist in the “Description” text box.

- Click **[Add new]** and edit an item in a playlist. You can add up to 99 items to a playlist.

- 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 item. 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:

NOTE

This method is similar to the way you use in your PC browser. SMP-WEB products do not support HTTPS (SSL) protocol currently.

Remote URL	<p>Specify a URL where SMP-WEB can connect to the html content, e.g. <code>http://remote_web_server/path/to/your.html</code>.</p> <p>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 <code>http://remote_web_server/test.php</code> in this option, SMP-WEB will actually send a request as <code>http://remote_web_server/test.php?hostname=hostname&group=groupname</code>. The hostname here is the hostname that you configure in "6-3 NETWORK SETTINGS".</p>
HTML / SWF file in Media Folder	<p>Select to play an html or swf file in the Media Folder.</p> <p>By default, CMS will automatically list all html and swf files in the Media Folder, so you can select an item here.</p> <p>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. <code>/cayin/main.html</code>) directly in the text box.</p>
Image transition	<p>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 new one] and entering the item (e.g. <code>/cayin/cartoon.jpg</code>) directly in the text box.</p> <ul style="list-style-type: none"> * 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. * Pre-load next item: You must set the time when you would like the system to start pre-loading the next item (eg. 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).



NOTE

If you select this function, 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.

NOTE

Remember to click the check box to enable those items that you want to play. Then, click [**SAVE**] and [**CLOSE**].

Video file in Media Folder	<p>You can insert a video file as one of the items in the playlist, and display a full-screen video.</p> <p>By default, CMS will automatically list all video files in the Media Folder, so you can select one here.</p> <p>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/cartoon.mpg) directly in the text box.</p>
----------------------------	---

7. Finally, set the duration of each playback item. After the time is up, SMP-WEB will play the next item. If you configure the duration as “Always”, the playlist will stop here, which means that SMP-WEB 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.**

8. After adding items, you can adjust the order by clicking the [Up**] or [**Down**] button in the Command column.**

Name:

Description:

Item	Enable	URL / File Name	Duration	Command
1	<input type="checkbox"/>	VIDEO_TS/VIDEO_TS.VOB	-	<div style="display: flex; justify-content: space-between;"> Edit Up </div> <div style="display: flex; justify-content: space-between;"> Delete Down </div>
2	<input type="checkbox"/>	VIDEO_TS1/VTS_01_0.VOB	-	<div style="display: flex; justify-content: space-between;"> Edit Up </div> <div style="display: flex; justify-content: space-between;"> Delete Down </div>

5 ■ Central Scheduling

5-1 Add Scheduling Period	38
5-2 Multimedia.....	39
5-2-1 Add Schedule - Video.....	39
5-2-2 Add Schedule - Image	41
5-2-3 Add Schedule – Streaming Video.....	43
5-2-4 Add Schedule – Video-In	44
5-3 Image Slide Show	45
5-4 Ticker	47
5-5 Skin.....	49
5-6 WEB Playlist	51



NOTE

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.

5-1 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.

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

3. Click **[Add]** in the "Scheduling period" area. Then, you will see a pop-up window.
4. Select a beginning and an ending date for this schedule.
5. If you want to duplicate a schedule from an existing schedule, 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.

5-2 Multimedia

NOTE

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

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

5-2-1 Add Schedule - Video

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

1. Login CMS server with the account which is allowed to access the function: “Central Scheduling - Multimedia”.
2. Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, “MULTIMEDIA”.
3. 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 5-1 for details.
5. Click [Add Schedule] and start to edit a new schedule.

The screenshot shows the CMS (Content Management Server) Web Manager interface. The main content area is titled "Central Scheduling Settings" and contains the following text:

A display presentation can consist of various content types, e.g. video, image slide show, ticker, and background skin. Central Scheduling provides central scheduling of different content types for each SMP player series respectively as below:
 SMP-PRO series: multimedia, image slide show, ticker, and skin.
 SMP-WEB series: multimedia and web playlist.

Select a group name first, define its schedule period, and then click "Add Schedule" to configure the details. You must upload these content files to CMS Media Folder prior to scheduling them.

Select group:

Scheduling period:

Enable	Schedule Name	Information	Commands
<input checked="" type="checkbox"/>	Default	Click here for details...	<input type="button" value="Edit"/>



NOTE

When the schedule task is expired or with 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.

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.

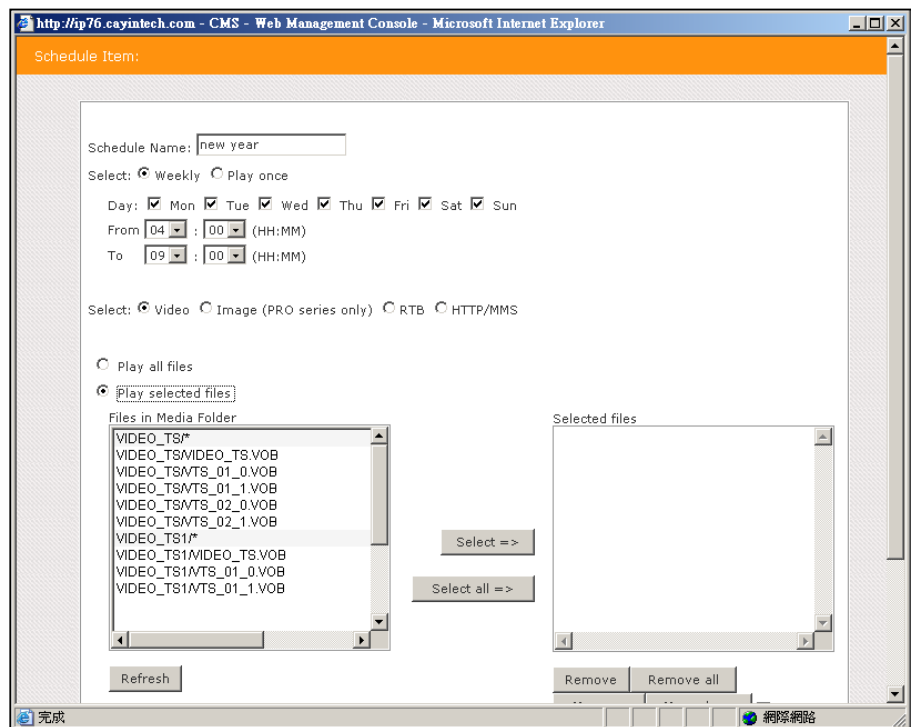
NOTE

If you select “Random”, all files in the right column will be played randomly, without following the sequence

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 be expired.

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. Select a media type: Video, Image, RTB, or HTTP/MMS. Please enable “Video” here; then, you will see all video files which are available in the Media Folder.
8. Select those files you want and click [Select=>]. The selected files will be duplicated to the “Selected files” column.
9. 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], and all items in the right column will be removed.



NOTE

Please remember to select the function “Central Scheduling (by CMS Server)” on SMP-PRO2’s Web Manager website (Playback>Multimedia Sources). For SMP-WEB, please remember to add the attribute “play-server-schedule” in media player’s tag in a HTML file. Please refer to the user manual (Chapter 3) of SMP-WEB series.

10. Finally, click [SAVE] and [CLOSE].

5-2-2 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.

- 1. Login CMS server with the account which is allowed to access the function: “Central Scheduling - Multimedia”.**
- 2. Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, “MULTIMEDIA”.**

NOTE

Only SMP-PRO2 and latest SMP-PRO series products support the image file type in the Multimedia section.

Select group:

Scheduling period:

Image Slide Show 1

Enable	Schedule Name	Information	Commands
<input checked="" type="checkbox"/>	Default	Click here for details...	<input type="button" value="Edit"/>

- 3. 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 5-1 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 be expired.**

NOTE

When the schedule task is expired or with 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.

NOTE

You have to put image files into the media folder first; then you can select them.

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 Content Update folder prior to scheduling them, or you will not see any files here.

7. 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.
8. Select those files you want and click [Select=>]. The selected files will be duplicated to the “Selected files” 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 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.
9. Please click “Scale to fit area” if you would like to adjust all images sizes automatically according to your designated display area.
10. Finally, click [SAVE] and [CLOSE].

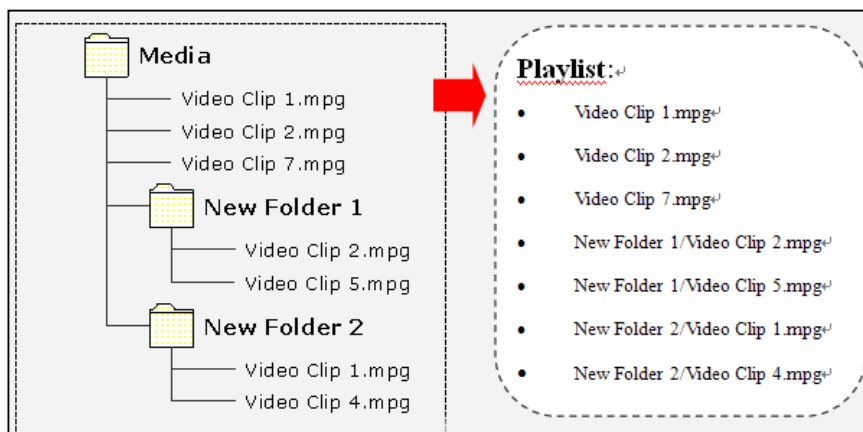
NOTE

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

For example:





5-2-3 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.

5-2-4 Add Schedule – Video-In

You can also display video input signal. Please select Video-in as your media type. Only SMP-WEB3 & SMP-PRO3 support this feature.

The screenshot shows a web browser window titled "CMS - Web Management Console - Windows Internet Explorer" with the URL "http://172.16.2.224/cgi-bin/schedule_edit.cgi". The page content is titled "Schedule Item:" and contains the following form fields:

- Schedule Name:
- Select: Weekly Play once
- Day: Mon Tue Wed Thu Fri Sat Sun
- From: : (HH:MM)
- To: : (HH:MM)
- Select: Video Image (PRO series only) RTB HTTP/MMS Video-in

At the bottom right of the form area, there are "Apply" and "Close" buttons. The "Video-in" radio button is highlighted with a red rectangular box. The browser's status bar at the bottom shows "完成" (Completed) and "Internet" with a 100% zoom level.

5-3 Image Slide Show

NOTE

You must create subfolders first; then you can see all subfolders in Media Folder here.

SMP-PRO series supports to display images in different areas on the skin background. You can play image files in the Multimedia area (refer to 5-2-2). You can also display image slide shows in different areas except for the Multimedia area. Please follow the steps:

1. Login CMS server with the account which is allowed to access the function: “Central Scheduling – Image Slide Show”.
2. Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, “IMAGE SLIDE SHOW”.
3. 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 5-1 for details.
5. Click [Add Schedule] and start to edit a new schedule.

The screenshot displays the CMS (Content Management Server) Web Manager interface. The top navigation bar includes 'MULTIMEDIA', 'IMAGE SLIDE SHOW', 'TICKER', 'SKIN', and 'WEB PLAYLIST'. The left sidebar contains a menu with options like 'SYSTEM STATUS', 'ACCESS CONTROL', 'RTB SERVER', 'RESOURCE MANAGEMENT', 'CENTRAL SCHEDULING' (highlighted), 'NETWORK SETTINGS', 'SYSTEM SETTINGS', and 'LOG'. The main content area is titled 'Central Scheduling Settings' and contains the following elements:

- A descriptive paragraph: "This section only support SMP-PRO series products, and allows you to schedule images file folders as playlists for each client group. Select a group first, define its schedule period, and then click "Add Schedule" to configure the details. You must upload these image content files to sub-folders of CMS Content Update folder prior to scheduling them."
- A 'Select group:' dropdown menu with 'TEST' selected.
- A 'Scheduling period:' dropdown menu with 'default' selected, and 'Add', 'Edit', and 'Delete' buttons.
- A table titled 'Image Slide Show 1' with columns: 'Enable', 'Schedule Name', 'Information', and 'Commands'.

Enable	Schedule Name	Information	Commands
<input checked="" type="checkbox"/>	Default	Click here for details...	Edit
- An 'Add Schedule' button highlighted with a red box.
- A second 'Scheduling period:' dropdown menu with 'default' selected, and 'Add', 'Edit', and 'Delete' buttons.



Schedule Item:

Schedule Name:

Select: Weekly Play once

Day: Mon Tue Wed Thu Fri Sat Sun

From: : (HH:MM)

To: : (HH:MM)

Play all files

Play selected files

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 be expired. 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. Finally, 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.

8. Finally, click [SAVE] and [CLOSE].

NOTE

SMP-PRO2 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”.

5-4 Ticker

This section only applies to SMP-PRO series products. With CMS server, you can schedule ticker texts 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:

1. Login CMS server with the account which is allowed to access the function: “Central Scheduling – Ticker”.
2. Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, “TICKER”.

Select group:

Scheduling period:

Ticker Text

Enable	Schedule Name	Information	Commands
Default			
<input checked="" type="checkbox"/>	Default	Click here for details...	<input type="button" value="Edit"/>

3. 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 5-1 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 be expired. 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.



Schedule Item:

Schedule Name:

Select: Weekly Play once

Day: Mon Tue Wed Thu Fri Sat Sun

From: : (HH:MM)

To: : (HH:MM)

Text:

Text File:

Enter

URL:

NOTE

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.

7. 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. First, upload your text file (with extension .txt) in the Media Folder. Web Manager lists all .txt files here for your choice.
Enter URL	The text source comes from a remote http server (web server). Enter a 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.

8. Finally, click [SAVE] and [CLOSE].

5-5 Skin

NOTE

Please go to “RESOURCE MANAGEMENT / SKIN MANAGER” and upload skins to the CMS server before you schedule skins here.

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

1. Login CMS server with the account which is allowed to access the function: “Central Scheduling – Skin”.
2. Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, “SKIN”.
3. 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 5-1 for details.
5. Click [Add Schedule] and start to edit a new schedule for skins.

The screenshot displays the CMS (Content Management Server) Web Manager interface. The top navigation bar includes 'MULTIMEDIA', 'IMAGE SLIDE SHOW', 'TICKER', 'SKIN', and 'WEB PLAYLIST'. The 'SKIN' tab is selected. The main content area is titled 'Central Scheduling Settings' and contains the following elements:

- A welcome message: 'Welcome, administrator'.
- A sidebar menu with options: SYSTEM STATUS, ACCESS CONTROL, RTB SERVER, RESOURCE MANAGEMENT, **CENTRAL SCHEDULING** (selected), NETWORK SETTINGS, SYSTEM SETTINGS, and LOG.
- An 'APPLY' button at the bottom of the sidebar.
- Instructions: 'This section only supports SMP-PRO series products, and allows you to schedule pre-designed skins for each client group. Select a group first, define its schedule period, and then click 'Add Schedule' to configure the details. You must upload these skin files from Resource Management - Skin Manager prior to scheduling them.'
- Form fields: 'Select group:' with a dropdown menu showing 'TEST', and 'Scheduling period:' with a dropdown menu showing 'default' and buttons for 'Add', 'Edit', and 'Delete'.
- A table titled 'Skin' with columns: Enable, Schedule Name, Information, and Commands.

Enable	Schedule Name	Information	Commands
<input checked="" type="checkbox"/>	Default	Click here for details...	Edit
- An 'Add Schedule' button below the table.
- A 'SAVE' button at the bottom right of the main content area.



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 be expired. 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. Select one of the uploaded skin in the drop-down menu, “Select Skin”. You will see all skins which you upload at “Resource Management / Skin Manager”.
8. Finally, click [SAVE] and [CLOSE].

Schedule Item:

Schedule Name:

Select: Weekly Play once

Day: Mon Tue Wed Thu Fri Sat Sun

From : (HH:MM)

To : (HH:MM)

Select Skin:

5-6 WEB Playlist

NOTE

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

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:

1. Login CMS server with the account which is allowed to access the function: “Central Scheduling – Web Playlist”.
2. Click [CENTRAL SCHEDULING] on the main page, and select the sub-page, “WEB PLAYLIST”.
3. 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 5-1 for details.
5. Click [Add Schedule] and start to edit a new schedule for Web Playlist.

The screenshot shows the CMS (Content Management Server) Web Manager interface. The top navigation bar includes 'MULTIMEDIA', 'IMAGE SLIDE SHOW', 'TICKER', 'SKIN', and 'WEB PLAYLIST'. The left sidebar contains a menu with options like 'SYSTEM STATUS', 'ACCESS CONTROL', 'RTB SERVER', 'RESOURCE MANAGEMENT', 'CENTRAL SCHEDULING' (highlighted), 'NETWORK SETTINGS', 'SYSTEM SETTINGS', and 'LOG'. The main content area is titled 'Central Scheduling Settings' and contains the following elements:

- A welcome message: 'Welcome, administrator'.
- An introductory text: 'This section only supports SMP-WEB series products, and allows you to schedule pre-edited web playlists for each client group. Select a group first, define its schedule period, and then click 'Add Schedule' to configure the details. You must create and edit web playlists from Resource Management - Web Playlist prior to scheduling them.'
- A 'Select group:' dropdown menu with 'TEST' selected.
- A 'Scheduling period:' dropdown menu with '02/20/2007~02/28/2007' selected, and 'Add', 'Edit', and 'Delete' buttons.
- A 'Multimedia' table with columns: 'Enable', 'Schedule Name', 'Information', and 'Commands'.

Enable	Schedule Name	Information	Commands
<input checked="" type="checkbox"/>	Default	Click here for details...	Edit
- An 'Add Schedule' button.
- A 'SAVE' button at the bottom right.

Copyright © Cayin Technology Co., Ltd. All rights reserved. US, TW Patent Pending



Schedule Item:

Schedule Name:

Select: Weekly Play once

Day: Mon Tue Wed Thu Fri Sat Sun

From : (HH:MM)

To : (HH:MM)

Select 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 be expired. 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. Select one of the pre-edited Web Playlists in the drop-down menu, “Select Playlist”. You will see all playlists which you edit at “Resource Management / Web Playlist”.
8. Finally, click [SAVE] and [CLOSE].

6 ■ System and Network Settings

6-1 System Status.....	54
6-1-1 Basic Information.....	54
6-1-2 Advanced Information.....	55
6-1-3 Firmware Information	56
6-1-4 Client List.....	56
6-2 System Settings.....	58
6-2-1 Set System Time.....	59
6-2-2 Set Auto-Restart	60
6-2-3 Set Language.....	61
6-2-4 System Maintenance	61
6-3 Network Settings	62
6-4 CMS and NAT Firewall.....	63



NOTE

Please refer to “6-4 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.

6-1 System Status

In the “SYSTEM STATUS” page, you can access all related system information. We divide it into three parts: “Basic Information”, “Advanced Information”, and “Firmware Information”.

6-1-1 Basic Information

Hostname, Product Model, Firmware Version, and Current Date/time are information about the current status of the CMS server. You can specify the hostname in “6-3 Network Settings” section, and you can change the date/time/time-zone in “6-2 System Settings” section.

The screenshot shows the CMS (Content Management Server) Web Manager interface. The top navigation bar includes the title "CMS (Content Management Server)" and the Cayin logo. Below the navigation bar, the "Web Manager" header is visible. The main content area is divided into two tabs: "SYSTEM STATUS" (selected) and "CLIENT LIST". The "SYSTEM STATUS" tab is further divided into "Basic Information" and "Advanced Information". The "Basic Information" section displays the following details:

- Basic information of system status
- Hostname: webplus
- Product Model: CMS
- Firmware Version: 3.5 ,Build 07031
- Current Date and Time: 2007/02/20 11:38:08
- Time Zone: (GMT+08:00) Taipei

6-1-2 Advanced Information

You can check related hardware usages in the “Advanced Information”.

Advanced Information

Advanced information of system status

CPU Utilization: Usage 0.0%

Memory Usage: Total 241MB , Used 234MB , Usage 97.1%

System Disk Usage: Total 37GB , Used 840.7MB , Usage 2.2%

Media Folder Usage: Total 37GB , Used 840.7MB , Usage 2.2%

IP Address: 61.63.72.17 Subnet Mask: 255.255.255.240

DNS1: 61.63.0.66 DNS2: 61.63.0.67

Gateway: 61.63.72.30

MAC Address: 00:03:1D:01:B6:EA

CPU Utilization	Real-time CPU usage
Memory Usage	Usage of system DRAM
System Disk Usage	Disk usage of system firmware disk. If the usage exceeds 95%, we strongly suggest that you do not upload more patches for preventing from disk overloaded.
Media Folder Usage	Disk usage of Shared Folder. If you run out of disk space, you will not be able to add more media files in Media Folder.
Network Information	You can check IP address and other related network information here.



6-1-3 Firmware Information

You can check all updated patches information here. If you want to update your firmware, please refer to the section, “6-2-4 System Maintenance”.

Firmware Information

System firmware information

1 patch(es) in the current system.

- U07080: Upgrade system from CMS 2.7/3.0 to CMS 3.5

6-1-4 Client List

All SMP clients which connect to this CMS server will be listed here. You can check the client’s name, IP address, web manager port number, and status.

CMS (Content Management Server)

Web Manager

Welcome, webadmin

- ▶ SYSTEM STATUS
- ACCESS CONTROL
- RTB SERVER
- RESOURCE MANAGEMENT
- CENTRAL SCHEDULING
- NETWORK SETTINGS
- SYSTEM SETTINGS
- LOG

APPLY

SYSTEM STATUS
CLIENT LIST

Client List

The following table lists the IP address and status of every SMP client connected to this CMS.

All Connections:

Index	Hostname	IP Address	Port	Status	Command	
1	Jimmy-PRO2-2	172.16.2.97 (172.16.2.97)	80	OK	Open	Delete
2	Jimmy-WEBPLUS3	172.16.100.222 (172.16.100.222)	80	OK	Open	Delete
3	Jimmy-PRO2-1	172.16.100.225 (172.16.100.225)	80	OK	Open	Delete
4	Jimmy-WEB-1	172.16.1.5 (172.16.1.5)	80	OK	Open	Delete

Copyright © Cayin Technology Co., Ltd. All rights reserved.
US, TW Patent Pending

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" means the SMP client functions normally; "Fail" means the 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.
Open	Open a browser to connect to SMP's Web Manager. The program will try to connect to the physical IP address here.
Delete	Manually remove the item



6-2 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.

The screenshot displays the CMS (Content Management Server) Web Manager interface. The top navigation bar includes the CMS logo and the text "CMS (Content Management Server)". Below this, the "Web Manager" title is shown. The left sidebar contains a "Welcome, administrator" message and a list of navigation options: SYSTEM STATUS, ACCESS CONTROL, RTB SERVER, RESOURCE MANAGEMENT, CENTRAL SCHEDULING, NETWORK SETTINGS, **SYSTEM SETTINGS** (highlighted), and LOG. An "APPLY" button is located below the sidebar.

The main content area is titled "SYSTEM SETTINGS" and contains a sub-section "System Settings" with the instruction: "Configure basic system settings in this section." The current system date and time is displayed as "2007/2/20 11:48:44". There is a checkbox for "Set system time" which is checked. Below this, there are input fields for the date (YYYY: 2007, MM: Feb, DD: 20) and time (HH: 11, MM: 48, SS: 41). The time zone is set to "(GMT+08:00) Taipei". There are radio buttons for "Disable NTP service" and "Enable NTP service" (selected). The NTP Server is set to "time.nist.gov", with "Update now" and "Test" buttons and a "(Status: *)" indicator.

Under "Set daily auto-restart at", there are three checkboxes, each with a dropdown menu set to "1" and the text "o'clock". The "Other information:" section shows the "System language" set to "English". A "SAVE" button is located at the bottom right of the settings section.

The bottom section is titled "System Maintenance" and contains the instruction: "Provide remote system maintenance functions for firmware update, and system restart and shutdown." It shows the "Firmware version: 3.5 ,build 07031" and an "Upload firmware/package:" section with a file input field and a "浏览..." button. Below this are "Upload", "Restart system", and "Shutdown system" buttons.

6-2-1 Set System Time

Please follow the steps to set the system time.

1. Login CMS server with the account which is allowed to access the function: “System Settings”.
2. Click [**SYSTEM SETTINGS**] on the main page.
3. Enable “Set system time” and enter the system date for the server. “YYYY” represents “Year”, “MM” means “Month”, and “DD” is “Date”.
4. Enter the time for the server. “HH” represents 24-hour system clock. “MM” represents “Minute” and “SS” represents “Second”.
5. 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.
6. After completing the settings, please click [**SAVE**] and [**APPLY**].

System Settings

Configure basic system settings in this section.

Current system date and time 2007/2/20 11:52:06

Set system time

YYYY MM Feb DD
 HH MM SS

Time zone: (GMT+08:00) Taipei

Disable NTP service
 Enable NTP service

NTP Server: Update now Test (Status: *)



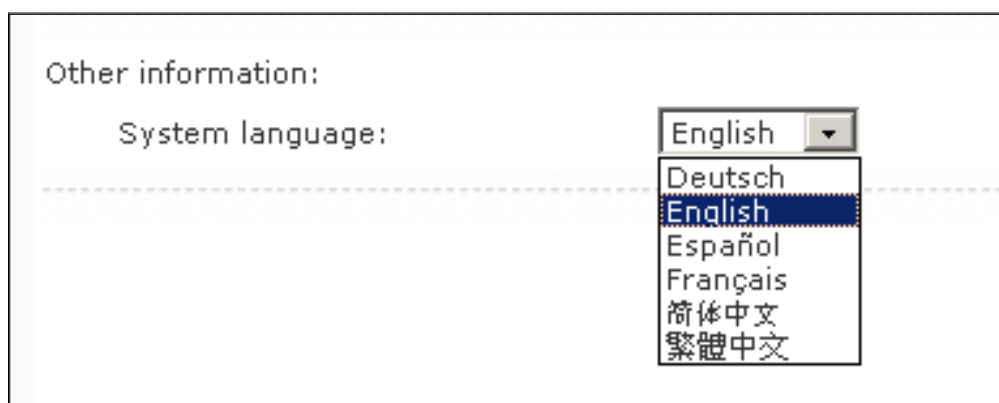
6-2-2 Set Auto-Restart

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.

The screenshot displays the 'System Settings' page in the CMS Web Manager. The left sidebar contains navigation links: SYSTEM STATUS, ACCESS CONTROL, RTB SERVER, RESOURCE MANAGEMENT, CENTRAL SCHEDULING, NETWORK SETTINGS, SYSTEM SETTINGS (selected), and LOG. Below these is an 'APPLY' button. The main content area is titled 'SYSTEM SETTINGS' and 'System Settings'. It includes a 'Current system date and time' field showing 2007/2/20 11:55:17. There are checkboxes for 'Set system time' and 'Set daily auto-restart at'. The 'Set system time' section includes fields for year (2007), month (Feb), day (20), hour (11), minute (45), and second (14). The 'Time zone' is set to '(GMT+08:00) Taipei'. There are radio buttons for 'Disable NTP service' and 'Enable NTP service' (selected). The 'NTP Server' field contains 'time.nist.gov', with 'Update now' and 'Test' buttons and '(Status: *)' text. The 'Set daily auto-restart at' section is highlighted with a red box and contains three rows, each with a checkbox and a time selector (1 o'clock). The first row's checkbox is checked.

6-2-3 Set Language

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



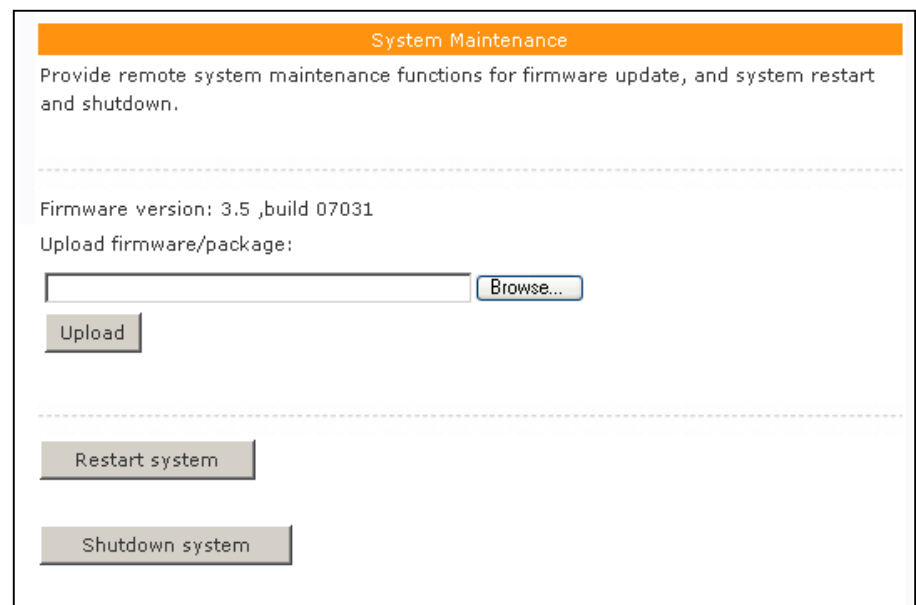
6-2-4 System Maintenance

NOTE

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.

You can update the system firmware by uploading Cayin's patch. 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.





6-3 Network Settings

NOTE

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

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, 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.

The screenshot shows the CMS (Content Management Server) Web Manager interface. The top navigation bar includes the CMS logo and the Cayin logo. The main content area is titled 'Web Manager' and contains a sidebar with navigation options: SYSTEM STATUS, ACCESS CONTROL, RTB SERVER, RESOURCE MANAGEMENT, CENTRAL SCHEDULING, NETWORK SETTINGS (highlighted), SYSTEM SETTINGS, and LOG. Below the sidebar is an 'APPLY' button. The main content area is titled 'NETWORK SETTINGS' and contains a 'Network Settings' section. The section includes a heading 'Assign a hostname to the server and configure the network settings.' and a form with the following fields: Hostname (webplus), Obtain IP by DHCP (radio button), Static IP Address (radio button, selected), IP address (61.63.72.17), Subnet mask (255.255.255.240), Gateway (61.63.72.30), DNS-1 (61.63.0.66), and DNS-2 (61.63.0.67). A 'SAVE' button is located at the bottom right of the form. The footer contains the text 'Copyright © Cayin Technology Co., Ltd. All rights reserved.' and 'US, TW Patent Pending'.

6-4 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 Web manager Client List	80 (TCP)
FTP	FTP	20, 21 (TCP)
SMB	Share Folder	139 (TCP+UDP)
SMP/CMS Command	Client List Super Monitor	20000 (TCP)

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

7. LOG



NOTE

You can use a syslog-compatible software to receive syslog records in a PC, for example, Cayin Super Reporter.

In this section, you can configure related settings of 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.

1. If you want to store logs in the Syslog server, please click “Enable Syslog” and enter the IP address of the Syslog server.
2. 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 procedures 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”.

