



# Entry-Level Digital Signage Content Management Server

## CMS-20

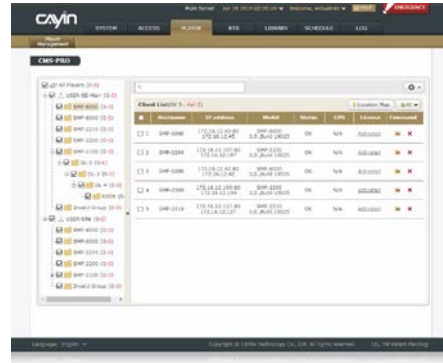


### Highlights

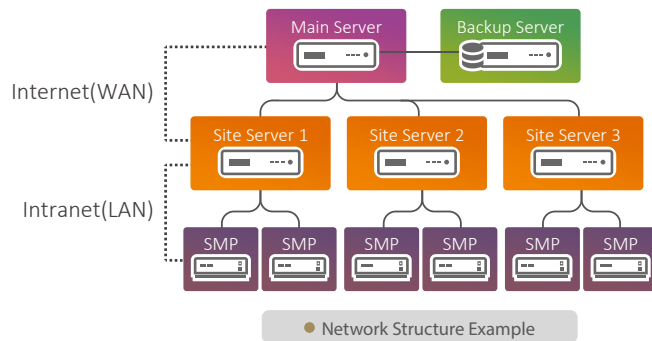
- Update contents to a maximum of 20 SMP players simultaneously
- Choose between main server, site server or backup server to ensure greater flexibility in network design
- Offer flexible central scheduling based on once, daily, weekly, monthly, or yearly timescales
- Monitor the current screenshots of a maximum of 15 SMP players per page simultaneously (requiring CMS-PRO)
- Synchronize configurations across multiple SMP players all at once (requiring CMS-PRO)
- Broadcast emergency messages with just two clicks
- Provide a one-time investment for self-hosted digital signage networks

### Efficient Management of Multiple Digital Signage Players

One CMS-20 server can control a maximum of 20 SMP players simultaneously. All SMP players connecting to the CMS server can be monitored through the server's web-based user interface. Instead of configuring media players one by one, you can manage all of them at the same time. Administrators can also locate SMP players on Google Maps when SMP players activate the location/GPS function.



### Designing a Multi-server Environment



Administrators can assign a role: main server, site server or backup server. The backup server will restore files and take over as soon as the main server fails, while the site server, installed at a branch office, can share the workload

between servers. Building a multi-server architecture ensures centralized and/or decentralized management, flexible network planning, bandwidth saving, content backup, and non-stop services. It is the best solution for you to develop a personalized network planning and achieve the stable long-term operation.

### Five-Layer Group Management

Administrators can create a maximum of five-layer groups to manage all SMP players systematically in two major aspects: content updates and task scheduling. CMS server will centrally control the playlists of all media players and synchronize content automatically to all players in groups. You can set the priority for each schedule in different layers to accommodate your need.

### Intelligent Scheduling Management

You can insert a one-time event or arrange periodic tasks based on daily, weekly, monthly or yearly timescales for all SMP players in groups. Location-based scheduling is also doable to largely increase the flexibility. SMP players will playback multimedia content automatically based on the schedule assigned by the CMS server. CMS provides two viewing modes, calendar and timetable, for you to facilitate schedule management.



### Live Streaming Video Channels

CMS-20 can manage a maximum of 2 video signals per server and up to 64 inputs for the whole system. It can transmit streaming data to SMP players by means of LAN broadcasting, multi-casting, or uni-casting and provides the most updated, multimedia entertainment for digital signage networks.

### Rich Library and Cloud Resources

All necessary raw materials, including multimedia files, fonts, clocks, skins, programs, and playlists, can be accessed easily in the Library to assist you in organizing resources. Moreover, the system allows you to upload your desired fonts or even to download the latest templates from CAYIN's Cloud service for free to greatly enrich your content.



### Instant Alert Broadcasting

With just two clicks, you can activate the alert mechanism and broadcast emergency messages to a particular group or all groups. Emergency messages can be presented in many formats, such as texts, images, video, HTML/Flash, etc.

### Secured Decentralized Management

Administrators can create multiple user accounts and authorize each account to possess different access rights. Usernames and passwords are required to access the user interface and media folder.

### Multiple Ways to Update Content

Multimedia content can be updated by FTP and Network Neighborhood. You can also upload or delete files directly in the Library of CMS's user interface.

### One-Time Investment

There are no extra fees or licenses for adding media players to work with the CMS server, no matter the number. It is the best solution for self-hosted digital signage networks.

## CMS-PRO: an add-on module for advanced management



### Access Detailed Information of SMP Players Efficiently

Administrators can check the details of system information, log records, and content update status of multiple SMP players without logging in the user interface of each SMP player one by one.



### Perform Time-Saving Batch Configuration

Configurations, such as multimedia playback, local schedule and system settings, can be synchronized between the benchmark player and all the other selected players simultaneously.



### Monitor Live Status of Multimedia Playback

Administrators can check the screenshots of a maximum of 15 SMP players per page simultaneously, receiving instant updates of each SMP player.



### Provide Instant Alert Mechanism

The system will indicate those abnormal devices whenever any disconnection between a SMP player and a CMS server is detected. Administrators can also receive an alert notification via Email.

### System Specifications

System software	CMS v11.0	
Access Control	User Accounts	• Create max. 30 user accounts and authorize each account to possess different access rights
	Authentication	• Secure the access to Web Manager and Media Folder by usernames and passwords
Media Player Management	User Interface	• View a list of all SMP players controlled by the CMS server in a tree structure
	Group Management	• Create a maximum of five-layer groups to organize and monitor the functioning status of SMP players
	Position	• Locate SMP players on Google Maps when SMP players activate the location function
Content Updates and Management	User Interface	• Manage files with two view modes, icon and list, and select files by the file filter
	Methods	• Upload files to CMS by FTP, Network Shares (Network Neighborhood), and CMS's Web Manager
	Capacity	• Update contents to max. 20 SMP players simultaneously
	Sync Source	• Create folders and sub-folders in CMS to store and organize multimedia files
	Sync Destination	• Assign each group with one media folder and synchronize contents automatically to all SMP players based on a group basis
	Media Types	• Synchronize playlist, skin, program, font, clock, and all multimedia files in the CMS's Media Folder to SMP players
Central Scheduling	Playback	• View type: calendar or time table
		• Schedule mode: once, daily, weekly, monthly, yearly, and location
		• Playback type: able to edit scheduled tasks in the master schedule and take further steps to edit tasks for each zone in the sub-schedule for the Skin playback mode
	Emergency	• Arrange emergency messages with skin, program, playlist, video, image, or HTML/Flash
Volume	• Set schedules to adjust SMP's volume	
Video Streaming Server	RTB (Real Time Broadcast)	• Support DVD quality RTB MPEG-2 and MPEG-4 transport streaming (TS); bit rate 256K ~ 5M bps
	Channel Number	• Manage max. 2 video signals per server; up to 64 inputs for the whole system
	Video Format	• Composite (BNC or RCA) input
	Audio Format	• Stereo audio input (for Video Channel 1)

System Settings	Languages	<ul style="list-style-type: none"> <li>User Interface: Chinese (Traditional), Chinese (Simplified), English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Thai</li> <li>Ticker Support: Unicode (UTF-8) compatible languages; able to use default fonts or upload TTF fonts<sup>(1)</sup> to a specific group.</li> </ul>
	Time	<ul style="list-style-type: none"> <li>Set system time manually or synchronize the clock from an NTP server</li> </ul>
Remote Diagnostics and Maintenance	Hardware Monitor	<ul style="list-style-type: none"> <li>Check utilization of CPU, system DRAM, and hard drive</li> </ul>
	Log	<ul style="list-style-type: none"> <li>Create log files recording the system status</li> </ul>
	System Update	<ul style="list-style-type: none"> <li>Automatic notification of patch and firmware updates</li> </ul>
	Self-repair	<ul style="list-style-type: none"> <li>Able to restart/shutdown the system and backup/restore configurations remotely</li> </ul>
Network	Protocols	<ul style="list-style-type: none"> <li>Support static IP and dynamic IP (DHCP)</li> <li>Support IP, TCP, UDP, ICMP, HTTP, DHCP, RTB, SMB/CIFS, FTP</li> </ul>
Resources	Cloud-based	<ul style="list-style-type: none"> <li>Provide templates and materials in Library and Online Resources</li> </ul>
Web Manager	Recommended Browsers	<ul style="list-style-type: none"> <li>IE 11 or later, Chrome 71 or later, Firefox 56 or later</li> </ul>
<b>CMS-PRO</b>	Player Management	<ul style="list-style-type: none"> <li>Check SMP's system information, log records and content update status in details</li> </ul>
	Multiplayer Configuration	<ul style="list-style-type: none"> <li>Configure more than one player at the same time, including multimedia playback, local schedule and system settings</li> </ul>
	Screenshot	<ul style="list-style-type: none"> <li>Check the screenshots of a maximum of 15 SMP players per page</li> </ul>
	Mail Alert	<ul style="list-style-type: none"> <li>Send an alert notification by Email to multiple users whenever the following event is detected: disconnect, connect, or shutdown</li> <li>Send Email immediately or upon a pre-set schedule</li> </ul>
	Patch Management	<ul style="list-style-type: none"> <li>Synchronize patches manually or automatically from Online Resource Server</li> <li>Update patches to selected SMP players immediately</li> </ul>

<sup>(1)</sup> CAYIN doesn't guarantee that SMP-NEO is compatible to all font files. \* Specifications subject to change without notice.

## Hardware Specifications

Dimension	• 440 (W) x 220 (D) x 45 (H) mm; 1U Rack	CPU	• 1.8G Hz
Weight	• 2.5Kg	Network	• 10/100/1000M bps Ethernet
Internal Storage	• 2.5" SATA Hard-disk drive; 320G Byte	Power	• 100~240V AC
Video in	• BNC x 2	Others	• USB 2.0 x 4
Audio in	• Phone jack x 1	Certificate	• CE, FCC, RoHS
Display Output	• VGA D-SUB x 1		

I/O Interface



- 1 Power, LAN & HDD Indicators
- 2 Power Switch
- 3 USB x 2
- 4 Video-In
- 5 Audio-In
- 6 USB x 2
- 7 Ethernet LAN
- 8 VGA
- 9 Power Connector

System Structure

