



The Best Cross-Platform Digital Signage Server

Product Highlights

- One for All, All in One
- Small Budget, Big Result
- CAYIN AI Server free multi-language localization, and quickly translate marquee content into multiple languages
- AI-powered content creation
- Start marketing in seconds
- Versatile scheduling and playback
- File activation settings
- Automatic HLS conversion for stable streaming
- Intuitive user interface
- Network traffic manager
- Multi-NIC configuration for self-hosted servers
- Safe and secure data storage
- HTTPS encrypted connections for stronger security
- File download for complete data backup
- Publish log for clear content audit trails





One for All, All in One

CMS-WS is the ideal cross-platform server you've been waiting for. The All-in-One Digital Signage Management System allows users to connect and manage up to 1000 devices directly through the web browser.

Choose from a wide selection of devices: Smart TV, Android Playback Systems, Mobile devices, Tablets, PC, Laptop with CAYIN Signage Player, CAYIN digital signage players and other media players. The unbeatable versatility gives control back to the user and can match diverse business demands and budgets.

Small Budget, Big Result

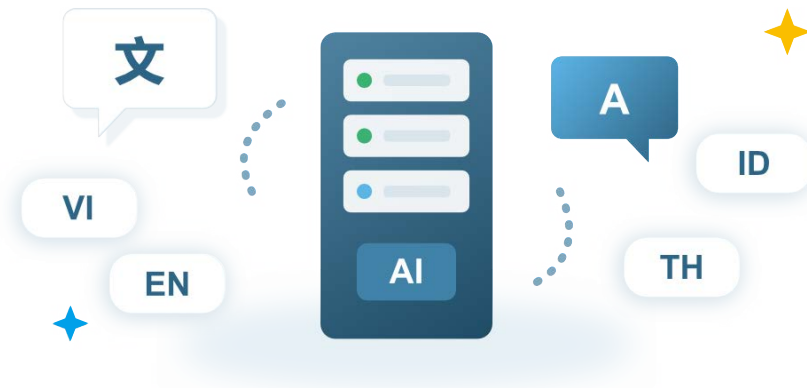
Compared to other cloud-based CMS software, you can spend less but benefit more with CMS-WS. The yearly-subscription based service cuts out long-term commitment and instead provides extra flexibility by letting users choose their own devices for the best value and cost.

CMS-WS is the ideal cost-effective solution for retail, small and medium-sized businesses to get big results from a small budget.



CAYIN AI Server Free Multi-language Localization

With the CAYIN AI Server, CMS-WS can translate and localize content into multiple languages within seconds. This is especially useful for environments such as factories with multi-national staff, ensuring that announcements, training, and safety information reach everyone instantly. Enjoy high-quality localization with no extra fees.

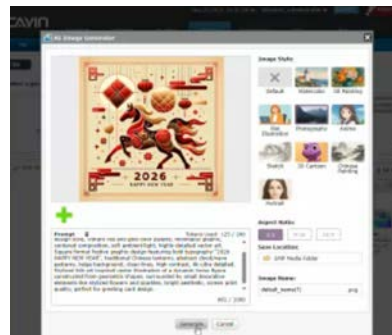


AI-powered Content Creation

Accelerate your creativity with CMS-WS AI. Create content faster and smarter with advanced AI-powered content creation tools. CMS-WS integrates cutting-edge AI to streamline your workflow, generating professional results based on your unique brand identity and target audience.

Smart Tools for Modern Marketing

- **Text-to-Image Generation** : turn simple descriptions into high-quality visuals instantly to keep your displays fresh.
- **Image-to-Image Transformation** : enhance or adapt existing images into new styles while maintaining brand consistency.



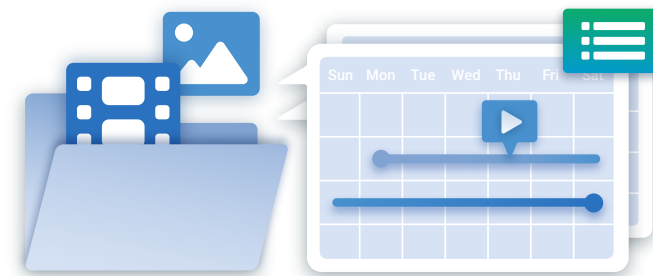
Automatic HLS Transcoding for Stable Streaming Playback

CMS-WS automatically transcodes uploaded videos to HLS streaming format, ensuring stable, smooth playback across all your devices with no extra software or manual conversion required.



Automated Video and Image Playlist

Schedule content on playlists ahead of time so you never miss a beat. Expiration dates can be set on uploaded video or image files in your playlist and automatically played or stopped as per your desired dates.



Multi-NIC Configuration for Self-Built Servers

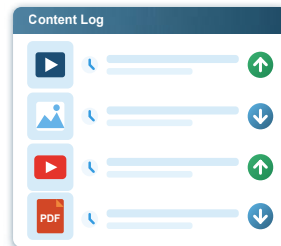
For customers who build their own CMS-WS server with multiple network interface cards, CMS-WS automatically detects every card installed on the machine, making network setup straightforward from the start.

Administrators can configure IP, netmask, DNS1, and DNS2 independently for each detected card, with no extra manual setup needed.



Content Audit Log All Publish & Unpublish Events at a Glance

The CMS-WS log records precise timestamps for every content publishing and unpublishing event. Administrators can easily review when playback started and ended for each item, streamlining audit trails, troubleshooting schedule issues, and providing vital evidence for contracts and playback verification.



Network Traffic Manager

Easily manage your video players' bandwidth and instantly tap into each player's real-time traffic and functioning status. You can also observe and check large traffic spikes for accidental operational mistakes or abnormal intrusions. To improve playback fluency and stability, adjust your player's content based on what you observe from the backend.



File Download for Reliable Data Backup

When relocating devices, replacing equipment, or retaining playback logs, users can download and back up all file contents from the server to their local computer. For best results and to ensure smooth operation, we recommend performing downloads when no content is playing. This helps avoid playback interruptions and makes data backup and device maintenance safer and more efficient.



Supports HTTPS Encryption for Enhanced Security

To strengthen management interface transmission security, SMP-2200 supports HTTPS encrypted connections.

After enabling this feature, you can quickly activate encryption using the system's built-in default self-signed certificate.

Enterprises with their own certificates can also upload a custom self-signed certificate for even stricter management connection security.



Start Marketing in Seconds

Reach your target audiences and start marketing your brand and products within seconds with CMS-WS! The rich library and cloud resources packed with fonts, clocks, downloaded and adjusted based on your brand image, style and needs. You'll be able to stream a variety of media types, including video, YouTube video, image, HTML5 web page, text ticker, news, weather, social media, etc.

Moreover, CMS-WS will deploy your marketing touchpoints to

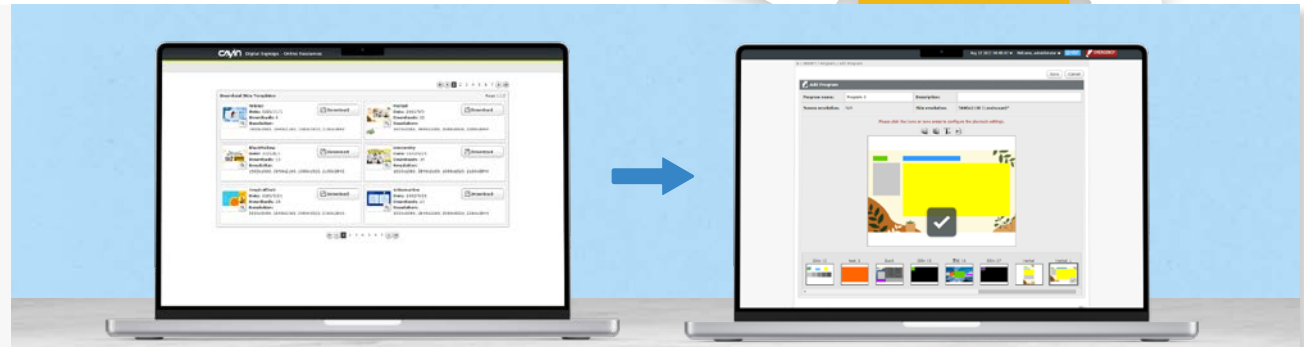
communicate with your audiences in 2 Simple Steps:



Step.

01

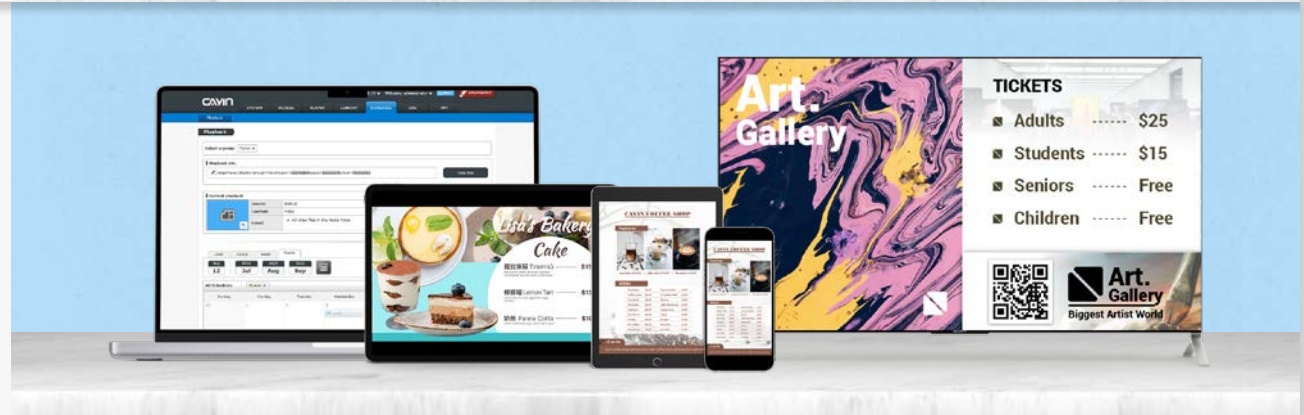
Create your templates



Step.

02

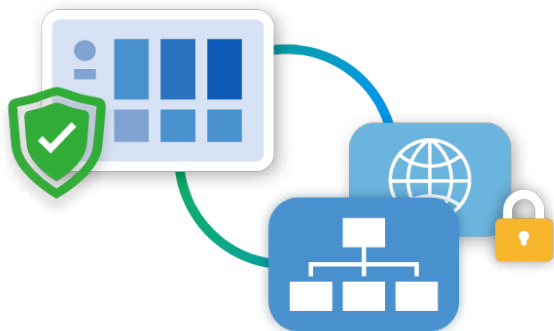
Display on
whichever device you like



Safe and Secure Data Storage

Compared to other cloud-based services, CMS-WS protects your data from security risks and leaks by storing them in your server rather than the cloud. Users have full control over their data and can choose their own preferred network.

For convenience, select the internet browser or for security, choose the LAN/WAN intranet, which provides a private connection for important content and data.



Intuitive User Interface

CMS-WS's intuitive user interface gives users the ability to perfectly manage all multimedia content with zero learning curve. The remote management function also gives users instant access to manage, upload, and schedule display devices anywhere, anytime using a WEB browser, or the CAYIN Signage Player App.



Versatile Playback Function

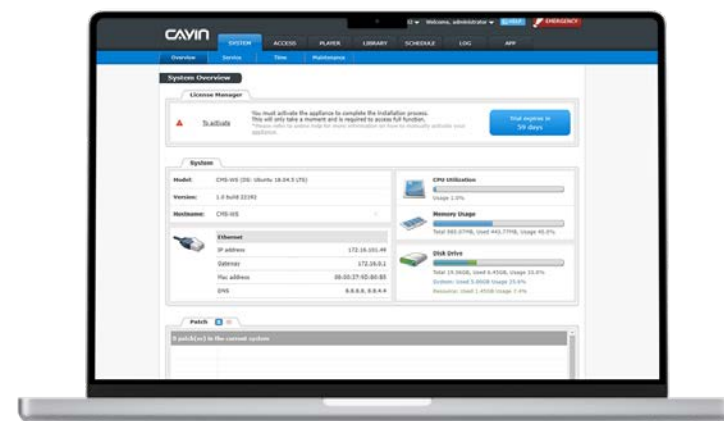
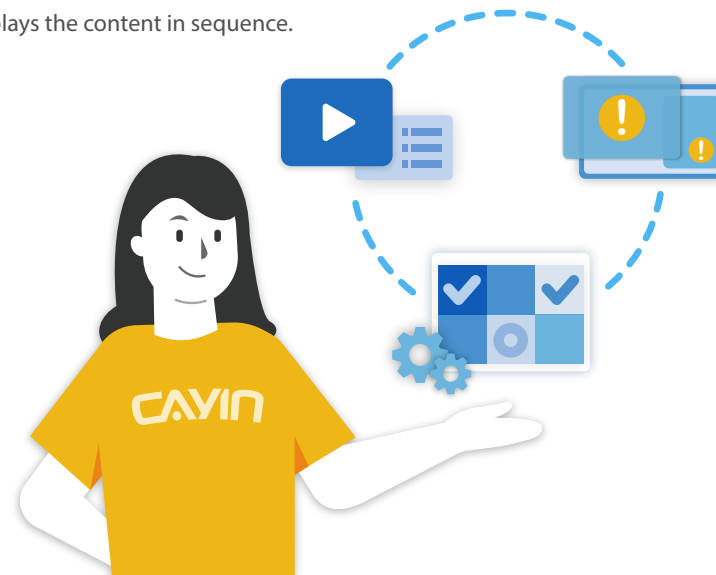
The Versatile Playback Function offers three playback options.

Playlist: Create a playlist that automatically plays the content in sequence.

Schedule: Arrange a one-time event or daily, weekly, monthly, or yearly tasks for all CAYIN players and web-enabled devices. The two viewing modes, calendar and timetable, help users facilitate schedule management.

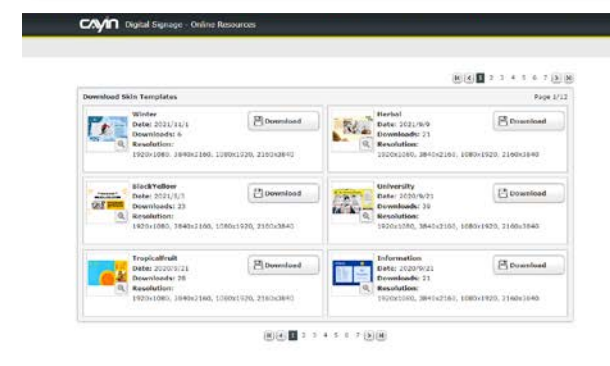
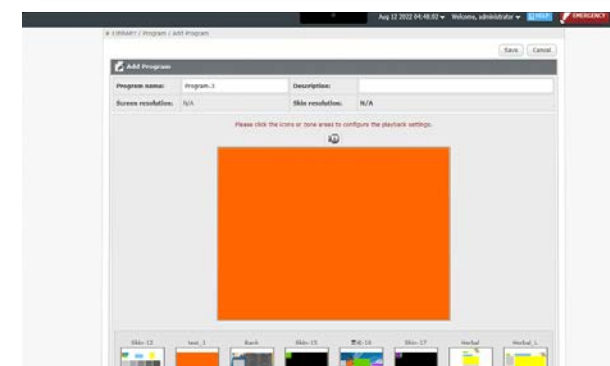
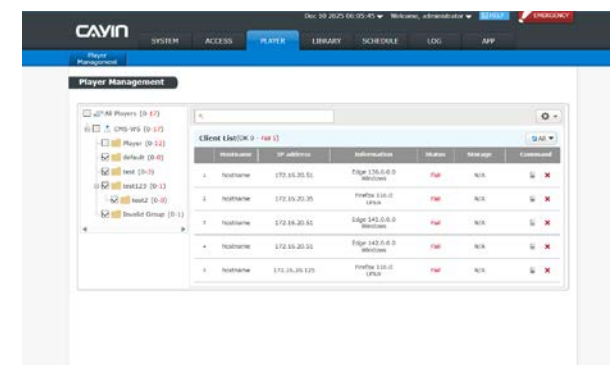
Emergency: Designed for times of urgency, users can activate the alert mechanism and broadcast emergency messages in texts, images, videos, HTML...etc.

The cross-platform feature will allow your audience to access urgent messages on their personal devices.



CMS-WS vs. CMS-WS Lite

	CMS-WS	CMS-WS Lite
		
User	All users	QNAP NAS users
Operating system	Ubuntu 64 bits 22.04 LTS + CMS-WS	QNAP NAS QTS
Playback format	Major video/audio/image formats	MP4 (H264)/JPG/GIF/BMP /TXT only
File management method	Web UI/ FTP/Network shared folder	Web UI only
Number of Program	Unlimited programs	Up to 15 programs
Account access control	Unlimited number of user accounts and access authentication	Not supported
Central scheduling	✓ Schedule mode: once, daily, weekly, monthly, and yearly ✓ Media type: include program, playlist, video, image, or HTML	Not supported
Group management	Unlimited number of groups	Not supported
Software license	90-day FREE TRAIL Buy licenses for max. 1000 devices	Free app Manage max. 1000 devices



System Specifications

Product Name		CMS-WS	CMS-WS Lite
Users		• All users	• QNAP NAS users
Operating System		• Ubuntu 64 bits 22.04 LTS + CMS-WS	• QNAP NAS QTS
Access Control	User Accounts	• Create unlimited user accounts and authorize each account to possess different access rights	X
	Authentication	• Secure the access to Web Manager and Media Folder by usernames and passwords	X
Media Player Management	User Interface	• View a list of all SMP players controlled by the CMS server in a tree structure	X
	Group Management	• Create a maximum of five-layer groups to organize and monitor all connected players	X
Content Updates and Management	Methods	• Upload files to CMS by FTP, Network Shares (Network Neighborhood), and CMS's Web Manager	• Upload files to CMS on CMS' Web Manager
	Capacity	• Update contents to the max. 1000 connected players simultaneously depending on the type of license purchased	• Update contents to the max. 1000 connected players • simultaneously
	Sync Source	• Create folders and sub-folders in CMS to store and organize multimedia files	• Same as CMS-WS
	User Interface	• Manage files with two view modes, icon and list, and select files by the file filter	• Same as CMS-WS
	Media Types	• Playlist, skin, program, font, clock, and all multimedia files in the CMS's Media Folder	• Manage skin, program, font, clock, and all multimedia files in the CMS' Media Folder. Only default fonts and clocks can be used.

* Specifications subject to change without notice.

Content Creation	Zone type	• Create templates directly on CMS-WS server • Video zone x 2 • HTML zone x 5 • Image zone x 2 • Ticker zone x 2 • Clock zone x 1 • Background image x 1	Same as CMS-WS
Multimedia Playback	Web Pages	• Web language: support HTML 5, JavaScript and CSS • Content: show HTML files, remote URL, weather, YouTube, social media or integrate with users' network facilities and databases	• Web language: support HTML 5, JavaScript and CSS • Content: remote URL, weather, social media or integrate with users' network facilities and databases
	Video Files	Transcode the following video sources to HLS format for streaming • Format: MPEG (MPG, VOB), AVI (H.264), WMV, MP4 • Video Codec: AVC (H.264), MPEG-2, MPEG-4, VP8, VP9, WMV1, WMV2, VC-1, Theora, H.265 • Audio Codec: WMA7/8, MP3, AAC • Resolution: up to 1080p (1920x1080)	• Format: MP4 • Video Codec: MP4 (H.264) • Resolution: up to 1080p (1920x1080)
	Image Files	• Format: JPEG / PNG / GIF / BMP • Resolution: up to 1920x1080 (2 million pixels)	• Same as CMS-WS
	Preview	• Playback simulator: image, HTML, remote URL, and ticker • File preview: show thumbnails for image and video files	• Same as CMS-WS

Central Scheduling	Playback	• View type: calendar or time table • Schedule mode: once, daily, weekly, monthly, and yearly • Media type: include program, playlist, video, image, or HTML in scheduled tasks	X
	Emergency	• Arrange emergency messages with program, playlist, video, image, or HTML	X
System Settings	Languages	• User Interface: Chinese (Traditional), Chinese (Simplified), English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Thai • Ticker Support: Unicode (UTF-8) compatible languages; able to use default fonts or upload TTF fonts to a specific group.	• Same as CMS-WS • Ticker Support: Unicode (UTF-8) compatible languages; able to use default fonts.
	Time	• Set system time manually or synchronize the clock from an NTP server	X
Remote Diagnostics and Maintenance	Hardware Monitor	• Check utilization of CPU, system DRAM, and hard drive	X
	System Update	• Automatic notification of patch and firmware updates	X
Network	Protocol	• Support static IP and dynamic IP (DHCP) • Support IP, TCP, UDP, ICMP, HTTP, DHCP, SMB/CIFS, FTP	• Use QTS network
Resources	Cloud-based	• Provide templates and materials in Library and Online Resources	• Same as CMS-WS
Web Manager	Supported browsers	• Chrome 88, Edge 88, Firefox 85, Opera 74, Safari 13 or later • *Recommended browser: Chrome88 or later	• Same as CMS-WS

System Requirements

Before you install CMS-WS, we recommend you verify that your hardware meets or exceeds the minimum system requirements for the product.

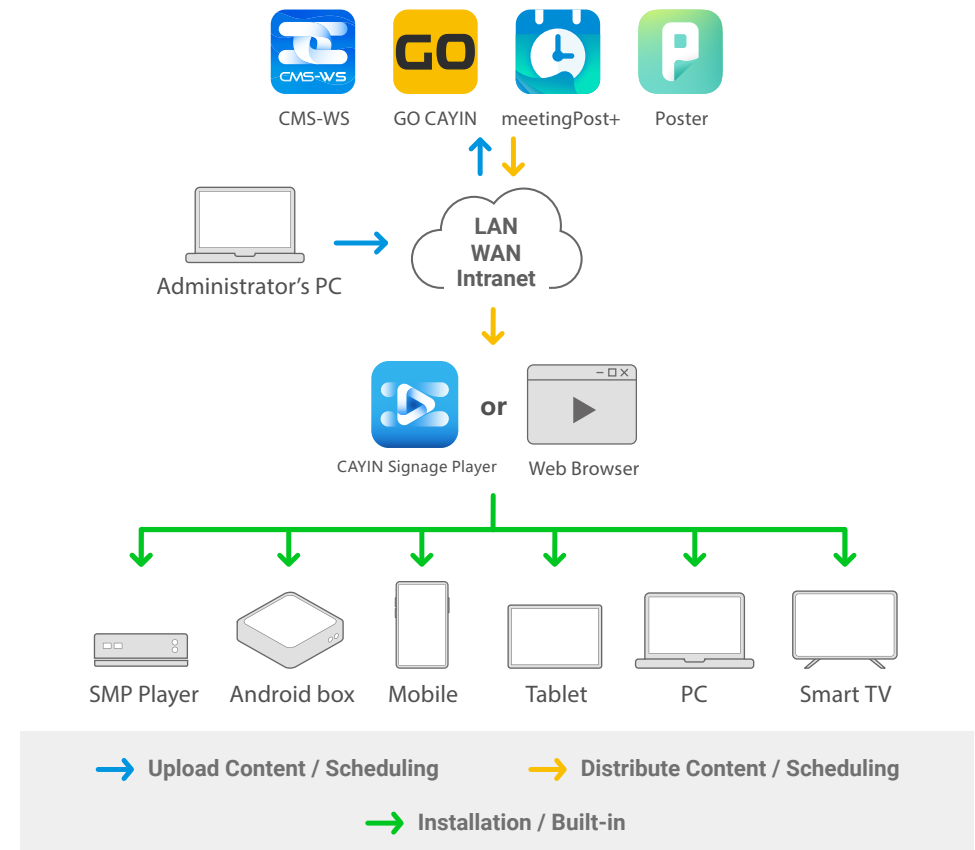
Operating system	• Ubuntu 64 bits 22.04 LTS(*)+ CMS-WS
CPU	• Intel® 8th Core i3 processor or better
GPU	• Intel chip (support Intel® Quick Sync Video)
Memory	• 4 GB RAM
Hard disk (HDD or SSD)	• 120 GB of available disk space
Installation media	• Either a USB flash drive or DVD
Network	• Highspeed Internet access is essential

* Ubuntu is a Linux operating system and all of the application software installed by default is free software. For more information please contact our sales team.

TRY CMS-WS FOR FREE

This free trial gives you access to all the features that come with CMS-WS for 90 days. During the free trial period, you may only connect to 1 player. When you are ready to connect to all of your players (up to 1000 players depending on your license), simply contact us to purchase the license and obtain a Serial Number to activate within the Software. You do not need to re-install CMS-WS.

System Structure



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