CMS-MAZi Client Software

CMS-MAZi Client Software is designed to configure and manage MAZi devices in a unified and intuitive manner, including the DVRs, NVRs, IP cameras, encoders, access control devices, security control panels, video intercom devices, VCA devices, etc. It provides multiple functionalities, including real-time live view, video recording, video footage search and playback, event and alarm receiving, etc.

Key Features

Live View

- Supports up to 64-window division for standard screen, and 48-window division for wide screen
- Supports customizing window division
- Supports viewing the stream information during live view, including bitrate, frame rate and resolution (except for devices added by CMS-MAZi)
- Supports live view in fisheye mode for one or more fisheye cameras, and supports Panorama, PTZ, Half Sphere, AR Half Sphere, and Cylinder modes
- Supports smart linkage
- Supports resuming the latest live view status after the client restarts
- Supports displaying or hiding waste gas information during live view
- Supports configuring auto-switch schedule
- Supports displaying channel recording status and alarm status

Recording

- Supports recording both main stream and sub-stream for playback (if device supports)
- Supports manual recording
- Supports recording schedule for continuous recording, event recording and command recording
- Providing SAN and Hybrid Storage Area Network configuration for Hybrid SAN devices
- Supports overwriting video file and deleting expired video file

Event Management

- Supports camera linkage and multiple linkage actions
- Supports configuring up to 4 cameras as the linkage of one event, and supports playing back the videos or captured pictures of the cameras simultaneously when searching historical events or viewing real-time events
- Supports sending email with captured picture as the attachment when the event is triggered
- Supports customizing alarm sound
- Supports subscribing event that the client can display in real time in event center when it is triggered
- Supports audible warning, pop-up live view and captured picture when alarm is triggered
- Supports receiving real-time events, e.g. events of face arming
- Supports searching for the historical events by event type or event details as the key words
- Supports exporting historical events in CSV format
- Supports fire alarm and status alarm for the fire protection gateway and detector
- Supports configuring AI open platform event
- Supports searching and downloading event triggered captured picture and event triggered video
- Supports acknowledging the received event, viewing the event on E-map, etc.
- Supports device arming and partition and zone settings
- Supports event configuration for video event, access control event, and security control event
- Supports the playback of video event
- Supports importing false alarm pictures and target frame information to self-learning library for line crossing detection and intrusion detection when viewing real-time events and searching for historical events

Playback

- Supports remote playback
- Supports up to 16-channel synchronous playback
- Supports viewing the stream information during live view, including bitrate, frame rate, resolution (except for devices added by CMS-MAZi)
- Supports instant playback, normal playback, alarm input playback, event playback, ATM playback, VCA playback, fisheye playback and POS playback
- Supports locating the playback time accurately

- Supports skipping unconcerned video footage during VCA playback
- Supports filtering the video footage with human or vehicle detected
- Supports searching and exporting captured pictures of event by date and event type
- Supports downloading video file of devices added by CMS-MAZi
- Supports merging video files when downloading by date
- Provides player in the installation directory to view the downloaded video file
- Supports searching recorded video files triggered by event and playing the video files, and downloading the video files
- Event Playback supports downloading multiple video files to local PC
- Supports the simultaneous playback of video and audio
- Supports downloading audios by time

Person Management

- Supports managing persons in different organizations
- Supports getting person information in a batch or via employee ID from added devices
- Supports importing and exporting person and face
- Provides multiple types of credentials, including card number, face, fingerprint, iris, and voiceprint for composite authentications
- Supports collecting face pictures by third-party camera (USB camera or the build-in camera of computer)
- Supports viewing resource statistics (including persons, face pictures, cards, fingerprints, and voiceprints)
- Supports extending person's validity period for access permission
- Supports reading card No. by swiping card
- Supports importing and exporting person information including card type and card number
- Supports issuing cards in batch to the persons with no cards

Access Control and Video Intercom

- Supports setting holiday schedule and access schedule template
- Supports setting a schedule for door's remaining open/closed status
- Supports setting access groups to relate persons, templates, and access points, which defines the access permissions of different persons
- Supports multiple modes for both card reader authentication and person authentication
- Supports advanced functions such as multi-factor authentication, custom Wiegand, first person in, anti-passback, cross-controller anti-passback, and multi-door interlocking
- Supports controlling the door status (lock, unlocked, remain locked, remain unlocked, remain all locked and remain all unlocked) by the client remotely
- Supports video intercom and searching for real-time call logs
- Supports managing notices on the indoor station; supports applying application package to indoor station
- Supports setting authentication attempts for multiple time periods, and supports clearing the authentication attempts
- Supports refreshing door's status

Elevator Control

- Supports setting parameters for elevator control devices
- Supports setting the relay types of the elevator control devices and setting the relation between relays and floors
- Supports controlling elevator status via the client, including Opening Door, Controlled, Free and Disabled
- Supports displaying events triggered by iris authentication

Time and Attendance

- Supports setting general rules for time and attendance
- Supports setting different rules for various attendance scenarios, such as one-shift and man-hour shift
- Supports customizing overtime levels and setting corresponding work hour rate
- Supports flexible and quick settings of timetables, shifts, and shift schedule
- Supports setting multiple timetables in one shift
- Supports getting detailed attendance data from the managed device, including check-in and check-out, break-in and break-out, overtime-in and overtime-out, etc.
- Supports customizing contents displayed in reports and sending reports to specified email address according to schedule
- Supports multiple types of reports according to different needs
- Supports sending the original attendance data to a third-party database (Microsoft® SQL Server® 2008 and above, MySQL V5.0.45 and above), and thus the client can access third-party T&A and payment system
- Supports calculating the break time as attendance

    | Supports flexible shift schedule on weekend
    | Supports editing flexible timetable and counting the day with insufficient attendance time under the set flexible timetable as absence

Security Control

    | Accessing AX-series security control device
    | Supports adding zone as hot spot on E-map and viewing the video of the linked camera
    | Supports radar configuration, including drawing zones, drawing trigger line, setting master-slave tracking, setting parking points for linked camera, setting map calibration, drawing point cloud filter zones, and displaying environment learning information in blue points
    | Supports drawing false track area
    | Supports enabling terrain learning when setting smart linkage

Statistics

    | Supports data statistics of heat analysis, people counting, counting, road traffic, face retrieval, license plate retrieval, behavior analysis, face capture, queuing-up time analysis, queue status analysis and intersection analysis
    | Supports people counting by facial features and displaying the duplicated persons

    | Supports showing large picture of face retrieval, license plate retrieval, and behavior analysis and the pictures can be exported for local storage
    | Supports data retrieval for faces, human bodies, vehicles, behavior analysis related pictures and videos, persons who do not wear hard hats, and facial recognition check-in
    | Supports searching facial recognition check-in records
    | Supports searching frequently appeared persons and rarely appeared persons
    | Supports AI dashboard retrieval function to search result for imported picture analysis task
    | Supports hard hat retrieval by wearing a hard hat or not and face recognition status, and supports displaying ID type and ID No. in search results
    | Supports searching for the historical temperature statistics of specific devices and displaying the information on a temperature map
    | AI Dashboard supports searching for data stored in DeepinMind servers
    | Supports searching for fire and smoke detections
    | Supports display by grouping statistics for people counting by encoding device

Network

    | Supports adding encoding devices and CMS-MAZi devices
    | Supports adding devices by IP address, domain name, IP Segment and ISUP account, and supports importing devices in batch
    | Supports enabling transmission encryption using TLS (Transport Layer Security) protocol when adding a device
    | Supports searching for the active online devices
    | Supports NTP protocol for time synchronization from the client to the added devices
    | Supports checking device's online users
    | Supports two-way audio and broadcast function
    | Supports applying the client in local area network and wide area network

PTZ Control

    | Supports remote PTZ control, preset, patrol, and pattern settings
    | Supports displaying analog speed dome's local menu via PTZ control panel
    | Supports PTZ control of one-touch patrol and one-touch park
    | Supports lens de-icing heater and PT de-icing
    | Supports arming and tracking target (human or vehicle)
    | Supports manually enabling the function of hazardous gas detection

General

    | Supports transmission encryption when logging in the SDK over TLS mode
    | Supports upgrading client and device firmware after detecting new versions
    | Supports importing and exporting configuration file
    | Supports auto backing database up according to the configured schedule

- Supports log search and backup
- Supports adding facial recognition devices such as DeepinView and DeepinMind
- Supports remote configuration for added devices
- Supports adding online devices registered to CMS-MAZi after logging into CMS-MAZi
- Supports creating a password to activate device. For device which supports CMS-MAZi, supports enabling CMS-MAZi service when activating it
- Supports resetting device password
- Supports setting email when activating devices, and resetting the password of devices by the email
- Supports hardware decoding for live view and playback
- Supports downloading video files to PC in MP4 and AVI format
- Supports user permission management
- Supports E-map functions, including adding, deleting, editing and viewing e-map, zooming in/out and moving the e-map
- Provides topology management module to monitor network health status of connected devices
- Provides configuration wizards for access control and time and attendance, which helps users to quick start
- Supports importing the events of the access control devices to the client in CSV format (encrypted)
- Supports configuring display formats of date and time of the client
- Supports 1V1 face comparison
- Supports searching analysis result for video and captured picture task
- Supports face picture retrieval, human body retrieval and vehicle retrieval, and exporting the related video files
- Supports saving pictures in structure data format to meet GDPR standards in the EU
- Supports selecting the retention period of events (the default retention period is 3 years)
- Live view and playback of devices added by cloud service account supports up to 5 minutes, and after that time the playback will end automatically.
- Supports longitude and latitude calibration for radars
- Supports customer traffic (face) in the intelligent application
- Supports accessing the fire protection gateway
- Supports the access to HCC on the interface
- Supports radar tracking manual compensation
- Supports person passing records management, lamp effect management, channel control management, and person channel management

Specification

Database	
Client Database	SQLite (encrypted)
General	
User	50 users and one super user
Encoding Device	256
Group	256
Camera	256 for all groups
DeepinMind Server	1
E-Map	256
User	50 users and one super user
Video	
Live View	64-channel live view at a time on one screen **This does not indicate supporting the live view of 256 (64 * 4) channels at the same time. For details, refer to system requirement and live view performance.*
Auxiliary Screen Preview	One main screen and 3 auxiliary screens for live view
Playback	16-channel playback at a time

Person	2,000
Card	5,000
Fingerprint	5,000
Face Picture	2,000
Permission Group	50
Door	50
Template	16
Video Intercom Devices (Door Station, Indoor Station, Master Station)	256
Access Controller	50
Elevator Controller	4
Time and Attendance	
Attendance Result	The retention period of attendance data depends on the total data of attendance and the disk space.
Schedule	32
Security Control	
Security Control Panel	16
Security Radar	8
Network	
Switch	16

System Requirement

For high stability and good performance, the following system requirements must be met.

| Features	Requirements
Operating System	Microsoft® Windows 7 SP1 and above (32-bit or 64-bit) Microsoft® Windows 8.1 (32-bit or 64-bit) Microsoft® Windows 10 (32-bit or 64-bit) Microsoft® Windows 11 (32-bit or 64-bit)
CPU	Intel® Core™ i3 Processor and above
Memory	4 GB and above
Resolution	1280×768 and above

Live View Performance

| H.264 (Software Decoding)						
	Channels	Resolution	CPU (%)	Memory (MB)	Bit Rate (Mbps)	Frame Rate (fps)
CPU: i3-8100@3.60 GHz 4G Graphics Card: GT1030 Windows 10 64-bit	9	1080P	79-88	150.9	6	30
	2	8 MP	73-80	169.4	12	30
	64	cif	40-53	857.7	0.5	30
CPU: i5-9400F@2.9 GHz 8G Graphics Card: GTX1050Ti Windows 10 64-bit	18	1080P	86-88	156.4	6	30
	4	8 MP	76-87	95.6	12	30
	64	4cif	74-85	922.5	0.5	30
CPU: i7-8700k@3.7 GHz 16G Graphics Card: GTX2080×2 Windows 10 64-bit	27	1080P	86-89	173.4	6	30
	8	8 MP	72-82	194.3	12	30
	64	4cif	38-45	747.4	1	30
Smart H.264 Hardware Decoding)						
CPU: i3-8100@3.60GHz 4G Graphics Card: GT1030 Windows 10 64-bit	10	1080P	59-72	509.8	6	30
	5	8 MP	65-86	796.6	12	30
	64	cif（D3D11）	42-51	1003.9	0.5	30
CPU: i5-9400F@2.9GHz 8G Graphics Card: GTX1050Ti Windows 10 64-bit	20	1080P	74-78	518.1	6	30
	6	8 MP	92-99	420.9	12	30
	64	4cif（D3D11）	53-60	996.2	1	30
CPU: i7-8700k@3.7GHz 16G Graphics Card: GTX2080×2 Windows 10 64-bit	24	1080P	75-77	714.5	6	30
	6	8 MP	65-72	413.7	12	30
	64	4cif（D3D11）	67-75	1173.8	1	30
H.264+						
CPU: i3-8100 4G Graphics Card: GT1030 D5 Windows 7 64-bit	18	720P	55-68	1,208	3	30
	10	1080P	54-78	1,024	6	30
	-	8 MP	-		12	30
CPU: i5-4590@3.3 GHz 8G Graphics Card: GTX970 Windows 7 64-bit	44	720P	84-92	1,382	3	30
	16	1080P	79-89	1,536	6	30
	5	8 MP	85-90	686	12	30
CPU: i7-6700k@4 GHz 16G Graphics Card: GTX1070 Windows 7 64-bit	64	720P	79-94	1,125	3	30
	27	1080P	87-93	1,161	6	30
	10	8 MP	92-96	1,249	12	30
H.265						
CPU: i3-8100 4G Graphics Card: GT1030 D5 Windows 7 64-bit	12	720P	70-77	349.1	3	30
	7	1080P	79-87	428.1	6	30
	-	8 MP	-	-	12	30
CPU: i5-4590@3.3 GHz 8G Graphics Card: GTX970 Windows 7 64-bit	25	720P	83-91	628.3	3	30
	12	1080P	88-94	983.2	6	30
	2	8 MP	59-70	604	12	30
	64	4cif	81-90	1057.6	1	30
CPU: i7-6700k@4 GHz 16G Graphics Card: GTX1070 Windows 7 64-bit	42	720P	90-97	937.6	3	30
	18	1080P	90-96	1207.9	6	30
	5	8 MP	86-95	1097.7	12	30
	64	4cif	57-63	1150.5	1	30

Typical Application

Application for Video Security
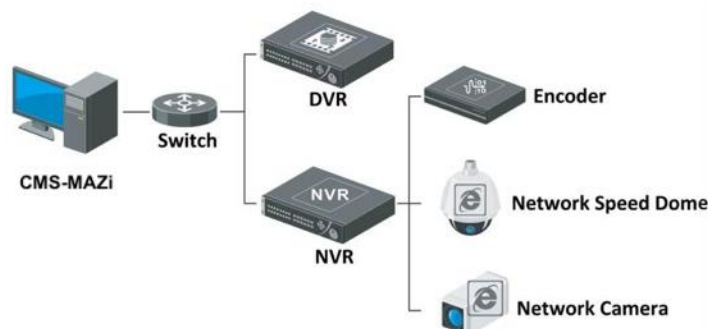
Application for Video Intercom
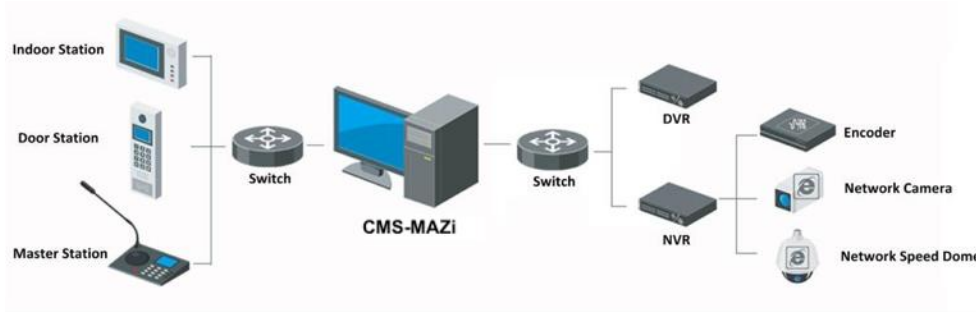
Application for Security Control Panel
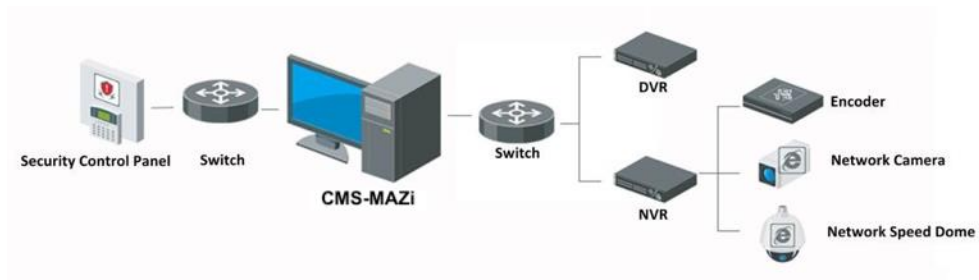
Application for Access Control