DIGIEVER

Empower Your Vision

E-Map | Liveview | Playback

DIGIEVER CMS Server

Professional Large-scale Surveillance Solution

CMS-Server

- Central management software
- Trouble-free installation
- Centralize multiple devices:
  NVRs, Failover Server, Streaming Server,
  ONVIF Cameras and Access Control
- Easy channel expansion via license key
- Manage up to 3000 channels
  via multiple NVRs
- Auto search NVR mechanism
- Graphical dashboard (multiple devices
  analysis with instant alert)

- Create up to 500 user accounts
- Trouble-free installation
- AD accounts access management
- Access Control device integration
- Smart privilege management
- Design layout for user group
- Easy channel expansion via license key
- Comprehensive log system
- A total package with CMS-Client
  (Liveview, E-Map, Playback)

CMS-Client

- Smart installation mechanism
- All-in-one Access Control Solution
- Powerful Video Wall Application
- Monitor up to 144 channels per page
- Two layout types:
  Server layout & Client layout
- User-defined display mode,
  up to 100 layouts
- Real-time event notification

- Intuitive multi-layer dynamic E-Maps
- Group playback across multiple E-Maps
- Advanced smart tracking within E-Map
- Up to 16CH synchronous and
  asynchronous playback simultaneously
- Five Smart Search modes, efficiently
  find out crucial moments
- Instant video export while playback
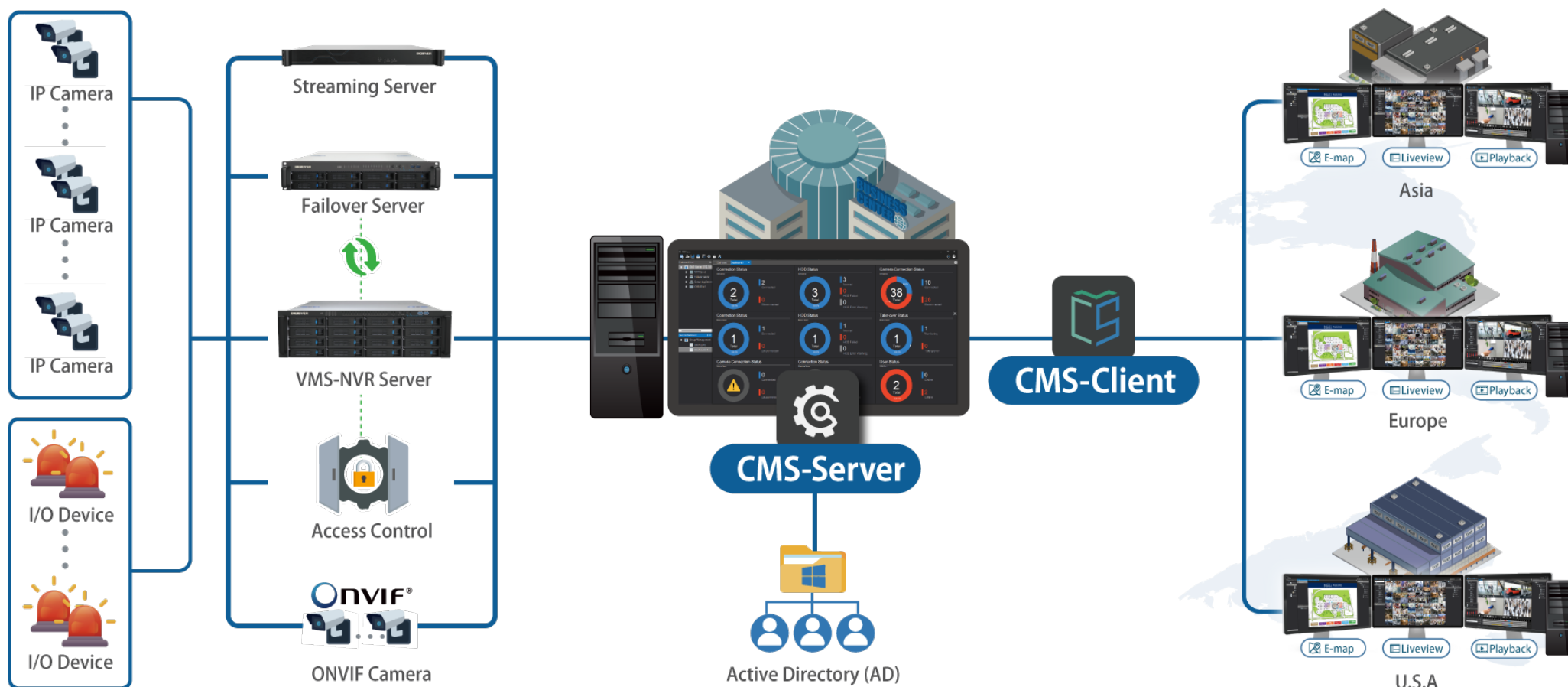- Remote playback via CMSPlayer

| Channel Management (Up to 3000 CH) | Three Server Accounts | Event Log History | Multi-layer Maps | Instant Export | User Privilege Management | Design Layout | Notification | Dashboard | Time-divided Search | Smart Search | Multi-channel Playback | Video pop-out Window | Camera Group Playback | Lock UI | Auto NVR Search |

| Video Wall Application | 144 CH Liveview | User-defined Icons | Thumbnail Preview | Quick Installation | Sequential Mode | User-defined Display Mode | PTZ Control | Dewarping Function | Stream Optimization | Highlight Video Window | Instant Playback | Self-defined Bookmark | Smart Tracking | Bookmark Search | Download Center |

CMS-Server

Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

IP Camera

IP Camera

IP Camera

I/O Device

I/O Device

Streaming Server

Failover Server

VMS-NVR Server

Access Control

ONVIF

ONVIF Camera

CMS-Server

Active Directory (AD)

CMS-Client

E-map   Liveview   Playback

Asia

Europe

E-map   Liveview   Playback

U.S.A

E-map   Liveview   Playback

CMS-Server

Professional Large-scale Surveillance Solution

- **All-in-one Access Control Solution**
- **Unified Security Management via CMS-Client**

All-in-one Access Control Solution (1/3)

- Seamlessly integrates Access Control device for efficient entry and exit security.
- Simplified camera pairing from managed NVRs.
- Group-based privilege authorization
- In-depth access control activity review and event playback

Card Reader

Entry/Exit Control

Vehicle Access Control

*Note: CMS supports Honeywell Pro-Watch currently and will be adding more brands and models soon.

Rapid Deployment

Maintains the original hierarchical structure of the Access Control system, accelerating system integration

First layer: Device's Name

Second layer: Controller

Third layer: Card-Reader

Fourth layer: Paired Cameras

Simplified Camera Pairing

Easily link camera from managed NVRs, with up to 4 cameras assignable per door or card reader.

One-click Data Synchronization

Instantly retrieve up-to-date data, reducing maintenance efforts and time costs.

Comprehensive Event Logs

Quickly find critical events by various search modes: smart filter, keywords, specified time range.

Instant Event Playback

Review events with immediate playback of the last 5 minutes of recorded footage, including pre-/post-event footage (configurable)

Detailed Log Export

Event Log Export at any time for further analysis and audit purposes. File format: csv
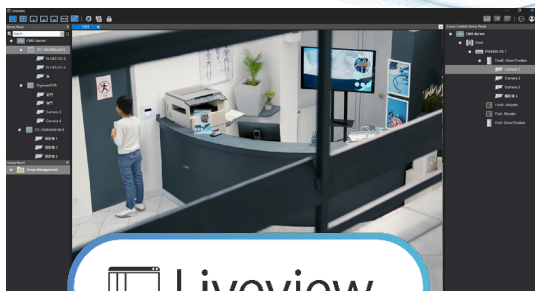
CMS-Server

Professional Large-scale Surveillance Solution

- ☐ All-in-one Access Control Solution
- ☐ Unified Security Management via CMS-Client

All-in-one Access Control Solution (2/3)

- ● Dedicated Access Control device panel on Liveview, dynamic E-Map & Playback
  - Real-time monitoring
  - Real-time event alarms via dynamic E-Map
  - Purple timeline highlighting event recording period in playback

Liveview

Access Control

Playback

E-Map

CMS-Server

Professional Large-scale Surveillance Solution

- ☐ All-in-one Access Control Solution
- ☐ Unified Security Management via CMS-Client

All-in-one Access Control Solution (3/3)

- Allocate On-map Access Control Device with 5 colors, 3 sizes
- Instant liveview via double-clicking the device icon on map
- Real-time event alarms via dynamic E-Map
- Simultaneously playback recordings from the paired camera
- Support group playback across multiple maps (up to 16-CH)

E-Map

Device	Icon Status on Map	Device icon with colors				
Door	Lock					
	Temporary Unlock					
	Event alarm					
	Unlock					
	Restore					
Card Reader	Normal					
	Offline					
	Alarm					

CMS-Server

Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

## Simplified Management (1/2)

- Trouble-free installation
- Login page for system security
- Strong password policy & instant feedback for password strength level
- Centralize devices management
- Manage up to 3000 channels via multiple NVRs

Strong Password Policy and Instant Feedback for Password Strength Levels

Logout   Personal settings

Too short   Week   Fair   Good   Strong

Intuitive User Interface
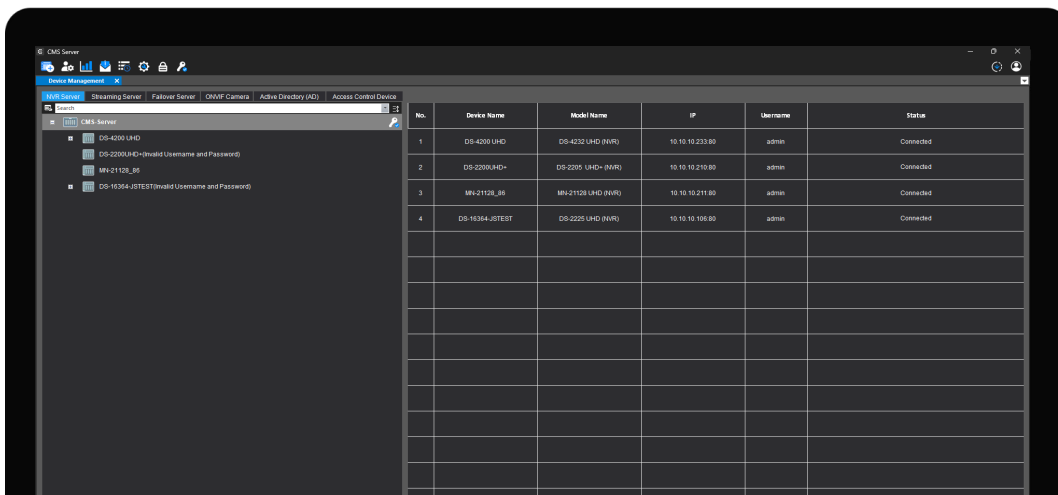
Centralized to Change Device Settings
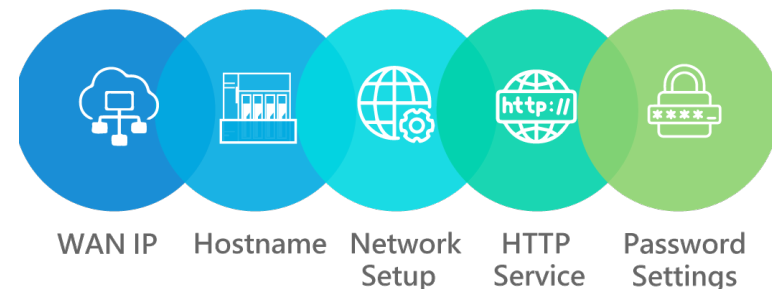
WAN IP   Hostname   Network Setup   HTTP Service   Password Settings

CMS-Server

Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

Simplified Management (2/2)

- Fast device deployment
- Easy channel expansion via license key
- One-stop channel activation maintenance

Flexible Channel Expansion via License Key
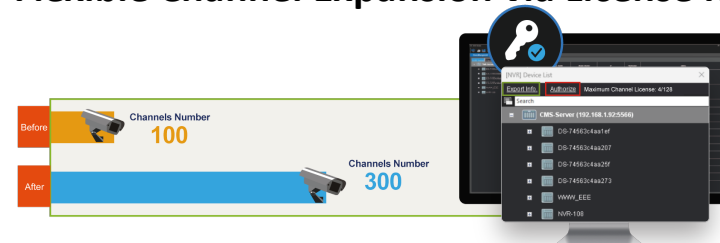
Auto/Manual Device Search
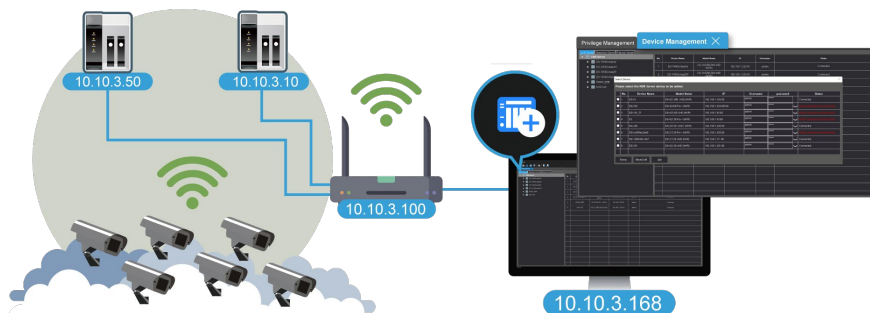
One-stop channel Activation Maintenance
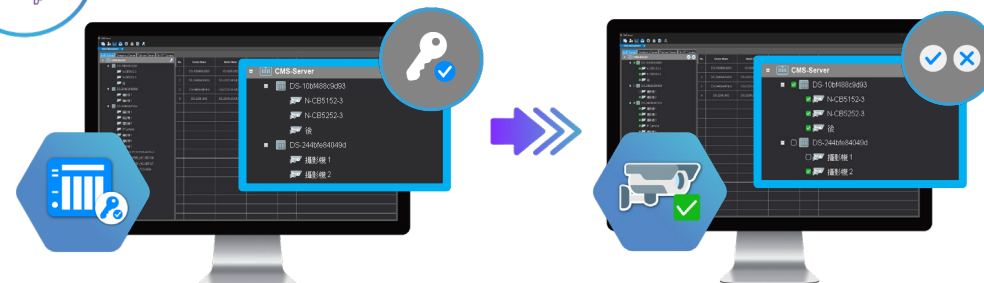
CMS-Server

Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

Three Server Accounts

1. **root:**
   full configuration with live stream visibility
2. **supervisor:**
   full configuration with <u>non-live stream visibility</u>
3. **designer**:
   layout planner, responsible for live view and E-Map layout
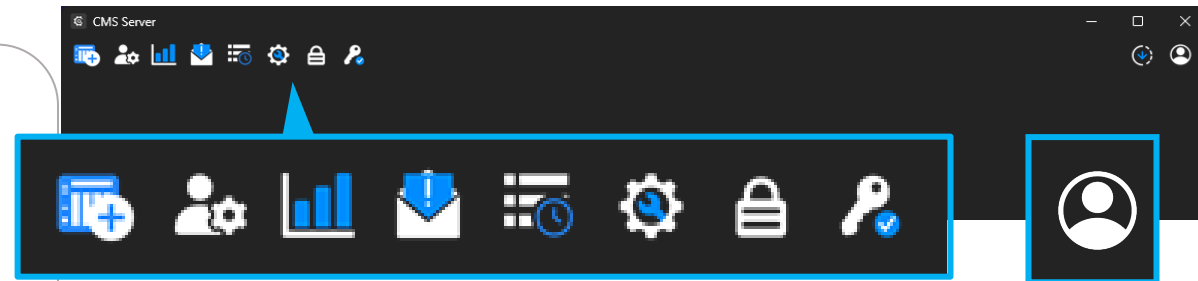
① Root
- ✓ System Configuration
- ✓ Viewing Streams
- ✓ Design Layout
- ✓ Change Password

② Supervisor
- ✓ System Configuration
- ✓ Design Layout
- ✓ Change Password

③ Designer
- ✓ Design Layout
- ✓ Change Password

CMS-Server

Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

Flexible Client Privilege (1/2)

1. **2 Group Method:**
   Manual Add and Add AD Group
2. **3 role-templates:**
   Manager, User and Viewer
3. **Assign Controllable Devices**
4. **Define Operation Privilege**

Step 1 Add Group

Step 2 Select Role Template
- Manager
- User
- Viewer

Step 3 Assign Devices
- Camera
- ONVIF Camera
- Access Control

Step 4 Setup CMS-Client Operational Permission
1. Camera Privileges
2. Features Privileges
   - Liveview
   - E-Map
   - Playback
3. Design Layout
   - Liveview
   - E-Map
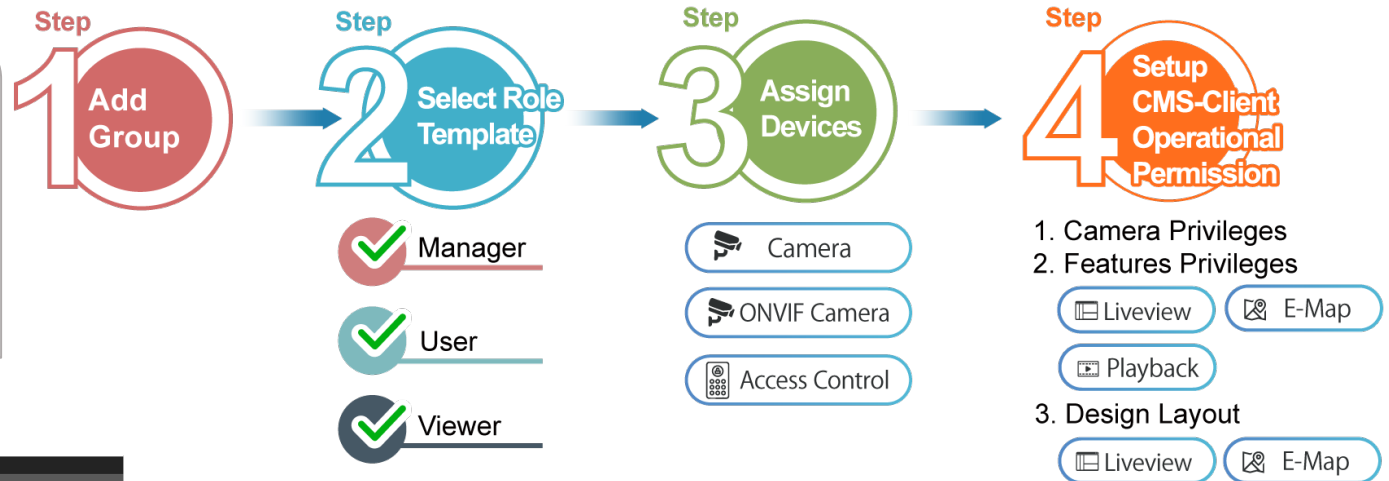
3 Role-templates Overview

Camera Privileges

Feature Privileges

CMS-Server

Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

Flexible Client Privilege (2/2)

5. CMS-Client auto logout time
6. Up to 100 User Groups with 500 user accounts

① Group Information	② Device List	③ Operational Permission	④ System Settings	⑤ Add User Account
Set group name, description and select role template.	Assign devices (NVRs, cameras) to the group.	Define detailed camera operation rights, design layout (optional) for the group.	Configure CMS-Client auto logout time.	Add user account for CMS-Client

CMS-Server

Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

Port Forwarding Setting to Connect the World

CMS Connection Port:	5566
CMS Data Transmission Port:	5568

E-map   Liveview   Playback

Internet

CMS-Server

CMS-Client

E-Map   Liveview   Playback

E-map   Liveview   Playback

Internet

Local Network /VLAN

E-map   Liveview   Playback

Internet

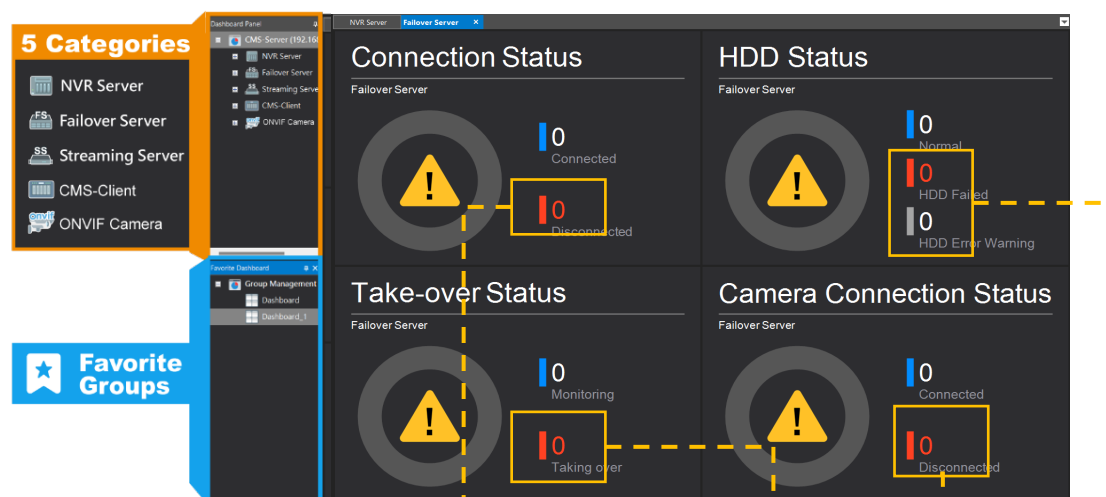# CMS-Server

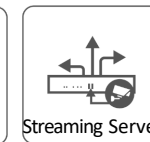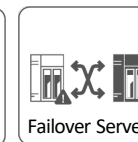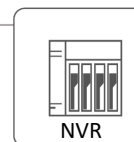## Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

Graphical Dashboard (1/3)

- Five Key device status:
  NVR, Failover Server, Streaming Server, CMS Client and ONVIF Camera

NVR | Failover Server | Streaming Server | CMS-Client | ONVIF®

- Detailed Usage Insights

5 Categories
- NVR Server
- Failover Server
- Streaming Server
- CMS-Client
- ONVIF Camera

Favorite Groups

Connection Status
Failover Server

0 Connected
0 Disconnected

HDD Status
Failover Server

0 Normal
0 HDD Failed
0 HDD Error Warning

Take-over Status
Failover Server

0 Monitoring
0 Taking over

Camera Connection Status
Failover Server

0 Connected
0 Disconnected

Click for further details

Smart display mode (auto-fitted matrix)

Pop-up window via double-click

Adjustable window size

CMS-Server

Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

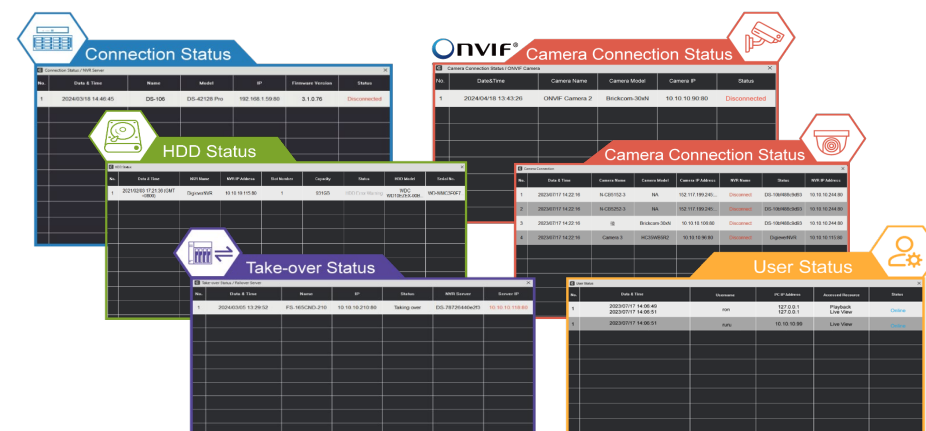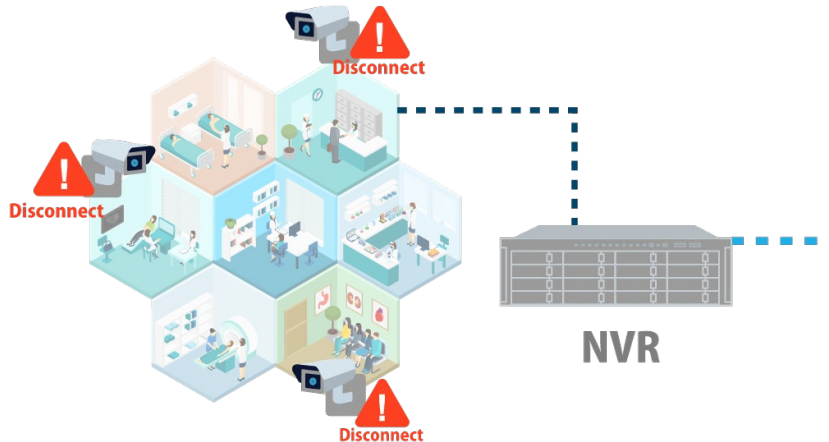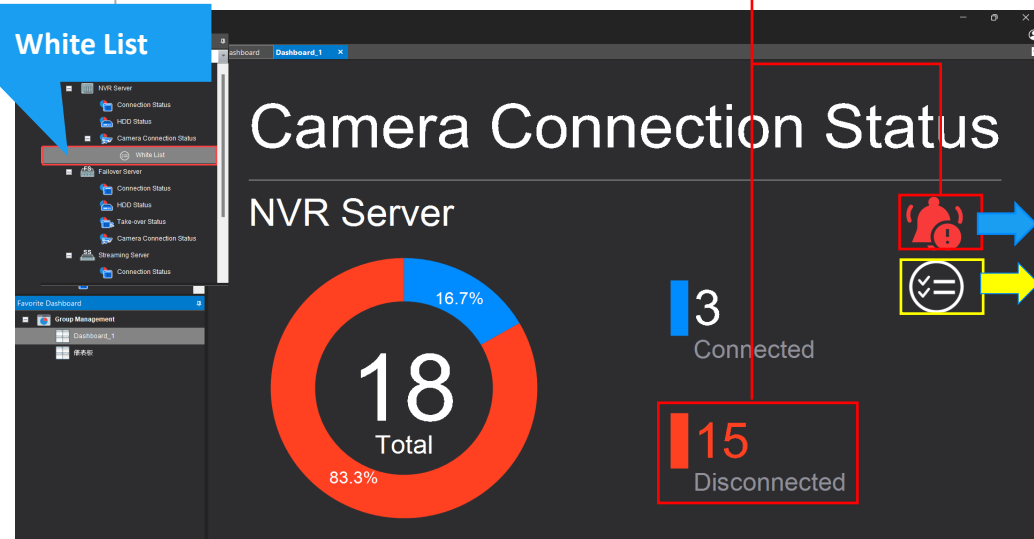## Graphical Dashboard (2/3)

- **Real-time Alert Management**
  1. Real-time alert
  2. Custom alert sound
  3. White List setting to stop sound

View the details (all devices)

White List

Camera Connection Status

NVR Server

16.7%

18 Total

83.3%

3 Connected

15 Disconnected

Alert icon

White List

Disconnect

Disconnect

Disconnect

NVR

Note: The alert sound will only activate when the specific dashboard group with an abnormal status is open.

Note: Closing the affected dashboard group will silence the alarm.

CMS-Server

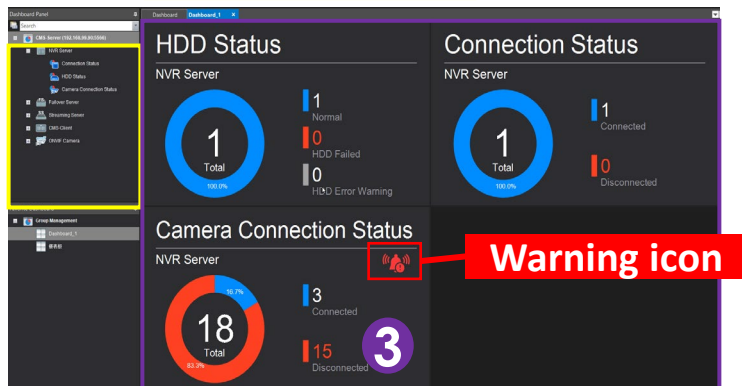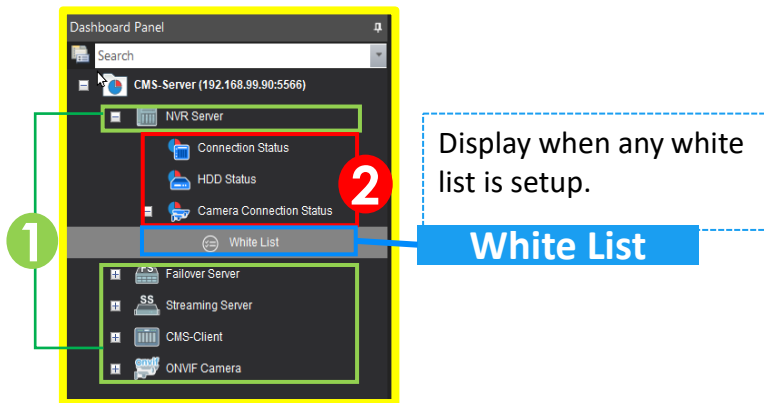## Professional Large-scale Surveillance Solution

- **Seamless Connections Without Boundaries**
- **Centralized Device Management**

Graphical Dashboard (3/3)

● **Real-time Alert Management**

4. Quick alert list

Display when any white list is setup.

White List

Warning icon

| Panel	Status Items	Real-time Status
NVR Server	Connection Status	Connected/Disconnected
	HDD Status	Normal/HDD Failed/HDD Error Warning
	Camera Connection Status	Connected/Disconnected
Failover Server	Connection Status	Connected/Disconnected
	HDD Status	Normal/HDD Failed/HDD Error Warning
	Take-over Status	Monitoring/Taking over
	Camera Connection Status	Connected/Disconnected
Streaming Server	Connection Status	Connected/Disconnected
	Camera Connection Status	Connected/Disconnected
CMS-Client	User Status	Online/Offline
ONVIF Camera	Camera Connection Status	Connected/Disconnected

CMS-Server

Professional Large-scale Surveillance Solution

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- Centralized Device Management

User-defined Reporting Notification

- **Multiple SMTP servers' configuration:**
  up to 10 servers to ensure reliable email delivery across different regions.

- **Customizable reporting schedule:**
  flexible options of monthly, weekly, and daily.

- **User-defined report type:**
  Up to 11 options

Add Schedule

Monthly	JUN
Weekly	
Daily	15
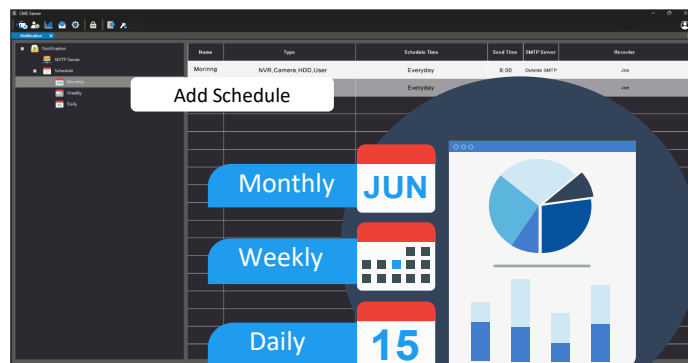
11 Report Types

☐ Connection Status / NVR Server	☐ HDD Status / NVR Server
☐ Camera Connection Status / NVR Server	
☐ Connection Status / Failover Server	☐ HDD Status / Failover Server
☐ HDD Status / Failover Server	☐ Camera Connection Status / Failover Server
☐ Connection Status / Streaming Server	☐ Camera Connection Status / Streaming Ser...
☐ Camera Connection Status / ONVIF Camera	
☐ User Status / CMS-Client	

CMS-Server

Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

Powerful Log System (1/2)

● **Comprehensive Log Coverage:**

1. **System Log :** Operation Log, Event Log, History of User Log
2. **Device Log :**
   Event Log, History of User Log and Device Log (Hardware Log, System Log and File Access Log
3. **Access Control Device:** Access Control Event Log.

CMS-Server

CMS-Server

Professional Large-scale Surveillance Solution

- Seamless Connections Without Boundaries
- Centralized Device Management

Powerful Log System (2/2)

- Smart Filter Design
- Keyword Search
- One-click Export
- Instant Sync Logs
- Instant Event Playback

Filter | Export | Sync

Log Categories

Filter Status: Result numbers/Selected criteria

Operation Log Search

- Operation Log
- Event Log
- History of User Log
- Device Log
  - Hardware Log
  - System Log
  - File Access Log
- Access Control Event Log

Result : 73 Info ✕ Notice ✕ Alert ✕ Warning ✕ Error ✕

Level	Date & Time ▼	IP Address	Device Name	Card Number	Description	Playback
Warning	2025-03-11 14:09:40(+08:00)	192.168.5.241:8734	Test1 - Reader	478492677	Unknown Card	▶
Warning	2025-03-11 10:58:07(+08:00)	192.168.5.241:8734	Test1 - Reader	1631341285	Expired Card Attempt	▶
Warning	2025-03-11 10:49:15(+08:00)	192.168.5.241:8734	Test1 - Reader	478492677	Unknown Card	▶
Warning	2025-03-11 02:02:09(+08:00)	192.168.5.241:8734	PW6000 2R 1		Panel Offline - RTN	
Warning	2025-03-11 02:00:29(+08:00)	192.168.5.241:8734	PW6000 2R 1		Panel Offline	
Warning	2025-03-10 19:01:18(+08:00)	192.168.5.241:8734	Test1 - Reader	478492677	Unknown Card	▶
Warning	2025-03-05 17:05:35(+08:00)	192.168.5.241:8734	PW6000 2R 1		Panel Offline - RTN	
Warning	2025-02-27 17:44:08(+08:00)	192.168.5.241:8734	PW6000 2R 1		Panel Offline	
Warning	2025-02-27 17:29:26(+08:00)	192.168.5.241:8734	Test1 - Reader		Reader in card only mode	
Warning	2025-02-27 17:28:20(+08:00)	192.168.5.241:8734	Test1 - Door Position		Input point held past shunt time	▶
Warning	2025-02-27 17:28:20(+08:00)	192.168.5.241:8734	Test1 - Door Position		Input point held past shunt time	▶
Warning	2025-02-27 15:31:31(+08:00)	192.168.5.241:8734	Test1 - Reader	1815490965	Opened UnlockedDoor	▶
Warning	2025-02-27 15:12:19(+08:00)	192.168.5.241:8734	Test1 - Reader	1815490965	Opened UnlockedDoor	▶
Warning	2025-02-27 15:02:49(+08:00)	192.168.5.241:8734	Test1 - Reader	1815490965	Opened UnlockedDoor	▶
Warning	2025-02-27 14:58:44(+08:00)	192.168.5.241:8734	Test1 - Reader	1815490965	Opened UnlockedDoor	▶
Warning	2025-02-27 14:58:35(+08:00)	192.168.5.241:8734	Test1 - Reader	1815490965	Opened UnlockedDoor	▶
Warning	2025-02-27 14:43:41(+08:00)	192.168.5.241:8734	Test1 - Reader	1815490965	Opened UnlockedDoor	▶
Warning	2025-02-27 14:41:05(+08:00)	192.168.5.241:8734	Test1 - Reader	1815490965	Opened UnlockedDoor	▶
		192.168.5.241:8734	Test1 - Reader	409896533	Opened UnlockedDoor	

Page : 1 /66

Page : 1 /66

Level
- ☑ Information
- ☑ Notice
- ☑ Alert
- ☑ Warning
- ☑ Error

Date & Time
- ☑ Start Time 2024/12/24 23:59:59
- ☑ End Time 2024/12/30 23:59:59

Keyword
- ☑ disconnect

Smart Filter Design

Current page/Total page | Previous page | Next page

CMS-Client

Comprehensive Surveillance Software
Liveview, E-Map, Playback

- ☐ **Installation Wizard**
- ☐ **Multilingual User Interface**
- ☐ **Access Control Integration**

Liveview

- Monitor up to 144 channels per page
- Support up to 16 channels ONVIF camera
- Personalized monitoring layouts, sequential displays, and favorite lists
- Manual recording, snapshot, instant playback and export footage, dewarping functions
- Real-time event notifications (visual & audio)
- Smart dual-stream switch

E-Map

- Intuitive management of multi-layer dynamic E-Map
- Distinct camera icon configuration
- Advanced smart tracking
- Group playback across multiple E-Maps
- Instant event notification (visual & audio)
- Advanced setting for event notification
- Thumbnail navigation

Playback

- Up to 16-ch playback simultaneously in Synchronous & asynchronous modes
- Time-divided search for efficient retrieval
- Five smart search modes
- Self-defined bookmark & bookmark search
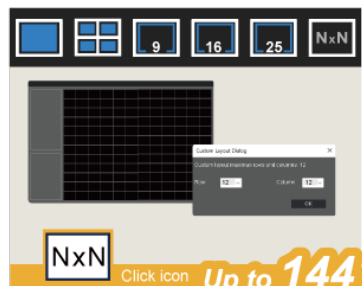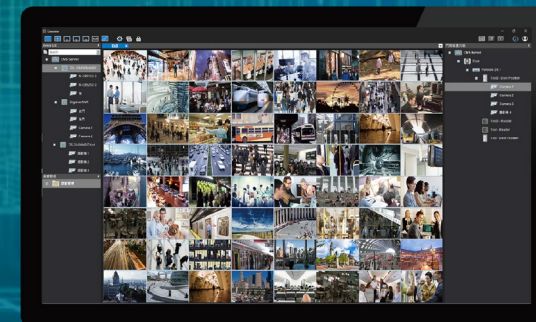- Built-in CMSPlayer for powerful remote playback
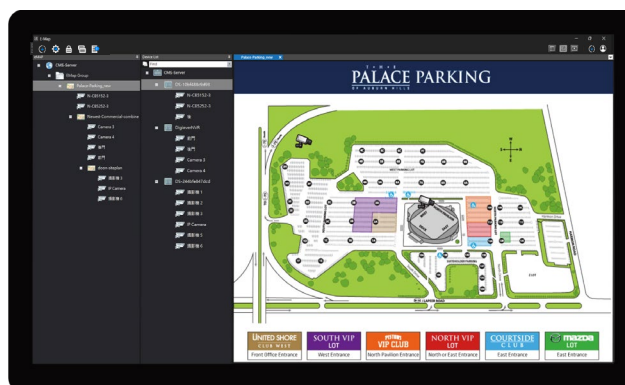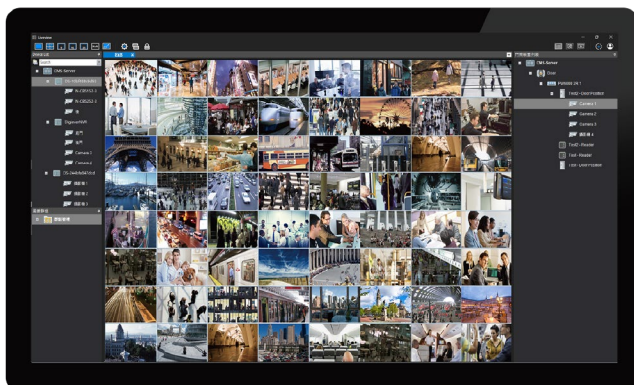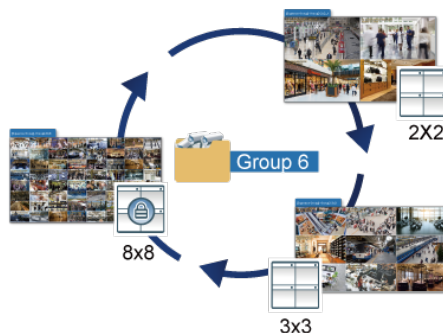
CMS-Client

Liveview

360-Degree Monitoring for Environmental Safety
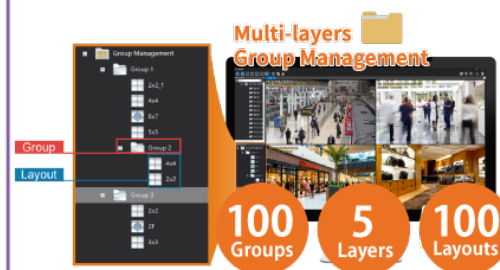
✓ User-friendly UI ✓ Easy operation

Diverse Display Modes:
- 1/4/9/16/25 division options
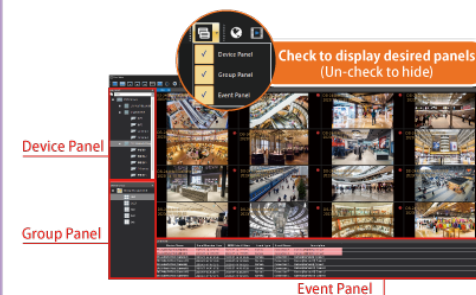- Self-defined division (NxN)

Click icon Up to 144 per page

Sequential Display:
- Group-based sequence
- Flexible time interval for each group

Group 6 · 2X2 · 8x8 · 3x3

Multi-layer Favorite Group:
- Up to 100 groups, 5 layers per group creation
- Up to 100 layouts

Multi-layers Group Management · 100 Groups · 5 Layers · 100 Layouts

Display/Hide Panel:
- Device, event, group, access control device panels
- Freely panel size adjustment

Check to display desired panels (Un-check to hide) · Device Panel · Group Panel · Event Panel
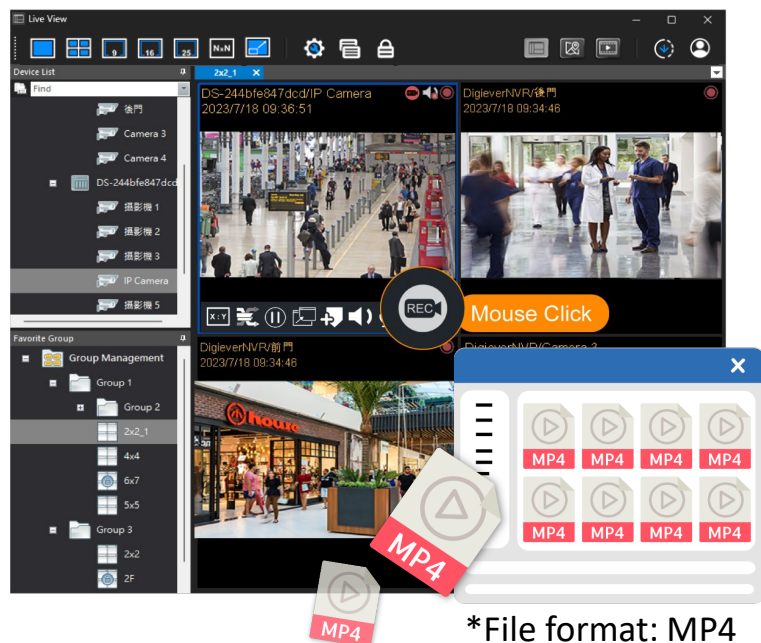
CMS-Client

Liveview

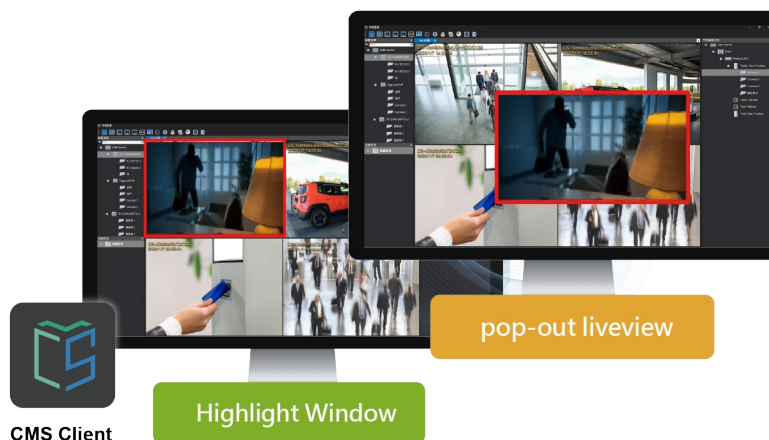# 360-Degree Monitoring for Environmental Safety
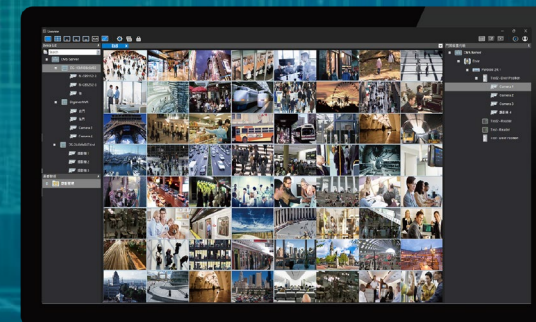
REC Manual Recording

- Capture suspicious images during monitoring for subsequent verification and documentation.
- Instant playback/export crucial images

*File format: MP4

⚠️ Instant Event Notification

- Alert center with visual & audio alerts
- Highlighted new event on event panel
- Two methods of notifications:
  - Highlight window
  - Pop-up liveview window

CMS Client

pop-out liveview

Highlight Window

More...

- 📷 Snapshot
- Self-defined Bookmark
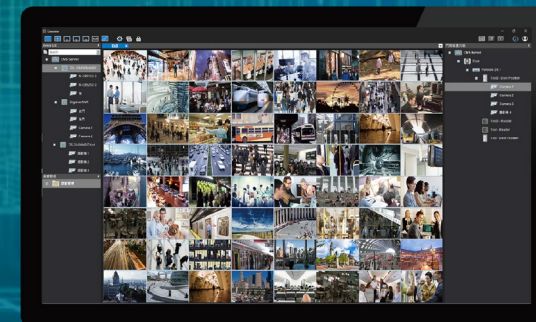- Instant Export
- PTZ Control
- Download Center

CMS-Client

Liveview · E-Map

360-Degree Monitoring for Environmental Safety

Powerful Video Wall Application

- Centralized events notification from multiple NVRs across different sites.

Video Wall Application

- Re-login
- System Restart

- E-Map
- Liveview
- Playback

Powerful Event & Action Support

- Centralized events notification from multiple NVRs across different sites.

Up to 17 types of NVR events

Camera Events

- Connected\Disconnected
- Motion Detection
- Audio Detection
- People Counting Threshold Alarm
- Camera Digital Input
- Cross Line Detection
- Tampering Detection
- Intrusion Detection
- Call Button
- Temperature Detection
- Loitering Detection
- Foreign Object Detection
- Missing Object Detection
- Advanced Motion Detection
- Human Detection

System Events

- NVR Digital Input1-4

Extenal Events

- HTTP- in

Up to 10 types of CMS actions

Notice on Live View

- Highlight Video Window
- Video Pop-out Window
- Highlight New Event Notice
- Instant Playback
- Alert Sound

Notice on E-Map

- Camera Icon Status Notification
- Video Pop-out Window
- Highlight Video Window
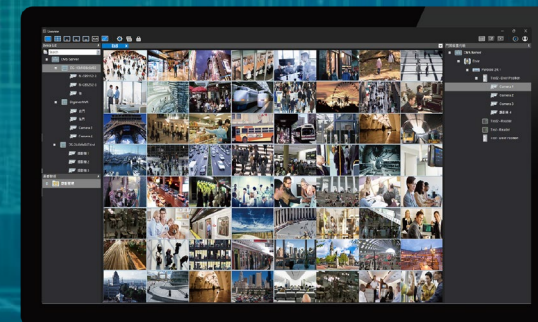- Event Map on Top
- E-Map Panel

Central Management System   20

CMS-Client

360-Degree Monitoring for Environmental Safety

Flexible Layout Design Management

- Two Types of Layouts
  1. Pre-configured Server Layout
  2. Personalized Client Layout

- Operational Functions
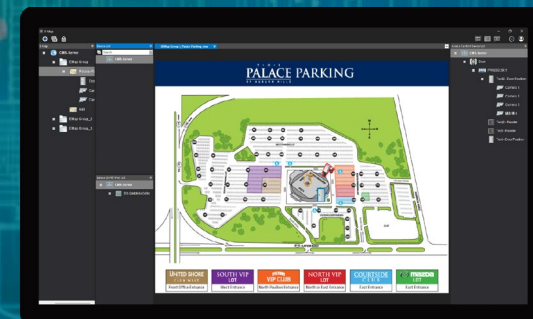 1. Liveview: Group Layout
  2. E-Map: Map Layout

Root

Superviso

Designer

Liveview/E-Map Design Layout

Liveview

Server Layout

E-Map

CMS-Client

E-Map
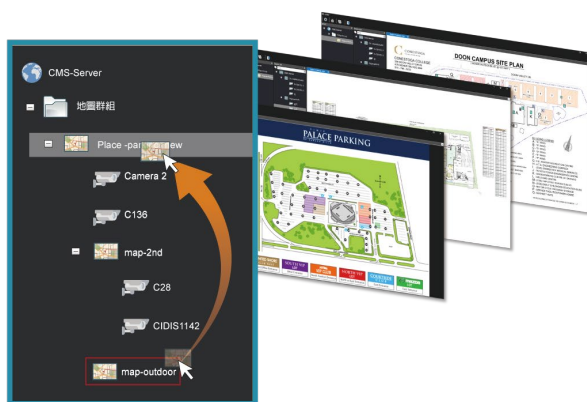
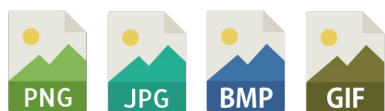## Multi-layer Dynamic E-Map

E-Map Management

- Group based structure
- Intuitive hierarchical E-Map organization

On-map Camera Deployment

- 5 colors to group cameras
- 6 icons to differentiate camera's style
- 3 sizes to fit different screen resolution
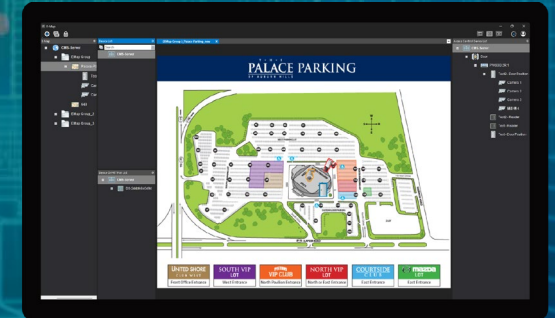- Change color, size, style, position anytime via right-click menu

5 colors & 6 styles

4K   FHD/HD   WXGA

3 Resolution

CMS-Client

E-Map

Multi-layer Dynamic E-Map

Instant Liveview

- Up to 10 windows
- To pop out liveview window by double-clicking camera's icons on map
- Save operation time through operation toolbar on liveview window

Real-time Event Notification

- Blinking visual alert icon on the focused area
- Highlighted window pop out directly on the screen (Max. 10)
- Auto-closed pop out window in 10 seconds

Advanced Option of Event Notification

- Effectively respond to critical events.
- Enhanced Map Highlighting on the top layer to indicate the occurrence of events.
- Multiple Notification Options: including Cam Event Popup, Cam DI Popup, NVR DI/HTTP-in Popup, Cam Event Switch, Cam DI Switch, NVR DI/HTTP-in Switch.

CMS-Client

E-Map

Multi-layer Dynamic E-Map

Instant Liveview

- Up to 10 windows
- Pop out liveview window by double-clicking camera's icons on map
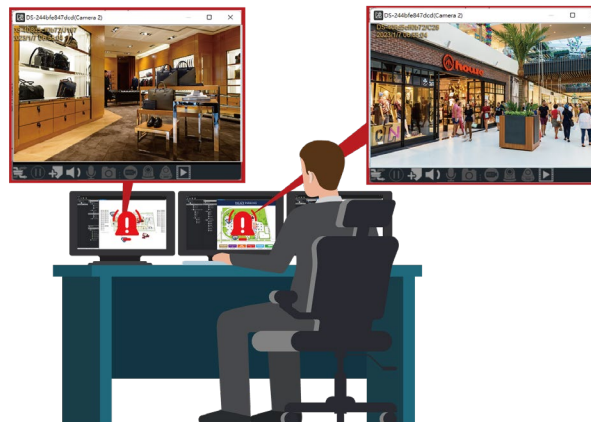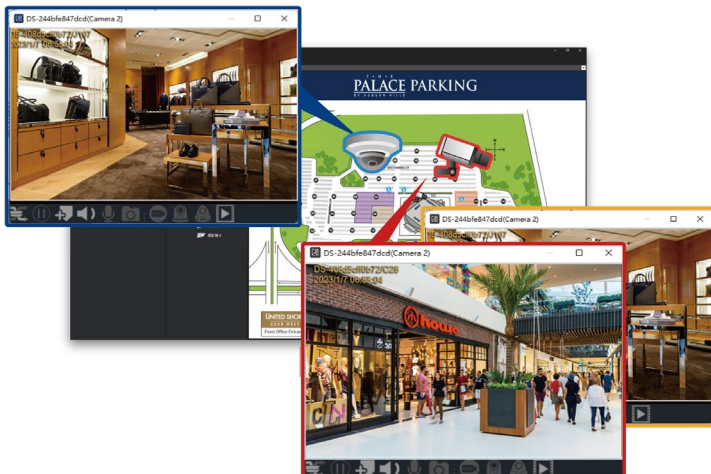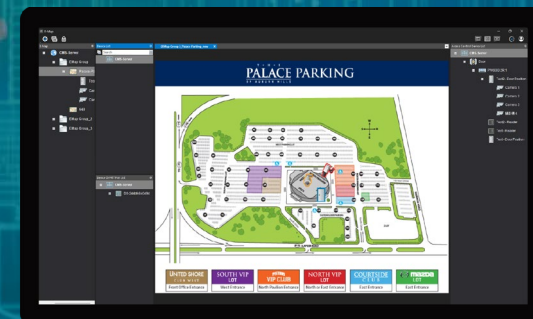- Save operation time through operation toolbar on liveview window
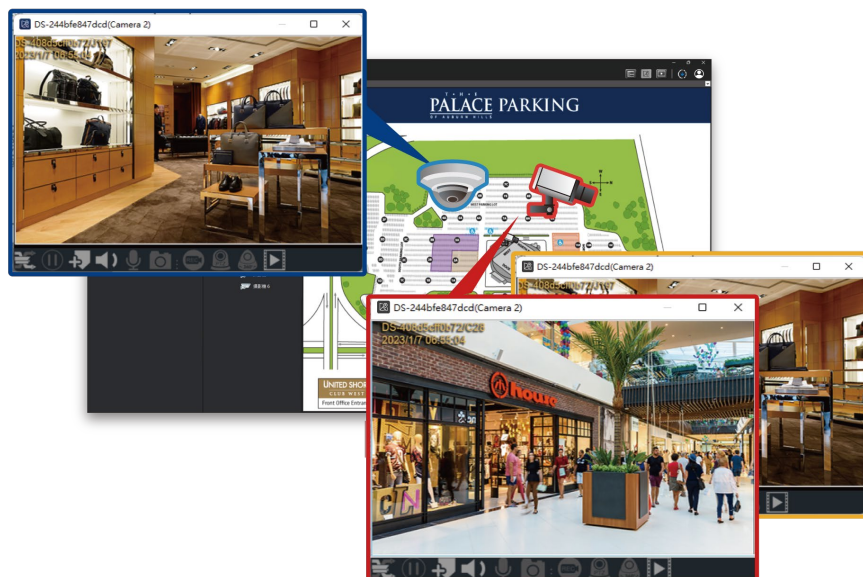
Advanced Group Playback

- Efficient group playback across multiple E-Maps
- Open multiple playback user-interface at the same time
- Support up to 16-CH

CMS-Client

E-Map

Multi-layer Dynamic E-Map
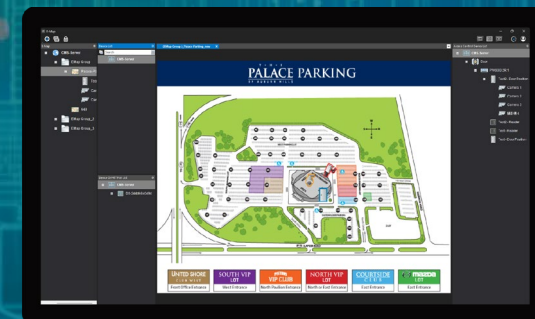
Powerful Smart Tracking

- Efficiently track suspicious movement from 9 cameras at different sites in one window
- Simultaneously playback selected camera and other 8 cameras nearby at a time
- Advanced playback options for further actions on each channel
- Easily trace the suspicious movement via one-click on another desired camera to view new 9 cameras
- Change date and time to playback recorded video for 9 cameras simultaneously
- Export video with combine videos & add watermark features for all channel & Instant export for a selected channel

Switch focus camera
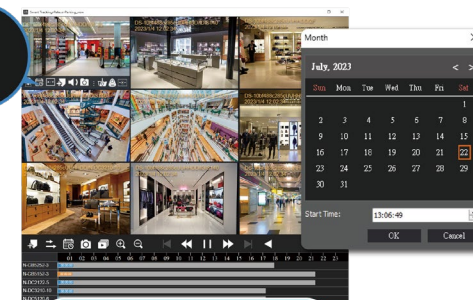
Change Play Time

CMS-Client

Playback

Powerful Multi-channel Playback
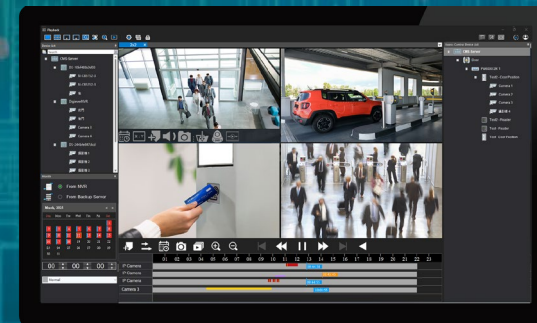
Intuitive Operation

- Simple playback in 5 steps
- 7 video types: distinguish colors displays in timeline for easy recognition
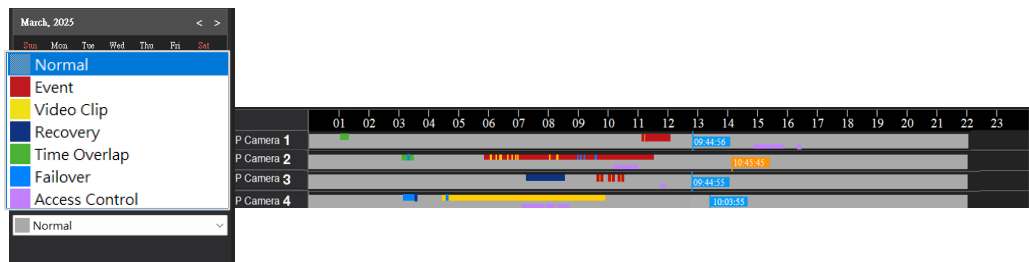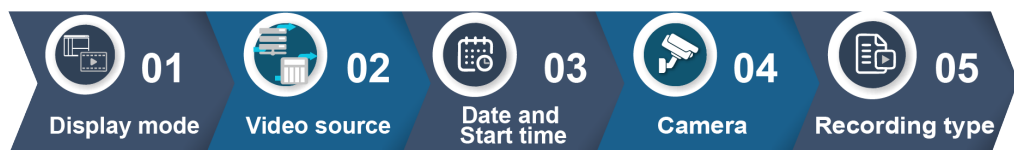
Change Play Time Button

- Effortless time adjustment via for all channel or selected channel during playback

Select

01	02	03	04	05
Display mode	Video source	Date and Start time	Camera	Recording type

March, 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat

- Normal
- Event
- Video Clip
- Recovery
- Time Overlap
- Failover
- Access Control

Normal

For selected Channel
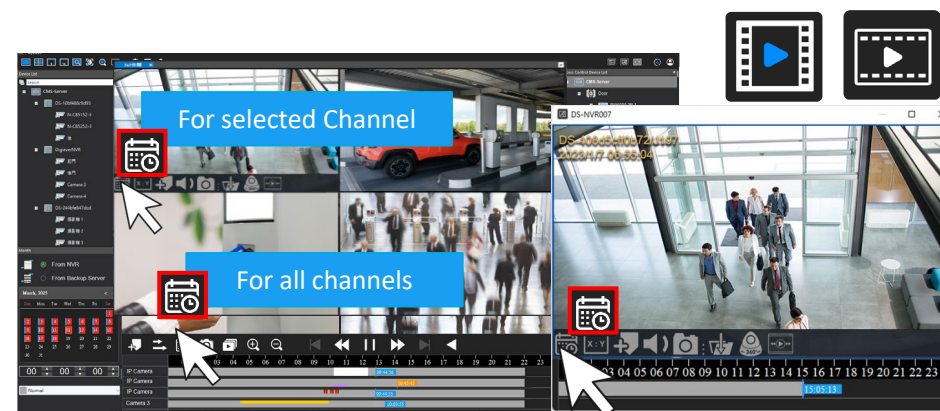
For all channels

CMS-Client

Playback

Powerful Multi-channel Playback

Synchronous Multi-channel Playback

By clicking control button to control all channel for same action simultaneously

Asynchronous Multi-channel Playback

By clicking each camera's timeline to control individual playback for each camera.

Time-divided Search

● Efficient playback to find suspicious object
● Retrieve the video of a day from selected camera and divide it into 12 divisions (snapshot) in equal time.
● Narrow down time range, each division can be re-split into another 12 divisions in equal time.

Synchronous
multi-channel playback
16 CH

Click

Asynchronous
multi-channel playback
16 CH

Click

12:00:00-13:00:00

2 ways to narrow down the time range

12:25:00-12:30:00

1 Click ▶

2 Double-click the selected division

12:25:00-12:30:00
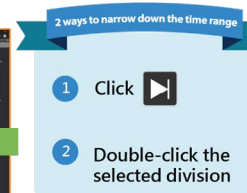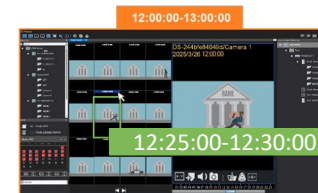
CMS-Client

Powerful Multi-channel Playback

Smart Search

- Five rapid search modes: motion detection, foreign object detection, missing object detection, camera tampering detection, and loss focus detection.
- Multiple Regions of Interest (ROI): Max. 3
- Rapid chronological search results retrieval
- Effortless event playback
- Flexible pre-event time
- One-click to export event result log

Smart Bookmark Search

- Support key-in any character for fuzzy searching
- Easy bookmark management for advanced operation. (video clips, edit, export and delete)
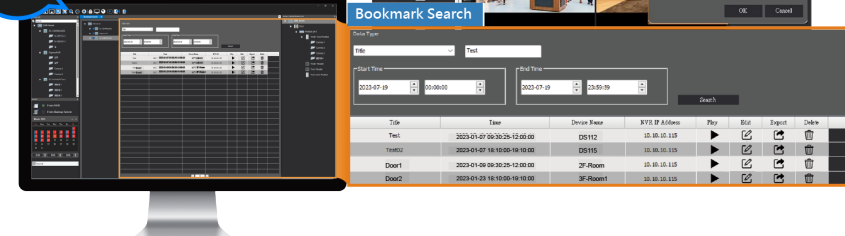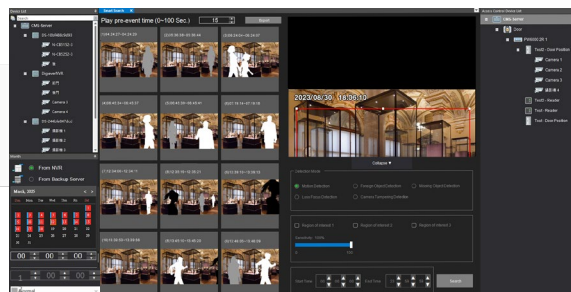
CMS-Client

📹 Playback

Powerful Multi-channel Playback
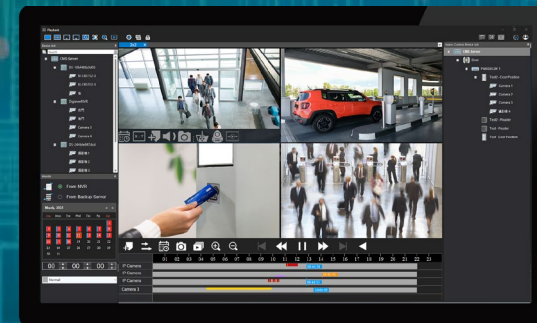
📥 Instant export

- Support on single channel
- Video length: complete 5-minute recorded file prior to the current time
- Video format option: Default, NVR's unique AVI file, General AVI file
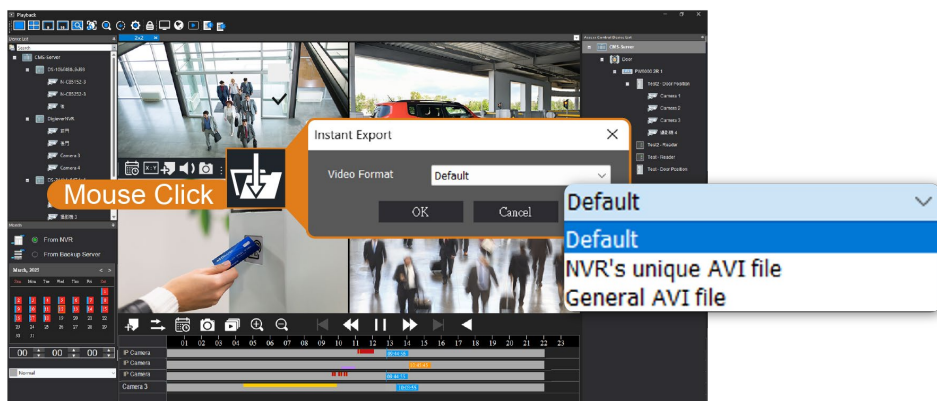
Note: Supported codecs: H.265, H.264, MJPEG, and MxPEG.

📑 Video Export ➡️➡️

- Support for synchronous multi-channel playback (all channel) & asynchronous multi-channel playback (a selected channel)
- Custom time range: up to a maximum of 2 consecutive days
- Support "**Cut and combine videos**" to improve operational efficiency.
- Support "**Add watermark**" to protect content authenticity and verify file integrity. Supported codecs: H.265, H.264 and MJPEG

Cut and Combine Videos

Add Watermark
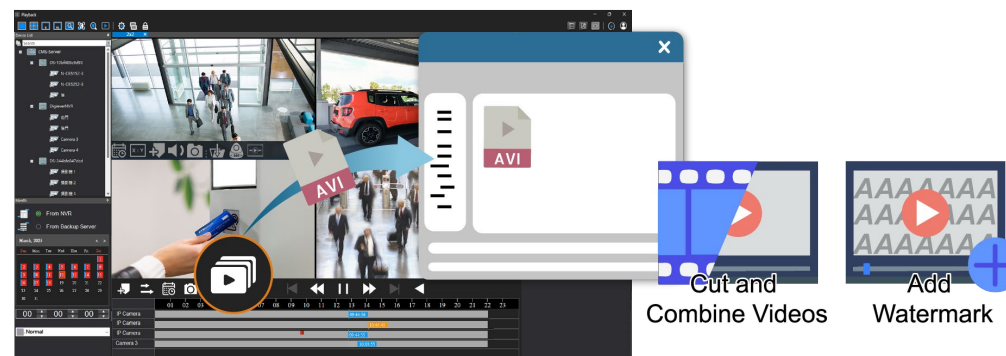
Note: Supported codecs: H.265, H.264, MJPEG, and MxPEG.

CMS-Client

 Playback

Powerful Multi-channel Playback

Instant Snapshots

- Snapshot essential images during playback to CMS-Client PC
- Flexible option: single, sequential snapshot for 3, 5, 10, 15 pieces, capture image (Format：JPG)

Remote Playback

- Smartly find recorded video in backup NAS in the same LAN
- Directly play recorded videos from backup NAS via built-in CMSPlayer (File Format：Unique NVR AVI and general AVI)

DIGIEVER CMS Server Software Specifications

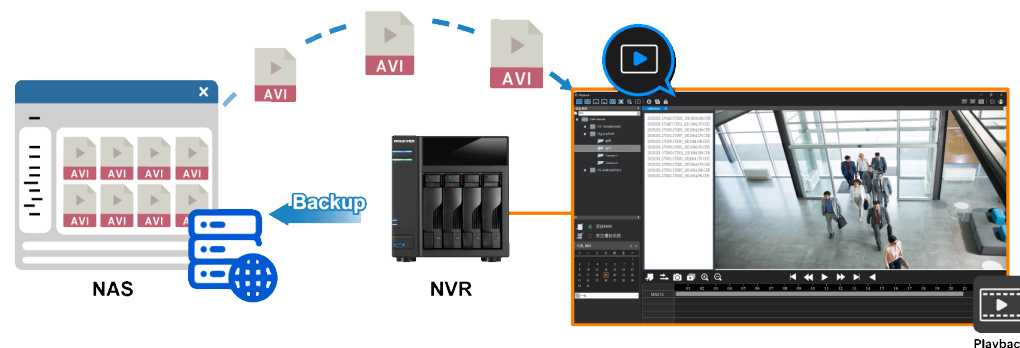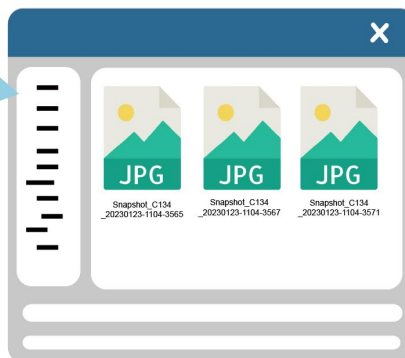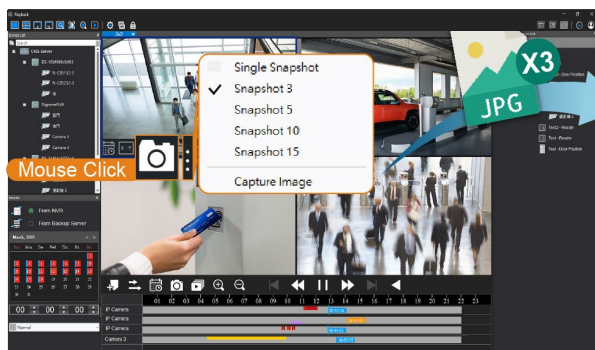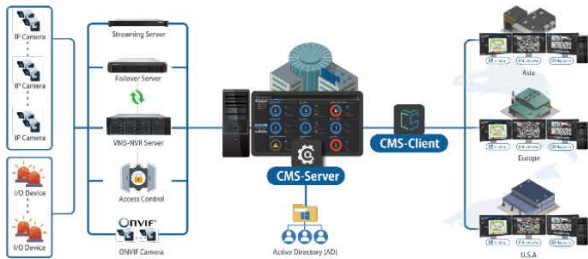|	
Clients Connection	Support unlimited clients' connection (depends on network environment & hardware performance)
Trouble-free installation	Step-by-step installation wizard
Login Page	Options: user-interface language, save login information
Server Accounts	• root (full system control with stream visibility) • supervisor (full system control without live stream visibility) • designer (design layout only, without live stream visibility)
Personal Settings	• Administrator's password management: Strong password policy, instant feedback for password strength level • Version Information • Logout
Device Management	• Central management for multiple NVRs, Streaming Server, Failover Server, ONVIF Camera (up to 16-channel ONVIF cameras), Access Control & camera pairing from managed NVRs (up to 4 cameras per door/card reader) • Two methods to add the device: 1. Auto search (the same network segment) 2. Manually add • One-stop channel activation management • Directly network setup for managed devices
License Management	• Flexible channel management upgrade via license key file (4 free-channel for trial) • Intuitively manage cameras for monitoring within authorized channel
Privilege Management	• Support 100+ groups and up to 500 user accounts creation • Offer "Administrator" default group and "admin" default user with full camera access permission. • Active Directory (AD) account access management • Access Control privilege management (Controller) • Built-in 3 role-templates: Manager, User, Viewer • Operational permission setup: camera access, feature, design layouts for user group
Dashboard	• Graphical overview at a glance • Quickly and clearly, show current resources. • Create multiple group-base dashboard for easy monitoring • Support multiple favorite dashboards for easy monitoring • Smart display mode: 1/4/6/9 (auto-fitted matrix) • Provide 11 status over 5 categories: NVR Server, Streaming Server, Failover Server, CMS-Client and ONVIF Camera • Flexible real-time alert with sounds and icons, custom alert sound, white list alert management • Detailed information for each usage • Pop-up window via double-clicking on abnormal status, adjustable window size
Notification	• Support up to 10 SMTP servers' connection • Offer 3 schedule settings: monthly, weekly and daily • Flexible 11 report types, providing detailed system and devices' analysis
Log System	• Smart filter design: Log levels, specific date & time range, keyword search • One-click export: Export search results for archiving and system analysis • Instant sync logs: Stay updated with the latest system and device changes • Detailed action view: By clicking blue hyperlink for a quick and clear interpretation of log actions • Adaptive display: Auto adjusts row and page displays based on screen size for an optimized • viewing experience • Access control: support instant event playback (up to 4 channels at a time)
Event and Action Management	**17 event types getting from NVR:** Camera connection lost, camera motion detection, camera audio detection, camera digital input, camera cross line detection, camera tampering detection, intrusion detection, temperature detection, loitering detection, foreign object detection, missing object detection, call button, people counting threshold alarm, advanced motion detection, human detection, NVR digital input, External event HTTP-in **10 ways event notifications:** Alert center, alert sound, alert icon blinking, highlight video window, video pop-out window, highlight new event notice on event panel, event instant playback, video pop-out window on E-Map, event map on top, camera alert icon status notification on panel & map

Customizable User Interface		• Adjustable column size to fit user's demand • Page open in new tab for convenient switch as web browser user-experience • Separate open page into column display mode for multi-task operation
Lock UI Mode		Lock the entire UI with password for high-level protection to prevent unintentional operations
Save Login Information		One-click to save login information on login page
Setting	Bridge port management	• User-defined connection & data transmission ports • Allows remote real-time monitoring and video playback in various network Environments anytime anywhere. • Intelligently verifies the availability of user-defined ports, expediting the configuration process
	Multi-language Support	Bulgarian, Croatian, Czech, Dansk, Deutsch, Dutch, English, Finnish, French, Indonesian, Italian, Japanese, Korean, Hebrew, Hungarian, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Thai, Turkish, Tradition Chinese, Simplified Chinese, Vietnamese
	System Configuration File	• Export: Backup system configuration file to client-PC • Import: Upload system configuration file to recover CMS software

CMS-Client

Initial Installation	Enter http://server_IP.port/cms.exe on web browser to download CMS-Client
Installation Wizard	Minimize setup effort via step-by-step wizard
Upgrade Notice	Automatically detect the latest version of CMS Server when execute CMS-Client before login
Login Option	Directly login to Liveview or Playback or E-Map on login page
Login with AD Account	Yes
Save Login Info	Yes. One-click
Multi-language Support	Bulgarian, Croatian, Czech, Dansk, Deutsch, Dutch, English, Finnish, French, Indonesian, Italian, Japanese, Korean, Hebrew, Hungarian, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Thai, Turkish, Tradition Chinese, Simplified Chinese, Vietnamese

Liveview

Function	Sub-Function / Description
Maximum Channels	Up to 3000 channels from multiple NVRs (up to 16-channel ONVIF cameras)
Maximum Channels per Page	Up to 144 channels
Display Mode for Liveview Monitoring	1x1, 2x2, 3x3, 4x4, 5x5, full screen, user-defined (NxN, up to 12x12), division auto-fit based on selected camera number
Method of Adding Camera for Liveview	• Double-click camera icon on device panel • Drag camera icon from device panel to liveview window • Add all cameras by dragging NVR servers to liveview window

Function	Sub-Function / Description
Video Compression Format	H.265/H.264/MPEG-4/MJPEG/MxPEG (Depending on the connecting camera)
Functions Toolbar	• Mouse over to display on each channel • Functions include: Image ratio, stream change, pause, video pop-out window, bookmark, mute, two-way audio, snapshot, manual recording, PTZ, panorama, instant playback
Image Ratio	Options: Original/Fit/Original Scale-ratio/Fit all
Dual Stream Support	• Support manually choose Stream 1 or Stream 2 • Auto switch stream: getting stream 1 when display above/and 12-channel per page, stream 2 when display over 12-channel per page
Stream from NVR Relay	Display stream from NVR's relay server to satisfy multiple clients simultaneous monitoring needs and to minimize the influence of camera limitation
Self-defined Bookmark	• Bookmark current video as a specific moment for future checking. • Auto Bookmark length: starting time: from pressing bookmark button of live video + 10 seconds • Bookmark files will be stored on NVR database
Two-way Audio	Directly communicate with onsite people via CMS-Client PC's speaker and microphone (depending on camera's type)
Manual Video Record	Manually record important moment by defining proper start and end time during liveview monitoring via pressing record button and save the video to CMS-Client PC / Format: MP4
PTZ Functions	Zoom out, zoom in, optical zoom in, optical zoom out, focus near, focus far, auto focus, speed (slow, normal, fast), preset point, PTZ control
Dewarping Functions	• Dewarping method: DIGI-Dewarp • Camera Position: Ceiling, Ground, Wall • Display Mode: PTZ, Quad, Panorama, Perimeter
Instant Playback	• Quickly turn to playback mode for the day of liveview • Auto playback the last 5-minute recorded video • Moving seeking bar of timeline for desired time period • Quick operation options on playback screen (change play time, image ratio, snapshot, instant export, audio/mute, back to liveview, playback control) • Instant export video format & Video player: Default (based on NVR format), NVR's unique AVI file (installation-free NVR/CMS Player), general AVI (PC media player such as Windows media player, VLC)
Event Panel	• Triggered events overview (camera event, NVR event and NVR storage event) • Highlight new event or unacknowledged event in pink background • Click to release event notification and stop the alert sound when alert sound is enabled

Function	Sub-Function / Description		
Live View Settings for Event Notification	Highlight liveview window	Highlight liveview window in red frame when an event is triggered	
	Instant liveview pop-out window	• A pop-out video window for instant notification • Freely adjust the size by user's demand • Self-defined time to close pop-out window (5~180 seconds, 5 seconds as default)	
	Alert sound control	• Enable/Disable • Custom alert sound (supported file format: *.wav, *.mp3, *.mid)	

Function	Sub-Function / Description
Find Devices by Name	Find managed NVRs and cameras by entering keyword
Digital Zoom with Mouse Scroll	Digital zoom in and zoom out from central point with mouse scrolling on selected channel *For PTZ cameras that adopt optical zoom in/out via mouse scrolling, please use zooming with mouse scroll first and then click digital zoom in/out button for more detailed view

Function		Sub-Function / Description
Group Layout Management	• Server layout: pre-configured layout by system administrator/designer	
	• Client layout: personalized layout by users	• Save layout • Freely re-order group and layout by drag-and-drop • Create up to 100 groups and up to 5 layers of each group • Right-click menu: enable sequential, edit sequential time interval for each layout, rename/delete group, add group • Up to 100 layouts creation • Right-click menu: rename, delete, playback

Function	Sub-Function / Description
File Path	Self-defined file path for snapshots, exported video, manual recorded video
Liveview OSD Settings	• Display options for OSD info: Server name, camera name, time zone, time • Self-defined fond size, position and color
Show or Hide Panels	Device panel, Group panel, Event panel and Access Control Device panel
Adjustable Panels Size	Flexibly adjust the panel to suitable size
Lock UI Mode	Lock the entire UI with password for high-level protection to prevent unintentional operations
Quick Link to Playback/E-Map	Directly open liveview window or E-Map window for quick operation
Easy Liveview Manipulation Tool	• Mouse over to view NVR and camera's information • Mouse scroll function toolbar to view hidden functions on each channel when the liveview window is in smaller size • Open liveview in new tab for quick switch • Double-click to open tab in new window for extended display on second monitor when dual monitors are connected.

Function	Sub-Function / Description
Download Center	• Provide an overview of downloading status for each exporting task, including finished, downloading, canceled, waiting, connection failed, access denied and file missing • Directly open file explorer to access the file location • One-click to clear all record
Alert Center	• Blinking alert icon when event is triggered • One-click to stop all alert sound (when alert sound is enabled)
Personal Settings	Logout and Check for current CMS-Client version (Liveview, Playback, E-Map)

E-Map

Function	Sub-Function / Description	
Multi-layer Maps	• Two types of layouts: Server layout & Client layout • Support multi-layer dynamic E-Maps to quickly locate trouble zones in a comprehensive overview • Up to 100 E-Map layers (Client layout) creation • Real-time liveview by clicking the on-map cameras (Up to 10 pop-out windows)	
Event Panel	• Triggered events overview (camera event, NVR event and NVR storage event) • Highlight new event or unacknowledged event in pink background • Click to release event notification and stop the alert sound when alert sound is enabled	
Instant Event Notification	Settings: • Video pop-out window: up to 10 windows at a time • Each pop-out window auto-close after 10 seconds.	• Show blinking alarm icon on map, click to release the event alarm. • Change camera icon with alert and red outline on E-Map panel.
Camera Allocation	Easy allocate the selected camera from device list to specific location of the map via drag-and-drop	
Camera Re-allocation on E-Map	Right-click menu: color, size, style, remove, rotate, playback, smart tracking • 6 camera styles, 5 camera group colors for priority management • 3 sizes to fit different screen resolution • 8 directions for monitoring area indication • Playback: support change play time, bookmark, mute, snapshot, instant export, panorama, back to liveview, playback control panel	
Access Control Device Allocation on E-Map	• Right-click menu: Color, Size, Remove, Playback, Action • 5 access control device group colors for priority management (door/card reader) • 3 sizes to fit different screen resolution • 4 actions for further operation: Unlock, Lock, Temporary Unlock and Restore	
Diverse Image Formats	Upload maps in BMP, GIF, JPEG and PNG formats	
Drag-and-drop Design on E-Map Panel	Re-order E-Maps within same E-Map group	
Intuitive E-Map Indicator	Display thumbnail at the right-bottom corner of the Map to show location when enlarge the map	
Show or Hide Panels	Device panel, E-Map panel, Device DI/HTTP-in panel, Access Control Device panel and Event panel	
Lock UI Mode	Lock the entire UI with password for high-level protection to prevent unintentional operations	
Adjustable Panels Size	Flexibly adjust the panel to suitable size	
Smart Tracking	• Efficiently track suspicious movement from 9 cameras at different sites in one window • Simultaneously playback selected camera and other 8 cameras nearby at a time • Easily trace the suspicious movement via one-click on desired camera to get refresh 9 cameras • Instantly change recorded date and time for further video checking • Support playback functions, video export with cut and combine video, add watermark features	
Group Playback	• Playback up to 16 cameras across multiple E-Maps at the same time • Mark the selected camera with sequence number • Auto-fitted display mode: 1, 4 (2x2), 6 (2x3), 9 (3x3), 16 (4x4)	
Easy E-Map Manipulation Tool	• Mouse over camera icon to view camera information • Add camera/HTTP-in device/Access control device to specific location on map via drag-n-drop. • Zoom in/out the E-Map with mouse scroll • Double-click camera icon on map to pop out large liveview window and window size resizable. • Support function toolbar for quick operation on pop out liveview window. Functions include stream change, pause, bookmark, two-way audio, snapshot, instant playback, manual recording to monitoring PC, digital zoom in/out, optical zoom in/out, focus near/ far/auto, go to present point and PTZ panel • Double-click to open tab in new window for extended display on second monitor when dual monitors are connected	
Quick Link to Liveview/Playback	Directly open liveview window or Playback window for quick operation	
Download Center	• Provide an overview of downloading status for each exporting task, including finished, downloading, canceled, waiting, connection failed, access denied and file missing • Directly open file explorer to access the file location • One-click to clear all record	
Alert Center	• Blinking alert icon when event is triggered • One-click to stop all alert sound	
Personal Settings	Logout and Check for current CMS-Client version (Liveview, Playback, E-Map)	

Playback

Function	Sub-Function / Description
Multi-NVR Selection	Retrieve specific recorded videos from multi-NVR
Multi-channel Playback	• Up to 16-channel simultaneous playback from multiple NVRs • Provide function toolbar on each channel for quick operation

Function	Sub-Function / Description
Display Mode	1,4,9,16 channel playback simultaneously
Playback Control per Channel	Play, fast forward, slow motion, previous/next frame, rewind, frame by frame
Up to 128x Fast Forward	7 fast-forward speeds (2x, 4x, 8x, 16x, 32x, 64x, 128x) to get the key moment of video more quickly
Functions Toolbar	Bookmark, sync button, change play time, snapshot, export, zoom in, zoom out
Sync Button	• Control all channels for the same action simultaneously • Click again to release sync mode
Synchronous Multi-channel Playback	Simultaneously play up to 16-channel video for wide-range location investigation
Asynchronous Multi-channel Playback	Individually playback each camera by clicking each camera's timeline to track suspicious objects in the region
Playback Calendar & Start Time Control	Yes
Recording Type	Normal, event, video clip, recovery, time overlap, failover and access control

Setting Tools	Change UI language, User-defined file path for snapshots and exported video	
	Playback OSD Setting	• Display options for OSD info: Server name, camera name, time zone, time • Self-defined fond size, position and color
	Access Control Settings	Pre/post-event playback time: available time range between 10~300 seconds (30 seconds in default)

Skip Blank Video	Skip the blank recording files to save operation time

Multiple Function Menu per Channel	Change Play Time	Effortless time adjustment button
	Image Ratio	4 mode options: Original/Fit/Original Scale-ratio/Fit all
	Bookmark	• Mark special moments for a specific camera during video playback • Bookmark files will be stored on NVR database
	Mute	Enable audio/mute
	Snapshot	• Save pictures to a user-defined path (format: JPG) • Support instant snapshot for single image during playback
	Sequential Snapshot	Take continuous snapshots of each second, including 3/ 5/ 10/ 15 seconds
	Export Video	• Instant export during playback video from specific channel • Export multiple videos from all playback channels in synchronous multi-channel playback mode for a specified time range. • Support "Cut and combine video and add watermark features" • Save exported video to user-defined path. Supported video codecs: H.265, H.264, MJPEG, and MxPEG • Supported video codecs for adding watermark: H.265, H.264, MJPEG
	Dewarping Functions	• De-warping method: DIGI-Dewarp • Camera Position: Ceiling, Ground, Wall • Display mode: PTZ, Quad, Panorama, Perimeter

Time-divided Search	• Efficient way to find key frame by dividing the recorded video of a day into 12 divisions in equal time • Each division displays the first frame of that period of time and user can click a channel to playback the video at one window Two ways to narrow down searching period: 1. Double-clicking specific division 2. Press "next" button Directly playback the same period of recorded video while checking the selected divisions Quick operation options on playback window (image ratio, bookmark, mute the audio, snapshot, instant export, control panel)
Smart Search	• Five search modes: motion detection, foreign object detection, missing object detection, camera tampering detection, and loss focus detection • Up to 3 ROIs & sensitivity adjustment (0~100 seconds) • Pre-event time setup: 0~100 seconds (Default:15 seconds) • Export search results • Search time setup (hh/mm/ss)
Bookmark Search	• Search bookmark videos from multiple NVRs by fuzzy matching bookmark title • User-defined searching range (start time and end time)
Lock UI Mode	• Lock the entire UI with password for high-level protection to prevent unintentional operations
Show or Hide Panels	Access Control Device panel and Event panel
Built-in CMSPlayer*	• A dedicated player to play backup video from NAS which is connected with selected NVR • File format: Unique NVR AVI and general AVI *The NAS must be the backup destination of the selected NVR server
Thumbnail Preview	Mouse over the footage to quickly display thumbnail preview
Zoom in/out Timeline	Mouse scroll to zoom in/out timeline scale bar
Digital Zoom in/out	Yes

| Function	Sub-Function / Description
Quick Link to Liveview/E-Map	Directly open liveview window or E-Map window for quick operation
Easy Playback Manipulation Tool	• Mouse over to view NVR and camera's information • Open playback in new tab for quick switch • Double-click to open tab in new window for extended display on second monitor when dual monitors are connected.
Download Center	• Provide an overview of downloading status for each exporting task, including finished, downloading, canceled, waiting, connection failed, access denied and file missing • Directly open file manager to check the file location • One-click to clear all record
Personal Settings	Logout and Check for current CMS-Client version (Liveview, Playback, E-Map)

*Usage notice for CMSPlayer:
1. Please ensure NVR backup to NAS is configured (Configuration page > Backup)
2. NVR and NAS are in the same network environment
3. NVR firmware version must be FW80 and/or later

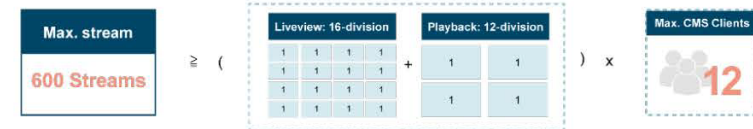## DIGIEVER CMS-Server Hardware Requirements

Level	PC Hardware Requirement		Max. Bandwidth[1] (Based on PC Network Port)	Max. Stream[2]
Standard	Operating System	Microsoft® Windows® 10/11	700 Mbps	256 Streams
	CPU	Intel® i7 8 Core CPU or above		
	System Memory	32G or above		
	Network port	1x 1Gbps Ethernet or above		
Advanced	Operating System	Microsoft® Windows® 10/11	7000 Mbps	600 Streams
	CPU	Intel® Xeon® E (8 Core) or Scalable Processor		
	System Memory	32G or above		
	Network port	1x 10Gbps Ethernet or above		

Note:

1. Total network bandwidth $\geq$ Bitrate per camera (Mbps) x (total channel of Liveview & Playback) x Max. CMS Client x 2
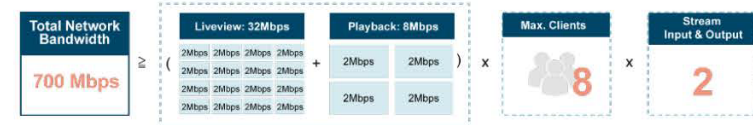
2. Max. Stream $\geq$ (Live view Streams) + (Playback Streams) x Max. CMS Clients

DIGIEVER CMS-Client Hardware Requirements

Level	PC Hardware Requirement	
Standard	Operating System	Microsoft® Windows® 10/11
	CPU	Intel® i7 8 Core CPU or above
	System Memory	16G or above
	Network port	1x 1Gbps Ethernet or above

Testing Case for Reference

Level	Camera Settings	One Monitor per PC	Two Monitor per PC
Standard	H.264, Full HD, 30fps, 2000kbps (no OSD)	Up to 12ch	Up to 6ch
	H.264, Full HD, 15fps, 2000kbps (no OSD)	Up to 16ch	Up to 10ch

* All designs and specifications are subject to change without prior notice.

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