



# Macula brochure 2025

Lax Teknologi Indonesia



# macula®

## Video Management Software, Comes with Service Support

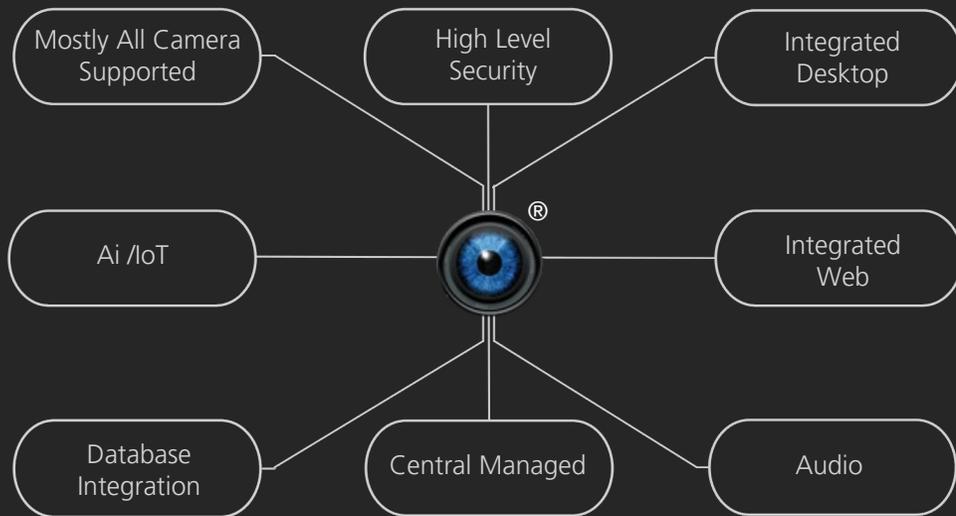
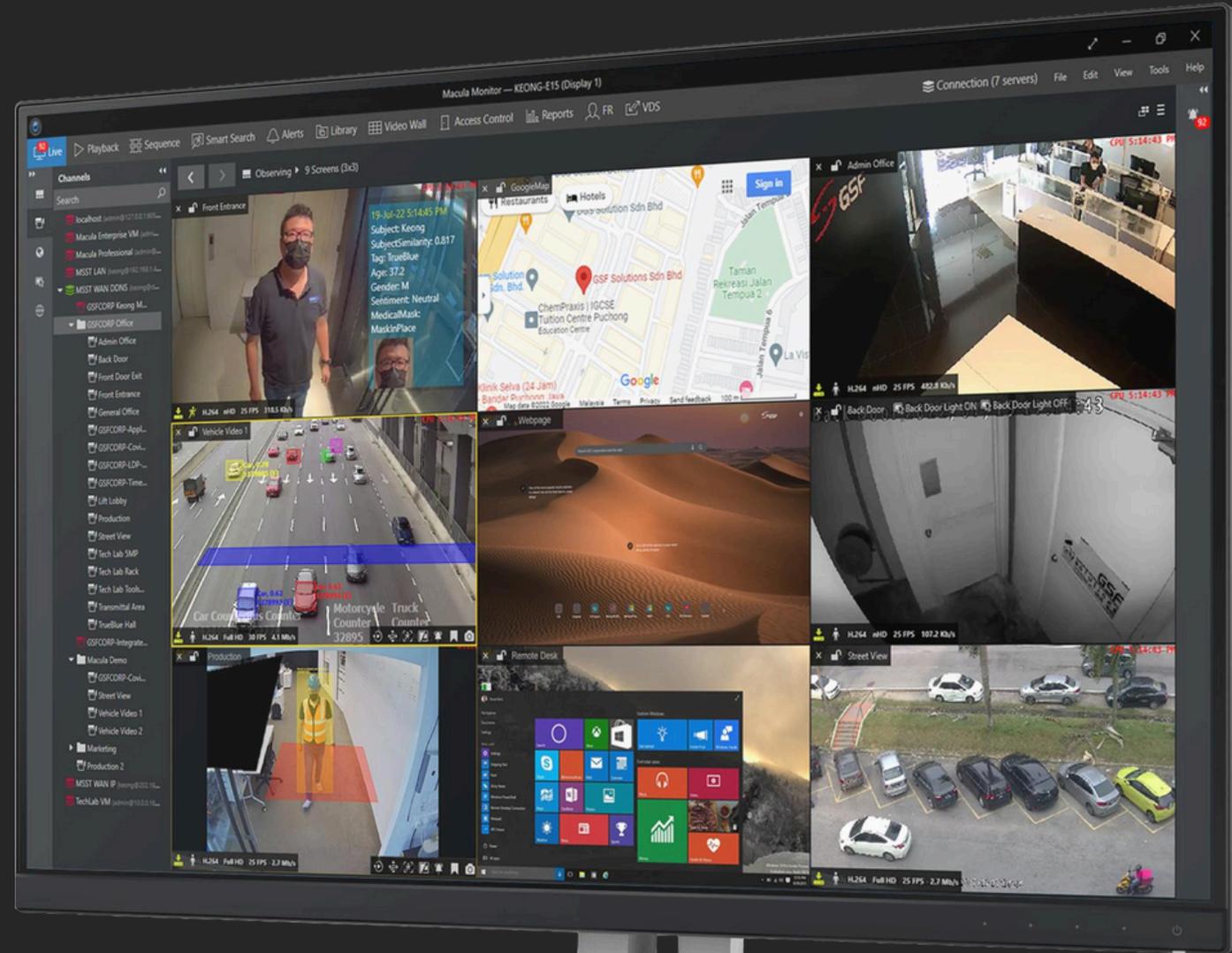
Our decades of experience in achieving best quality of HDCCTV system design and first-class service support, all combined into this piece of engineering marvel.

For the next ten years, macula was created with data integrations in mind, toward Ai & IoT trend.

# Do more than a video management software - macula<sup>®</sup>

## Video Management Software Comes with **Service Support**

macula's key integrations is integrating all subsystem work together as one. In modern surveillance, every data is important to create evidence meticulously. The integration with AI, IoT sensors and Database will be taken care of.



# Operations Effectiveness

Backed by TrueBlue Support, service and support from the people who know your system best.

**TrueBlue®**  
**experience**

## TrueBlue Care Premium

Trouble-free premium support with 3 years next-business-day onsite labor and parts replacement for ECA.

## Phone & Remote Support

All GSF products come with international phone and remote support, for help on settings or using the ECA.

*\* Working hour only. Mon-Fri. 9am-6pm (GMT+8)*

## Pay-per-request Onsite Service

Support at your location, as and when you need it, to solve specific problems and issues. Support on-site by our professional TrueBlue engineer.



Heartbeat generation 2

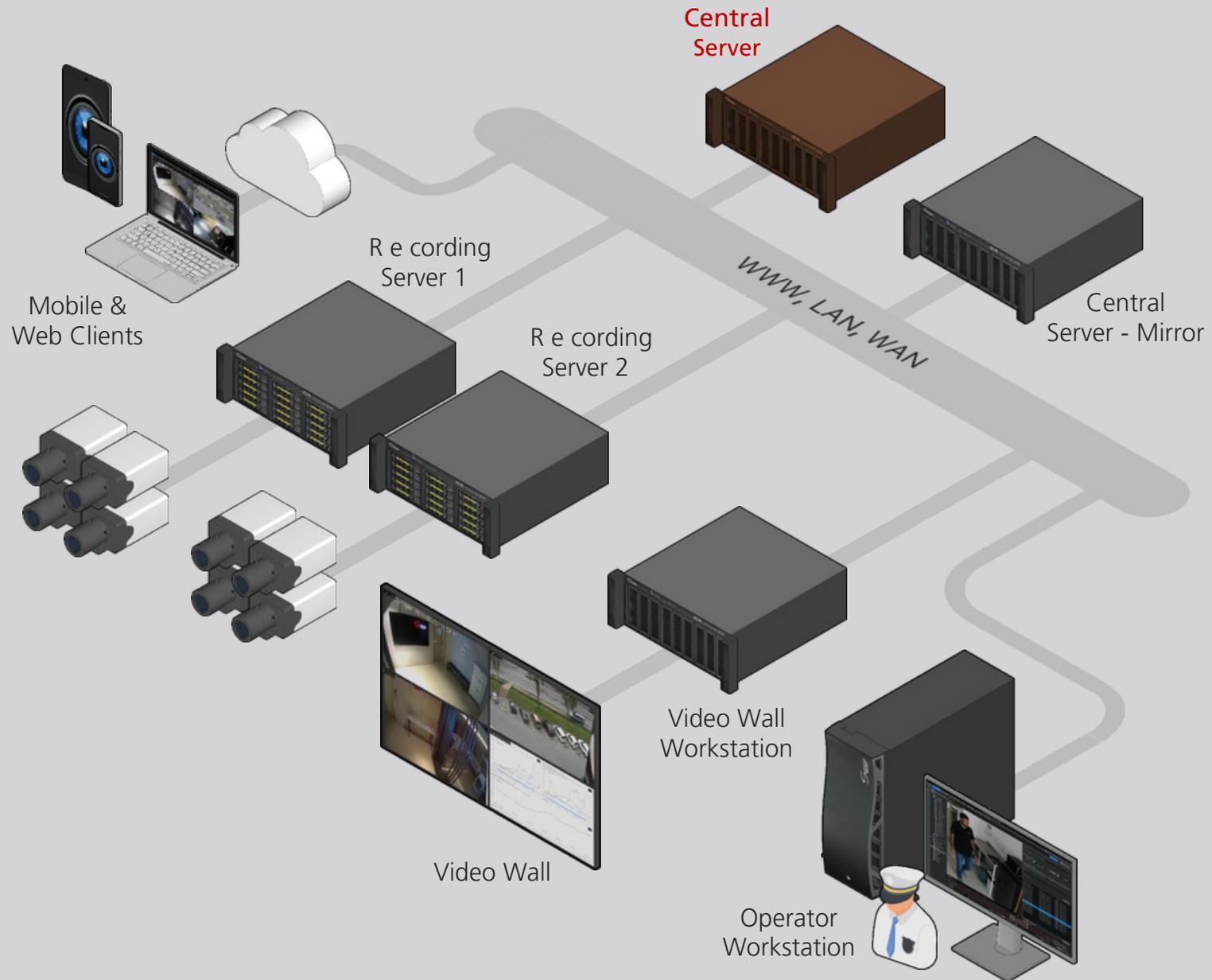
# Centralized Managed Surveillance System

## Effective and Efficient in Operation

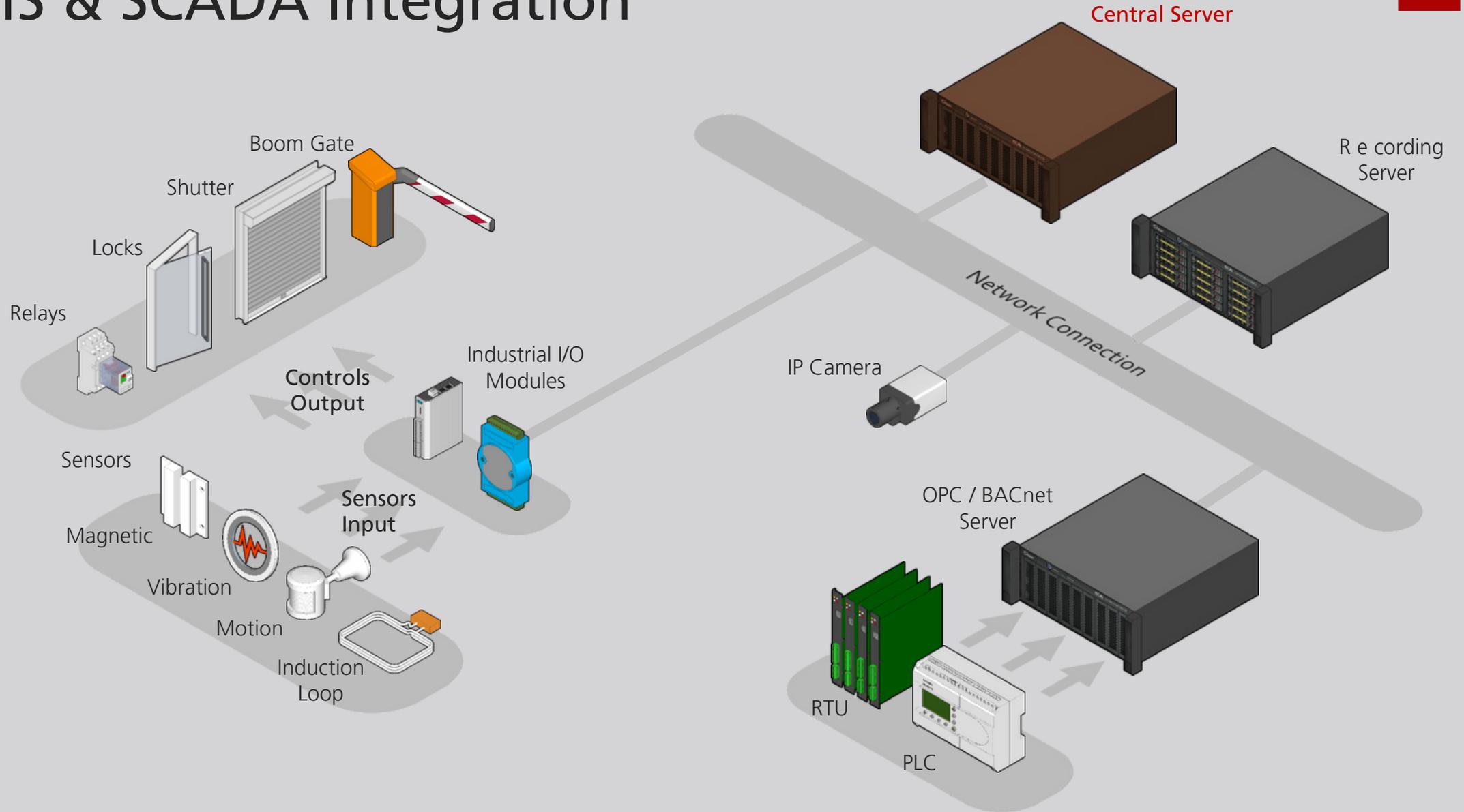
Single login, multiple managed, make management of large-scale surveillance much more effective, and easier to maintain. For example, you required to change a user account password, you only changed once at central server, and it will automatically be synced to all servers. Thus, saving on human capital cost and expenses.

### Central server hold all:

- User accounts
- User permission
- All resources like cameras
- Settings
- Configurations
- Security Policy
- Licenses

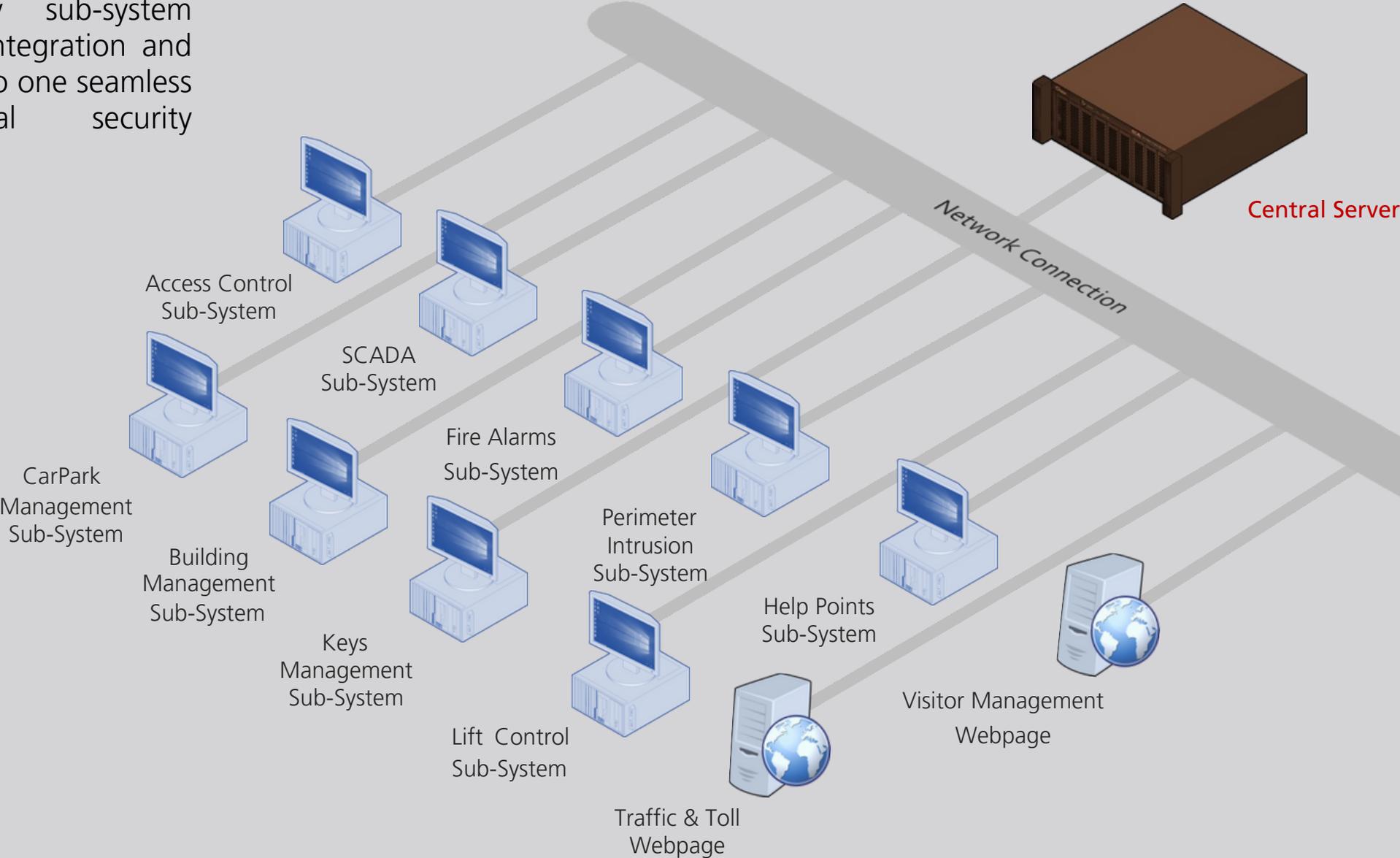


# I/O, BMS & SCADA Integration



# Universal PSIM & iSMS

Support 3rd party sub-system desktop application integration and webpage interface into one seamless integrated physical security management system.



# Analytics Engine with Artificial Intelligent (Ai) Automation





# Face Recognition System (FRS)

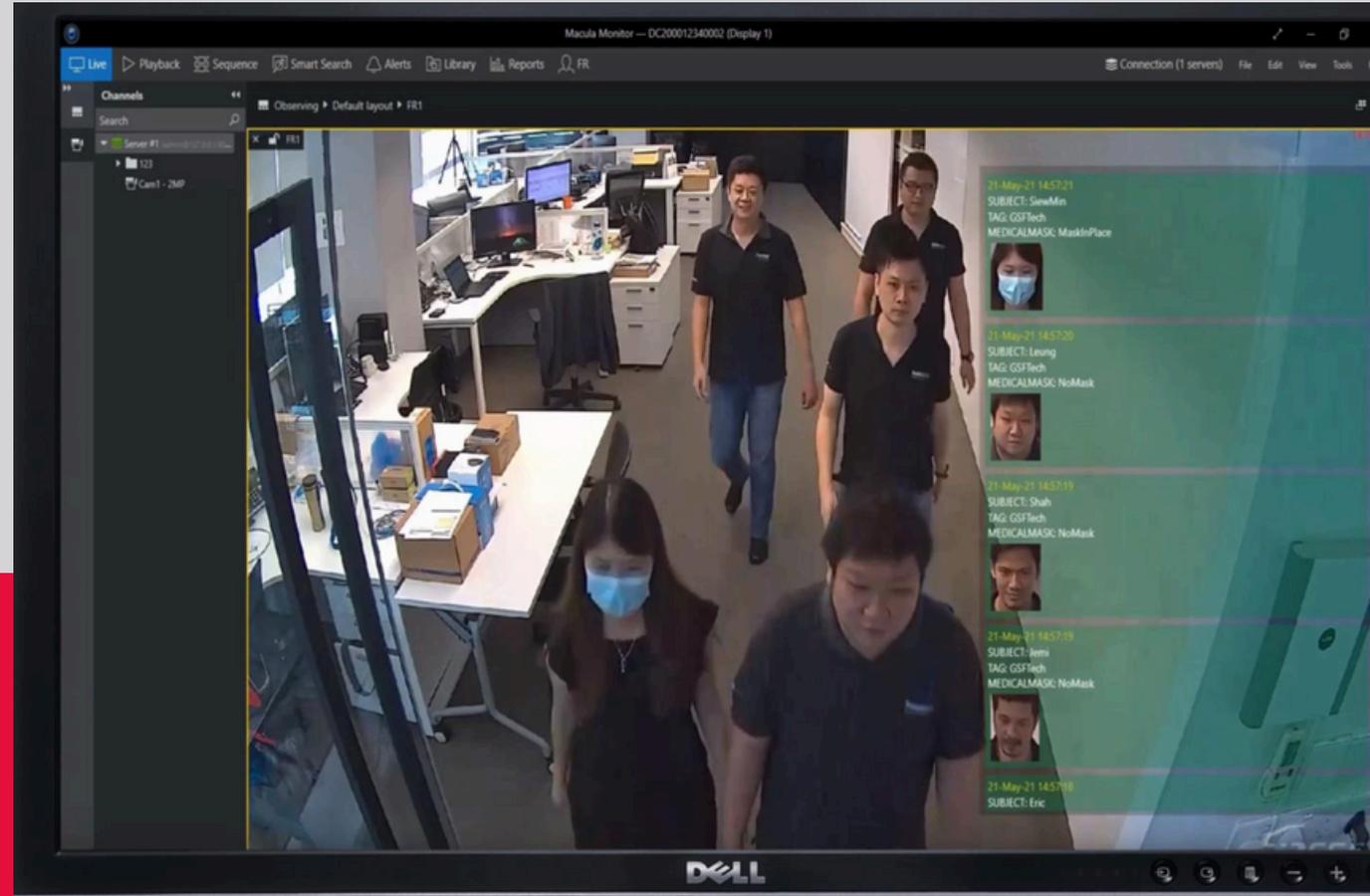


Smart Logic®FR System rely on neural networks are faster, lighter, and more accurate at the same time also good on partial faces (which includes people wearing masks) and faces at big angles. As well as offering facial expression, gender and age information. Smart Logic ® Face Recognition System (FRS) engine is based on neural networks,featuring all the benefits ofthe cutting-edge FR technologies.

 [FRSbrochure>](#)

## LivenessDetectionforAnti-Spoofing

Liveness detection distinguishes live persons and non- live person such as printed photo or images from smart devices. Liveness feature is important if you are using face recognition system (FRS) for critical application like door access, or door un-locking function.



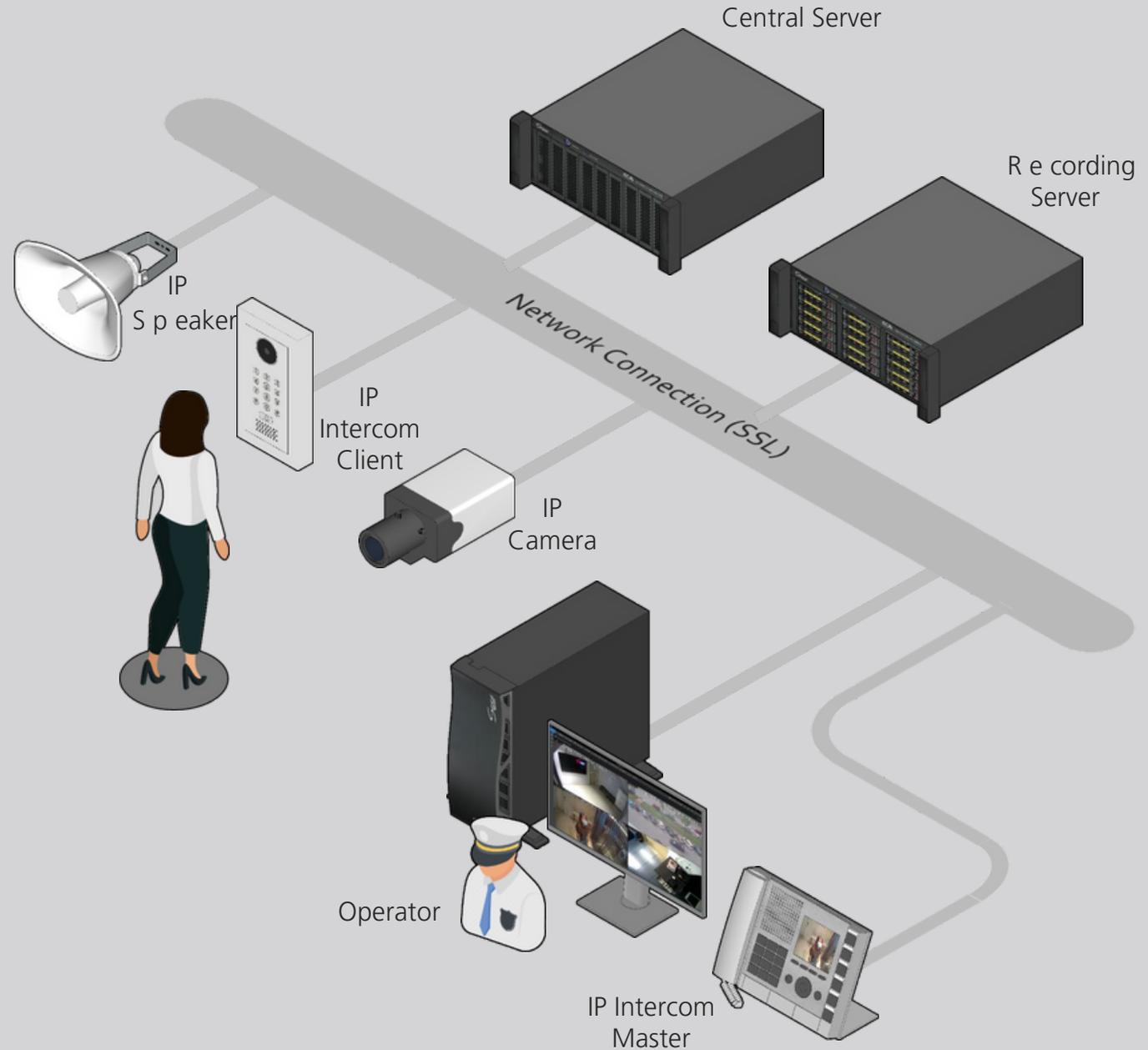
FRS in Live Monitoring

[Watch at YouTube](#) 

[Watch at YouTube](#) 

# Audio Integration

- 2-ways conversation recordings (IP intercom)
- 2-way communication to IP speaker or IP intercom
- Pre-recorded sound clip playback to IP Speaker according to events logic or as Public Announcement
- Intercom Call event Tagging or alert
- Pair any audio (IP speaker or intercom) with any IP cameras



# Barcode & Text Based Data Capture

**1. Scan & capture**  
barcodes / QR codes

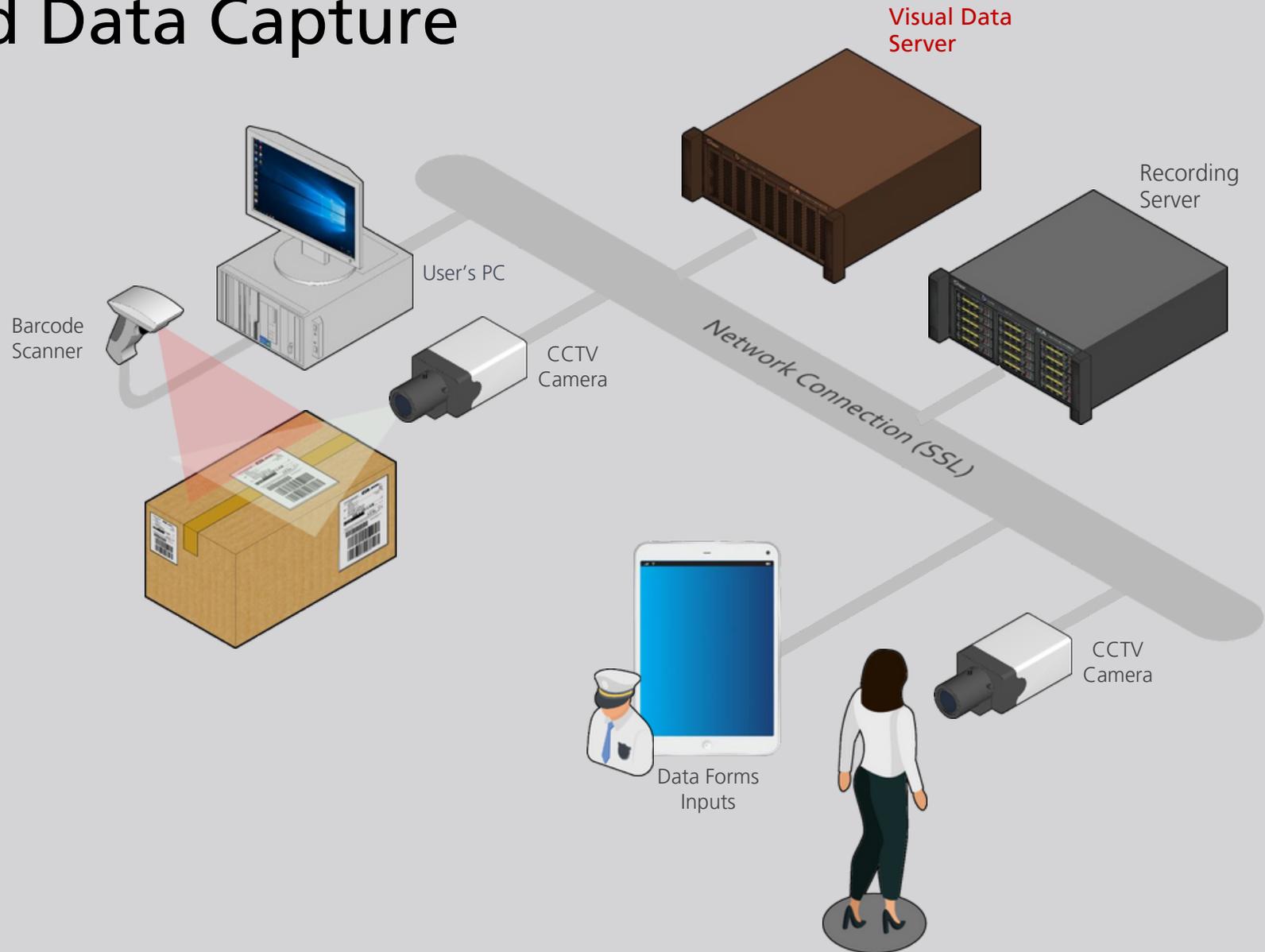
**2. VDS Collector Client**  
captures & send data

**3. VDS Collector Server**  
receive data

**4. VDS Database Server**  
store data

**5. VDS Data display**  
on Macula Monitor  
VDS search & playback

\*Supports multiple clients for data collection



# Access Control Integration

## Seamless pairing CCTV with Access Control

In one single GUI, single login access both systems for instant search on events log plus CCTV footage simultaneously.

- ▶ Seamless User Experience  
<https://youtu.be/xfc5ZNEJSNw?si=7woVm4jotgfiJhqK>
- ▶ Door Functions  
<https://youtu.be/PBrlqZ6Kiz4?si=b3RsVowHDD22f7Eu>
- ▶ Cardholder Features  
<https://youtu.be/vO9Em7F3vY4?si=u-dS46EqNmWCIVep>
- ▶ Smart Filter & Search  
<https://youtu.be/4bHXGrGIKS0?si=vSONSjxW0PB3a9q>
- ▶ Event Action  
<https://youtu.be/qyктаP0QXJ0?si=tYz7bLiejPgpF8Ri>

The screenshot displays the Macula Monitor software interface. The main window is titled "Macula Monitor — SF-WS-11 (Display 1)". The interface is divided into several sections:

- Top Navigation:** Includes "Live", "Playback", "Sequence", "Smart Search", "Alerts", "Library", "Access Control" (highlighted), "Reports", "Connection (1 servers)", "File", "Edit", "View", "Tools", and "Help".
- Event Log Table:** A table with columns "TIME", "EVENT", "DOOR", and "CARDHOLDER". It lists 18 events for the date 2/10/2019, including "Valid entry access" and "Unknown card number" for various doors like "Server Room Door", "Main Entrance Door", and "Store Room Door". The cardholder name "Leung" is listed for all events.
- Search Interval:** A search bar showing the interval from 1/9/2019 15:50:56 to 2/10/2019 23:50:56.
- Search Filters:** Includes "Source" (set to "(Any door)"), "Event", and "Cardholder" (set to "Leung"). A "Search" button is present.
- Results:** A message at the bottom right states "18 event(s) found".
- CCTV Feed:** A video window on the right shows a person in a dark shirt standing in a room, with a timestamp of 16:41:27. Below the video is a playback control bar and a "View cardholder events" button.
- Cardholder Details:** A section below the video shows the cardholder's name "Leung" and a "View cardholder events" button.
- Door and Event Details:** A section below shows the door "Server Room Door" and the event "Valid entry access" for the time "2/10/2019 16:41:25". A "View door events" button is also present.

Visual Access System (VAS) brochure here: <https://gsfcorp.com/downloads/vas.pdf>



Info	3/9/2020 15:47:46	Human Detected	Street View
Info	3/9/2020 15:45:12	Human Detected	Street View
Info	3/9/2020 15:43:59	Human Detected	Street View
Info	3/9/2020 15:42:42	Human Detected	Street View
Info	3/9/2020 15:41:01	Human Detected	Street View
Info	3/9/2020 15:40:27	Human Detected	Street View
Info	3/9/2020 15:40:08	Human Detected	Street View
Info	3/9/2020 15:39:35	Human Detected	Street View
Info	3/9/2020 15:35:14	Human Detected	Street View
Info	3/9/2020 15:33:57	Human Detected	Street View
Info	3/9/2020 15:29:09	Human Detected	Street View
Info	3/9/2020 15:26:57	Human Detected	Street View
Info	3/9/2020 15:26:08	Human Detected	Street View
Info	3/9/2020 15:22:30	Human Detected	Street View
Info	3/9/2020 15:21:09	Human Detected	Street View
Info	3/9/2020 15:20:56	Human Detected	Street View
Info	3/9/2020 15:19:02	Human Detected	Street View
Info	3/9/2020 15:18:11	Human Detected	Street View

227 bookmarks(s) found [Export CSV...](#)

RGN PTZ

15:55 16:00

Navigation controls: -24H -1H -10M -1M -10S | Play/Pause | +10S +1M +10M +1H +24H

3/9/2020 16:03:26

## Ai-Powered Human Detection

Human is what we interested. The Ai based human detection sensor can filter or TAG the event whenever human appear in the CCTV cameras.



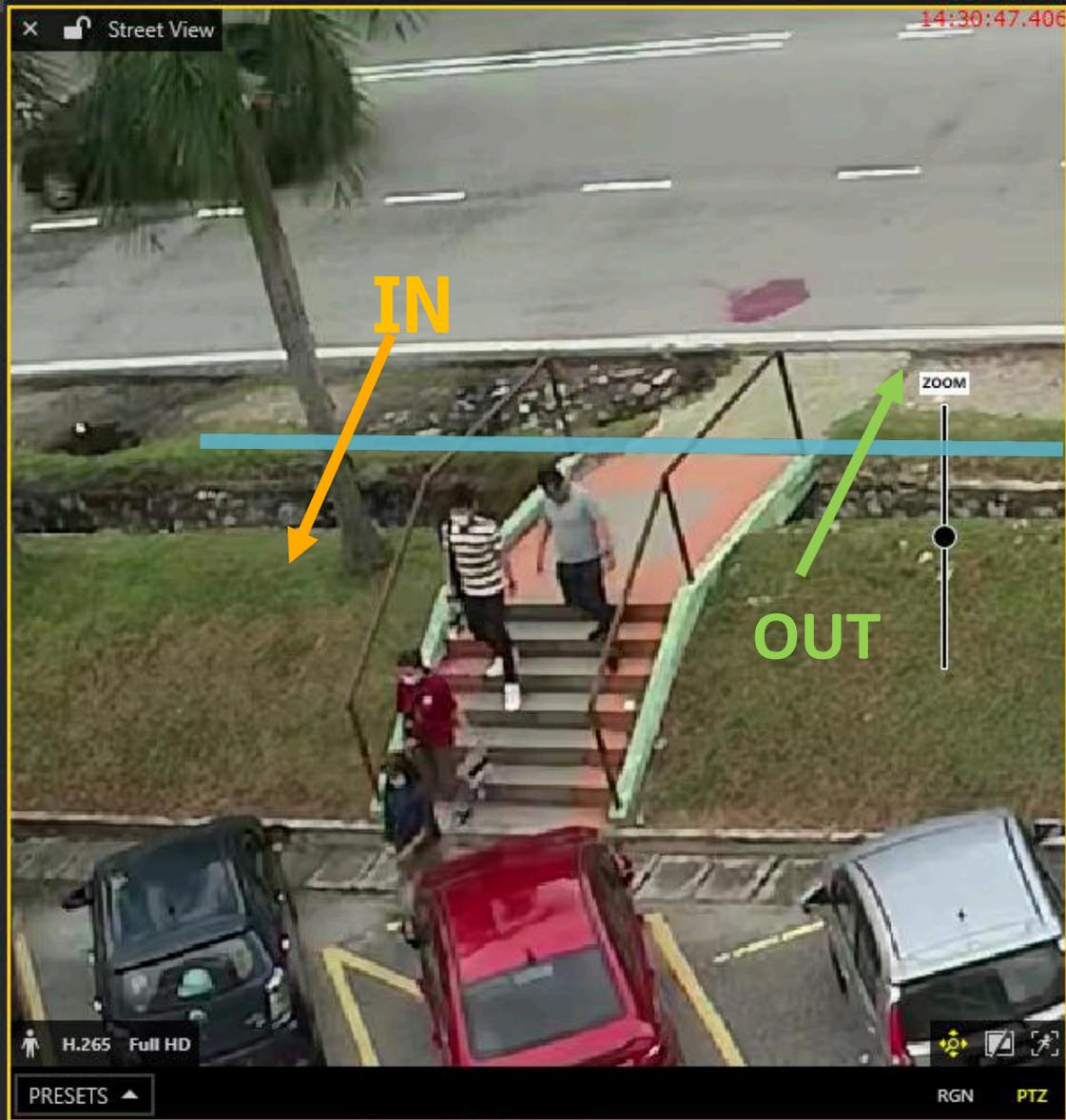
## **Ai Based Perimeter Intrusion Detection**

Virtual perimeter or virtual fencing make overall site deployment a huge cost saving by eliminate expensive cabling cost. Yet it is a lot more accurate because it would alert only if human triggered the virtual line.

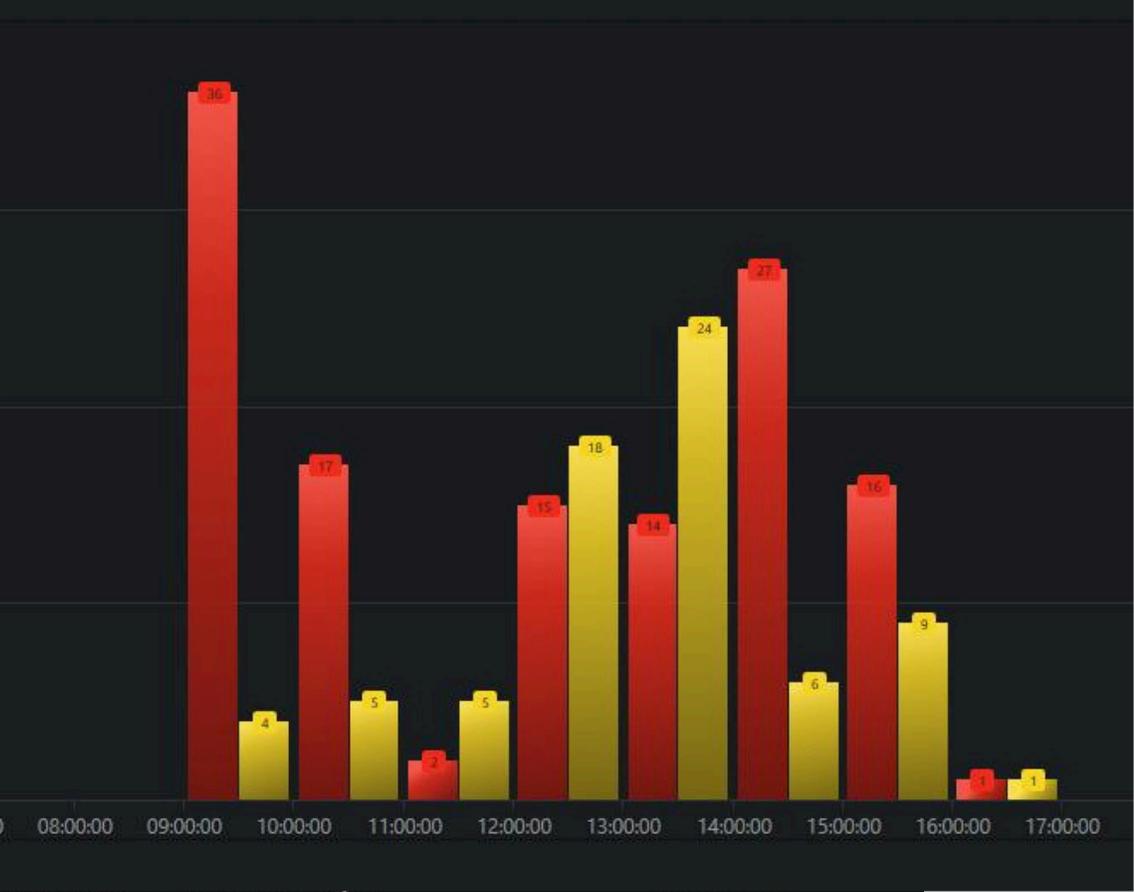


## Ai Based Crowd Detection

We can set virtual Zone from any surveillance camera and set (for example) if there is more than 2 person then alert. This is useful and cost effective for control and in confined space we can use it as social distancing.



SEVERITY	BOOKMARK
Low	3/9/2020 14:23:51
Low	3/9/2020 14:11:05
Low	3/9/2020 14:05:00
Low	3/9/2020 13:55:00
Low	3/9/2020 13:45:00
Low	3/9/2020 13:35:00
Low	3/9/2020 13:25:00
Low	3/9/2020 13:15:00
Low	3/9/2020 13:05:00
Low	3/9/2020 12:55:00
Low	3/9/2020 12:45:00
Low	3/9/2020 12:35:00
Low	3/9/2020 12:25:00
Low	3/9/2020 12:15:00
Low	3/9/2020 12:05:00
Low	3/9/2020 11:55:00
Low	3/9/2020 11:45:00
Low	3/9/2020 11:35:00
Low	3/9/2020 11:25:00
Low	3/9/2020 11:15:00
Low	3/9/2020 11:05:00
Low	3/9/2020 10:55:00
Low	3/9/2020 10:45:00
Low	3/9/2020 10:35:00
Low	3/9/2020 10:25:00
Low	3/9/2020 10:15:00
Low	3/9/2020 10:05:00
Low	3/9/2020 09:55:00
Low	3/9/2020 09:45:00
Low	3/9/2020 09:35:00
Low	3/9/2020 09:25:00
Low	3/9/2020 09:15:00
Low	3/9/2020 09:05:00
Low	3/9/2020 08:55:00
Low	3/9/2020 08:45:00
Low	3/9/2020 08:35:00
Low	3/9/2020 08:25:00
Low	3/9/2020 08:15:00
Low	3/9/2020 08:05:00
Low	3/9/2020 07:55:00
Low	3/9/2020 07:45:00
Low	3/9/2020 07:35:00
Low	3/9/2020 07:25:00
Low	3/9/2020 07:15:00
Low	3/9/2020 07:05:00
Low	3/9/2020 06:55:00
Low	3/9/2020 06:45:00
Low	3/9/2020 06:35:00
Low	3/9/2020 06:25:00
Low	3/9/2020 06:15:00
Low	3/9/2020 06:05:00
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Low	3/9/2020 05:45:00
Low	3/9/2020 05:35:00
Low	3/9/2020 05:25:00
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Low	3/9/2020 05:05:00
Low	3/9/2020 04:55:00
Low	3/9/2020 04:45:00
Low	3/9/2020 04:35:00
Low	3/9/2020 04:25:00
Low	3/9/2020 04:15:00
Low	3/9/2020 04:05:00
Low	3/9/2020 03:55:00
Low	3/9/2020 03:45:00
Low	3/9/2020 03:35:00
Low	3/9/2020 03:25:00
Low	3/9/2020 03:15:00
Low	3/9/2020 03:05:00
Low	3/9/2020 02:55:00
Low	3/9/2020 02:45:00
Low	3/9/2020 02:35:00
Low	3/9/2020 02:25:00
Low	3/9/2020 02:15:00
Low	3/9/2020 02:05:00
Low	3/9/2020 01:55:00
Low	3/9/2020 01:45:00
Low	3/9/2020 01:35:00
Low	3/9/2020 01:25:00
Low	3/9/2020 01:15:00
Low	3/9/2020 01:05:00
Low	3/9/2020 00:55:00
Low	3/9/2020 00:45:00
Low	3/9/2020 00:35:00
Low	3/9/2020 00:25:00
Low	3/9/2020 00:15:00
Low	3/9/2020 00:05:00
Low	3/9/2020 00:00:00



SEVERITY	BOOKMARK	DESCRIPTION	CAMERA
Low	3/9/2020 14:23:51	Line Crossing OUT	Street View
Low	3/9/2020 14:11:05	Line Crossing IN	Street View

178 bookmarks(s) found

Export CSV...

## Ai Based Counting

count when human pass IN or OUT the counting lines. This is very useful to know statistic for your premises like entrance. Now you can turn any cameras into statistic counters.

### Recording Monitor Summary

Total Recording (Last 24 hours)

31 days 8 hours 27 minutes / 36 cameras

Current status

Recording	32
Not Recording	4
Server Unreachable	0
Error	0
<b>Total</b>	<b>36</b>

Latest 5 no recording incidents

- No recording for Dry Kitchen (SFHouse) on 1 April 2024, 11:11:58 and lasted 56 seconds
- No recording for Dry Kitchen (SFHouse) on 1 April 2024, 11:11:42 and lasted 12 seconds
- No recording for Dry Kitchen (SFHouse) on 1 April 2024, 11:10:59 and lasted 39 seconds
- No recording for Wet Kitchen (SFHouse) on 1 April 2024, 11:10:51 and lasted 6 seconds
- No recording for Wet Kitchen (SFHouse) on 1 April 2024, 11:10:28 and lasted 5 seconds

### Recording Monitor Status

(Last checked 1 April 2024, 11:13) Manage Servers

Name	Status	Recording	Recording History (24 Hours)
Work Area Outdoor (SFHouse) SFHOUSE LOC...	Recording	1d 100%	
Work Area Indoor (SFHouse) SFHOUSE LOC...	Recording	1d 100%	
Work Area (SFHouse) SFHOUSE LOC...	Recording	1d 100%	
Wet Kitchen (SFHouse) SFHOUSE LOC...	Recording	22hr 42min 94.62%	
TrueBlue Hall MSST REC SVR	Recording	23hr 59min 99.932%	
Transmittal Area MSST REC SVR	Recording	23hr 58min 99.888%	

# Recordings Monitor

## Know each camera's recordings

**Know each camera's recordings**  
 This feature offer you insight about each individual cameras recording status, you will get

- 24hours recordings status and recording %
- Easily know if the cameras has no recordings and when no recordings.
- Details recording statistics and time stamp for individual recording status.
- Notifications and Alerts
- Report in PDF

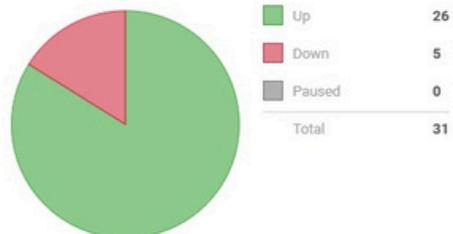
\* Available when Installed in ecaOS

## Device Monitor Summary

Overall Uptime

80.939%

Current status



## Latest downtime

- CCTV Study Room (SFHouse) was down on 1 April 2024, 9:49:17 and lasted 4 minutes 30 seconds
- CCTV Study Room (SFHouse) was down on 1 April 2024, 5:19:17 and lasted 4 minutes 30 seconds
- MSST Recording Server was down on 1 April 2024, 4:00:51 and lasted 14 minutes 29 seconds
- MSST Recording Server VMS Port was down on 1 April 2024, 4:00:51 and lasted 14 minutes 29 seconds
- MSST VMS was down on 1 April 2024, 4:00:51 and lasted 14 minutes 29 seconds

## Device Monitor Status

24 Hours 7 Days 14 Days 30 Days

Status  Monitor Type  Name     

Name	Status	Avg. Resp. Time	Uptime	History	Actions
CCTV Work Area <a href="#">PING</a>	Up	1.333ms	100%		<input type="button" value="Incidents"/>
CCTV Work Area Indoor <a href="#">KEYWORD</a>	Up	4.75ms	100%		<input type="button" value="Incidents"/>
CCTV Work Area Outdoor (SFHouse) <a href="#">PORT</a>	Up	1.542ms	100%		<input type="button" value="Incidents"/>
Dry KitChen (RTSP) <a href="#">PORT</a>	Up	334.271ms	100%		<input type="button" value="Incidents"/>
GSF MSST <a href="#">PORT</a>	Up	916.875ms	85.699%		<input type="button" value="Incidents"/>
GSFCorp Website <a href="#">KEYWORD</a>	Up	546.792ms	100%		<input type="button" value="Incidents"/>

# Devices Monitor

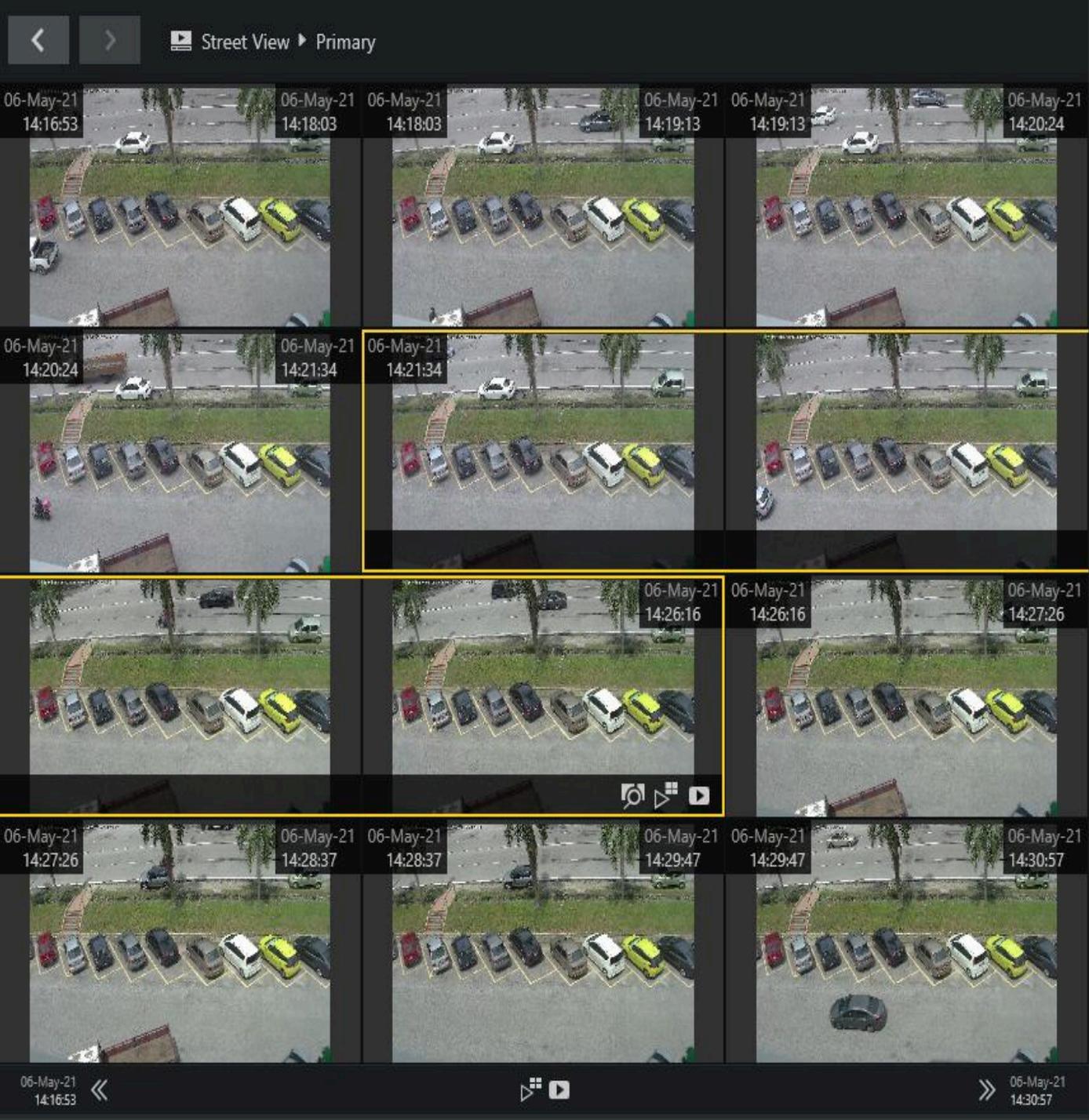
## On-prem devices uptime

This feature offer you insight about each individual devices like cameras, servers, access controller, video stream port, api-socket, web, and etc status

Monitor type: [HTTP](#), [Keyword](#), [Ping](#) and [Port](#).  
Interval from 1 minutes to 24 hours.  
History record of 24hr, 7days, 14days and 30days  
CSV data export and PDF report

\* Available when Installed in ecaOS





**Calendar**

From date  
06-May-21

From time  
14:21:34

Till date  
06-May-21

Till time  
14:26:16

Snapshots  
4 \* 3 Screens

Make sequence

# Evidence Search. Super easy.

## Timeline Search

Simplest way to search by timeline of 24hr, 1hr, 10min, 1min & 10sec +forward or -backward. Across all devices.

## Sequence Search

Picture Story. Its divide your evidence into 2mins frame block, and show you an overall thumbnail pictures what happened to that scene.

## Smart Search

Intelligent motion search by region of interests.

## Bookmark Search

You can manually bookmark an suspicious event or TAG an event automatically from event logic or Sensors / Digital Inputs.

# Evidence Export. One Click!

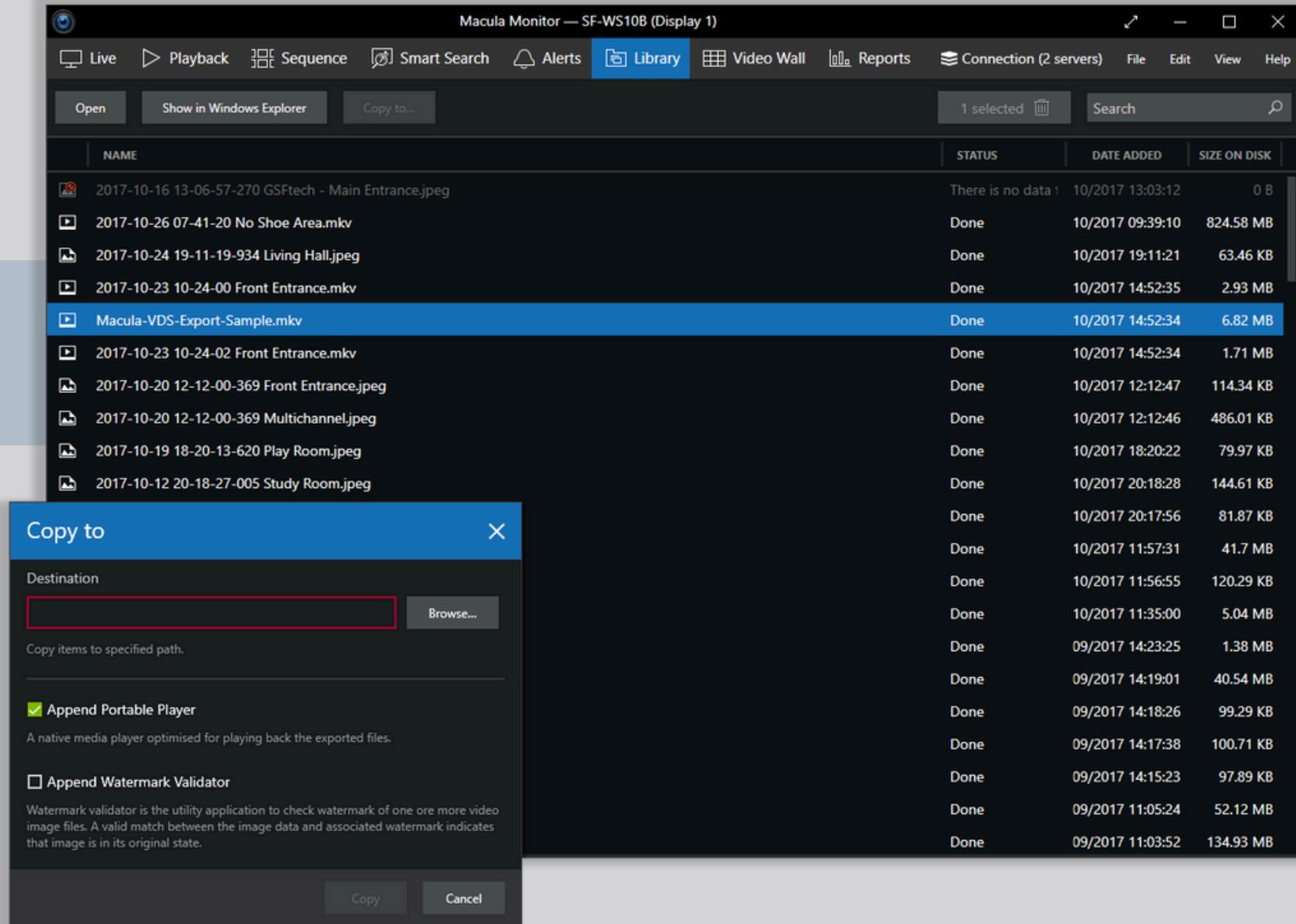
To export video or image evidence. Yes one click, with pre-defined parameters.

## Centralized Library Folder

All one click exported videos or images will store in library folder by default.

## CloudSynced

You can easily add the library folder into synced cloud drive. So you can see all the exported videos or images across all the computers (cloud synced). Support all major cloud drive like OneDrive, Google Drive, Dropbox, etc.



The screenshot displays the Macula Monitor software interface. The top menu bar includes options like Live, Playback, Sequence, Smart Search, Alerts, Library (highlighted), Video Wall, Reports, and Connection (2 servers). Below the menu is a toolbar with buttons for Open, Show in Windows Explorer, and Copy to... A search bar shows '1 selected' items. The main area is a table listing evidence files with columns for NAME, STATUS, DATE ADDED, and SIZE ON DISK. The file 'Macula-VDS-Export-Sample.mkv' is selected. A 'Copy to' dialog box is open in the foreground, showing a destination field with a 'Browse...' button, a checked checkbox for 'Append Portable Player', and an unchecked checkbox for 'Append Watermark Validator'. The dialog also contains descriptive text for the watermark validator and 'Copy' and 'Cancel' buttons at the bottom.

NAME	STATUS	DATE ADDED	SIZE ON DISK
2017-10-16 13-06-57-270 GSFtech - Main Entrance.jpeg	There is no data	10/2017 13:03:12	0 B
2017-10-26 07-41-20 No Shoe Area.mkv	Done	10/2017 09:39:10	824.58 MB
2017-10-24 19-11-19-934 Living Hall.jpeg	Done	10/2017 19:11:21	63.46 KB
2017-10-23 10-24-00 Front Entrance.mkv	Done	10/2017 14:52:35	2.93 MB
Macula-VDS-Export-Sample.mkv	Done	10/2017 14:52:34	6.82 MB
2017-10-23 10-24-02 Front Entrance.mkv	Done	10/2017 14:52:34	1.71 MB
2017-10-20 12-12-00-369 Front Entrance.jpeg	Done	10/2017 12:12:47	114.34 KB
2017-10-20 12-12-00-369 Multichannel.jpeg	Done	10/2017 12:12:46	486.01 KB
2017-10-19 18-20-13-620 Play Room.jpeg	Done	10/2017 18:20:22	79.97 KB
2017-10-12 20-18-27-005 Study Room.jpeg	Done	10/2017 20:18:28	144.61 KB
	Done	10/2017 20:17:56	81.87 KB
	Done	10/2017 11:57:31	41.7 MB
	Done	10/2017 11:56:55	120.29 KB
	Done	10/2017 11:35:00	5.04 MB
	Done	09/2017 14:23:25	1.38 MB
	Done	09/2017 14:19:01	40.54 MB
	Done	09/2017 14:18:26	99.29 KB
	Done	09/2017 14:17:38	100.71 KB
	Done	09/2017 14:15:23	97.89 KB
	Done	09/2017 11:05:24	52.12 MB
	Done	09/2017 11:03:52	134.93 MB

Macula Monitor — DESKTOP-V4ER9PA (Display 1)

Alerts Library Alarm Bar Code Access FACE LPR Visitor Registration Connection (4 servers) File Edit View Help

17:57:16

Plate

Tag (Any)

Search interval

01-Nov-17 11:57:50 > 01-Nov-17 17:57:50

Search in the specified time interval.

Search

TIME	CHANNEL	PLATE	CAMERA
01-Nov-17 17:57:48	LPR-IOI	W3664D	175
01-Nov-17 17:57:47	LPR-IOI	WJY3481	175
01-Nov-17 17:57:42	LPR-IOI	WJC6218	175
01-Nov-17 17:57:41	LPR-IOI	WVF9063	175
01-Nov-17 17:57:20	LPR-IOI	A3411Y	175
01-Nov-17 17:57:18	LPR-IOI	BNX3188	175
01-Nov-17 17:57:16	LPR-IOI	W1018X	175
01-Nov-17 17:57:15	LPR-IOI	WWJ6804	175
01-Nov-17 17:57:10	LPR-IOI	VU9045	175
01-Nov-17 17:57:08	LPR-IOI	WDN6013	175
01-Nov-17 17:57:03	LPR-IOI	WC2707L	175
01-Nov-17 17:57:01	LPR-IOI	MBU1396	175
01-Nov-17 17:56:58	LPR-IOI	AKB2699	175
01-Nov-17 17:56:54	LPR-IOI	WB5718R	175
01-Nov-17 17:56:48	LPR-IOI	JMX5298	175

Activate Windows  
Go to Settings to activate Windows.

444 event(s) found

Export CSV...



# Visual . Data . Solutions.

by combining both visual and data, user can proof many concrete evidence to reduce losses yet achieve customer satisfaction

## AddonsApp

Enhance user usability, by addon more applications, like Access Control, Bar Code, LPR, FACE, Alarms, POS, Visitors Registration and many more...

## Database

With SQL database structure, virtually you can integrate any set of data you want with pair with visual form any cameras.

## DataOverNetwork

With GSF VDS Collector Small-APP client and Collector Server, you can transmit/receive any data over the TCP/IP with SSL secured connection.

# All Cameras Supported. Almost.

Virtually any IP camera in the market were supported.  
More than 4000 models of camera in the market.  
As well as ONVIF Profile-S

## Onvif Profile-G Edge Recording

Upon network lost, the camera (edge) will start recording in it's SD card. And automatic sync back to server when network resume.

## H.265 HEVC Ready

Save almost 40% of storage space with this compression

## I/O Device (Sensors)

Support Moxa, or network I/O module to collect more sensors data like magnetic or motions PIR.

## Pre-recorded Video/Picture Files or RTSP

You can load any recorded video files like AVI & JPEG as device source. This is useful as information/ADs display. Or any RTSP video source input.



## Mobile Cameras

Turns any android/iOS device into surveillance cameras with audio, and manage them as one of the CCTV cameras.

# Access from anywhere. Any mobile device.

## Macula Mobile

IOS or Android, Chromecast, MAC-OS native app download from Google Play Store or Apple App Store.



## Mobile Notifications and Control

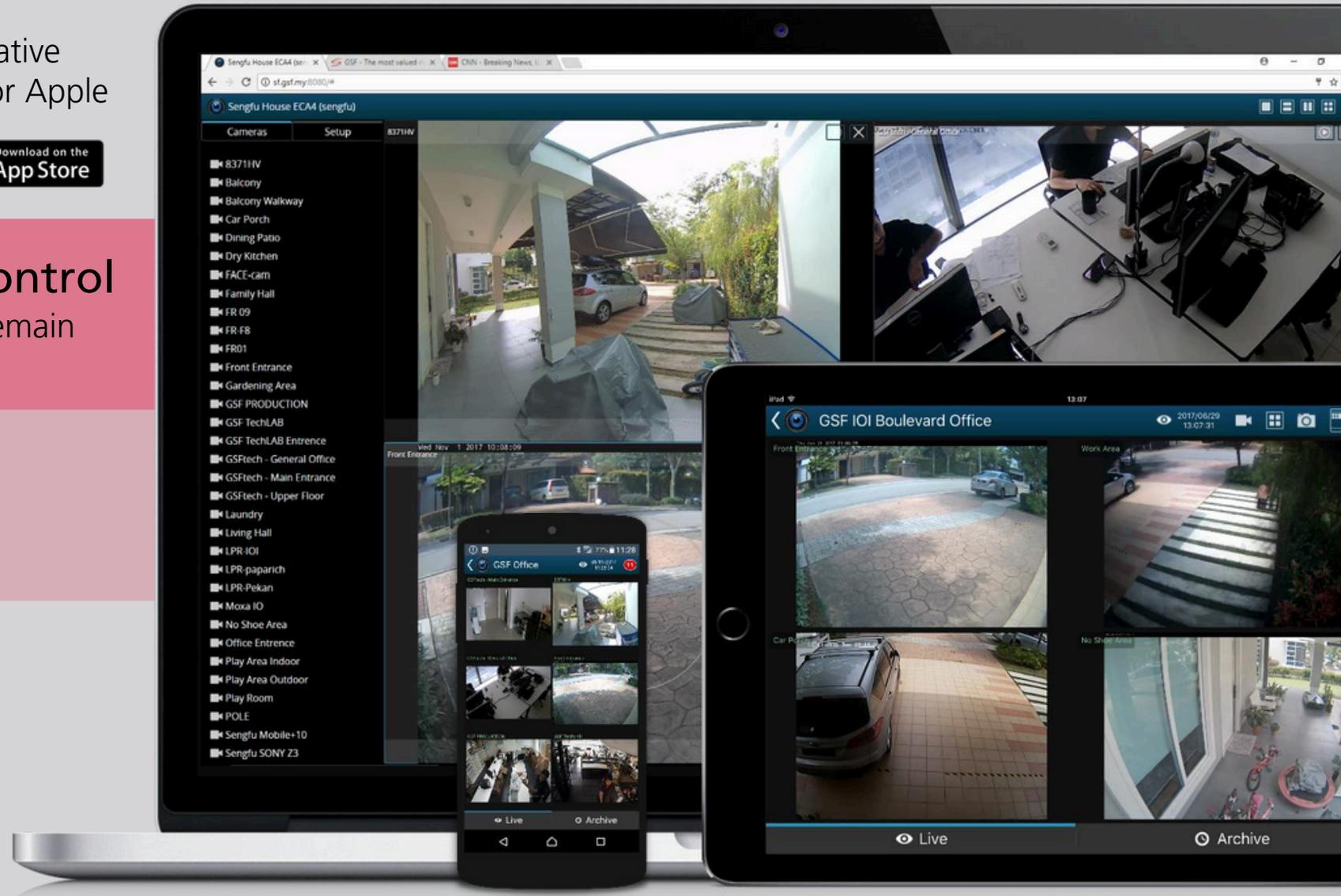
Gets notified from smart logic events, like main door open or control car porch lights.

## HTML 5 Web Client

Any modern web browser like Chrome. No plugins installation is required.

## Live Broadcast

Live Broadcast any cameras to RTMP protocol, like YouTube, Facebook.



# Servers

Enterprise IT friendly.

## Central Server

Centralized management server, keep all settings, users account, and licenses. Support Mirroring for Redundancy.

## Recording Server

Local or remotely deploy recording server. Assign license via Global Server and add local cameras remotely.

## Fall-Back Drive

In smaller scale design, where failed over server is not in place, the fall-back HDDS in individual server or NAS maybe the helper to take over the recordings when main storage is failed.

## Streaming Server

With multi-cast technology built-in, the server can support virtually no limitation of video stream out client connections, without increasing or CPU loads.

## Replication Server

Use as temporary local buffer server. Send archive to Data Center on network availability or by schedule, in lower FPS.

## Failover Server

Sometimes very unfortunate event happened. You may need the WHOLE-SERVER failed over as backup plan. Macula Enterprise support multi group failover servers to any recording servers, via networks.

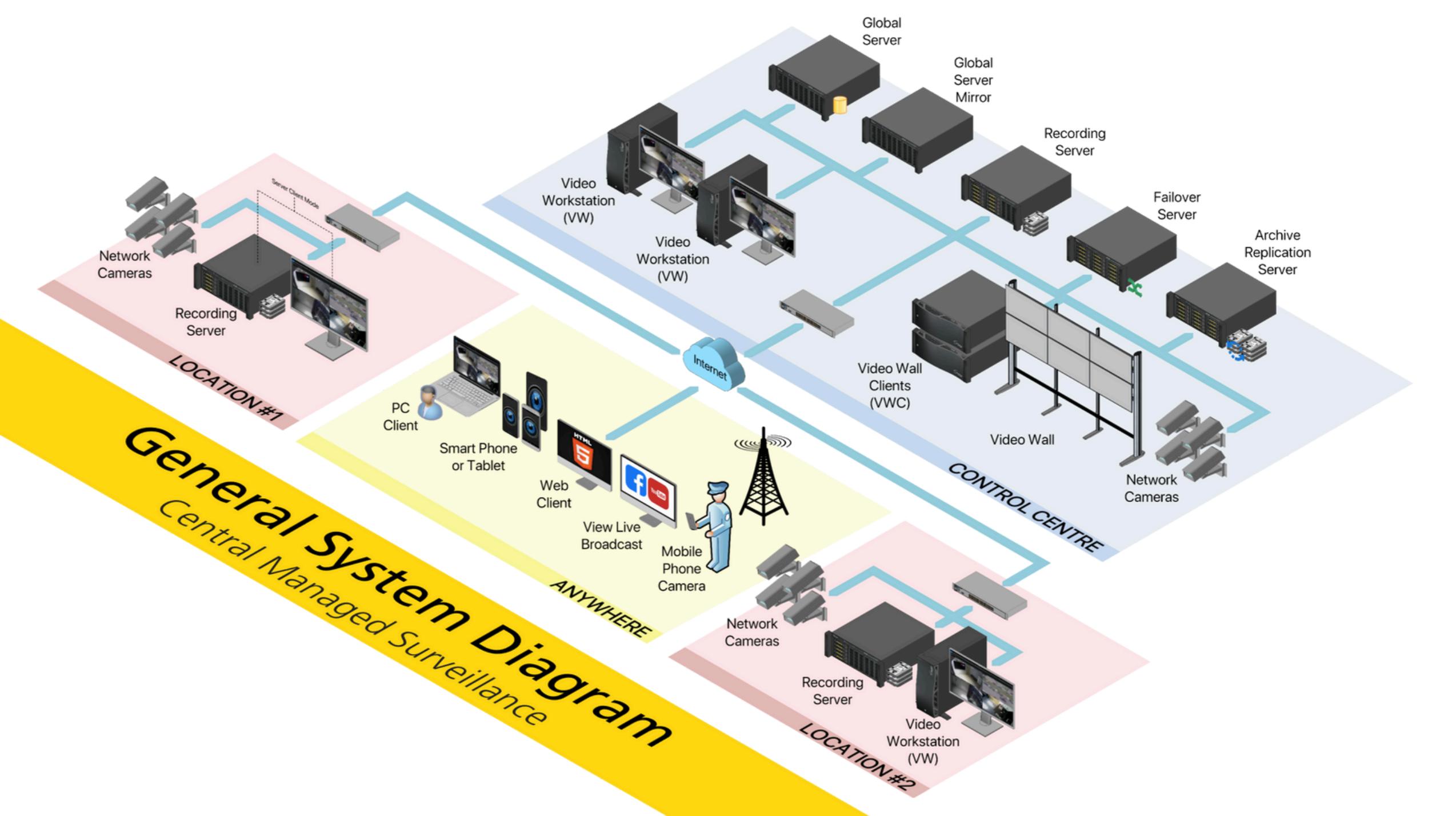


## Backups Wizard

Step by step wizard easily backup any video to external storage.

## Video Wall

Macula Enterprise support centralized managed and create comprehensive video wall environment in the control room via network.



# Macula features

updated version 1.31.0

# Control Panel – v1.31.0

- Real-time monitoring of system states, device statuses, and various metrics directly within the viewport.

The screenshot displays the Control Panel v1.31.0 interface. The top navigation bar includes 'Live', 'Playback', 'Sequence', 'Smart Search', 'Alerts', 'Library', 'Security Systems', 'Reports', 'FR', 'EVA-Hardhat', and a globe icon. The left sidebar shows 'Control Panels' with a search bar and a tree view under 'Local Server (admin@localhost:60554)' containing 'Control Panel TB-G'. The main content area, titled 'Control Panel TB-G', shows a list of metrics for 'Keong Laptop Server':

Metric	Value
Keong Laptop Server/#CpuLoad	33%
Keong Laptop Server/#MemoryLoad	49%
Keong Laptop Server/#NetworkLoad	0.59%
Keong Laptop Server/#OfflineChannels	4
streetview/#Online	Online
streetview/#VideoLostTime	
Digital Output 1 - Activate/#Button	
Digital Output 2 - Activate/#Button	

Control Panel

# Syslog Client – v1.31.0

- Forward all audit events to external syslog server

The image shows the Syslog Client configuration interface and the Visual Syslog Server application. The Syslog Client configuration is for a server named 'Server Keong Laptop Server' and is set to 'Syslog server' mode. The configuration includes the following details:

- Mode: Use custom settings
- Host: 192.168.1.113
- Port: 514
- Protocol: Udp
- Format: Rfc3164

The Visual Syslog Server 1.6.4 interface displays a table of received messages:

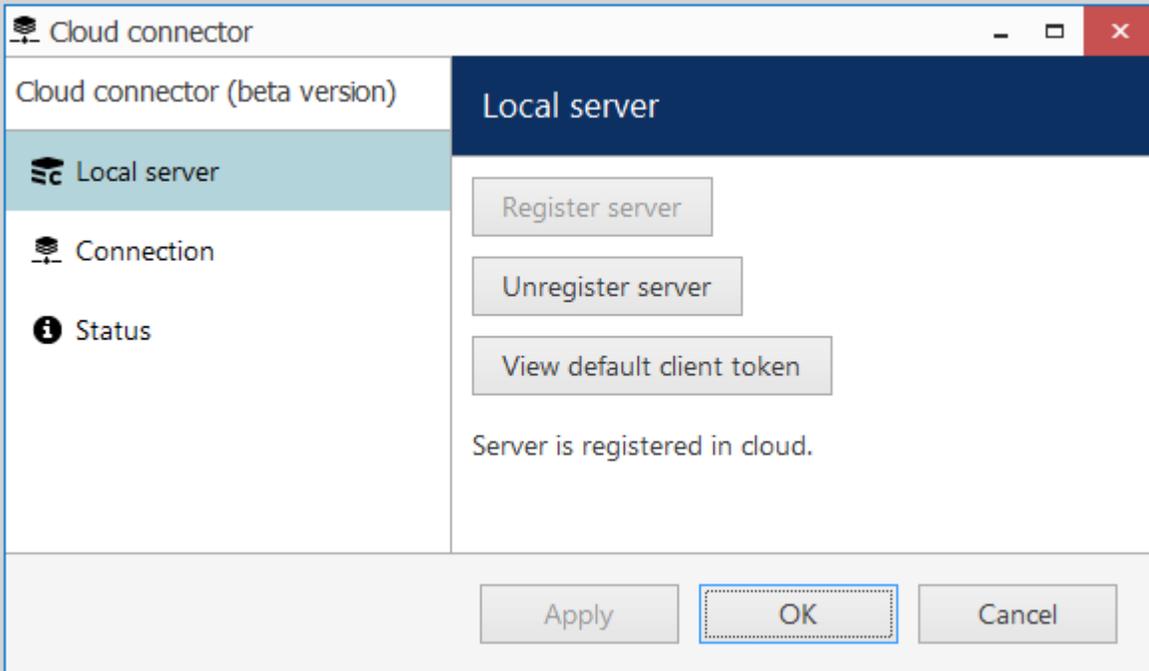
Time	IP	Host	Facility	Priority	Tag	Message
Jul 16 13:31:19	192.168.1.113		local0	info	VMSServer[7364]	Event: Configuration loaded, information: The operation completed successfully, additional information: [Data version]=611; [Old de
Jul 16 13:32:03	192.168.1.113		local1	info	127.0.0.1:10394 VMSServer[7364]	[User name: admin, user id: 1, remote address: 127.0.0.1:10394, connection type: Console, event: Storage directory updated, info
Jul 16 13:32:04	192.168.1.113		local0	info	VMSServer[7364]	Event: Configuration loaded, information: The operation completed successfully, additional information: [Data version]=612; [Old de

A 'Message content' dialog box is open, showing the details of the message received at Jul 16 13:32:03:

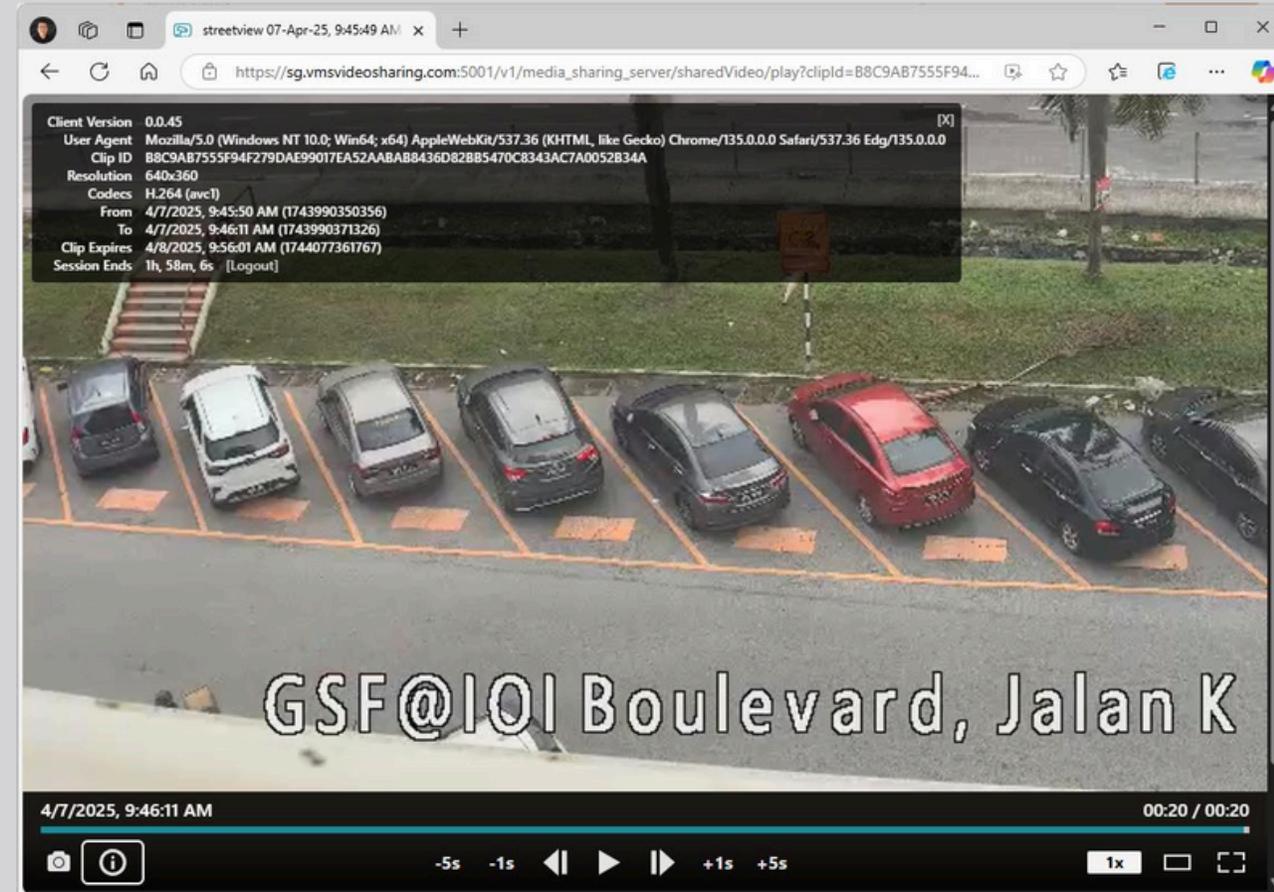
```
Time: Jul 16 13:32:03
IP: 192.168.1.113
Host:
Facility: local1
Priority: info
Tag: 127.0.0.1:10394 VMSServer[7364]
Message: User name: admin, user id: 1, remote address: 127.0.0.1:10394, connection type:
Console, event: Storage directory updated, information: The operation completed successfully,
additional information: [User Id]=1; [User name]=admin; [Server Id]=101; [Server title]=Keong
Laptop Server; [Storage Id]=CentralServer.ServerStorage(0); [Storage name]=Default; [Directory
Id]=101; [Directory path]=D:\Macula\Archive Files; [Updated fields]=Directory quota space: 40960
MB => 20480 MB; [Remote address]=127.0.0.1:10394; [Connection type]=Console; [Connection
id]=1
```

# Cloud connector & video sharing – v1.30.0

- Available in both Enterprise and Professional editions.

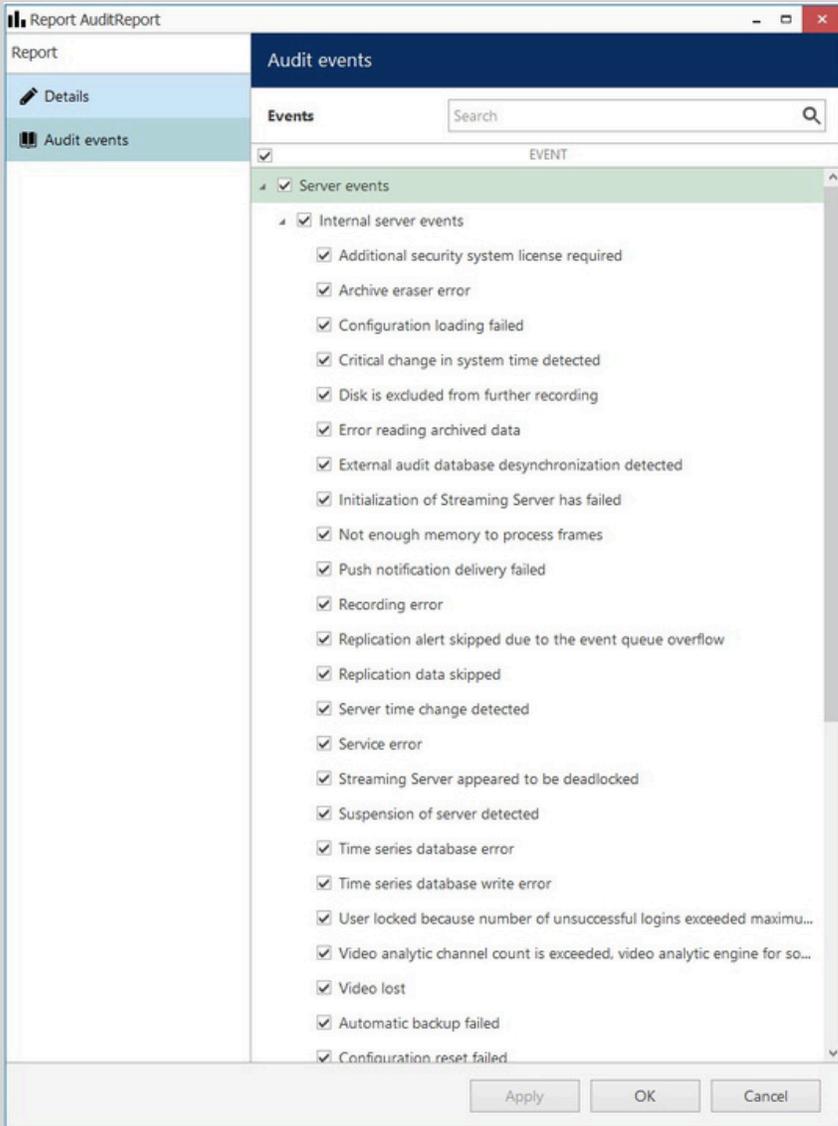


Cloud connector registration

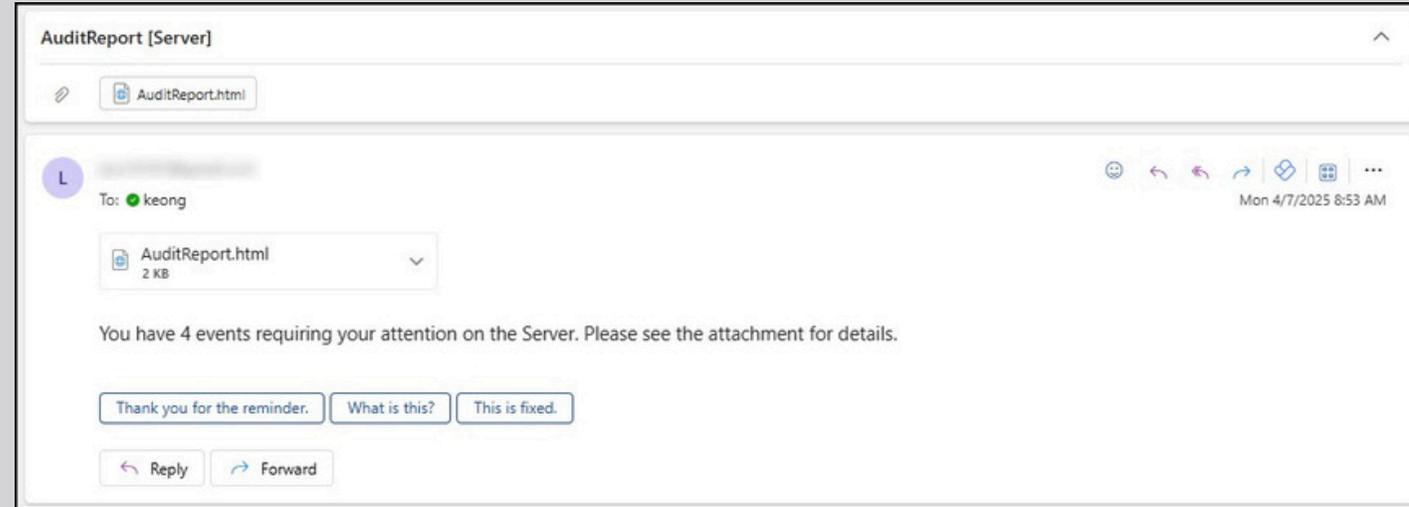


Video sharing

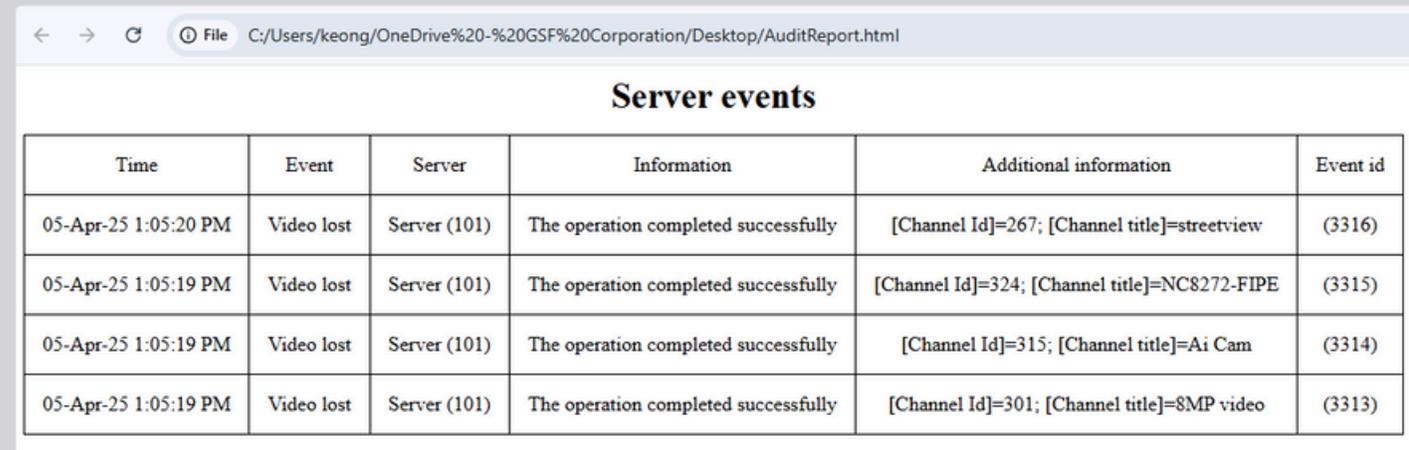
# Audit Report based on Critical events – v1.30.0



Audit Events



Audit Report as an email attachment.



Audit Report in html format

# Temporary permissions – v1.30.0

- Administrator can provide temporary access to a particular resource

Temporary permission Staff-only (509) - ALL CH (110) - from 07-Apr-25 12:00:00 AM to 08-Apr-25 12:00:00 AM\*

Temporary permission

Details\*

Permissions

**Details**

User or user group

Staff-only (509) Change...

The user or user group for which the permissions will be set

Resource

ALL CH (110) Change...

The specific resource for which the permissions will be set

Start time

07-Apr-25 12:00:00 AM

Specifies the date and time when the permissions will take effect for the specified resource and user

End time

08-Apr-25 12:00:00 AM

Specifies the date and time when the permissions will be revoked the specified resource and user

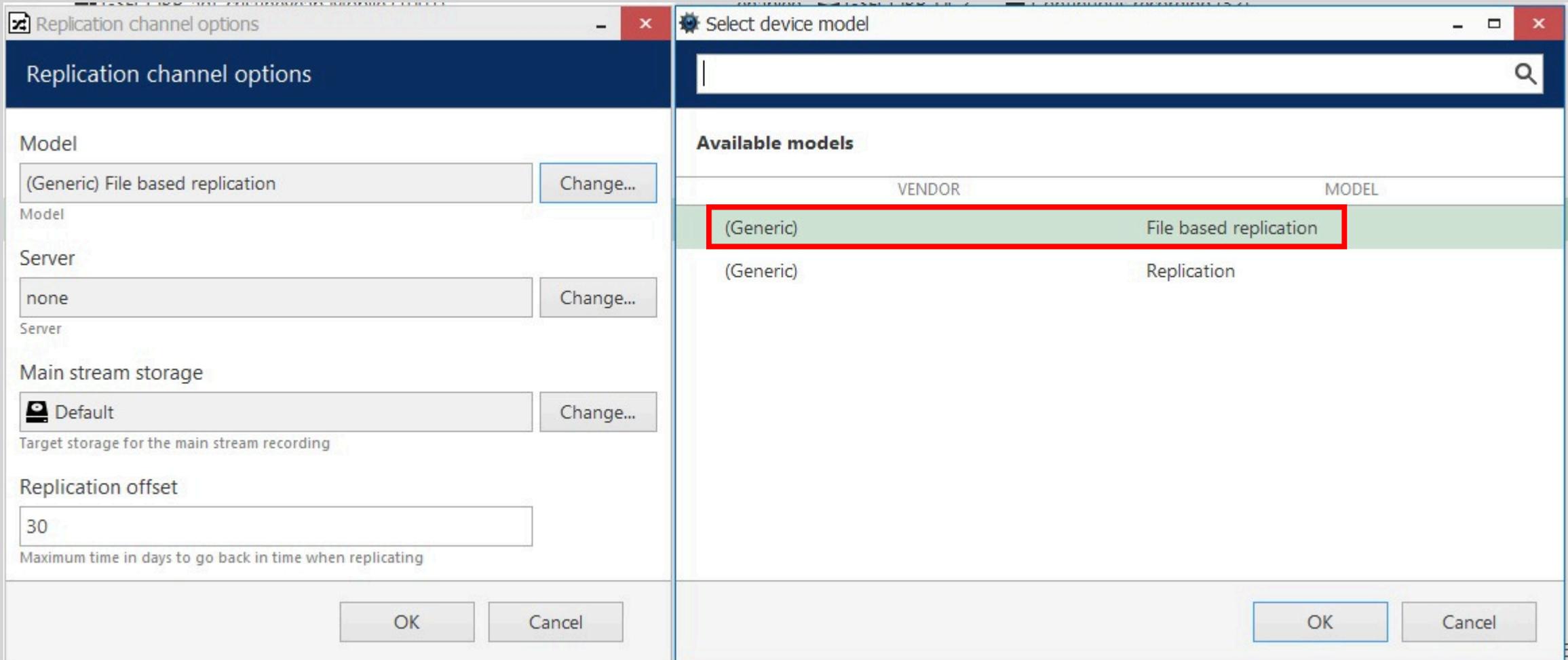
Auto-delete

If enabled, this temporary permission item will be automatically removed from the list after its completion

Apply OK Cancel

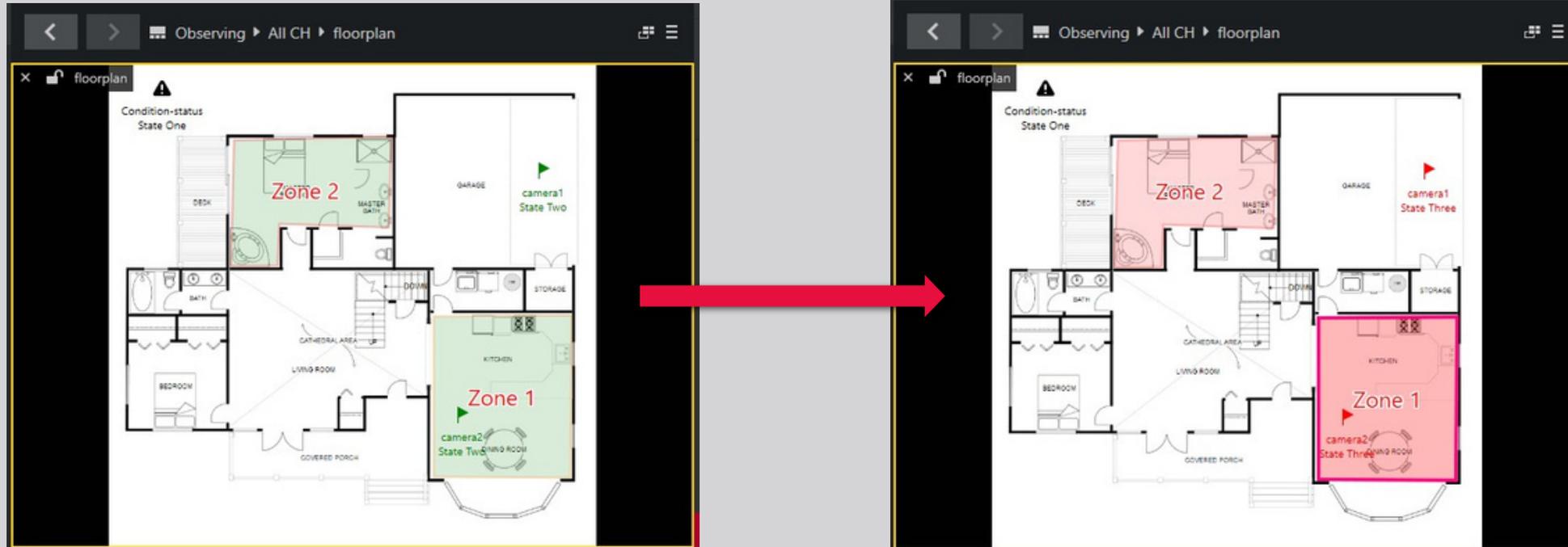
# Added file-by-file replication option – v1.29.0

- Data Integrity Handling: On startup, the replication process reviews the last MDAT file(s) for integrity. If issues are detected (e.g., due to an unexpected shutdown), it re-copies the previous portion to maintain data consistency.



# New map marker – v1.28.0

- 2D zones, with an option to bind them to user buttons and indicators



# Edge LPR Devices – v1.28.0

- Macula supports Vaxtor LPR on Mobotix MOVE, Vivotek, and Hanwha devices.

The screenshot shows the Macula Monitor interface with a video wall of four camera feeds. Each feed shows a car with a green LPR overlay. The top-left feed shows a blue car with plate WNU 6505. The top-right feed shows a grey car with plate WUF 6265. The bottom-left feed shows a black car with plate PJK 931. The bottom-right feed shows a silver car with plate WAM 434H. The search results table on the right lists the following data:

TIME	CHANNEL	Plate	Attributes
27-Aug-24 8:54:21 A...	TechLab-LPR	WNU6505	MYS.Towards.Proton,Saga,Green
27-Aug-24 8:54:18 A...	TechLab-LPR	WUF6265	MYS.Towards.Proton,Saga,Grey
27-Aug-24 8:54:14 A...	TechLab-LPR	PJK931	MYS.Towards.Honda,City,Grey
27-Aug-24 8:54:12 A...	TechLab-LPR	WA1434H	MYS.Towards.Lexus,RX,Grey
27-Aug-24 8:54:05 A...	TechLab-LPR	WKC9809	MYS.Towards.Proton,Black,Blacklist
27-Aug-24 8:53:56 A...	TechLab-LPR	BMT4614	MYS.Towards.Toyota,Hiace,White
27-Aug-24 8:53:27 A...	TechLab-LPR	WVC8979	MYS.Towards.Honda,Civic,White
27-Aug-24 8:53:20 A...	TechLab-LPR	WNF3188	MYS.Towards.Toyota,Hilux,Black
27-Aug-24 8:53:16 A...	TechLab-LPR	WPS7542	MYS.Towards.Perodua,MyVi,Red,Whitelist
27-Aug-24 8:53:13 A...	TechLab-LPR	WVY83840	MYS.Towards.Subaru,XV,Blue
27-Aug-24 8:53:09 A...	TechLab-LPR	WYX8901	MYS.Towards.Honda,City,White
27-Aug-24 8:53:01 A...	TechLab-LPR	WVW3336	MYS.Towards.BMW,Serie 3,Black
27-Aug-24 8:52:53 A...	TechLab-LPR	WPQ5656	MYS.Towards.Perodua,MyVi,Green
27-Aug-24 8:52:50 A...	TechLab-LPR	WXB6619	MYS.Towards.Mazda,Mazda 3,Grey
27-Aug-24 8:52:47 A...	TechLab-LPR	WXH2663	MYS.Towards.Honda,City,Grey

# Resource tree icons – v1.28.0

- option to define resource tree icons for Visual Groups, Crosslinks, Channels, and User Buttons

The image displays two overlapping screenshots from the Macula Monitor software interface. The left screenshot shows the 'Channel streetview' configuration window, specifically the 'Details' tab. The 'Icon' field is set to a document icon, and a red arrow points from this field to the right screenshot. The right screenshot shows the main Macula Monitor interface with a dark theme. The 'Channels' panel on the left lists various resources, including 'streetview' which is highlighted and has a document icon next to it. The main video view on the right shows a street scene with a red 'Alarm 注意' overlay.

Channel streetview

Channel

Details

Title

streetview

Channel title

Icon

Change...

Channel icon to be used in Macula Monitor

Main stream recording configuration

Continuous recording (32) Change...

Recording configuration assigned to the main video stream (includes supplementary streams by default)

Main stream storage

Default Change...

Target storage for the main stream recording

Substream recording configuration

No recording (31) Change...

Recording configuration assigned to the secondary video stream

Related items

Apply OK Cancel

Live Playback Sequence Smart Search Alerts Library Access Control

Channels

Search

GSFinternaldemo (lv3 password...)

Local Server (admin@127.0.0.1:60554)

floorplan

POS Camera

VGroup1

streetview

Youtube.com

MSST LAN (keong@192.168.1.4:605...)

MSST rec svr (keong@demo.macu.l...)

Server (robot@202.190.247.34:60554)

testbed-C (admin@10.0.0.33:60554)

VM (admin@192.168.1.212:60554)

Observing All CH

streetview

Alarm 注意

# H.265 streaming in Chrome (Web Client) – v1.28.0

- Live & Playback

The screenshot displays the Macula Management Console interface for monitoring channels. The main table lists the following channels:

TITLE	ID	STATUS	SERVER	DEVICE	STATUS UPDATE TIME	KBIT/S	FPS	RESOLUTION	CODEC	SUBSTREAM KBIT/S	SUBSTREAM FPS	SUBSTREAM RESOLUTION	SUBSTREAM CODEC	ONLINE
rtsp-camera	(270)	Disabled	Keong Laptop Server (101)											
streetview	(267)	Normal	Keong Laptop Server (101)	streetview (202)	26-Jul-24 9:27:05 AM	1306	19.0	1920x1080	H.265	274	20.0	640x360	H.264	99.76% A

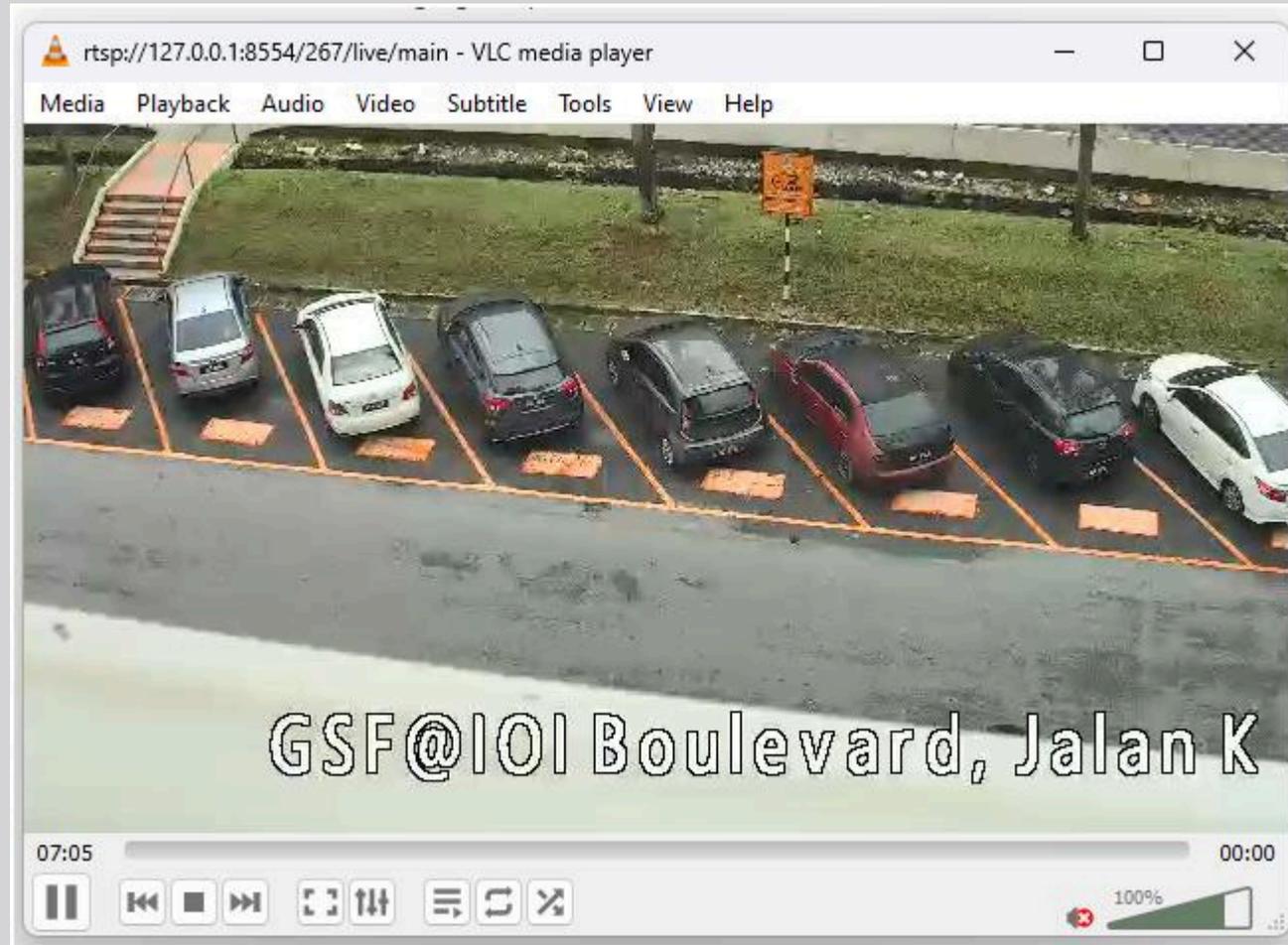
The interface also features a sidebar with navigation options: Servers, Devices, Channels (1 selected), Streams, Archive statistics, Storages, User sessions, Video walls, Data sources (1), External services (1), Reports, Access control, Configuration, Events & Actions, Monitoring, and Audit.

Two browser windows are shown, both displaying the 'Keong Laptop Server (admin)' interface. The left window shows a live view of the 'streetview' camera feed, displaying a parking lot with several cars. The right window shows a playback view of the same feed, with a timeline at the bottom indicating the current position in the recording.

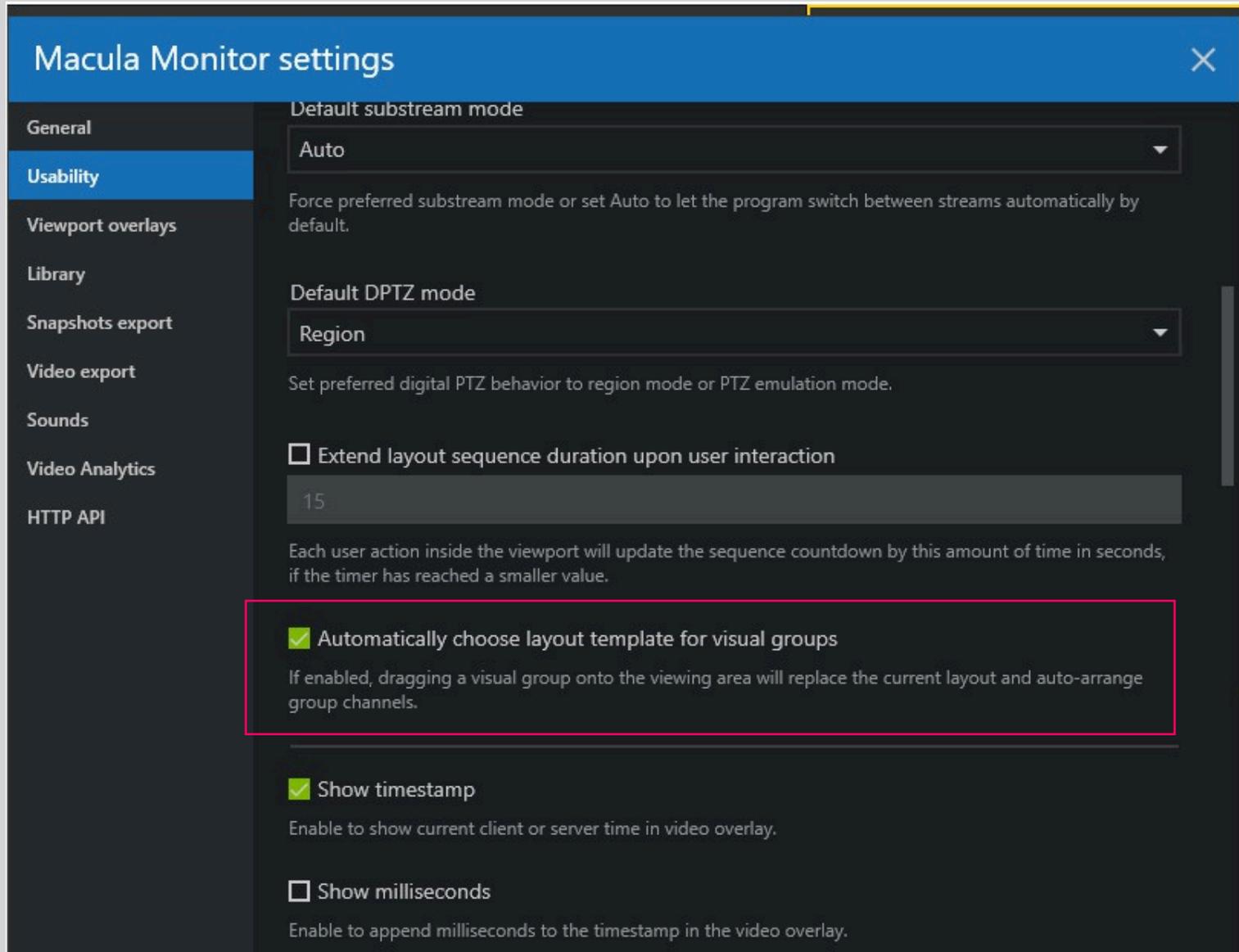
# Stream RTSP video from Macula Server – v1.27.0

- Link template:

`rtsp://user:password@Server_IP:RTSP_port/channel_ID/live/stream_type (main or substream)`



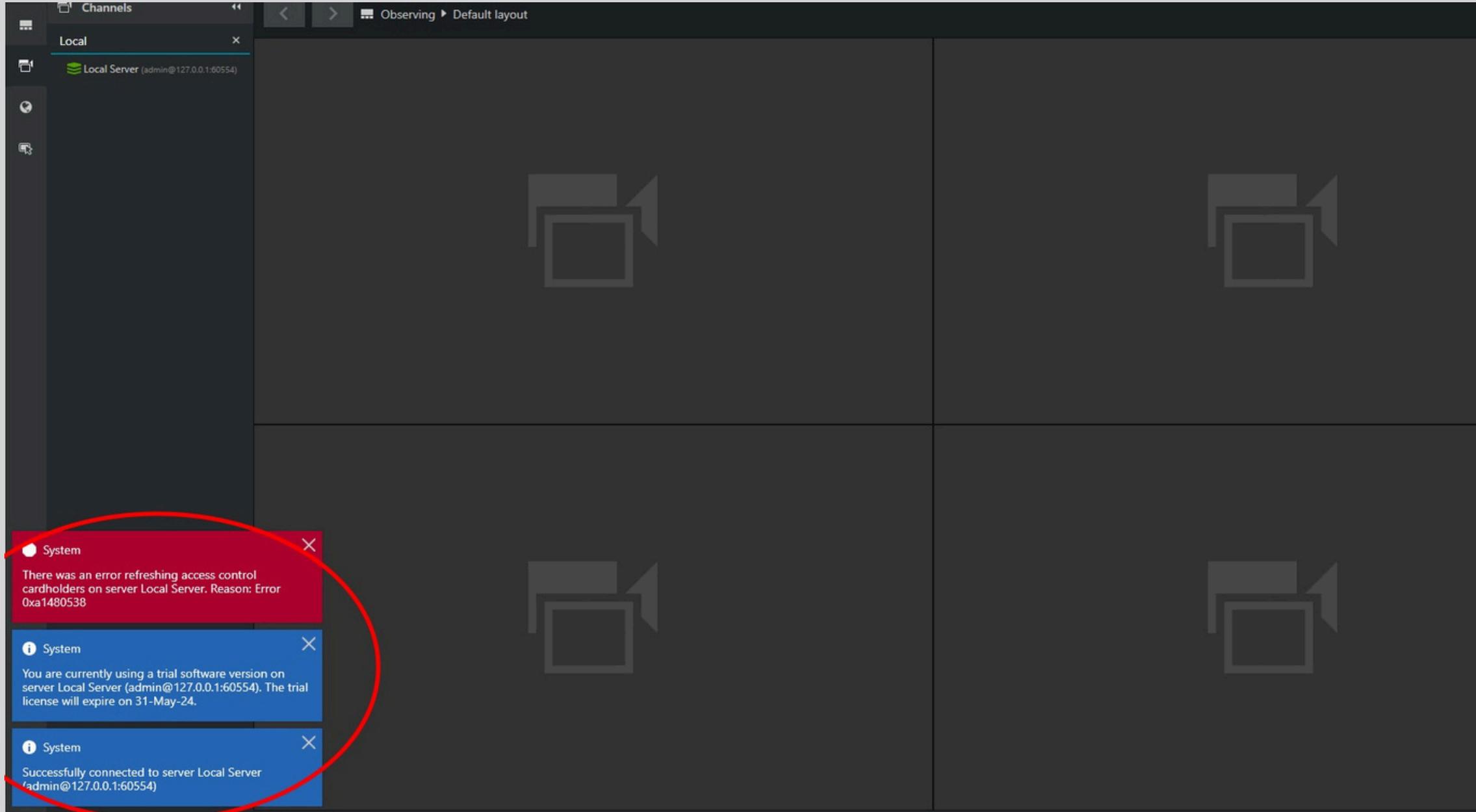
# Select layouts for visual groups automatically – v1.27.0



The image shows a settings dialog box titled "Macula Monitor settings" with a close button (X) in the top right corner. The "Usability" tab is selected in the left sidebar. The main content area contains several settings:

- Default substream mode:** A dropdown menu set to "Auto". Below it is a description: "Force preferred substream mode or set Auto to let the program switch between streams automatically by default."
- Default DPTZ mode:** A dropdown menu set to "Region". Below it is a description: "Set preferred digital PTZ behavior to region mode or PTZ emulation mode."
- Extend layout sequence duration upon user interaction:** An unchecked checkbox. Below it is a slider set to "15". Below the slider is a description: "Each user action inside the viewport will update the sequence countdown by this amount of time in seconds, if the timer has reached a smaller value."
- Automatically choose layout template for visual groups:** A checked checkbox. Below it is a description: "If enabled, dragging a visual group onto the viewing area will replace the current layout and auto-arrange group channels."
- Show timestamp:** A checked checkbox. Below it is a description: "Enable to show current client or server time in video overlay."
- Show milliseconds:** An unchecked checkbox. Below it is a description: "Enable to append milliseconds to the timestamp in the video overlay."

# Snackbar style notifications – v1.27.0



# Users and user groups time-based access– v1.26.0

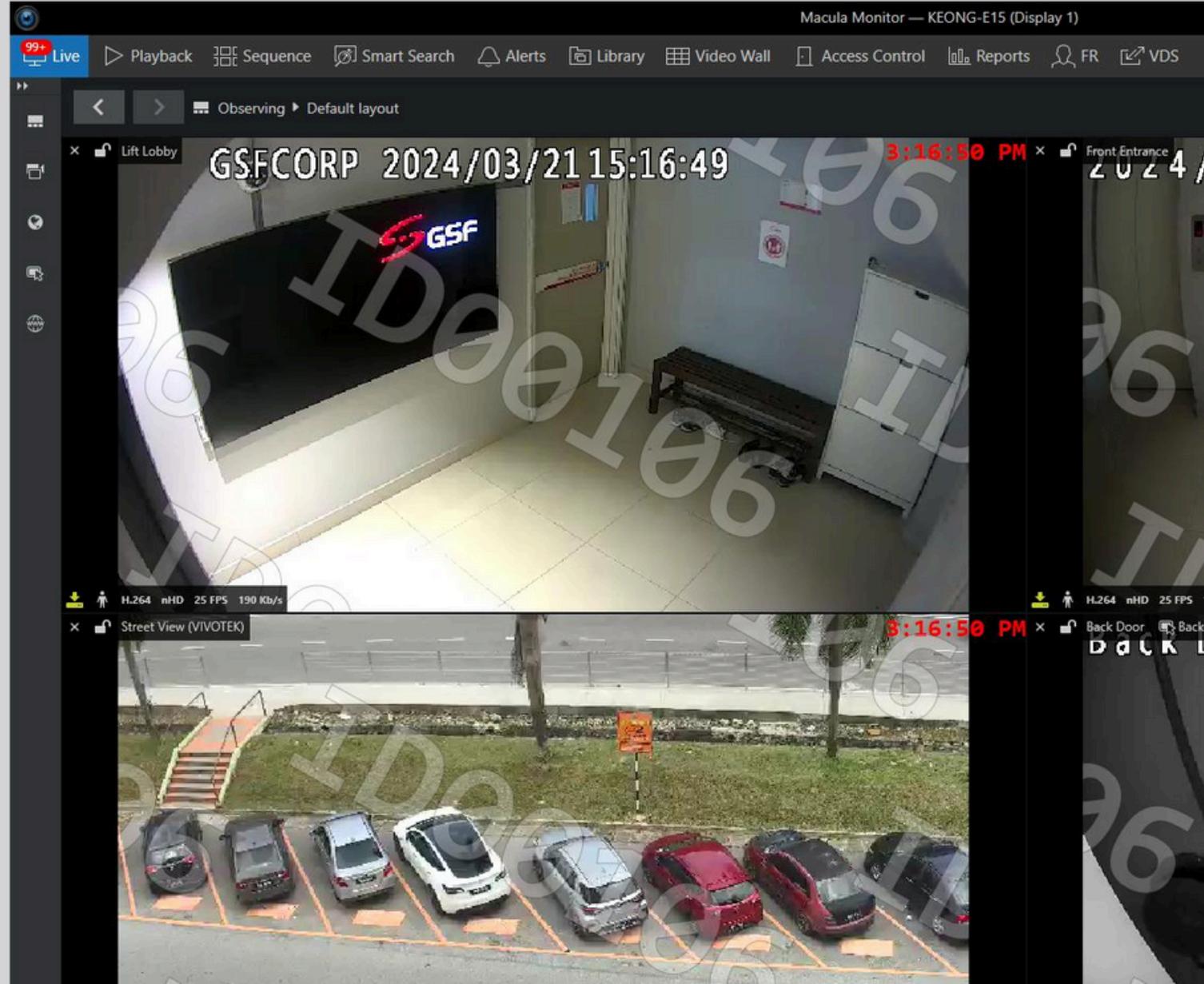
- Assign schedules to users and user groups
- can limit user access options based on the schedules

The screenshot shows a user profile page for 'User user'. The left sidebar contains navigation options: 'User', 'Details', 'Membership', 'Resources', 'Administration profile', and 'Time-based access' (which is selected). The main content area is titled 'Time-based access' and shows the current schedule as 'Working hours (826)' with a 'Change...' button. Below this is a 'Select schedule' dropdown menu and a table of 'Available schedules'.

Title	Id	Type
none		
24x7	(118)	Schedule
Events Schedules	(117)	Schedule
Perimeter Camera Night Time - Motion ...	(479)	Schedule
Working hours	(826)	Schedule

# Option to watermark the video in Monitor – v1.26.0

- Add watermark with the logged-in monitor User's ID over the all Live View and Playback viewports displaying video streams.



# Case Export in Monitor – v1.25.0

- Asynchronous video export of multiple channels with custom time ranges
- Create a "story" video from all the available channels, with different intervals.

The screenshot displays the 'Case Export' interface. At the top, there are navigation buttons: Bookmarks, VCA, Archive Calendar, Case Export (highlighted), and Databases. The main video player shows two channels: 'Front Entrance' (06-Sep-23 9:51:30 AM) and 'Transmittal Area' (06-Sep-23 9:51:30 AM). The 'Transmittal Area' channel is highlighted with a yellow border. The right sidebar contains a form for 'Case title' (Collect Parcel), 'Case description', and a list of video segments. The bottom of the interface features a timeline with red bars and a playback control bar.

Case title: Collect Parcel

Briefly describe the case.

Case description

Provide detailed information about the case.

Add entry Show all

- Transmittal Area ▶ Primary  
06-Sep-23 9:51:19 AM - 06-Sep-23 9:51:21 AM
- Front Entrance ▶ Primary  
06-Sep-23 9:51:21 AM - 06-Sep-23 9:51:25 AM
- Lift Lobby ▶ Primary  
06-Sep-23 9:51:31 AM - 06-Sep-23 9:51:37 AM
- Front Entrance ▶ Primary  
06-Sep-23 9:51:35 AM - 06-Sep-23 9:51:39 AM
- Transmittal Area ▶ Primary  
06-Sep-23 9:51:39 AM - 06-Sep-23 9:51:44 AM

Export video Apply Save Cancel

9:50 AM 06-Sep-23 9:51:31 AM 9:55 AM

-24H -1H -10M -1M -10S || +10S +1M +10M +1H +24H | - || +

06-Sep-23 9:58:49 AM

# Detailed audit event log for archive access – v1.25.0

- Trackuser activity in the archive playback mode of MaculaMonitor
- Playback, Export video, & Snapshots with Start and End time

Event details	
Id	(3717183)
Time	06-Sep-23 4:03:46 PM
Class	User
Subclass	User activity
Event	Archived data accessed
Server	Macula Server (101)
User Id	admin (1)
User name	admin
Channel Id	StreetView (141)
Channel title	StreetView
Stream type	Video stream
Time from	25-Jul-23 3:13:37 PM
Time to	25-Jul-23 3:13:38 PM
Remote address	127.0.0.1:14123
Connection type	Client
Connection id	9

Playback

Event details	
Id	(3717187)
Time	06-Sep-23 4:04:50 PM
Class	User
Subclass	User activity
Event	Archived data exported
Server	Macula Server (101)
User Id	admin (1)
User name	admin
Channel Id	StreetView (141)
Channel title	StreetView
Stream type	Video stream
Time from	24-Jul-23 3:32:31 PM
Time to	24-Jul-23 3:32:46 PM
Remote address	127.0.0.1:14123
Connection type	Client
Connection id	9

Export Video

Event details	
Id	(3717192)
Time	06-Sep-23 4:05:47 PM
Class	User
Subclass	User activity
Event	Archive snapshot exported
Server	Macula Server (101)
User Id	admin (1)
User name	admin
Channel Id	StreetView (141)
Channel title	StreetView
Time from	25-Jul-23 8:57:54 AM
Time to	25-Jul-23 8:57:54 AM
Remote address	127.0.0.1:14123
Connection type	Client
Connection id	9

Snapshot

# Cybersecurity report – v1.24.0

- Four pre-defined security levels range from the lowest to the highest. You can choose any level as a basis and, either leave it as it is, or turn off individual security checks

The image displays three screenshots of the Windows Cybersecurity settings application, illustrating the configuration of security levels and individual checks.

**Screenshot 1 (Left):** Shows the 'Security level - High' slider set to 'High'. Below it, a table lists security checks and their recommended settings:

CHECK	RECOMMENDED SETTING
<input checked="" type="checkbox"/> Automated backup configuration	
<input checked="" type="checkbox"/> Mode	enabled
<input checked="" type="checkbox"/> Interval	1 day
<input checked="" type="checkbox"/> Maximum files to keep	30 or greater
<input checked="" type="checkbox"/> Directory	Doesn't match configuration drive
<input checked="" type="checkbox"/> DBs	All
<input checked="" type="checkbox"/> Server	
<input checked="" type="checkbox"/> Connections	
<input checked="" type="checkbox"/> Client-Server connection encryption	enabled
<input checked="" type="checkbox"/> HTTPS	enabled
<input checked="" type="checkbox"/> Storage	
<input checked="" type="checkbox"/> Encryption	enabled
<input checked="" type="checkbox"/> Encryption password	Apply check for password complexity

**Screenshot 2 (Middle):** Shows the 'Security level - High' slider set to 'High'. Below it, a table lists security checks and their recommended settings:

CHECK	RECOMMENDED SETTING
<input checked="" type="checkbox"/> Security policy	
<input checked="" type="checkbox"/> Minimum password length	12 or greater
<input checked="" type="checkbox"/> Minimum special symbols	1 or greater
<input checked="" type="checkbox"/> Minimum digits	2 or greater
<input checked="" type="checkbox"/> Minimum uppercase letters	2 or greater
<input checked="" type="checkbox"/> Minimum lowercase letters	2 or greater
<input checked="" type="checkbox"/> Number of passwords to remember	3 or greater
<input checked="" type="checkbox"/> Max number of days between password change	30 or less
<input checked="" type="checkbox"/> Max number of simultaneous connections	1
<input checked="" type="checkbox"/> Max unsuccessful login attempts	3 or less
<input checked="" type="checkbox"/> Disconnect disabled users	enabled
<input checked="" type="checkbox"/> Disconnect upon user password change	enabled
<input checked="" type="checkbox"/> Disconnect if the password expires	enabled

**Screenshot 3 (Right):** Shows the 'Security level - High' slider set to 'High'. In the top right corner, there is a shield icon and the text 'Active issues: 31'. Below the slider, a table lists security checks and their recommended settings, with a column for 'ISSUES' showing the number of active issues for each check:

CHECK	RECOMMENDED SETTING	ISSUES
<input checked="" type="checkbox"/> Disconnect if the auth token is reset	enabled	1
<input checked="" type="checkbox"/> Two-factor authentication		
<input checked="" type="checkbox"/> Enable two-factor authentication	enabled	1
<input checked="" type="checkbox"/> Audit policy		
<input checked="" type="checkbox"/> Server security	all enabled	
<input checked="" type="checkbox"/> User		
<input checked="" type="checkbox"/> Details		
<input checked="" type="checkbox"/> Password	Apply check for password complexity	
<input checked="" type="checkbox"/> Password never expires	disabled	11
<input checked="" type="checkbox"/> Never lock account on bad password	disabled	2
<input checked="" type="checkbox"/> Device		
<input checked="" type="checkbox"/> Network		
<input checked="" type="checkbox"/> Password	Apply check for password complexity	

# Cybersecurity report – v1.24.0

- security shield indicates that the setting value does not meet the current cybersecurity level preference

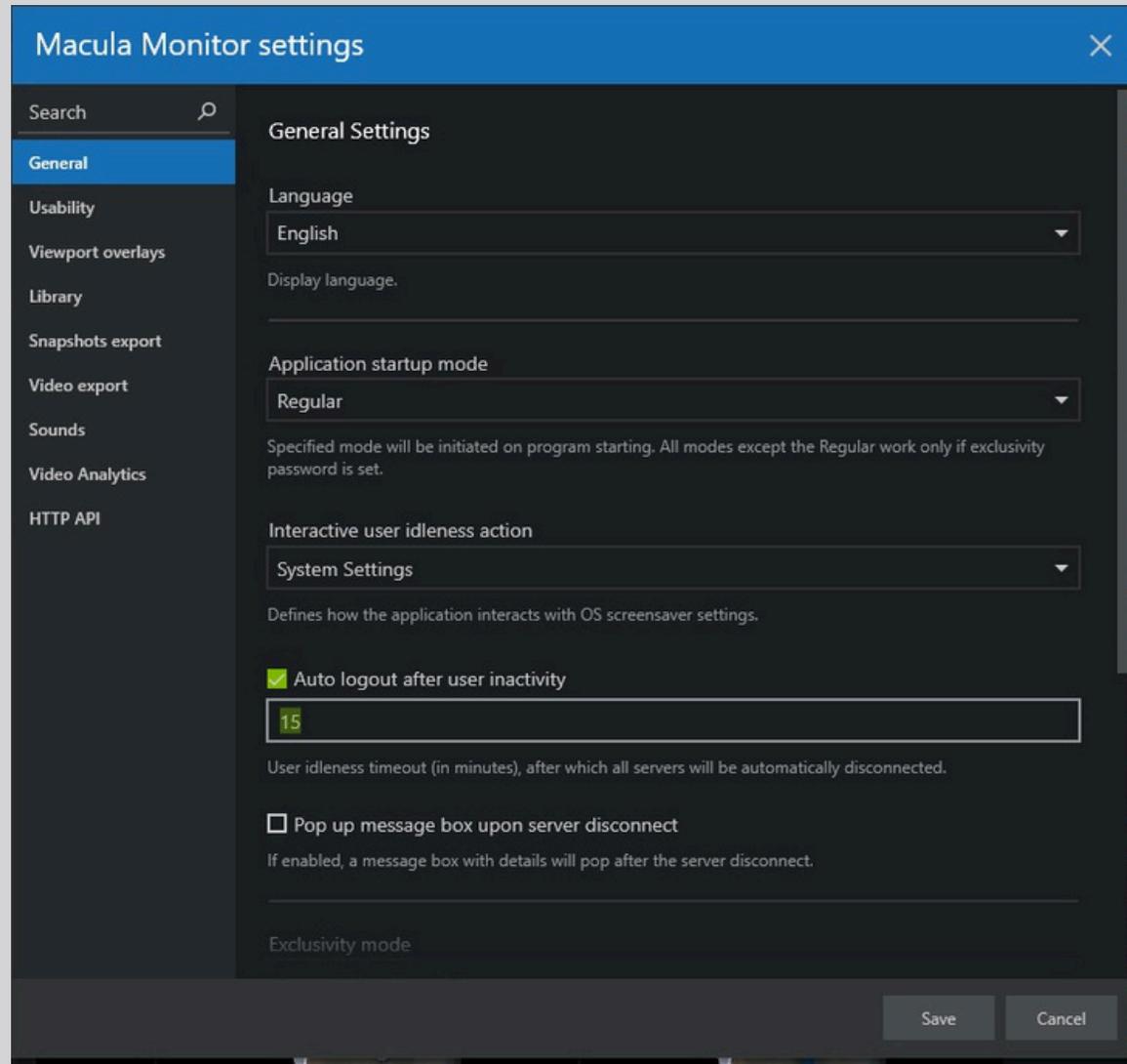
The screenshot shows a window titled "Server Server\*" with a "Security policy" tab. The left sidebar lists various server settings, with "Security policy\*" selected and marked with a red shield icon. The main area displays the following settings:

Setting	Value	Status
Minimum password length	12	OK
Minimum number of special symbols in password	1	OK
Minimum number of digits in password	0	Warning (Red shield)
Minimum number of uppercase letters	2	OK
Minimum number of lowercase letters	2	OK
Number of previous passwords to remember	1	Warning (Red shield)
Maximum number of days between password change	0	Warning (Red shield)
Maximum number of simultaneous connections with the same login name	0	Warning (Red shield)
Maximum unsuccessful login attempts	0	Warning (Red shield)

At the bottom of the window, there are three buttons: "Apply", "OK", and "Cancel".

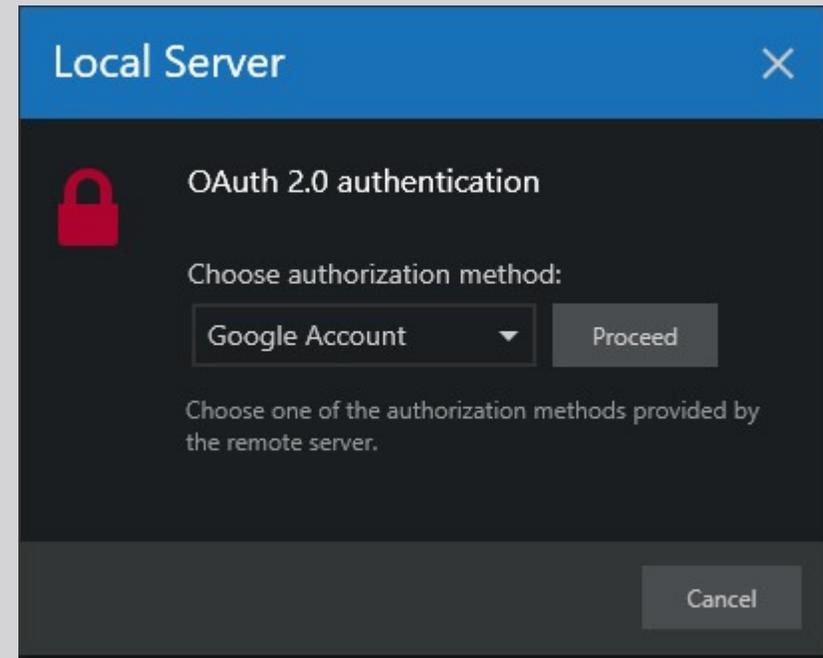
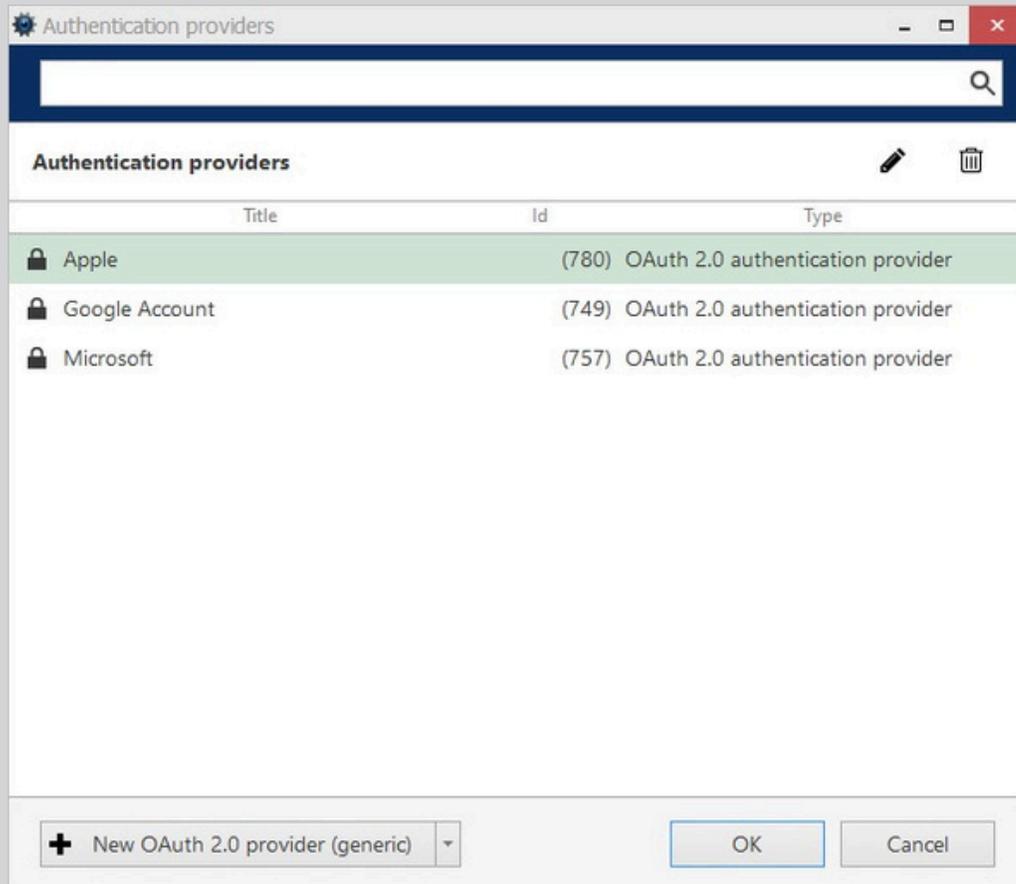
# Monitor Auto Logout – v1.7.0

- Monitor auto logout setting in Monitor application after user inactivity



# User authentication via OAuth 2.0 – v1.24.0

- OAuth2.0 authentication provider–Apple,GoogleAccount,Microsoft,Okta
- For Macula Monitor and Macula Console applications



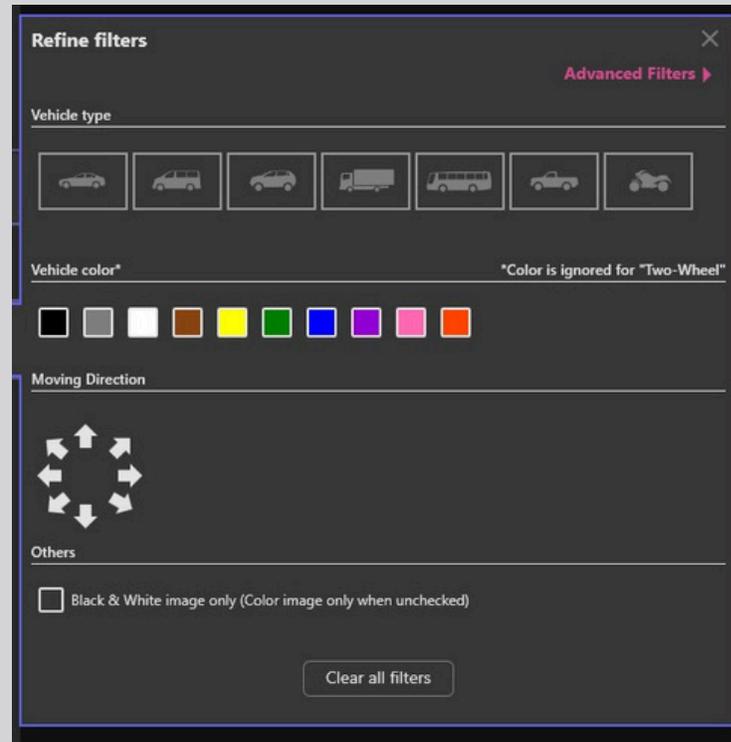
# i-PRO Active Guard integration – v1.24.0

- People Detection

- Gender– Age - Hair length - Hair color - Sunglasses - Beard - Mask - Tops type - Topscolor - Bottom type - Bottom color - Bag - Bags color - Shoes

- Vehicle Detection

- Type(Truck/Bus/SUV/Van/Sedan/Pickup/Two wheels) - Color



# i-PRO Active Guard integration – v1.24.0

The screenshot displays the i-PRO Active Guard software interface. The top navigation bar includes options like Live, Playback, Sequence, Smart Search, Alerts, Library, Video Wall, Access Control, Reports, VA Investigation, FR, and VDS. The main area shows a grid of video thumbnails from 'Street View 2' cameras, with timestamps ranging from 10:06:45 AM to 10:12:14 AM. A detailed information panel is open for a detected vehicle, showing the following data:

Information	
14-Sep-23 10:09:26 AM	
Street View 2	
Detected info	
Type	Sedan: 79%
Color	White: 62%, Gray: 36%
Day Night	Color
Direction	Middle Left
Recommended size	Yes
Detect size	570x290

At the bottom, there is a 'Load More' button and a status indicator showing '100 of 985 results'.

# Built-in MQTT client – v1.22.0

- Host MQTT clients
- subscribe MQTT topics
- publish MQTT messages.

MQTT client hivemq.cloud

MQTT client

**Details**

macularemote  
Client name

Username  
keong  
Username

New password  
Password will not be changed

Protocol version  
3.1.1  
Protocol version

Clean session  
Clean session

Keep alive interval  
30  
Keep alive interval in seconds

SSL/TLS version  
TLS 1.2  
SSL version

Certificate

Enable last will and testament  
The Last Will and Testament is used to notify other clients about an ungracefully disconnected client.

Apply OK Cancel

# Alarm Pane – v1.19.0

- Display alarm events
  - Severity
  - color &
  - comments
- Tabs with different filters

The screenshot displays the Alarm Pane interface, which is divided into several sections:

- Top Navigation:** Includes tabs for 'Perimeter' (20 events), 'FR' (99+ events), and 'All Events' (99+ events). A search bar and a filter icon are also present.
- Event List:** A vertical list of alarm events. The selected event is highlighted in blue: '14-Sep-23 8:49:44 AM | Transmittal Area | NEW Glass Door Opened updated 2 hour(s) ago'. Other events include 'Open Shutter', 'Close Shutter', and 'Tech Lab Entrance Human Sensor Triggered'.
- Event Detail Panel (Red):** A pop-up window showing details for the selected event:
  - Alarm:** Glass Door Opened
  - Severity:** Critical
  - Status:** NEW
  - Description:** EVENT TITLE: Global event; EVENT SOURCE TITLE: Glass Door Open
  - Event Date/Time:** 14-Sep-23 08:49:44
  - Comment:** A text input field with an 'Add comment' button.
- Video Feed:** A live video stream showing a person in a dark uniform standing near a glass door. The video player includes a timeline at the bottom with a yellow marker at 8:49:45 AM.
- Bottom Right:** An 'Export...' button.

# Export Snapshot as PDF Report– v1.18.0

**Snapshots export** [Close]

Snapshot file name  
\$(Year)-\$(Month)-\$(Day) \$(Hour)-\$(Minute)-\$(Second)-\$(Millisecond) \$(StreamTitle) [Right Arrow]

Filename template for the exported snapshots.

JPEG quality  
60 [Slider]

Allows to select an appropriate trade-off between file size and image quality.

Include external data  
When selected, external textual data will be embedded into the snapshot.

Include analytics metadata  
If selected, all displayed video analytics elements will be embedded into the snapshot.

Subtitles  
Enabled [Dropdown] [Properties...]

Generate PDF report  
If selected, the target snapshot will be exported as a PDF report with relevant comments.

Always use snapshot export settings  
When selected snapshots will use settings above without prompt.

[Export] [Cancel]

**Macula Surveillance Report**

2023-09-14 09-18-35-326 Front Entrance

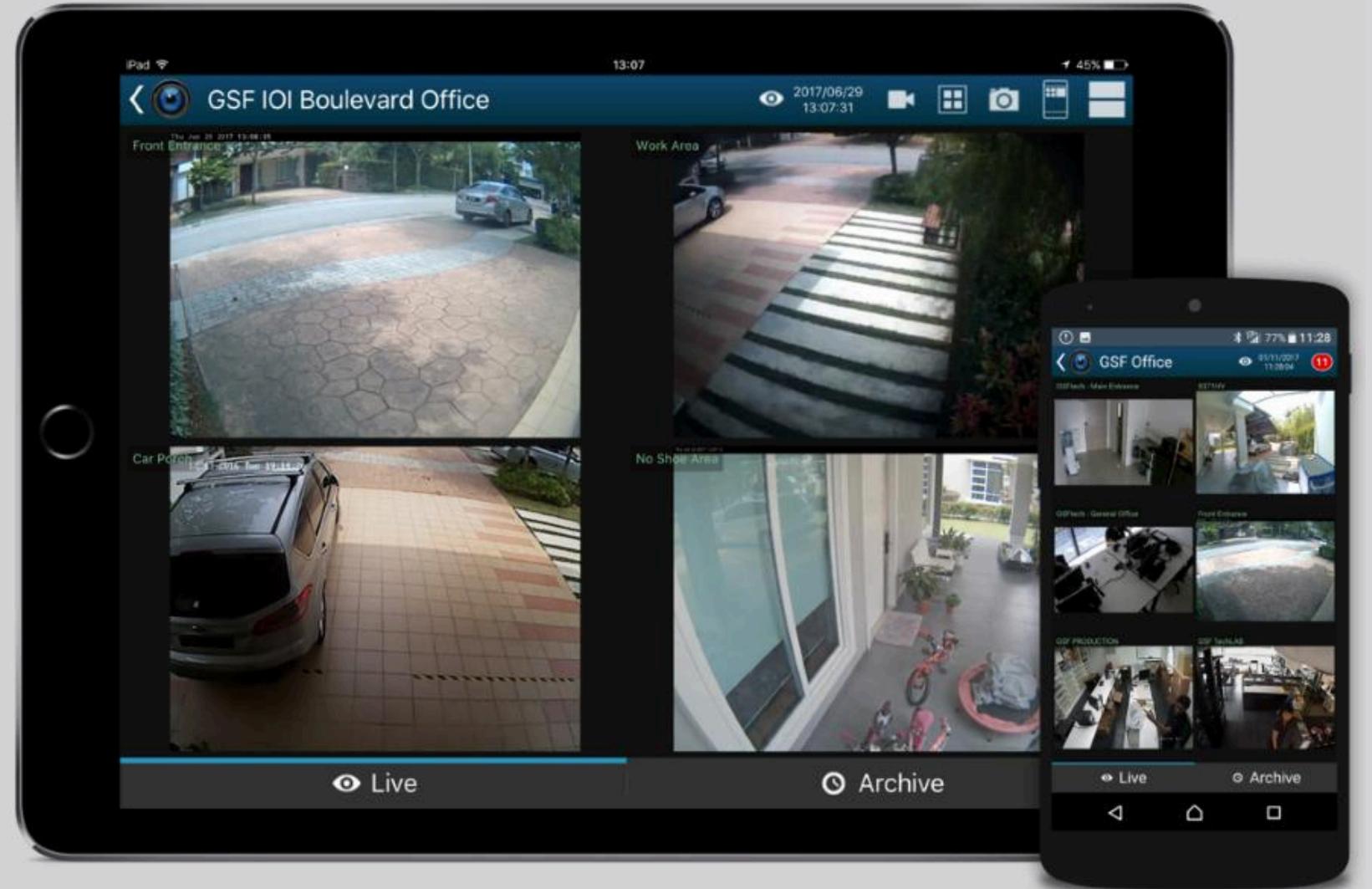
Snapshot source	Front Entrance
Snapshot time	Thursday, September 14, 2023 9:18:35 AM
Report time	Thursday, September 14, 2023 12:13:02 PM
User notes	Staff - Jemi



# General Features of Macula Professional

## Mobile Applications

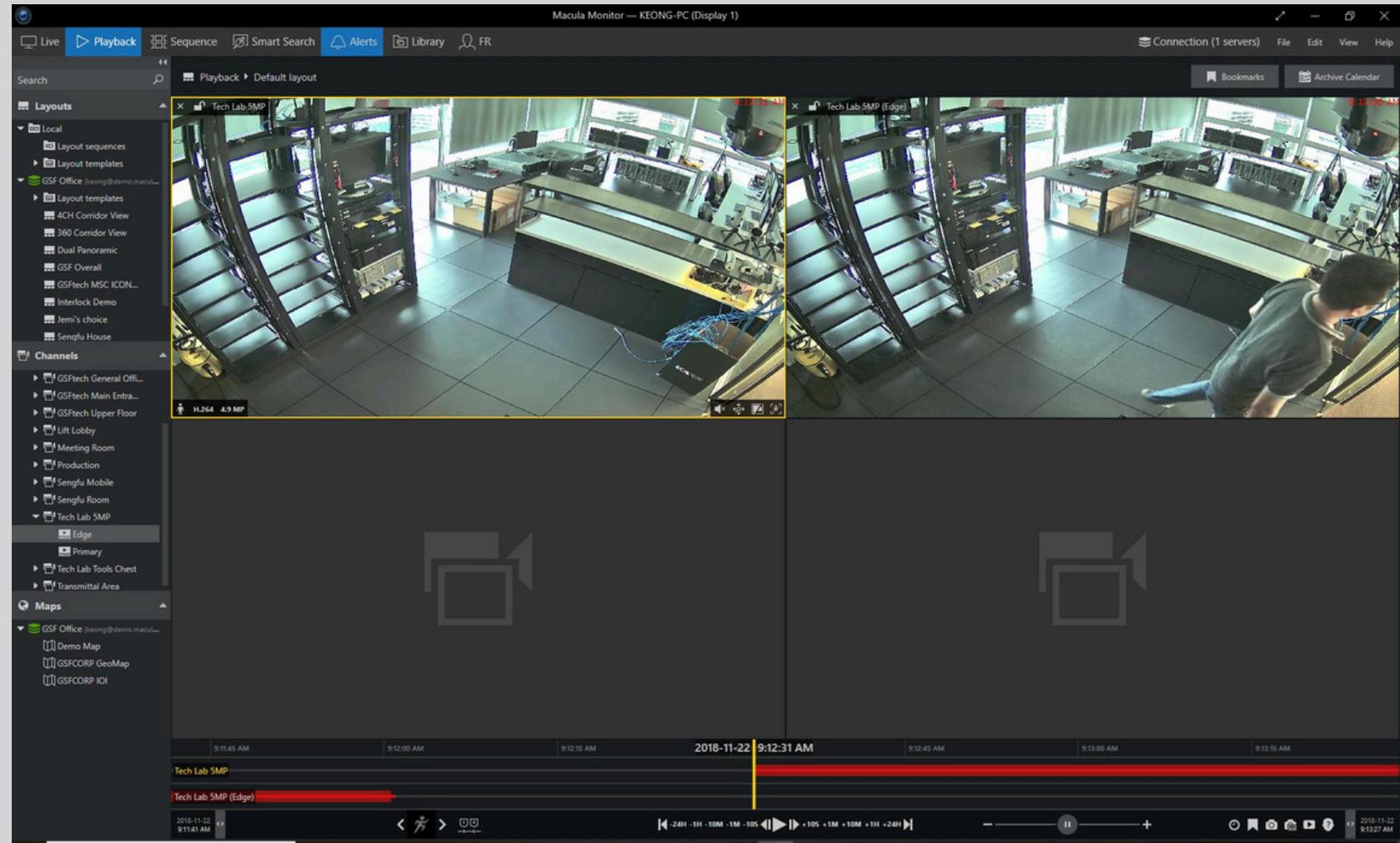
- Use your mobile device to access
  - live and archived streams.
  - Trigger action like I/O via user defined buttons.
- Turn your mobile into a surveillance camera.



# General Features of Macula Professional

## EdgeRecording

- Synchronize all your data with IP device storage with ONVIF-G Profile.
- By doing this, even if the network connection with any camera is lost, your data will still be recorded by the camera.
- It will be transferred in full to your server as soon as the network connection is reestablished.



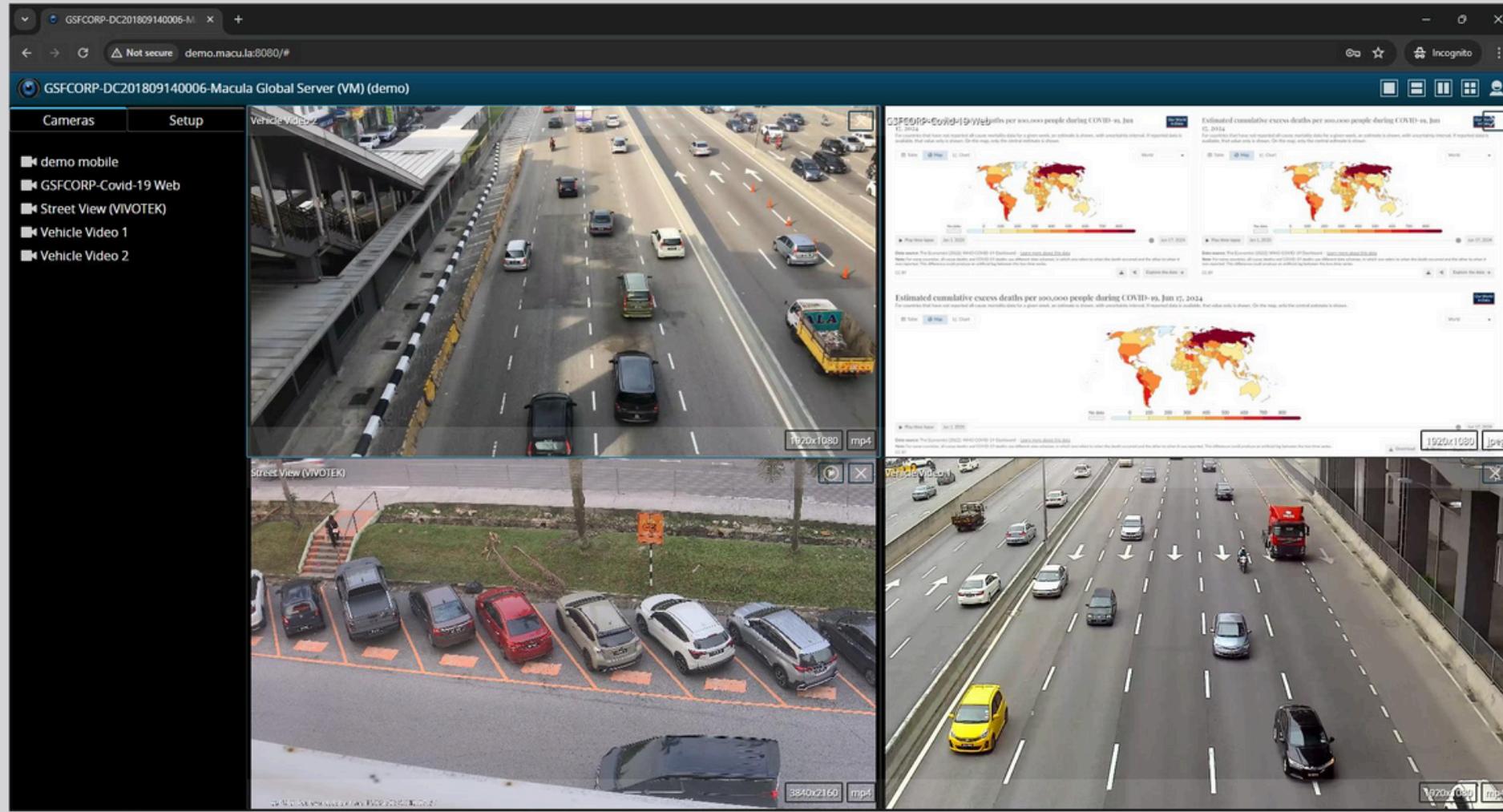




# General Features of Macula Professional

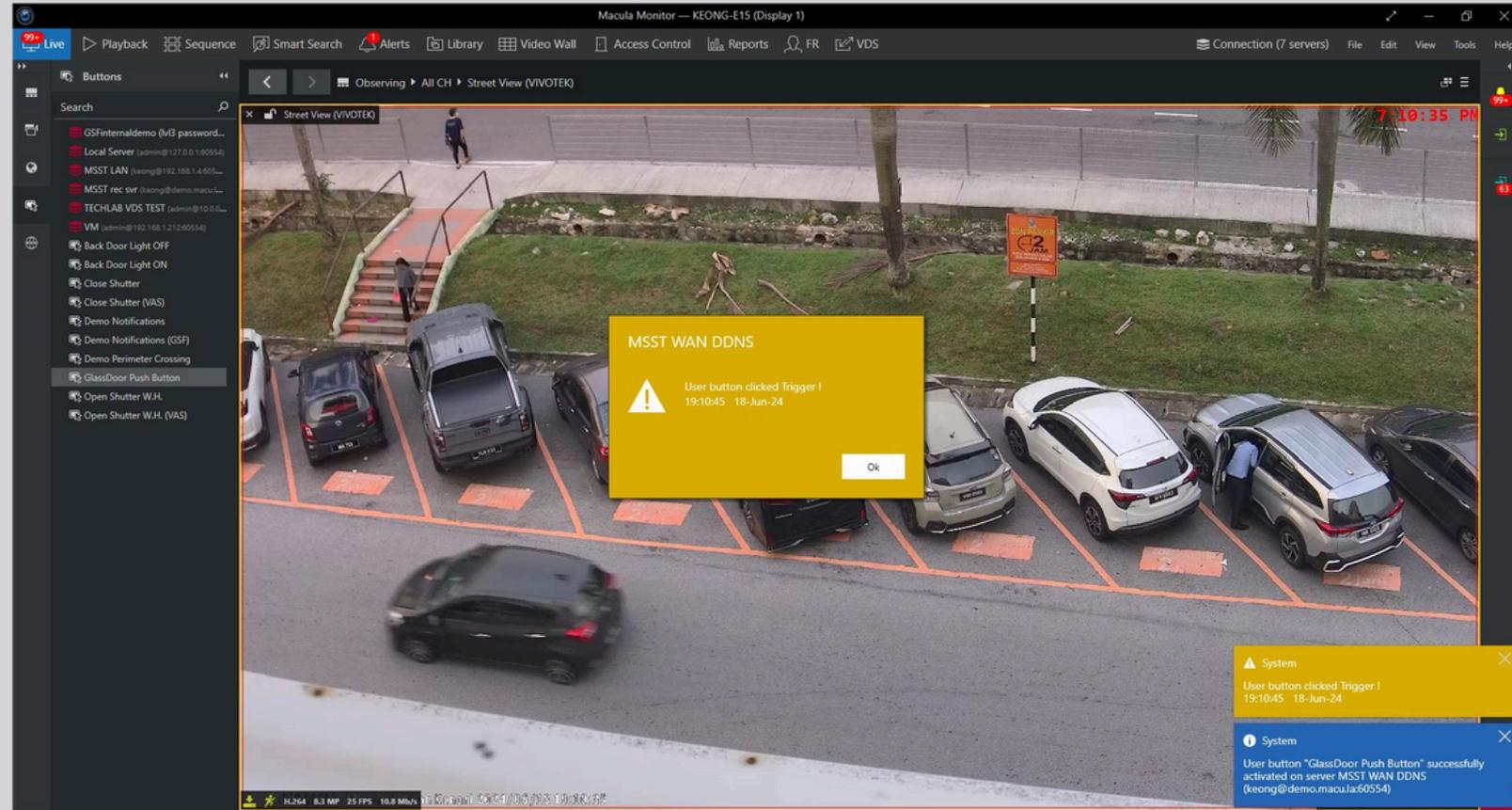
## Webaccess

- Get permanent access to live streaming and archive video through your web browser



# General Features of Macula Professional

- Specify your desired outcome of your video surveillance system's operation. Determine how software reacts to any event caught on camera and how it turns them into an automated process.
- Send emails, activate DI/DO, interact with any other software or just bring the attention of the operator to the camera that requires their immediate action.
- The functionality can be used not just for a single event, but a set of sequenced events to get rid of false alarms and improve the efficiency of your surveillance system.

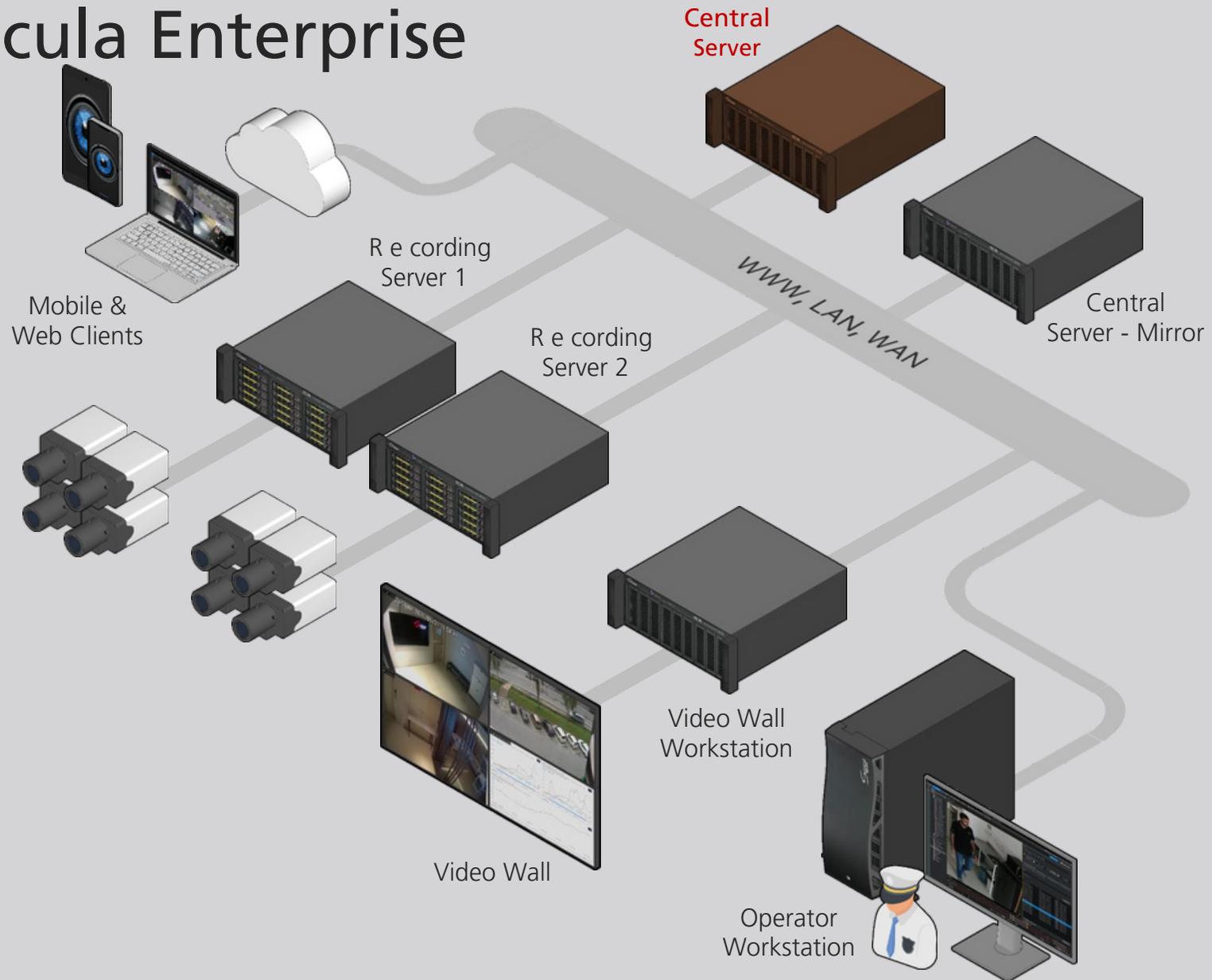


# General Features of Macula Enterprise

Centralized Managed Effective and Efficient in Operation

Single login, multiple managed, make management of large-scale surveillance much more effective, and easier to maintain. For example, you required to change a user account password, you only changed once at central server, and it will automatically be synced to all servers. Thus, saving on human capital cost and expenses. Central server hold all:

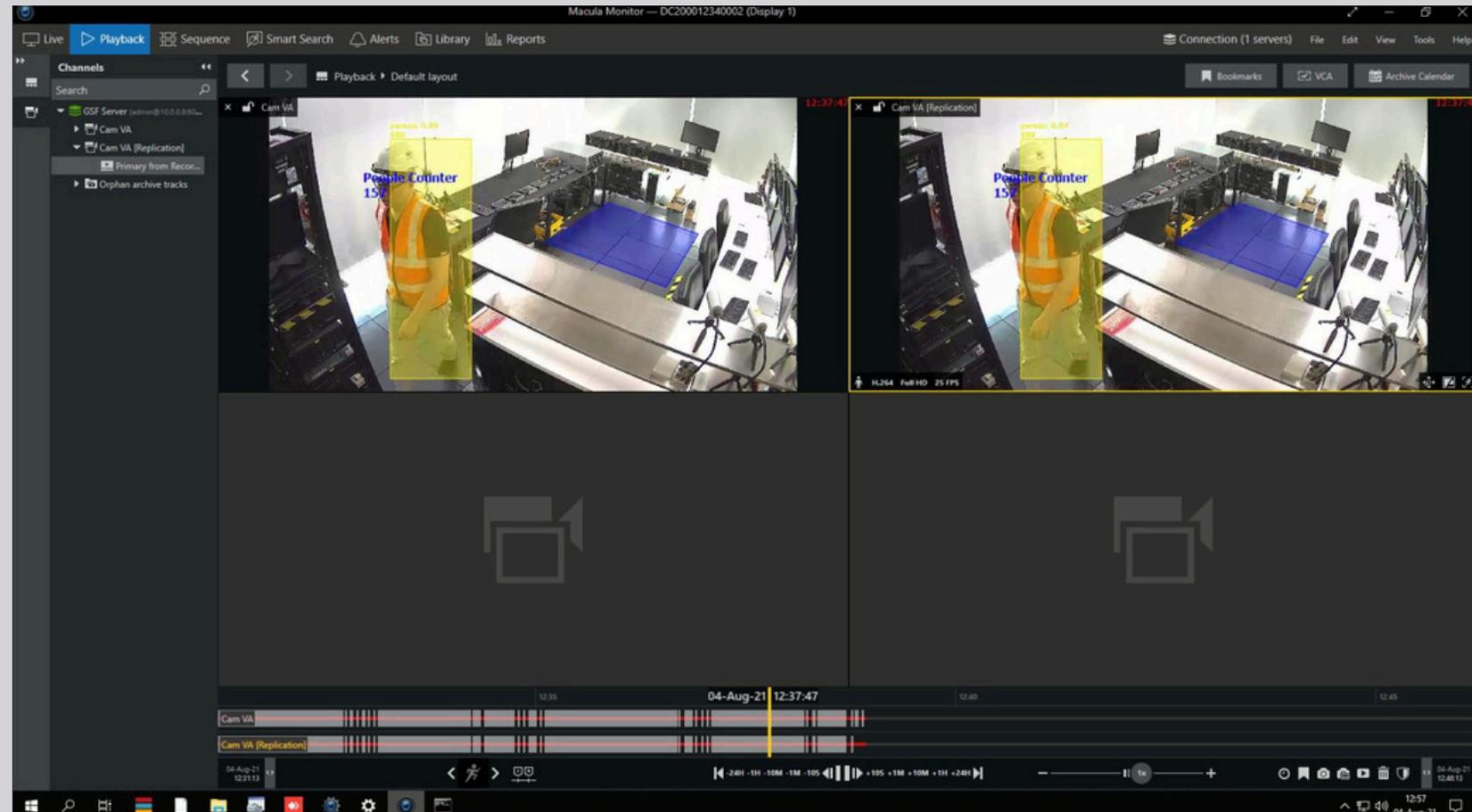
- User accounts
- User permission
- All resources like cameras
- Settings
- Configurations
- Security Policy
- Licenses



# General Features of Macula Enterprise

## Archive replication

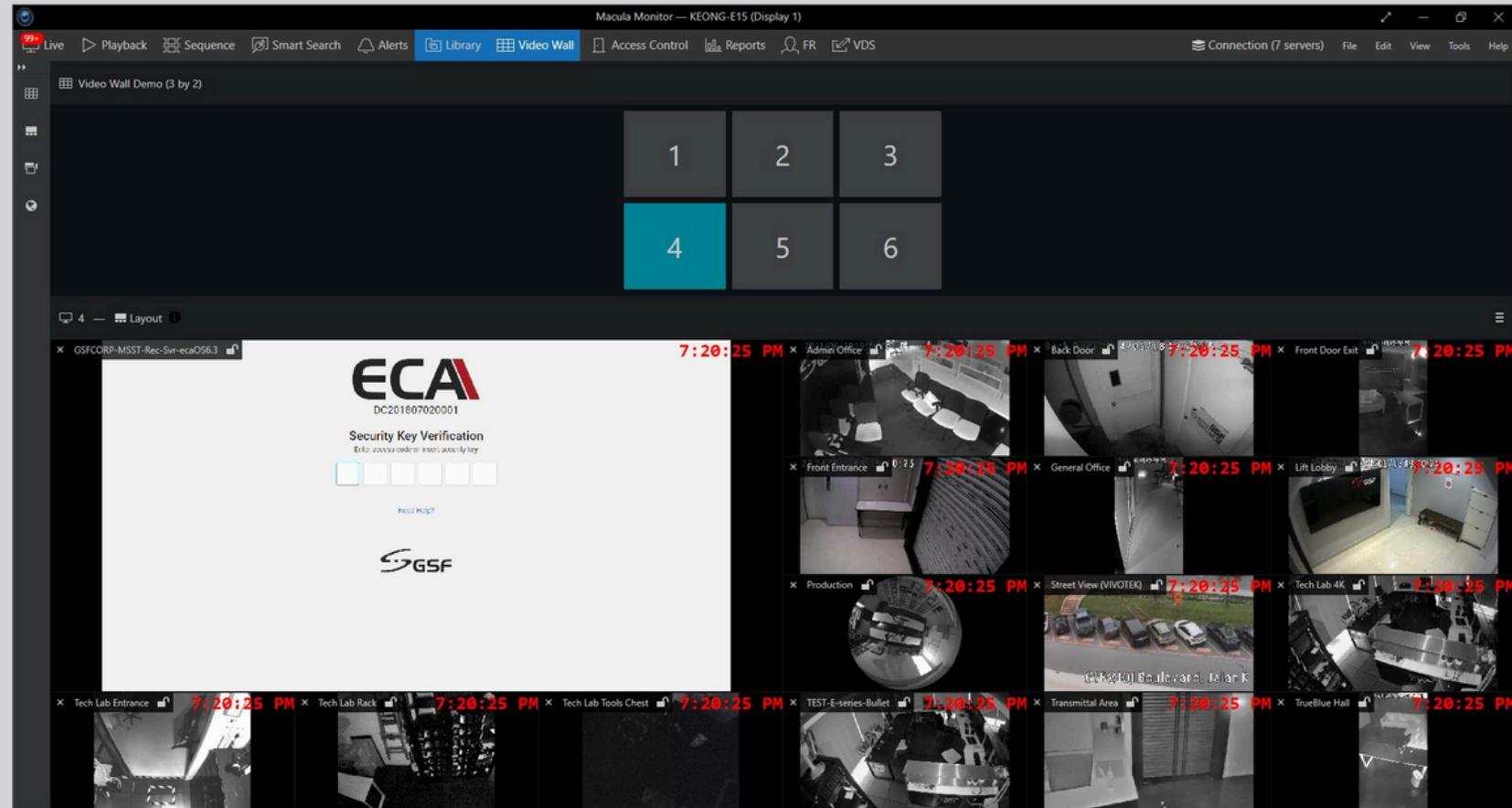
- Make your local recording server into a buffer server.
- In large enterprises, this allows for convenient local usage and scheduled or constant data transfer to Central Data Centre, whenever the network is available.



# General Features of Macula Enterprise

## Video Wall

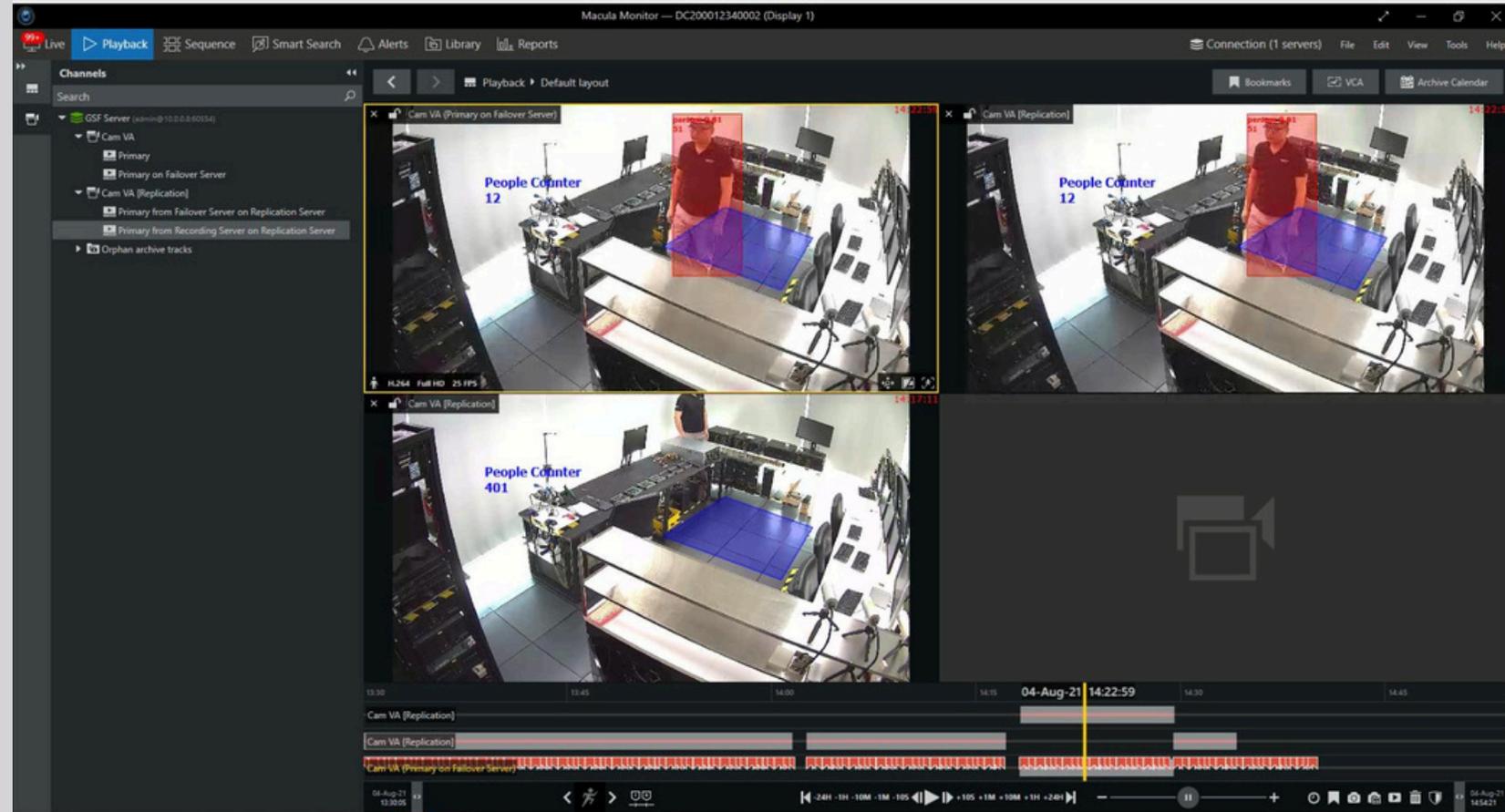
- Get the most out of your video wall in the control room.
- Macula Video Wall offers improved configuration and functionality, as well as the ability to easily manage large display installations.
- It is vital for operating large-scale video surveillance systems, especially where the ability to easily examine the area and quickly react to alarm events is essential.



# General Features of Macula Enterprise

## Failover

- Automated recovery of your system in the event of a sudden server failure.
- Macula Enterprise carefully tracks operations of all servers, and, in case any of the servers has failed, it quickly activates a spare server to perform the actions that the malfunctioning server was performing prior to failing.





## PROFESSIONAL

Individual Manage

## ENTERPRISE

Centralized Manage

Management	Configure each server individually	Configure once at central server, auto sync to all servers
Usage	Small scale deployment. 1 or 2 servers	Enterprise scale multi servers multi site
Server	Single server	Add multiple servers
Users	Multi permission user level (support AD, LDAP)	←
Device connection	Virtually any camera. I/O module. Speaker. Audio. Intercom. Video Files, Picture Files, Web Page, ONVIF, RTSP, Window Desktop.	←
Recording	Multiple recording profile. Continuous, Schedule, motion, or event based. Can record Video, Audio and Data, Web, Desktop	←
User Button	Create any virtual button for automation	←
Layout & Visual Group	Customize video layout and viewports. Create visual group	←
Events & Actions	Create rules, events, actions, condition, schedule, counters, indicator and variable (data).	← Global Events (for multiple servers' trigger)
System Status Monitoring	Status for server, device, video stream, storage, archive statistics.	←
System Audit Log	Servers and user's activity and logs	←
Add an App (Data, Ai and IoT)	Face Recognition, LPR, Access Control,	←
Organization	×	Create organization with different network and user group
Failover	×	Rapid Failover. Create Failover Server Cluster. Assign multiple Failover Servers.
Video Wall	×	Remotely command any video from workstation to any video wall. Video matrix combiner. Unlimited screen support, and customizable video wall layout.
License	Perpetual start from 4CH	Perpetual start from 50CH <a href="#">Click here for datasheet</a>

## Experience Start from Pre-Sales

At GSF, we emphasize a goodtrouble-free system design must start from proposing stage. That is why our TrueBlue experience engineer involve since day 1 of meeting customer needs. We work hand in hand with customer and partner system integrator

TrueBlue®  
experience

## Best in Class Customer Service

ECA comes with 3yrsNext business dayonsite TrueBlue Care warranty package, and macula with 2 years free software update. Phone, email and remote support comes in default for all GSF products.

TrueBlue®  
care

## System Maintenance (TBM)

Maintenance plan to ensure your system up running.

- Yearly, quarterly or half yearly maintenance plan
- Optional comprehensive part & labor onsite Paired with TrueBlue onsite, phone, email and remote support

TrueBlue®  
maintenance

## Project Outsource Service (TPS)

System based engineeringsserviceoutsourceby project basis. Cover backends system, cameras, network and other 3rd party system. Job scope inclusive:

- System diagram
- System technical information in digital format
- Onsite software configurations and setup
- System performance and optimization
- One session User operation training
- 7 days grace period system performance monitoring
- One month service satisfaction guarantee

## System Testing & Commissioning (TNC)

- Onsite Back End software configuration and setup
- Back End System performance and optimization
- One session system operation training
- 7 days grace period system performance monitoring
- One month service satisfaction guarantee

## Professional Service (TBP)

Pay-per-request basisprofessional support.

- Complex Technical Troubleshooting
- Project based Documentation Service
- Objective based User Training Service

## Pay-per-Request Onsite (TBO)

Pay-per-request basisonsitesupport.

- Objective and incident based

TrueBlue®  
services

TrueBlue®  
support



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