



Visual Data Solutions (VDS)

Pairing Data with Visual

(an add-on applications in macula[®] software)



macula[®]

/`makjuələ/

is the central point of the sharpest vision in retina
blue eye, means backed by TrueBlue Service

It's a Video Management Software (VMS),
comes with service support.

Macula was created with data integrations
in mind, toward IoT trend

Macula is cloud connected toward pro-active
service objective



macula®

VDS Add on

What is VDS?

Visual Data Solutions (VDS) is the integration of useful information into CCTV visual. The combination of data information with video proof makes daily production process more effective on identifying potential loss or problems.

Evidence Storage and Retrieval

Evidence can be stored for months to years, depend on design. Easily retrieval of evidence, by simply key in the data like product Barcode, Invoice No., Serial No., Person Name, License Plate, Sensor Values, etc

Data Applications example

Some of the potential integration : Barcode System, Weight Bridge System, Access Control System, Sensors, Serial No., Invoice/Delivery Order No., LPR, Face Recognition and PLC/SCADA... etc.

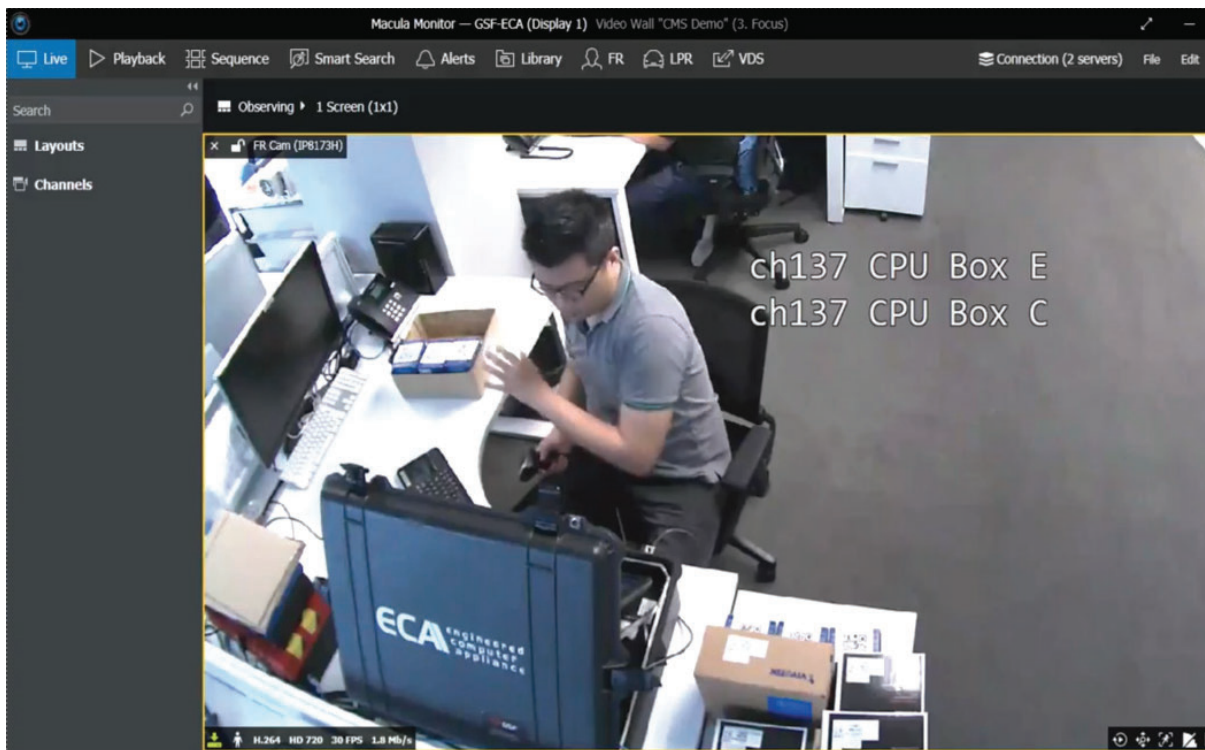
Database

With SQL database structure, virtually you can integrate any set of data you want with pair with visual from any camera

Data Over Secure Network

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

On Screen Data Display



During Live

Live data can be feed into Macula® Live Display. This is good for real time operation monitoring.

Exported Video

For evidence to be shown as a proof, data can be integrated onscreen display as one single video file. This makes video sharing easier.

Integrated GUI

Visual and data is designed to seamlessly working together in a single application. This integration operation is to deliver the best customer experience

1 Application TAB

There is no limit to our data application, you can always add on through Macula via add on app.

2 Visual Display

Based on the data timestamp, Macula can automatically link the video as visual evidence.

3 Data Search

Any data can be searched using the selected interval. Macula VDS will automatically call out all the datas from database and match it with the visual on the left.

The screenshot displays the Macula Monitor application interface. At the top, there is a navigation bar with tabs for 'Alerts', 'Library', 'Video Wall', 'Data Sources', and 'LPR'. The 'LPR' tab is active. Below the navigation bar, there is a search bar and a 'Search' button. The main area is divided into two sections: a video feed on the left and a data table on the right. The video feed shows a white car with the license plate 'W 1018 X'. The data table lists search results with columns for 'TIME', 'CHANNEL', 'PLATE', and 'CAMERA'. The row for '01-Nov-17 17:57:16 LPR-IOI W1018X 175' is highlighted in blue. A red vertical line in the video feed indicates the selected time interval. At the bottom, there is a video player with a timeline and a '444 event(s) found' notification. The system tray at the bottom right shows the time '18:03' and the date '01-Nov-17'.

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	WBS718R	175
01-Nov-17 17:56:48	LPR-IOI	JMX5298	175

DATA / Sensors TAG'ing

The screenshot displays a video management software interface. On the left, a video feed shows a man in a black shirt and blue jeans walking in a kitchen area. The interface includes a search panel on the right with the following data:

BOOKMARK TIME	TITLE	CHANNEL
31/10/2017 08:53:32	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 08:53:39	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 09:13:48	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 09:42:27	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 09:42:37	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 13:09:57	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 13:10:11	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 14:04:54	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 14:05:06	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 18:19:15	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 18:19:20	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 18:48:21	GSFtech-Lower Door Alert	GSFtech - Main Entrance
31/10/2017 18:48:27	GSFtech-Lower Door Alert	GSFtech - Main Entrance

Door Open / Close

By connecting magnetic sensor to digital inputs, we can now TAG the video when door is open / close.

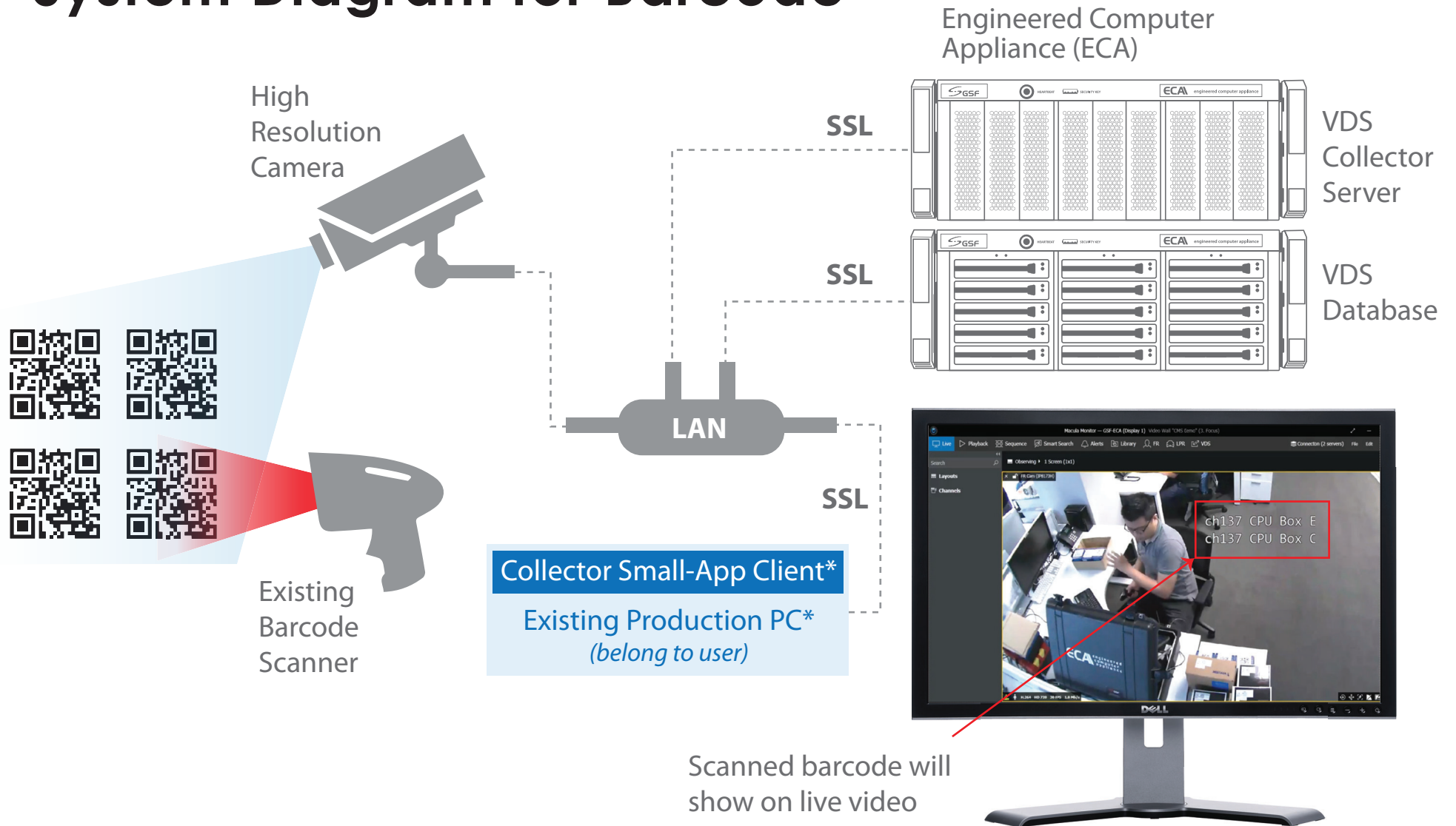
Vehicle Detection

By connecting loop induction sensor at parking entrance barrier gate, we can now filter all video only when vehicle detected.

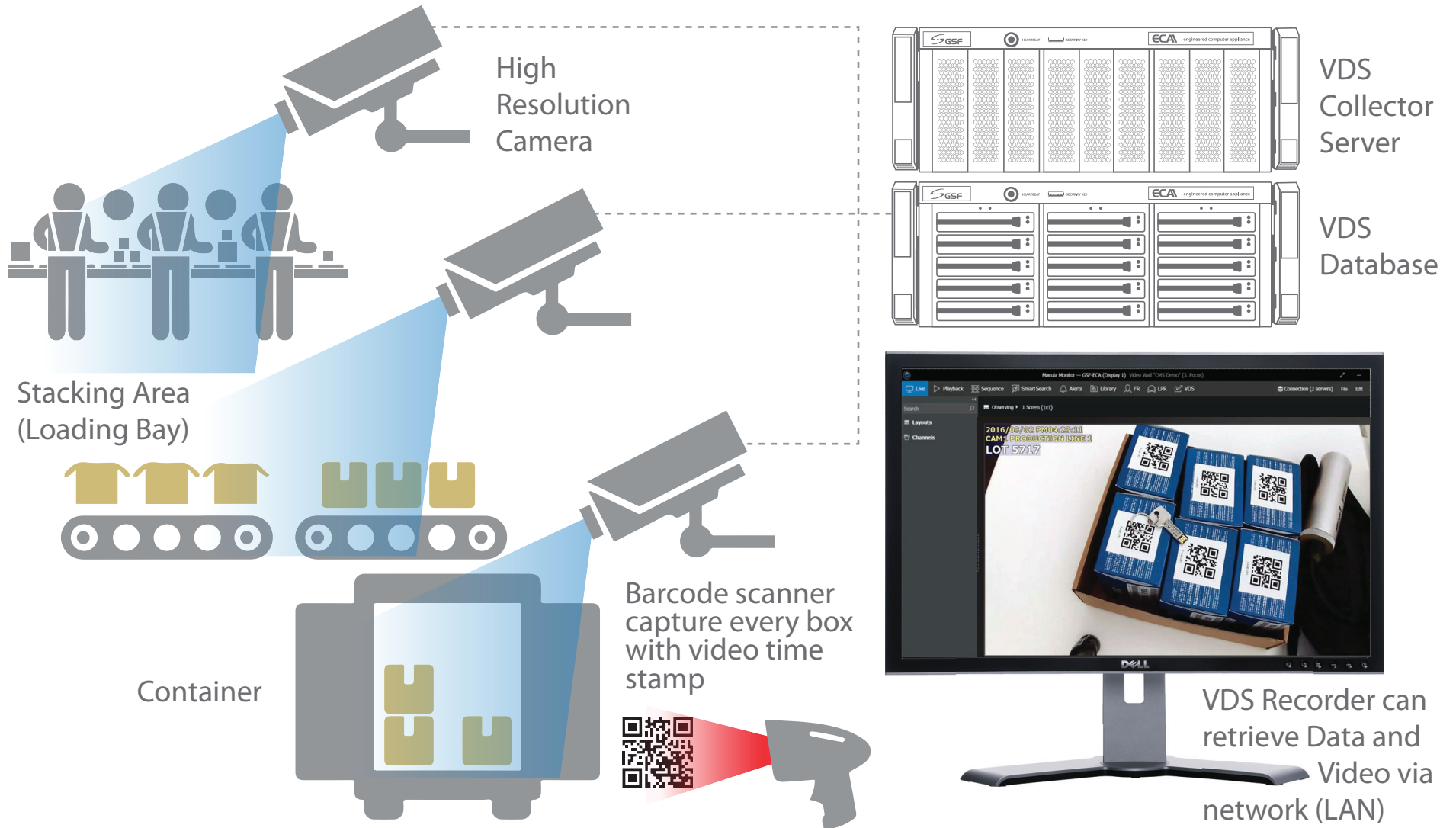
Keywords Specific Tagging

If VIP name is detected from Face Recognition "Lim Chong Wei" then it will unlock the door. Or Valve Pressure is detected more than 380PSI then it will automatically send an email alert.

System Diagram for Barcode



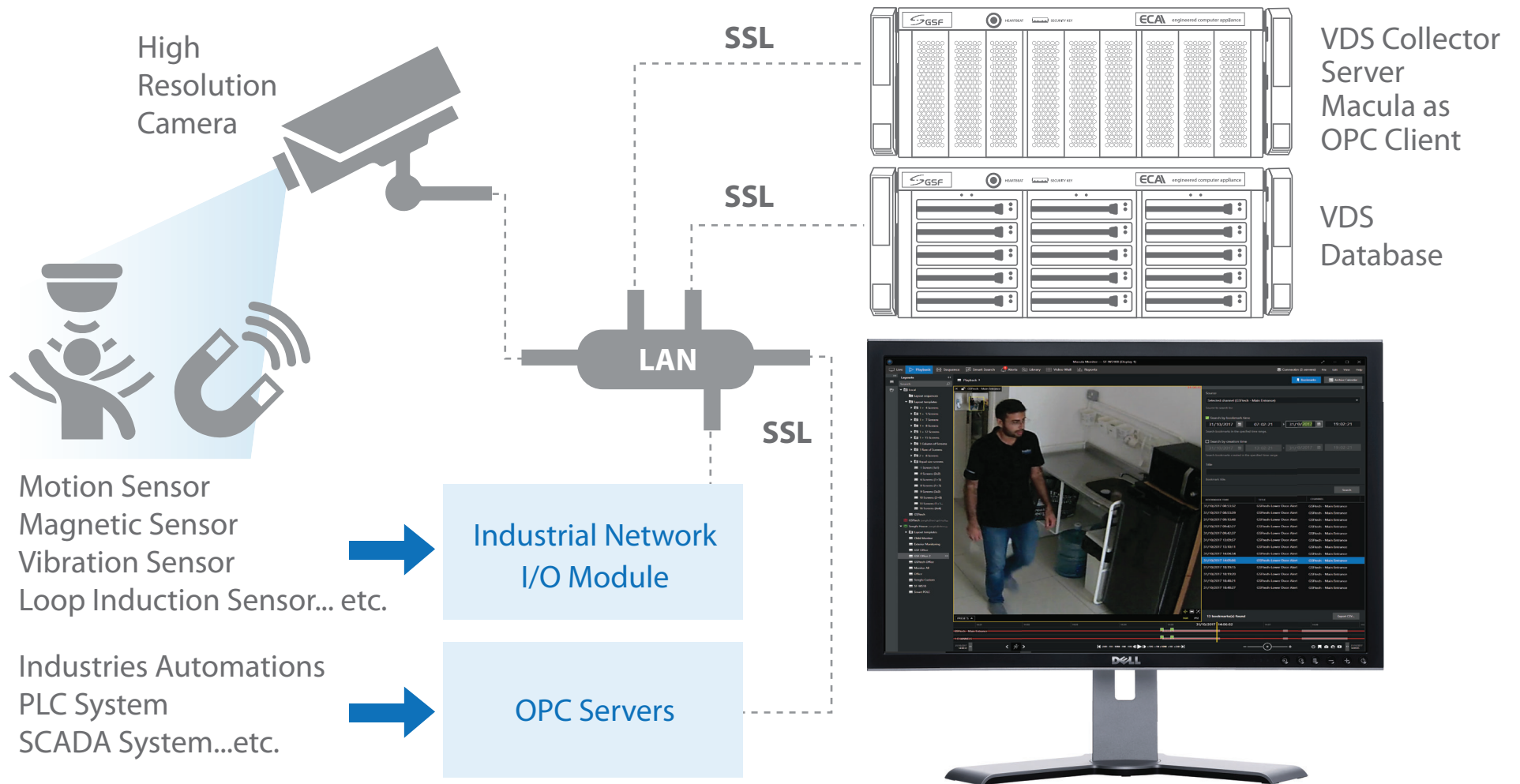
VDS-Production Pre-check before packing (example)



System Diagram for Analytics Engine (Ai)



System Diagram for Sensor Tagging/Scada



Evidence Export. One Click!

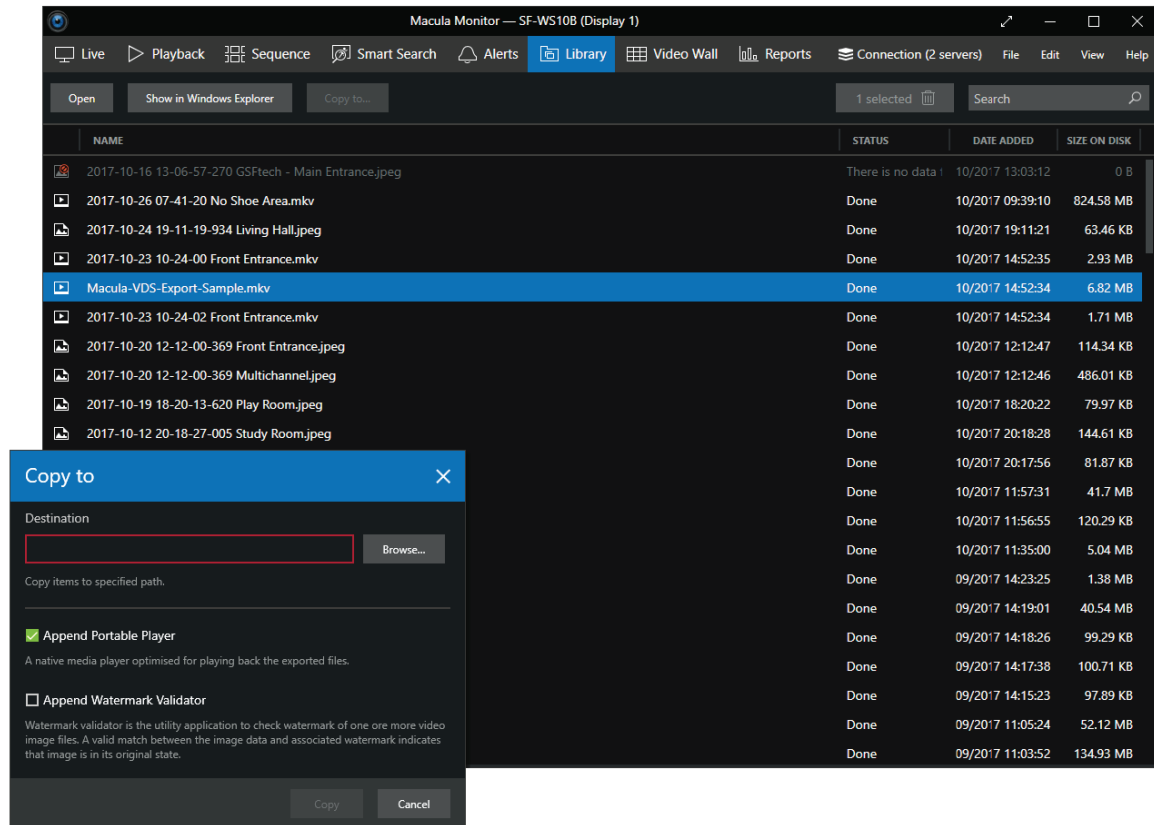
To export video or image evidence.
Yes with just one click, with pre-defined parameters.

Centralized Library Folder

All one click exported videos or images, will be stored in library folder by default.

Cloud Synced

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 drives like OneDrive, Google Drive, Dropbox, etc.



Intelligence inside

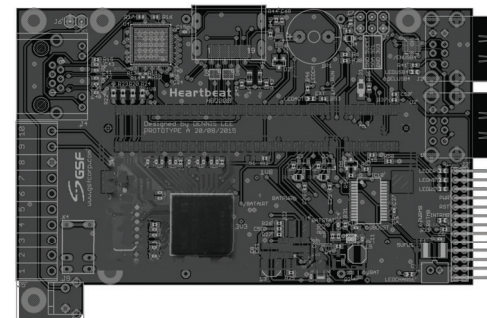
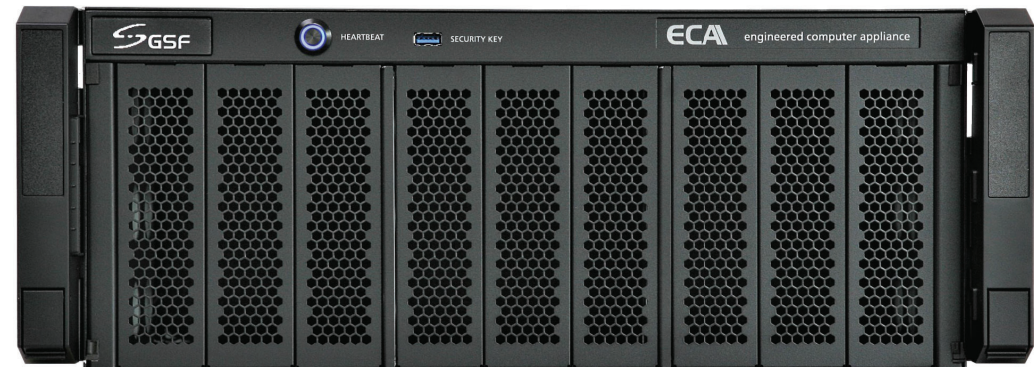


Engineered Computer Appliance

The ECA platform is like having an engineer on standby inside your machine ready to automatically solve typical system issues. This artificial engineer monitors all hardware and software activity, alerts you in case of suspicious system behaviour and allows for swift recovery in case of failures.

ECA is an automated computer system that require minimal maintenance

- A fully protected system that prevent unauthorized shut-down and setting change by enforced 128-bit encrypted security key
- Fast recovery within 5 minutes in the event of software related issue
- Auto recovery upon unusual system event detected
- Notification alert upon unusual system health event detected e.g: HDD going to fail, HDD removed...etc.
- Backed by professional TrueBlue Support.



Inbuilt Microcontroller
“Heartbeat”.

A hardware monitoring system designed to ensure continuous system operation with minimal human intervention.

Backed by TrueBlue Support

When you need help during operations or technical, Macula comes with support services - Phone Support, Email Support, Remote Support and Carry-IN Support. Or Pay-per-request TrueBlue Onsite Service. We are always here.





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