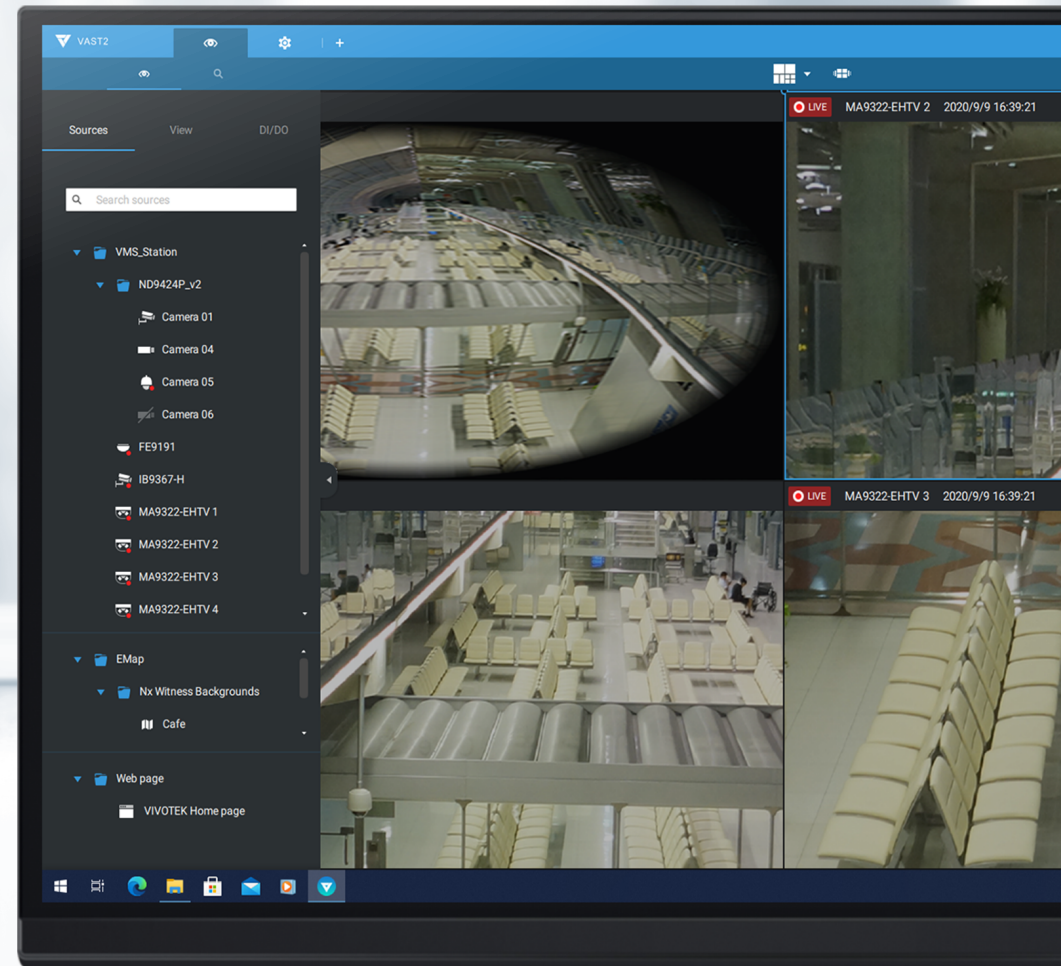


# VIVOTEK

A Delta Group Company

# VAST 2 BROCHURE

## Video Management Software



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## Video Management Software

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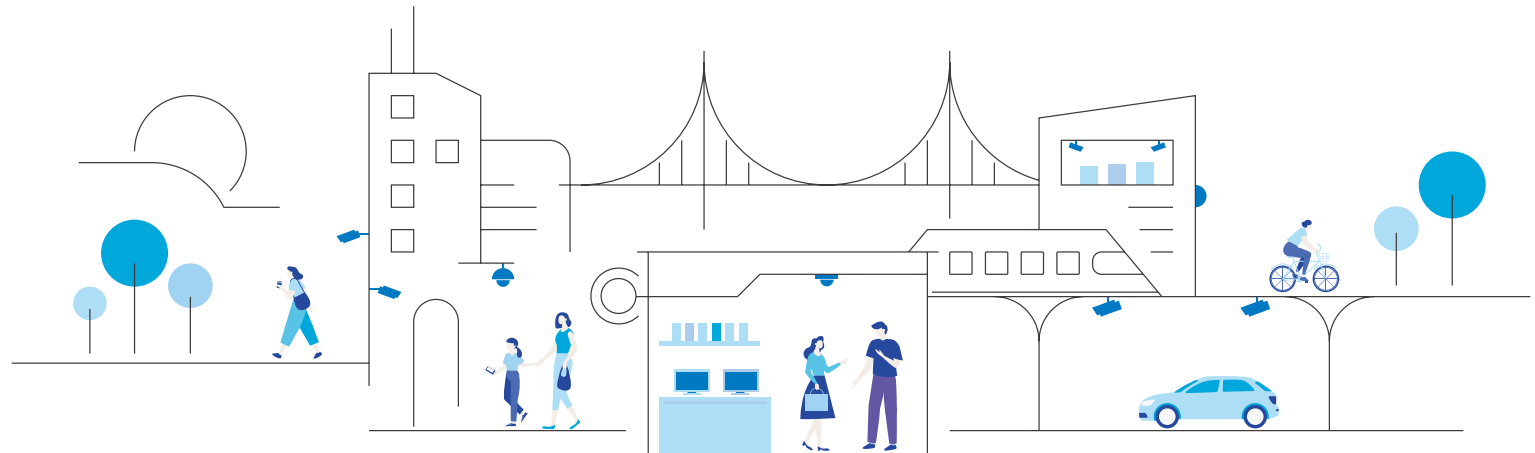
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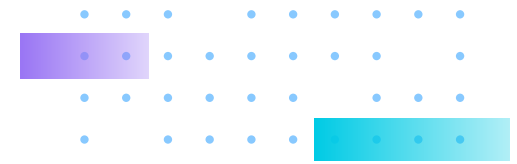
### Success Stories



# VAST 2

## Video Management Software

VAST 2 is an easy to use IP video management software (VMS) that provides easy operation on a single or multiple monitors. It can rapidly export multichannel video clips and acquire VCA analytics from enabled cameras. With a wide range of add-on solutions, VAST 2 is the perfect VMS for use in markets such as SMB, retail, transportation, manufacturing and more.

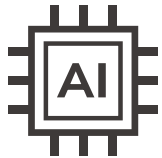


# VAST 2 Benefits



## Smart Investigation

Tons of surveillance footage is stored every day. With Smart Search II, Evidence Lock & Event Search built into VAST 2, search & retention of video content is no longer a painstaking task



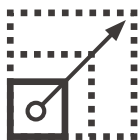
## AI Analytics

Thanks to the integration of deep learning AI edge devices, multiple alarm event rules can be configured by customers to automatically trigger self-defined actions



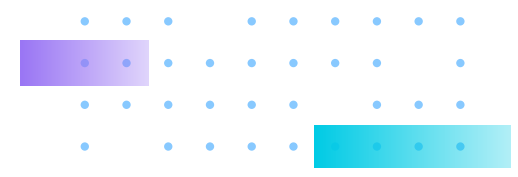
## Secure & Reliable

Included cybersecurity management detects cyberattacks to protect data integrity. Designed with Failover to take over the recording task in case of CMS/substation failure



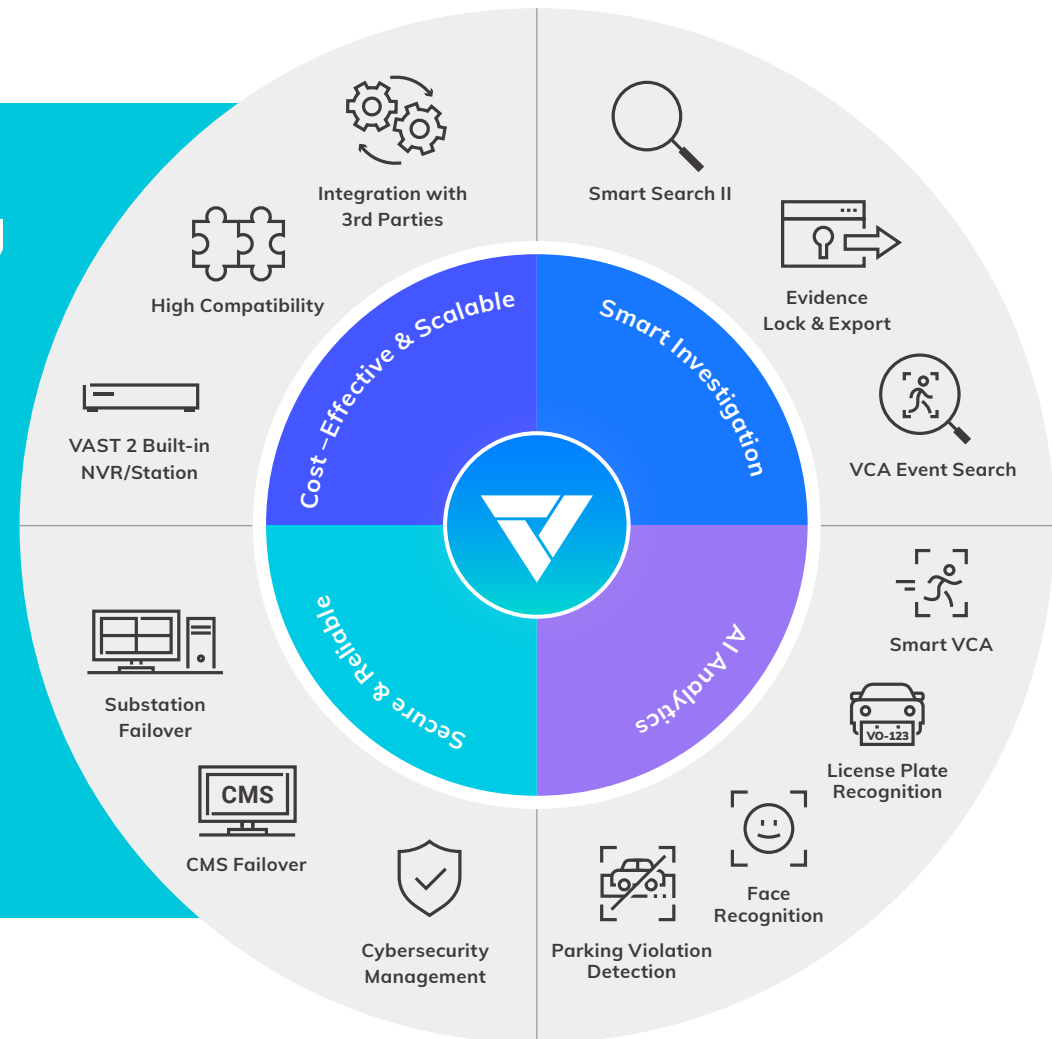
## Cost –Effective & Scalable

VAST 2 embedded NVR/CMS station, together with a wide range of fine-tuned cameras, offers customers optimal configurations and scalability, reducing time and effort needed for setup and configuration



# VAST 2 – Limitless Evolution

Continuously growing and adding new features to meet diversified environments. Customers of all types can always find the most suitable features from the comprehensive & expanding VAST 2 system

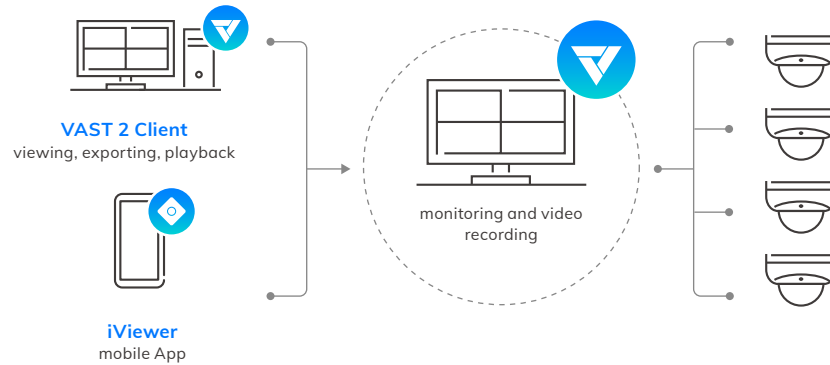




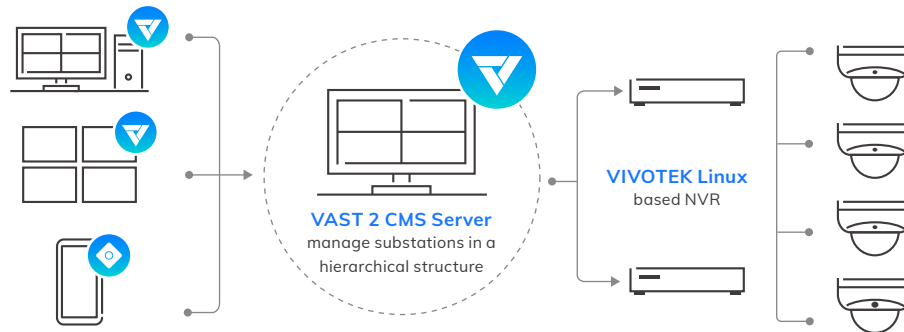
# Flexible Architecture for Versatility

Change the Way You Experience VMS

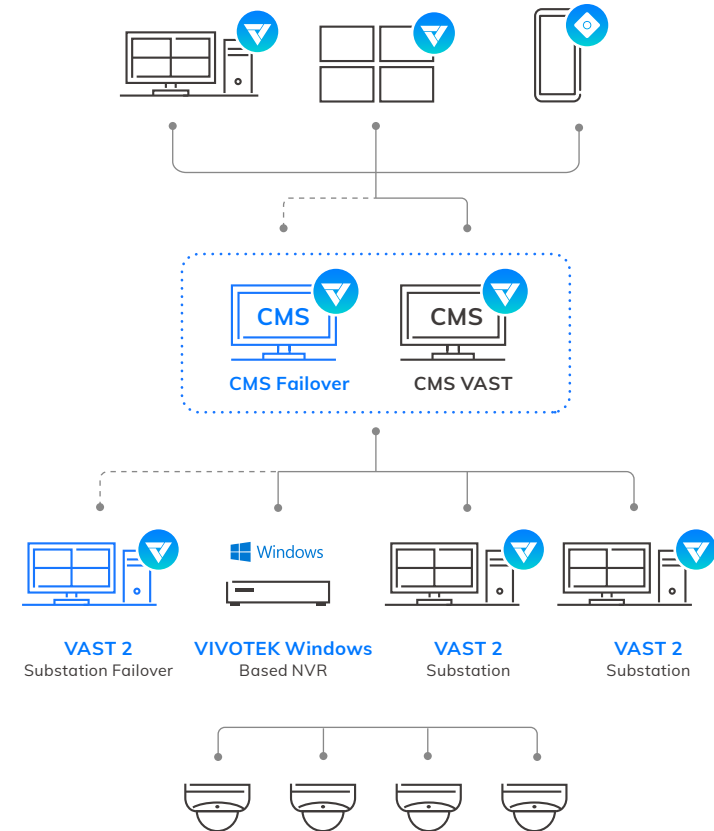
## 1. Small-Scale



## 2. Medium-Scale



## 3. Large-Scale\*



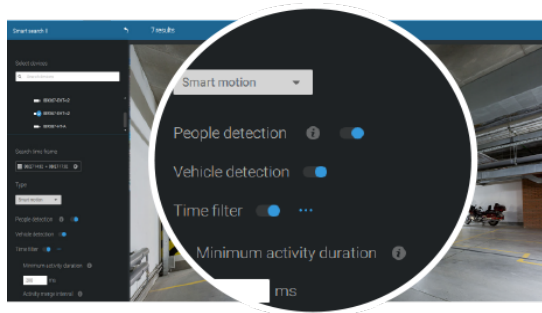
\* As operations expand, end-users can effortlessly upgrade the configuration from small to medium or large scale

A man in a light blue shirt is seen from the side, sitting at a desk in a control room. He is looking at several computer monitors displaying surveillance footage. The room is dimly lit, with the primary light source being the screens. A purple semi-transparent box is overlaid on the right side of the image, containing text. The overall scene suggests a professional environment focused on video analysis and security.

# Smart Investigation

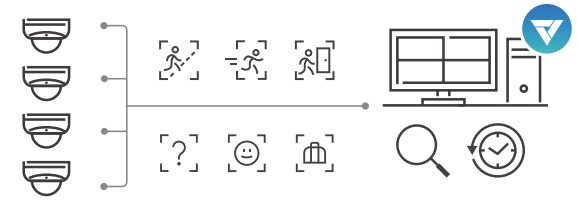
Search and retention of video recordings has always been one of the most time-consuming tasks in video surveillance. Through self-defined search criteria, video clips can be automatically tagged, making search and retention highly efficient





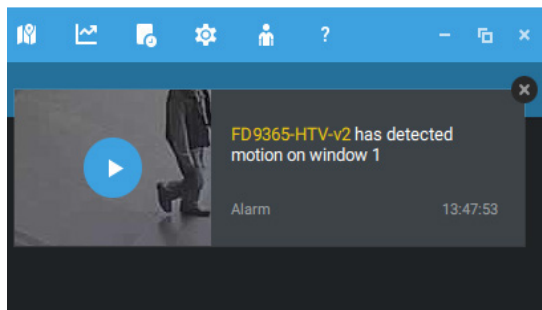
## Smart Search II

Users can quickly sort through large amounts of footage to find people/vehicle related motion in video recordings. People and vehicles appearing in the user-defined area can serve as search criteria, providing greater efficiency



## Evidence Lock & Export

Automatically bookmark relevant recordings when alarms are triggered, or manually extend the retention time for video recordings. Easy export of multiple video recordings with custom layouts in a specific time period



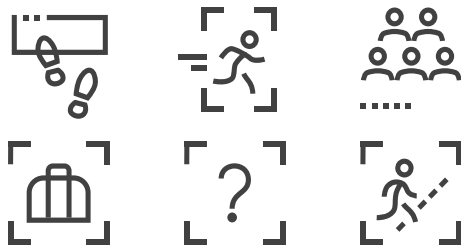
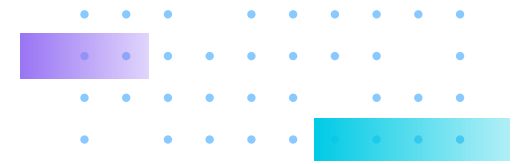
## VCA Event Search

When a preset VCA rule is triggered (e.g. line crossing or intrusion detection), the alarm will pop up in live view and E-map in real-time. Furthermore, the footage will be automatically tagged to reduce forensic search times

# AI Analytics

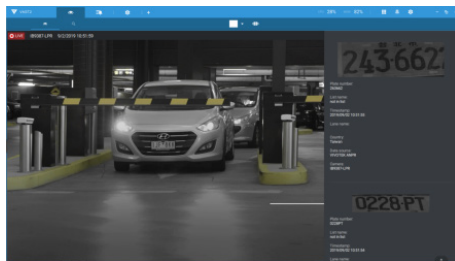
Network cameras can do more than simply capture video. Thanks to the advanced deep learning & AI algorithm, VAST 2 can set up multiple event rules and link them to edge devices, so that actions can be automatically triggered





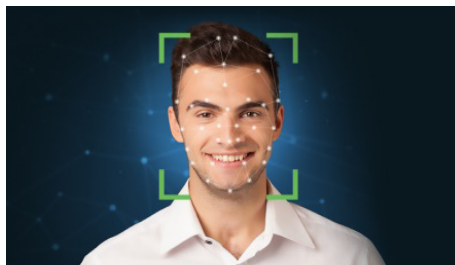
## Smart VCA

Integrate Video Content Analytics from cameras, enabling VAST 2 to detect intrusion, loitering, line crossing, missing and unattended objects, or faces in a crowd



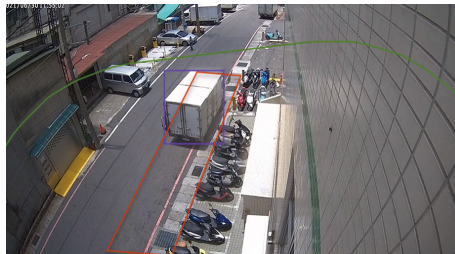
## License Plate Recognition

VAST 2 links license plate information with live streaming and recordings via integration with VIVOTEK's LPR cameras. Users can search and analyze historical data, display the number of recognized license plates, export search results, and display live streaming video data from alarm triggered cameras



## Facial Recognition

VAST Face Facial Recognition solutions are fully integrated with VAST 2, allowing users to apply it to a variety of applications including identity verification, live alerts/notifications, access control, and person of interest management



## Parking Violation Detection

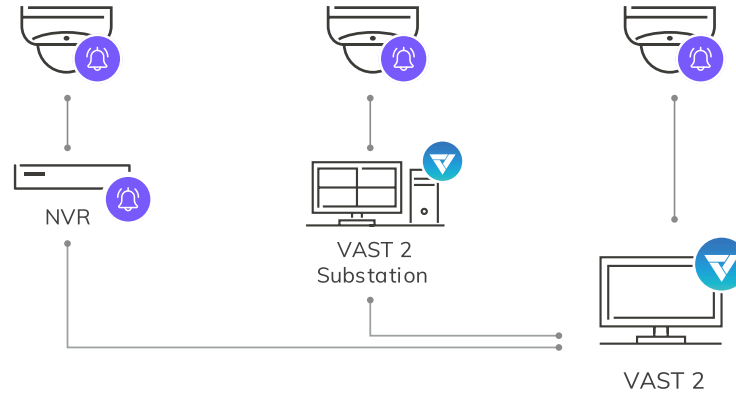
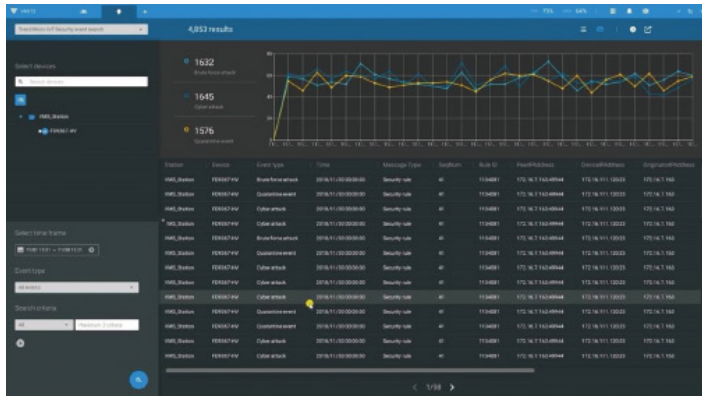
Illegal parking is a major cause of traffic congestion. Parking violation detection can detect illegally parked vehicles in real-time and notify the command center to take action



# Secure & Reliable

Similar to equipment in any other field, surveillance devices are not immune to the threat of hackers. VAST 2 includes password encryption and cybersecurity management, greatly safeguarding video recordings to a higher level.

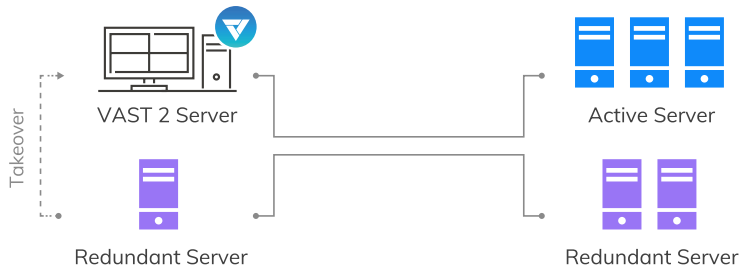
CMS/substation failover provides immediate takeover if the active server goes offline, maintaining routine operations works as usual



## Cybersecurity Management

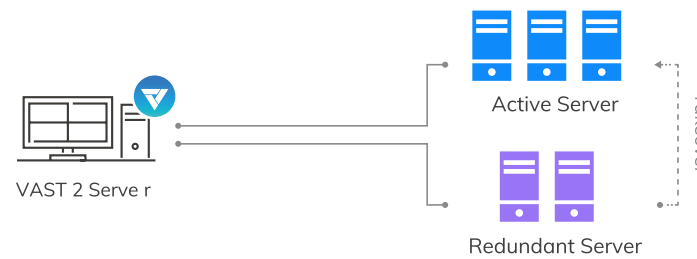
Oversee cybersecurity attack events from VIVOTEK cameras and NVR's with VAST 2 alarm management. In addition to alarm

actions and notifications, VAST 2 can centrally manage and recognize attack trends, as well as acquire attack information .



## CMS Failover

Provide 1+1 Redundancy for Central Management System. In case of CMS service failure, recording and management tasks will be transferred from CMS to a CMS redundant server.



## Substation Failover

Reliable backup system designed to transfer recording tasks from N sites to M sites upon the rare occurrence of disk failure or other malfunction.

# Cost-Effective & Scalable

One-stop shop for VIVOTEK hardware and software, seamlessly working with existing and new devices, make VAST 2 highly cost-effective for all types of customers. Furthermore, expanding AI analytics continuously enhance the accuracy and meticulousness for more & more security scenarios





## VAST 2 Built-in NVR/Station

VAST 2 built-in NVR/Station is designed to save time and effort. With an intuitive user interface, flexible storage support, and embedded VAST 2 video management system, it's convenient for users to start their operations

without delay. Plus, multiple tests and verifications in-house make VAST 2 built-in NVR/Station compatible with other devices in the entire ecosystem.

### High Compatibility

From VIVOTEK to ONVIF cameras, most cameras can operate with VAST 2.

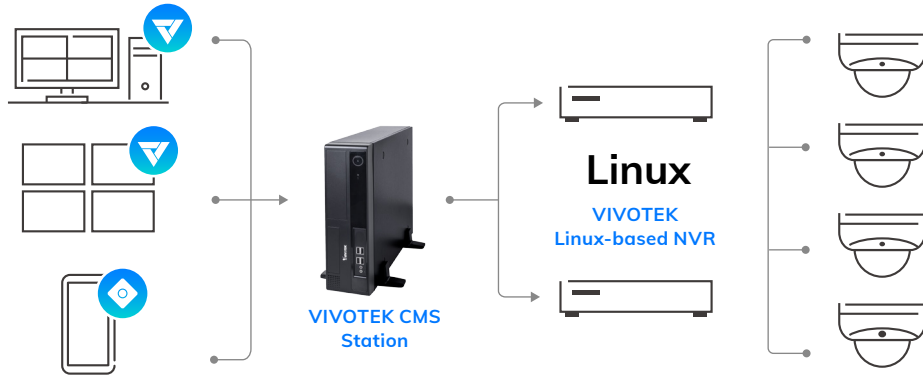
### Easy Integration with 3rd Parties

VAST 2 syncs up with multiple devices via data magnet and TCP message. It can receive data and commands from 3rd party devices as well as send HTTP requests to 3rd party devices to trigger actions. This ease of integration continuously expands VAST 2 applications for more added value.

# VAST 2 Built-in NVR/Station

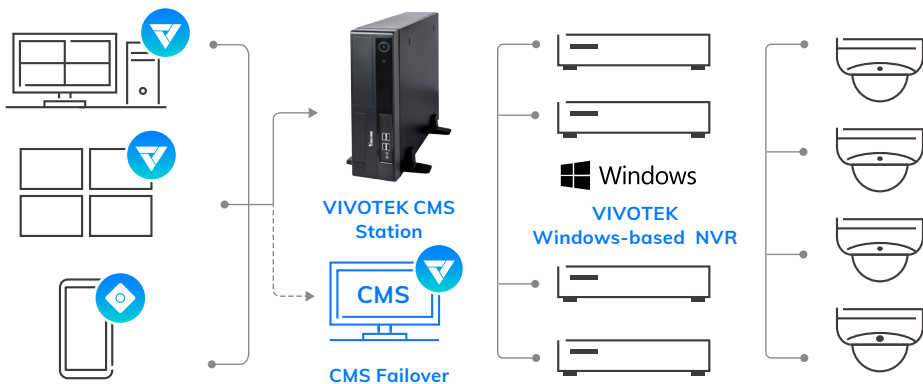
With the advantages of quick setup, easy deployment and simple troubleshooting, VAST 2's built-in NVR/Station offers a cost-effective turnkey solution to customers. Smart VCA and multiple solutions support makes VIVOTEK's VAST 2 built-in NVR more than just a video recorder





## Small/Medium Scale

In simple small cases, users can directly utilize one single CMS station to connect with cameras. In more complex small/medium-scale deployments, VAST 2's built-in CMS station acts as the CMS server to manage substations. With verification and certification by VIVOTEK, it fully aligns with all VIVOTEK family products for a fully integrated seamless solution



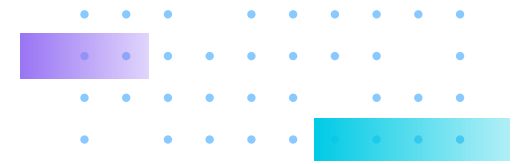
## Large Scale

In large-scale deployments, Windows-based NVR's embedded with VAST 2 can act as either the substation or the substation failover. Highly flexible with great reliability provides users with a full turnkey solution

# High Compatibility

Users have varied needs and expectations for their security requirements. VIVOTEK VAST 2, fully integrated with all VIVOTEK product lines, is a cost-effective solution for all surveillance and monitoring applications. Integration of other 3rd party cameras is also supported via ONVIF





## Comprehensive VIVOTEK Product Lineup

VAST 2 is fully integrated with all VIVOTEK products. From high image quality, multiple angles, and noise reduction to searching for a person of interest and AI analytics, VIVOTEK's comprehensive product portfolio comes to full life with VAST 2



## Multiple Fisheye Dewarp Modes

VAST 2 provides multiple fisheye de-warp display modes for VIVOTEK Fisheye cameras, including 10, 1P, 1R, 103R, 4R, 2P, 4R Pro, and 108R. By using different dewarp modes, users can monitor different angles as well as get immersive 360° e-PTZ effects



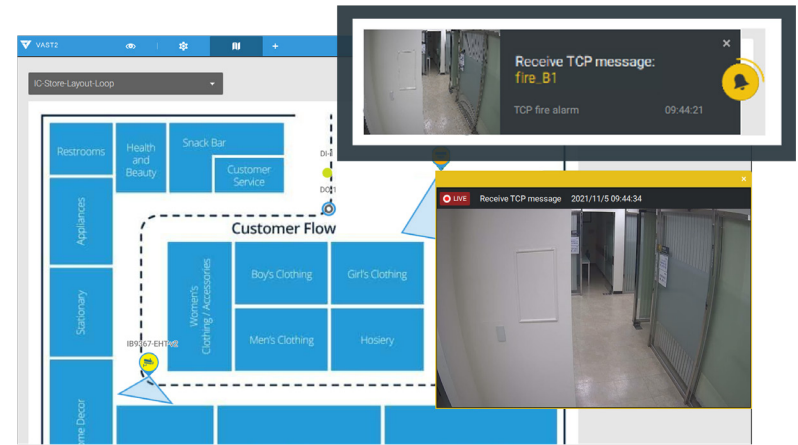
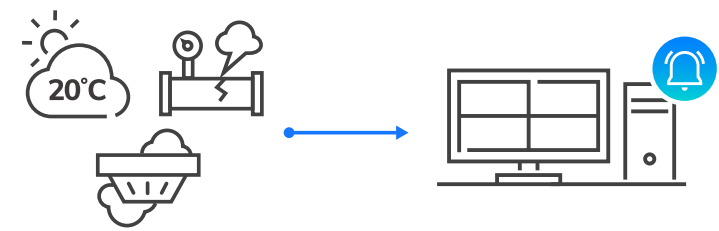
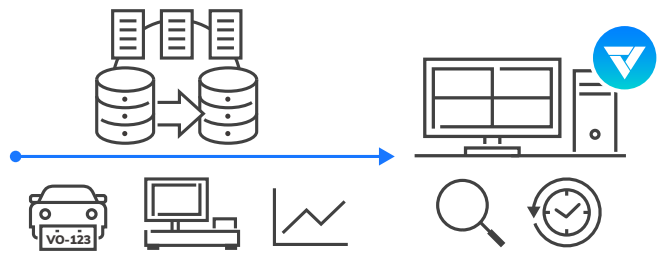
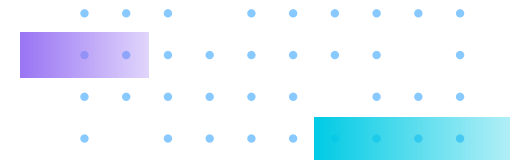
## ONVIF Support

VAST 2 supports ONVIF certified cameras. Recording video, audio & streaming with ONVIF cameras is guaranteed



# Easy Integration with 3rd Party Devices

Both Data Magnet or TCP protocol are utilized to integrate 3rd party devices. From pop-up alarm messages to video content analytics, data transmission is fully integrated with VAST 2.

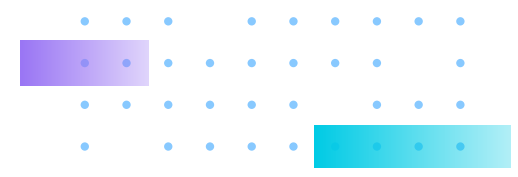


## Data Magnet Integration

Data Magnets enable cameras or third-party devices (e.g., access control/POS/Analytics) to integrate into VAST 2, supporting data display on live streaming and recording, as well as rapid search of multiple metadata/video. For human/vehicle identification, Data Magnets transmit the captured snapshot to VAST 2 and triggers immediate actions (e.g., Go/No Go). It also bookmarks the recordings for post search

## TCP Message

Relay TCP messages from third-party security devices such as smoke detectors or temperature sensors to notify VAST 2 users and/or trigger alarm actions. In the case of fire alarms, once the smoke detector sensors fire and transmits a TCP message to VAST 2, cameras nearby would automatically pop up on the monitor or on the e-map to call for further actions



# Case Study – Parking Lot Access Control



## 1 LPR Camera + Access Control

A camera with built-in license plate recognition technology detects the vehicle's license plate and manages the authorization of in/out with the gate barrier while sending video recording and identified result back to VAST 2



## 4 VAST 2 System

VAST 2 receives real-time alerts, allowing operators to take immediate actions through either pre-defined rules/announcements on VAST 2 or in person



## 2 Parking Violation Detection

Cameras with parking violation analytics detects if vehicles are illegally parked, and send out real-time alarms to the VAST 2 system



## 3 Network Audio

A horn speaker integrated with VAST 2 broadcasts pre-recorded audio warnings to drivers who violate parking rules, suspicious persons loitering in the parking lot, or persons attempting a break-in



# Case Study – Retail Surveillance



## 1 People Counting & Business Intelligence

People counting analytics integrated with VAST 2 generate accurate in-store traffic reports, providing valuable data to enhance operational efficiency



## 2 POS Terminal Integration

Integration of cameras monitoring POS terminals can associate transaction data with video footage, creating live printing transaction data on the screen and facilitating corresponding video search on VAST 2



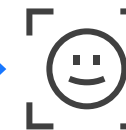
## 5 VAST 2 System

VAST 2 receives real-time alerts, allowing operators to take immediate actions through either pre-defined rules/announcements on VAST 2 or in person



## 4 Intrusion Detection

Cameras with intrusion analytics detects a suspicious person intent on breaking into a closed store, sends out real-time alarms to the VAST 2 system, and triggers an audio alert notification



## 3 Facial Recognition + List Management

Facial recognition cameras can verify staff identification and manage access authorization into the office and warehouse. Conversely, facial recognition can also be used to detect and welcome the arrival of VIP customers



# Case Study – Manufacturing & Industrial Security



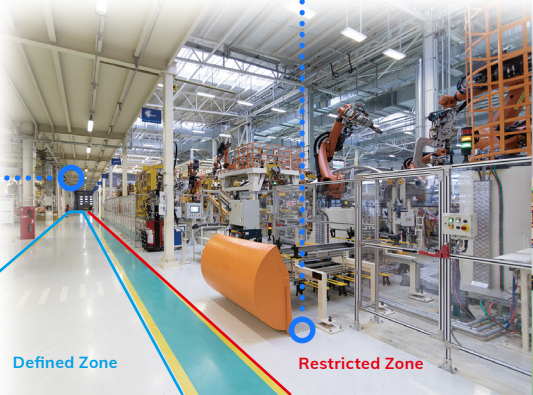
## 1 Restricted Zone Detection

A camera with restricted zone analytics detects a person of interest entering a prohibited area and sends out real-time alarms to the VAST 2 system



## 2 Network Audio

A horn speaker integrated with VAST 2 broadcasts a pre-recorded or live warning to a suspicious person who triggered an alarm



Defined Zone

Restricted Zone



## 3 LPR Camera + Access Control

A camera with built-in license plate recognition technology detects the vehicle's license plate and manages the authorization of in/out with the gate barrier while sending video recording and identified result back to VAST 2



## 6 VAST 2 System

VAST 2 receives real-time alerts, allowing operators to take immediate actions through either pre-defined rules/announcements on VAST 2 or in person



## 5 Data Magnet/TCP Message

Through Data Magnets, facial data for access control is imported into the VAST 2 system. Security operators can search through footage or attendance reports for a person of interest. Through TCP message, VAST 2 can receive alarms from IoT devices to take necessary actions



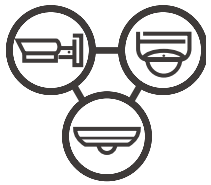
## 4 Facial Recognition + Access Control

The list management function makes access authorization by different groups possible. It is especially useful when applied to restricted areas like data centers or laboratories





# Case Study – Campus Safety



## 1 Camera Surveillance

Selective cameras of all types monitor every corner of the campus in real-time and send notifications back to VAST 2 if alarms are triggered



## 2 Facial Recognition + Access Control

Students and teachers are categorized into different groups with varied access authorities. Through facial recognition, access authority to specific buildings/labs/classrooms is achievable and forensic search of a suspicious person's route is also possible on VAST 2



## 5 VAST 2 System

VAST 2 synthesizes video streams and facial data, receives and delivers corresponding notifications and actions when pre-defined conditions are met



## 4 Network Audio

A horn speaker integrated with VAST 2 can broadcast a pre-recorded clip by schedule or a live announcement to the campus



## 3 Loitering Detection

A camera with loitering analytics detects a person of interest who is not allowed on campus and sends out real-time alarms to the VAST 2 system, as well as triggers audio warnings



# Success Stories



## Education

Nov. 2021, Indonesia  
Singapore School, Pantai  
Indah Kapuk



## Commercial

Sep. 2021, Indonesia  
Vittoria Residence



## Transportation

Sep. 2021, Taiwan  
Parking Management System  
of Medical Center



## Transportation

Mar. 2021, Zambia  
Zambian National Roads Fund  
Agency



## Commercial

Mar. 2021, South Africa  
BP Manor Garage Gas Station



## Retail

Jan. 2021, Mexico  
Peyrelongue Chronos Jewelry  
Boutique



## Manufacturing & Industrial

Oct. 2020, United States  
Existo Cannabis Security  
Solutions



## Education

Dec. 2019, United States  
National Center for  
International Schools



## Casino and Gaming

Nov. 2019, United States  
Chumash Casino Resort



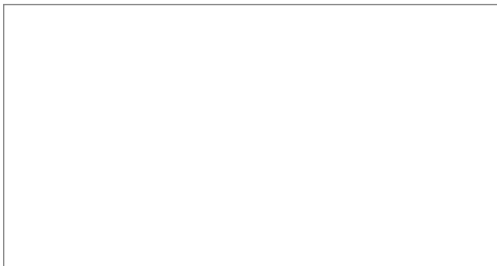
## Commercial

July 2018, Serbia and Montenegro  
SBB, the provider of cable television  
and broadband internet

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A Delta Group Company

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