



Datasheet

Video Analytics - Milestone



Version 3.6

This Specification Sheet gives the details of system requirements, features and other salient points of AllGoVision advanced Video Analytics for Milestone VMS Integration

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AllGo Embedded Systems Pvt. Ltd.

2729, 80 Feet Road, HAL 3rd Stage
Indira Nagar, Bangalore-560038, India

Telephone: +91-80-4330-3100
Email: agv_contact@allgosystems.com
Website: www.allgovision.com

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INTRODUCTION

This Data sheet gives the details of system requirements, features and salient points of AllGoVision.

AllGoVision is a Video Analytics software product for actionable intelligence in security installations. The product provides excellent return on investment for a wide range of applications, including City Surveillance, Building Surveillance, Business Intelligence, Loss Prevention, Consumer Behavior Analysis, Monitoring Traffic Flow, Parking Management and many more.

The technology evaluates the contents of video to determine the specific information about the video contents. The product analyzes rapidly the video for specific data, behavior patterns, tracking movement of people/objects in monitoring zones.

SYSTEM REQUIREMENT

AllGoVision analytics has the following system hardware and software requirements.

CATEGORY	REQUIREMENT
Operating System	Windows Server 2003, 2008, 2012 Window XP, Vista, 7, 8 Linux
CPU	Core i3 and above. Library portable on ARM
RAM	Minimum 2GB
Network	Ethernet, 100 Mbit or higher recommended.
Graphics Adapter	AGP or PCI-Express, minimum 1024×768 (1280×1024 recommended), 16 bit colors
Hard Disk Space	50 GB Free
Hardware Requirements	x86 Platform
Server requirement (for 640x480 resolution)	Core i3 3 GHz, 4GB for up to 15 channels Xeon 4 core or 6 core, 4GB for up to 24 channels Xeon 8 core or 12 core, 8 GB for up to 48 channels Supports Nvidia GPU acceleration for Face Capture & Recognition. Face recognition hardware requirement: NVidia GTX 780 + i7 3930 6 core, 32 GB RAM, 1 TB HDD, Windows 7/8 can support up to 8 channels.
Camera Support	Models from Axis, Pelco, Bosch, Sony, Honeywell, Arecont Vision, IQInvision, Brickcom, Hikvision, Panasonic, ISD. Any other camera requires URL to connect camera and get video feed. Supports MJPEG, H.264, MPEG4 Supports ONVIF camera, ONVIF PTZ control
VMS Software	Milestone (Express/Expert/Professional/Enterprise/Corporate)

COMPREHENSIVE SOLUTION








The AllGoVision Analytics is robust to weather changes, lighting changes, tree swaying and other background distractions. The AllGoVision also works well in crowding conditions. The AllGoVision supports object classification.

The software is easy to install and simple to use with intuitive GUI. AllGoVision also supports customization through variation of features for specific applications. AllGoVision supports distributed architecture.

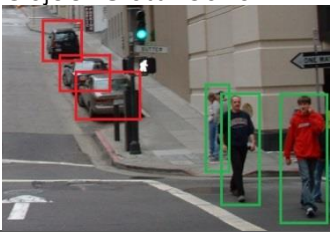
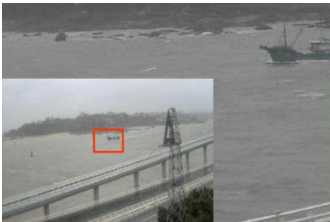
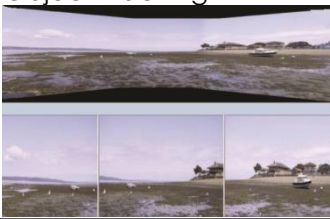



- AllGoVision GUI has scheduler to enable scheduling of Analytics and Administrator Login.
- AllGoVision supports:
 - Failover server
 - ONVIF streaming of analytics overlaid video, video stabilization
 - Alarm video creation and Snapshot creation
 - Video Stabilization
 - False Alarm minimization
 - Direct Camera Connection
 - Application to run as service
 - People counting report generation
 - Auto Emailer for reports
 - Save and Restore of settings
 - Administrator Login
 - Color and Size detection
 - Masking of view
 - Alarms filter based on object color, size, speed and aspect ratio
 - Logical operation on Alarms
 - Analytics capability to run both on server as well as edge (on camera)
 - Multi-region Analytics set on a single frame (alerts for multiple regions simultaneously)
 - Save settings and restore
 - Priority and region naming
- AllGoVision provides its **own Alarm Center (AC)** also. The database requirement is MySQL.
 - AllGoVision AC provides real time alarm snapshot and video.
 - AllGoVision AC provides **search** capability for Forensic search.
 - Forensic search can be done based on object properties like size, color, type, time etc.
 - AllGoVision AC provides heat map and motion map.





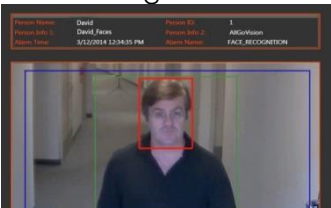
- AllGoVision AC provides reporting in pdf, excel, text file and scheduling reports for email & FTP.
- AllGoVision AC supports:
 - Video summary and Thumbnails
 - Live reporting
 - Emails on Alarms
 - Sound alarms
 - Parking management display
 - Face Recognition client

VIDEO ANALYTICS FEATURES

Sl. #	Feature	Description	Example
1	Tripwire 	Detection of Person or Vehicle crossing a virtual line	Intruder detection on fenced areas, Alert monitoring at the entrance, Illegal crossing of Railway line
2	Tailgating 	Detecting a person (individual) or vehicle following too closely the person or vehicle in front to get past access controlled entrances or barriers.	Unauthorized access at the mall entrance, gated communities, office premise
3	Counting 	Counting of people or vehicle after crossing a virtual line. Supports both overhead camera as well as	People counting to analyze foot fall statistics in malls, retail shops, buildings, Vehicle counting to analyze traffic capacity Vehicle counting for parking lot
4	Trespass 	This feature is used for detecting person or vehicle entering or exiting virtual area	Intruder detection in restricted areas. Illegal entry into restricted area in Banks, Shops Entry of person or vehicle into restricted area or exit from that. Over Speeding in the restricted area
5	Wrong Way Detection 	This feature is used for detecting people or vehicle moving in wrong direction	Vehicle moving in wrong direction in one way system, People exiting at the designated entry only areas
6	Loitering Detection 	This feature is used for detecting of Vehicle or person persistence beyond a specified time in a virtual area	People loitering in malls, People or vehicle having longer dwell time in restricted areas
7	Object Removal Detection 	Detection of object removal like paintings hanging on a wall	Artefacts protection in museums

Sl. #	Feature	Description	Example
8	Crowd Detection 	This feature is used for detecting people gathering in a virtual area	Illegal crowding on roads, railway station, in front of buildings
9	Left Object Detection 	This feature is used for detecting the people leaving out baggage or object in public place	Threat detection due to baggage left unattended in public place like malls, roads
10	Illegal Parking Detection 	This feature is used for detecting of Vehicle or person persistence beyond a specified time in a virtual area	People loitering in malls, People or vehicle having longer dwell time in restricted areas
11	Speeding Detection 	This feature detects speeding of the vehicle above speed limit	Over speeding on highways and city roads
12	Camera Tampering 	This feature detects Camera focus change or obstruction or video cable cut	Intentional sabotage by vandals
13	Smart Auto PTZ control 	This feature allows automatically do one step PTZ operation to capture closer video of violator as well as monitoring	Monitoring of violation with closer capture of violator for evidence
14	Object Tracking using PTZ Camera 	This feature allows tracking of object (Single or Multiple) using PTZ camera	Continuous tracking of object like intruder Continuous tracking of vessels in Sea

Sl. #	Feature	Description	Example
15	Object Classification 	Classify objects as people and vehicle	
16	PTZ Handoff 	Violation detected on any Fixed camera triggers PTZ camera to its view for auto tracking of object	Auto tracking of intruder with one PTZ camera covering multiple Fixed cameras
17	Video stitching with Object Tracking 	Stitching of 2-8 camera video with object tracking.	Critical infrastructure monitoring like Airports, Railways Border Security Building Surveillance Retail Surveillance
18	Face Capture 	Face Capture: Detects face in the camera FOV, captures it and stores it Face Tracking: Tracks the face in camera FOV	Face capture & storage for future evidence at airports, retail shops, financial institutes
19	Video Based Smoke & Fire Detection 	VSD will provide Smoke and/or Fire (S&F) detection for both indoor & outdoor environments. The Smoke and Fire detection can provide rapid detection of smoke and fire even when it is formed in 10-15% of the view. The smoke can be with or without fire.	Critical Infrastructures, Oil & Energy industrial plants, Garages, large indoor
20	Queue Management 	This provides queue properties Ingress: People coming into queue Egress: People coming out of queue Waiting time: Waiting time in the queue	Airports, Other counters

Sl. #	Feature	Description	Example
21	Slip & Fall Detection 	The provides detection of Slip & Fall of people	Slip & Fall of people in Malls, Airports, Metro
22	Parking Management 	This provides the free slots available for parking in parking place	Parking management of malls, building parking
23	Object and Face Masking 	This feature provides moving object and face masking for privacy	Maintains privacy of people monitored
24	Meta Data Storage and Search 	This feature provides storage and search of meta data of object properties like type, color, size, speed for each frame	Search and display of video for object properties like type & color.
25	Face Recognition 	Matches image detected with the images in database	Black list matching VIP identification

ALLGOVISION GUI

AllGoVision product offers a graphical user interface with windows-oriented, tab based, point and pick interface. Extensive use of graphical icons, pull-down menus, buttons, check boxes, and radio-buttons are incorporated to reduce typing work to the minimum possible extent.

AllGoVision product GUI consists of following seven tabs:

Server Setup Tab

The server setup tab consists of VMS or camera settings and other field details. You are able to view the video details from camera.

Analytics Setup Tab

The Analytics setup tab gives options to set the analytics fields for different features.

Advanced Setup Tab

This tab gives options to select advanced settings like camera environment, analytics processing complexity, shadow removal sensitivity, camera view, predefined object size and minimum object size.

Video Stitching Tab

This allows stitching of Videos from 2-8 cameras. The output is displayed in the same tab. The objects detected are also shown with Red rectangles.

Trigger Based

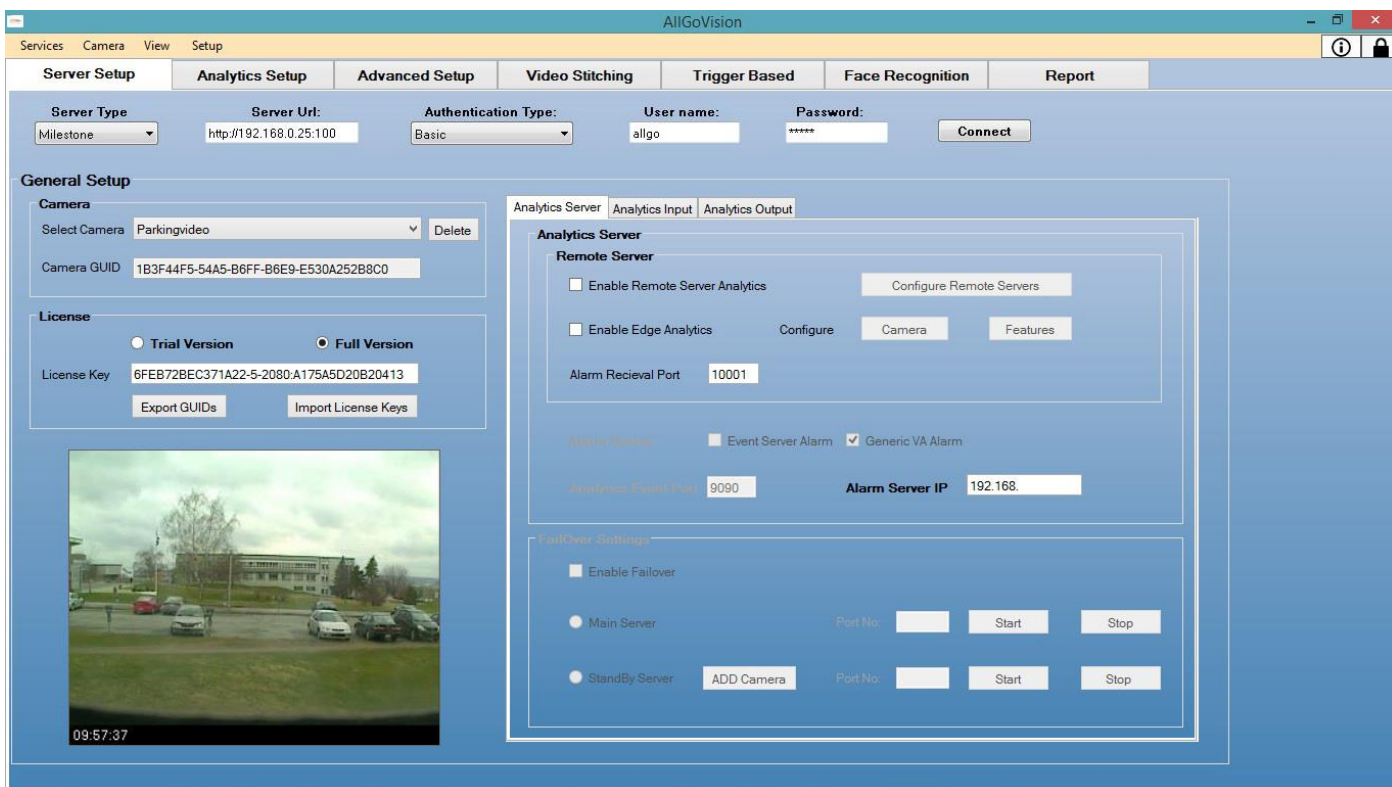
This allows running analytics from trigger like that from RFID.

Face Recognition Tab

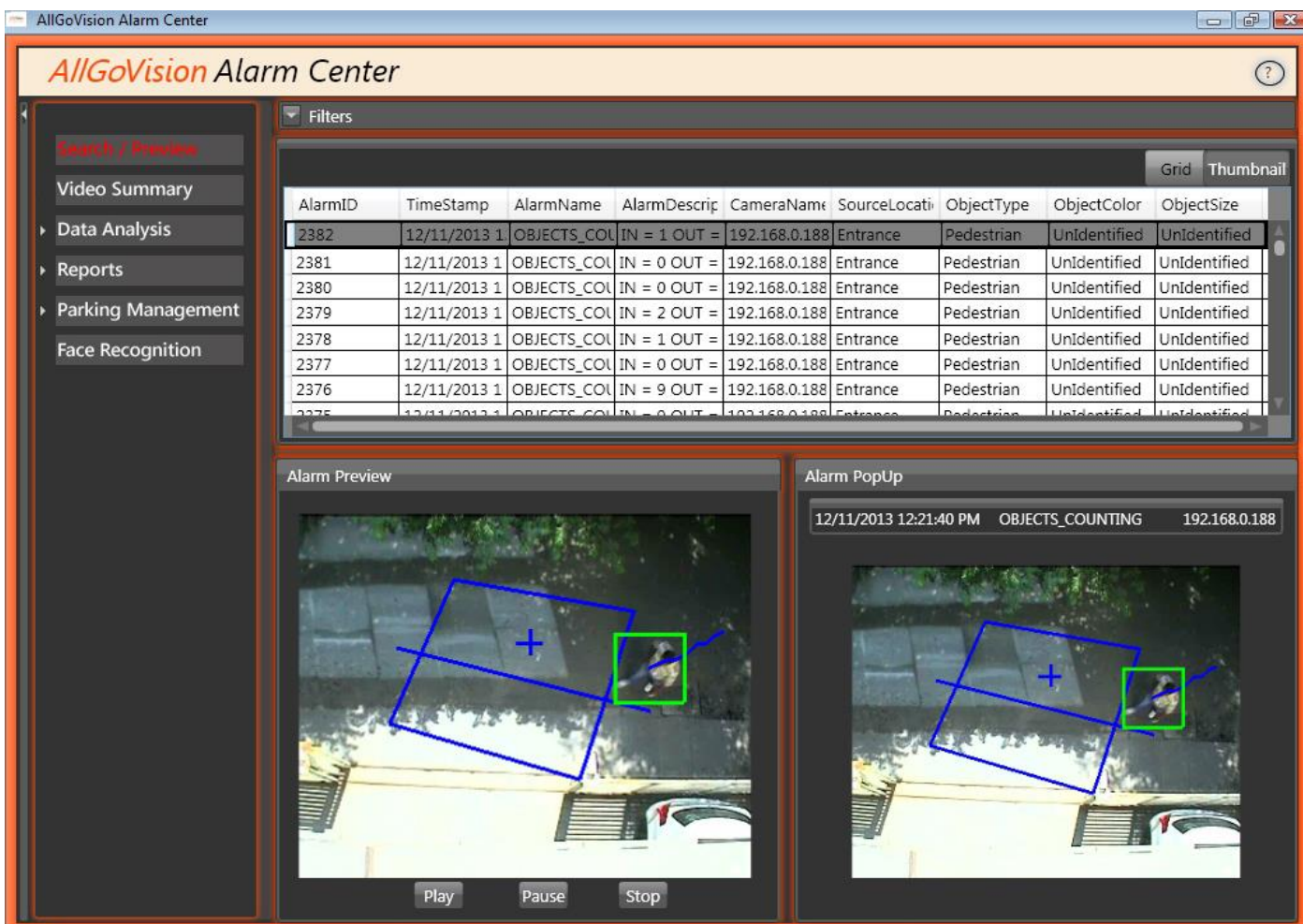
This tab provides registration application for Face recognition.

Report Tab

This tab gives option to plot the statistics of people counting. Both line and bar charts are possible. This also has auto e-mailer and export of plots and report.



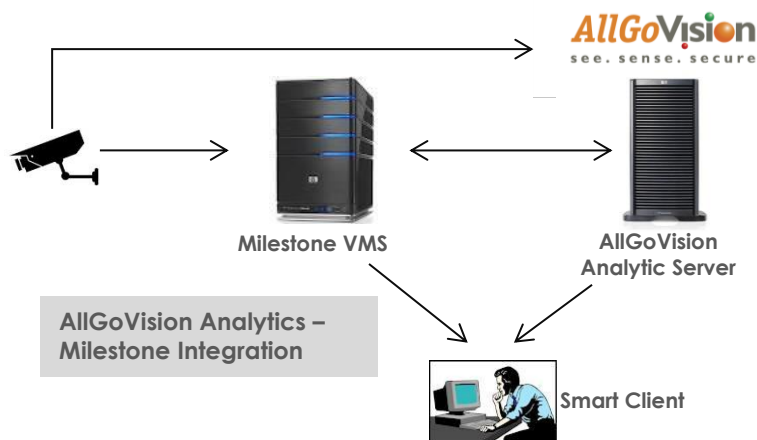
AllGoVision Management Client



AllGoVision Alarm Center

INTEGRATION WITH MILESTONE

- AllGoVision application provides the flexibility in installation. It can be installed either in same machine with VMS or separate machine.
- AllGoVision can take the Video feed directly either from VMS or Camera.
- AllGoVision send alarms to Smart Client application.
- AllGoVision application can run as a windows service



AllGoVision Management client

- AllGoVision Management client connects to Milestone and gets video feed
- The analytic rules are set in AllGoVision Management client and started as service
- The alarms are sent to Event server of Milestone

Video Analytic Alarms

- AllGoVision Video Alarms/events are stored in event manager and seen in Smart client
- The alarm manager displays alarm in real time and would be able to search alarms
- The plugins provided for live view alarm, popup and alarm playback

The screenshot shows the Milestone XProtect Smart Client interface. The top bar indicates the date and time as 9/11/2013 7:43:48 PM. The main window is titled 'Alarm Manager' and displays a table of recent alarms. Below the table, a live video feed from 'Camera 4' shows a person walking down a hallway. A red box highlights the person, and a blue box highlights the hallway area. A green line indicates the person's movement path.

Time	Priority Level	State Level	State Name	Message	Source	Owner	ID
7:16:24 PM 9/11/2013	1	1	TRESPASS	TRESPASS	Camera 4	allgo	13094
7:16:23 PM 9/11/2013	1	1	TRESPASS	TRESPASS	Camera 4	allgo	13093
7:14:15 PM 9/11/2013	1	1	TRESPASS	TRESPASS	Camera 4	allgo	13092
7:12:39 PM 9/11/2013	1	1	TRESPASS	TRESPASS	Camera 4	allgo	13091
7:12:35 PM 9/11/2013	1	1	TRESPASS	TRESPASS	Camera 4	allgo	13090
7:08:14 PM 9/11/2013	1	1	TRESPASS	TRESPASS	Camera 4	allgo	13089
7:06:24 PM 9/11/2013	1	1	TRESPASS	TRESPASS	Camera 4	allgo	13088
7:05:24 PM 9/11/2013	1	1	TRESPASS	TRESPASS	Camera 4	allgo	13087

Alarms received in Milestone XProtect Smart Client from AllGoVision