



# Datasheet

# Intrusion Detection



## Version 3.6

This Specification Sheet gives the details of system requirements, feature details and other salient points of AllGoVision's Intrusion Detection applications.

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## INTRODUCTION

This Data sheet gives the details of system requirements, feature details associated with AllGoVision's Intrusion Detection applications.

The Video Analytics product can use the following feature to monitor and detect the event of intrusion and thereby ensures safety for vulnerable and critical infrastructures, boundaries of industrial areas etc.

## SYSTEM REQUIREMENT

AllGoVision analytics has the following system hardware and software requirements.

CATEGORY	REQUIREMENT
Operating System	Windows Server 2003, 2008, 2012 Window 7, 8
Hardware Configuration	Intel i7, RAM 16 GB for 4 channels Intel 12 Core Xeon, RAM 32 GB for 12 channels
Network	Ethernet, 100 Mbit or higher recommended
Hard Disk Space	50 GB for 1 week storage of alarm files (images & videos)
Database	MySQL 5.5.2
Resolution and Frame Rate	640x480 and above up to 1080p Frame rate: 10 fps and above
Stand Alone version camera support	Models from Axis and ONVIF camera
VMS Support	Milestone Note: Any other VMS is supported through Alarm Center

## ALLGOVISION VIDEO ANALYTICS

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/Object/Vehicle counting and 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)**. The database requirement is MySQL.

## INTRUSION DETECTION FEATURES

The following video analytics features are used for effective surveillance for intrusion detection:

### Automatic PTZ Features:

AllGoVision provides AutoPTZ tracking. AllGoVision controls PTZ operation directly with camera or through VMS. Home or Preset position needs to be defined. AllGoVision supports PTZ control through ONVIF protocol.

#### Smart Auto PTZ

This feature allows automatically do one step PTZ operation to capture closer video of violator as well as monitoring.

Example: Monitoring of violation with closer capture of violator for evidence.

The Analytic rules like Tripwire can be set on PTZ camera to enable Smart Auto PTZ. In this process there are below steps are performed in order.

- At first, the analytics system estimates Violator's position.
- Then, PTZ control automatically captures a closer view of the violator for evidence.
- When the violator has moved, the camera immediately returns to normal position for monitoring again.



#### Continuous Auto PTZ

This feature allows tracking of object (Single or Multiple) using PTZ camera.

Example: Continuous tracking of object like intruder Continuous tracking of vessels in Sea.

In Continuous PTZ there are 2 options provided

- Multiple object – Any object near the end of frame is tracked.
- Single object – An object is latched based on size and continuously tracked



### PTZ Handoff

Violation detected on any Fixed camera triggers PTZ camera to its view for auto tracking of object.

Example: Auto tracking of intruder with one PTZ camera covering multiple fixed cameras.



Fixed Camera

PTZ Camera



## Object Detection based features:

AllGoVision video analytics is based on advanced object detection and object tracking algorithms. It has superior robustness to environmental changes like wind, rain, snow, etc. and gives accurate results even during gradual and sudden illumination changes.



### Tripwire

Detection of Person or Vehicle crossing a virtual line.

Example: Intruder detection on fenced areas, Alert monitoring at the entrance, Illegal crossing of Railway line



### Trespass

This feature is used for detecting person or vehicle entering or exiting virtual area

Example: Intruder detection in restricted areas. Illegal entry into restricted area in Banks, Shops etc. Entry of person or vehicle into restricted area or exit from that.



### Loitering

This feature is used for detecting of Vehicle or person persistence beyond a specified time in a virtual area.

Example: People loitering in malls, People or vehicle having longer dwell time in restricted areas.



### Crowding

This feature is used for detecting people gathering in a virtual area

Example: Illegal crowding by vandals near industrial boundary, crowding on roads, railway station, in front of buildings

## INTEGRATION

AllGoVision Video Analytics application is available in 2 flavours:

### With VMS:

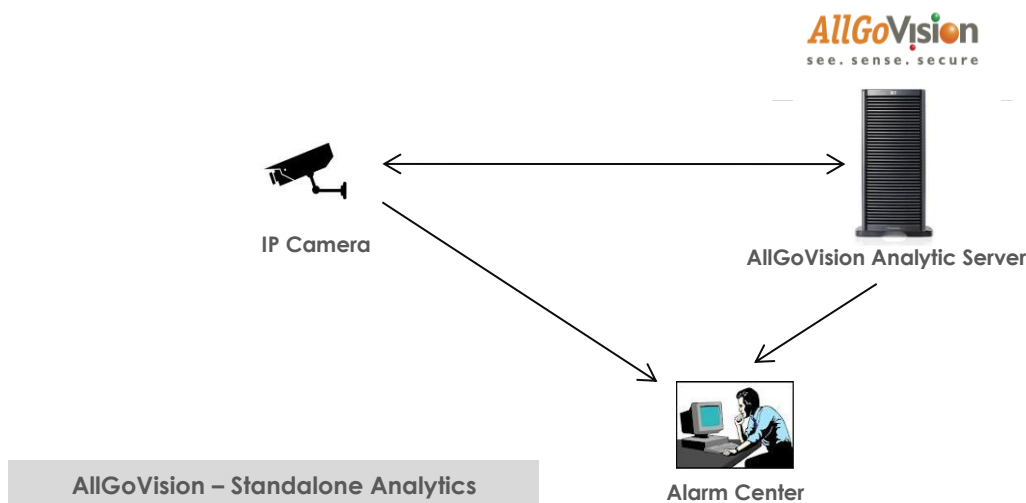
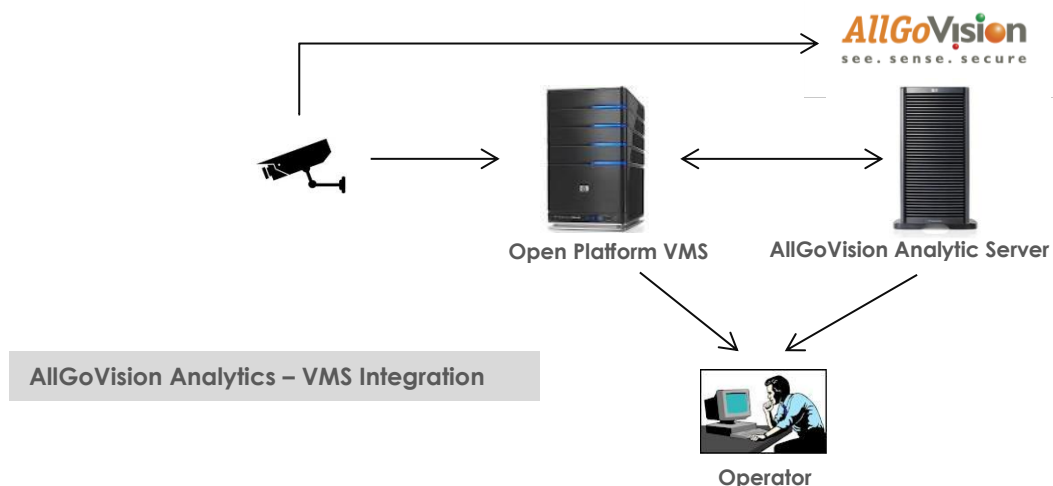
- AllGoVision application is based on Open Platform Standards.
- It is integrated with VMS like Milestone.

### Without VMS:

- It is a standalone application.
- It works independent of VMS.
- Directly takes the video feed from camera.

## Architecture

A simple architecture with VMS is shown below. The video from the camera is processed by AllGoVision video analytics server. The alarms can be viewed in the Alarm Center.





## 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

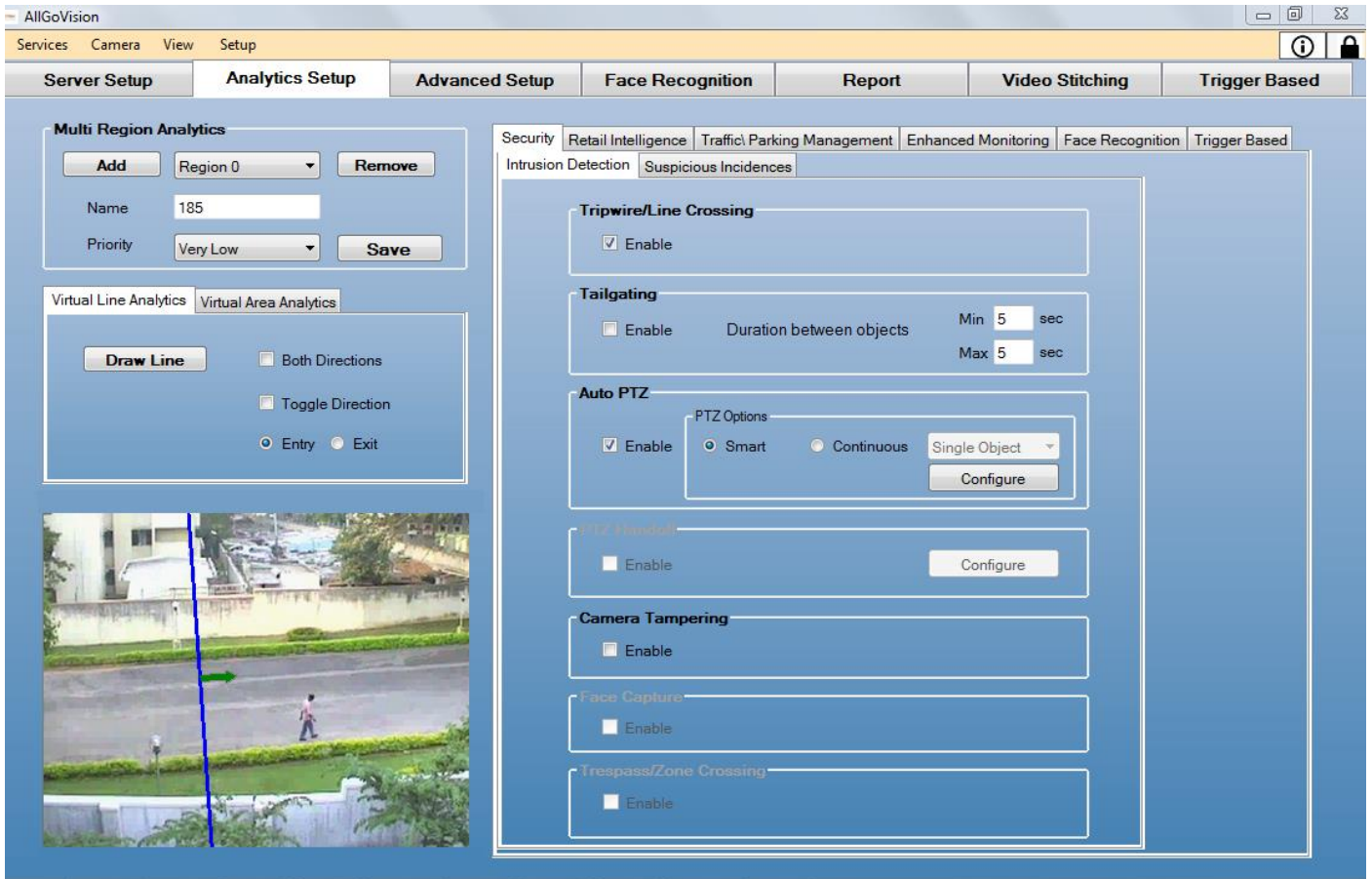
This allows running analytics from trigger like that from RFID.

### Face Recognition Tab

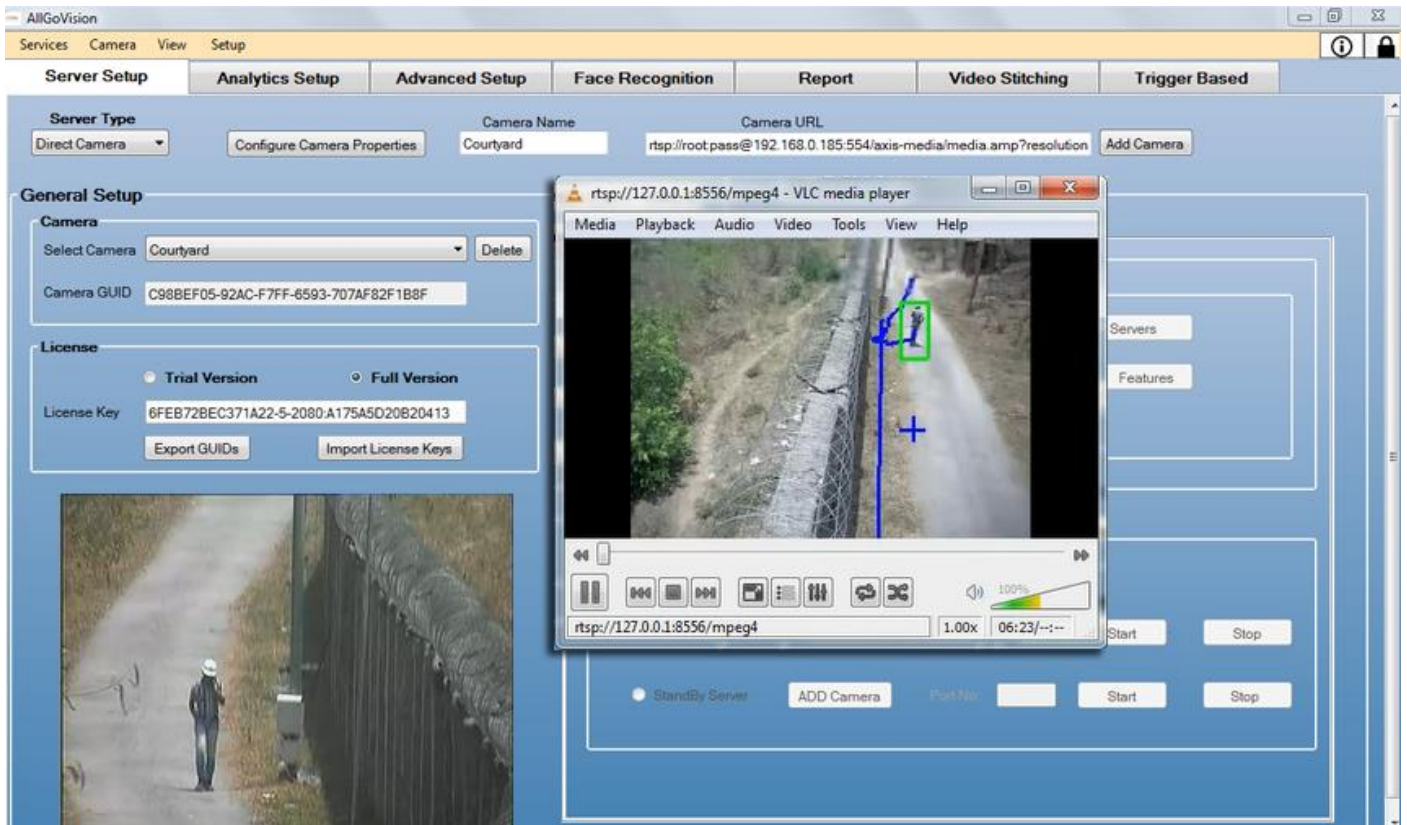
This tab provides registration application for Face recognition.

### 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 GUI – Analytics Setup Tab



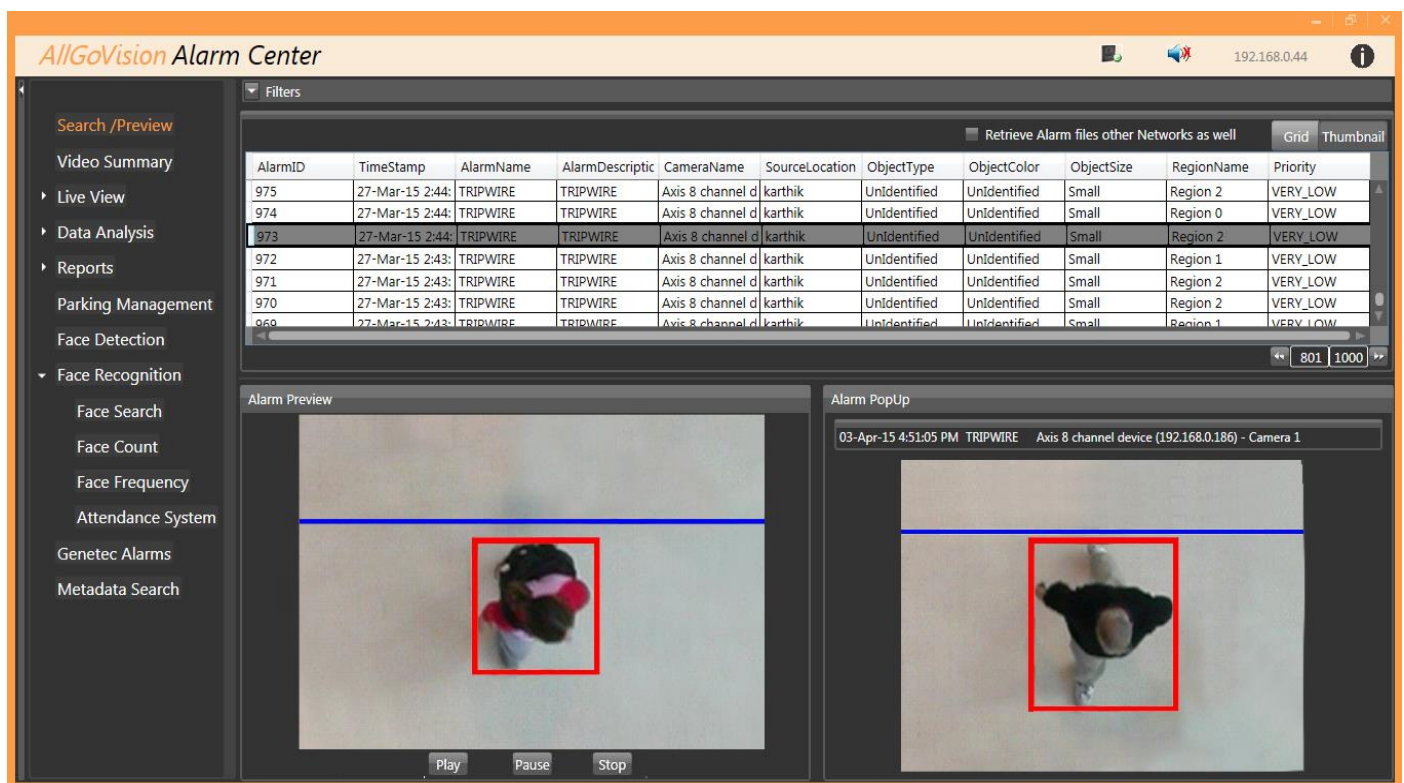
AllGoVision PTZ Handoff Operation

## ALLGOVISION ALARM CENTER

AllGoVision Alarm Center is a Client to view all the alarms generated by AllGoVision analytics running on different systems across a LAN.

### Features

- Alarm popup
- Alarm Video Playback
- Display alarms with date and time stamp
- Search: Filters to search alarms based on it types and properties
- Plot and Export of reports in JPEG, Excel and PDF format
- Schedule of Report
- Live reporting, Emails on Alarms, Sound Alarms, FTP upload of report.
- Alarm Center supports Video summary and Thumbnails



AllGoVision Alarm Center