AllGoVision

see. sense. secure

Datasheet
Face Counting & Analysis

Version 3.75

This Specification Sheet gives the details of system requirements, features and other salient points of AllGoVision Face Counting and Analysis applications.

Revision Date: August, 2016

Contents

COPYRIGHT INFORMATION

INTRODUCTION

This Specification sheet gives the details of system requirements, descriptions and salient points for features based on AllGoVision's Face Counting & Analysis applications.

The product analyses rapidly the video data to detect human face, captures the face (Face Capture), tracks it and stores it and sends real time alarm based on the number of faces (Face Count) in the camera view at a single instant as well as over a period of time.

Other than Face Count, AllGoVision's Face Capture & Recognition technology also provides the data regarding time span for which any face is in the camera view (Face Presence), or even the distribution map of recognized faces (Face Frequency) and Demographic Data (Age & Gender).

The software also provides extensive Reporting & Analysis options.

SYSTEM REQUIREMENT

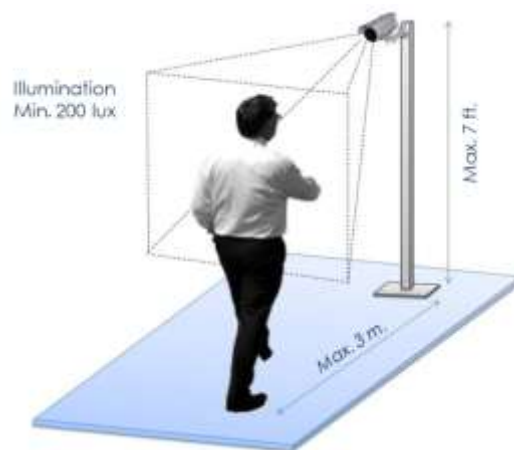AllGoVision analytics has the following system hardware and software requirements.

CATEGORY	REQUIREMENT
Operating System	Windows Server 2003, 2008, 2012 Window 7, 8
Hardware configuration	GPU: NVidia GTX 780 + i7 5930 6 core, 32 GB RAM, 1 TB HDD, Windows 7/8 can support up to 10 channels Or i7 3930 6 core, 32 GB RAM, 1 TB HDD, Windows 7/8 can support up to 6 channels For Client: i7 5930 6-core, 8 GB RAM, 1 TB HDD machine Database: 2 TB HDD (Minimum)
Network	Ethernet, 100 Mbit or higher recommended.
Hard Disk Space	50 GB for 1 week storage for alarm files (images & videos)
Database	My SQL 5.5.2
Resolution & Frame Rate	640x480 and above up to 1080p. Frame rate: 10 fps and above
Stand Alone Version Camera support	Axis, Pelco, Bosch, Sony, Honeywell, IQinvision, Hikvision, Dahua, ISD, Panasonic, Brickcom, ArecontVision, Indigovision, Cisco, Acti, Samsung, Vision, Digital Watchdog, and others (ONVIF cameras)
VMS Support	Milestone, Genetec, IndigoVision, exacqVision, Honeywell, Cisco Note: With any other VMS supported through Alarm Center

INSTALLATION

The software is easy to install and simple to use with intuitive GUI. The AllGoVision Face Capture & Recognition supports face detection and face count for people moving towards the camera.

Camera Installation

i) The camera installation should be Angular at a height of about 1.7 m facing the region where people can walk towards camera. If the height of camera installation is more, appropriate lens should be used and angle of incidence for face detection should be maximum 10 degree.

ii) The camera installation should be generic IP cameras with good quality at Angular direction.

iii) The illumination should be above 200 lux. Good constant illumination should be maintained throughout the day.

iv) The height of installation depends on resolution. The pixel distance between eyes should be above 60 pixels for detection.
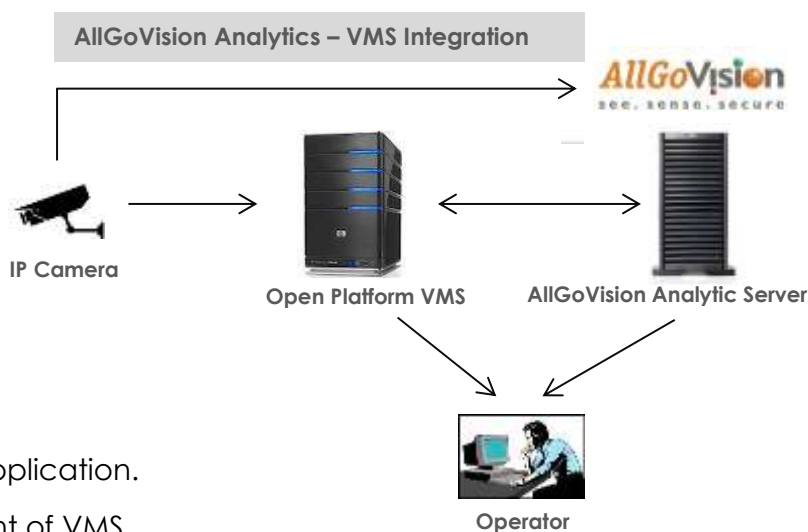

Integration

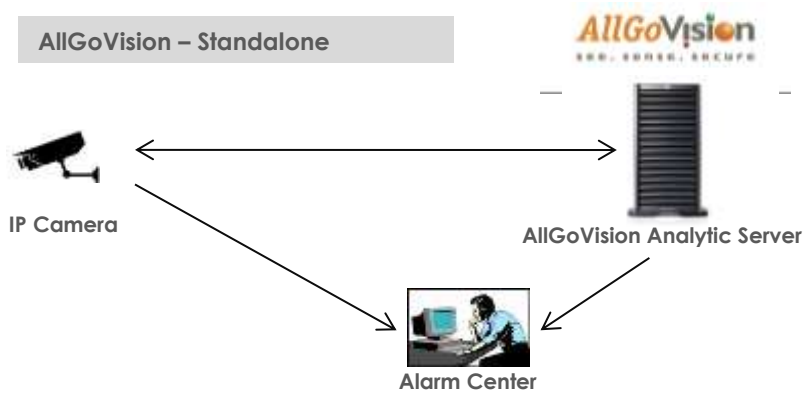AllGoVision Face Counting application is available in 2 flavours:

With VMS:

• AllGoVision application is based on Open Platform Standards.

• It is integrated with VMS like Milestone, Genetec, IndigoVision etc.

Without VMS:

• It is a standalone application.

• It works independent of VMS.

• Directly takes the video feed from camera.

• The statistics and alarms are seen in Alarm Center

AllGoVision – Standalone

IP Camera

AllGoVision Analytic Server

Alarm Center

FACE COUNTING FEATURE

- Counts the number of faces in the camera view.
- Accuracy > 90 %.
- Environment: Indoor/Outdoor.
- People face to be visible in front of the camera.
- Works simultaneously with video analytics for other cameras.

FACE DETECTION & RECOGNITION FEATURES

- Apart from Face Count, Detection/Capture and Recognition can be applied.
- Face Capture: Detects face in the camera FOV, captures it and stores it.
- Forensic Face Search: Finds approximate matches for searched face from captured data.
- Face Tracking: Tracks the face in camera FOV.
- Face Recognition: finds a match for the detected face in the database.
- The recognized person details can be displayed in real time.

FACE ANALYSIS

- Face Presence: Detects the time span when any face is in camera FOV.
- Face Frequency: Provides frequency distribution map for recognized faces.
- Demographic Analysis: Age and Gender is analysed based on detected face.

Applications

- Face Counting (for visitor statistics) at entrances and exits, service counters like ticket counters, platforms, departure and arrival gates etc.
- Face Capture for capturing and storing the faces to database for future tracking and identification and forensic search.
- Eye gaze detection for different shelves in retail.
- Viewers / Audience Engagement Analysis with Face Presence & Face Frequency.
- Demographic Profiling (with age & gender detection) for digital signage, retail stores etc.
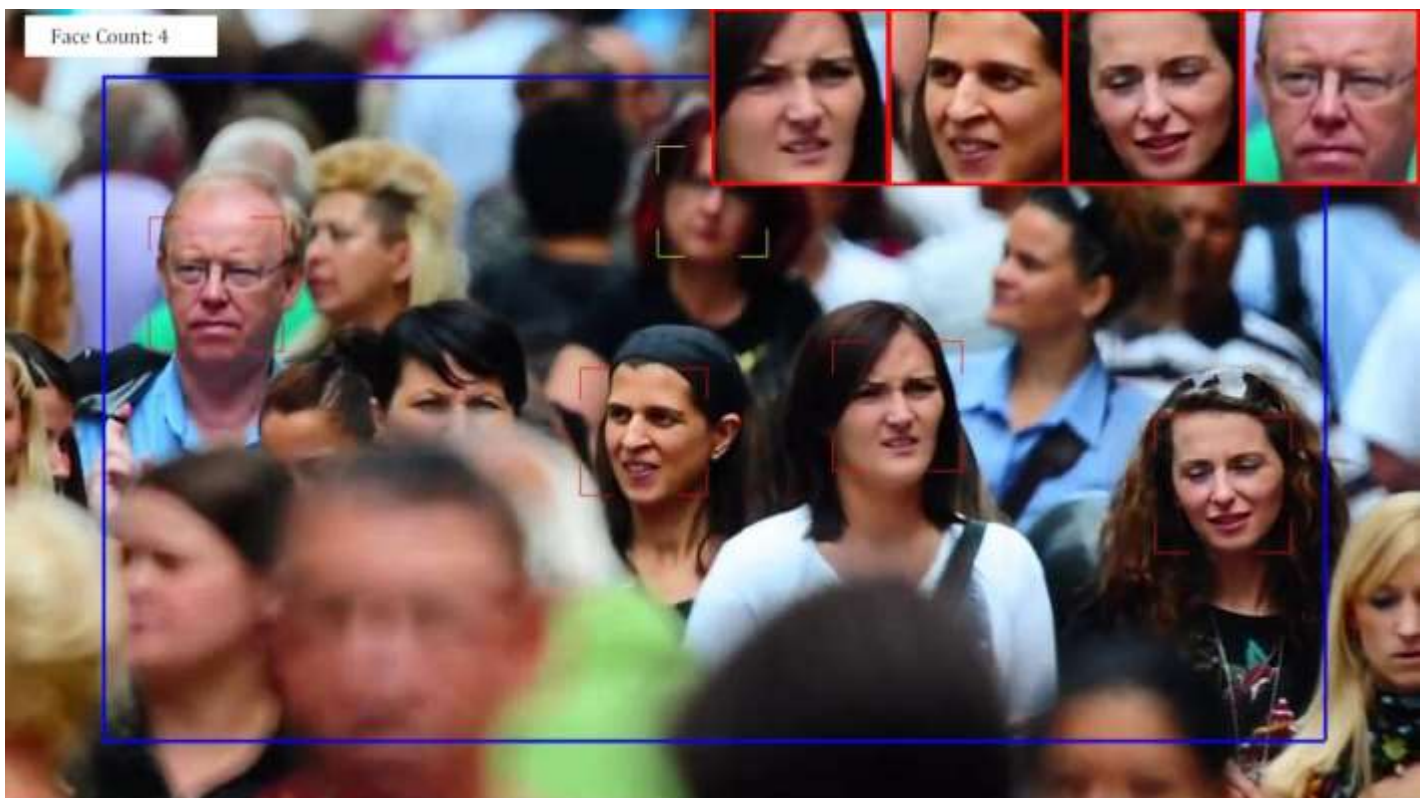
Software Features

- Application can run as service
- Settings are available for Direct Camera connection
- Settings are available to send alarms to supported VMS clients and Alarm Center
- Scheduler available to enable scheduling of Video Analytics
- It has its own viewer application, extensive reporting and analysis options

Reporting

- Report of Face Counting with different time duration, interval and plot options.
- Report of time span for Face Presence
- Frequency Distribution map for recognized people (Frequency)
- Face Analysis based demographic data (age, gender)
- Export of plot in JPEG and report in CSV format
- PDF format export supported
- Options for Report Scheduler and Live Reporting are available
- Options for Auto Report E-mailer or FTP upload of reports are available
- Option for Comparison Reports is supported

Face Count Snapshot

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 tabs:

Server Setup Tab
The server setup tab consists of setup for VMS connection or camera connection.

Analytics Setup Tab
The Analytics setup tab gives options to set the analytics fields for different features. The face detection and counting settings are completed here.
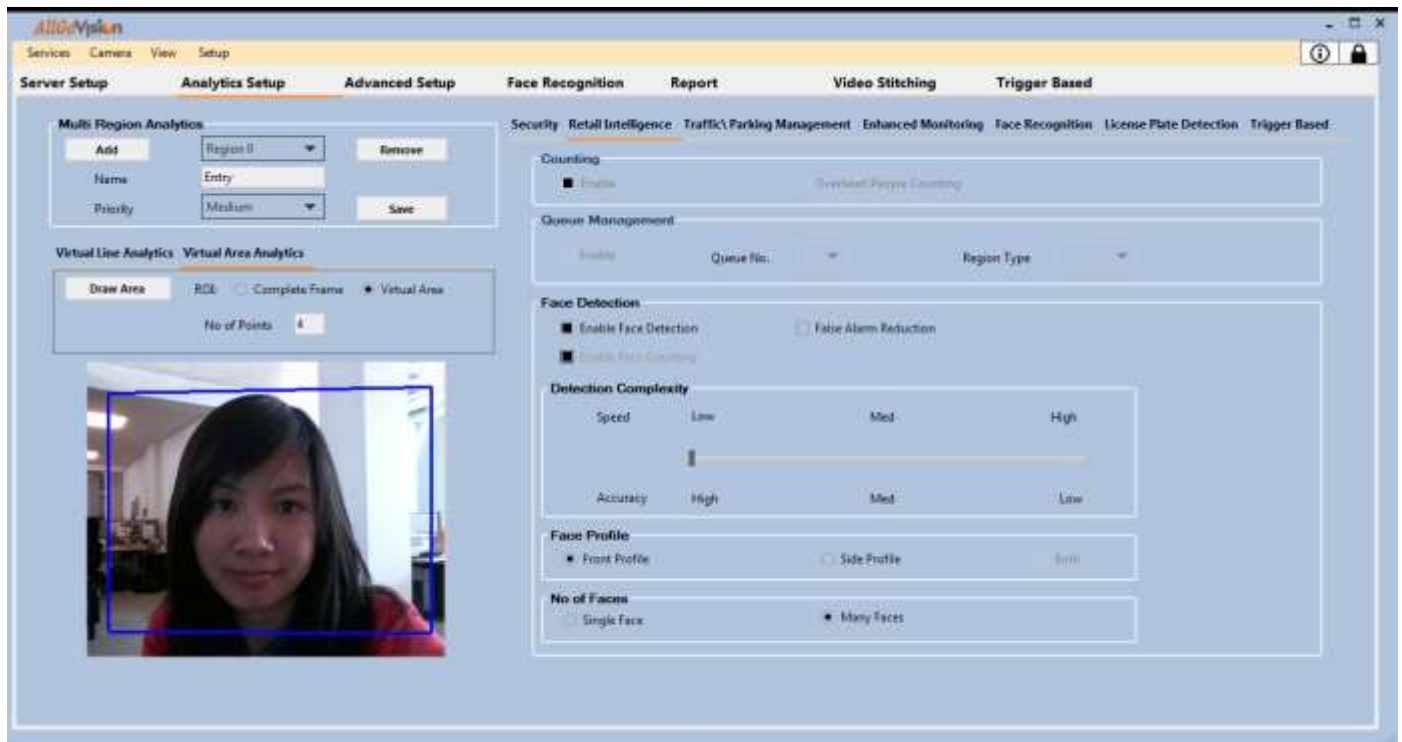
Advanced Setup Tab
This tab gives options to select advanced settings like camera environment, analytics processing complexity, shadow removal sensitivity, camera view, predefined object size, minimum object size etc.

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

Face Recognition Tab
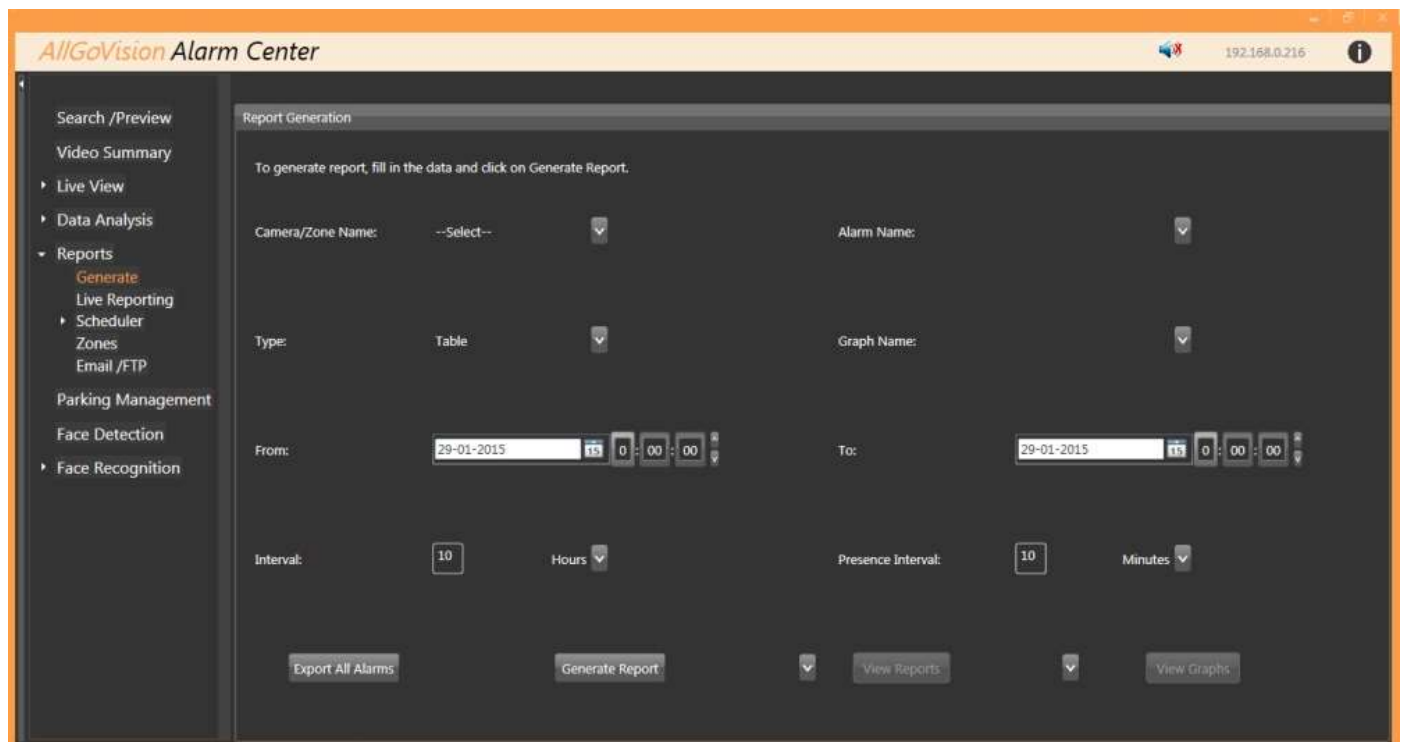This tab is used for Face Registration.

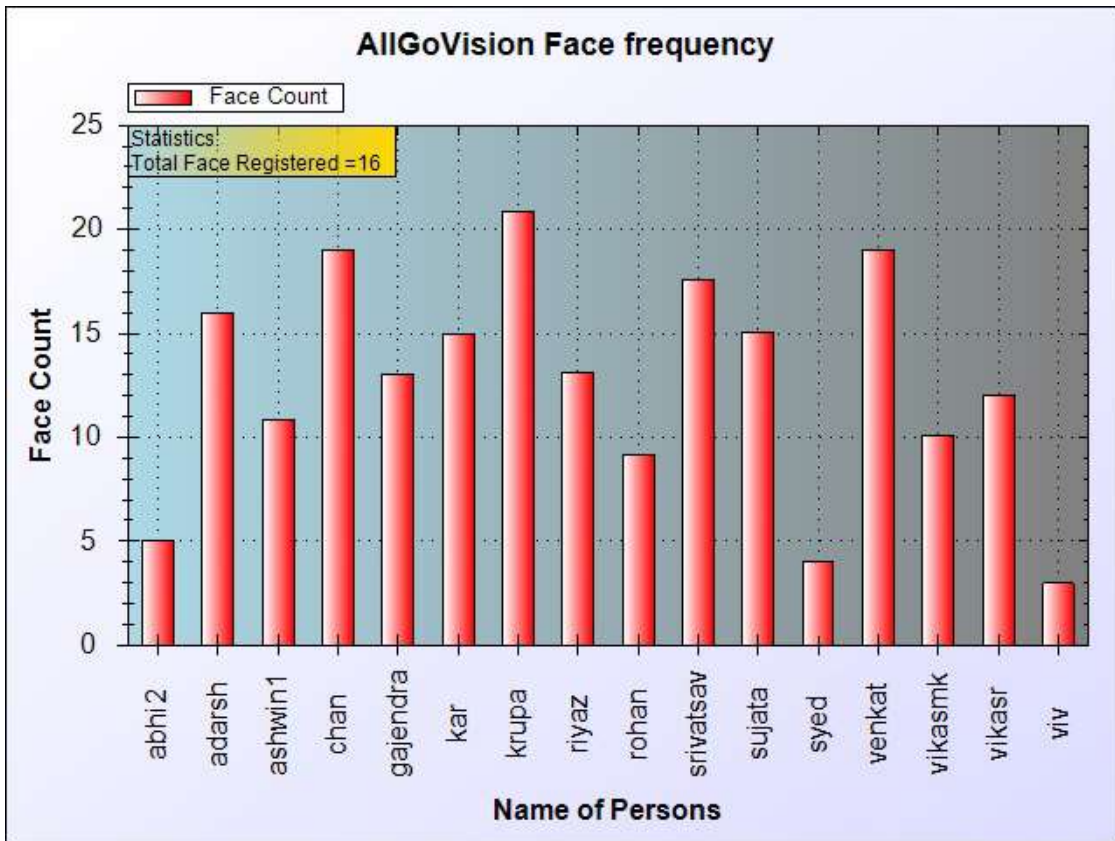**AllGoVision Analytics Setup Tab**

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. Database is MySQL.
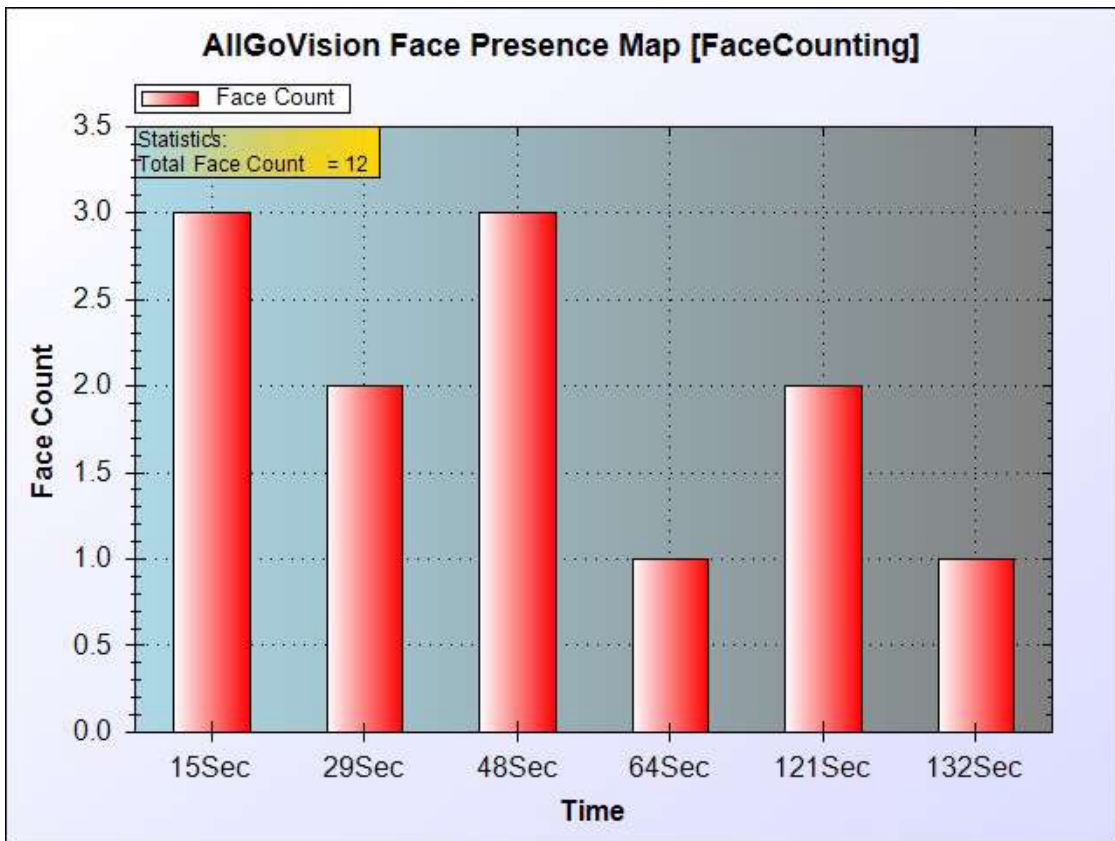
Features

- Alarm Popup for latest alarm

- Alarm Preview and Alarm Video Playback options for any of the past alarms

- Displays alarms with date and time stamp

- Search: Filters to search alarms based on its types and properties

- Forensic Analysis based on various object properties – size / color / type / time etc.

- Forensic Face Search: searching appearance of a person in recorded video

- Forensic search works with Milestone & Genetec recorded video

- Plot and Export of reports in JPEG, Excel and PDF format

- Schedule of Report, Live Reporting options

- FTP Upload / Email transmission of reports

- Report of Face Counting with different time duration, interval and plot options.

- Report of time span for Face Presence

- Frequency Distribution map for recognized people (Face Frequency)

AllGoVision Alarm Center – Generates plots of face counting, face presence, face distribution

Face Count Distribution Map

Face Presence Distribution Map