AllGoVision

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Datasheet

Video Stitching

Version 3.6

This Specification Sheet gives the details of system requirements, feature details and other salient points of AllGoVision's Video Stitching Feature.

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INTRODUCTION

This Data sheet gives the details of system requirements, feature details of AllGoVision's Video Stitching feature.

The Video Analytics product can provide Real Time Video Stitching up to 8 cameras to output the panoramic view in the stitched video.
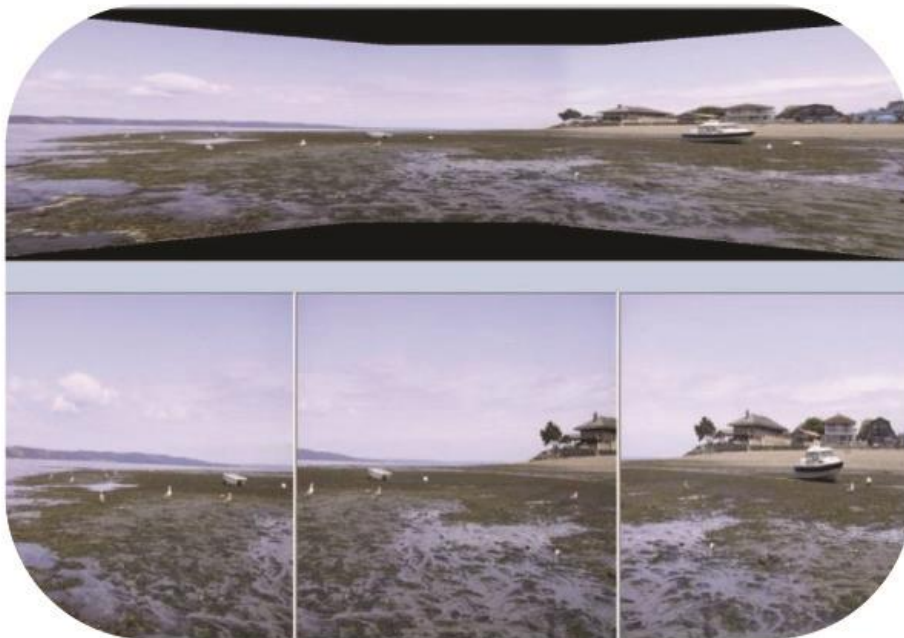
SYSTEM REQUIREMENT

AllGoVision analytics has the following system hardware and software requirements.

CATEGORY	REQUIREMENT
Operating System	Windows Server 2003, 2008, 2012 Window XP, Vista, 7, 8
CPU	Intel i7, RAM 16 GB for 8 channels Intel 12 Core Xeon, RAM 32 GB for 24 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, Pelco, Bosch, Sony, Honeywell, Arecont Vision, IQInvision, Brickcom, Hikvision, Panasonic, ISD, Acti, Vision and others.
VMS Support	Milestone, Genetec, Indigovision

FEATURE DESCRIPTION

- AllGoVision provides video stitching features.

- Unaligned and overlapped views from IP cameras are stitched together to create one single view.

- Non overlapped cameras also can be stitched together to create one view

- Video stitching is possible for Up to 8 cameras.

- The stitched video can be added as ONVIF camera in VMS and can be recorded and viewed in VMS client.

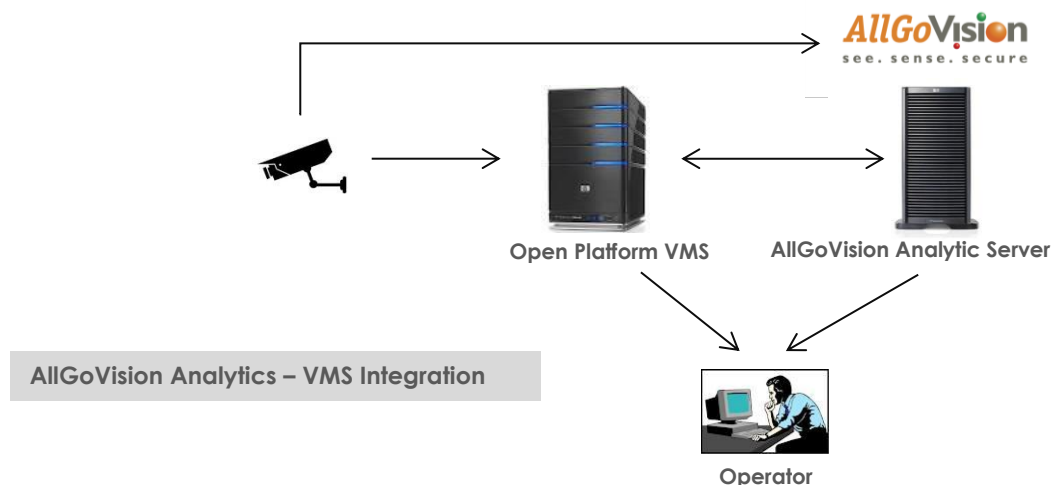- Object tracking supported in stitched view

CAMERA INSTALLATION GUIDE

1. Installations can be made both indoor and outdoor.

2. Single camera brands for all the cameras produces better stitching.

3. Camera should not have high variation in zoom levels.

4. Camera should have same resolution and frame rate.

5. Installation should be made at places where there is a wide view of larger area at equidistance from the cameras. If the views vary with distance to nearest landscapes across the cameras, the stitched image might produce variable results.

6. Best performance when installed during the steady background scenario for the system to be stable and adaptive. Once installed in steady background without many movements in the scene, stitching can provide good results even if, later, there are movements and objects motions across the views.

7. Core i3 minimum 2.5 GHz is recommended for 3 camera video stitching for 640x480 resolution.

8. Works for 10%-100% overlap for stitching. If there is no overlap, images are displayed side by side.

9. The setup effort is one time. Stitched Video is seen continuously after that.

10. Video stitching works with Genetec and Milestone Login.

11. Example installations :

    • Outdoor: Cameras looking down from high altitude across the open grounds like parking lots, big pathways, campus premises, Road intersections etc.

    • Indoor: Cameras with unobstructed views of spacious rooms, long passages, uniform depths of views across the cameras in the premises.

ARCHITECTURE

A simple architecture with VMS is shown below. The video from the CCTV camera is stitched by AllGoVision video analytics server. The stitched view can be added as ONVIF camera and viewed in the VMS client.

AllGoVision Analytics – VMS Integration

Open Platform VMS   AllGoVision Analytic Server

Operator

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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.
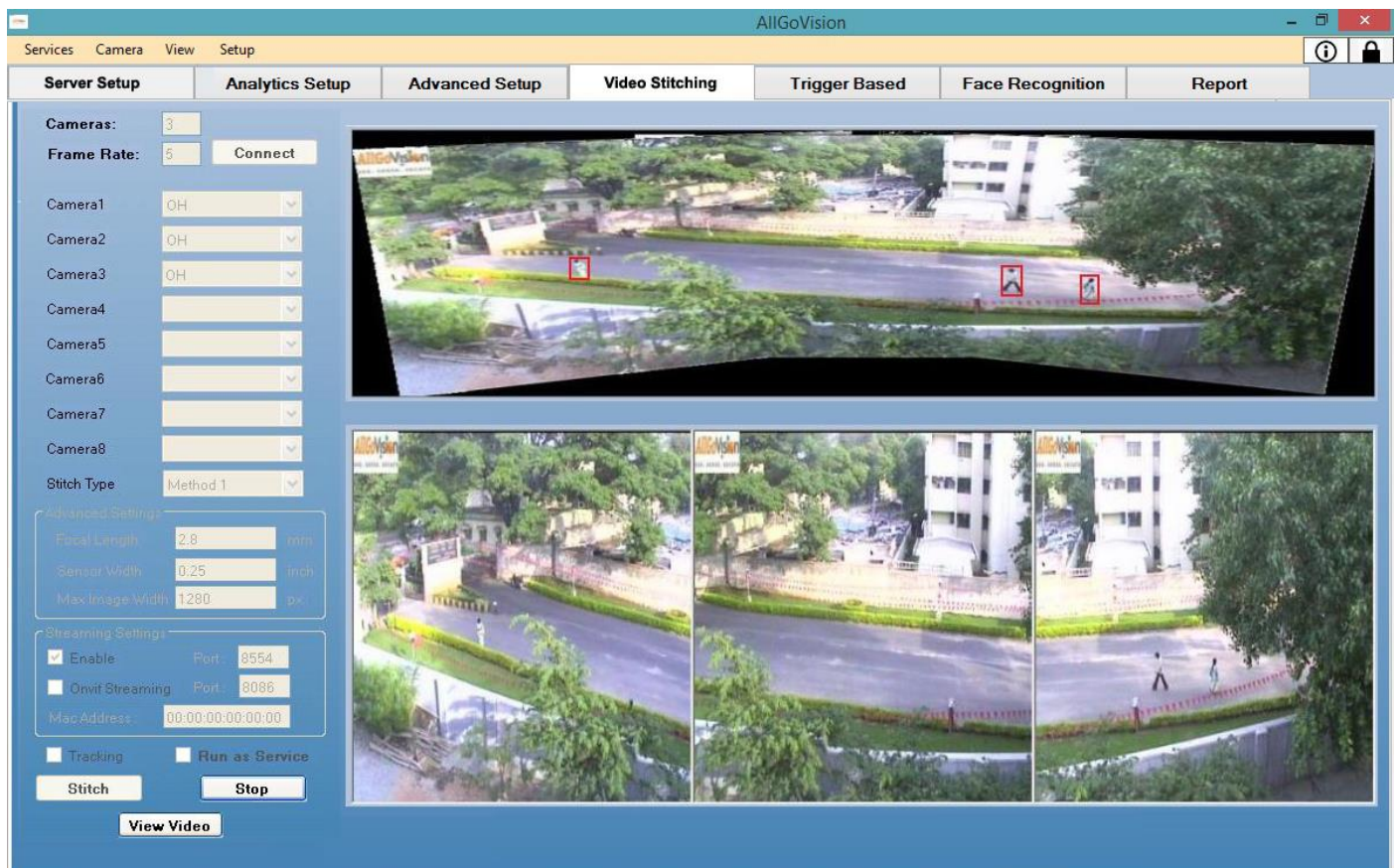
Trigger Based

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 Video Stitching Tab