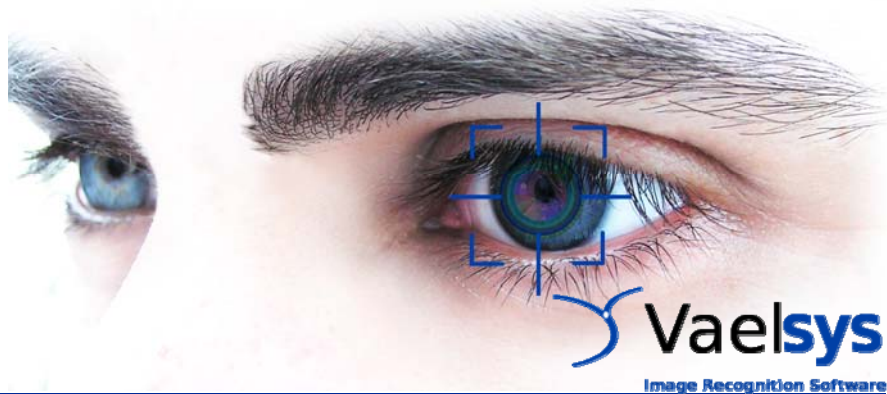


ViX HeatMap



HeatMap is a plug & play application designed for flow analytics using network cameras. HeatMap runs embedded in network cameras compatible with Axis Camera Applications Platform (ACAP) providing in real time images showing how people have moved in the camera scene for a period of time. The information can easily be retrieved to create video by any recording software compatible with Axis cameras or viewed directly in the camera. Cameras can be mounted in the ceiling or on a wall overlooking the scene.

Key Features:

- Embedded application requiring no additional hardware
- Ready to work, configuration is optional.
- A new map image is created every 10 seconds resuming the activity that has taken place
- Map reset can be configured (every hour, every 4 hours, 8 hours ...) Data is store up to 24 hours to create maps.
- Two different kinds of map are available for better visualization:
 - Full range of colors is used for every image (from black to white) – Instant Map
 - Full range of colors is used for the entire period (useful to compare maps of different moments) – Period Map

Requirements :

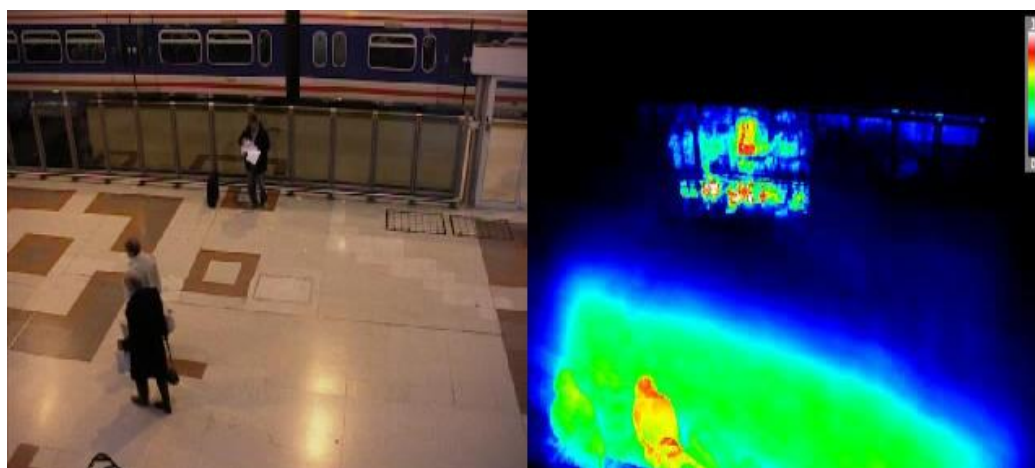
- Axis Camera Application Platform. (ACAP)
- Web Browser compatible with ACAP

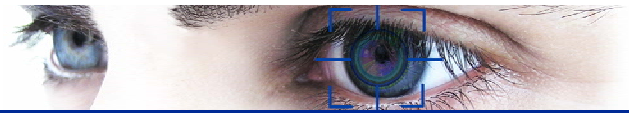
Installation recomendations,

- The camera should cover as much ground as possible, trying to avoid occlusions
- Mounting cameras in the ceiling is recommended. Avoid frontal position since occlusions are maximum that way.
- Avoid moving elements, shadows, doors etc because they will heat up their area.

Integración:

- Images can be retrieved using HTTP requests





Benefits:

- Easy to use visual tool for measuring traffic patterns in stores, streets, etc.
- Know how people use , detect “black spots” and “hot spots”
- Build “heat videos” based on Heat Map images and be aware of traffic within your store
- Compare how space is used after a layout redesign
- No extra hardware is required. Information is available directly in the camera
- Cost efficient solution
- Camera optimization. Use cameras as a surveillance device but also get a HeatMap device running on the same hardware.
- Plug & Play , you only need to configure, the reset frequency.

How does it work ?

1. Place the camera with VIX HeatMap installed in a way you can cover the maximum space possible. Usually the best option is mounting cameras on ceiling in order to avoid occlusions (if you get one person in front of the camera, you wont see the action behind!)
2. ViX HeatMap can automatically start running. However you may want to check reset frequency (every hour, 8 hours, or every day). When reset is achieved, the heat maps will frozen, losing all the previous activity .
3. Every 10 seconds two new Heat Maps (“instant” and “period” maps) will be created and available for display or retrieval. After 10 seconds they will be replaced by two new ones.
4. Motion within the camera scene is analysed avoiding soft light changes. The information is accumulated in the camera in order to create visual Heat Maps.
5. There is two option to visualize a Heat Map “Instant “ and “Period” . The difference is the way colors are used.

“Instant” Heat Map is a better way to visualize traffic in a period (ex: from 9h to 10h)

“Period” Heat Map is the best option to compare two different periods (ex: from 9h to 10h and from 10h to 11h)

Applications:

HeatMap is very easy to use and provides information that can be useful for:

- Store layout design
- Store layout testing and optimization
- Customer traffic pattern analysis
- New product impact analysis
- Find out problem areas