

NETAVIS iCAT for Business

Video analytics as an integrative component of video management

NETAVIS iCAT is part of the **NETAVIS Platform for Security and Business**, which provides professional video surveillance, extensive video content analysis, and generates real business value by transforming the raw data into vital key performance indicators.

NETAVIS iCAT analyzes video streams and detects relevant actions and incidents. A wide range of powerful and easy-to-configure video analytics modules therefore delivers vital insights about customer frequencies, customer segmentation, customer behavior and more. Providing the full potential of intelligent video surveillance with IP and legacy analogue cameras, iCAT is already installed with every single NETAVIS Observer video management system and is activated by simply changing the license key.

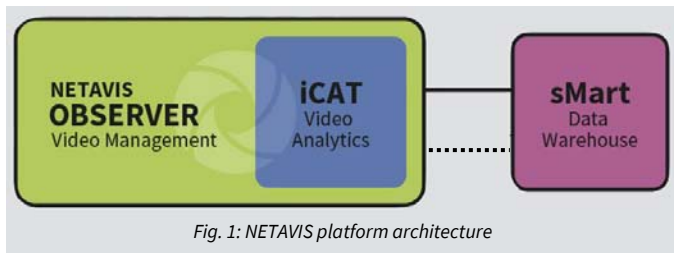


Fig. 1: NETAVIS platform architecture

ICAT FACE DETECTION

iCAT Face Detection detects faces in video streams and estimates age group and gender for each detected face. Upon request, sMart Data Warehouse transforms the video meta data into vital customer segmentation information. Thus, decision makers are enabled to improve target marketing and optimize business processes.

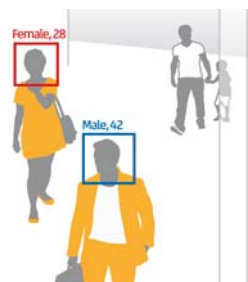


Fig. 2: iCAT Face Detection

ICAT NUMBER PLATE RECOGNITION

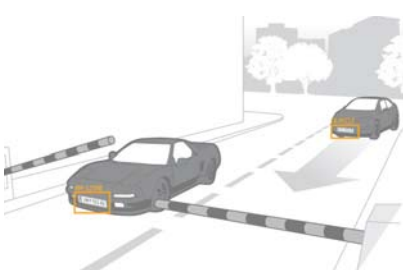


Fig. 3: iCAT Number Plate Recognition

iCAT NPR can be used in vehicle entry, parking, and free flow scenarios. Furthermore, it provides number plate data for a variety of business applications like customer frequencies and geographic customer segmentation, helping to improve marketing strategies.

ICAT VIDEO ANALYTICS

This module includes various algorithms for a diverse set of solutions.

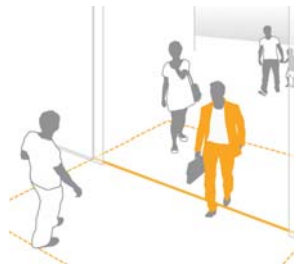


Fig. 4: People Counting with iCAT

People counting detects and counts people in video streams with the unique Smart Tripwire technology. It detects people moving in the wrong direction and allows counting incoming and outgoing people with a single camera, delivering exceptionally accurate results. Criteria like minimum size or speed further improve the accuracy.

Object counting allows efficient monitoring of production outputs and performances, as well as inventory shrinkage and loss. Upon request, NETAVIS sMart Data Warehouse transforms all counting data into vital frequency information.

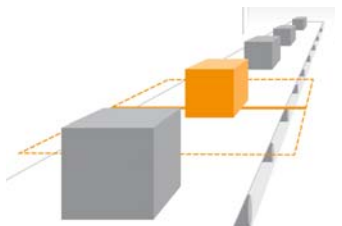


Fig. 5: Object Counting with iCAT

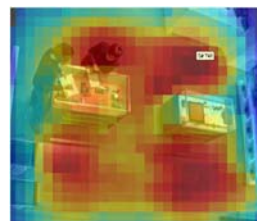


Fig. 6: Heat Maps with iCAT

Heat Maps are colored overlays of video streams that visualize detections such as number, speed, stops and dwell time of people. Heat maps can be displayed on floorplans in sMart, help to quickly identify busy areas and monitor promotions, and understand customer behavior.

Dynamic Privacy Mask provides dynamic privacy protection by covering people with a mask. Of course, it can also be scheduled to be active only during certain times of the day or be deactivated manually, e.g. via a panic button.

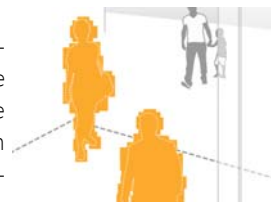


Fig. 7: Dynamic Privacy Mask



Fig. 8: Zone Management

Zone Monitoring & Queue Length Detection automatically detects and counts people in previously defined areas e.g. in front of remote information desks or check-out counters. Pre-configured thresholds trigger e.g. speaker announcements informing staff to open an additional counter, allowing them to quickly react to customer needs and significantly improve customer service.