

BETTER TOMORROW

Technical Product Overview



Indexing Everything the Sensor Sees

The world's most advanced AI-based tactical surveillance system, able to detect, track and recognize persons of interest and objects in a mass crowd and in real-time.

Key Features



POI ENROLLMENT

Enroll/delete POIs by image, directly from live or pre-recorded video or by rule



FORENSIC

Analyze video from files or from VMS (runs up to x20 faster), as well as still photos with multiple people



SEARCH BACKWARDS

Search for suspects backward through all connected cameras and display detections in a timeline



WATCHLIST

Create a POI database by uploading single or multiple images or adding existing detections to the watchlist



ALERT

Define an alarm type (visual, sound or silent) and get an alert whenever a person in the watchlist is recognized



GROUPS

Create suspect groups and define their label, color and alert type



SEARCH, TRACE & DELETE

Set automatic deletion rules and customize deletion options



FACE-BLUR MODE

Obscure all non-involved faces in the field of view automatically



PRIVACY MODE

Capture and present faces of pre-defined individuals only



WHITELIST

Create a whitelist camera group or add a camera/suspect to an existing whitelist



CAMERA MANAGEMENT

Set camera for face or body detection.



TRACK SUSPECT

Trace a suspect through all the appearances in different cameras

Technical Specifications

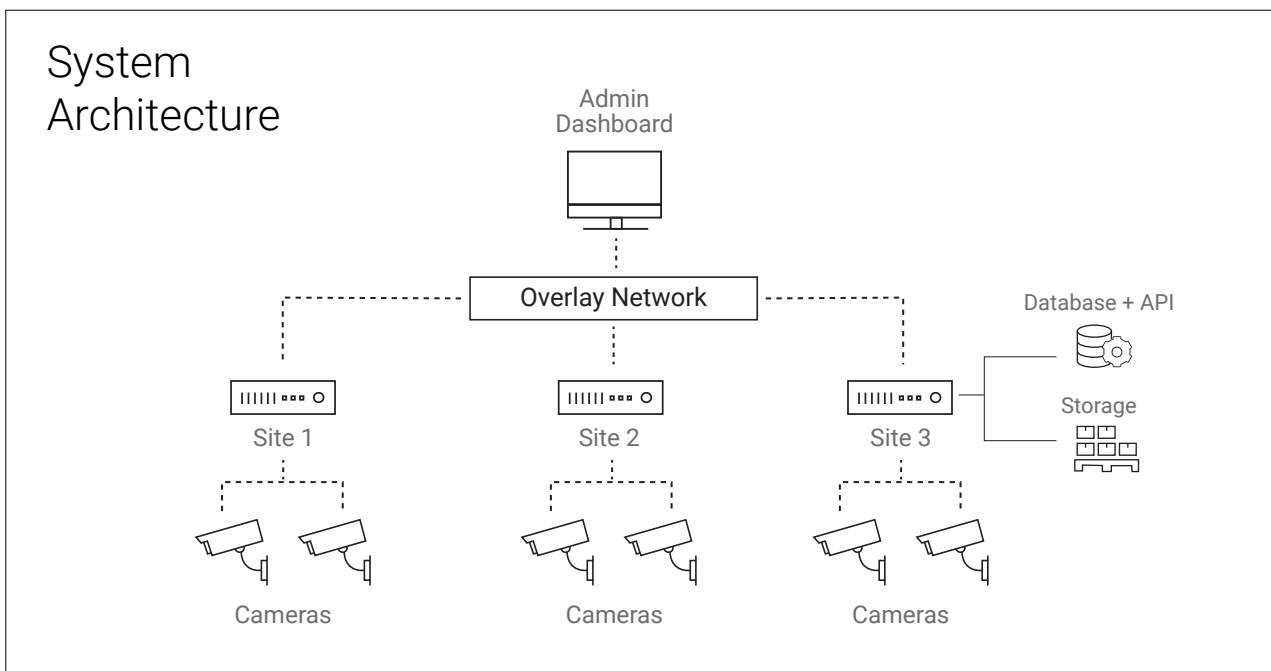
SYSTEM COMPONENT		PERFORMANCE AND LIMITATIONS
System	Architecture	On Premise On the cloud (Google, Azure, AWS)
	Software/hardware	Software only Software embedded on designated ANV Hardware
Integrations	Camera integration	Run up to 20 cameras per single GPU. Fully compatible with IR cameras Edge devices (smartphones, mobile cameras, wearables) as a video stream - offline or connected to a centralized database
	VMS integration	Integrate seamlessly into existing VMS listed in the next page Capabilities: connect to cameras, pop-up alarms, communicate suspect name, detections and images
Detections	Capabilities	Face, body, objects, LPR, OCR
	Accuracy	Up to 99.9 %
	Speed	0.43ms per 1000 faces
	Minimum face size	Minimum 45x45 pixels
Recognitions	Capabilities	As for detections
	Accuracy	Up to 99.9 %
	Recognition	1:1 and 1:N
	Re-ID speed	0.2ms
	Minimum face size	45x45 pixels
Data Base	Database size	Up to 300 million people
Storage	Tracks	Save up to 300M tracks in the system
	Video	Store video for as long as needed, depending on customer needs and hard-drive size
High Availability		- "RAS" (reliability, availability, serviceability) or "fault resilient"- multiprocessing system that can quickly recover from a failure
		- Ability to service a component in the system without shutting down the entire operation

Minimum System Requirements (For Single Node)

SYSTEM COMPONENT	PERFORMANCE AND LIMITATIONS
GPU	GTX 1050
CPU	Intel i7 7700K
Memory	16GB DDR4
Storage	500GB SSD
Operating System	Linux Ubuntu 16.04+/RedHat Enterprise Linux 7+
Additional software	Nvidia drivers version 390+
	Docker-CE 18.03+
	Nvidia-Docker 2
	Docker compose 1.22

* Multiple nodes should be defined by request

** Specific hardware definitions can be found in document XXX



VMS Integration



Available Hardware Spec

ANV Production Rack Mounted Server (up to 6 P4000 GPU) | Max streams: 4-29

SERVER: DELL R740/HP DL360/HP DL380

ANV PART NUMBER	MAX STREAMS	GPU	CPU	MEMORY GB	POWER	FF
ANVp4000S1	4	1 * P4000	2 * Xeon Silver 4114 (2.2GHz 10 Cores)	64	Dual Hot swap	1-2 U
ANVp4000S2	9	2 * P4000	2 * Xeon Silver 4114 (2.2GHz 10 Cores)	64	Dual Hot swap	1-2 U
ANVp4000S3	14	3 * P4000	2 * Xeon Silver 4114 (2.2GHz 10 Cores)	128	Dual Hot swap	2U
ANVp4000S4	19	4 * P4000	2 * Xeon Silver 4114 (2.2GHz 10 Cores)	128	Dual Hot swap	2U
ANVp4000S5	24	5 * P4000	2 * Xeon Gold 6148 (2.4Ghz 20 cores)	192	Dual Hot swap	2U
ANVp4000S6	29	6 * P4000	2 * Xeon Gold 6148 (2.4Ghz 20 cores)	192	Dual Hot swap	2U

SSD: 1x 2.5" 500GB SSD (SATA 3) + 1x 2.5" 1TB SSD (SATA 3)

HDD: 2 X 3.5" 4TB HDDs 7200RPM SATA 3, (Up to 6x 3.5" HDD can fit)

RAID: PERC H330 RAID Controller

Remote Management: Yes: Idrac/Illom

Available Support options: 3/5 Years NBD / 24X7

ANV Production Rack Mounted Server (up to 6 P4000 GPU) | Max streams: 4-29

SERVER: DELL 3930

ANV PART NUMBER	MAX STREAMS	GPU	CPU	MEMORY GB	POWER	FF
ANVp4000W1	4	1 * P4000	1 * I7-8700K	64	Single	1U
ANVp4000W2	9	2 * P4000	1 * I7-8700K	64	Single	1U

SSD: 1x 2.5" 500GB SSD (SATA 3) + 1x 2.5" 1TB SSD (SATA 3)

HDD: 2 X 3.5" 4TB HDDs 7200RPM SATA 3, (Up to 6x 3.5" HDD can fit)

RAID: PERC H330 RAID Controller

Remote Management: Yes, Idrac/Illom

Available Support options: 3/5 Years NBD / 24X7

Master Administration Server

When Using more than one server in the same site we require a Master Administration server
*Not related to Master API

SERVER: DELL/HP DL20 GEN10

ANV PART NUMBER	MAX STREAMS	GPU	CPU	MEMORY GB	POWER	FF
ANVp4000MAS	NA	None	Intel Xeon E-2124 (3.3GHz/4-core)	16	Single	1U

SSD: 1x 2.5" 256GB SSD (SATA 3)

HDD: None

RAID: None

Remote Management: Yes, Idrac/IloM

Available Support options: 3/5 Years NBD / 24X7

