



INTELLIGENT VIDEO ANALYTICS (IVA)

Mavenir's Intelligent Video Analytics (IVA) is an intuitive, yet powerful solution that applies artificial intelligence (AI) to real-time videos to analyze and generate alerts for actionable insights. The comprehensive solution is built on cloud-native frameworks, engages 5G networks, and leverages acceleration offered by GPUs to deliver highly reliable, high-performing, and scalable AI solutions at the edge. Mavenir's IVA has been consciously designed to deliver a solution that ensures quick time to value and return on investments.

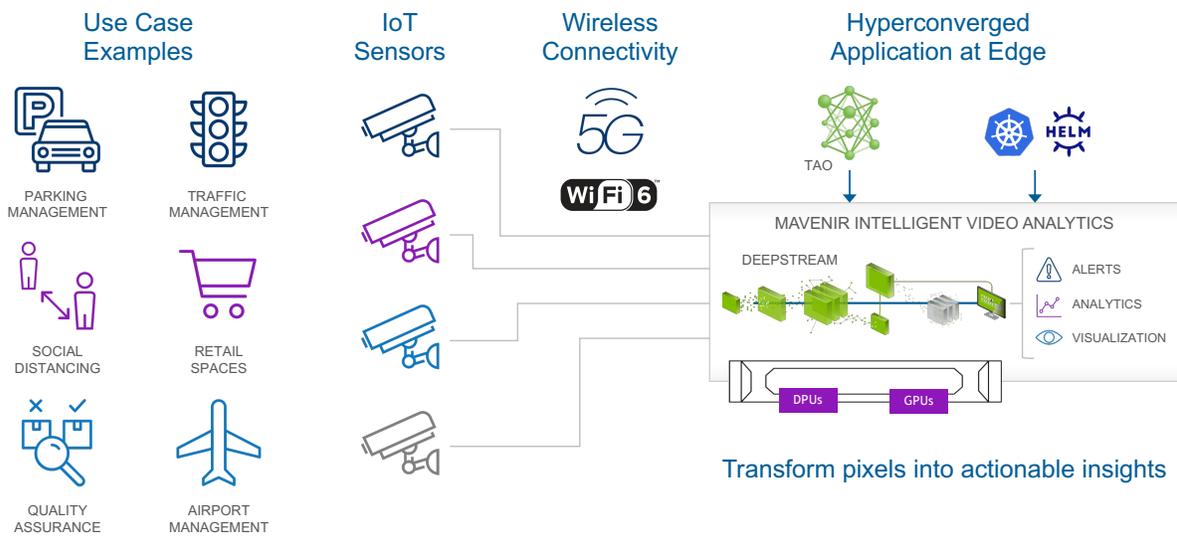


Figure 1: Mavenir's IVA deployment architecture

Drive faster decisions with a comprehensive solution

Mavenir's IVA has been consciously designed to deliver a solution that would ensure quick time to value and return on investments. The core capabilities and value to enterprises include:

Built for business users

Mavenir's IVA is tailored for business users, including traffic inspectors at cities, floor supervisors on manufacturing plants, security officers at stadiums, and even facility managers at airports. The intuitive point and click user interface minimizes time required to configure videos from wireless cameras with pre-configured workflows and models to start analyzing insights. Business users can identify regions to limit analytics and specify directions to enforce rules on analytics.

Enables out-of-the-box models and use cases

Mavenir's IVA is bundled with pre-trained models to detect vehicles, people, personal protective equipment (PPE), face masks, and several other objects. These objects are put in context to manage crowds, monitor growing queues or detect workers in a no-go zone. Such pre-trained models with preconfigured detection chaining provide deeper insights required for efficient operations. In addition to the bundled pre-trained models, custom models can be trained and integrated into new workflows to fit the business need.

IVA USE CASES

Manufacturing – defect inspection

Smart Cities – traffic flow planning

Entertainment – crowd management for large events

Airports – traveller experiences enhancements

Workplace safety – standards and regulations compliance



Monitors dashboards and configurable alerts

The detected insights are plotted on preconfigured dashboards for business users to understand patterns and trends. Rules can be specified to generate alerts that can be delivered as emails or text messages on phones, or as MQTT events on message servers.

Integrates with other systems of engagement

Message brokers are used to orchestrate communication of detected insights with Production Line Controllers (PLC) on typical manufacturing floors. Message brokers are based off of MQTT protocols where events can be published, and clients can subscribe to receive and react upon them.

Deploys on the cloud and the edge

Built on the cloud-native framework, Mavenir's IVA can be deployed on the cloud where insights from the edge nodes are aggregated for cumulative analysis. A lightweight software is designed for a variety of Edge hardware to analyze videos and images to upload the metadata and relevant footage of value. Features of the application are delivered as containerized micro services, that expands to scale, performs linearly to the analyzed volumes, and ensures high availability of services.

Accelerate solutions for various domains

Mavenir's IVA is bundled with several pretrained models that can accelerate deployments of AI solutions for several domains. The platform aggregates pixels from several cameras and uses pre-trained models to analyze and generate event-based actionable alerts.

Why Mavenir for IVA



Inbuilt deep learning models



Built with open interfaces to enable multi-vendor integration



Cloud-native design with microservice architecture



Deliver real-time insights



Intuitive user interface



Bundled with 5G networks

About Mavenir

Mavenir is building the future of networks and pioneering advanced technology, focusing on the vision of a single, software-based automated network that runs on any cloud. As the industry's only end-to-end, cloud-native network software provider, Mavenir is transforming the way the world connects, accelerating software network transformation for 250+ Communications Service Providers in over 120 countries, which serve more than 50% of the world's subscribers.

For more on Mavenir Solutions, please visit www.mavenir.com