In recent years, many public and private organizations have implemented disparate sets of systems and technologies to connect and protect their communities, premises and people. Now, they must make sense of enormous amounts of data generated by these systems, while managing real-time responses or planning for smarter operations in the future.

Hitachi Visualization Suite (HVS) integrates video, internet of things (IoT) data and event sources from fixed and moving assets, to provide intelligence for airports and ports, businesses, transportation, retail, traffic, utilities, schools and public safety organizations. With real-time visual and geospatial visualization, and integrated command center capabilities, HVS enables organizations to gain rapid insights, to deliver higher levels of service and improved operations. It also provides historical information to predict events ranging from traffic congestion, operational and maintenance issues to crime and more. It can be hosted in the cloud or on premises, and enables use on mobile browsers for distributed intelligence.

Hitachi Visualization Suite: Actionable Intelligence

- Body Worn-Video
- License Plate Recognition (LPR)
- Facial Recognition
- Intelligent Transportation
- Computer-Aided Dispatch (CAD)
- Video Management System
- Smart Parking
- Gunshot Detection
- Smart Lighting
- Drone Detection

Figure 1: HVS can ingest a variety of event sources and IoT data.
Collect, Connect, Manage, Analyze and Distribute Data from Any Source

Public and private organizations often struggle with disparate data streams and camera systems. Rapid integration of data sources and analytics, however, improves response, intelligence and safety. HVS is both a cloud and on-premises solution that's mobile and ready to manage assets such as cameras, sensors and analytics components. It provides a single common operating pane for full situational awareness, and integrates analytics, including big data, for powerful, investigative and analytical workflows.

Real-Time Insights and Analytics from Hitachi’s Lumada Operational Efficiency

With built-in privacy controls, the intuitive HVS interface is scalable and capable of integrating hundreds of simultaneous events for geospatial visualization and monitoring. It handles asset and event management, geofenced tweets and timelines, and has a user-friendly interface. Privacy controls enable role-based management to prevent wrongful access at all levels.

HVS gathers actionable intelligence that provides real-time access of all data sources using selectable layers. When combined with Hitachi Video Analytics (HVA), HVS can analyze customer activity, help refine store marketing, collect parking data and report ridership patterns. It improves passenger experience, occupancy, event operations and more.

HVS integrates with third party municipal, commercial, and industrial systems to provide comprehensive insights and effective response to emergencies and work orders.

Situational Awareness
Enhance actionable intelligence and improve your response time.

Cloud Based
View from the field, on the way to a crime scene, or from the command and control center.

Analytics
Use video analytics, social media, big data, and predictive analytics.

All IoT Endpoint
Include cameras, video management systems, sensors, and web services.

ICCC
Integrate third-party and private entity cameras to assist law enforcement.

See Smart Spaces Solutions From Hitachi Vantara

Figure 2: View video feeds from disparate systems and analytics dashboards, while collaborating with remote and distributed teams.
Improve Insight and Operations with Hitachi Visualization Suite

**Integrated Alerts, Analysis, Operations, and Response**

HVS unifies all your disparate systems into one holistic view, offering both a historical and real-time view into their operations. This empowers the user to perform a more in-depth analysis, allowing operations teams to be more proactive in their approach to their space.

HVS integrates and aggregates disparate points of data to help public and private entities better manage events and crises with real-time analytics.

**Data-Driven, Smart Transportation**

HVS tracks both fixed and moving assets. Click on the map to see where vehicles, cameras or other sensors are situated on a train, boat, car or any other moving vehicle, and view live video.

Enhance station or port retail, operations and security with improved analytics. Count people, analyze flow, track vehicles and find objects or alert to intrusions in real-time.

**The Smart Campus: Enhance Security, Operations, and Planning**

HVS collects and integrates campus data and systems, with robust privacy controls, to view foot traffic and campus infrastructure status. HVS eliminates manual effort by configuring if-then workflows to automate tasks and improve campus operations.

Integrate incidents and assets. Create a picture of threats and student sentiment in real time and share with law enforcement or administrators.

**Enhance the Retail Experience while Increasing Safety**

HVS integrates systems to drive deeper insights from Hitachi Video Analytics into customer activity, shopper experience, and store sales and marketing, including support of a/b testing. Alerts from intrusion detection (after hours) signal cameras to pan or tilt and record valuable footage.

Retail and company administrators gain a location-based perspective that combines real-time video from cameras, sensors, and smart devices, and provides alerts from HVA.

**Intelligence and Analytics for Public Safety and Beyond**

HVS enhances visualization of big data analytics by integrating with third-party products such as facial recognition and drone detection. Also, by using HVS incident heat maps, authorities can assign their limited resources to specific regions.

HVS supports alerts from HVA, which provides intrusion and object detection, people counting, queue detection, activity analysis and image enhancement for facial recognition.

**Solution Summary**

- Enables real-time visualization for geospatial correlation of disparate video, data systems and sensors. Map-based, user-friendly web interface supports both public and private cloud applications.
- Increases flexibility with cloud-based and mobile-device accessible command and control, and distributed intelligence. Fully customizable, it meets specific needs of city, campus, transit, port or retail operations and public safety entities.
- Enhances data-driven operations through Lumada to turn data into outcomes for digital innovation. Lumada provides analytics dashboards, predictive analytics and geospatial tools that find correlations in the data.
- Scales from a single camera to thousands of simultaneous streams in high-performance computing environments.
Hitachi Smart Spaces: Enabled by Lumada Video Insights

Hitachi Visualization Suite is a part of the Lumada Video Insights portfolio, which offers end-to-end, adaptable and intelligent solutions for smart spaces. Other products include:

- Hitachi Video Analytics (HVA)
- Multifeature Video Search
- Hitachi Video Management Software
- Hitachi’s Pentaho platform’s data integration and analytics tools
- Hitachi Smart Camera

Together, these technologies form a comprehensive solution that delivers powerful insights from video and other IoT data.

“We have become a safer and smarter city through the use of Hitachi Visualization Suite. We are safer because of the number of incidents we are able to investigate, the clarity that we’re able to gain on events happening in our city, and the leads that we generate that we would not have otherwise.”

Steve Hargis
Technology Services Division Manager,
City of Moreno Valley

Learn More
Hitachi Visualization Suite is a central application that ties all your camera systems and IoT data together. HVS is readily customizable for each use case and IT ecosystem. It enables the integration of both private and public systems and offers analytics on the best visualization interface in the market. HVS is the right solution for smart and safe cities, organizations and businesses. Benefits include situational awareness for faster response time and cloud-based command and control, anywhere. Further, robust, intuitive and integrated analytics integrate all IoT endpoints, including cameras, sensors and web services.

At Hitachi Vantara, we take a human-centered approach that views cities as interactions of people, communities and technology, places we come together to improve lives. Hitachi Smart Spaces supports smart cities to achieve three primary goals.

- Improve quality of life, including public safety and economic opportunity, ensure vibrant communities and reach sustainability goals.
- Increase resiliency, enabling cities and communities to adapt quickly to changes, now and in the future.
- Operate efficiently, optimizing transportation times, reducing energy consumption and utilizing technology to help people be more effective.

Leveraging capabilities across Hitachi, we are providing solutions for cities across the globe, and we can do the same for you.
Next Steps
Hitachi Vantara is helping cities, organizations and businesses become safer and smarter today. Using IoT data, analytics and proven technologies, smart cities are driving operational intelligence that increases efficiency and safety, improving the way our communities work, so we all can thrive.

Ready to learn more about the benefits of Hitachi Smart Spaces for your organization?

Hitachi Vantara Smart Spaces Infographic
See how Hitachi Vantara’s solutions for smart spaces help keep people safe, operations moving efficiently and businesses thriving.

View ➔

Hitachi Video Analytics Overview
Transform cameras into city sensors that enable smarter operational or business intelligence and security.

Download ➔

Hitachi Video Management Platform Datasheet
Empower video analytics, security and monitoring with a converged video solution that stores and manages video with high availability and fault tolerance.

Download ➔

Multifeature Video Search
Explore how attribute search for live and recorded video can help to locate persons of interest, vehicles and objects.

Learn More ➔

WE ARE HITACHI VANTARA
Hitachi Vantara solves digital challenges by guiding you from what’s now to what’s next. Our unmatched industrial and digital capabilities benefit both business and society.

Contact Us ➔
Learn more about Hitachi Visualization Suite.