Hitachi Visualization Suite

TRANSFORM VIRTUALIZATION ECONOMICS FLEXIBILITY INNOVATE RELIABLE TRUST
INFORMATION GLOBAL CHANGE INTELLIGENT TECHNOLOGY SERVICES VALUE INSIGHT
OPPORTUNITY SOCIAL INFRASTRUCTURE INTEGRATE ANALYZE DISCOVER COMPETITI
The Problem and Solution

Your single pane of glass for the Smart City

Over the past few years, the majority of public and private organizations have implemented a diverse set of systems to protect their assets, premises and people. To effectively manage large amounts of critical assets and incidents, your systems must be integrated so that they can provide meaningful information.

The primary goal of Hitachi Visualization Suite (HVS) is to provide a platform for representing just about any real-world object such as a building, car, camera, train, boat, you name it. By integrating critical video and event sources together with fixed and moving assets such as listed above, HVS provides visual and geospatial correlation in a simple interface that takes command and control to a new level.

By using existing public safety assets – both private and public – and by applying a bit of analytics and the best visualization interface on the market, HVS is quickly becoming the platform standard for the Smart City.
Full Situational Awareness

Integration of disparate systems and sensors provides connected intelligence

Tailor your view to include the information you need to make informed decisions quickly.
Actionable Intelligence

Visual correlation between seemingly different data paints a clear picture

HVS combines public information sources, such as traffic, with private sources of information including license plate recognition (LPR), CAD/911 calls and gunshot events. Just about any sensor data can be integrated with HVS.

- Multiple map layers
- NOAA weather alerts
- Imported ESRI shape files
- Navigation charts
- Geocoding services
- Dozens of 3rd-party video systems
- CAD/911 systems
- License plate recognition systems
- Traffic systems
- Smart sensors
- Building schematics
- And much more...

Integrated traffic and LPR notifications – just one of hundreds of ways to visualize your information.
Investigations

Simple search and timeline views make investigations intuitive

HVS provides a single pane of glass for the user. By showing real-time events correlated with fixed and moving assets, true information can be derived from data locked in standalone public safety systems.

- Visual insight
- Improved collaboration
- Integration of disparate systems
- Intelligence from the raw data
- Event and alarm tracking

Go back in time and view all of the events for a particular day, or perform a simple search across the logged events or by place and time.
Automated Workflow

Manage by exception

Even the best-trained video operator cannot see everything at once. HVS allows you to manage by exception, instantly and automatically presenting the most critical information when something out of the ordinary occurs.

- License plate read event identifies a stolen vehicle
- A gunshot event occurs nearby
- Several people call 911 identifying a man with a gun
- The operator pulls up nearby video and gets a description of the suspect
- Armed with a license plate number, description of the suspect and visual evidence of the car, they dispatch the closest officers to arrest the suspect

Actionable intelligence through automated workflow and visualization of distinct events.

Hitachi Visualization Suite
Automated Video Surveillance Analysis

Maximize Security, optimize costs and protect privacy

Hitachi Video Analytics (HVA) covers all your surveillance needs with a distributed system architecture that is scalable and automated.

The HVA manager offers the most accurate detection of key information via video analytics, ensuring privacy and data protection through the cloud and virtualization.

Business Intelligence
- Activity Visualizer
- People Counter
- Queue Detector

Surveillance Security
- Camera Health Monitor
- Face Collector
- Intrusion Detector
- Object Detector
- Video Enhancer

Traffic Intelligence
- Direction Controller
- License Plate Recognizer
- Parking Space Analyzer
- Traffic Analyzer
- Vehicle Counter
Hitachi Digital Evidence Management System

From Discovery to Courtroom

Upload and preserve digital evidence: media, audio, pictures text and documents

HVS includes built-in Evidence Management (DEM) that can be easily uploaded from multiple systems, tagged and associated with a case on one single platform. Workflow can be applied to the media for notifications or queuing for review by an end user.

With HVS, media can be collected in several ways:
- Manual upload by a user from any device
- Export of a video clip from a source video system
- Manual recording of any live stream in HVS
- From a workflow engine based on any external event HVS can leverage geo-tagged media and display geospatially on the map, overlaying event data, such as CAD or 911 calls.

Hitachi Evidence Management is intuitive and simple to operate. Runs on any mobile and desktop system. Customizable asset metadata management with deep search capabilities.

DEM platform can integrate with other systems for auto-data uploads or manual uploads. All media is digitally signed when uploaded to ensure chain of custody.
Virtualizing the Management and Storage of Video

Solve high-availability, redundancy, scalability and cost issues

Hitachi Video Management Platform (VMP) separates the compute from storage using an enterprise storage solution. VMware is the driving force of solving high-availability, redundancy, scalability and cost issues for video surveillance architecture.

Hitachi VMP supports all major video management software suppliers such as Milestone, OnSSI, NICE and Verint to name a few.

Overall design of HVP video management platform includes VMware and redundancy throughout the design:

- Storage
- Compute
- Throughput
- Scale
- Cost

Hitachi VMP

Provides Turnkey Video Management Platform

Hitachi Visualization Platform offers Video Management which is a turnkey converged hardware platform composed of storage and compute that run digital video management systems (DVMS or VMS).
For Moments when Time and Accuracy are Critical

Improve the Effectiveness of Video Surveillance

Live Face Matching (LFM) provides real-time facial image matching for video surveillance systems deployed in public and commercial buildings, hospitals, banks, railways, cruise lines, airports and many others where continuous pro-active threat detection is essential.

- High Matching Accuracy
- High Speed Matching
- High Robustness
- Auto Alert
- Integrates with HVS data ingest

Our facial recognition technology can prevent criminals from entering important areas and facilities.
Crime Prediction Analytics

Putting big data analytics to work in helping reduce crime and terrorism

By integrating with existing crime data, such as the Records Management System (RMS), and combining it with social media and other spatial data sources, HVS can visualize crime by location and predict (with a high level of accuracy) where and when specific types of crime will occur.

HVS can predict, down to the city-block level, crime types and times where the highest probability exists for a specific crime type. This information becomes useful to optimally manage patrols and get officers in the right place at the right time to prevent crimes from occurring.

The HVS crime prediction analytic module can predict, with a high level of accuracy, where and when specific types of crime will occur.
How Does it Work?

The hybrid cloud design makes Hitachi Visualization Suite the most robust and flexible tool on the market.

HVS represents a state-of-the-art design optimally suited for crisis and emergency management. The underlying cloud architecture allows the solution to scale up quickly during high-demand situations, such as when there is an active shooter. Literally hundreds of users can view camera feeds, get alerts and share information as never before.

The hybrid cloud architecture allows HVS to easily integrate with 3rd-party camera systems. The Hitachi Visualization Platform (HVP) gateway makes deployment simple. It handles all video and data ingest along with workflow on premises. This keeps the sensitive data where it lives currently without having to replicate across data centers or into the cloud.

By combining the highly available cloud architecture with an on-premise appliance for integration, HVS can scale up or down quickly depending upon the criticality of the situation.
The HVP Gateway

Simple, effective, and low-cost integration appliance

The gateway is part of Hitachi Visualization Platform – an integrated set of secure and intelligent cloud devices for edge capture and recording.

- Secure Internet service bus avoids limitations of VPN connectivity
- Reliable Microsoft Windows Azure cloud environment provides world-class stability
- Video transcoding to normalize disparate video feeds
- Dynamic streaming to provide the best video quality based on available edge CPU and bandwidth

The small form-factor HVP gateway is ideal for integrating private camera systems into HVS.
Public and Private Partnerships

Deter crime and promote public safety

Deputizing private-entity cameras expands the area of surveillance without added cost.

- Access to locations and angles otherwise unavailable to law enforcement
- Improved patronage and better emergency response

Deputy Cam aims to deter crime and promote public safety by making it easier for the community to collaborate with law enforcement. Businesses, malls, schools, and others can help us protect our neighborhoods by sharing their security camera views during an emergency.

Get Involved!

Help the Police protect your business and solve crimes. No individual or agency working alone can prevent crime; it takes police and citizens working in partnership.

Start being proactive today and fill out the registration form. Tell your Police department if you own security cameras and if you are willing to share their video feeds.

Get Started

You can help support criminal investigation by notifying the Police department about your system. Knowing in advance if cameras are located in and around your business will improve and accelerate the investigation of a crime.