# The ROI Case for Using Intelligent IP Video Surveillance Appliances

## An Alternative to Centralized, General Purpose IT Systems

**razberi™** technologies

**A few years ago when a major integrator and their enterprise customers in the Detroit, Michigan area began video surveillance and recording, the network was relatively small. Rapid growth soon put pressure on the business IP network and storage, both quickly becoming overtaxed. The result was compromises and tradeoffs in video surveillance quality that provided inadequate quality of evidence and video loss. The team determined that a better strategy, architecture and technology solution were in order. Their tenets: reduce risk, scale quickly, maintain evidence quality levels, reduce costs, and provide business value.**

**The answer was to move to an intelligent appliance strategy using Razberi's all-in-one ServerSwitch™ – in a distributed platform where video could be recorded without streaming continuously over the corporate network. The result was improved quality for evidence, 95% reduction on bandwidth and dramatic cost savings.**

## SITUATION: High Cost, Compromised Quality

- Rapidly growing enterprise, clients and multi-site locations with demanding video surveillance requirements
- All camera video streamed to centralized, general purpose IT servers, switch and storage not specifically built for security
- Due to network and storage impacts, reduced recording and live stream frame rates to 1 FPS (Frames Per Second) and lower resolution (640x480) creating issues where video evidence was not identifiable if captured at all
- Footprint for surveillance servers, storage, switches and power taking 3-4U of data center space for server and switch as well as power
- Central IT organization started to charge back for IP addresses, firewall and other network requirements to support surveillance with $500-1200 of one time charge backs to the group and the potential for recurring charges with additional growth
- Technical and economic scalability concerns

## SOLUTION: Moving to an Intelligent Appliance Strategy and Distributed Architecture Platform Led to Better Quality, $1.2M in Savings, and Scalability

The integrator and enterprise team found a smarter way. They started evaluating the opportunity to use an intelligent surveillance platform strategy with Razberi Technologies. By using purpose-built, surveillance recording appliances that provide server, switch, storage and PoE all-in-one box and using a distributed architecture, they could stop streaming video continuously over the business IP network and record closer to the edge. The benefits and hard cost savings were immediate and are ongoing.

> *"We're now running higher quality video and we've cut our bandwidth utilization by 95%. For the price of one general-purpose server and storage, we're able to buy 3 enterprise-class Razberi appliances with 24 camera ports, i7 processor, integrated power, switch and 16TB of storage. That's 48 TB of storage! It's the best bang for the buck, dependable and scalable."*
>
> *-Technology Specialist, major Detroit System Integrator*

## RESULTS: By Standardizing on the Razberi Platform

### UNCOMPROMISED QUALITY:

Increased recording and live view quality by 7-8X to 7-8 FPS and nearly doubling the resolution quality from 640 x 480 to what the camera can provide and at a minimum supporting 1024 x 768 and 1280 x 720. They have found the sweet spot at these resolutions to meet the quality for evidence for the majority of applications at the right economic cost.

### REDUCED NETWORK IMPACT AND COST:

The improved quality came with reducing the impact to the IP network by at least 95%. Using 24 port Razberi appliances in a distributed architecture, video is recorded near the cameras and only streamed when requested, the impact has virtually disappeared for the enterprise IP network. The savings are 5-6Kbps per camera up to 400-500Kbps (and even 1Mbps) for each camera times the number of cameras. The company has also avoided the need to build a dedicated IP network to support the exponential data growth that video surveillance could demand. There is no longer impact on other IP business applications, even when using higher quality.

### REDUCED CAPITAL COSTS:

For the price of one general-purpose server and storage, they were able to buy 3 enterprise-class Razberi appliances with 24 camera ports, i7 processor, integrated power, switch and 16TB of storage. That's 48 TB of storage at one-third of the cost!

### REDUCED FOOTPRINT IN THE DATA CENTER:

By using an all-in-one appliance for server, storage, switch and PoE that lives closer to the edge where the cameras are located, the footprint in the data center is virtually eliminated. The appliances use half of the space of typical 3U server and 1U storage of a general-purpose IT system configuration. Most of the appliances are located near cameras in closets or other office areas taking approximately 2U of space for everything including power depending on the appliance size.

### REDUCED COST OF IP ADDRESSES AND CHARGE BACKS:

As with many enterprises, the security team was starting to get charge backs for blocks of IP addresses and specialized network configurations (SSL, licensing fees). This has been virtually eliminated with an appliance strategy that only requires 1 IP address to 24-port appliance.

> *IT views Razberi as "appliances" and not as a traditional server on the network. Because of the bandwidth-friendly architecture and the intelligent features such as health monitoring and cyber security protection, the appliance has been ideal for security and IT teams alike.*

## MORE REDUNDANCY:

During a recent server remediation process, when the company decided to move to an appliance strategy, servers were repurposed as failover servers providing redundancy and for other non-security related applications.

## IT-FRIENDLY:

IT views Razberi as "appliances", not as a traditional server on the network. Because of the bandwidth-friendly architecture and the intelligent features such as health monitoring and cyber security protection, the appliance has been ideal for security and IT teams alike.

## AN INTELLIGENT, OPEN PLATFORM FOR GROWTH

As this innovative system integrator and their customers continue their fast-paced growth, they plan to expand the use of intelligent features for health monitoring and cyber security.

With a growing services business and multi-location enterprise, Razberi's VyneWatch™, provides the ability to proactively manage far-flung sites down to the camera-level reducing the risk of lost video and keeping the cost of support down.

They are also concerned about the security of the security. With more cameras inside and outside living on the IP network, Razberi's LocBeri™ provides security managers with the ability to lock down camera ports to prevent hackers from finding new ways into the IP network.

Razberi provides this system integrator and their customers with an easy to implement, out of the box solution that is always open and VMS (Video Management System) ready.

## A SUCCESS SUMMARY

The bottom-line for the company is that Razberi's intelligent surveillance appliances provide a platform for growth, smart business investment, and future innovation. With Razberi, integrators and customers-alike can embrace new cameras and technologies on the horizon with the performance, reliability, smart-architecture, intelligence and cost-effective scalability that makes it a smart, rock-solid business decision.

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*technologies*

**Contact Razberi Technologies today** to request a demonstration and discover what the intelligent surveillance appliance can do for you at razberi.net/demo.

Razberi develops and manufactures intelligent network security appliances.  It's flagship Intelligent Surveillance Appliance, the razberi™ ServerSwitch™ is a superior alternative to general-purpose servers, switches, storage and power for IP video surveillance.  By deploying Razberi in a distributed appliance architecture, network utilization is reduced by up to 95% while increasing megapixel video quality and dramatically reducing capital, bandwidth and space costs. Razberi's open, scalable platform combines server, storage, switch and PoE as well as health monitoring and cyber security features. Razberi works with leading VMS and camera providers delivering unmatched certification and support. Razberi solutions are available through a worldwide network of value added partners. Razberi Technologies is a privately held company founded and managed by veteran security experts and innovators. The company designs and manufactures its products in Dallas, Texas. For more information, visit razberi.net.

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