



**Leveraging the Cloud for Video Surveillance Solutions
From the Small Business to the Enterprise Organization**

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1. Introduction

In today's Internet-enabled world, businesses need to utilize the public network infrastructure for their video surveillance needs. Many organizations assume cloud-based technology consists of data stored on someone else's servers sitting in a data center. However the cloud is not a box sitting in a rack, it is a network communications backbone that enables technology to work in new ways.

In the past, video surveillance focused on digital video recorders sitting onsite in a closet or underneath a monitor. While digital cameras are certainly in the mix now, analog cameras are still popular with an older generation of cctv installers. The learning gap tends to scare many installers from making the jump to more advanced solutions.

However, there are many new experts in the video surveillance field that utilize technology to provide much more complete and effective solutions. A recent study by Lusax, a research group at Lund University in Sweden, found that the installation of a mid-sized IP video surveillance system costs less than installing a corresponding analog system. These solutions don't stop at a box in the closet but expand to multiple options for the business. This document outlines some of those scenarios and how they may benefit an organization.

2. Hosted Video Surveillance

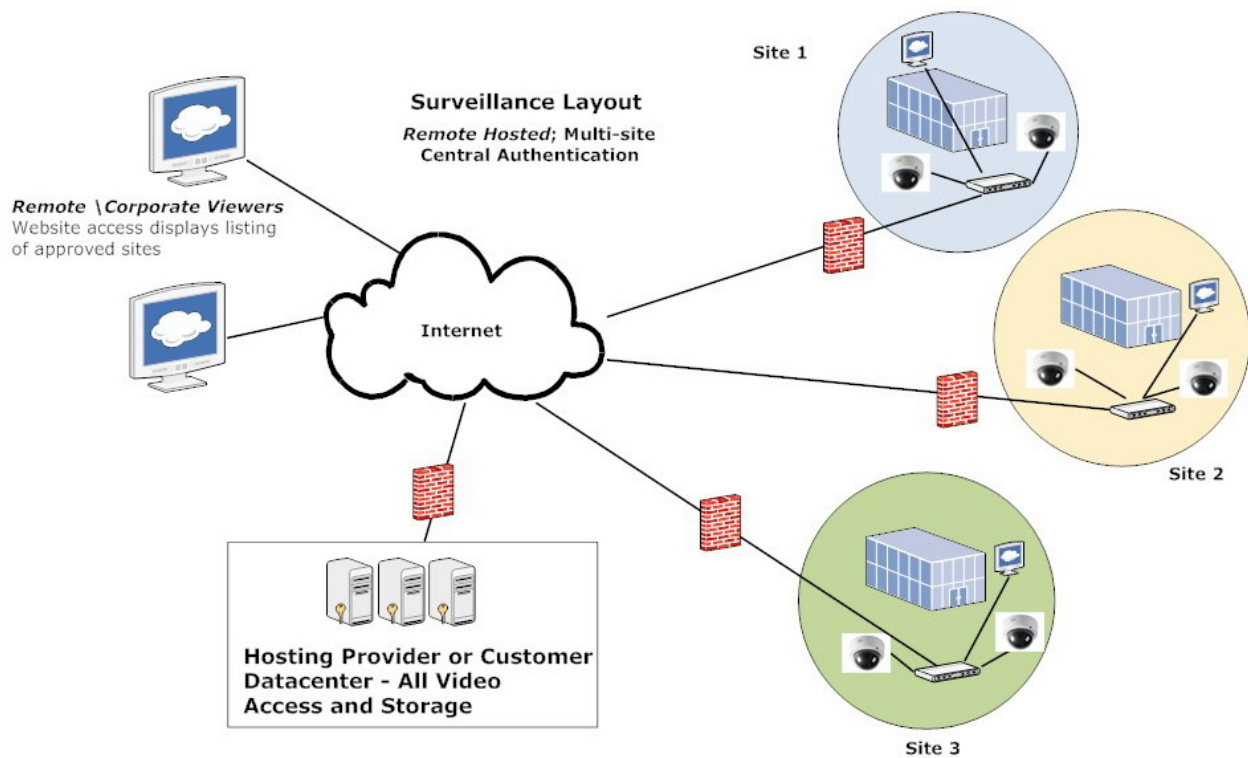
Hosted Video Surveillance (also called Offsite or Remote Video Surveillance) consists of recording video events off the premises where the cameras are physically located. Industry forecasts predict IP video surveillance product sales to increase up to 200% between 2010 and 2012 and ControlByNet's expects to see a substantial part of its growth to continue to come from hosted solutions. More than 70 percent of calls to ControlByNet's partners request information on hosted solutions.

Benefits:

- No video onsite to be compromised
- Initial costs of server and software eliminated
- Groups with cameras from other remote locations for single access
- Integrators can provide faster notification and support

Things to Consider:

- Software provided by a camera manufacturer will likely lock the customer into that provider. This may not be ideal in a market where new companies are consistently introducing new products.
- Bandwidth usage must be considered during selection. If high frame rates or resolution, megapixel or HD is required it will need to be taken into account during system design.



3. Managed Video Servers

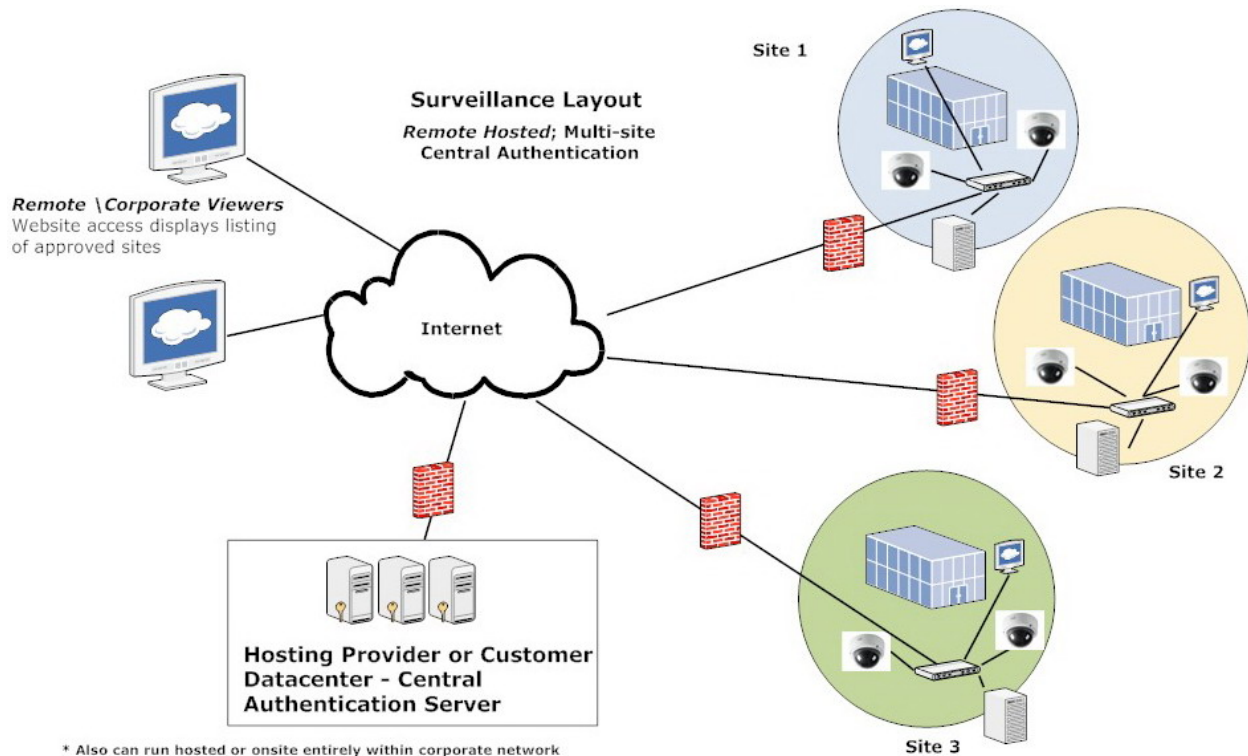
Managed Video Servers allow the data to stay on the property but still be maintained remotely. Usually a managed server is fully supported and receives software updates at little or no additional cost to the customer.

Benefits:

- Lower upfront cost with no software/server purchase
- Integrator takes responsibility for uptime and maintenance instead of employees
- Links with other managed servers or hosted servers for central user management

Things to Consider:

- Option to have higher resolution onsite while still recording lower resolution offsite for added security of data
- Managed servers should still be linked with each other to ensure single point of authentication



4. Mobile Access

The ability to access video from mobile devices is an important step in providing full security solutions. Triggered alerts with mobile access provide a way to minimize personnel by having the ability to review events anytime and anywhere. Mobile access is not only smart phones but also tablet and pad devices. These will be even more critical as mobile devices continue to grow as a market alternative.

Benefits:

- Instant anywhere access to video archives
- Notification of motion activity
- Access to live video for management

Things to Consider:

- Don't save passwords to video access in case of lost phone
- Limit mobile access to key personnel so it doesn't become a 'hobby' for some

5. Guard Station / Monitoring

Some organizations require the ability to have the video monitored by a guard; either an employee or a security company. A guard should have the ability to quickly shift through live and archived video from every location without losing sight of active alerts. The solution must actively interact with the recording software so remote users can effectively communicate with the operator of the guard solution.

Benefits:

- Monitoring of multiple locations via single interface
- Instant alerting of events
- Used in multiple locations for redundancy

Things to Consider:

- Archives should be formatted for proficient playback of video
- Camera and site organization is key for efficient guard reaction

6. Static Viewing of Live Video

The ability to display full-time live remote video in public places is an important consideration in the selection of a security solution. Viewing company operations can be critical to providing the best experience for customers or assisting with efficiency within an organization. From conference rooms to offices, the display of organizational activity is an essential opportunity.

Benefits:

- 24/7 view of locations
- Management application to 'checking-up' on operations

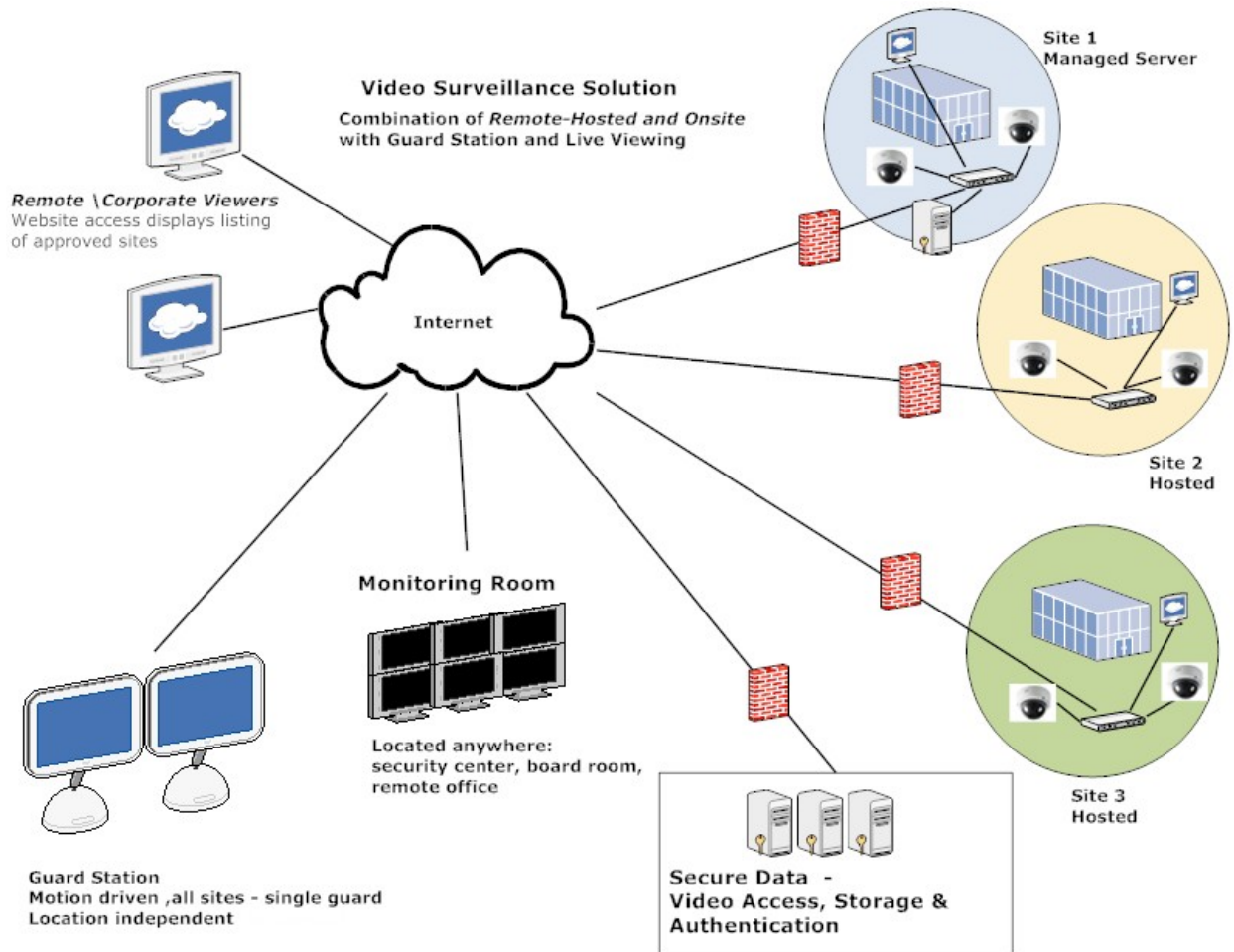
Things to Consider:

- Video should be delivered in an efficient manner such as mpeg-4 or h264 to ensure bandwidth is not compromised to other areas of the security solution

7. Summary

The importance of thoughtful planning of a video surveillance system cannot be overlooked. Decisions today will still be impacting the solution for years to come. Consider not only the initial needs of the solution but also where the system will be in 5 years.

All of the characteristics listed above are key components in a complete video surveillance system. All the components should have the ability to build upon each other to work with organizations as standalone products but also as a single enterprise solution.





8. About ControlByNet

ControlByNet provides the most advanced adaptable hosted and managed IP-based surveillance solution on the market. ControlByNet's advanced software is the cornerstone for the new security surveillance business model. By leveraging Software as a Service (SaaS), CBN's solution integrates seamlessly across its products creating limitless installation scenarios. The hierarchal nature of the software allows a single log-in with multiple levels of access from any (Internet) location which leverages existing enterprise resources. With years of development, their software solution is flexible, future-proof and designed to lead the industry. Product offerings include i-flashback LOCAL and REMOTE and ip-LookOUT, its guard monitoring application. While the i-flashback interface is as simple to use as a nanny cam, both versions of the software are sophisticated enough to manage hundreds of remote cameras from a single browser; including Internet Explorer, Firefox or even an iPhone or iPad. They currently use AXIS for remotely hosted cameras but will expand to others as manufacturers provide IP cameras that are deemed highly efficient on the network. For more information, visit www.controlbynet.com