



# IS A CLOUD-BASED VIDEO SURVEILLANCE SOLUTION RIGHT FOR YOU?

we help you make better-informed security decisions

## OVERVIEW

While most organizations choose to use and deploy traditional software, servers, and hardware for their video surveillance. (Referred to as "On-Prem" in this article), there is a growing trend toward cloud-based solutions, (Referred to as "VSaaS" in this article). Different schools of thought exist regarding the benefits and shortcomings of VSaaS (video surveillance as a service).

There are many start-up companies providing new VSaaS solutions that are joined by established On-Prem system providers that are now offering a VSaaS in their product lineup.

To complicate things, it has become evident that both new and existing video system providers have a slightly different interpretation of what VSaaS means. There have been many articles that outline the pros and cons of VSaaS, some of which can be difficult to interpret due to varying methods and directions that manufacturers of VSaaS solutions are taking.

In order to determine what solution is right for you, we've compiled this overview with a set of definable and non-biased pros and cons.

## COMMITMENT TO EXCELLENCE

At ivelah we take the time to understand your overall business initiatives. This allows us to design & deploy traditional access control & video surveillance technologies in both traditional and non-traditional ways, aligning our solutions directly to your goals.

By delivering consistent, exceptional solutions our goal is to be your go-to trusted security partner at all of your facilities – current and future.



How can we help your team succeed?

Contact ivelah, the security expert committed to understanding your business.

**(800) 216-0805**

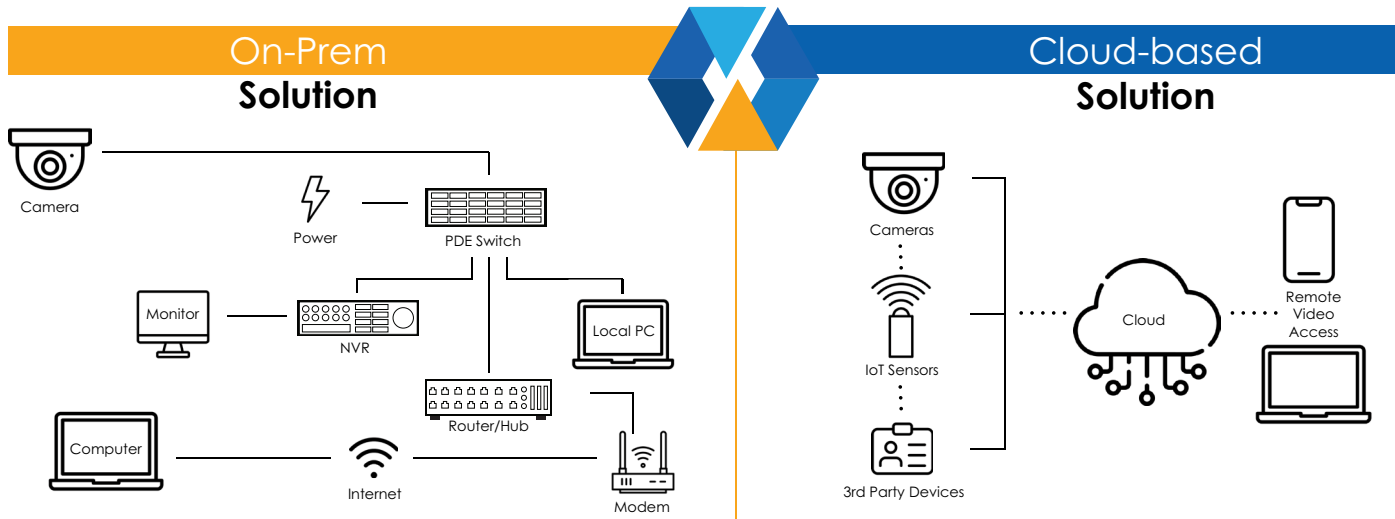
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# ON PREM VS VSAAS

Let's begin with outlining the basic differences, without the technical nuances and viewpoints of various manufacturers.

While both utilize software, traditional video management software (VMS) solutions are installed on-site whereas VSaaS runs an internet connection to the manufacturer's platform.

In the details below we will provide an overview of functionality differences between the two options. Many traditionally "On-Prem" platforms are already working on a path to migrate those systems to a VSaaS solution, so details are changing rapidly. **For the most up-to-date information, please contact our team.**



Cybersecurity is always a key issue for video surveillance systems. With published vulnerabilities, hacks, and the discovery of bots on the rise, On-Prem and VSaaS solutions will have different approaches to cybersecurity. Those pros and cons are included in the bullet points below, with the top 5 pros/cons bolded in each section.

## PROS OF ON-PREM VIDEO SURVEILLANCE



- (+) **Most cameras & ONVIF components are VMS-supported**
- (+) **No subscription management & reoccurring fees required**
- (+) **A deeper level of integration, more application options (e.g. hotkeys, macros, surveillance keyboard support), and layouts for monitoring (e.g. dynamic maps, access control devices, & events) possible**
- (+) **Higher resolution & frame rate video can be analyzed without internet limitations**
- (+) **Not internet dependent**
- (+) Offers a self-contained solution without additional 3rd party services
- (+) Requires little to no traffic on the WAN (depending on utilization)
- (+) Many 3rd party systems integrations options
- (+) Minimal recurring costs necessary
- (+) Proven & established analytics and additional features
- (+) Offers options for advanced live monitoring capabilities
- (+) Advanced management features versus VSaaS
- (+) Flexibility to build your own system, based on preferred hardware & components
- (+) Offers deeper configuration & thick client applications with advanced features

## PROS OF ON-PREM VIDEO SURVEILLANCE CONTINUED



- (+) Video storage can be broadly expanded on-site using NAS & SANs, or additional servers for supporting more cameras, longer recording times, or increasing camera resolution/quality
- (+) Less complex than a VSaaS solution that requires a thick client because clients and server(s) typically connect to the same LAN
- (+) Many On-Prem systems are typically behind a firewall, which limits inbound/outbound traffic to only specific IP addresses & authorized ports. Properly implemented, this may prevent cyberattacks.



## CONS OF ON-PREM VIDEO SURVEILLANCE



- (-) A larger upfront capital investment required
- (-) Requires manually updating server & client software
- (-) Recording hardware (e.g. servers, hard drives) must also be maintained & serviced
- (-) Server-based analytics commonly require high-cost GPU & CPU
- (-) Redundancy planning & backup servers recommended as a safeguard
- (-) Although 3rd party analytic integration is broadly offered with On-Prem additional configurations could be required
- (-) The most common network vulnerability for an On-Prem solution is publicly available ports, which are opened through the user's firewall/router.



*"ivelah was brought in to help us determine if a cloud-based systems was right for our organization. After looking at the benefits and limitations we were able to determine that the technology just isn't where we need it yet to make the switch. We will look at it again in a few years."* - Eric R., IT Manager



## PROS OF A VSAAS SOLUTION

- (+) No server set up required
- (+) Can be managed off-site.
- (+) (Hosted) VSaaS offers virtually unlimited video storage
- (+) Firmware & software vulnerabilities can be addressed remotely by the VSaaS vendor
- (+) Most platforms allow users to access the video via a website without a VPN or firewall details
- (+) Plug and play IP camera/bridge connections are easy to set up
- (+) Global management is both possible and streamlined
- (+) Remote access is possible through proxy/direct NAT connections
- (+) Software updates can be rolled out automatically
- (+) Solution operates through and integrates with open APIs
- (+) Multi-tenancy is can be set up to appeal to different types of users
- (+) For some predictable yearly costs are easier to manage than significant capital investments every 5-10 years
- (+) (Managed) VSaaS recording saves significant bandwidth by keeping the video storage on-site while offering remote cloud management and secure remote monitoring
- (+) Many VSaaS solutions strictly use web clients, which do not need installing and are upgraded automatically in the cloud, and this offers new features and monitoring capabilities without having to wait for a thick client application update
- (+) Some VSaaS providers offer thick/thin client applications, which typically support more complex features (e.g. dynamic map alerts)
- (+) Easier to deploy/add analytics if offered
- (+) VSaaS providers are increasingly bundling analytics with video recording which eliminates the need to purchase, set up & integrate 3rd party analytics
- (+) VSaaS solutions rely on the system manufacture for cyber security and does not require firewall configuration or a VPN client to connect to the cameras



*"After looking deeper into the technology we've determined that cloud-based video surveillance is the way to go for us. ivelah was able to develop some work arounds until the current limitations can be readily addressed. They took the best the technology has to offer and customized it to meet our needs."*

**- Bill, Global Security Director**

Next Level Security Starts Here! Inquire at  
[about.ivelah.com/needs](https://about.ivelah.com/needs)

or call us today at  
**800.216.0805**

## CONS OF A VSAAS SOLUTION

- (-) **Bandwidth requirements to stream video to/from the cloud**
- (-) **Narrower user interfaces versus On-Prem solution**
- (-) **Limited deep configuration capability**
- (-) **Minimal options for advanced user features without purchasing additional solutions**
- (-) **Limited options for camera selection**
- (-) Some users do not want to effectively “lease” a system that will stop working if they do not or cannot pay the subscription fee
- (-) Limited to integrating with niche cloud-hosted access providers
- (-) Recording to cloud servers require monthly/yearly recurring expense to maintain access to live and recorded video
- (-) Cloud storage can be expensive typically costing between \$25-\$50 per camera per month
- (-) If internet connection is lost both recording and live monitoring can be lost
- (-) If utilizing a bridge to connect to cloud services, there is additional hardware which adds complexity and maintenance
- (-) Because video may need to come from the internet based VSaaS server not directly from the camera this can result in significantly higher download bandwidth to on-premise clients, even when viewing local cameras
- (-) Because of many cybersecurity configurations, the cameras/bridges are often designed to only accept connections from the cloud server, not a web browser from on an on-site PC
- (-) Some VSaaS offer direct LAN viewing if they offer a thick client that includes security capabilities to communicate directly, or by installing a local security certificate, however, these add complexity and require local installation and configuration
- (-) Because of the complexity of integration and cybersecurity concerns, 3rd party analytic integration is uncommon with VSaaSes. As such, users typically must take or leave the analytics from the VSaaS provider, which frequently are not as good as best-in-class analytics (though generally at significantly lower cost and complexity to use)



If your business environment functions best via traditional On-Prem, a cloud-based solution, or a combination of both, Ivelah is here to help you explore which option can meet your long and short-term targets.

Our goal is to ensure your needs, objectives, and challenges are all accounted for regardless of solution type. Contact us today to speak with one of our consultants or click below to complete a needs assessment.

ivelah provides security solutions  
**WITH THE SPEED CONVENIENCE &  
TRUST IMPORTANT TO YOUR PROJECT**

The security industry specialists at ivelah are well-versed in assessing clients' precise needs and delivering, and servicing access control & video surveillance solutions that are smart, dependable, and scalable.

Reducing your risks and developing a security strategy that improves workflow and production puts your business needs at the heart of every design and decision we present.



**SCHEDULE A DISCOVERY CALL WITH OUR TEAM** 

## **ivelah** IS COMMITTED TO DOING WHAT'S RIGHT FOR **YOU**



### the right **choice**

Make better-informed security decisions on what equipment to use in your security designs & technologies.

- Access Control
- Video Surveillance
- Perimeter Security
- Critical Integrations



### the right **process**

Ensure your deployment & ongoing system management is running efficiently & in a cost-effective manor.

- Technology Choice
- Deployment Practices
- Reduce Cost of Ownership
- Scalable Solutions



### the right **connects**

Maximize the benefits your security system offers while connecting seamlessly to other business critical systems.

- Human Resources
- Finance
- Compliance
- Information Technology



### the right **support**

Finally a support solution customized around you, your business needs, & budget.

- Comprehensive Service Plans
- Synchronized Warranties
- System Longevity Planning
- Managed Services

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