



i-PRO Software Deployment & Support Guidelines

Video Insight

Scalability

- One of the greatest single factors regarding scalability is the user's/site's network type and overall bandwidth capacity (wired or wireless).
- i-PRO software and hardware solutions cannot natively overcome or scale when the user/site cannot ensure the sanctity/capacity of the network, whether existing or newly deployed.
- While utilization of existing networks is acceptable, connectivity and consistency may suffer due to non-security-related IP devices' utilization of network resources.
- i-PRO highly recommends the deployment of *fixed video surveillance* equipment on a dedicated, wired, and segregated network.
- i-PRO Support *cannot troubleshoot or resolve* an issue that is purely stemming from a user's/site's network.
- *Consult the i-PRO Sales Engineering (SE) Team for* VI projects which require 600Mbps or above in total network bandwidth requirements (e.g., 375 x 1080P cameras streaming at a rate of 15FPS via H.265 codec require 600Mbps of total network bandwidth) and when a project requires a centralized/shared database, AD integration, virtualization, or complex integration requirements/scenarios.

VM or HCI Environment and VI

- i-PRO *cannot provide technical support nor recommend* the use of or deployment of VI on Hyperconverged Infrastructure (HCI), Cloud-Hosted Virtual Machines, or any Dynamically Resource Balancing VMs, including Emulated Virtual CPU Cores, etc.
- If a user wants to utilize a VM for VI deployment, *i-PRO SE Team must be consulted*.
- The VM must provide the same *static/dedicated resources* as needed by a traditional physical server, in accordance with the scale of the deployment.

Note: VMs can cause recording and playback abnormalities.

Third-Party Hardware/Software

i-PRO cannot troubleshoot any software or hardware that was not directly provided by i-PRO. This includes servers, workstations, networks, software layers, etc.

Video Insight | Audio Video Synch | Limitations

i-PRO does not recommend using Video Insight v7.9.6 or an older version for projects or deployments that require 100% accurate audio and video synching. VI 7.9.7 and later are better candidates for such functionality.

Video Insight Failover | Limitations

- VI currently offers a 1-to-1/chain-based failover functionality (1 x Server to 1 x Failover-Server or, in other words, 1 x failover-server to 1 x database).
- VI doesn't support multiple failover servers in a shared database environment.



Video Insight

Video Insight Monitor Plus Pc Client Operation

- Due to the dynamic nature of resource utilization required when streaming 1 or multiple live video streams, users should avoid using the VI MonitorPlus client on the same machine running the VI IP server application.

Video Insight Audit Trail | Scaling

- The *VI audit trail* functionality makes an active connection to the VI database and thus reduces UI UX responsiveness as the system scales above 1Gbps total bandwidth utilization.
- This reduced responsiveness is more evident if the site uses a shared database.
- Please consult with an SE team member if a site wants to utilize the functionality at scale.

Video Insight | Transit

VI Transit Solution | Limitations

- As of 7.9.7, Transportation Solution is predominantly built for the U.S. market but can be used internationally if approved by i-PRO SE and Product Management Team (PM) members.
- The VI Transit Solution's auto off-loading functionality is intended for *marked events**, and not for the general transmission of all recorded videos located on the vehicle network video recorder (NVR) to the central VI depot server.
- The VI Transit Solution's wireless scalability is directly related to the capacity of the wireless network it is deployed on, and third-party validation of any network is needed, as i-PRO cannot take responsibility for third-party network operations/limitations.
- Cellular functionality can only be provided via third-party hardware and service contracts not provided by i-PRO.
- If using cellular networks, network priority settings must be configured within third-party hardware settings.

**marked events: Booked marked events that are identified as important through the activation of a physical or virtual trigger. Examples of a trigger: button/dipswitch, actuation of stop sign, etc.*

i-PRO Hardware Integration Limitations

CU980 and VI | Limitations

- The i-PRO CU980 joystick/keyboard requires a license to operate with VI.
- While the i-PRO CU980 joystick/keyboard can work with VI's main client (VI MonitorPlus), it is designed for the *VI Video WallPlus client*.

i-PRO Embedded Recorder and Ip server Hybrid Environments | V7.9.3 | Limitations

Please note that the behavior/available features of IP devices/cameras managed directly by VI are not the same as IP devices/cameras found/attached to i-PRO embedded recorders, which are then integrated with VI. (Some features or functions may be limited.)



Active-Guard

ActiveGuard Scalability

- One of the greatest single factors regarding scalability is the user's/site's network type and overall bandwidth capacity.
Note: Due to the nature of ActiveGuard, the resource requirements for its server requirements can scale at a rapid rate.
- *All ActiveGuard* configurations must be validated *via the i-PRO ActiveGuard calculator* before deployment (found on i-PRO website).

ActiveGuard Calculator

Shared Server Resource (VI/Genetec)

Consult *i-PRO SE Team* if there are more than 10 x AI-enabled i-PRO cameras involved in the scope of a project that also wish to use the VI or Genetec Security Center PC as a shared resource.

Dedicated Server Resource

- Consult *i-PRO SE Team* if there are more than 50 x AI-Enabled i-PRO cameras involved in a scope of a project.
Note: 300 x AI-enabled i-PRO cameras is the maximum load 1 x AG server can support.
- Consult *i-PRO SE Team* if scaling beyond 300 x cameras, *more high resources servers need to be added* to accommodate the site.

VM & ActiveGuard

- i-PRO *does not recommend* the virtualization of the Active-Guard Server.
- If a user wants to utilize a VM for AG deployment, *i-PRO SE Team must be consulted*.
Note: VMs can cause performance abnormalities with ActiveGuard deployments.

Third-Party Hardware/Software

i-PRO Support cannot trouble shoot any software or hardware that was not directly provided by i-PRO. This includes servers, workstations, networks, software layers, etc.

MC & HM+

Monitorcast | Limitations

- Currently, due to the nature and distribution structure associated with *Mercury hardware*, MonitorCast, the i-PRO native access control solution, is only available in the U.S.
- Currently, MonitorCast is bound to Mercury hardware.

Health Monitor | Limitations

- HealthMonitor+ can be utilized outside of the U.S.; however, there are limitations.
- Not all international date and time formats are supported.
- International language support is limited to Danish, Dutch, and French. English is the prime supported language within HM+.
- HealthMonitor+ is an on-prem application.



General | Considerations

Display Performance

For the best display performance, please consult with *the i-PRO SE Team* regarding the nature of the site's requirements.

Wireless Operation | Notation

- Wireless networks are utilized during the operation of several i-PRO solutions.
- i-PRO solutions never rely on Wi-Fi for their primary mode of operation.
 - Some of these solutions include:
 - Video Insight's Transit Application via Transit NVRs (connection to Wi-Fi network for file transferring and Fleet wide software updating).
 - i-PRO native access control solution MonitorCast and its support for some wireless locks and credentials.
 - i-PRO public safety solutions, such as the VPU4000 vehicle recorder and BWC4000 body camera units.

General | Limitations

Wireless & Networks | Limitation

- While i-PRO has solutions that can take advantage of Wi-Fi networks, in general, IP cameras and other mission-critical devices that solely rely on Wi-Fi connectivity/ Wi-Fi networks are not recommended.
- This is because Wi-Fi networks are inherently more complex to set up and stabilize, can be technically more prone to cybersecurity events, and can be affected by interference and dead zones resulting in data or operational loss.
- For the reasons stated above, i-PRO cannot guarantee the consistent operation of its solutions when deployed via a Wi-Fi network/mesh.
- Just as in a traditional network setting, i-PRO Support cannot troubleshoot or resolve an issue that is purely stemming from a user's/site's Wi-Fi network.
- VI and MC *do not support* the teaming or bonding of Networks/NICs.



General Info & Best Practices

Supported Features and Functionality

- All supported features and improvements are documented on the Video Insight IP server/VI MonitorPlus release notes produced with each release.
- Please include only supported documented features in your proposals.
- Please consult the documentation or contact the i-PRO PM Team/i-PRO SE Team about the nature of the features in question.
- Contact the i-PRO SE Team regarding questions about the implementation, setup, and scaling of said feature.
- Do not include upcoming or future road mapped features in your proposal.

Feature Request & Software Escalations

- Improvement requests, features, and functionality changes for any products should be proposed to the Product Management Team.
- High-priority defects and customer escalations should also be brought to the attention of the Support Team, Product Team, and Development leadership for a quick resolution.

Software & Hardware Product Support

- i-PRO does not provide support/updates for its software and hardware products indefinitely.
- i-PRO has and will, from time-to-time, end support/discontinue some of its hardware and software products.
- In these circumstances, i-PRO endeavors to create a new like product or provide a path to an upgrade, potentially with a cost associated.
- If a product or software is discontinued by i-PRO, by no means will i-PRO deactivate or invalidate the product at the end-user level, and thus the end-user may use it for as long as the platform operates within the parameters of its original scope/environment, with the understanding that they “the end-user” does so at their own risk and that i-PRO cannot provide any further warranty or general support for the hardware or software.
- i-PRO cannot provide technical support or warranty claims based around malware, ransomware, social engineering, phishing-based attacks, and other attack vectors not directedly originating from its software and hardware products.
- Support for all camera integrations within all VI Platforms will end when the respective model reaches the official End-of-Support date for i-PRO models and End-of-Life date for third-party models.