This document describes the features, operational issues, and major fixes for the VideoXpert Video Management Software (VMS). Review each section to determine if an upgrade is warranted for your installation.

**Note:** For technical issues, contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international).

## Release Increments and Version Numbers

VideoXpert is released in major program increments – 1.8, 1.9, etc. Each VideoXpert increment contains software versions for your VideoXpert products that have been designed and tested together to expose new features and ensure optimal performance. When updating your VideoXpert environment, it is expected that you will update all components of your VideoXpert environment to the software versions indicated by the program increment (1.8, 1.9, etc).

## Updating Your System

Sometimes, .NET updates are needed for elements used within VideoXpert systems because they run on Microsoft Operating Systems. Microsoft might require a reboot when .NET updates are installed.

**Caution:** In order to upgrade your system, the system must be at VideoXpert Enterprise v 2.5 or later. If necessary, upgrade to v 2.5, and then to the current version.

Before upgrading to the current version of VideoXpert, check the system to ensure it satisfies the requirements for a smooth upgrade.

- The VideoXpert system must be running v 2.5 or later.
- If there are any integrations present, ensure that an update to the integration is available which supports the version of VideoXpert to which you are upgrading.
- VideoXpert v 3.1 or later does not support DS acting as a recorder. If a customer has DS, they must either remain at VideoXpert v 2.5 or they must uninstall DS and install VxStorage instead. If you need to keep your video, then you must run the DS to VxS migration; otherwise, you will lose your video on your DS. This update can only be done if the DS is running on DSSRV2 hardware. VxStorage has not been qualified on DSSRV1 hardware.
- VideoXpert v 3.1 or later does not support the UDI5000. For VideoXpert v 3.1 or later, it is recommended that you use VideoXpert's native third-party camera support instead of using the UDI.

**Caution:** Copy installers directly to and run them from your system. Pelco strongly recommends that you do not attempt to install VideoXpert from an external drive, such as a network or USB drive.

Upgrade components in the following order:

1. VxOpsCenter
2. VxToolbox
3. Media Gateways
4. VideoXpert Cores (this step will break all integrations until the next step is performed)

5. Integrations
6. VxStorage

When updating from VideoXpert Enterprise 2.5 to a later version, the upgrade process prompts the user to migrate their data. This is the first VideoXpert upgrade that has required this type of data migration. Users must go through this migration process to preserve their existing data.

During an update (for example: VxOpsCenter, VxToolbox, and Media Gateways have been updated, but VideoXpert Core and VxStorage have not been updated), all critical functionality will work properly; some of the other, less-critical features might not work until all components have been updated to the same release. Critical functionality includes:

- Live viewing
- Playback
- Exports
- PTZ

# VideoXpert Enterprise v 3.9 / Released June 23, 2020

## Software Versions

- VideoXpert Core v 3.9.0.241
- Media Gateway v 3.9.0.60
- VxToolbox v 3.9.0.224
- VxOpsCenter and VxPlayer v 3.9.0.398
- VxStorage v 3.9.0.75

## New Features and Improvements

- Added the ability to configure Vehicle in Zone Analytics for cameras that are capable of running the Pelco Advanced Analytics Suite based on camera model, camera firmware, and licensing. (VxToolbox) Also added the ability to configure and view associated events. (VxToolbox, VxPortal, and VxOpsCenter)

- Added the ability to configure counter flow detection for people and vehicles on cameras that are capable of running the Pelco Advanced Analytics Suite based on camera model, camera firmware, and licensing. (VxToolbox)

- Administrators can configure confidence filtering on cameras that are capable of running the Pelco Advanced Analytics Suite based on camera model, camera firmware, and licensing. (VxToolbox)

- Using VxPlayer, you can export recordings in .MP4 and .AVI file formats, depending on the recording type and source camera. Audio can be included in the export. For .MP4 files, a timestamp can be included as subtitle text.

- In VxPlayer, a button has been added to switch between sequential playback (one cell shown) and synchronized playback (four cells shown).

- You can apply permissions that specify which monitors (per-monitor) can be controlled by which roles. (VxToolbox, VxOpsCenter)

- You can use the Rules Engine to configure Banner Notifications and Audio Alerts for specific combinations of Events and Devices. (VxToolbox, VxOpsCenter)

- Added the ability to set a maximum number of events to retain for System Event Retention in VxToolbox. For new systems, the default is 10,000 events; for upgraded systems, the maximum is set to the lowest value that does not require events to be deleted (10,000, 100,000, 1,000,000 or 10,000,000); for upgraded systems with more than 10,000,000 events, the maximum of 10,000,000 is applied.

- When using Multi-System Access Mode, you can launch VxOpsCenter client without providing login credentials. This will open VxOpsCenter client (in MSA mode) without connecting to a VX System. When you choose a system to access, you will be prompted for credentials for that system. (VxOpsCenter)

- Operators and Administrators can dismiss the SUP renewal notification for 7 days. (VxToolbox, VxOpsCenter)

- Streaming options default to unicast mode on new installations, but can be changed to multicast mode. This improvement was introduced in VideoXpert v 3.8. (VxToolbox, VxOpsCenter)

## Known Issues

- Due to periodic issues, support for the following cameras/encoders will have limited support in v 3.7 and are no longer officially supported in v 3.8 or newer:

  – NET5300 Series Analog Camera Encoder (sold 2005-2013)

  – IP110 Series Cameras (sold 2007-2011)

  – IP3701 Series Cameras (sold 2007-2011)

  – Spectra Mini IP (SD4N) Series Cameras (sold 2008-2016)

  – Spectra IV IP (SD4N) Series Cameras (sold 2008-2015)
  The Spectra IV IP (SD4E) Series Cameras sold between 2010-2016 is not affected by this notice.

  It is recommended that before upgrading your system to version 3.8 or newer, a limited bench test is performed with the newer VX version along with the desired legacy camera(s) to ensure satisfaction with the performance.

- When there is a network disconnection and recording gaps are auto-filled for multiple GFC Multi 4-in-1 cameras, the recording from only one of the cameras is applied to all of the cameras. (VxOpsCenter)

## Test Information

- VxOpsCenter (Shared Display), VxPlayer, and VxPortal have been tested with:

  – Windows 7 Ultimate (6.1.7601 Service Pack 1 Build 7601)

  – Windows 10 Enterprise 2016 LTSP (10.0.14393 Build 14393)

  – Windows 10 Pro (10.0.17763 build17763)

- VideoXpert Enterprise (VideoXpert Core, Media Gateway, VxToolbox, and VxStorage) have been tested with:

  – Windows Server 2016 Standard (10.0.14393 Build 14393)

# VideoXpert Enterprise v 3.8.1 Patch / Released April 14, 2020

## Software Versions

- VideoXpert Core v 3.8.1.5
- Media Gateway v 3.8.1.3
- VxToolbox v 3.8.1.16
- VxOpsCenter and VxPlayer v 3.8.1.15
- VxStorage v 3.8.1.5

## Major Fixes

- Optimized rules processing in VideoXpert Core.
- When updating VideoXpert Cores in a configuration that uses VX Load Balancing, there is no longer an error reporting that other VideoXpert Cores are unavailable.
- VxToolbox refreshes the video configuration information from Pelco EVO-05 cameras without closing and reopening VxToolbox.
- Corrected an issue where VxToolbox sometimes did not allow changing the bitrate on Axis cameras.
- Corrected an intermittent issue of VxOpsCenter crashing while viewing analytics overlays on some cameras.
- Corrected an issue to enable users to swap streams between a local monitor and an Enhanced Decoder. (VxOpsCenter)
- Offline RTSP data sources no longer send "Device Modified" messages when the camera is offline. (VxOpsCenter)

## Known Issues

- Due to periodic issues, support for the following cameras/encoders will have limited support in v 3.7 and will no longer be officially supported in v 3.8 or later:

  - NET5300 Series Analog Camera Encoder (sold 2005-2013)
  - IP110 Series Cameras (sold 2007-2011)
  - IP3701 Series Cameras (sold 2007-2011)
  - Spectra Mini IP (SD4N) Series Cameras (sold 2008-2016)
  - Spectra IV IP (SD4N) Series Cameras (sold 2008-2015)
    The Spectra IV IP (SD4E) Series Cameras sold between 2010-2016 is not affected by this notice.

  It is recommended that before upgrading your system to version 3.8 or newer, a limited bench test is performed with the newer VX version along with the desired legacy camera(s) to ensure satisfaction with the performance.

- When there is a network disconnection and recording gaps are auto-filled for multiple GFC Multi 4-in-1 cameras, the recording from only one of the cameras is applied to all of the cameras. (VxOpsCenter)

## Test Information

- VxOpsCenter (Shared Display), VxPlayer, and VxPortal have been tested with:

  – Windows 7 Ultimate (6.1.7601 Service Pack 1 Build 7601)

  – Windows 10 Enterprise 2016 LTSP (10.0.14393 Build 14393)

  – Windows 10 Pro (10.0.17763 build17763)

- VideoXpert Enterprise (VideoXpert Core, Media Gateway, VxToolbox, and VxStorage) have been tested with:

  – Windows Server 2016 Standard (10.0.14393 Build 14393)

## VideoXpert Enterprise v 3.8 / Released March 31, 2020

### Software Versions

- VideoXpert Core v 3.8.0.252
- Media Gateway v 3.8.0.99
- VxToolbox v 3.8.0.271
- VxOpsCenter and VxPlayer v 3.8.0.682
- VxStorage v 3.8.0.108

### New Features and Improvements

- Added a system-wide setting to optionally force encryption on exports, and a system-wide setting to optionally use a globally-specified password on exports. This feature does not apply to MSA mode. (VxToolbox, VxPortal, VxOpsCenter)

- VxToolbox simultaneously updates firmware for multiple cameras.

- VxToolbox can create passwords for cameras that do not have initial passwords set. This configuration can be done in bulk.

- Added the ability to configure People in Zone Analytics for PTZ cameras that are capable of running the Pelco Advanced Analytics Suite. (VxToolbox)

- Added video overlays for Object in Zone using the Pelco Advanced Analytics Suite. (VxOpsCenter)

- Added the ability to select the tertiary stream, when available on the camera. (VxToolbox, VxPortal, VxOpsCenter, VxStorage, servers)

- Added the ability to create event-triggered rules to start and stop recordings, and to record a specific group of data sources. (VxToolbox)

- Added support for the updated Spectra Enhanced 7 series 2MPx30 speed dome cameras. (VxToolbox, VxPortal, VxOpsCenter)

- Added support for the new Esprit TI Thermal PT series cameras. (VxToolbox, VxPortal, VxOpsCenter)

- Added SD card notifications from Sarix Enhanced 2 cameras. To use this new feature, you must update to the controlled camera firmware release version 6.4.2.8. (VxOpsCenter)

- Added new user settings for snapshots: font size and color, background, text position. These will apply to all subsequent snapshots made via VxOpsCenter by the specific user. (VxPortal, VxOpsCenter)

- Replaced functionality of the VideoXpert Accessory Server with software in VideoXpert Core that performs load balancing and supports Windows Server DHCP and NTP services. This supports RMF-compliant load balancing.

- Updated browser plugin for VxOpsCenter.

- Added the ability to monitor and view the status of all connected VideoXpert services (Cores, Gateways, VxStorage, databases) on-premesis. Users can see online/offline status, and can choose to receive SMS notifications when the status of one or more services changes. (VxToolbox, VxOpsCenter)

- Added full frame-rate and fractional-speed rewind and playback. (VxOpsCenter, VxPlayer, VxStorage)

- Operators can use a QWERTY keyboard to manually cycle through cameras by camera number. (VxOpsCenter)

- Reduced default memory allocation for VxToolbox to 1 GB. Users can configure additional memory for large VideoXpert systems that will persist through reboots and software updates.

- VxToolbox, VxPortal, and VxOpsCenter software is now available in six more languages: Bulgarian, Croatian, Czech, Hungarian, Polish, and Romanian. These are in addition to the previously available Arabic, Brazilian Portuguese, English, French, German, Italian, Korean, Russian, Simplified Chinese, Spanish for Latin America, and Turkish.

## Known Issues

- Due to periodic issues, support for the following cameras/encoders will have limited support in 3.7 and will no longer be officially supported in 3.8 or later:

  - NET5300 Series Analog Camera Encoder (sold 2005-2013)
  - IP110 Series Cameras (sold 2007-2011)
  - IP3701 Series Cameras (sold 2007-2011)
  - Spectra Mini IP (SD4N) Series Cameras (sold 2008-2016)
  - Spectra IV IP (SD4N) Series Cameras (sold 2008-2015)
    The Spectra IV IP (SD4E) Series Cameras sold between 2010-2016 is not affected by this notice.

- When there is a network disconnection and recording gaps are auto-filled for multiple GFC Multi 4-in-1 cameras, the recording from only one of the cameras is applied to all of the cameras. (VxOpsCenter)

## Major Fixes

- Corrected an issue in VxOpsCenter v 3.7 and v 3.7.1, when a camera was disconnected and then reconnected to the network, the camera would not automatically reconnect the live video stream.

- Changed the port range associated with VxOpsCenter UDP Unicast ports to 4502-4900. (This change was implmented in VideoXpert v 3.8; the VideoXpert System Design Guide dated 03/20 reflects the previous range.)

## Test Information

- VxOpsCenter (Shared Display), VxPlayer, and VxPortal have been tested with:

  - Windows 7 Ultimate (6.1.7601 Service Pack 1 Build 7601)
  - Windows 10 Enterprise 2016 LTSP (10.0.14393 Build 14393)
  - Windows 10 Pro (10.0.17763 build17763)

- VideoXpert Enterprise (VideoXpert Core, Media Gateway, VxToolbox, and VxStorage) have been tested with:

  - Windows Server 2016 Standard (10.0.14393 Build 14393)

## VideoXpert Enterprise v 3.7.1 Patch / Released December 18, 2019

### Software Versions

- VideoXpert Core v 3.7.1.5
- Media Gateway v 3.7.1.2
- VxToolbox v 3.7.0.156
- VxOpsCenter v 3.7.1.1
- VxPlayer v 3.7.0.458
- VxStorage v 3.7.1.3

### Known Issues

- Due to periodic issues, support for the following cameras/encoders will have limited support in VX 3.7 and will no longer be supported in VX 3.8 or later:
  - NET5300
  - IP110
  - IP3701
  - Spectra IV IP and Spectra Mini IP (SD4N series)

- When there is a network disconnection and recording gaps are auto-filled for multiple GFC Multi 4-in-1 cameras, the recording from only one of the cameras is applied to all of the cameras. (VxOpsCenter)

### Major Fixes

- Corrected an issue from VX 3.5 that occurred when upgrading to VX 3.7. The VxS would stop recording or begin capturing after the upgrade.
- Corrected an issue from VX 3.5 that occurred when upgrading to VX 3.7.  In VideoXpert Core, after upgrading, licenses were expired with the expiration year 1970.

### Test Information

- VxOpsCenter (Shared Display), VxPlayer, and VxPortal have been tested with:
  - Windows 7 Ultimate (6.1.7601 Service Pack 1 Build 7601)
  - Windows 10 Enterprise 2016 LTSP (10.0.14393 Build 14393)
  - Windows 10 Pro (10.0.17763 build17763)

- VideoXpert Enterprise (VideoXpert Core, Media Gateway, VxToolbox, and VxStorage) have been tested with:
  - Windows Server 2016 Standard (10.0.14393 Build 14393)

# VideoXpert Enterprise v 3.7 / Released December 10, 2019

## Software Versions

- VideoXpert Core v 3.7.0.224
- Media Gateway v 3.7.0.93
- VxToolbox v 3.7.0.156
- VxOpsCenter and VxPlayer v 3.7.0.458
- VxStorage v 3.7.0.89

## New Features and Improvements

- VxToolbox software is now available in English and the following languages: Arabic, Brazilian Portuguese, German, French, Italian, Korean, Russian, Simplified Chinese, Spanish for Latin America, Turkish.
- VxPlayer now supports the same snapshot functionality as does VxOpsCenter, including the naming convention used when saving a file to disk, and the timestamp overlay.
- VxPlayer now support the same FF/RW controls as VxOpsCenter, including fast-forward and rewind speeds up to 128x.
- In VxToolbox, Administrators can set access permissions at the user level for export of recorded video.
- In an aggregated VX environment, users can create an export that contains video from multiple sites.
- Event-triggered recording options have been greatly expanded. New options include: improved filtering of the event list, and configuration to work with certain external events, analytic events, and access events. (VxToolbox, VxStorage, VX Server)
- In VxToolbox, Administrators can activate and view analytic licenses, apply them to supported cameras, and configure and use video analytics.
- VxOpsCenter incorporates high frame rate playback (25/30 ips) for fast-forward at 2x, 4x, and 8x.
- VideoXpert now supports Pelco's new pan/tilt thermal cameras, Sarix Enhanced 3 cameras, Spectra Enhanced G7 cameras. This includes video overlays for Object in Zone Analytics and the ability to configure People in Zone Analytics for PTZ cameras. (VxPortal, VxStorage, VxDecoder, VX Server)
- VxOpsCenter Clients can connect to a VideoXpert Enterprise system from multiple networks.
- Free integration licenses no-longer expire.
- Administrator and integrators can receive critical notifications from their VideoXpert Systems via SMS notifications at all times and at all locations.

## Known Issues

- When there is a network disconnection and recording gaps are auto-filled for multiple GFC Multi 4-in-1 cameras, the recording from only one of the cameras is applied to all of the cameras. (VxOpsCenter)

## Test Information

- VxOpsCenter (Shared Display), VxPlayer, and VxPortal have been tested with:

  – Windows 7 Ultimate (6.1.7601 Service Pack 1 Build 7601)

  – Windows 10 Enterprise 2016 LTSP (10.0.14393 Build 14393)

  – Windows 10 Pro (10.0.17763 build17763)

- VideoXpert Enterprise (VideoXpert Core, Media Gateway, VxToolbox, and VxStorage) have been tested with:

  – Windows Server 2016 Standard (10.0.14393 Build 14393)

**VideoXpert Enterprise v 3.9 Release Notes**