VideoXpert Professional

This document describes the features, operational issues, and major fixes for VxPro software. Review each section to determine whether or not you should perform updates.

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

**INSTALLING THE SYSTEM**

If you have multiple drives, or have a designated recording directory, you should perform a custom installation so that you can select your recording directory. Performing a default installation will place your recording directory on the drive with the largest amount of free space.

NOTE: If installing on a JBOD unit, you must go to the VxStorage interface, and add your individual drives as recording volumes. If the drives have been added so that each is its own volume group, you must also assign cameras to the individual drives (as if they were separate recorders).

**UPDATING YOUR SYSTEM**

When updating your VxPro system, use the latest VxPro installer. This will update all of your installed VxPro components.

CAUTION: In order to upgrade to 3.1, your current system must be VxPro v 2.5.x. You cannot update to VxPro 3.1 from VxPro versions earlier than 2.5.

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**VideoXpert Professional v 3.3.1 Patch / Released May 1, 2019**

**SOFTWARE VERSIONS**

- VxPro Bundled Installer v 3.3.1.6
- VxPro Server v 3.3.1.21
- VxToolbox v 3.3.1.3
- VxOpsCenter and VxPlayer v 3.3.1.21
- VxPortal v 3.3.1.1

**NEW FEATURES AND IMPROVEMENTS**

- Fixed an issue with VxPortal on Google Chrome in FIPS-enabled environments.
- Russian text is now supported when the locale is set to Ukrainian or to Russian (VxPortal, VxOpsCenter).
- Fixed an issue with some cameras displaying incorrect frame rates on live, recorded, and exported video in VxOpsCenter.
- Playback for Optera IMM12036 cameras is improved (VxOpsCenter).
- Improvements have been made to support different screen resolutions and other screen-related issues (VxToolbox).
- Fixed an issue where users might have seen a warning that the demo license is expiring, even if there are enough channel licenses (active and applied) to operate.

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**VideoXpert Professional v 3.3 / Released April 2, 2019**

**SOFTWARE VERSIONS**

- VxPro Bundled Installer v 3.3.0.281
- VxPro Server v 3.3.0.401
**NEW FEATURES AND IMPROVEMENTS**

- VxToolbox supports video configuration of Pelco H.265 cameras. (VxToolbox)
- Nested groups are now supported for LDAP users and roles. (VxToolbox)
- The VideoXpert system notifies you when a license is about to expire or has expired. (VxToolbox, VxOpsCenter)
- The Rules Engine recognizes NET55XXT alarms and can differentiate between different alarm contacts (VxToolbox).
- You can save specific alarm/relay sources as rule triggers (VxToolbox).
- The user action report includes login/logout actions from VxToolbox and VxOpsCenter.
- After migrating from DS software to VxPro software, the VxPro server records to the drives that were selected during installation.
- After migrating from DS software to VxPro software, previously recorded video (from DS) and new live and recorded video are viewable from the same camera in the camera tree. No additional license is required for the camera.
- After a fresh installation of VxPro and VxToolbox, the software is able to sort devices by IP address.
- “Search Recording for Motion (Pixel Search)” is available to all users who have View Recorded Video permissions. (VxToolbox).
- For cameras on your VideoXpert system that have local recordings, Edge Storage Auto Gap Fill functionality detects when a gap in recording occurs, queries the camera for recordings, and automatically downloads video and audio (if present) to fill the gap. (VxOpsCenter, VxStorage)
- Spectra Pro lookup and the IR 4K camera are supported in VideoXpert.
- GFC Multi 4-in-1 camera is supported in VideoXpert.
- The secondary stream from Axis cameras is consistently displayed in VxOpsCenter.
- Axis PTZ cameras are shown correctly, not as fixed cameras (VxOpsCenter, VxToolbox).
- PTZ controls operate consistently on Axis cameras that use ONVIF drivers (VxOpsCenter).
- When you close a video from the live cell or the Investigation mode, the corresponding audio feed also closes (VxOpsCenter).
- You can successfully change the VxOpsCenter layout using the ASCII translator service.
- When Event monitor service changes the layout to the shared display, the monitor number stays at the correct number (VxOpsCenter).

**VideoXpert Professional v 3.1.1 Patch / Released January 31, 2019**

**VxPRO SERVER VERSION 3.1.1.15**

**Major Fixes**

- Users that have live but not playback permissions are not able to view recorded video via MJPEG-PULL.
- The VideoXpert System Credentials can be validated and saved properly on a VxPro v 3.0 system.

**VxTOOLBOX VERSION 3.1.1.10**

**Major Fixes**

- Commissioning proceeds at full speed, even in larger environments.
- In VxMaps, the world map will load zoomed to the cameras.
• Recording and retention configuration is available when multiple cameras are selected.
• Labels for VxCore in VxToolbox are displayed consistently.

**Known Issues**
• When a tab or workspace are monitored, the corresponding modification value is not displayed in the Events Report or the User Action Report.
• To differentiate between the different alarm contacts on the NET55xx, you must create and use a custom action script.

**VxOpsCenter and VxPlayer Version 3.1.1.54**

**Major Fixes**
• VxOpsCenter does not show an erroneous “Your session has expired” message when MSA is used.
• In VxMaps, Load Last Map and Load Specific Map properly displays the screen.
• In VxMaps, Center on Alarm is functioning.
• In VxMaps, you can save all cameras to a map, instead of a maximum of 555.
• In VxMaps, the camera information panel shows the same information as the VxOpsCenter camera information panel.
• In VxMaps, switching to a DWG map always displays the map.
• VxMaps successfully launches in an IPv6 environment.
• In investigation mode, the playback bar area does not degrades and functions properly.
• In investigation mode, navigating in a playback bar that has many gaps does not cause the VxOpsCenter Client to lock up and become unresponsive.
• When switching tabs, cells populate with the correct camera.
• When a user is viewing a video stream that has secondary stream recording, and has chosen the Secondary Stream view, the video stream correctly plays as the Secondary Stream video.
• When there are a large number of motion alarms (for example, 30), cameras that have current motion alarms do not flicker and VxOpsCenter does not flip between the camera displays.
• Memory usage of VxOpsCenter does not climb to 90%, so VxOpsCenter Client remains responsive.

**Known Issues**
• Use the Pelco camera driver instead of ONVIF drivers for the Pelco Spectra Pro IR camera.
• VxMaps is not compatible with a Windows 7 system that has attached decoders. To use VxMaps, you must upgrade to a Windows 10 system.
• In VxMaps, the tags list changes size as the user scrolls through the list.
• When opening VxPortal using the Web Browser plugin in VxOpsCenter, an “Unsupported Browser” error might occur.
• When multiple saved tabs have data sources that are streaming, some of the cells in the tabs might begin to flicker.
• Opening multiple workspaces in quick succession can cause a memory spike, with causes white screens and makes the VxOpsCenter Client slow or unresponsive.
• When playing video using fast forward at 4x or 8x on a Windows 10 system, the video jumps and appears to skip frames.

**VideoXpert Professional 3.1 / Released December 11, 2018**

**New Feature Highlights**
• VideoXpert handles generic ONVIF events from any ONVIF camera.
• ONVIF and Pelco drivers support hostnames, and VideoXpert displays hostnames in several key locations in the UI.
• You can migrate from a Digital Sentry system to a VideoXpert system without losing events or video.
• Support is added for the Pelco GFC Pro 4K cameras.
• Meinberg NTP is no longer required for VideoXpert systems.
• VideoXpert can manage user credentials for the entire VX System via LDAP.
• In VxMaps, the Administrator can manually rotate camera icons on a map.
• VxMaps supports JPEG and PNG maps. VxMaps Raster View enables features including linked drawings, center on alarm, center on call-up dialog, center from VxOpsCenter, and filtering.
• In VxMaps, camera icons on the map are displayed to reflect the same states that are shown in Mission Control.
• In VxMaps, the operator can choose multiple cameras to launch at one time.
• VxMaps supports using a 3D mouse to control and interact with a map.
• You can add Access Control icons to maps in VxMaps.
• Pelco analytic overlays are shown in VxOpsCenter and Export Player.
• VxOpsCenter and VxDecoder support an immersive view separate from the iPTZ views for Optera cameras.
• In Investigation mode in VxOpsCenter, the timeline is more responsive and more easily used.
• ENC5516 encoding is supported on DSSRV2 hardware.
• VxPortal supports high framerate MJPEG playback of recorded video.
• The gap report from VxToolbox is accurate.

**VxPro Server Version 3.1.0.231**

**New Features and Improvements**

• VideoXpert handles generic ONVIF events from any ONVIF camera.
• ONVIF and Pelco drivers support hostnames, and VideoXpert displays hostnames in several key locations in the UI.
• You can migrate from a Digital Sentry system to a VideoXpert system without losing events or video.
• Support is added for the Pelco GFC Pro 4K cameras.
• Meinberg NTP is no longer required for VideoXpert systems.

**Known Issues**

• Users that have live but not playback permissions are able to view recorded video via MJPEG-PULL.
• In some cases, the VideoXpert System Credentials cannot be validated or saved properly on a VxPro v 3.0 system. This prevents VxSNMP from being setup.

**VxToolbox Version 3.1.0.179**

**New Features and Improvements**

• VideoXpert can manage user credentials for the entire VX System via LDAP.
• In VxMaps, the Administrator can manually rotate camera icons on a map.

**Known Issues**

• Commissioning might be slowed significantly in larger environments.
• When a tab or workspace are monitored, the corresponding modification value is not displayed in the Events Report or the User Action Report.
• In VxMaps, the world map will load as zoomed all the way out instead zoomed to the cameras.
• Recording and retention configuration is not available when multiple cameras are selected.
• Using VxOpsCenter Client at the same time as VxToolbox can cause memory issues.
• Labels for VxCore in VxToolbox are shown as either VideoXpert Core or just Core. These refer to the same product.
• To differentiate between the different alarm contacts on the NET55xx, you must create and use a custom action script.
**VxOpsCenter and VxPlayer Version 3.1.0.745**

**New Features and Improvements**
- VxMaps supports JPEG and PNG maps. VxMaps Raster View enables features including linked drawings, center on alarm, center on call-up dialog, center from VxOpsCenter, and filtering.
- In VxMaps, camera icons on the map are displayed to reflect the same states that are shown in Mission Control.
- In VxMaps, the operator can choose multiple cameras to launch at one time.
- VxMaps supports using a 3D mouse to control and interact with a map.
- You can add Access Control icons to maps in VxMaps.
- Pelco analytic overlays are shown in VxOpsCenter and Export Player.
- VxOpsCenter and VxDecoder support an immersive view separate from the iPTZ views for Optera cameras.
- In Investigation mode in VxOpsCenter, the timeline is more responsive and more easily used.
- ENC5516 encoding is supported on DSSRV2 hardware.

**Known Issues**
- Use Pelco camera drivers instead of ONVIF drivers.
- VxMaps is not compatible with a Windows 7 system that has attached decoders. To use VxMaps, you must upgrade to a Windows 10 system.
- In VxMaps, the tags list changes size as the user scrolls through the list.
- VxMaps will not launch in an IPv6 environment.
- In VxMaps, the camera information panel shows different information from the VxOpsCenter camera information panel.
- In VxMaps, Center on Alarm is not functioning.
- In VxMaps, Load Last Map and Load Specific Map each display a black screen.
- In VxMaps, switching to a DWG map sometimes will not display the map.
- In investigation mode, the playback bar area degrades as it is used, until it is unusable.
- In VxMaps, you can save a maximum of 555 cameras to a map.
- In investigation mode, navigating in a playback bar that has many gaps can cause the VxOpsCenter Client to lock up and become unresponsive.
- When opening VxPortal using the Web Browser plugin in VxOpsCenter, an “Unsupported Browser” error might occur.
- When multiple saved tabs have data sources that are streaming, some of the cells in the tabs might begin to flicker.
- When switching tabs, cells might populate with the wrong camera.
- Opening multiple workspaces in quick succession can cause a memory spike, with causes white screens and makes the VxOpsCenter Client slow or unresponsive.
- When a user is viewing a video stream that has secondary stream recording, and has chosen the Secondary Stream view, the video stream might continue to play as Primary Full Frame video.
- When there are a large number of motion alarms (for example, 30), cameras that have current motion alarms might flicker and VxOpsCenter might repeatedly flip between the camera displays.
- Memory usage of VxOpsCenter can climb to 90%, rendering VxOpsCenter Client unresponsive.
- When playing video using fast forward at 4x or 8x on a Windows 10 system, the video jumps and appears to skip frames.

**VxPortal Version 3.1.0.2**

**New Features and Improvements**
- VxPortal supports high framerate MJPEG playback of recorded video.
**VxStorage 3.1.0.142**

**New Features and Improvements**
- The gap report from VxToolbox is accurate.

**Known Issues**
- In some cases, VxStorage cannot retrieve local recordings from cameras that use Pelco and ONVIF drivers.

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**VideoXpert Professional 3.0.1 Patch / Released October 30, 2018**

**VxPro Server Version 3.0.1.16**

**Major Fixes**
- When a P2-SUP-EXT-1C1D license is tampered with, it expires permanently.
- Changing the device driver is now always successful.
- Terminating the migration tool while it is running will not shut down VxCore and VxCore Database services.
- Viewing video from JPEG and thumbnail modes from aggregated sources will not result in an error message.
- Archived exports are successfully migrated when updating from VideoXpert 2.5 to VideoXpert 3.0.

**Known Issues**
- After upgrading to VideoXpert 3.0, the server might disconnect frequently (a few times a day), and send connection lost and re-established messages.
- Users that have live but not playback permissions are able to view recorded video via MJPEG-PULL.
- In some cases, the VideoXpert System Credentials cannot be validated or saved properly on a VxPro v 3.0 system. This prevents VxSNMP from being setup.

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**VxToolbox Version 3.0.1.6**

**Major Fixes**
- If the IP of a device changes, VxToolbox updates the device to the new IP address.
- VxToolbox can change the settings of more than one camera at a time.
- Authenticated devices might become unauthenticated over time.
- Corrected an issue that caused some pools to improperly migrate to the Recording Tab while updating a single Core system to VideoXpert v 3.0.

**Known Issues**
- When a tab or workspace are monitored, the corresponding modification value is not displayed in the Events Report or the User Action Report.
- Recording and retention configuration is not available when multiple cameras are selected.
- Using VxOpsCenter Client at the same time as VxToolbox can cause memory issues.
- Labels for VxCore in VxToolbox are shown as either VideoXpert Core or just Core. These refer to the same product.

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**VxOpsCenter and VxPlayer Version 3.0.1.14**

**Major Fixes**
- VxOpsCenter Client can stream playback video in JPEG format.
- The VxMaps plugin might crash after switching between different maps.
- In VxMaps, the filter count is double the number of cameras on the map.
- Corrected an issue that caused video playback from IMP219 cameras to jump 20 minutes ahead from NSM recorders.
- Corrected an issue that prevented recorded video from being available for viewing after an update of VxS or NSM.
Known Issues
- VxMaps is not compatible with a Windows 7 system that has attached decoders. To use VxMaps, you must upgrade to a Windows 10 system.
- In VxMaps, the tags list changes size as the user scrolls through the list.
- In investigation mode, the playback bar area degrades as it is used, until it is unusable.
- In investigation mode, navigating in a playback bar that has many gaps can cause the VxOpsCenter Client to lock up and become unresponsive.
- When opening VxPortal using the Web Browser plugin in VxOpsCenter, an “Unsupported Browser” error might occur.
- When multiple saved tabs have data sources that are streaming, some of the cells in the tabs might begin to flicker.
- When switching tabs, cells might populate with the wrong camera.
- Opening multiple workspaces in quick succession can cause a memory spike, with causes white screens and makes the VxOpsCenter Client slow or unresponsive.
- When a user is viewing a video stream that has secondary stream recording, and has chosen the Secondary Stream view, the video stream might continue to play as Primary Full Frame video.
- When there are a large number of motion alarms (for example, 30), cameras that have current motion alarms might flicker and VxOpsCenter might repeatedly flip between the camera displays.
- Memory usage of VxOpsCenter can climb to 90%, rendering VxOpsCenter Client unresponsive.

VxStorage 3.0.1.6
Major Fixes
- VxStorage can retrieve local recordings from cameras that use Pelco and ONVIF drivers.

VideoXpert Professional 3.0 / Released September 21, 2018

NEW FEATURE HIGHLIGHTS
New Features and Improvements
- Users can now configure JBOD drives during VxPro installation.
- Administrators can use device and data source RTSP URLs to create a new device; add new data sources to an existing device; remove data sources from a device; and record media streams that are accessible by an RTSP URL to retain and access the media using VideoXpert.
- VxPro Server includes Pelco driver and ONVIF driver support for alarms and relays.
- VxPro Server supports cameras that use TLS.
- VxPro Server supports IPV6 cameras.
- VxPro Server supports ENC5516 encode on DSSRV2 hardware.
- VxPro Server supports live and playback viewing of Pelco h.265 cameras, and exports from these cameras.
- VxPro Server enables you to view and control (PTZ) all cameras without buying a recorder.
- VxPro Server reduces aggregated user privileges, and enables Administrators to set them.
- VxPro Server enables Administrators to specify the recording retention period on a per-channel basis in VxToolbox.
- Administrators can use VxToolbox to configure visual representations of monitor walls, including cell layouts and cameras.
- Administrators can manage system devices in VxToolbox. Formerly, only camera devices could be managed in VxToolbox.
- VxToolbox device filtering is improved.
- Administrators can configure SMTP, clusters and gateways, database backup, audio association, and aggregation from VxToolbox.
- Administrators have more control over aggregation credentials.
- VxToolbox includes a new device report.
VxToolbox supports relays (via Pelco and ONVIF drivers), and has greater support for alarms.

VxToolbox includes a new trigger relay rule response builder and a new email rule response builder.

VxOpsCenter includes visual representations of monitor walls, including cell layouts and cameras.

Operators can use the mouse scroll wheel to zoom in and out of, and click and drag to select the playback timeline in VxOpsCenter.

The default layout when opening a new window in VxOpsCenter is 2x2.

Operators can modify the iris and focus on non-PTZ cameras in VxOpsCenter.

Multi-selection in the Bookmarks list in VxOpsCenter enables bulk deletion of bookmarks.

When exporting logs from VxOpsCenter, you can now include server logs.

VxOpsCenter includes a custom option in the Quick Export menu.

VxOpsCenter supports the triggering of Pelco Camera Relays both manually and through the Rules Engine.

The Acknowledge All button in VxOpsCenter acknowledges all events. Previously, only 500 events could be acknowledged per button click.

The VxMaps Plugin, now included in VxOpsCenter, provides an interface to arrange cameras according to their physical locations on a map, making it easier to find the right camera and view to suit your needs.

VxDecoder default port ranges (client-side ports used by the decoder to receive UDP unicast RTP streams) have been updated to port numbers 4500-4600.

In addition to English, VxPortal software is now available in the following languages: Arabic, Brazilian Portuguese, German, French, Italian, Korean, Russian, Simplified Chinese, Spanish for Latin America, and Turkish.

**VxPro Installer Version 3.0.0.189**

**New Features and Improvements**

- Users can now configure JBOD drives during VxPro installation.

**Major Fixes**

- Operators can use only English-language characters in the VxPro installation path. This prevents an installation failure that could occur when using Russian characters in the installation path.

**VxPro Server Version 3.0.0.248**

**New Features and Improvements**

- Administrators can use device and data source RTSP URLs to create a new device; add new data sources to an existing device; remove data sources from a device; and record media streams that are accessible by an RTSP URL to retain and access the media using VideoXpert.

- VxPro Server includes Pelco driver and ONVIF driver support for alarms and relays.

- VxPro Server supports cameras that use TLS.

- VxPro Server supports IPV6 cameras.

- VxPro Server supports ENC5516 encoder on DSSRV2 hardware.

- VxPro Server supports live and playback viewing of Pelco h.265 cameras, and exports from these cameras.

- VxPro Server enables you to view and control (PTZ) all cameras without buying a recorder.

- VxPro Server reduces aggregated user privileges, and enables Administrators to set them.

- VxPro Server enables Administrators to specify the recording retention period on a per-channel basis in VxToolbox.
**Known Issues**

- In some cases, changing the device driver is not successful. The driver might fail to change, the device might incorrectly appear as offline, and the device might become id_inconsistent.
- After upgrading to VideoXpert 3.0, the server might disconnect frequently (a few times a day), and send connection lost and re-established messages.
- Termination the migration tool while it is running will shut down VxCore and VxCore Database services. You can restart VxCore and VxCore Database services, and then restart the migration tool.
- Attempting to view video from JPEG and thumbnail modes from aggregated sources will result in a “Streaming server reported an error” message.
- Users that have live but not playback permissions are able to view recorded video via MJPEG-PULL.
- When a P2-SUP-EXT-1C1D license is tampered with, it should expire permanently, but does not.
- In some cases, the VideoXpert System Credentials cannot be validated or saved properly on a VxPro v 3.0 system. This prevents VxSNMP from being setup.

**VxToolbox Version 3.0.0.276**

**New Features and Improvements**

- Administrators can use VxToolbox to configure visual representations of monitor walls, including cell layouts and cameras.
- Administrators can manage system devices in VxToolbox. Formerly, only camera devices could be managed in VxToolbox.
- VxToolbox device filtering is improved.
- Administrators can configure SMTP, clusters and gateways, database backup, audio association, and aggregation from VxToolbox.
- Administrators have more control over aggregation credentials.
- VxToolbox includes a new device report.
- VxToolbox supports relays (via Pelco and ONVIF drivers), and has greater support for alarms.
- VxToolbox includes a new trigger relay rule response builder and a new email rule response builder.
- Administrators can specify the recording retention period on a per-channel basis in VxToolbox.
- Labels for VxCore in VxToolbox are shown as either VideoXpert Core or just Core. These refer to the same product.

**Known Issues**

- When a tab or workspace are monitored, the corresponding modification value is not displayed in the Events Report or the User Action Report.
- Authenticated devices might become unauthenticated over time.
- Recording and retention configuration is not available when multiple cameras are selected.
- If the IP of a device changes, VxToolbox shows the device as offline. It does not update the device to the new IP address.
- Using VxOpsCenter Client at the same time as VxToolbox can cause memory issues.
- VxToolbox cannot change the settings of more than one camera at a time.

**VxOpsCenter Version 3.0.0.1382**

**New Features and Improvements**

- VxOpsCenter includes visual representations of monitor walls, including cell layouts and cameras.
- Operators can use the mouse scroll wheel to zoom in and out of, and click and drag to select the playback timeline in VxOpsCenter.
- The default layout when opening a new window in VxOpsCenter is 2x2.
- Operators can modify the iris and focus on non-PTZ cameras in VxOpsCenter.
Multi-selection in the Bookmarks list in VxOpsCenter enables bulk deletion of bookmarks.

When exporting logs from VxOpsCenter, you can now include server logs.

VxOpsCenter includes a custom option in the Quick Export menu.

VxOpsCenter supports the triggering of Pelco Camera Relays both manually and through the Rules Engine.

The Acknowledge All button in VxOpsCenter acknowledges all events. Previously, only 500 events could be acknowledged per button click.

The VxMaps Plugin, now included in VxOpsCenter, provides an interface to arrange cameras according to their physical locations on a map, making it easier to find the right camera and view to suit your needs.

VxDecoder default port ranges (client-side ports used by the decoder to receive UDP unicast RTP streams) have been updated to port numbers 4500-4600.

Major Fixes

- When accessing live sources over low bandwidth connections, streams no longer fail to load.
- Viewing Optera video in VxOpsCenter no longer automatically downgrades to lower resolution.

Known Issues

- VxMaps is not compatible with a Windows 7 system that has attached decoders. To use VxMaps, you must upgrade to a Windows 10 system.
- In VxMaps, the tags list changes size as the user scrolls through the list.
- In VxMaps, the filter count is double the number of cameras on the map.
- The VxMaps plugin might crash after switching between different maps.
- VxOpsCenter Client cannot stream playback video in JPEG format.
- In investigation mode, the playback bar area degrades as it is used, until it is unusable.
- In investigation mode, navigating in a playback bar that has many gaps can cause the VxOpsCenter Client to lock up and become unresponsive.
- When opening VxPortal using the Web Browser plugin in VxOpsCenter, an “Unsupported Browser” error might occur.
- When multiple saved tabs have data sources that are streaming, some of the cells in the tabs might begin to flicker.
- When switching tabs, cells might populate with the wrong camera.
- Opening multiple workspaces in quick succession can cause a memory spike, with causes white screens and makes the VxOpsCenter Client slow or unresponsive.
- When a user is viewing a video stream that has secondary stream recording, and has chosen the Secondary Stream view, the video stream might continue to play as Primary Full Frame video.
- When there are a large number of motion alarms (for example, 30), cameras that have current motion alarms might flicker and VxOpsCenter might repeatedly flip between the camera displays.
- Memory usage of VxOpsCenter can climb to 90%, rendering VxOpsCenter Client unresponsive.

VxPortal Version 3.0.0.63

New Features and Improvements

- In addition to English, VxPortal software is now available in the following languages: Arabic, Brazilian Portuguese, German, French, Italian, Korean, Russian, Simplified Chinese, Spanish for Latin America, and Turkish.
- Live video streaming from h.265 cameras does not work; playback from these cameras works intermittently.
- Sorting the exports by Last End Time causes the application to crash.

VxStorage 3.0.0.189

Known Issues

- In some cases, VxStorage cannot retrieve local recordings from cameras that use Pelco and ONVIF drivers.
VideoXpert Professional 2.5.1.6 / Released July 23, 2018

**VxPro Server Version 2.5.1.6**

**Major Fixes**

- HikVision cameras are fully supported in VxPro Server, such that they can be used as expected in VxOpsCenter.

**VxOpsCenter Version 2.5.1.9**

**Major Fixes**

- When accessing live sources over low bandwidth connections, streams load successfully.

**VxPlayer Version 2.5.1.9**

**Major Fixes**

- VxPlayer is FIPS-compliant, while still using the SHA-1 cryptography standard.

**VxToolbox Version 2.5.1.8**

**Major Fixes**

- Users can change the VxToolbox driver for 3rd-party cameras, with no errors.

VideoXpert Professional 2.5 / Released June 26, 2018

**New Feature Highlights**

**New Features and Improvements**

- Security enhancements related to SSH service are implemented in VxPro Server.
- There is no longer a constraint on the max bitrate assignment.
- A base license is no longer required, so you can implement VxPro with only one channel.
- By default, only primary streams are recorded. This uses less storage than recording primary and secondary streams. (You can change the setting so that primary and secondary streams are recorded.)
- Cypher strength for password storage has been improved to use AES128 encryption.
- Support has been added in VideoXpert for the changes to EVO 180 camera firmware.
- VxOpsCenter now supports Windows Kiosk Mode.
- VxOpsCenter now has a 1+1+4 layout available.
- Linked pan and tilt for 2-camera tracking is supported in VxOpsCenter. VideoXpert is aware of Optera cameras that have a 2-camera-tracking link established with one or more PTZ cameras.
- When in full-screen mode in VxOpsCenter, the header and footer bars are hidden.
- In VxOpsCenter, you can now set a preference to display in-cell feedback for keyboard controls.
- An analytics overlay feature for Pelco cameras has been added to VxDecoder. It provides visual indicators of Simple-Motion Data and Analytics Drawing Data for both live and playback streams. This feature is available when using H.264 or MPEG4. This feature can be enabled or disabled in each cell you are viewing.
- You can now set a preference to show the semi-transparent background of overlays at the top of a cell, under the camera name, or hide it.
- In VxOpsCenter normal mode, users can now set preferences to display video stretched so that it takes up the entire cell, instead of maintaining the aspect ratio which displays black vertical bars at the edges of the cell.
- In VxOpsCenter, users can assign numbers to monitors, making it easier to send tabs or cameras to a monitor, and to cells within the monitor. Set the monitor numbers in the Monitor Configuration dialog box.
• In VxOpsCenter, “Call-up Time” information indicates how long it took to launch a video stream and provides details about events that contributed to the total call-up time.

• For Pelco Optera Panoramic Cameras, there is an option in VxOpsCenter to hide or show the position indicator—a view of the entire range of the camera, with a red box that indicates what area of the total range to which you have panned, tilted, and zoomed.

• Users can schedule recordings in VxToolbox at specified days and times, for different durations, and in all modes (continuous, bump on alarm, analytics, motion, dry contact, etc.).

• Added the Rules Engine capability to VxToolbox (to automate specific actions), including clip locking and sending video to a specific monitor.

• Operators now have the ability to move Mission Control in VxPortal from the left of the window to the right.

• Several keyboard shortcuts have been added to VxPortal, including Cell Contents and Layout shortcuts and Playback Controls shortcuts.

• Navigation in VxPortal has been improved for Pixel Search.

• VxPortal supports the latest versions of Google Chrome, Mozilla Firefox, and Microsoft Edge, but no longer supports Internet Explorer.

**VxPro Installer Version 2.5.0.112**

**Major Fixes**

• VxPro can be installed on a server that uses Windows Server 2016 as the operating system.

**Known Issues**

• VxPro installation might fail when using Russian characters in the installation path.

**VxPro Server Version 2.5.0.131**

**New Features and Improvements**

• Security enhancements related to SSH service are implemented in VxPro Server.

• There is no longer a constraint on the max bitrate assignment.

• A base license is no longer required, so you can implement VxPro with only one channel.

• By default, only primary streams are recorded. This uses less storage than recording primary and secondary streams. (You can change the setting so that primary and secondary streams are recorded.)

**Major Fixes**

• Motion recording is consistently represented by a blue timeline.

• Recorded video on some IMP221s and Oncam EVO5 cameras no longer have a distorted area on the bottom part of the image.

• Limited the memory of VxPro Server to 4G on ECO hardware, resulting in a larger buffer for VxToolbox and VxOpsCenter.

• Re-introduced SMB1 support for NAS storage when using anonymous login.

**VxOpsCenter Version 2.5.0.958**

**New Features and Improvements**

• Cypher strength for password storage has been improved to use AES128 encryption.

• Support has been added in VideoXpert for the changes to EVO 180 camera firmware.

• VxOpsCenter now supports Windows Kiosk Mode.

• VxOpsCenter now has a 1+1+4 layout available.

• Linked pan and tilt for 2-camera tracking is supported. VideoXpert is aware of Optera cameras that have a 2-camera-tracking link established with one or more PTZ cameras.
• When in full-screen mode, the header and footer bars are hidden.
• You can now set a preference to display in-cell feedback for keyboard controls.
• An analytics overlay feature for Pelco cameras has been added to VxDecoder. It provides visual indicators of Simple-Motion Data and Analytics Drawing Data for both live and playback streams. This feature is available when using H.264 or MPEG4. This feature can be enabled or disabled in each cell you are viewing.
• You can now set a preference to show the semi-transparent background of overlays at the top of a cell, under the camera name, or hide it.
• In normal mode, users can now set preferences to display video stretched so that it takes up the entire cell, instead of maintaining the aspect ratio which displays black vertical bars at the edges of the cell.
• Users can assign numbers to monitors, making it easier to send tabs or cameras to a monitor, and to cells within the monitor. Set the monitor numbers in the Monitor Configuration dialog box.
• “Call-up Time” information indicates how long it took to launch a video stream and provides details about events that contributed to the total call-up time.
• For Pelco Optera Panoramic Cameras, there is an option to hide or show the position indicator—a view of the entire range of the camera, with a red box that indicates what area of the total range to which you have panned, tilted, and zoomed.

**Major Fixes**

• Closing the last tab in the window using the tab header no longer results in an orphaned vx_decoder.exe process.
• Addressed an issue that caused the system to crash when run in a Russian language Operating System.

**Known Issues**

• When accessing live sources over low bandwidth connections, some streams might fail to load. In most cases this can be resolved by configuring the system to only allow TCP transport. Note that for aggregated and multi-system-access setups, transport settings can be configured on a per-system basis. You can also select a lower bitrate stream from the View > Max Video Quality menu.
• In some cases, when Pixel Search has detected motion, the motion underlay does not display in the timeline.

**VxTOOLBOX VERSION 2.5.0.109**

**New Features and Improvements**

• Users can schedule recordings at specified days and times, for different durations, and in all modes (continuous, bump on alarm, analytics, motion, dry contact, etc.).
• Added the Rules Engine capability (to automate specific actions), including clip locking and sending video to a specific monitor.

**Major Fixes**

• The TimeTable control responds properly to click-and-drag actions using the mouse.
• If a camera is set to a non-whole number framerate (such as 12.5fps), VxToolbox will truncate the decimal so that the result is a whole number.
• A licensed system no longer decommissions cameras after the trial expires.

**Known Issues**

• When using Sarix Enhanced 2 or Pro 2 Camera, the timezone setting do not match the settings displayed in VxToolbox. The issue, however, is a camera issue and is not fixed.
• When a tab or workspace are monitored, the corresponding modification value is not displayed in the Events Report or the User Action Report.
**VxPORTAL VERSION 2.5.0.19**

**New Features and Improvements**
- Operators now have the ability to move Mission Control from the left of the window to the right.
- Several keyboard shortcuts have been added, including Cell Contents and Layout shortcuts and Playback Controls shortcuts.
- Navigation has been improved for Pixel Search.
- VxPortal supports the latest versions of Google Chrome, Mozilla Firefox, and Microsoft Edge, but no longer supports Internet Explorer.

**VideoXpert Professional 2.0 / Released May 1, 2018**

**NEW FEATURES AND IMPROVEMENTS**

**New Features and Improvements**
- VxSNMP Agent is now available for VxPro.

**VxSNMP AGENT VERSION 1.1.0.12**

**New Features and Improvements**
- System administrators can use a standard IT SNMP Manager to monitor the health of their VxPro systems.
- VxPro will send an SNMP trap if an issue is detected with a vital system service or component.
- System administrators can use a standard IT SNMP Manager to retrieve status information about VxPro services, components, and cameras.
- VxSNMP Agent can be configured for secure communication via SNMPv3, which has both encryption and authentication. SNMPv1 and SNMPv2 are also supported.

**VideoXpert Professional 2.0 / Released April 3, 2018**

**NEW FEATURES AND IMPROVEMENTS**
- In VxPro Installer, security updates have been implemented.
- Sources on the system can be organized into nestable folders with corresponding, searchable, tags. Operators can use the new folder view or the standard, flat list.
- In VxOpsCenter, Operators can add clip locking to and remove clip locking from a bookmark. Operators can create bookmarks, lock bookmarks, remove locks from bookmarks, and view a list of bookmarks in Mission Control.
- In VxOpsCenter, quick-launch buttons with drop-down menus have been added in Mission Control.
- In VxOpsCenter, video streaming over a low bandwidth connection has been improved.
- In VxOpsCenter, when a network or client PC has been overloaded, stream quality for a cell/source is automatically downgraded. When this happens, an icon in the cell provides information about the stream rate, and can be clicked to restore the cell to the usual stream quality. A tab-level icon is also available, that lets an Operator restore all tab cells with one click.
- In VxOpsCenter, when changing streams in a cell, the existing stream remains visible until the new stream is buffered and ready to show.
- The installer for VxPlayer has been improved to provide a consistent end user experience across VideoXpert products.
- In VX Portal, Operators can view Optera cameras in panomersive mode.
- In VX Portal, Operators can see and respond to alarms.
- In VX Portal, Operators can create, update, lock, unlock, and delete bookmarks on a VxPro or an aggregated VxPro system.
- In VX Portal, Operators can view a list of exports, download exports, and initiate a Quick Export of video.
- In VX Portal, Operators can trigger PTZ Presets and Patterns.
• In VX Portal, Operators can search for cameras based on the tags which have been applied to them.
• The installer for VxPlayer has been improved to provide a consistent end user experience across VideoXpert products.
• In VxToolbox, when adding a camera to the system, the user can specify a port number.
• In VxToolbox, in the Licensing tab, information in the Activation ID field can be copied.
• In VxToolbox, system administrators can run a report that shows when a user was assigned a role and when a role assignment was removed from a user.
• In VxToolbox, system administrators have more flexibility in configuring user roles.
• In VxToolbox, when discovering a camera, the user can select a third-party camera driver.
• In VxToolbox, Operators can choose to have the system automatically unlock bookmarks of a specified age (for example, 7 days). Unlocked bookmarks are then available to the garbage collection feature.
• In VxToolbox, bulk camera configuration can be performed on up to 150 cameras.
• System administrators can use a standard IT SNMP Manager to monitor the health of their VxPro systems.
• VxPro will send an SNMP trap if an issue is detected with a vital system service or component.
• System administrators can use a standard IT SNMP Manager to retrieve status information about VxPro services, components, and cameras.
• VxSNMP Agent can be configured for secure communication via SNMPv3, which as both encryption and authentication. SNMPv1 and SNMPv2 are also supported.

**VxPro Installer Version 2.0.0.90**

**New Features and Improvements**
• Security updates have been implemented.

**Major Fixes**
• Addressed an issue where, if you had installed the VxPro system and later tried to install individual Apps using the installer, you had to uninstall the VxPro system and then reinstall the system and all appropriate Apps.
• Addressed an issue that caused the control panel to show one entry for the installed App and another entry for VxPro when you installed one App.

**VxPro Server Version 2.2.0.454**

**Known Issues**
• Motion recording is not consistently represented by a blue timeline.

**VxOpsCenter Version 2.3.0.1167**

**New Features and Improvements**
• Sources on the system can be organized into nestable folders with corresponding, searchable, tags. Operators can use the new folder view or the standard, flat list.
• Operators can add clip locking to and remove clip locking from a bookmark. Operators can create bookmarks, lock bookmarks, remove locks from bookmarks, and view a list of bookmarks in Mission Control.
• Quick-launch buttons with drop-down menus have been added in Mission Control.
• Video streaming over a low bandwidth connection has been improved.
• When a network or client PC has been overloaded, stream quality for a cell/source is automatically downgraded. When this happens, an icon in the cell provides information about the stream rate, and can be clicked to restore the cell to the usual stream quality. A tab-level icon is also available, that lets an Operator restore all tab cells with one click.
• When changing streams in a cell, the existing stream remains visible until the new stream is buffered and ready to show.
**Major Fixes**

- Shared displays now support cameras in 5 x 5, beyond 16 cells.
- Alarm Sequence Mode has a drop-down menu from which to select Event Types.
- Addressed an issue that caused VxOpsCenter to crash if the NTP address pointed to a system with NTP enabled, but not as a server.
- When a mouse is used to drag the ExportPlayer App window, the video will stay in place instead of moving along with the App window until you drop the App window, at which time the video moves into the window.
- When using the playback bar on a camera that has many gaps, VxOpsCenter becomes unresponsive.

**VxPLAYER VERSION 2.3.0.1167**

**New Features and Improvements**

- The installer for VxPlayer has been improved to provide a consistent end user experience across VideoXpert products.

**VxPORTAL VERSION 1.1.0.32**

**New Features and Improvements**

- Operators can view Optera cameras in panomersive mode.
- Operators can see and respond to alarms.
- Operators can create, update, lock, unlock, and delete bookmarks on a VxPro or an aggregated VxPro system.
- Operators can view a list of exports, download exports, and initiate a Quick Export of video.
- Operators can trigger PTZ Presets and Patterns.
- Operators can search for cameras based on the tags which have been applied to them.

**VxTOOLBOX VERSION 1.4.0.515**

**New Features and Improvements**

- When adding a camera to the system, the user can specify a port number.
- In the Licensing tab, Information in the Activation ID field can be copied.
- System administrators can run a report that shows when a user was assigned a role and when a role assignment was removed from a user.
- System administrators have more flexibility in configuring user roles.
- When discovering a camera, the user can select a third-party camera driver.
- Operators can choose to have the system automatically unlock bookmarks of a specified age (for example, 7 days). Unlocked bookmarks are then available to the garbage collection feature.
- Bulk camera configuration can be performed on up to 150 cameras.

**Major Fixes**

- Addressed an issue that prevented the GBO Technology S1080 (ONVIF) camera from authenticating in VxToolbox.

**Known Issues**

- When setting the timezone for Pelco Pro 2 or Enhanced 2 cameras to either Los Angeles or Vancouver zones using the POXIS format in VxToolbox, the timezone for the camera might not match the timezone in VxToolbox.
- The TimeTable control does not respond properly to click-and-drag actions using the mouse.
- If a camera is set to a non-whole number framerate (such as 12.5fps), VxToolbox will truncate the decimal so that the result is a whole number.
VxStorage Portal Version 2.2.0.169

Major Fixes

- Addressed an issue that, after updating, caused VxStorage Portal to show a blank status page, and being unable to add NAS storage.
- Addressed an issue that caused VxStorage to identify some fixed Panasonic cameras as PTZ cameras.