

VideoXpert Enterprise

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

Before upgrading to VideoXpert v 3.0 or a later version, 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 VideoXpert v 3.0 or the later version to which you are upgrading.
- VideoXpert v 3.0 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. (Doing this will lose all video previously recorded to the 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 3.0 or later does not support the UDI5000. For VideoXpert v 3.0 or later, it is recommended that you use VideoXpert's native third-party camera support instead of using the UDI.

With VideoXpert v 3.0 or later, the component upgrade order has been changed and care must be taken to follow the correct order, which is as follows:

1. Ops Center
2. Accessory Servers
3. Toolbox
4. Media Gateways
5. Cores (this step will break all integrations until the next step is performed)
6. Integrations
7. VxStorage

When updating Core, the end of the installer process prompts the user to migrate their data from v 2.5 to v 3.0. 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.

VideoXpert Enterprise v 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.
- VxE supports FIPS 140-2.
- In VxMaps, the Administrator can manually mark a camera field of view (FOV) for fixed position cameras, and toggle FOV on and off.
- VideoXpert can manage user credentials for the entire VX System via LDAP.
- 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.
- VxPortal supports high framerate MJPEG playback of recorded video.

VxCORE VERSION 3.1.0.289

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.
- VxE supports FIPS 140-2.

Known Issues

- After upgrading to VideoXpert 3.0, VxCore might disconnect frequently (a few times a day), and send connection lost and re-established messages.

VxTOOLBOX VERSION 3.1.0.179

New Features and Improvements

- In VxMaps, the Administrator can manually mark a camera field of view (FOV) for fixed position cameras, and toggle FOV on and off.
- VideoXpert can manage user credentials for the entire VX System via LDAP.

Known Issues

- Commissioning might be slowed significantly in larger environments.
- In VxMaps, the world map will load as zoomed all the way out instead zoomed to the cameras.
- 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.

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.

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, which 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

Known Issues

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

VideoXpert Enterprise 3.0.1 Patch / Released October 30, 2018

VXCORE VERSION 3.0.1.44

Major Fixes

- Termination the migration tool while it is running will not shut down VxCore and VxCore Database services.
- Users that have live but not playback permissions are no longer able to view recorded video via MJPEG-PULL.
- You can view video from JPEG and thumbnail modes from aggregated sources without error message.
- Corrected an issue that caused the Core installer to stop when it could not detect a network storage location.
- Archived exports are successfully migrated when updating from VideoXpert 2.5 to VideoXpert 3.0.
- All archived exports are available to all users.

Known Issues

- After upgrading to VideoXpert 3.0, VxCore might disconnect frequently (a few times a day), and send connection lost and re-established messages.

VXTOLBOX 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.

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

Known Issues

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

VideoXpert Enterprise 3.0 / Released September 21, 2018

NEW FEATURE HIGHLIGHTS

- VxCore includes Pelco driver and ONVIF driver support for alarms and relays.
- VxCore supports cameras that use TLS.
- VxCore supports live and playback viewing of Pelco h.265 cameras, and exports from these cameras.
- VxCore supports IPV6 cameras.
- VxCore enables you to view and control (PTZ) all cameras without buying a recorder.
- VxCore reduces aggregated user privileges, and enables Administrators to set them.
- VxCore 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.
- Administrator have more control over aggregation credentials.
- VxToolbox includes a new device report.
- VxToolbox supports relays (via Pelco driver 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.
- 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.
- 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.
- VxPortal is now included with VxCore. VxAdminPortal is no longer included with VxCore because its features are now included in VxToolbox.
- In addition to English, VxPortal software is now available in the following languages: Arabic, Brazillian Portuguese, German, French, Italian, Korean, Russian, Simplified Chinese, Spanish for Latin America, and Turkish.

VXCORE VERSION 3.0.0.833

New Features and Improvements

- VxCore includes Pelco driver and ONVIF driver support for alarms and relays.
- VxCore supports cameras that use TLS.
- VxCore supports live and playback viewing of Pelco h.265 cameras, and exports from these cameras.
- VxCore supports IPV6 cameras.
- VxCore enables you to view and control (PTZ) all cameras without buying a recorder.
- VxCore reduces aggregated user privileges, and enables Administrators to set them.
- VxCore enables Administrators to specify the recording retention period on a per-channel basis in VxToolbox.

Known Issues

- After upgrading to VideoXpert 3.0, VxCore 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.

VXTWOOLBOX 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.
- Administrator have more control over aggregation credentials.
- VxToolbox includes a new device report.
- VxToolbox supports relays (via Pelco driver 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.

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.
- Labels for VxCore in VxToolbox are shown as either VideoXpert Core or just Core. These refer to the same product.

VxOpsCenter AND VxPLAYER 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.
- 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

- 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

- VxPortal is now included with VxCore. VxAdminPortal is no longer included with VxCore because its features are now included in VxToolbox.
- 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.
- In addition to English, VxPortal software is now available in the following languages: Arabic, Brazillian Portuguese, German, French, Italian, Korean, Russian, Simplified Chinese, Spanish for Latin America, and Turkish.

VXSTORAGE 3.0.0.189

Known Issues

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

VideoXpert Enterprise 2.5.1 / Released July 23, 2018

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.

VXSTORAGE 2.5.1.4

Major Fixes

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

VideoXpert Enterprise 2.5 / Released June 26, 2018

NEW FEATURE HIGHLIGHTS

- Security enhancements related to SSH service are implemented in VxCore.
- 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.
- Support has been added in VideoXpert for the changes to EVO 180 camera firmware.
- Cypher strength for password storage has been improved to use AES128 encryption.

- 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. VxOpsCenter displays 2-camera tracking, and enables the operator to switch to the 2-camera tracking middle-ware to engage PTZ.
- In VxOpsCenter, when in full-screen mode, the header and footer bars are hidden.
- In VxOpsCenter, you can now set a preference to display in-cell feedback for keyboard controls.
- In VxOpsCenter, 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.
- 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.
- In normal mode in VxOpsCenter, 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.
- “Call-up Time” information in VxDecoder 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.
- In VxToolbox, 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 VxToolbox (to automate specific actions), including clip locking and sending video to a specific monitor.

VxCORE VERSION 2.5.0.62

New Features and Improvements

- Security enhancements related to SSH service are implemented.
- 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.
- Support has been added in VideoXpert for the changes to EVO 180 camera firmware.

VxOpsCENTER VERSION 2.5.0.958

New Features and Improvements

- Cypher strength for password storage has been improved to use AES128 encryption.
- 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. VxOpsCenter displays 2-camera tracking, and enables the operator to switch to the 2-camera tracking middle-ware to engage PTZ.
- 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.
- 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.
- 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.

- 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.

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.

VideoXpert Enterprise 2.2 / Released May 1, 2018

NEW FEATURE HIGHLIGHTS

- VxSNMP Agent is now available for VxEnterprise.

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 VxEnterprise systems.
- VxEnterprise 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 VxEnterprise 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 Enterprise 2.2 / Released April 3, 2018

NEW FEATURE HIGHLIGHTS

- In VideoXpert installer, security updates have been implemented.
- Support is added in VxCore for H.264 4K video output.
- In VxOpsCenter and VxPlayer, 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 and VxPlayer, Operators can add clip locking to and remove clip locking from a bookmark.
- In VxOpsCenter and VxPlayer, quick-launch buttons with drop-down menus have been added in Mission Control.
- In VxOpsCenter and VxPlayer, video streaming over a low bandwidth connection has been improved.
- In VxOpsCenter and VxPlayer, 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 you restore all tab cells with one click.
- In VxOpsCenter and VxPlayer, 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 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.
- You can now securely authenticate and write to your NAS archive server.

VXCORE VERSION 2.2.0.168

New Features and Improvements

- Support is added for H.264 4K video output.
- Security updates have been implemented.

Known Issues

- For P1220 cameras, the wrong PTZ Preset maximum limit is shown.

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

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.

Known Issues

- 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.
- On Windows 2012 Servers, VxOpsCenter does not restart after configuration changes, if the change has a secondary pop-up window; neither does it restart after a power cycle.
- When using the playback bar on a camera that has many gaps, VxOpsCenter becomes unresponsive.
- After running the Repair feature using the installer, the Meinberg NTP is missing files and the VxOpsCenter login screen shows a warning message.

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.

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.
- Currently, users are unable to change the password of an EVO camera from VxToolbox.
- For Hikvision cameras, after the camera is added to VideXpert, the name of the camera is not displayed.
- 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 does not populate the stream settings and the cannot be adjusted.

VxSTORAGE VERSION 2.2.0.169

New Features and Improvements

- You can now securely authenticate and write to your NAS archive server.

Major Fixes

- Addressed an issue that caused VxStorage to identify some fixed Panasonic cameras as PTZ cameras.
- Addressed an issue that caused latency when panning and tilting some Panasonic cameras.
- Addressed an issue where the Axis driver was not included in the installation.

Known Issues

- After a fresh installation of VxStorage, there might be duplicate entries in VxCore. Delete the duplicate entries using the instructions in the current version of *VideoXpert Server Setup and the Admin Portal User Guide, Deleting Devices from the Registry* section.

VideoXpert 2.1-2 Patch / Released February 6, 2018

VXCORE VERSION 2.1.0.279

Major Fixes

- When removing devices from Admin Portal, the target device, the data source, and VxCore logs are also removed.
- Addressed an issue on some systems where users without the Manage Exports permission were able to see exported clips from other users in the Export Archive.
- When the client retrieves notifications, the Core response includes a collection header with a next link.

VXOPSCENTER AND VXPLAYER VERSION 2.2.2.55

Major Fixes

- Addressed an issue where if a user was playing back video in VxPlayer, toggling Show Camera Date/Time did not show the date and time.
- Addressed an issue so that timeout exceptions no longer occur during the import of some events into VideoXpert from a third-party plugin.

VXTOLBOX VERSION 1.3.1.22

Major Fixes

- Addressed an issue where, if there were more than 555 notifications in the system, users could not configure the external event notification to show "User roles to notify".
- Addressed an issue where VxToolbox did not show aggregated channels in the Events tab to associate cameras with external event notification.
- Addressed an issue on some gaming systems where VxToolbox failed to generate a Recording Gap Report for the last 24 hours.
- Addressed an issue on some gaming systems where the camera role failed to generate a Camera Role Report.

VideoXpert 2.1 Patch / Released December 21, 2017

NEW FEATURE HIGHLIGHTS

- A new report type, Camera Role Access Report, has been added. It lists which users are assigned to which roles, and which role is being used by which user.

VXCORE VERSION 2.1.0.277

Major Fixes

- Corrected an issue where licensing migration incorrectly set "license_required" to "true" for aggregated server devices.
- Corrected an issue where evaluation licenses were taking precedence over actual licenses.
- Corrected an issue where licensing migration did not commission devices that were out of sync.
- Corrected an issue where updating to version 2.1 Core would decommission hardware VX Storage without releasing the license.
- Corrected an issue where updating to version 2.1 Core with the gaming database fails on database migration.

GATEWAY VERSION 2.1.1.1

Major Fixes

Corrected an issue where the Pelco Atlas camera was no longer streaming to the Ops Center after an update. **VXOPSCENTER VERSION 2.2.1.100**

Major Fixes

- Corrected an issue where monitor configuration would not connect to the decoders on a fresh installation.
- Corrected an issue where the KDB5000/3d mouse would lose control when adding a camera to an empty video cell.

VXTOOLBOX VERSION 1.3.1.17

New Features and Improvements

- A new report type, Camera Role Access Report, has been added. It lists which users are assigned to which roles, and which role is being used by which user. ,

Major Fixes

- When you add a VxPro System in VxToolbox, the device names are discovered.

VideoXpert 2.1 / Released November 30, 2017

NEW FEATURE HIGHLIGHTS

- Users with the new clip locking permission assigned now have the ability to optionally lock a segment of video around a saved bookmark. The video is saved until the lock is removed (it is not automatically purged when the configured retention period is met). When the lock is removed, the video is purged according to the recorder's retention configuration.
- Strengthened security associated with permissions to update binary files, and with tightening access requirements to view files on the server.
- When a channel is disabled, it does not consume a channel license, is not assigned to VideoXpert Storage, and does not show up in the data source list or the event or system logs.
- Corrected a recording gap issue where the reason is displayed as "Stream loss" instead of "write_error" in the gap report.
- Users now have the ability to perform bulk acknowledgments of events in the Event Viewer plug-in.
- Users now have the ability to bulk-delete exports.
- Users now have the ability to select a default behavior when the Mapping plug-in is launched.
- Users can view more than two Optera cameras per monitor.
- Users now have the option to display streaming video statistics (bitrate, etc.) in video cells via right-click context menu.
- Users can create a view to show up to 25 cameras in an 5x5 layout.
- Full framerate playback is now available in the 9-up tab layout.
- VxOpsCenter can now display Optera cameras that are set to Unistream Mode.
- VxOpsCenter can now eliminate "pillarboxes" (black vertical bars) in the video display. This is available in Shared Display mode.
- VxOpsCenter now includes improved stream error reporting for more effective troubleshooting.
- Improvements have been made to the digital PTZ for smooth motion in VxOpsCenter.
- Improvements have been made to the workflow for initial configuration of a Shared Display.
- Users can now access the Add System dialog box from the Shared Display section of the Workstation Configuration window.
- The VX System Connections Tab In the Workstation Configuration window is now disabled when the Workstation Settings are invalid.
- Users can now require acknowledgement of a notification without there being a pop-up. This is configured in VxToolbox.

- Improvements have been made to security in the Password field of the Workstation Configuration.
- The following report types have been added to VxToolbox:
 - Camera Report: Camera information (name, IP, state, etc) and their storage assignments.
 - Event Report: System event log entries.
 - Recording Gap Report: A list of unexpected recording gaps.
 - Role Report: The currently defined roles and their privileges.
 - Storage Report: Storage (recorder) information (name, IP, state, etc) and their camera assignments.
 - User Report: A list of current system users and their details (name, phone number, roles, etc).
 - User Action Report: System event log entries corresponding to actions performed by system users.
- Improved role and permission management.

VX CORE VERSION 2.1.0.266

New Features and Improvements

- Users with the new clip locking permission assigned now have the ability to optionally lock a segment of video around a saved bookmark. The video is saved until the lock is removed (it is not automatically purged when the configured retention period is met). When the lock is removed, the video is purged according to the recorder's retention configuration.
- Strengthened security associated with permissions to update binary files, and with tightening access requirements to view files on the server.
- When a channel is disabled, it does not consume a channel license, is not assigned to VideoXpert Storage, and does not show up in the data source list or the event or system logs.

Major Fixes

- Addressed an intermittent PTZ issue where VX System became unresponsive.
- Corrected an issue preventing the generation of User Action and Event History reports.
- Corrected an issue with Pelco SDK preventing a user with limited permission from performing device collection on VX unless the user has permissions set to "Any Data Source."
- Addressed a Core services locking issue after upgrading to patch release.
- Corrected an issue where a camera's state switches between Online and Offline in VX Core after a new camera is added with the same IP address as an offline camera.
- Corrected a Core database issue where configured backup intervals are not followed.
- Addressed a privilege migration issue causing missing restrictions for auto-added devices.
- Corrected a User Action Report issue where Privilege_Added and Privilege_Modified events don't have required property information.
- Corrected an issue causing UDI5000 cameras to be shown as offline even though users can connect and stream video.
- Addressed a clip locking issue where NSM media clips become unexpectedly unlocked after updates are made to a locked bookmark.
- Corrected an intermittent issue where open authenticated cameras cannot be assigned to NSM recorders.
- Corrected an Admin Portal issue where child permissions inherit camera "Exclusions" as "Inclusions."
- Addressed an issue with data source access functionality performing inconsistently.

STORAGE VERSION 2.1.0.1196

Major Fixes

- Corrected a recording gap issue where the reason is displayed as "Stream loss" instead of "write_error" in the gap report.

VxOpsCenter VERSION 2.2.0.2849

New Features and Improvements

- Users now have the ability to perform bulk acknowledgments of events in the Event Viewer plug-in.
- Users now have the ability to bulk-delete exports.
- Users now have the ability to select a default behavior when the Mapping plug-in is launched.
- Users can view more than two Optera cameras per monitor.
- Users now have the option to display streaming video statistics (bitrate, etc.) in video cells via right-click context menu.
- Users can create a view to show up to 25 cameras in an 5x5 layout.
- Full framerate playback is now available in the 9-up tab layout.
- VxOpsCenter can now display Optera cameras that are set to Unistream Mode.
- VxOpsCenter can now eliminate “pillarboxes” (black vertical bars) in the video display. This is available in Shared Display mode.
- VxOpsCenter now includes improved stream error reporting for more effective troubleshooting.
- Improvements have been made to the digital PTZ for smooth motion in VxOpsCenter.
- Improvements have been made to the workflow for initial configuration of a Shared Display.
- Users can now access the Add System dialog box from the Shared Display section of the Workstation Configuration window.
- The VX System Connections Tab In the Workstation Configuration window is now disabled when the Workstation Settings are invalid.
- Users can now require acknowledgement of a notification without there being a pop-up. This is configured in VxToolbox.
- Improvements have been made to security in the Password field of the Workstation Configuration.

Major Fixes

- Corrected an issue where OpsCenter Investigation window crashes after pressing the KBD5000 layout change button.
- Removed a superimposed 1x1 image when viewing a 3x3 layout.
- Addressed an issue where clicking the Live View button causes a "No Recording exists..." message to display during multi-monitor sync playback.
- Improved load times for the mapping plugin.
- Corrected an Event Viewer issue where more than 555 users are not displayed in the user filter.

VxToolbox VERSION 1.3.0.202

New Features and Improvements

- The following report types have been added to VxToolbox:
 - Camera Report: Camera information (name, IP, state, etc) and their storage assignments.
 - Event Report: System event log entries.
 - Recording Gap Report: A list of unexpected recording gaps.
 - Role Report: The currently defined roles and their privileges.
 - Storage Report: Storage (recorder) information (name, IP, state, etc) and their camera assignments.
 - User Report: A list of current system users and their details (name, phone number, roles, etc).
 - User Action Report: System event log entries corresponding to actions performed by system users.
- Improved role and permission management.

Major Fixes

- Corrected an issue where external events are not displayed.
- Corrected an issue preventing all cameras added to VX from being shown as commissioned.
- Corrected an issue causing incorrect event types to be listed in User Action reports.

VideoXpert 2.0-1 Patch/ Released July 12, 2017

VXCORE VERSION 2.0.1.10

Major Fixes

- Corrected an issue causing delayed PTZ control with NET5500 Series video encoders.
- Corrected an issue causing failed downloads of export files from aggregated VxPro sites.
- Corrected an issue causing the removal of VxPro devices within 20 minutes of aggregation.
- Corrected an issue excluding newly-added devices from users with restricted permissions related to other devices.
- Corrected several issues related to parent-child restrictions migrating incorrectly.
- Corrected an issue causing system delays when removing a remote site during aggregation.
- Corrected an issue causing delays when viewing events on the second and all subsequent pages.
- Fixed potential socket leaks.
- Updated to ensure all users with PTZ permissions can add presets.
- Updated to enable aggregation with VxUltimate licenses.
- Deleted exports in OCC are now appropriately removed from the server.
- Corrected an issue causing failed exports when attempting to download clips.

VXOPSCENTER VERSION 2.0.13360.78

New Features and Improvements

- Removed the Event Log button from the Ops Center, when the Event Viewer is not installed.
- Enabled the user to acknowledge multiple events at one time.

Major Fixes

- Corrected an issue causing the export player to crash when attempting to perform digital zoom while in the multiview export mode.
- Corrected an issue causing OCC 2.0 (build 10) BRIX decoder monitors to flash and/or flicker intermittently.
- Corrected an issue causing system crashes when loading an active tab in collaborative mode.
- Updated the export poll time to increase responsiveness of the OpsCenter progress bar.
- Corrected an issue in which Intel drivers caused a crash when disconnecting from EVO cameras.
- Corrected an issue disabling mouse zoom control of D5118 cameras when camera set to closed authentication in the OpsCenter.
- Modified PTZ speed to improve mouse control for small incremental movement tracking.

VXSTORAGE VERSION 2.0.1.14

New Features and Improvements

- Updated the ONVIF driver to disable auto-configuration of secondary stream when not in Profile-S conformance mode. This allows users to update the configuration file to enable ONVIF configuration.

Major Fixes

- Corrected an issue causing a server error on the Assignments tab after performing a database rebuild.
- Corrected an issue causing recording gaps with Axis M3006 cameras.

VideoXpert 2.0 / Released May 1, 2017

NEW FEATURE HIGHLIGHTS

New Features and Improvements

- Users now have greater control over transmission, and can allow unicast or TCP transmission of H.264 streams over WAN. Stream control settings are now available to the VxOpsCenter local administrator.
- Changed the installation and local administration experience for the OpsCenter allowing for greater control of the VideoXpert experience before logging into systems. The local administrator will now log in and provide information and credentials for servers available to VxOpsCenter; system users will then select the system they want to connect to when they log in.
- VxOpsCenter now supports hardware acceleration, improving video performance for Pelco VxOpsCenter hardware and VxDecoders.
- You can now configure presets for Pelco PTZ cameras in VxOpsCenter.
- The VideoXpert player now validates exported video regardless of encryption. When you open a video file in the VideoXpert player, the player will inform you whether or not your video files have been tampered with.
- You can now associate audio sources with independent video sources. This functionality is available from the Devices page within the Admin Portal.

KNOWN ISSUES

- The Platesmart plugin is not yet supported by VX 2.0. Other plugins using JSON may experience issues with this version of VideoXpert.
- VxOpsCenter may quit unexpectedly after running the Pelco Event Viewer plugin for an extended period of time.
- The Event Viewer plug-in may open video in new 1x1 windows, even when open cells in an existing layout are available.
- VxStorage does not currently subscribe to events from Hikvision cameras.
- Child permission restrictions may not be applied consistently upon updating to this version of VideoXpert.
- The VideoXpert player may exhibit the following issues:
 - The VideoXpert player may crash when users drag the playhead along the timeline to move to a specific moment of recorded video.
 - The VideoXpert player may crash when a user attempts to zoom on a cell in a 2x2 layout.
- VxOpsCenter users are unable to retrieve local storage from Next Gen Sarix Professional and Enhanced series cameras.
- Changing the Viewing Mode to "Secondary Stream" in an investigation may cause "Cannot connect to video source" errors; prevalence of this issue depends on the camera.
- Dragging multiple video sources to an Enhanced Decoder-driven monitor can cause the screen on the decoder to flash white for a short period of time before returning to normal operation.
- Users may encounter an issue causing video tearing and playback instability. This is believed to be an issue with hardware acceleration. If you encounter this issue, you may try restarting your workstation or disabling hardware acceleration.
- After running VxOpsCenter with sequences for an extended period of time, user interaction may cause the application to quit unexpectedly.
- VxCore automatically commissions devices added to the system, regardless of the administrator's auto-commissioning settings.
- When dragging an audio-enabled camera from a DS recorder into a workspace, video may pause for an extended period of time before catching-up to the audio stream.

VxCORE VERSION 2.0.0.213

New Features and Improvements

- You can now associate audio sources with independent video sources. This functionality is available from the Devices page within the Admin Portal.
- Users now have greater control over transmission, and can allow unicast or TCP transmission of H.264 streams over WAN. Stream control settings are now available to the VxOpsCenter local administrator.
- VxAccessoryServers are now recognized as their own device type ("acc").
- The system now supports post-alarm support for event-triggered recording.

Major Fixes

- Corrected an issue causing the system to become inaccessible when updating the progress of exports in large environments.
- Corrected an issue causing exports to sit in a pending state indefinitely.
- Corrected an issue causing reports to fail with a 204 response in large environments.
- Camera tooltips' "Recording to" field now accurately reflect the friendly name or IP address of VxStorage recorders.
- Corrected an issue causing the system to inadvertently add resource restrictions to certain permissions that were configured to restrict permissions using the "All Data Sources Except" setting.
- Corrected an issue causing report names and "requested" fields to display dates and times in UTC rather than matching the date and time format of the system and the requesting user.
- Corrected an issue preventing devices from appearing in the device list if they had been moved from a remote site to an aggregation server (VxUltimate).
- Corrected an issue preventing old and new values from appearing in User Action reports. The values simply reported "old value" and "new value".
- Corrected an issue causing the system to take backups daily, regardless of the value in the "Expiration (Days)" field.
- Corrected an issue causing closed authentication to appear to be successful even after a user entered invalid credentials.
- Corrected an issue causing VxOpsCenter to crash when running multiple alarm sequences for an extended period of time.
- Grace period licenses are now removed when a user installs a valid, active license; it may take the system up to 10 minutes after activation to remove a grace period license.
- All reports now use the same date, time, and time zone formats.
- Corrected an issue preventing the VideoXpert player from playing back video when displayed on a VxDecoder-driven monitor.
- Camera Configuration and Recorder Assignment reports now show friendly names for VxStorage recorders.
- Corrected an issue preventing PTZ functionality for SD5300T Series devices.
- Corrected an issue preventing the system from logging Admin/Member modified, added, or removed events.
- Corrected an issue preventing users from batch-unassigning cameras from NSM5200 and VSM recorders.
- Corrected an issue preventing alarms with customized names from appearing in reports.
- User action events for adding and removing markers on a map now indicates the name of the map on which markers were modified.

VxMEDIAGATEWAY VERSION 2.0.0.62

New Features and Improvements

- Users now have greater control over transmission, and can allow unicast or TCP transmission of H.264 streams over WAN. Stream control settings are now available to the VxOpsCenter local administrator.

Major Fixes

- Corrected an issue preventing users from streaming video from EW5301T models.
- Corrected an issue preventing users from streaming MJPEG video from a camera for several minutes after the camera restarted.

VxSTORAGE VERSION 2.0.0.99

New Features and Improvements

- Users now have greater control over transmission, and can allow unicast or TCP transmission of H.264 streams over WAN. Stream control settings are now available to the VxOpsCenter local administrator.

Major Fixes

- Corrected an issue causing a delay when attempting to play back recorded video from Optera cameras. This delay was exacerbated when operating in MJPEG mode.
- Users will now see thumbnails when hovering over a timeline of recorded Optera video, as with other cameras.
- Corrected an issue preventing cameras using closed authentication from recording after a failover event.
- Corrected an issue causing short recording gaps for Optera cameras.
- Corrected an issue preventing EVO-series cameras from recording motion as expected.
- The unit will now failover appropriately if the RAID controller fails.
- Corrected an issue causing the status page of the VxStorage interface to report all drives as missing if the RAID controller selected an enclosure ID greater than 9.
- Corrected an issue that prevented a camera from streaming if the camera experienced an exception and then was interrupted (i.e. by a firmware update).
- Corrected an issue causing a timeout if a user added and removed the same camera using VxToolbox multiple times.
- Corrected an issue causing data sources to continue to record to a failover recorder after the primary recorder came back online.
- Corrected an issue preventing stream transitions from low quality to high quality in a bump-on-alarm schedule from accounting for the full duration of the motion.
- Corrected an issue preventing users from removing some data source associations through the VxStorage interface.
- Drive bays that are empty will no longer appear as a "Missing Drive" error in the VxStorage interface; these bays will simply report as empty.
- The Hikvision driver now supports edge storage recording.

VxOPSCENTER VERSION 2.0.12851.10

New Features and Improvements

- Users now have greater control over transmission, and can allow unicast or TCP transmission of H.264 streams over WAN. Stream control settings are now available to the VxOpsCenter local administrator.
- Changed the installation and local administration experience for the OpsCenter allowing for greater control of the VideoXpert experience before logging into systems. The local administrator will now log in and provide information and credentials for servers available to VxOpsCenter; system users will then select the system they want to connect to when they log in.
- VxOpsCenter now supports hardware acceleration, improving video performance for Pelco VxOpsCenter hardware and VxDecoders.
- You can now configure presets for Pelco PTZ cameras in VxOpsCenter.
- The VideoXpert player now validates exported video regardless of encryption. When you open a video file in the VideoXpert player, the player will inform you whether or not your video files have been tampered with.

Major Fixes

- Changed the green recording bar to indicate differences in i-frame only and full framerate recording.
- Corrected an issue causing a delay and black screen for up to 3 seconds on VxEnhancedDecoders when attempting to play back some cameras from live video. (Issue observed on NET5500 Series encoders.)
- Corrected an issue causing video to freeze on an enhanced decoder when attempting to maximize a single cell from a 3x3 or 4x4 layout.
- Corrected an issue causing significant latency and synchronization issues when viewing video from Optera cameras.
- Corrected an issue causing video to pause unexpectedly when attempting to rewind from live video; this issue was only observed for cameras recorded to NSM5200 and VSM recorders.
- The VideoXpert Player will now provide a helpful error message if the user does not have .NET version 4.6.1 or later installed.
- Corrected an issue preventing streams from synchronizing properly in the VideoXpert player.
- Corrected an issue causing poor video quality and framerate for some cameras when hardware acceleration was enabled.
- The Event Viewer plugin now visually indicates when it is loading data.
- Corrected an issue causing the Mapping plugin to fail unexpectedly with a 403 code after running for more than 24 hours.
- Corrected an issue preventing VxOpsCenter from receiving custom audio alarms as specified through the Admin Portal.
- The Mapping plugin will no longer reload the active map when a user switches tabs or moves the tab containing the mapping plugin.
- Improved loading times for vector files (DWG) in the mapping plug-in.
- Corrected an issue causing live video to fail for a camera after the camera was unassigned from a VxStorage recorder.
- VxOpsCenter now imposes correct character limits when attempting to change camera names.
- VideoXpert player handles audio streams much more gracefully.
- Corrected an issue causing differing timestamps for synchronized streams originating from NET5301T devices.
- Corrected an issue causing a green flash when moving tabs between monitors.
- Corrected an issue preventing users from seeing camera device information in the Mapping plugin's edit mode.
- Corrected an issue causing dialogs on a second local monitor to be hidden by video streams.
- Corrected an issue causing cameras to appear multiple times in an alarm sequence if experiencing successive alarms.
- Corrected an issue causing an alarm sequence to stop when moved to a different monitor or workspace.

VideoXpert 1.12.1 / Released March 23, 2017

Use the compatibility matrix below to determine the Accessory Server version you should run to properly support your VideoXpert environment.

If your VideoXpert environment contains an Accessory Server, you must update your VideoXpert Cores before you perform the Accessory Server 1.3 update. Update your Accessory Server to version 1.3 immediately following your VideoXpert 1.12 update. Failover services will not function with your VideoXpert 1.12 environment until you update your Accessory Server to version 1.3.

	VideoXpert 1.11	VideoXpert 1.12
VideoXpert Accessory Server 1.2	✓	x
VideoXpert Accessory Server 1.3	x	✓

NEW FEATURE HIGHLIGHTS

- VideoXpert now supports cameras with “Closed Authentication”. If you have configured a camera to require a user name and password before it allows a user to retrieve video (for increased security, etc), you can pass those credentials to VideoXpert through the Devices page of the Admin Portal; VideoXpert will then authenticate against the camera like a normal user would before retrieving live video, recording video, or retrieving recorded video stored on the camera.
NOTE: Closed Authentication currently supports Sarix Professional, Next Gen Sarix Professional, Spectra Professional, Spectra Enhanced, and NET5500 Series devices. Support will extend to other Pelco cameras in the future.
- You can now synchronize playback across monitors. This allows you to create a global synchronization group across relevant parts of your workspace without being confined to a single tab.
- Added support for legacy Pelco cameras and encoders, including Spectra Mini IP, Spectra IV IP, IP110, IP3701, and NET5300 Series devices.
- Each Tab within the OpsCenter now runs as a separate process, making more efficient use of workstation resources.
- You can now assign friendly names and numbers to Shared Display monitors. This allows you to send cells to monitors by friendly name or number, or to configure rules and events based for specific shared displays.
- Permissions now support inclusion or exclusion (“allow all except...”) models for data sources/resources, making it easier to configure permissions, especially in large environments.
- Improved the way in which VideoXpert Storage handles data source assignments. Assignments should now occur faster, and users should experience greater flexibility when bulk-assigning data sources to Storage.
- Snapshots can now be configured to include video overlay information.
- Made a number of improvements to reporting features:
 - Reports now include a workstation identifier or client identifier where possible.
 - Reports indicating a change in settings now indicate both the original value and the changed value.
 - Reports now indicate differences in live and recorded video requests.
 - The Camera Configuration report includes stream parameters.
 - Recorder reports for NSM5200 models include retention parameters
 - In reports, tags now indicate the sources to which they are linked.

CORE VERSION 1.12.105

NOTE: Contact Pelco Support upon updating to this version of VxCore to receive another incremental update.

New Features and Improvements

- VideoXpert now supports cameras with “Closed Authentication”. If you have configured a camera to require a user name and password before it allows a user to retrieve video (for increased security, etc), you can pass those credentials to VideoXpert through the Devices page of the Admin Portal; VideoXpert will then authenticate against the camera like a normal user would before retrieving live video, recording video, or retrieving recorded video stored on the camera.
NOTE: Closed Authentication currently supports Sarix Professional, Next Gen Sarix Professional, Spectra Professional, Spectra Enhanced, and NET5500 Series devices. Support will extend to other Pelco cameras in the future.
- Permissions now support inclusion or exclusion (“allow all except...”) models for data sources/resources, making it easier to configure permissions, especially in large environments.
- Made a number of improvements to reporting features:
 - Reports now include a workstation identifier or client identifier where possible.
 - Reports indicating a change in settings now indicate both the original value and the changed value.
 - Reports now indicate differences in live and recorded video requests.
 - The Camera Configuration report includes stream parameters.
 - Recorder reports for NSM5200 models include retention parameters
 - In reports, tags now indicate the sources to which they are linked.
- Improved the behavior of live video during a Core/CMG failover. When the active CMG falls offline, video will either continue to play, or potentially disconnect and reconnect within seconds.

Major Fixes

- Corrected an issue preventing users from adding multiple cameras to a recorder when selecting multiple cameras by holding the shift key and selecting a group of cameras.
- The Admin Portal now returns a helpful response if a user tries to initiate a device discovery operation while another discovery operation is already in progress.
- Corrected a minor issue causing the “Unassign” option to become unavailable after assigning multiple roles to a new user.
- Corrected an issue causing errors when users searched for cameras using some special characters on the Live page of the Admin Portal.
- Corrected an issue causing the system to inadvertently decommission Media Gateway devices operating on a grace period after a few minutes.
- Corrected an issue preventing users from clustering Core servers when the Windows Firewall was enabled.
- Corrected an issue allowing users to add third-party cameras to NSM5200-based recorders. You must add third party cameras to NSM recorders through the Endura interface using a UDI5000-CAM.
- Corrected an issue preventing the Core from discovering devices that had been removed from VideoXpert within the last two minutes.
- Corrected an issue causing exceptions when attempting to PTZ cameras that had been assigned to Storage while active in an OpsCenter workspace.
- Corrected an issue causing cameras to appear offline for a short time after being assigned to a recorder.
- Corrected an issue a number of sorting issues across reports.
- Large user action reports correctly sort by descending date and time.
- Camera configuration reports now show the friendly name of the recorder to which they are assigned.
- Corrected an issue in VideoXpert version 1.11 preventing the system from commissioning VideoXpert server and recorder devices after a user had changed the names of devices on the Devices page of the Admin Portal. This same issue caused the system to automatically decommission VideoXpert servers and recorders if a user changed the names of these devices after commissioning them.
- Recording schedules can now contain more than 555 cameras.
- The Recording tab in the Admin Portal now shows all data sources rather than devices, so that it properly reflects recording associations.

MEDIA GATEWAY VERSION 1.12.26

New Features and Improvements

- Added support for legacy Pelco cameras and encoders, including ExSite, Esprit, Spectra, NET5300 Series devices.
- Increased performance of JPEG-pull streaming (for low-bandwidth clients).

STORAGE VERSION 1.12.76

New Features and Improvements

- Improved the way in which VideoXpert Storage handles data source assignments. Assignments should now occur faster, and users should experience greater flexibility when bulk-assigning data sources to Storage.

Major Fixes

- Corrected an issue causing recording gaps for Honeywell cameras using the ONVIF driver.
- Corrected an issue preventing Storage from issuing events when hard disks failed.
- Corrected an issue causing shorter than expected pre-alarm recording times when a user configured bump-on-alarm recording.
- Corrected an issue causing erratic PTZ control using NET5404T.

- Corrected an issue causing short recording gaps when users quickly and continually restarted RTSP streams.
- Corrected an issue preventing EVO series cameras from recording motion events when set to a bump on alarm schedule.
- Corrected an issue occasionally preventing a failover unit from correctly monitoring a group of active recorders, if that group already contained a failover monitor; a group of VXS recorders with multiple failover recorders is a valid configuration.
- Corrected an issue causing continuous, i-frame only recording for EVO-05 cameras to stop after the camera restarted.
- Corrected an issue causing cameras VideoXpert Storage to report a higher than expected bit rate for cameras, preventing Storage from accepting camera assignments up to its recording capacity.
- The Database Rebuild operation now correctly notifies the user that they will need to reassign data sources when the rebuild operation is complete.
- Corrected an issue causing exceptions when assigning some cameras to a recorder.
- Corrected an issue causing batch recording assignments to fail or take an unnecessarily long time if an offline camera belonged to the group.
- Corrected an issue causing the recorder to occasionally report that cameras were not added to the recorder when the recorder assignment was successful.
- The Storage web interface now shows tooltips for cameras, as is consistent with the Admin Portal.
- Corrected an issue causing a recorder after all schedules were unassigned from the recorder.
- The Storage Web interface now correctly reports the status of volumes.
- Corrected an issue allowing users to record an audio source without an associated video source.

OpsCenter Version 1.12.11757.21

New Features and Improvements

- You can now synchronize playback across monitors. This allows you to create a global synchronization group across relevant parts of your workspace without being confined to a single tab.
- Each Tab within the OpsCenter now runs as a separate process, making more efficient use of workstation resources.
- You can now assign friendly names and numbers to Shared Display monitors. This allows you to send cells to monitors by friendly name or number, or to configure rules and events based for specific shared displays in your control room.
- Snapshots can now be configured to include video overlay information.
- You can now assign a friendly name to a map to make the map more easily identifiable.
- You can now filter cameras by model and IP address within the OpsCenter.

Major Fixes

- Corrected an issue preventing streams from playing back synchronously in the VideoXpert player in a 2x2 layout.
- Corrected an issue preventing the frame step command from functioning in the VideoXpert player.
- Added additional logic to more gracefully handle the source list for large environments, so the list will time out less frequently when paging new sources and enable users to more gracefully recover should the list timeout.
- Corrected an issue preventing timeline controls from affecting a paused JPEG source; timestamps would change, but the paused frame would not.
- Corrected an issue causing shared displays to become unavailable if a user changed the password for the shared display through the Admin Portal (as prompted when passwords expired). There is now a way to recover from this issue; the application now provides more assistance to change/update the password.
- Corrected an issue causing cells in an alarm sequence to flash between two streams when receiving frequent events in the sequence.
- Corrected an issue preventing users from double-clicking cameras in the mapping plugin to open them as normal.
- Corrected an issue allowing a user to switch cameras when the "Save Snapshot" dialog was open.

- Corrected an issue causing the application to quit unexpectedly when a user attempted to open an exported file after deleting the directory that previously contained the exported file.
- Corrected an issue causing the PTZ context menu to become unavailable when a user jumped from recorded video to live for some PTZ cameras.
- The OpsCenter now shows, and allows users to access, more than 555 exports.
- Corrected an issue preventing cells containing overlay plug-ins to fall out of recalled sync groups.
- Users can now show camera details for cameras on the map in Edit Mode by right-clicking the camera and selecting Show Details.
- Corrected an issue preventing cameras on a map from displaying tags assigned to them while the mapping application was open until the map was closed and re-opened.
- Improved the speed with which the mapping application loads maps containing large quantities of cameras.
- Corrected an issue preventing users from saving maps after changing the name of the map.
- Corrected an issue causing memory usage to climb whenever users recalled saved workspaces. In extreme cases, this issue may have caused the application to crash.
- Corrected an issue causing sequences, and the OpsCenter in general, to become sluggish when used for an extended period of time.
- Corrected an issue that occasionally prevented tooltips from displaying camera resolutions.
- Corrected an issue causing sluggish behavior in the Mapping plug-in when in edit mode. This same issue may have caused the plug-in to quit unexpectedly when a user attempted to perform editing actions (placing cameras on a map, searching for cameras, etc).
- Corrected an issue preventing users from opening cameras on a map by double-clicking a camera.
- Corrected an issue occasionally preventing the "Refresh Source List" button from loading.
- Corrected an Export Player issue causing audio to fall out of sync with video when multiple audio-enabled sources were playing back in a 2x2 workspace.
- Corrected an issue causing the Event Viewer to report "invalid time value" when running on a workstation with a 24-hour time format.
- Corrected an issue causing the workspace list to show duplicate entries after a user deleted a workspace.
- Corrected an issue preventing changes from saving across Collaborative Tabs in some cases.
- You can now initiate playback in a collaborative tab using the quick callup hotkey.
- Corrected an issue preventing users from re-playing exported video clips after the playhead reached the end of the clip.
- Corrected an issue causing paused sequences to restart automatically when a user moved to another tab and then back to the sequence.
- The Tabs list is now properly refreshed when users add new tabs or edit existing ones.

VideoXpert 1.11 / Released October 17, 2016

NEW FEATURE HIGHLIGHTS

- Added LDAP support, allowing you to authenticate users in an Active Directory.
- Added support for "Archive Video Groups": network storage that acts an extension of VideoXpert Storage. As VideoXpert storage reaches its maximum capacity, it will begin to move video to the Archive Video Group, allowing you to extend the retention period for your VX Storage recorders using your existing recording platforms.
- You can now install VideoXpert Storage as a software platform on your existing recording hardware. Refer to VideoXpert specifications for hardware requirements.
- Added an Alarm Sequencing mode to the OpsCenter. Much like the pop-up on alarm feature in Endura and Digital Sentry platforms, this mode automatically populates cameras as relevant events occur in your environment, and automatically closes cameras as events are acknowledged or expire.
- Added MPEG-4 support. You can now add, stream, record, and export MPEG-4 streams in VideoXpert.

- Added an Event Viewer to the OpsCenter. The Event Viewer plug-in provides an interface for events -- much like the Events page within the Admin Portal; events associated with video streams (i.e. camera analytic events) include links to cameras/streams, allowing you to use events to quickly find and watch relevant video.
- Incorporated SNMP support so you can monitor and send traps relating to your VideoXpert system's hardware, uptime, and the status of software services. To enable SNMP support, you must download and install the VideoXpertSNMP.msi installer; you should run the installer on all VideoXpert components you want to monitor via SNMP.
- VideoXpert can now receive and account for analytic events from Pelco cameras. Analytic events are automatically associated with video, so you can go to the relevant video using the Event Viewer plug-in in the OpsCenter.
- Improved failover support for VideoXpert Storage recorders. You can now designate a failover unit to monitor up to 8 active recorders; the failover unit will step in if a unit it is assigned to monitor fails, preventing video loss.

CORE VERSION 1.11.12245.36

New Features and Improvements

- Added LDAP support, allowing you to authenticate users in an Active Directory.
- Optera cameras are now discovered like other Pelco cameras.
- Core servers now provide "failover" PTZ control for Optera cameras. If the VideoXpert Storage recorder hosting an Optera camera fails, and the recorder does not have a direct failover, the Core will handle PTZ operations for Optera cameras. If you previously added your Optera cameras as 3rd party cameras, you should "re-discover" the camera to enable this option. (Go to the Devices page, click Add, and select "Discover and Add Pelco Devices".)
- Core now includes input loss and input restored events, helping users troubleshoot stream failures from encoders. These events reflect stream loss or restoration from an analog device to an encoder (as opposed to the stream loss and stream restored events, which reflect stream loss or restoration from the IP device to VideoXpert).
- You can now configure backups from within the Admin Portal. (You must still restore the database using the BackupInteractive tool, as with previous iterations of VideoXpert.)
- You can now configure Core to store event logs for up to 90 days.
- VideoXpert can now receive and account for analytic events from Pelco cameras. Analytic events are automatically associated with video, so you can go to the relevant video using the Event Viewer plug-in in the OpsCenter.

Major Fixes

- "Drawing Image" events now show the user name, core, and drawing name relevant to the event.
- PTZ Pattern and Preset related events now list the friendly name of the camera rather than the UUID.
- Corrected an issue preventing a user from assigning a group of cameras to a VideoXpert Storage recorder if any camera in the group was unavailable. An individual assignment to Storage may time out after 120 seconds if unavailable, but a single device time-out will no longer prevent the Core from adding other selected devices to Storage.
- Corrected an issue causing an exception when adding certain cameras to Storage.
- Corrected an issue preventing users from sorting by "name" and "type" when selecting the video sources available to certain permissions.
- Corrected an issue preventing export-related events from appearing in the User Actions report.
- Corrected an issue causing the Camera Configuration report to contain duplicate entries.
- Corrected an issue causing large reports to timeout or fail. While the system may take a long time to process a request for a large report (long time frame, large number of users and devices, etc), the report should not timeout.
- Corrected an issue causing exceptions when attempting to assign cameras to VideoXpert Storage. This fix also increases the timeout period for camera assignments to 120 seconds.
- Corrected an issue with Endura migration preventing users from being linked to appropriate roles when imported into VideoXpert.
- The system now appropriately logs user actions against views, including tabs, workspaces, and when a user launches a view to another workspace.

- Improved search/filtering functionality on the Users page.
- Corrected an issue causing Core to unsubscribe and immediately subscribe again to events every 5 minutes, rather than renewing previous subscriptions. For some cameras, this resulted in excessive alarm active and inactive events and high memory utilization.
- Corrected an issue preventing datasource IDs from appearing for certain events.
- Corrected an issue causing timestamps to jump to 1/1/1970 for up to 10 seconds, before returning to the actually requested time on enhanced decoders for some cameras immediately after rewinding.
- Corrected an issue preventing a user from adding an aggregated site due to a duplicate entry in the database; this issue typically occurred if an attempt to add an aggregated site failed and the user retried.
- Third party cameras should now properly update online or offline statuses in a reasonable time period.
- TCS encoders no longer appear as PTZ devices within the system.
- Corrected an issue preventing users from clustering Core servers if a firewall was enabled on one Core.
- Corrected an issue causing the “Manage User Accounts” permission inadvertently grant the “Manage System Views” permission.
- Core now receives “device offline” events for cameras connected through Digital Sentry recorders.
- Corrected an issue preventing the Core from differentiating between multiple audio channels on a multi-channel encoder. Audio channels are now labeled in accordance with their corresponding video channels.
- Core now accurately represents “Recording to” information for Evo cameras; Evo cameras will now show the recorder to which they are assigned in the OpsCenter.

MEDIA GATEWAY VERSION 1.11.67

New Features and improvements

- Added MPEG-4 support. You can now add, stream, record, and export MPEG-4 streams in VideoXpert.

Major Fixes

- Corrected an issue causing the Media Gateway to obtain a new device ID after an update, requiring users to remove the pre-upgrade instance of the Media Gateway and add/discover the post-upgrade instance.
- Media Gateway software is now consistently reflected as the “VideoXpert Media Gateway Service” throughout Windows.

STORAGE VERSION 1.11.96

New Features and Improvements

- Added support for “Archive Video Groups”: network storage that acts an extension of VideoXpert Storage. As VideoXpert storage reaches its maximum capacity, it will begin to move video to the Archive Video Group, allowing you to extend the retention period for your VX Storage recorders using your existing recording platforms.
- You can now install VideoXpert Storage as a software platform on your existing recording hardware. Refer to VideoXpert specifications for hardware requirements.
- Added MPEG-4 support. You can now add, stream, record, and export MPEG-4 streams in VideoXpert.
- Improved failover support for VideoXpert Storage models. You can now designate a failover unit to monitor up to 8 other units; the failover unit will step in when any unit it is assigned to monitor fails, preventing video loss. You can enable failover and make failover assignments from the Storage interface.

Major Fixes

- Corrected an issue causing some cameras to take an inordinate amount of time to respond to RTSP requests without being marked offline.
- Corrected an issue causing a change in the transmission method for Storage to take longer than 15 seconds, resulting in exception errors at the Core.

- Corrected an issue preventing users from streaming live video from a third party camera if the camera was removed from a VXS recorder, and then added back to the recorder from which it was removed within 5 minutes.
- Corrected an issue preventing VideoXpert Storage from recognizing audio sources that were enabled or added after the device hosting the audio source was already added to the recorder.

OPSCENTER VERSION 1.11.9843.5

New Features and Improvements

- Added an Alarm Sequencing mode to the OpsCenter. Much like the pop-up on alarm feature in Endura and Digital Sentry platforms, this mode automatically populates cameras as relevant events occur in your environment, and automatically closes cameras as events are acknowledged or expire.
- You can now right-click and drag to select and automatically open multiple cameras within the Mapping plug-in.
- OpsCenter now allows overlay plug-ins within investigation tabs.
- You can now rotate video in cells. Right click a cell, and select “rotate” to rotate a stream view; use the rotate option to get the right view for cameras situated on a wall (rather than a ceiling) and other similar camera placements.
- Added MPEG-4 support. You can now add, stream, record, and export MPEG-4 streams in VideoXpert.
- Added an Event Viewer to the OpsCenter. The Event Viewer plug-in provides an interface for events -- much like the Events page within the Admin Portal; events associated with video streams (i.e. camera analytic events) include links to cameras/streams, allowing you to use events to quickly find and watch relevant video.
- Included an updated VideoXpert player, which now includes the ability to view exported clips in a 2x2, synchronized layout, much like an investigation in the OpsCenter.

Major Fixes

- Corrected an issue preventing audio playback from newly-added multi-channel encoders containing multiple audio sources until after a restart of the OpsCenter.
- Corrected an issue causing the application to crash when users opened the Tags or Export Archive interfaces when Mission Control was opened from a shared display.
- Corrected an issue preventing the Export Archive from providing relevant feedback in a timely manner for clips exported from an aggregated site. The Export Archive now shows exports on demand.
- Corrected an issue occasionally preventing the application from showing resolution, framerate, and other information for some cameras.
- Corrected an issue occasionally preventing child permission restrictions for the Mapping plug-in from taking effect when a user had an unrestricted parent permission.
- Corrected an issue potentially causing “choppy” playback of Optera cameras.
- Corrected an issue allowing users to add clips from multiple aggregated sites to a playlist. You cannot export clips from multiple sites; VideoXpert no longer allows users to add clips from multiple sites and returns an appropriate error.
- Corrected an issue preventing the Mapping plug-in from supporting more than 550 tags.
- Corrected an issue preventing the Mapping plug-in from showing the correct names for updated maps and map files unless a user closed and restarted the plug-in.
- Corrected an issue causing export errors for unavailable clips to list times in UTC rather than local times.
- Corrected an issue causing a stream error when users attempted to open more than 16 streams on enhanced decoders.
- Corrected an issue preventing the 3D mouse and KBD5000 from functioning properly in Turkish and German localizations.
- Tooltips now show additional camera details, including UUID, Model, Software Version, and Camera Name.
- Corrected an issue causing audio to continue to play at 1x even when fast forwarding video in the VideoXpert Player.
- Dragging an investigation tab to a new window now preserves playback times as expected.
- If an audio source is assigned a tag, filtering by that tag will now correctly show video sources associated with the tagged audio source.

- Logging out of the OpsCenter application now releases memory as expected, preventing the application from consuming excessive memory.
- Corrected an issue preventing PTZ states from persisting when switching from primary to secondary streams.
- Corrected an issue preventing thumbnails from properly appearing in investigation tabs.
- Corrected an issue preventing users from taking snapshots from EVO cameras.
- Corrected an issue preventing users from being able to CTRL + Click to select multiple cameras in the source list.
- Improved the behavior of plug-ins, preventing plug-ins from consuming excessive resources and providing better behavior when moving plug-ins or switching to and from tabs containing plug-ins.
- Bookmarks for EVO series cameras now display thumbnails when a user hovers over them in the timeline.

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