**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.

**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 EV05 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.

**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 VxPortal, Operators can view Optera cameras in panoramic mode.
- In VxPortal, Operators can see and respond to alarms.
- In VxPortal, Operators can create, update, lock, unlock, and delete bookmarks on a VxPro or an aggregated VxPro system.
- In VxPortal, Operators can view a list of exports, download exports, and initiate a Quick Export of video.
- In VxPortal, Operators can trigger PTZ Presets and Patterns.
- In VxPortal, 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.

1.2.0.158 / Released February 2, 2018

**New Features and Improvements**
• You can now securely authenticate and write to your NAS archive server.

**VxPro Installer Version 1.2.0.158**

**Known Issues**
• If you have installed the VxPro system and later want to install individual Apps using the installer, you must uninstall the VxPro system and then reinstall the system and all appropriate Apps.
• When you install one App, the control panel will show one entry for the installed App and another entry for VxPro.

**VxPro Server Version 2.2.0.401**

**New Features and Improvements**
• You can now securely authenticate and write to your NAS archive server.
**Major Fixes**

- VxPro Server now uses the subscription reference URI to pull messages, renew, and unsubscribe.
- An intermittent issue caused the server to stop responding to API requests. This has been fixed.
- A role that has been configured with restricted resources can be deleted.
- You can still perform an Export when audio recording is missing for all or part of a clip.
- Addressed an issue where VxPro Server would grant access to excluded devices, instead of everything except the excluded devices.
- Motion events are being detected and recorded for Sarix Pro Gen 2 cameras.
- Addressed an issue where selecting only a few resources on which to apply permissions would not save the selection.
- When changing Privilege.exclude_restricted, existing restrictions for associated resources are cleared.
- New child permissions inherit the parent privilege exclusions.
- Addressed an issue where, on a VxPro system that has a VxOpsCenter and/or a VxToolbox standalone version installed, upgrading the system might fail.
- Unicast streams can be pulled, and VX Storage records from all cameras.

**VxToolbox Version 1.3.1.22**

**Major Fixes**

- Addressed an issue where GBO cameras would not work with the Onvif driver.
- When you add a device to a VxPro system using VxToolbox, the device names are discovered and match the camera settings.

**1.0.2.26 / Released January 5, 2018**

**VxOpsCenter Version 2.1.15104 R(104)**

**Major Fixes**

- Addressed an issue where upgrading a VxPro system that has an OpsCenter/Toolbox standalone version installed might fail. Also addressed an issue where, after experiencing this upgrade failure, the uninstaller might hang when run on a system that was upgraded with VxPro 1.0.2.20.

**VxToolbox Version 1.3.0.206**

**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.
  - 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**

- Addressed an issue where a role that had been configured with restricted resources could no longer be deleted.
- Addressed an issue where some Oncam cameras could not be discovered.
- Addressed an issue where the GBO Technology S1080 camera would not authenticate via the Toolbox.
• Corrected an issue where external events are not displayed.
• Corrected an issue preventing all cameras added to VX from being shown as commissioned.

**VxPLAYER Version 2.1.15104 R(104)**

**Major Fixes**
• Addressed an issue where sending multiple sync playback commands caused video cells to lock up.

**VxPRO Server Version 2.1.0.1333**

**Major Fixes**
• Addressed an issue where a successful aggregated VxPro export appears on the aggregator as if it never completed, and canceling the export would delete the successful exports.
• Addressed an issue where using the Frame Forward button had to be pressed multiple times to move forward one frame.
• Addressed an issue where reversing frames quickly multiple times might “break” Frame Forward.
• Addressed an issue where access is incorrectly given to excluded devices instead of everything except those devices.
• Addressed an issue where a child permission with restricted resources could not be deleted.
• Addressed an issue where motion events were not being recorded on Sarix Pro Gen 2 cameras.
• Addressed an issue where on some devices, the simple service discovery protocol (SSDP) responder consumed significant CPU.
• Addressed an issue where, after a reboot, the an incorrect IP address (169.x.x.x) is stored in the server.