VICON

Release Notes

July 2022

Vicon Valerus VMS 22.1 (build 110)

General Description

Vicon is releasing a new version of Valerus VMS, version 22.1 (Build 22.100.110). This version is providing updates and fixes for items reported by customers and the testing team. It is an update to the former builds (85, 94 and 100) shared with early adopters containing several fixes.

Installing this version on currently installed Valerus VMS will not require any new licensing and will not change the system settings. It is recommended to update all Valerus systems to the latest version at all times. With this release, a new version of the Valerus-ViconNet Gateway is also provided and may be used to upgrade the ViconNet Gateway if needed (installed separately, not updated automatically).

Software Versions

The Valerus VMS is built out of several different software modules packaged in a unified installer; Vicon identifies a version by the package numbering, however each module has its own internal version number. In the Valerus software, versions are listed in the "About," "NVR" and "Gateway" pages.

Module	Description	Former version	Current version
VMS version	This is the full package version that will be referred to in all documentation	21.100.131.25711	22.100.110.26724
Application Server version	This is the application server module internal version	21.100.98.25666	22.100.72.26724
Recording Server (NVR) version	This is the NVR module internal version	21.100.98.25666	22.100. 72.26724
Valerus-ViconNet Gateway version	Module to connect Valerus to ViconNet system	21.100.97.25072	22.100.72.26724
Internet Gateway + Media Server version	This is the Internet Gateway and Media Server modules, which can be installed when connecting to a public network	21.100.97.25072	22.100.72.26724
Thick Client	Thick client for Valerus	21.100.97.25072	22.100. 72.26724
Keypad PLC version	This is the module supporting keypad and PLC control of the client	21.100.5.24778	22.100.2.25746
Client version	This is the web client UI internal version	21.100.96.25711	22.100. 72.26724
Player version	This is the video Player module internal version	21.100.49.25711	22.100.15.26587

As updates to the Valerus software are being released, an updated VMS installation package will be made available. When installed, the modules that have changed will show an updated internal number while the ones that have not will remain as before.

Updates to the Internet Gateway, Media Server, Thick Client and Keypad/PLC installations will be available on the built-in software download page in Valerus.

The Valerus-ViconNet Gateway software (if need) is a separate download on the Valerus software download page due to the total size and expected download times.

Vicon Production

The new version will be used by Vicon production going forward.

This version of the software is published on the Vicon website and may be downloaded and installed on COTS hardware according to the Vicon specifications.

Field Installation

New Systems

Installing a new Valerus system either with Vicon hardware or on compatible COTS/VM hardware should be done according to the published specifications and installation guide.

Updating Existing Systems

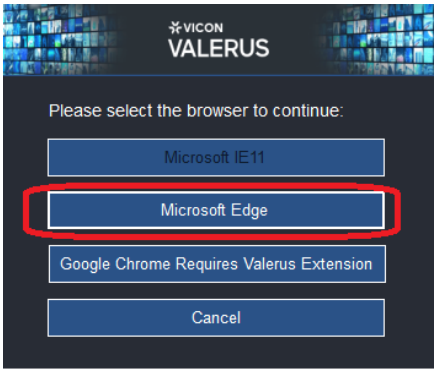
Installing the Valerus VMS software on existing hardware must meet the minimum requirements. In the case of older ViconNet VMS hardware, Vicon has a guideline listing the models and their manufacturing dates that can be updated along with hardware upgrade kits for the compatible units.

Note that after an upgrade, all users will be required to log in again in order to update their security credentials with the new ones introduced in this version.

Features and Enhancements

Export Player on Windows Edge

Added the option to select Microsoft Edge as the browser to be used when opening export video. Prior to this the options were limited to IE11 and Chrome using the extension.



Servers on Windows 11

Starting at this version, the Valerus servers (Application Server, NVR, etc.) are approved to run on Windows 11. Note, Vicon has not yet switched production OS from Windows 10 to Windows 11 and is suggesting to wait for this change to be announced.

Client on Windows 11

Starting at this version, the Valerus browser Client is supported on Windows 11 operating system. Windows Edge is the browser supported on Windows 11 and the Valerus configurator for Edge is included and available on the download page in the VMS. The few minor limitations when using Windows 11 are listed below and will be corrected after the release.

Application Server and NVR testing for Windows 11 is still in process, but we have not found any major issues beyond what is reported below.

Known Limitations

1. On NVR Configuration page, the scroll bar to set storage size does not work. The number selector does work and can be used instead.
2. Tooltip messages when hovering over icons do not work.
3. Horizontal scroll for the Resources list does not show.

Support of Mapped Drives

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Not Included	Not Included	Not Included

Added to the Valerus NVR ability to use internal or iSCSI drives is the ability to map network drives. This allows utilizing NAS solutions or shared drives accessible on the network for recording and, more importantly, for auto archiving (see below) as a secondary location.

Drive mapping follows UNC path with up to a 40-character folder path name. Examples:

- \\NASServer\ValerusArchives
- \\172.20.1.22\Recordings

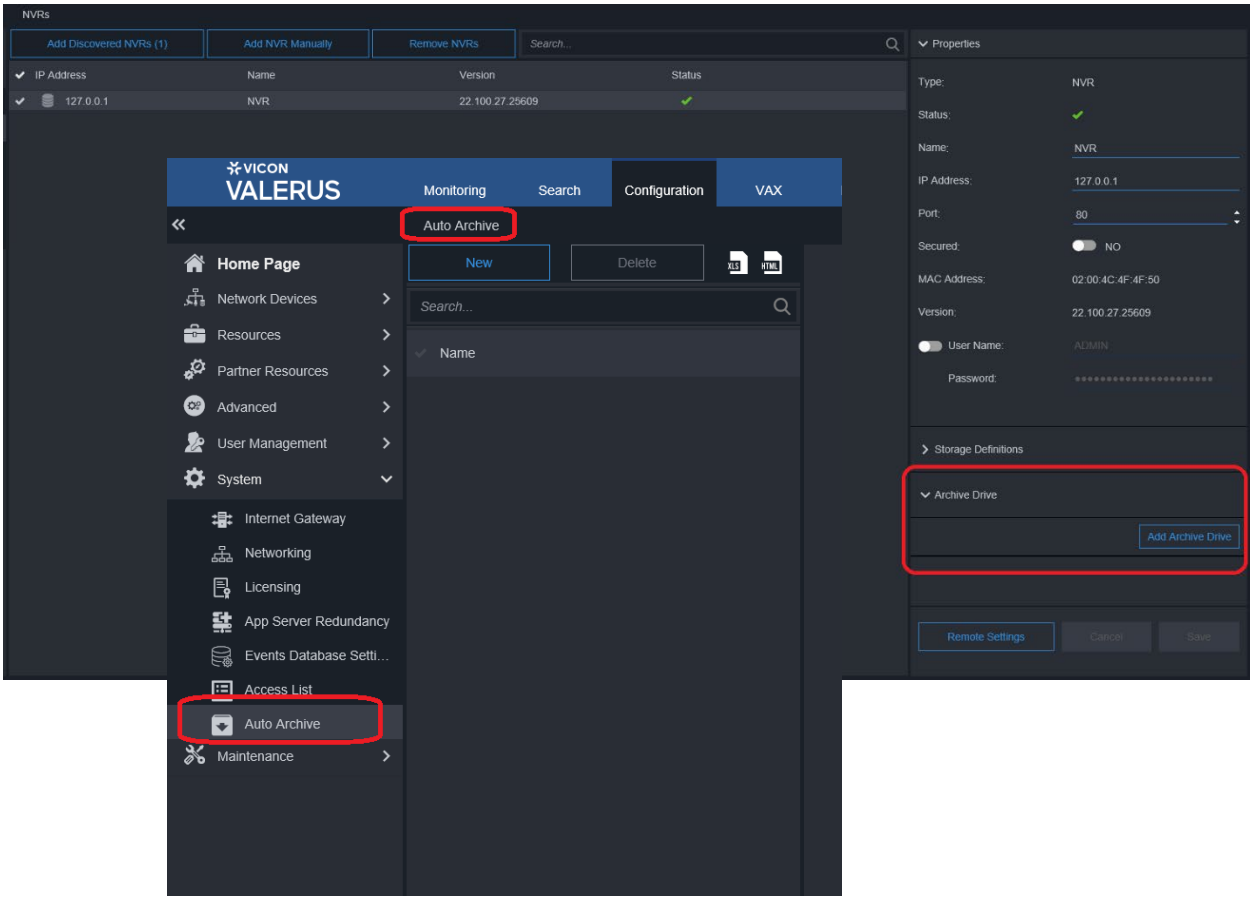
Auto Archive Ability

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Not Included	Not Included	Not Included

A new ability has been added to allow defining a secondary storage location for any NVR in Valerus. This secondary storage location is meant to allow archiving data from the main recording location at defined schedules. The primary benefit of this addition is to allow certain recording to occur on the NVR itself and to move data for a longer retention period on the secondary location, whether for cost saving or data security purposes. For example, record 48 hours locally and move to a secondary storage location for 30 additional days.

Auto-Archiving tasks added under Configuration – System allows either the archiving of all the data (for example, every midnight archive the last day) or by events (for example, every midnight move event related data from the last day).

The data is fully available from both the main and secondary recording locations without a need for the user to specify which one to use or how to access it, as Valerus will show a combined picture of available recording at all times while managing separate FIFO for each one.

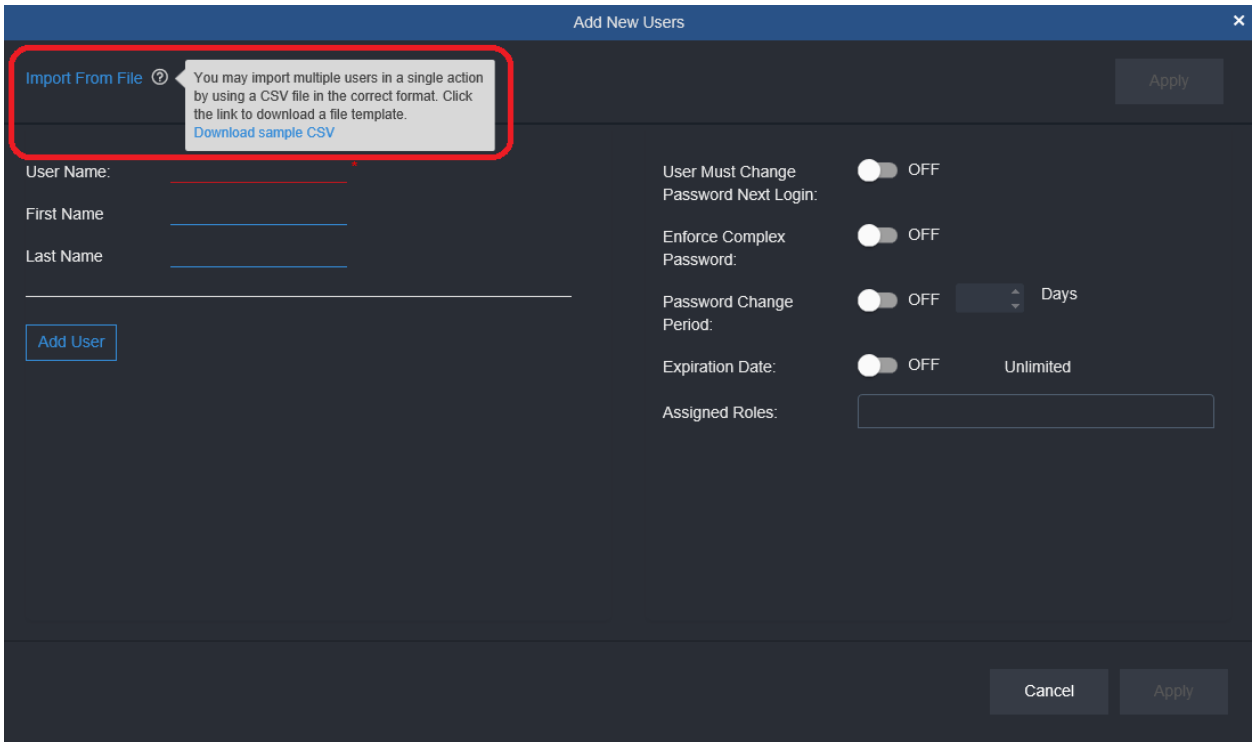


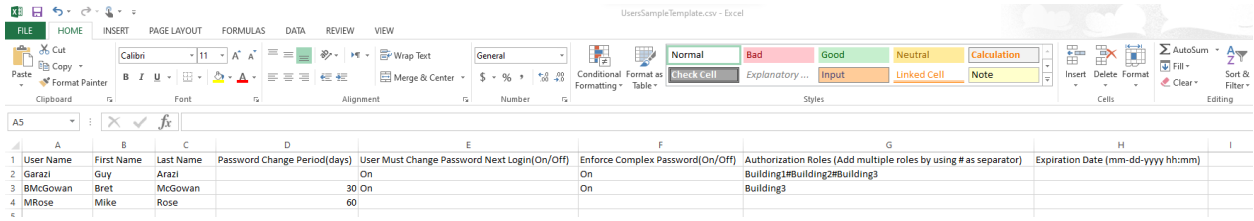
User Import via CSV

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	**ENT**	**PRO**	**CORE**	**TRY**
	Included	Included	Included	Included

Simplifying the ability to import users into the Valerus system, it is now an option to create a list of users and their attributes in a CSV formatted document (edited in Excel) and load it into Valerus, saving the need to create each user separately.

Valerus user creation now provides a template for the CSV table and the means to upload it. Any user attribute in Valerus (example "must change password") can be defined as part of the user information.



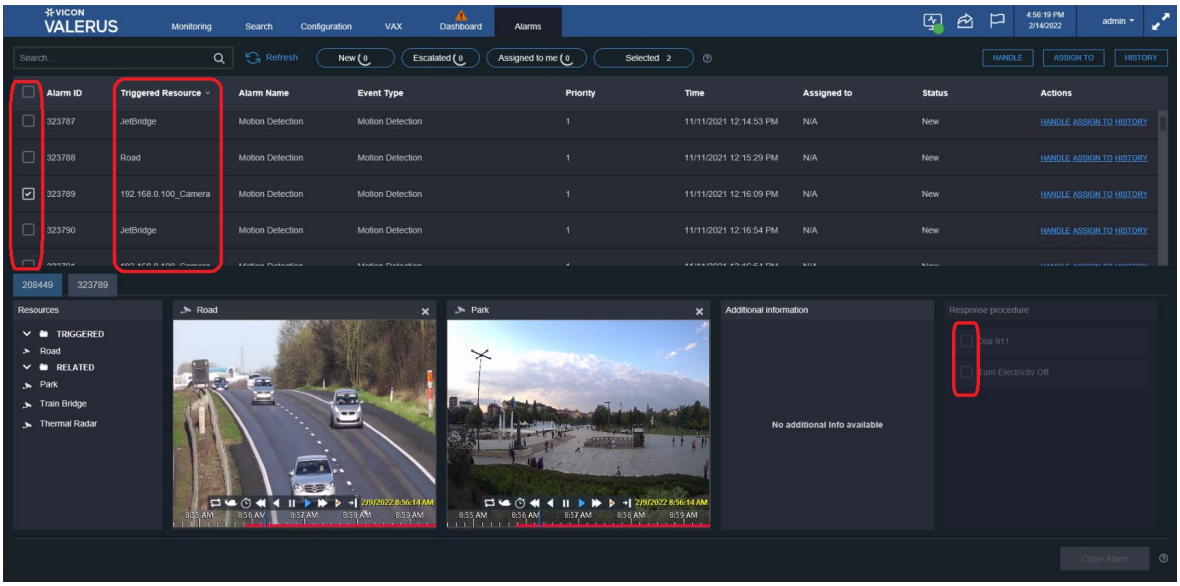


User Name	First Name	Last Name	Password Change Period(days)	User Must Change Password Next Login(On/Off)	Enforce Complex Password(On/Off)	Authorization Roles (Add multiple roles by using # as separator)	Expiration Date (mm-dd-yyyy hh:mm)
Garazi	Guy	Arazi		On	On	Building1#Building2#Building3	
BMcGowan	Bret	McGowan	30	On	On	Building3	
MRose	Mike	Rose	60				

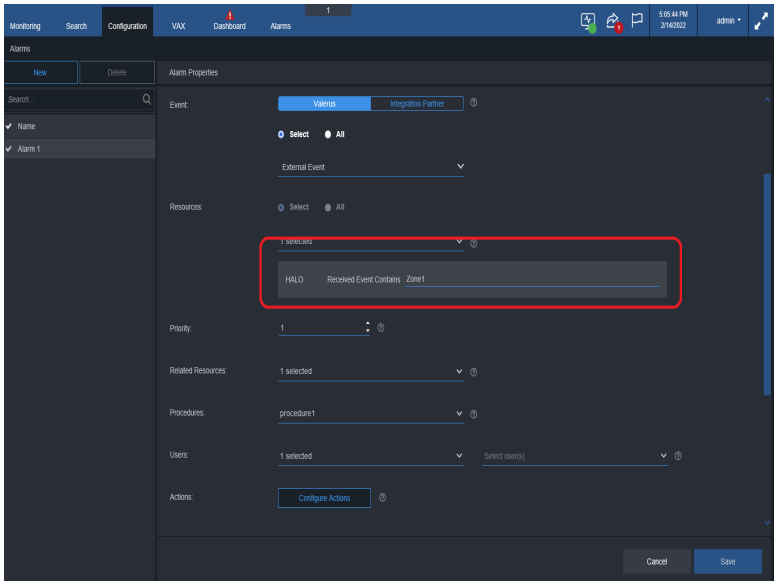
Alarms Management Screen Updates

A few updates were made to the Alarms Management screen to support easier operation:

- Added a field showing the specific resource that triggered the alarm, for example, "Back Door camera" or "Sensor 1". This helps to quickly identify the source for an alarm.
- Alarms list has been updated to provide better contrast and separation between lines.
- The check boxes used on the Alarms Management form have been updated to provide clearer indication of checked vs. unchecked.



- Added the ability to specify text from an external event to trigger an alarm instead of just the Listener name.

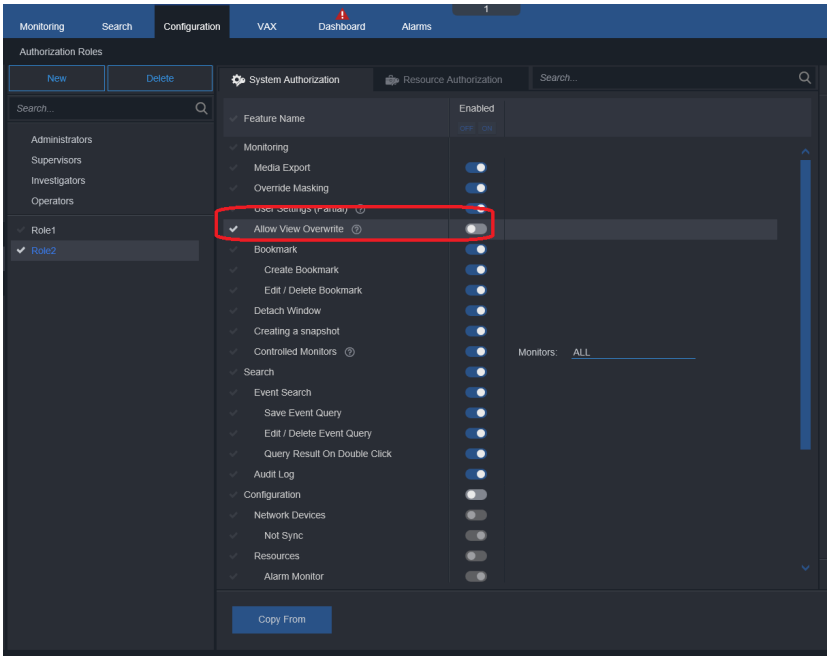


View Overwrite Authorization

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Included	Included	Included

Up to this release, a user had the ability to drag and drop cameras onto a View displayed in the Monitoring tab (Valerus View previously created and saved). Following several users' requests, we added a new User Authorization under the Monitoring section allowing to define if the user can or cannot overwrite a view.

This prevents users from changing a View from what it was originally set for.

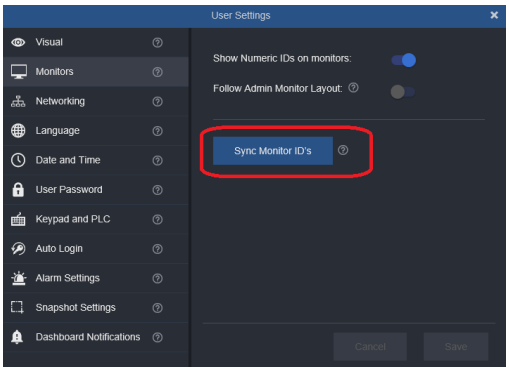


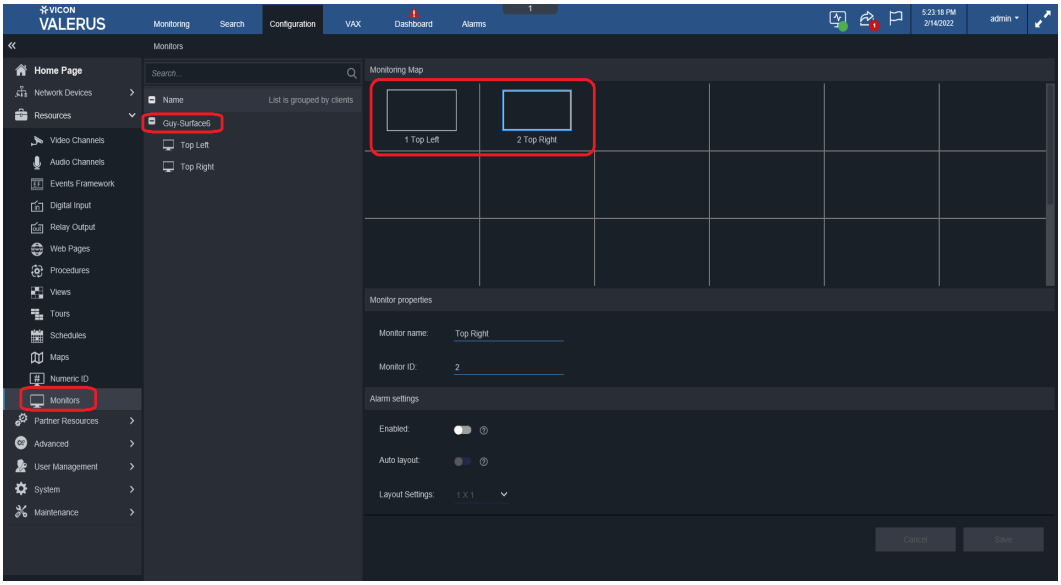
Central Monitor Management

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Included	Included	Not Included

Up to this release, monitor numbering and management was done at the local Client PC and did not offer a centralized approach and screen. In this release, a new Resources screen for Monitors is added and allows to sync tabs open on Client PCs, naming and numbering the monitors from one central screen and accessing alarm designation options (see below).

Any Client PC may now sync its monitors to the Application Server using the sync button in the newly added User Settings – Monitors section, which also contains former monitor related settings.





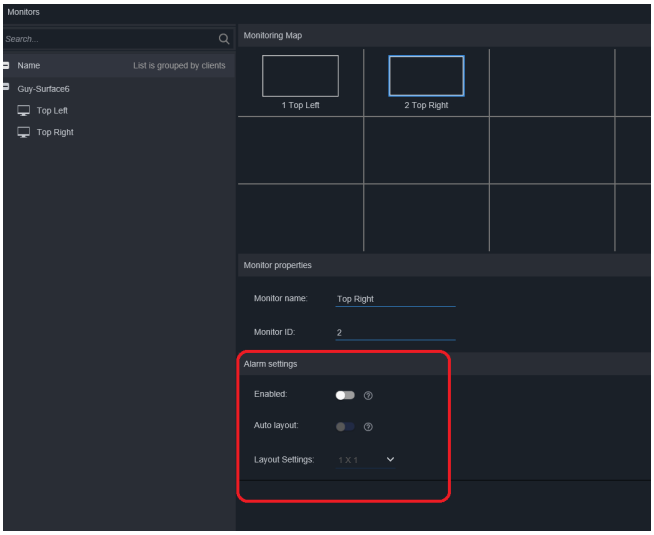
Alarm Monitor Designation

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Included	Not Included	Not Included

A new capability added for Enterprise tier users is the ability to designate a specific monitor as an alarm monitor, which can be used to display alarmed camera and offers 2 options:

1. A monitor designated for alarms in a set layout (up to 4x4).
2. A monitor designated to alarms in Auto layout mode, which will start as a single view and collapse to contain multiple alarms if those happen at the same time.

This feature uses the designated alarm monitor as a spot monitor for those display actions, showing the camera for 60 seconds and allowing video verification (see Rule actions below).



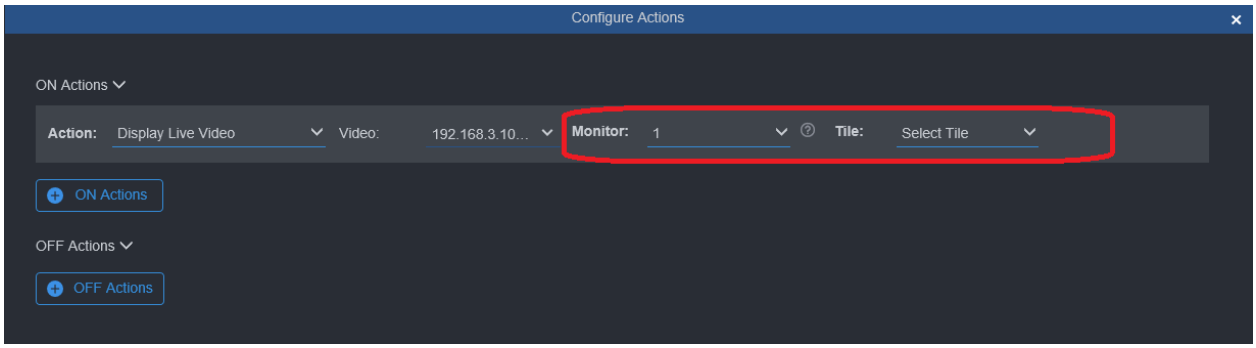
Rule Action Updates

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Included	Included	Included

Supported by the updated central monitoring and alarm monitor designation, two new actions are added to Alarms and Rules.

Start camera on monitor/tile

Now allows specifying a monitor and tile by number for the camera action to open on. The camera will be displayed with no timeout.



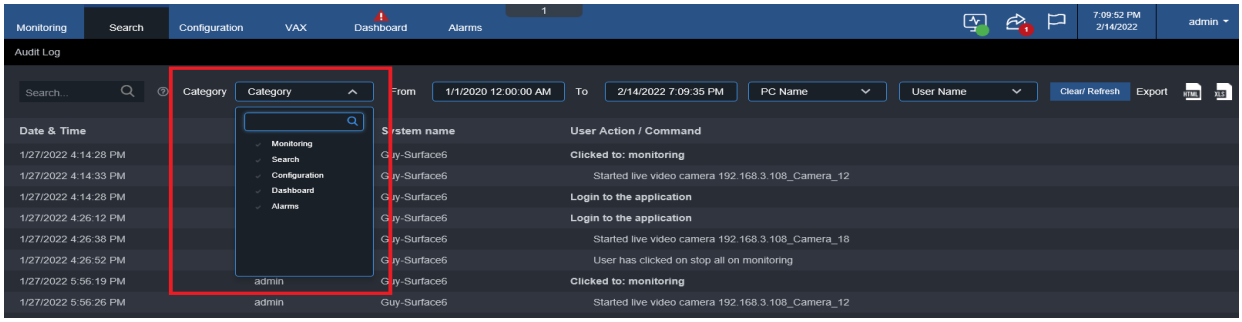
Start camera on alarm monitor

When a monitor has been designated for alarms, allows selecting it and automating the display without specifying tiles, etc. The alarm monitor behavior will be according to the setting (fixed/auto layout) and will show the camera for 60 seconds.

Audit Log Enhancement

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Included	Included	Included

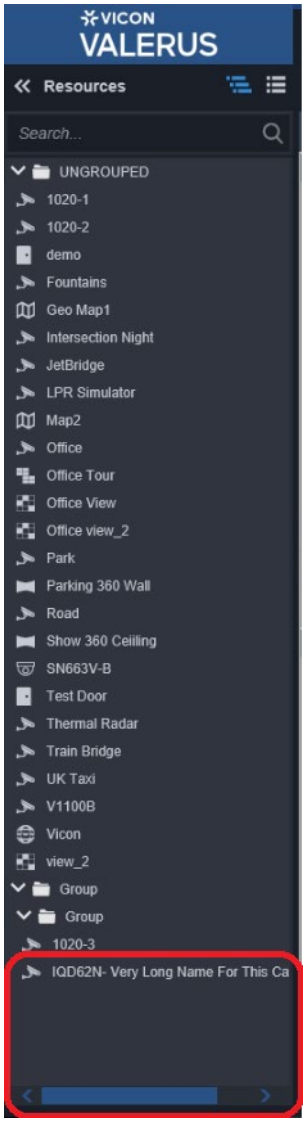
Added another dropdown in the Audit Log form allowing to select the specific section for filtering. This dropdown replaces the use of tags (i.e., #monitoring) in former versions.



Horizontal Scroll on Resources List

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Included	Included	Included

A horizontal scroll bar was added for the Resources list in the Monitoring screen. The scroll bar will show when Resource names are longer than the available width and allows scrolling to read the full name without having to solely depend on the tooltip.

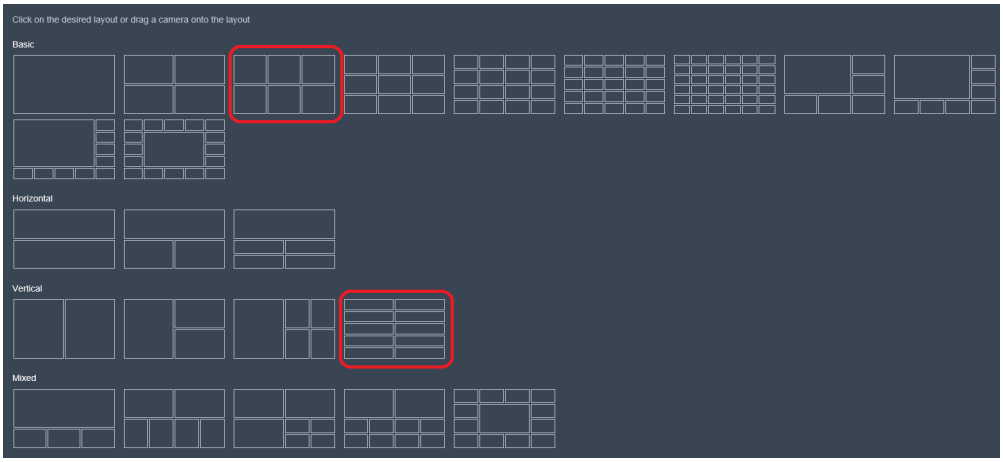


New Display Layouts

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	**ENT**	**PRO**	**CORE**	**TRY**
	Included	Included	Included	Included

Added two new options for display layout:

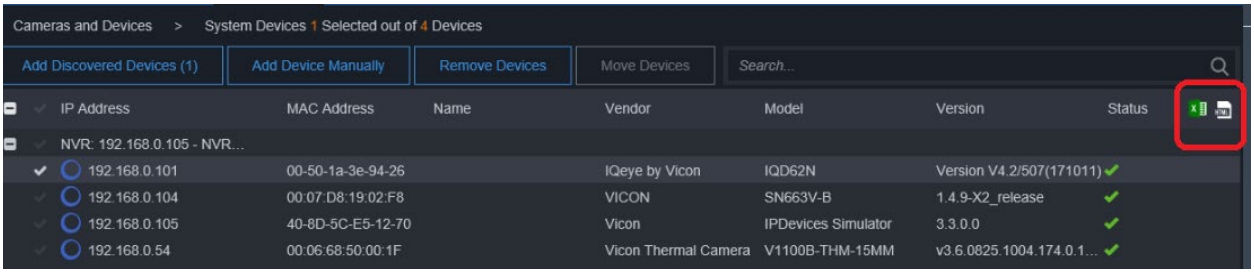
3x2 layout added to the basic layouts and 2x5 added to the vertical layouts (for monitors in portrait mode).



New As-Made Report

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Included	Included	Included

To the Excel report containing all devices and NVR, added an HTML version, which is more graphic, contains a snapshot and is meant to serve as an "as-made" report.



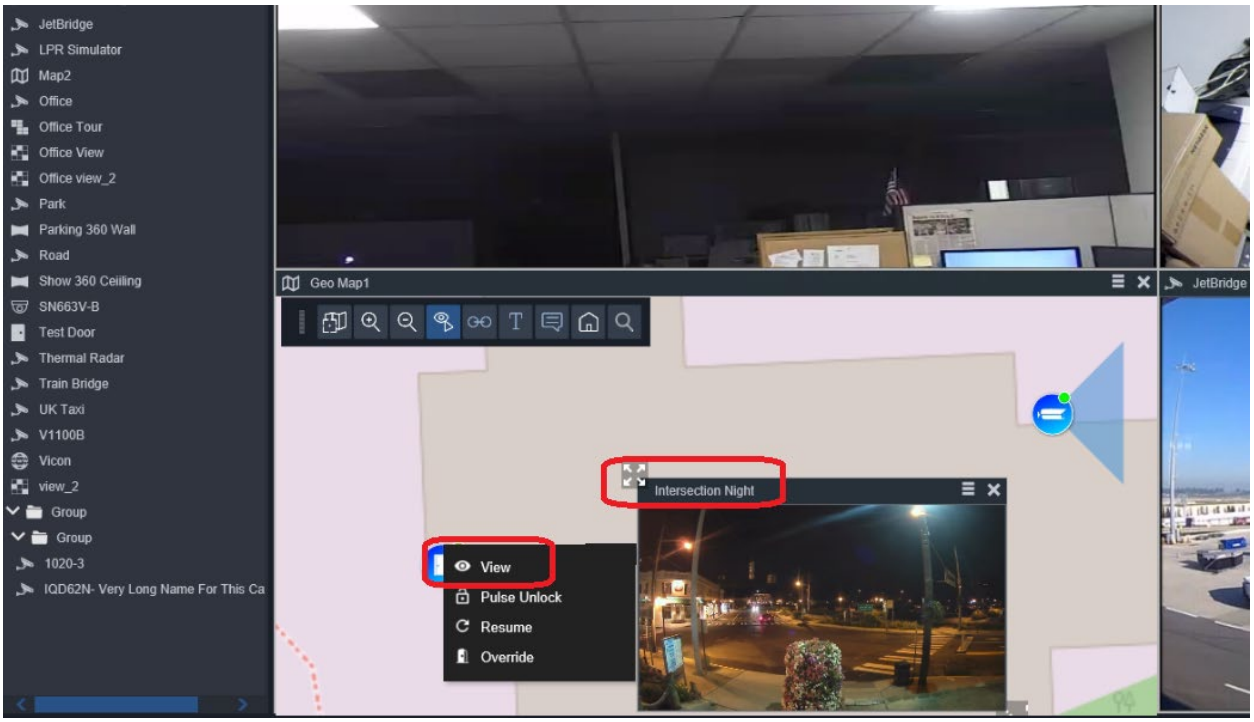
NVR and Device Report -192.168.0.105 - NVR- UK Taxi

Vendor	Vicon	Max Exposure Time	
Model	IPDevices Simulator	Gain	10
Version	3.3.0.0	Gain	
IP Address	9	Max Gain	
MAC Address	40-8D-5C-E5-12-70	Exposure Mode	MANUAL
Channels	Video : UK Taxi	auto Focus Mode	MANUAL
PTZ Settings	No	Default Speed	50
Mask	No	Far Limit	22
360 Settings	No	Near Limit	4
Picture_Settings	Yes	Backlight Compensation level	20
Status	Ready	Backlight Compensation mode	ON
Brightness	15	imageStabilization Level	40
Color Saturation	15	imageStabilization Mode	ON
Contrast	60	Wide Dynamic Range Level	30
Sharpness	80	Wide Dynamic Range Mode	ON
Iris	3	CB Gain	10
Min Iris		CR Gain	10
Max Iris		White Balance Mode	MANUAL
Exposure Time	7	IR Cut Filter Mode	ON
Min Exposure Time		Snapshot	

View Camera from Partner Map Icon

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	**ENT**	**PRO**	**CORE**	**TRY**
	Included	Not Included	Not Included	Not Included

When a Partner icon is placed on the map (LPR or VAX door at this time), an option was added for "View," which will open the first camera related to the LPR sensor or the door for viewing. This adds a quick way to look at the main camera covering this partner resource.

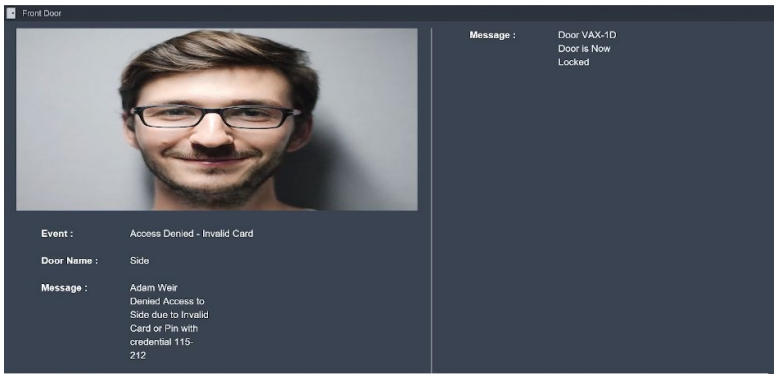


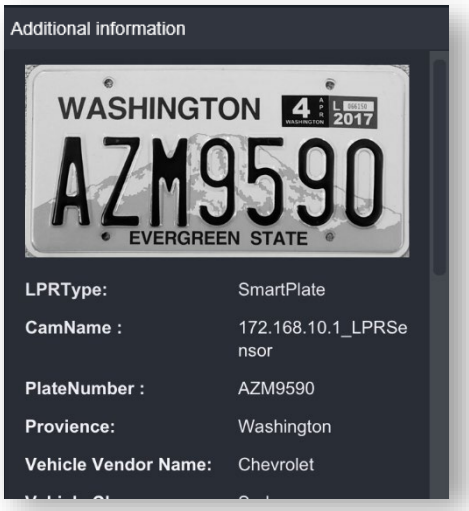
View Partner Events in a Tile

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Not Included	Not Included	Not Included

Added the ability to show a Partner resource on the monitoring Resources list and to drag into a tile like one would a camera. While waiting for an event to occur, the tile will show "Waiting for data" and when an event is received, the information for that event will be displayed for several seconds. The same information will show in the Alarm monitoring screen if an alarm was defined for it and will also be available from the Search tab.

This resource can be used in a View and allow event information next to video and maps as required.





Note: The events are shown in the tile in the order they arrive, so in case multiple events arrive together, the tile will end up showing the last one arriving. Specific to card holder events (access granted and denied), those will stay on for 5 sec before the next event is shown to allow seeing the information.

Control VAX Actions from Resources List

Feature licensing in the different tiers: Note that when upgrading from an older version, the license must have a valid UPP or this feature will not get enabled.	ENT	PRO	CORE	TRY
	Included	Not Included	Not Included	Not Included

When showing an access control door on the monitoring Resources list, provided an option to right click and control the same functions offered for the door icon on a map. This expands the current capabilities and allows control of the door with a map open.

Fixes and Enhancements in this Version

Enterprise Site App Server Start Time

Large sites with many NVRs and cameras, as well as many ViconNet Gateways and cameras, sometimes reported the Application Server struggles to start (after restarted or rebooted). The server will take a long time to initialize and would use high RAM. Additional handling of the initialize process has been added to assist in a smooth initializtion process.

It is normal for the Dashboard to still load information in the background after the log in is competed.

Dashboard Updates

Corrected several issues with the dashboard showing incorrect statistics and warnings for larger sites and cyber security.

VAX Doors Configuration

Corrected an issue preventing from using "select all" when adding VAX doors during configuration.

Video Players Not Closing

Corrected an issue that on occasion caused video player processes to remain open even when Valerus was closed. This led to memory accumulation over time and slowed down those system.

Playback Steps in Audit Log

Added audit log data for playback start and stop.

360 Playback Pause

Corrected an issue with the 360 camera dewarp where, in playback mode, pausing playback would cause the set dewarp/zoom to reset and required readjusting.

Export Authorization in Events

Export Icon from event query was enabled even for users who do not have export permission. This is now corrected.

ViconNet Gateway Enhancements

Made several enhancements to the ViconNet Gateway module to better support functionality and prevent video feeds from the Gateway to get stuck in the connecting state.

Camera Count on Dashboard

Under certain conditions, the camera error and alarm counter showed a negative number. The counters are corrected to properly show the errors in the system.

V8360 Stream Display

Updated the dewarp library where certain pixel values caused the image to not show properly and presented green and purple lines framing the image.

Non-Domain App Server and Active Directory

When the Application Server was set to work with Active Directory but was not part of the domain, it was constantly trying to query the domain controller, failed and slowed down the overall performance. Additional handling was added to prevent this from happening.

Mixed Channel Call Up

Under certain timing, frequent call up of mixed channels (typically by PLC script) would cause a Player crash. Memory leak was isolated and corrected.

PLC Call Up Lag

Corrected an issue where certain PLC users experienced a lag in call up (one command behind).

Digital Zoom In Custom Perimeter (360)

Corrected an issue that prevented performing image adjustment by zooming in when setting a 360 enabled camera to "custom perimeter;" now supported in this mode exactly like any other one.

Cameras Addition Via ViconNet Gateway

In former version, the ability for cameras added to a ViconNet group and have them update via ViconNet Gateway was lost. It is resolved and working again.

Known Issues

Card Holder Name on Monitoring

When access granted or denied event is shown from VAX on a monitoring tile or map, the card holder name is not shown. This will be corrected in a future version.

VAX User Changes Not Reflected

In the current Valerus version, in a case when the card holder picture is changed, that change will not be reflected in Valerus until VAX is removed and re-added. All other information is reflected. This will be addressed in a future version.

Access List Limitation

When defining an access list in Valerus, it will not be able to resolve MAC addresses across different subnets. To use an access list in such an environment, use the Valerus ID instead of MAC.

H.265 Display Issues

In some places, images streaming at H.265 show distortion, gray flashes and jumps. Switching the Client to TCP for Live view corrects this in most places.

Dragging a Camera over Mic

If microphones are open on the Monitoring screen, and a camera is dragged over the microphone area at the bottom, it may cause the camera display tile to distort. Refreshing the browser will resolve the issue.

Detach of Sync Playback

If sync playback is performed, and that Monitoring tab is detached, the sync will break and playback will need to be restarted.

On Map Maximum Devices

On a single GEO map, it is requested that no more than 100 devices will be added and on a static map no more than 200 devices. Adding more devices than recommended will impact on the Client"s performance.

Stretched Snapshot Thumbnail

Occasionally, when creating a snapshot from Live or Playback feeds, the thumbnail shown on the Player is stretched (vertically or horizontally). This issue is only affecting the thumbnail and the actual saved snapshot file is created correctly.

Full Screen Forces Live

If tiles are displaying video in Playback mode and Valerus is switched to full screen using the full screen button, the tiles will be forced into Live mode.

Presets with 360 Camera

When using the dewarp option with fisheye cameras, the presets in Valerus only work if the selected display mode is the same for all presets (full, quad, etc.). Trying to mix display modes will fail.

Views with Presets

When creating a View, if a camera is shown more than once (in different tiles), it will only be possible to use the same preset for all tiles. This applies to PTZ and 360 cameras that have presets. Allowing different presets for 360 cameras will be supported in a future version.

Snapshot Action in Audit Log

When taking a snapshot from the video played in Event Search, the Audit Log will only show the action (snapshot taken) but not the camera name. This works correctly when taking snapshots from Monitoring.

Potential Mask Shift

When setting a mask in Valerus, returning to the masking page and making changes may cause the mask to slightly shift. A message was added in the screen requesting the user to verify the mask position after making changes.

Digital Input Configuration

Configuration of digital inputs is only possible for users in the Admin or Supervisor group and not when using users in other groups who will not see the digital inputs listed. The functionality is not hurt for other users, only the configuration.

Playback Behavior in Events Query

In the Events Search Query form, if there is no video at the time searched, the Player opens at the closest available recording and does not display a message that there is no video at the requested time. This will be enhanced in the next version.

No Audio for Removed Channel

An audio channel that has been removed (deleted) from Valerus and is still seen as a "removed channel" cannot be played back.

Quick Config False Error

When running Quick Configuration, a message stating "camera communication lost" is sometimes shown although the camera has been added and working correctly.

Samsung Cameras Issue

When adding a Samsung camera and performing factory default on it, the camera sometimes will start showing two video resources instead of one. To resolve this, the camera needs to be removed from Valerus, reset to factory defaults and then added back.

In addition, motion detection from certain Samsung/Hanwa cameras is not picked up by Valerus (different event topic in ONVIF). Topic will be updated in a future version.

UI Scaling Issue

The Valerus UI is optimized for full HD screen resolution (1920x1080). If Valerus is opened on a screen set for resolution 1280x1024, scroll bars are shown and the full screen button can't be reached. The current workaround is to set that browser to 75% zoom. This sets the UI but does not harm the video display.

Green Video V9360W

The older model V9360W cameras show green flashing on the video when exporting video from recordings made in a 1080p resolution. A workaround is to lower the stream to 720P.

Old ONVIF Camera Support

The old model cameras that have not updated their ONVIF version sometimes show ongoing disconnects and recording gaps in Valerus. A workaround is to remove these and add them back as generic RTSP devices (requires ANY camera license).

This includes the older Vicon V960 and V980 series cameras.

Remote NVR Upgrades

In systems that include remote NVRs over a slower connection (Internet and similar), performing a remote upgrade on those NVRs may fail. In such cases, upgrading the NVRs will need to be done locally on the unit. This will be corrected in a future version.

Playback via Gateway

In rare cases where recording on ViconNet has very large gaps (days), it may not playback correctly in Valerus via the Valerus-ViconNet Gateway. The video can still be played back in ViconNet. This issue will be corrected in the next release.

Camera Credentials Error

In some cameras, adding them to the system with the wrong credentials will result in a message "Device Error" instead of "Unauthorized." This occurs when cameras do not reply correctly.

V960 Series Camera Time

Adding V960 series cameras to Valerus requires that their time is set (not the 2007 default) or the addition will fail.

Digital Input on V960 Series Cameras

The digital input from these cameras is not seen by Valerus.

Sync Playback from Valerus and Gateway

When playing back cameras from both the Valerus-ViconNet Gateway and directly connected cameras, the sync of playback will work only on lower speeds (X2, X4).

Web Page Refresh

On rare occasions where the web page did not properly show changes, a refresh is needed (refresh button or F5). Such a refresh may be needed after making changes to view to allow them to show on the Resources list, when adding an Internet Gateway and also when setting up IPV6 to apply the filter.

IQeye Cameras Alternate Stream

When using IQeye cameras, it is required to disable their multicast stream to allow Valerus to pull an alternate stream from the camera in case of NVR failure.

Switching Tabs during Museum Search

Occasionally, while running a Museum Search, if the user switches to another tab and then comes back to the search, there will be no results shown. It is recommended to allow the search to complete before switching tabs.

Thumbnail Image

In Thumbnail and Museum Search, an image sometimes does not get loaded properly and will show a black tile. The search can be rerun at that time.

Statistics Latest Recording Time

In case of Event recording, latest recording time will always show EVENT instead of the actual latest recording time.

Video Stream Display

Rarely, on camera switches, the video in that tile will stop and will require a page refresh to recover.

Audio Time Line

When dragging a microphone, the audio window will sometimes open without the time line at the bottom. Closing and reopening will fix it.

Video and Audio Sync

Live and playback of video and audio together will not be completely synchronized.

Behavior on Playback Loss

When playing back video, if the source for playback (NVR) disconnects, the video freezes. In the future we will display a message for "Playback Loss."

Behavior on License Error

When attempting to log in during a license error (expiration or other), a user without configuration authorization will just see a spinning circle. A user with configuration authorization must log in to get to the license settings and correct it. In future versions we will add appropriate messages.

Video in 1FPS

If video is viewed at 1 frame per second, it will have a noticeable delay.

Specific Event Handling

Cameras that send an ON message for an event but do not send an OFF message will not properly generate alarms.

Multi-Monitor on Log In

When logging in and asking to restore the last state, the View tabs for the other monitors sometimes open in the main monitor and need to be moved over again.

VAX Integration Tab Stays Grayed Out

After upgrading Valerus, if you have a VAX integration, the VAX tab stays grayed out until you go into the network settings and reconfigure VAX.

Partner Event Resource Issue

If a partner event resource is dragged into a tile on the Monitoring page for a certain amount of time, when you clear all resources and then drag a camera into that same tile, the event resource you dragged in earlier still appears instead of the camera.

Bookmarking Video Issue

Bookmarking video when the video is paused does not reflect the correct time.

Edge Installer Upgrade Issue

If upgrading the Edge installer when a previous version is already installed, you must uninstall the older version and then reinstall the newer version. You will get an error if you try to just do an upgrade.

Availability

The Valerus 22.1 software is released to production.