

Vicon Valerus VMS 21.1 (build 127)

General Description

Vicon is releasing a new version of Valerus VMS, version 21.1 (Build 21.100.127). This version is providing updates and fixes for items reported by customers and testing team.

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. The Gateway software needs to be installed separately and will not be 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	20.300.13.23960	21.100.127.24990
Application Server version	This is the application server module internal version	20.300.6.24119	21.100.97.25072
Recording Server (NVR) version	This is the NVR module internal version	20.300.6.24119	21.100.97.25072
Valerus-ViconNet Gateway version	Module to connect Valerus to ViconNet system	20.300.6.24119	21.100.97.25072
Internet Gateway + Media Server version	This is the Internet Gateway and Media Server modules, which can be installed when connecting to a public network	20.300.5.23941	21.100.97.25072
Thick Client	Thick client for Valerus	20.300.5.23941	21.100.97.25072
Keypad PLC version	This is the module supporting keypad and PLC control of the client	20.300.2.23983	21.100.5.24778
Client version	This is the web client UI internal version	20.300.8.24117	21.100.94.25130
Player version	This is the video player module internal version	20.300.6.23960	21.100.35.25047

Release Notes

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 needed) will be 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

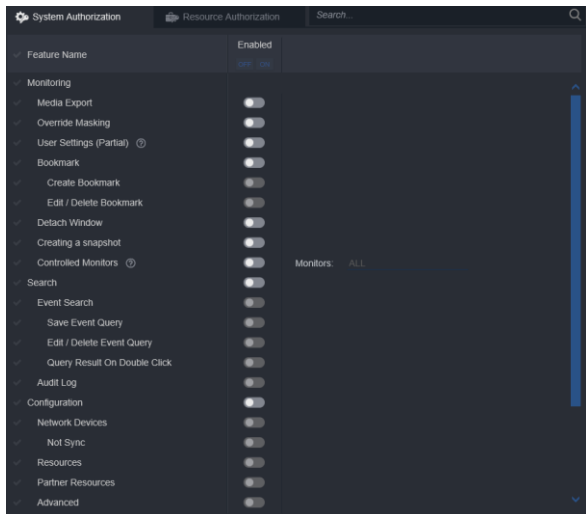
Changes to Configuration List

Two new sections were added to the Configuration list:

- Partner Resources – For the new integration framework which is described in detail below.
- Advanced – For the new Alarms Management feature. Also moved the following configuration screens from Resources into here: Rules, External Events and Group Hierarchy.

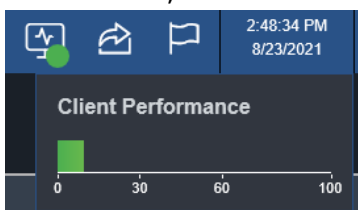
Added Authorization Levels

Up to this version, the authorization for configuration tasks was simple and only allowed to determine who can access Configuration in general and who can access User Management within. In this version, the level of authorization is improved and allows to define, per role, which specific sections of Configuration it can access and, in some, even specific features. This allows a much more granular control where certain users may need access to specific configuration areas but not to others.



Client Performance Indicator

Added a gauge on the main toolbar (next to the Player icon) that provides the local user with an indication on the load level of their system. This is based on CPU and is meant to give a traffic light type indication (green, yellow, red) of how loaded the PC is as cameras are displayed. This came following many requests for an indication that will give the operator a sense of where they stand as more and more cameras are added to the system and allows giving a simple “Stay in the green or yellow zone” direction. This monitor requires the installation of a new service on the PC to operate. Those who do not wish to install it, don’t have to and the icon can be hidden from the User Settings.



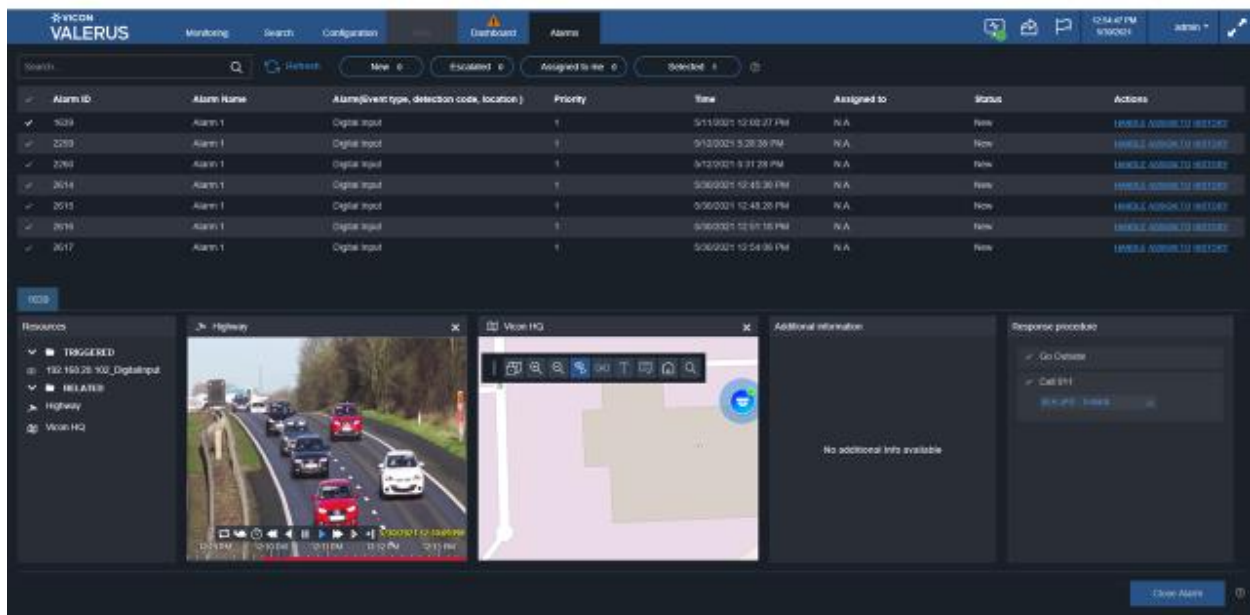
Alarms Management

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	Limited	Not Included	Not Included

This is a major addition to Valerus and is meant to allow configuring Valerus to classify certain events as alarms that can be seen, processed and closed in the Alarms Management screen.

The Alarms Management screen is a new screen added to Valerus, where all alarms will be listed, and provides tools to review the alarm and eventually close it. This allows following the alarm life cycle as it was defined in the alarm configuration, including their designated procedure (see below).

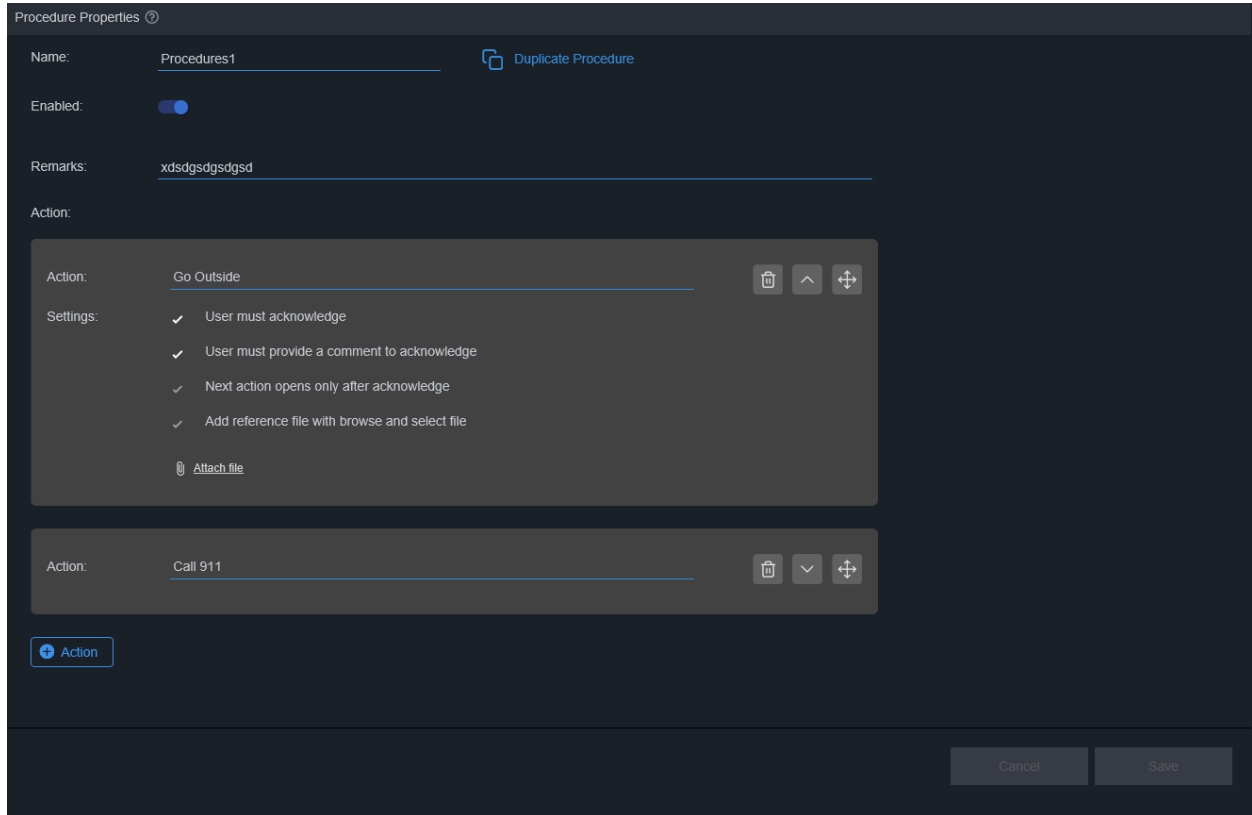
The Event Search screen has also been updated to allow searching for alarms in order to get a historical list of those occurrences and their respective video.



Alarm Operating Procedures

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

Part of the Alarms Management system is supporting the use of standard operating procedures that are defined for the alarm and allow the operator to follow step-by-step instructions when they handle the alarm. These procedures can be defined in multiple steps and allow setting the required actions per step, including if they have to be acknowledged and their dependency on other steps. In alarms that have a procedure, it is possible to limit the ability to close the alarm until the procedure is completed.



Integration Framework – LPR

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

An integration framework was created allowing License Plate Recognition systems to connect to Valerus, use video feeds from the VMS as needed and send their LPR events back to Valerus. By adding LPR sensors to the Valerus map, the user can see where those are placed and what they read. Events from the LPR system can be set to trigger alarms in Valerus when certain plates are identified as suspicious (based on LPR settings). The event information, including the snapshot of the license plate, are shown in the Alarms Management screen and allow the operator to investigate the alarm event and close it.

Release Notes

This version includes an integration with Neural Labs LPR and will also support the Edge LPR solution Vicon is about to release. Additional LPR partners are expected to be added in the coming versions.

Integration Framework – Access Control

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.	<u>ENT</u>	<u>PRO</u>	<u>CORE</u>	<u>TRY</u>
	Included	Not Included	Not Included	Not Included


An integration framework was created allowing Access Control systems to connect to Valerus and send their different access control (reader, door) events back to Valerus. By adding doors to the Valerus map, the user can see where those are placed and if they are alarmed. Events from the Access Control system can be set to trigger alarms in Valerus when certain events are identified as suspicious (based on the Access Control system settings). The event information, including the picture of the card holder (when available), are shown in the Alarms Management screen and allows the operator to investigate the alarm event and close it.

This version includes an integration with Vicon VAX access control.

Dashboard Enhancements

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.	<u>ENT</u>	<u>PRO</u>	<u>CORE</u>	<u>TRY</u>
	Included	Included	Included	Included

General

- Added an option to export graphs to either HTML or Excel format 
- Added an option to silence certain Dashboard notifications under User Settings.

Application Server

- Added gauges tracking the SQL server CPU and RAM levels.
- Added video export space information.
- Added "Open Alarms gauge" helping to keep open alarms to a maximum of 1,000.

NVR

- Added S.M.A.R.T. info communication with the recording drives showing S.M.A.R.T. errors and events reported by the drives, allowing for preventive maintenance.

Release Notes

Cyber Security

- Added an alert for devices or users that are still using their default password. This is meant to encourage users to change their default password.
- Added an alert for Failed log in attempts (two and up) to alert about a potential hacking attempt.
- Added an Access list violation alert supporting the new feature.

New Activity Mapping Tab

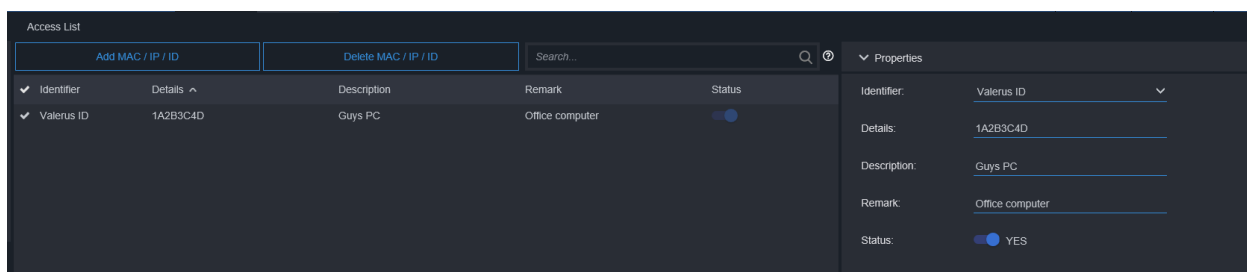
- Added an activity map to the Dashboard showing a calendar view and color-coded markings highlighting where there are audits and providing a high-level view vs. a textual report with the ability to click to access those entries.

Computer Access 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	Not Included	Not Included

Up to this version, Valerus only authenticated the users logging into the system by verifying their credentials regardless of the computer they are using for log in.

This is a new option to create an Access List (typically known as a white list) of PCs that are allowed to connect to Valerus. This adds another layer of security by restricting the PCs that can connect. We allow listing PCs using their IP address, MAC address or a unique Valerus ID that is created when the Client Monitoring Service is installed and is shown in the About screen of the User Settings. Without an Access List any PC can connect; once a list is started, it becomes mandatory to add all PCs to it in order to gain access. The built-in ADMIN user can always connect from any PC no matter if it's in the list or not.



Refresh Snapshot – All

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

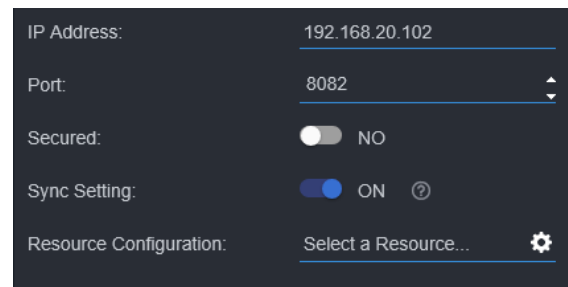
For video channels' reference snapshot (Configuration – Resources – Video Channels), we added the ability to capture snapshots for all resources at the same time in addition to the one-by-one option previously provided. This is meant for those working on a system and wanting to have updated shots at the end of installation. This saves the need to collect the updated snapshot for each camera individually.

Device Sync Control

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

The Valerus system typically synchronizes with every camera twice an hour and ensures that the settings on the camera match the expected settings in Valerus. We have now added an option (per device) for disabling this system. This is meant to help in the following scenarios:

- Two systems (two Valerus or combination with others) are connected to the same camera and we want to avoid a race condition, where different settings are syncing from different systems.
- The camera needs to be set from its web page and not from Valerus.
- Cameras that don't perform well when synchronized often.



Fixes and Enhancements in this Version

Log In Time Control

Large sites with many NVRs and cameras, as well as many ViconNet Gateways and cameras, are sometimes seeing their log in time takes longer than the expected 60 sec. This issue has been corrected by moving some of the log in tasks to the background while opening the monitoring screen, and now the log in time is as expected or shorter (depends on the system size).

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

Unexpected Export Failures

Updated the export mechanism to better handle exceptions reports from virtual machine users, which resulted in export attempts failing.

Analog Camera Call Up Issues

Corrected issues causing call up of cameras from an encoder to sometimes fail when overwriting an existing camera.

Log Page UI Fix

Corrected an UI problem on the log collection page that would cause it to show only a partial view of the page.

Vicon V1500X-SCCS Keypad

Corrected the keypad driver, which stopped working properly in former version.

ViconNet Gateway Enhancements

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

Map Icons Disappearing

Corrected an issue with the mapping module that resulted in icons sometimes disappearing from the map while zooming.

Mixed Channel Crash

Enhanced the mixed channel (video + audio) handling to avoid crashes on call up.

Text Field Enhancements

Text fields across the system (primarily in Dashboard) have been resized to provide more room for names to display before the system has to cut the name and require using the tool tip. The changes made are supporting a better and easier UX where this text is required.

Monitoring Resource List Fixes

Corrected several problems with the Resources list on the monitoring page, causing it to show gaps in the list and affecting general performance.

JQuery Library Update

Updated the JQuery library used for the Valerus Client UI to the latest version.

Release Notes

Sync Playback Behavior

Updated the player behavior when in sync playback to make closing one timeline on any player close all the timelines of the other players in the sync group. This change makes it similar to all other functions when in sync.

Audit Log Search Improved

Corrected an issue where in certain audit log searches using two words separated by a space would not work. Also improved support for multi-language in audit logs that would not show properly.

Audit Log Button Change

The "Reset" button in the audit log was renamed "Clear/Refresh" for a better description of its functionality.

NVR CPU Consumption

Corrected an issue on the NVR logging mechanism that would sometimes cause the NVR CPU to rise up to 100%. The change is now handling this scenario so it will not need CPU.

Services Start Mode Change

Changed the startup mode for both Application Server and NVR from "Automatic" to "Automatic Delayed start." This is meant to allow more time for other services to start and allow the Valerus ones to follow them.

ADAM Device Relay Name

Corrected an issue where renaming of the ADAM units does not get saved properly.

Valerus Encoder Audio Recording

Fix audio recording problems reported by Valerus encoder users post using the "apply to" button. This option is no longer enabled for the encoder and multi-sensor camera and each of the channels needs to be set individually.

List by Type Gets Disabled

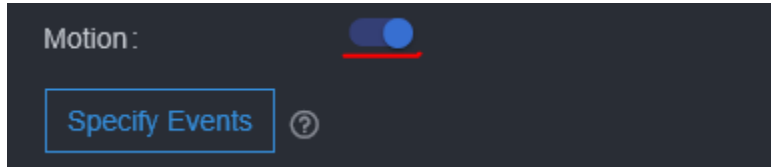
Corrected this issue reported in 20.3, where in systems that have defined custom roles for their users, the option on the Resources list to sort by type may get disabled and only allow the grouped view. This issue can be easily corrected by re-saving (no need to delete, only to edit and save) the role.

Release Notes

Known Issues

Record on Event Default VMD

When setting a channel to record on event or to continuous & event, the button for VMD from this channel is enabled by default. If this is not the event required, user needs to turn it off. The default state will be changed to off in next version.



HDD S.M.A.R.T. Type

In the dashboard type showing the S.M.A.R.T. status of the NVR hard drives, the HDD type is not always correct. This will be corrected in the next release.

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 have impact on the Client 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.

Release Notes

Specific Event Handling

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

Using Network Drives

Valerus will not yet recognize drives that are mapped from the network through Windows mapped drive (NAS), only those shown as local drives (including RAID or iSCSI drives).

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.

Availability

The Valerus 21.1 software is released to production.