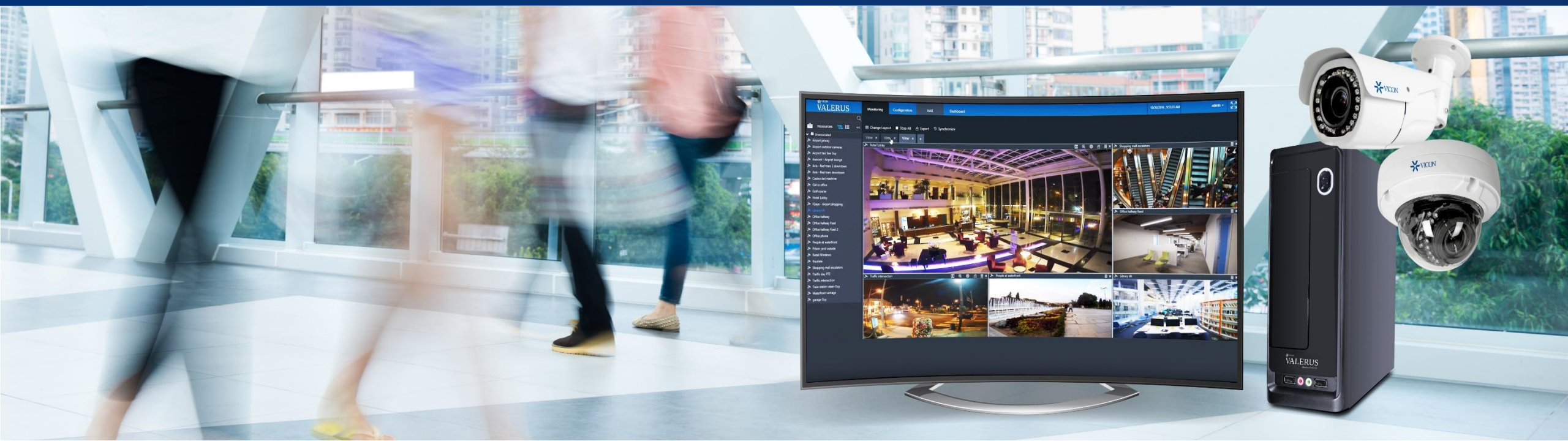


WEBINAR: VALERUS

Video Management Software • Version 18.2





At Vicon, we are hard at work
striving to improve our products.

*The Latest Version of Valerus Delivers
Enterprise Performance with Video Analytics,
NVR Failover and More*



Complete Security Solutions *Simplified*

Vicon makes it simple to manage even the most complicated security challenges. Vicon's end-to-end security surveillance solutions deliver simple usability that is as impressive as their powerful capabilities, delivering high-performance, easy-to-deploy results.

Vicon's portfolio includes the full range of security solutions including:

Valerus Video Management Software



An open platform browser-based solution

VAX Access Control *Integrates with Valerus*



Cutting-edge access control integrates with Valerus

High-Performance Cameras HD Analog Cameras



Lower bandwidth and outstanding image quality

NEW Storage Options



Pre-certified, conventional and RAID options

Each of our solutions is powerful in their own right, but together they'll bring your security system to the next level.

Vicon's Valerus Video Management Software

An open-platform browser-based video management software (VMS) solution designed to simplify every aspect of your surveillance experience.



Valerus has been designed to eliminate all the pain points typically associated with video management solutions. Our open-platform, enterprise-quality software redefines what customers can, and should, expect from their video surveillance system.



Valerus highlights:

- Ultimate in flexibility and scalability with four license tiers; and web-based access from anywhere
- Simple and cost-effective pricing model combined with optional upgrade protection plan ensures long-term value
- Offers comfort of real choice with third-party integration compatibility through ONVIF
- Single license activates all Valerus components—including cameras, recording servers and clients
- Increases operational efficiency with quick configuration tool and centralized management
- Provides unparalleled HD image quality and intelligently manages bandwidth and storage



Agenda



Welcome

Valerus Introduction

Demo of Valerus VMS Highlighting the NEW Version 18.2 Features

Tiers, Licensing & Upgrades

New Cameras Overview



Valerus v. 18.2 VMS Overview



Highlights of Valerus 18.2



**Failover
Technology**



**Video Analytics
Solution**



**New
License Tier**



**External Event
Reactions**



**Log
Collection**



**Configuration
Enhancements**



NVR Failover Technology

Alleviates concerns regarding loss of data in case of failures and strengthens the dependability of the recorded data

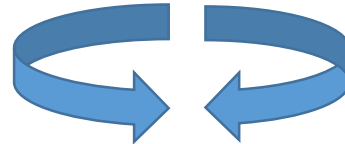


Valerus allows an NVR to be configured as a failover NVR to act as a backup in the case of an NVR failure. The failover NVR is a dedicated PC and is not one of the system's active NVRs.

This feature offers the ability to create clusters of NVRs and Failover NVRs that back them up. By creating a cluster, it is possible to define multiple NVRs and failover ones to meet any required specification.

One to One Failover

NVR being backed up



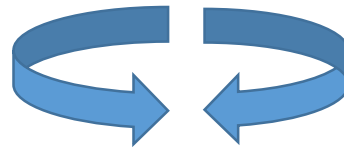
Failover NVR



Pros	Cons
100% failover capacity (similar to disk mirror)	Expensive deployment

Many to One Failover

NVRs being backed up

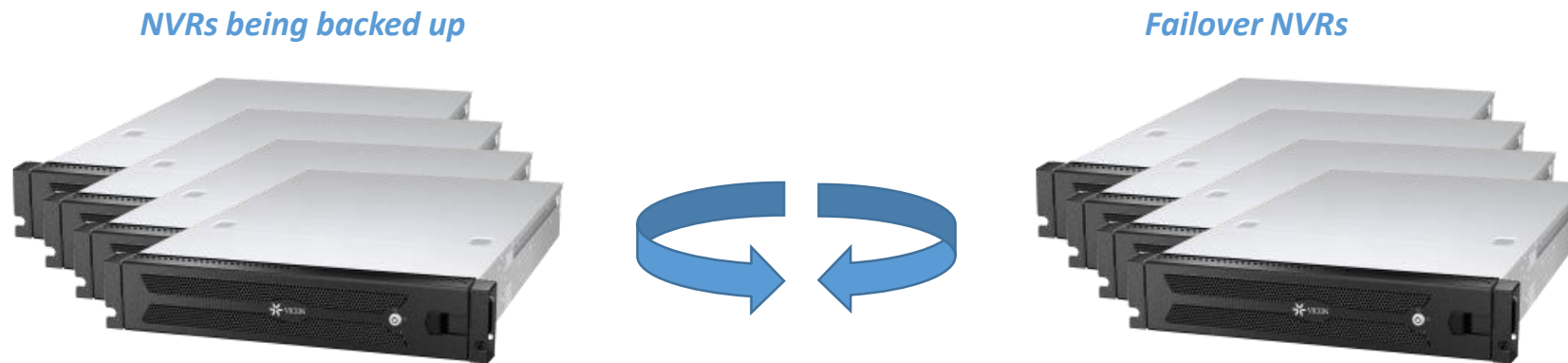


Failover NVR



Pros	Cons
Assumes not all NVRs fail together	Might fall short if several NVRs fail together
Allows every user to decide how many NVRs to cover with the failover one	
Much more cost effective than 1-on-1	

Many to Many Failover



Pros	Cons
Assumes not all NVRs fail together	Higher cost than many to one
Allows every user to decide how many NVRs to cover with the failover ones	Still not 100% failover
Provides multiple layer of protection	



Valerus SmartAnalytics

Leverages the use of surveillance systems utilizing video analytics software



Valerus **SmartAction**

Real-time event detections
and alerts

Valerus **SmartSearch**

Enhanced video searches

Valerus **Business Intelligence**

Business intelligence applications allow
user to define statistical analysis tasks



Valerus SmartAnalytics

Real-time Video Analytics Solution

The SmartAnalytics suite boasts a set of advanced, automated, video analysis tools that provide for the immediate detection and extraction of events and valuable data from surveillance footage, increasing the surveillance system's ROI, and improve overall security, safety and business operations.

The tight integration of both video management and analytics makes the Valerus SmartAnalytics suite a smart and cost-effective surveillance solution across all industries including retail, transportation, financial and commercial industries.



These tools replace the manual and time-consuming tasks traditionally employed to monitor live video feeds or sift through recorded video.

Valerus SmartAnalytics Integrated System Diagram

This diagram depicts a system in which the SmartAnalytics run on the same hardware as Valerus.



Note: In this configuration, the VCA Service running on the Valerus Recording Server impacts the number of cameras the server can support.
See detailed specifications for design guidance



Valerus SmartAction

Real-Time Event Detections & Alerts -identify risks and react quicker than conventional security monitoring.



Setting “Rules” that automatically react to pre-defined behaviors takes the burden off of operators. Alerts can be set for a wide variety of actions and each video stream can support multiple rules.



Define area of interest, breach of a defined area



Stopped vehicle detects a vehicle stopped in a predefined area



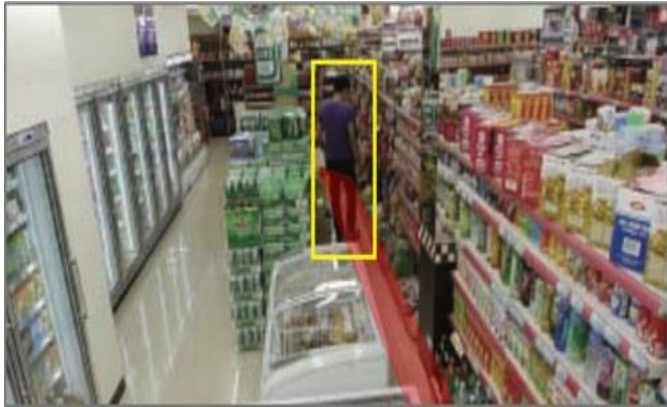
Object detection allows user to identify an object unattended for longer than a predefined time

Rules are defined by the user such as entrance of a secured zone, vehicle stops on highway, or suspicious bag is left behind.



Valerus SmartAction

Examples of General Rules For Video Analytics



Loitering



Asset Removed



Suspicious Object



Person Line Cross

> *Specify Events for Rules*

> Line Crossing

Intrusion

Person Moving

Person Line Cross

Person Tailgating

People Grouping

Crowding

Loitering

Vehicle Moving

Vehicle Line Cross

Vehicle Stopped

Vehicle Tailgating

Traffic Congestion

Traffic Congestion End

Object Lighting

Suspicious Object

Tamper Image Too Bright

Tamper Scene Changed

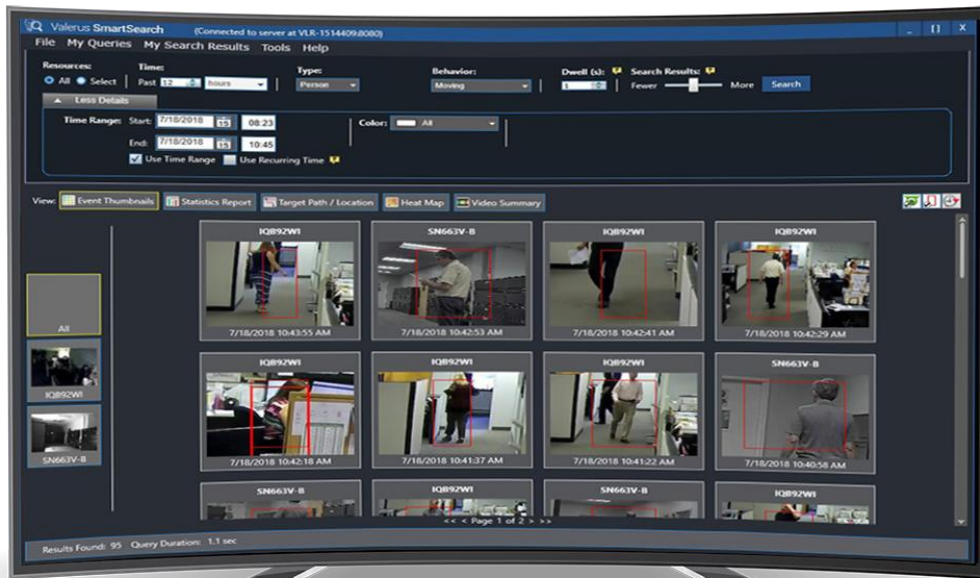
Asset Removed

Apply and close



Valerus SmartSearch

Automatic and effortless retrieval and analysis of recorded video, replacing cumbersome, labor-intensive, manual searches. Users define parameters regarding the event/object of interest and receive matching search results within seconds, enabling rapid access to specific video segments buried in the stored video.



Features



- Offers extensive range of search parameter filters to pinpoint video segments of interest
- Presents versatile visualization displays that minimize video viewing time
- Delivers rapid results: searches 24 hours of video in a few seconds
- Enables simultaneous search on any number of cameras
- Increases efficiency in investigations relying on recorded video
- Allows search to be applied in near real-time for enhanced situational awareness and incident response

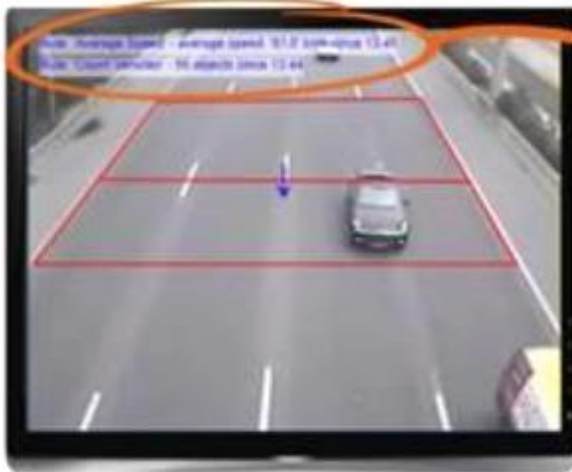


Valerus Business Intelligence

Statistical information regarding traffic volumes, traffic trends and motion patterns can be effortlessly extracted from surveillance video.



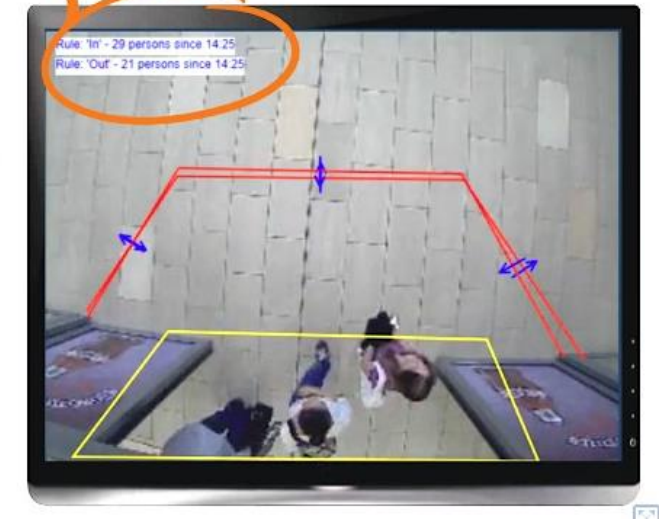
Statistical analysis tasks related to people and cars accurately recognize the movements of people and vehicles while ignoring motion not relevant to a scene.



For vehicles, measure traffic flow and calculate the average speed in a specific area, providing valuable insights into important aspects like traffic patterns



- Calculating conversion rates
- Comparing store performance
- Optimizing operations
- Enhancing marketing campaigns



In the retail environment, collect statistics about customer traffic and behavior. Calculate conversion rates, compare store performance and enhance marketing campaigns.



Valerus Business Intelligence



Retail Heat Mapping

A visual representation of traffic over time helps build an understanding of customer activity



Visual mapping of customer behavior and patterns is interactive, providing direct links from the pattern to source video.

- Delivers accurate, wide-ranging statistical data related to people and vehicles
- Offers advanced visualization tools including charts, graphs and heat maps
- Enables exporting of the raw data for further analysis or integration with other systems
- Enhances operations and marketing decisions for the retail sector through customer behavior analysis
- Provides key metrics for highway operators through vehicle flow and speed analysis



Enhancement Updates

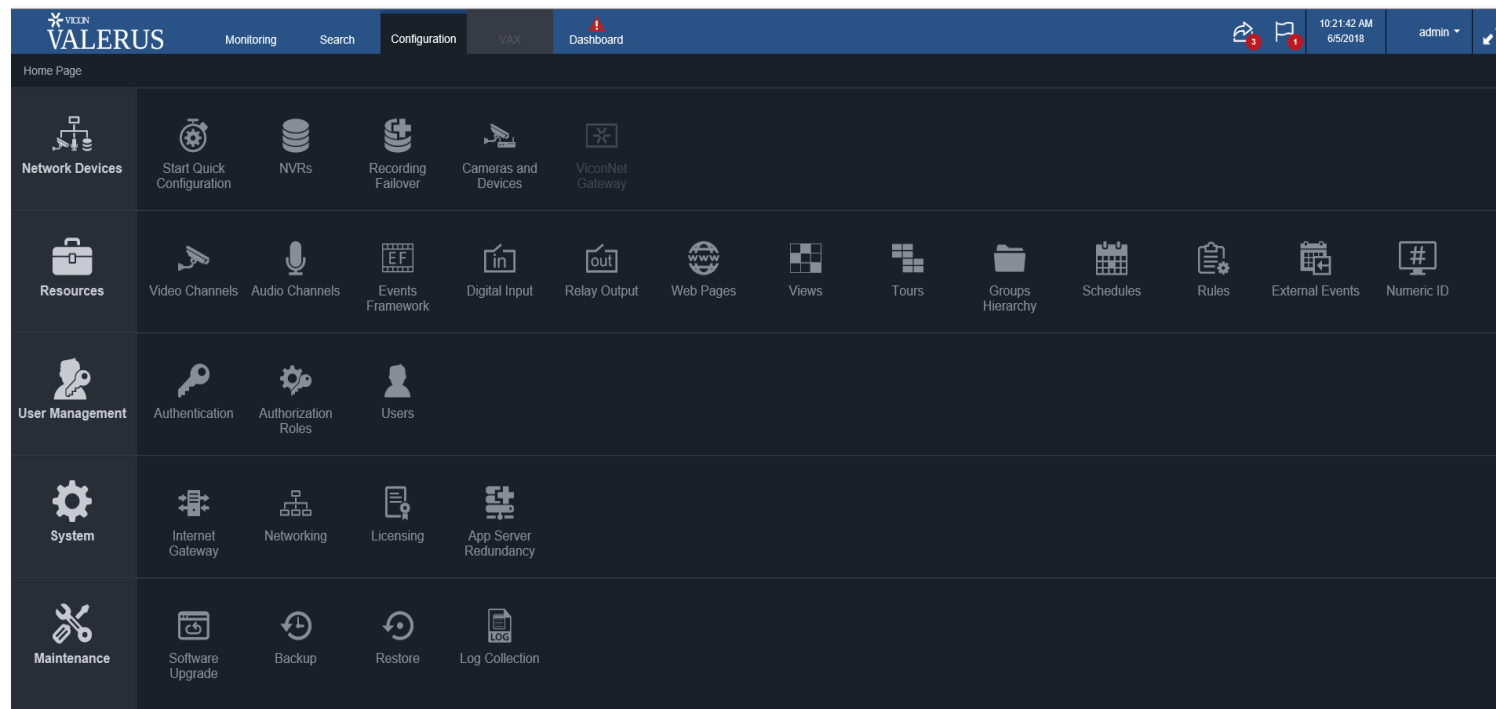
Simplified User Experience



Improved configuration options that include an enhanced rules engine that can respond to external events, tighter controls for system access authorizations and network-wide log collection and reporting.

Configuration Landing Home Page

Added a landing home page when entering the Configuration area with clear icons per category.





External Event/System Reactions

Enhance system inputs and notifications to improve operator awareness

ADAM-6050 Integration

Valerus now supports the ADAM-6050 IP-based I/O device. This allows using dry contact inputs and outputs not tied to a specific camera. The device is added under the “Cameras and Devices” menu.



Receive External Text Events

Valerus can now accept external text strings from third-party systems (access control, LPR, POS, Intercom) to associate sensors with cameras. The sensors can trigger events in Valerus to speed up recording, pop-up a display window or sound an audio notification.

System Response

Enhanced indication of an alarm. The alarm tab is now highlighted red and an alarm icon flashes on the top toolbar. In addition an alarm sound was added to draw the operator's attention.





Enhancement Updates

Simplified User Experience



Devices Report

Added a report button to the devices screen that generates an Excel report of the devices sorted by their hosting NVRs as well as a flat list.

Device to Resources Shortcuts

Added shortcuts in the Resources screen and the Device screen to allow fast navigation between the two. This allows the user to jump to a specific resource for a device without looking for it.

Support 3rd Stream from Camera

For cameras that support more than two streams, added the ability to configure those; this requires the user to define the desired stream. The system shows the options supported by the camera to add the appropriate one.

Move/Replace Cameras

Allows moving a camera or device from one NVR to another, usually for load balance purposes. Supports the ability to replace a camera already in the system with a new one (MAC address change). Same model camera will take all older settings; a different model camera will need to be reconfigured.



Updated Authorization *for Added Security*

The authorization system now provides a more robust security level. Instead of every resource allowing access (*live, playback, etc.*) by default, it will now block access. The user groups are replaced with “Roles” that define a template of authorizations to which users can be added. This change was made to benefit large deployments where many users need limited access to the system.

As in the previous version, a user may be assigned multiple roles and roles may be changed when needed. An additional “built-in” role was added and now the system offers “Admin, Operators, Supervisors and Investigators” as the default roles.



Built-in Log Collection

Gain immediate visibility into the system

A log collection option is now available, which allows the retrieval of system logs from all Valerus PCs, making it easier to troubleshoot potential issues.





NEW ENTERPRISE License Tier

A third commercial license tier has been added to support large-scale system requirements



VALERUS VMS TIER COMPARISON CHART

Simple and Cost-Effective Licensing
Tier Options to Meet Your Specific Needs

TRY

CORE

PRO

ENTERPRISE

GENERAL OPERATIONAL PARAMETERS

Maximum number of devices per system	6	35	Unlimited	Unlimited
Maximum number of simultaneous clients	5	10	Unlimited	Unlimited
Maximum number of supported devices	6	35	Unlimited	Unlimited
Museum Search	–	–	Yes	Yes
Support Valerus server-based SmartAnalytics/SmartSearch	–	–	–	Yes
Recording server failover	–	–	–	Yes
Events Framework Search	–	–	Yes	Yes
Microsoft Active Directory support	–	–	Yes	Yes
Support analog HD video (AHD)	Yes, w/Valerus encoder	Yes, w/Valerus encoder	Yes, w/Valerus encoder	Yes, w/Valerus encoder
Application server failover	–	–	Yes	Yes



New **ENTERPRISE** tier is built for large scale enterprise solutions. Now introduced with NVR failover and server-based analytics, future adds include interactive maps and event framework.

Optional Software Upgrade Protection Plans

Unlimited footprint for NVRs and Client Viewing Stations (*No additional base license fees!*)



Keeping up with the latest camera technology advances, our portfolio has expanded to include cameras that offer the latest features to meet demanding applications.

NEW Camera Lineup

High-Performance Next Generation Portfolio



4K - V988D



4K - V988B



V840 Series Micro Dome



V1000 Series Multi-Sensor



SN240D PTZ



V922B-W551MIR-A



SN693V Cruiser



SN683D Rugged PTZ

NEW V988D and V988B Series

4K Resolution Outdoor Dome and Bullet Cameras



V988D

The 4K dome and bullet cameras deliver sharper images while providing a broad range of coverage and improved visibility.



V988B

Product at a Glance

- 4K resolution (8 MP)
- H.264/H.265 and M-JPEG compression
- True WDR
- 28 IR LEDs (Dome)/34 IR LEDs (Bullet)
- (90 ft/30 m range)
- Motorized varifocal lens
- Quad streaming

- Video Content Analysis (VCA): Defog, tampering, intrusion, motion detection
- Audio and alarm input/output
- Powered by PoE; 12 VDC
- Video composite out
- SD card slot for on-camera storage
- Surface mounting on wall or ceiling
- IP66; IK10



NEW V840D Series

Micro Dome Cameras



The HD micro dome camera, one of the industry's smallest high-definition dome cameras, enables a cost-effective transition into HD video surveillance. These cameras are an ideal solution for applications in retail, hospitality, financial/banking and commercial.



Product at a Glance

- 2 & 4 MP models available
- H.265/H.264 compression
- True WDR (120 dB)
- Smart IR (49 ft/15 m range)
- Fixed 2.8 mm
- 0.03 lux low light capabilities

- Triple streaming
- Smart encoding
- Video Content Analysis (VCA)
- Museum Search
- Power-over-Ethernet (PoE),
- Two-way audio
- IP66; IK10 vandal-resistant

NEW V1000 Series

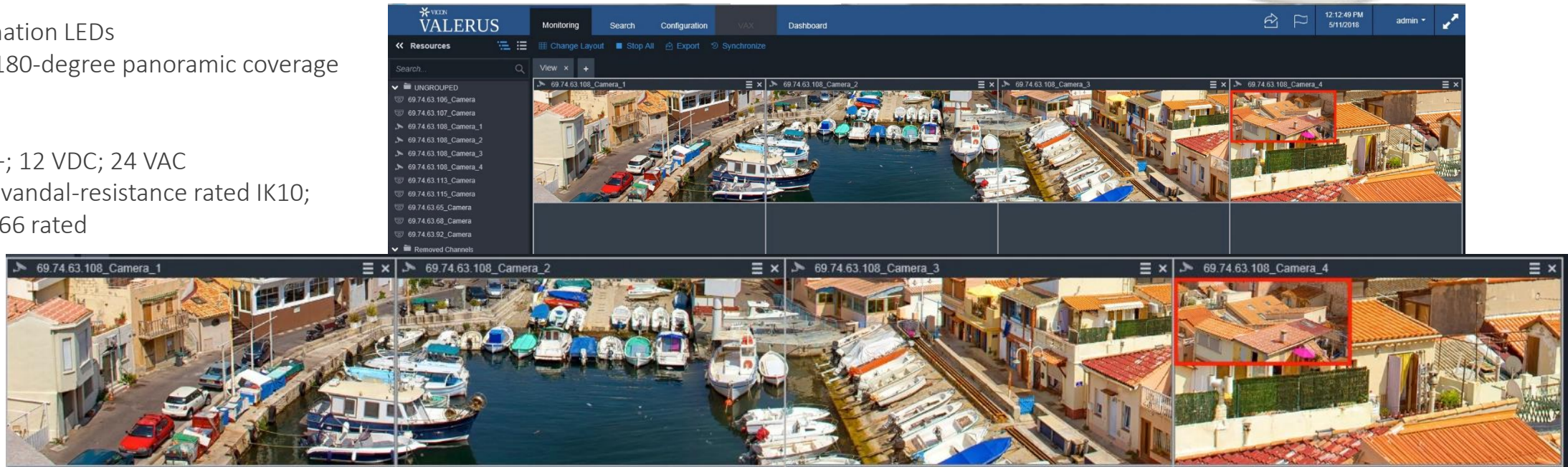
Multi-Sensor Dome Cameras

The multi-sensor camera has four sensors that work together to provide a detailed 180-degree panoramic view.

Product at a Glance

- 8 megapixel and 20 megapixel versions
- Includes four separate camera modules (2 MP or 5 MP)
- H.265/H.264 compression
- Smart Encoding
- Built-in IR illumination LEDs
- High-resolution 180-degree panoramic coverage
- Triple streaming
- True WDR
- Powered by PoE+; 12 VDC; 24 VAC
- Indoor/outdoor; vandal-resistance rated IK10;
- weatherproof/IP66 rated

*One camera provides **180 degrees** coverage in wide indoor/outdoor areas as shown here.*



NEW SN240D Series

PTZ Speed Dome Camera

Provides excellent wide area coverage and great zoomed-in details in HD.

Product at a Glance

1080p resolution (1920 x 1080)

Min illumination: Color 0.35 lux, B/W: 0.013 lux

30X optical zoom and 16X digital zoom

True WDR (120 db)

Max 380° /sec speed (preset)

Power-over-Ethernet (IEEE 802.3af);

12VDC/24VAC

Privacy Masking

Audio In/Out

DIS (Digital Image Stabilization), tampering,
defog, face detection, and object detection

Composite Video Out + RS485

IP66; IK10



NEW SN693V CRUISER

PTZ Outdoor Dome Camera

The PTZ dome camera provides surveillance over a wide area range.



Product at a Glance

1080P (1920x1080P) day/night camera

H.265, H.264 and M-JPEG compression formats

23X optical zoom

Minimum illumination: Color 0.35 lux, B/W: 0.013 lux

True WDR

Video Content Analysis (VCA): Tampering, defog, and object detection

IR illumination up to 196 ft (60 m)

Supports local recording to Micro-SD card

Powered by 12 VDC and PoE+

Outdoor; IP66 and IK10 rated

NEW SN683D

Rugged PTZ Dome Camera

This rugged PTZ dome camera is designed for performance in the most demanding installations.



Product at a Glance

- 3 MP resolution
- True WDR; day/night camera with a built-in varifocal 36x optical zoom autoiris lens
- Synchronized IR illuminators with 1312 ft (400 m) range
- 12 VDC and UPoE (PoE injector included)
- Quad streaming video
- Video Content Analysis - Tampering, defog, intrusion detection
- Two-way audio
- IP66 and IK10 rated
- 16 programmable privacy masks
- Surface mounting on wall or ceiling

Thank you

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