

DW Spectrum V2.0 Features



About

- › Powerful & User-Friendly
- › Unlimited scalability
- › Unmatched bandwidth savings
- › Simplified system setup and management
- › Cutting-edge User Interface (UI):
 - › Unlimited layout designs
 - › Smart network bandwidth auto-adjust
- › Fast, Light and Powerful



Power

- › Modular and flexible architecture
- › Enterprise scalability
- › Windows, Linux, Android, iOS
- › Simple non-technical deployment
- › Optimized bandwidth and processing
- › Total forensic video manipulation
- › Rich, open and simple UX



Mobile

- › Live and recorded video
- › Full or thumbnail view
- › Zooming capabilities
- › Calendar search
- › Resolution settings for bandwidth control
- › Management of multiple locations



Advantage

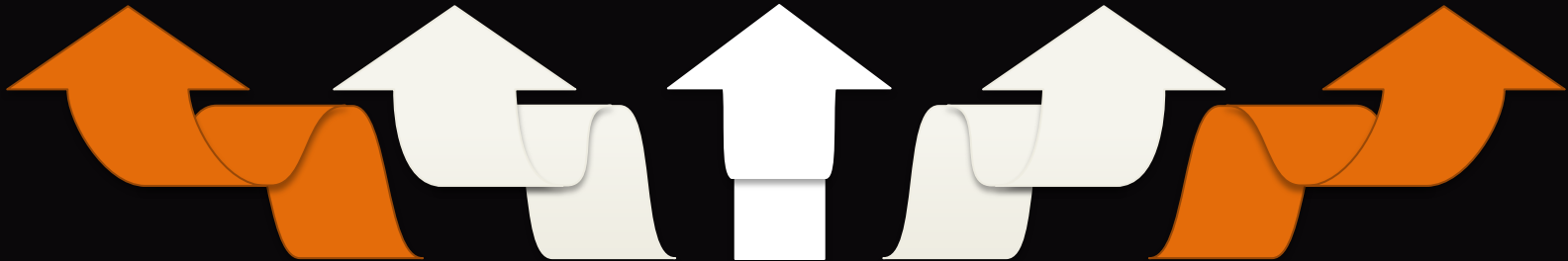
Powerful,
fast and
scalable

Rich, open,
and simple
UX

Extremely
low Total Cost
of Ownership

FREE
Upgrades
& Maintenance

Easy to sell,
install, operate,
and upgrade



DW Spectrum License Options

Description	Model Number
1 DW Spectrum IPVMS License	DW-SPECTRUMLSC001
4 DW Spectrum IPVMS License	DW-SPECTRUMLSC004
10 DW Spectrum IPVMS License	DW-SPECTRUMLSC010
20 DW Spectrum IPVMS License	DW-SPECTRUMLSC020
4 Channel Analog Viewing License	DW-SPVMAX004
16 Channel Analog Viewing License	DW-SPVMAX016
4 Channel Encoder License	DW-SPENCODE4

* Blackjack Servers sold with 4 free recording licenses pre-loaded



V2.0 NEW FUNCTIONS

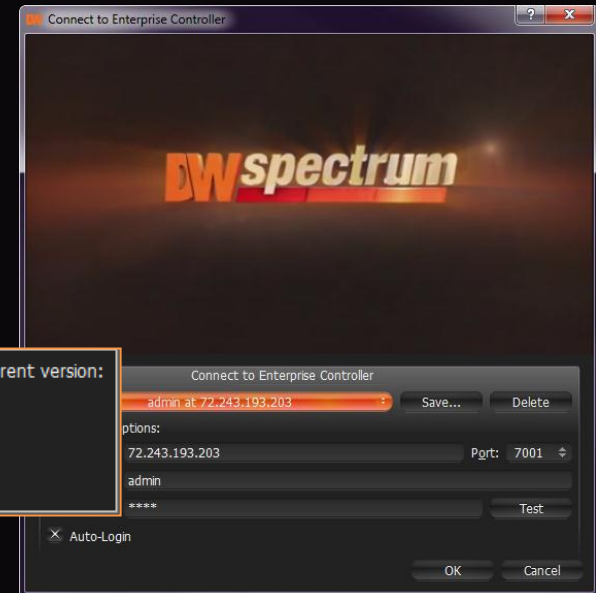
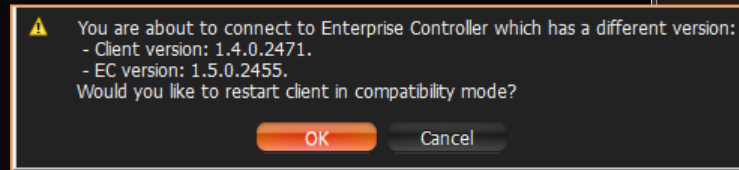
Auto Login to a Server

- › Connect to Enterprise Controller
- › Auto Discovered ECs
- › Last Used Connection
- › Saved Connections
- › Test Connectivity
- › Auto Login



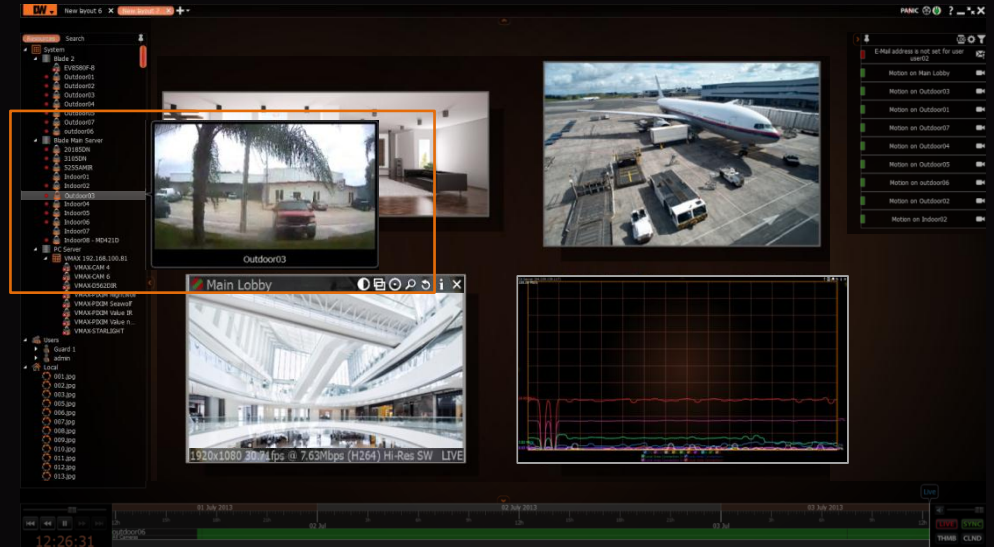
Compatibility Mode

- When the Enterprise Controller has a different software version than the client
- Software will close and re-launch in compatibility mode



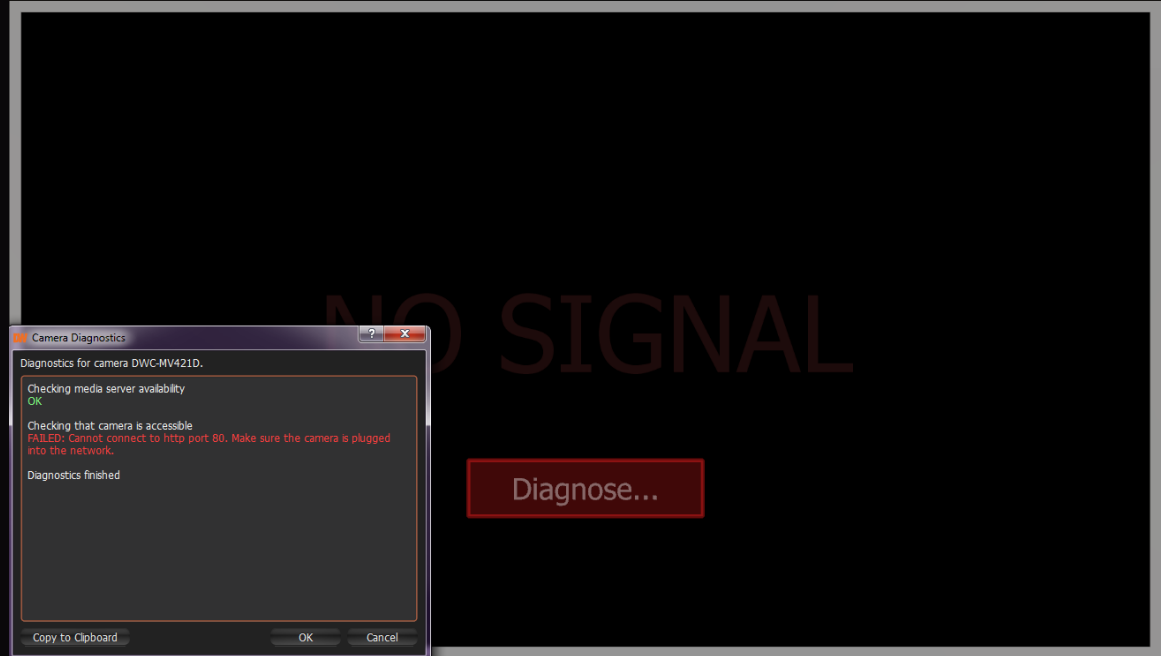
Camera Preview

- Camera View popup
- From Display tree
- From popup notifications



Advanced Camera Diagnostics

- › System performs quick diagnostics on cameras with network issues



Calendar Search

- › Browse through archived data by day & hour
- › Select more than one day
- › Results automatically reflected in time bar
- › Full green
- › Transparent green

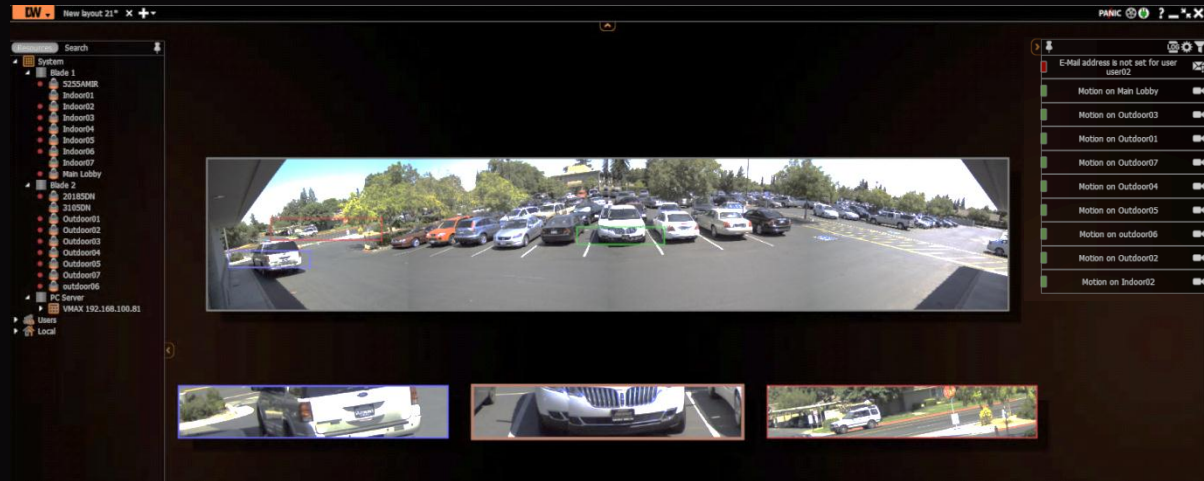
The image shows a screenshot of a calendar search interface. At the top, it displays "15 August 2013". Below this is a time bar with 12 hourly slots. The slots for 12 am, 2 am, 9 am, and 10 am are highlighted in green. Below the time bar is a monthly calendar view for August 2013. The days 11, 12, 14, and 15 are highlighted in green, indicating they are selected for search. The day 15 is highlighted with a yellow border, indicating it is the current day. The days 18, 19, 20, 21, and 22 are highlighted with a dotted pattern, indicating they are also selected for search.

15 August 2013						
12 am	1 am	2 am	3 am	4 am	5 am	
6 am	7 am	8 am	9 am	10 am	11 am	
12 pm	1 pm	2 pm	3 pm	4 pm	5 pm	
6 pm	7 pm	8 pm	9 pm	10 pm	11 pm	

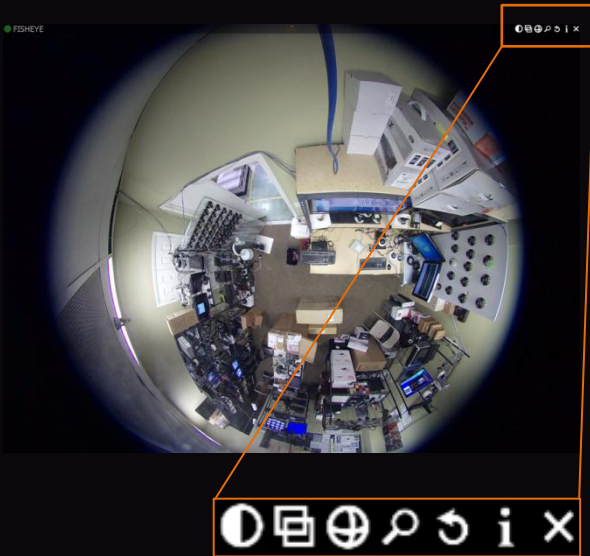
August 2013						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

Forensic Spyglass View

- Monitor large spaces using a single camera
- Zoom into specific portions of the camera's field of view
- Exponentially increase your camera's presence



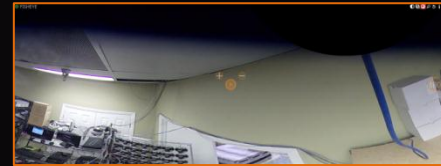
Hemispheric Camera View



90° View with
PTZ Control

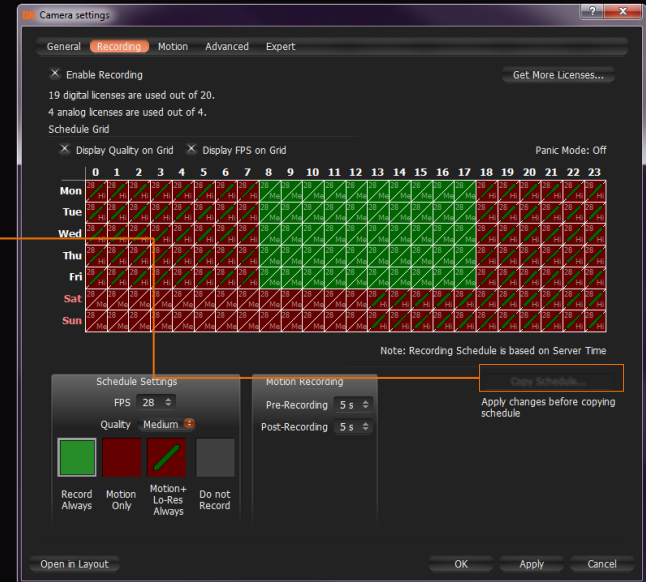
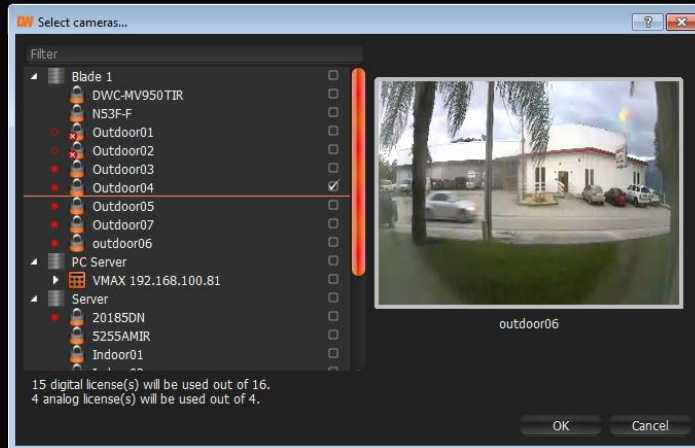
180° View with
PTZ Control

360° View with
PTZ Control



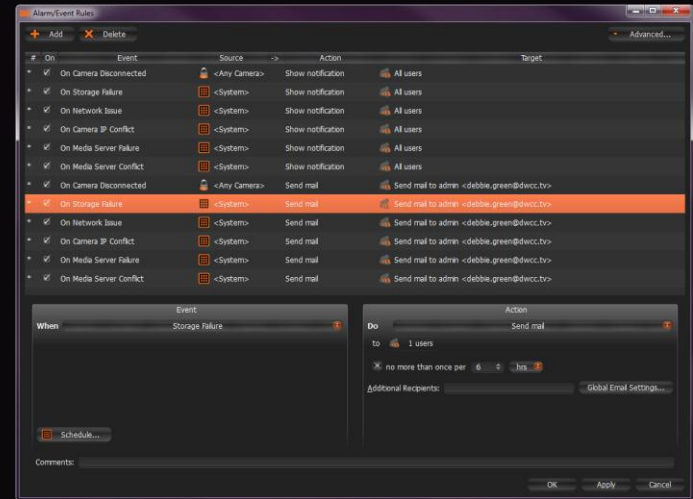
Camera Settings – Recording

- Select recording mode + FPS
- Setup multiple recording styles based on time
- Copy settings to multiple cameras



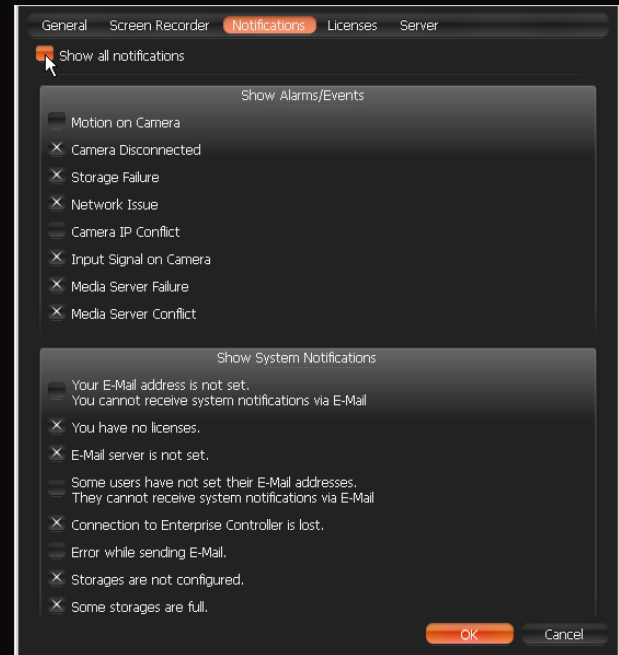
Adding or Modifying a Rule

- Click '+Add' to add a new rule
- Double-click on a rule to modify
- Click 'Advanced' for additional features and schedule
- Actions:
 - E-mail with JPEG and video link
 - Popup notification
 - Voice notification
 - Camera Output Control



Enabling Popup Notifications

- › Chose which actions detected by the DW Spectrum server will appear as a pop-up notification



Configuring Media Server's Storage

- Right-click on a media server
- Select Server Settings

Protocol: Windows Network Shared Resource

URL: \\computer\share

OK Cancel

Name: Server

IP Address: 10.0.2.188

Port: 7002





Panic mode: Off

Storages		
In Use	Path	Capacity
<input type="checkbox"/>	C:/DW Spectrum Media	111.7 GiB
<input checked="" type="checkbox"/>	D:/DW Spectrum Media	1863 GiB

[Add external Storage...](#)

OK Cancel

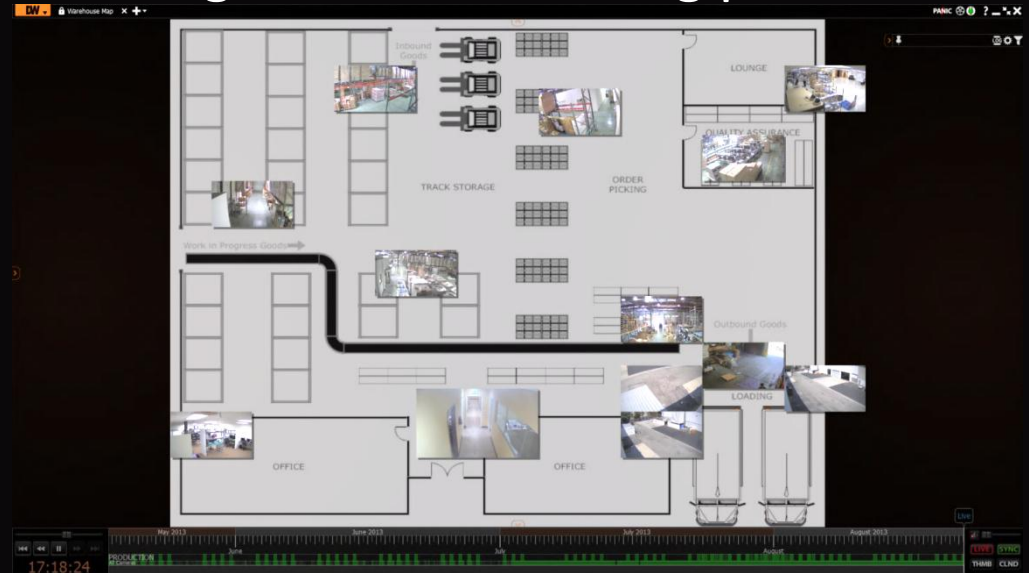
PTZ Virtual Controller

- › Press the PTZ button on the camera's menu
- › use  to open PTZ Control
- › Click-n'-hold the center  and move mouse to change position
- › use  and  to zoom
- › Click once to move to a position
- › Draw a rectangle to zoom
- › Double-click to zoom out



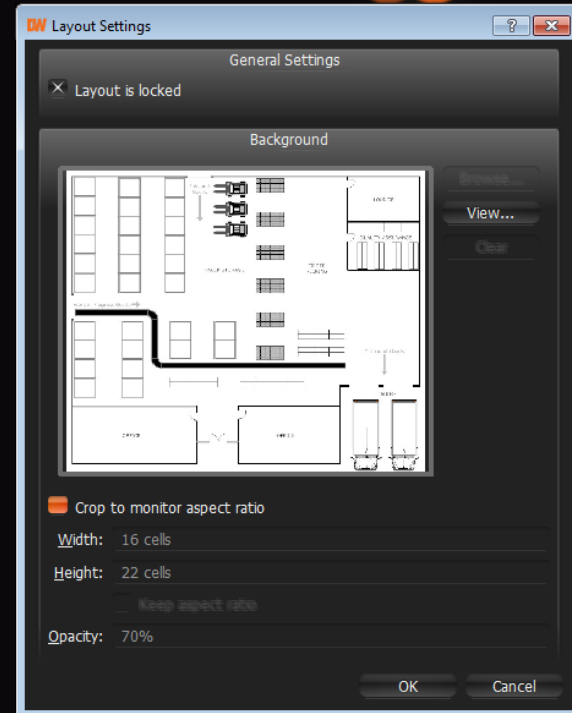
E-Mapping

- Layout multiple cameras over a CAD drawing or map
- Easily monitor cameras according to their mounting position in a building
- Visually view event triggers



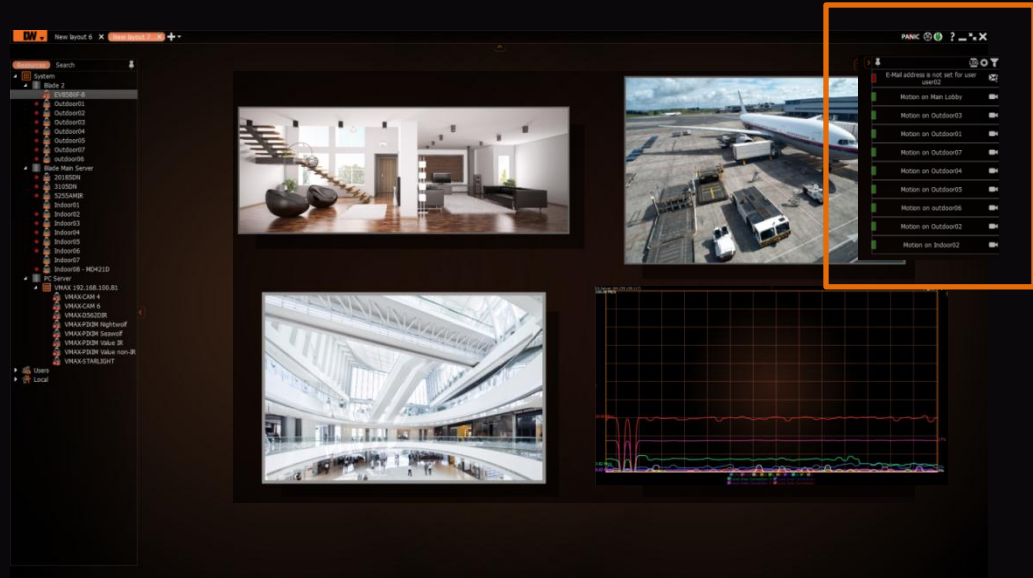
E-Mapping Setup

- › Upload image (picture files only)
- › Set the number of cells allocated for the map.
 - › 1 Cell = 1 camera
 - › Up to 64 cells width
 - › Up to 64 cells height
- › Select the opacity level of the image.



Instant Notifications

- Instant pop-up notification windows on camera loss, IP conflict, and configuration recommendations such as email setup and more.



Event Log Reports & Search

- Advanced Log Report for all events including unique filter to adjust the report to every need.

The screenshot displays the Digital Watchdog V2.0 Event Log interface. On the left, a tree view shows the system hierarchy: System > CA Server > AND06035E > BLDG1, BLDG2, BLDG3, BLDG4, BLDG_PTZ, BLDG_SIDE1, BLDG_SIDE2, Backdoor, DVC MD421D, WIHNET Co., Ltd. - Cebo-... > Server > Server > Temp_HK > Users > Local. The main window shows an event log for Thursday, July 11, 2013, with 72 events found. The log is filtered by 'Any event' and 'Any camera'. The table below shows the details of the events:

Event Time	Event	Source	Action	Target	Description
7/11/2013 6:53:15 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	RTP packet loss detected. Prev seq.=35581 next seq.=38642
7/11/2013 6:53:12 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed
7/11/2013 6:46:12 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	RTP packet loss detected. Prev seq.=44445 next seq.=44512
7/11/2013 6:46:08 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed
7/11/2013 6:38:42 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	RTP packet loss detected. Prev seq.=28922 next seq.=28924
7/11/2013 6:28:40 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed
7/11/2013 6:20:16 AM	Media Server Failure	CA Server	Show notification	All users	Server started after crash.
7/11/2013 5:51:48 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed
7/11/2013 5:51:43 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed
7/11/2013 5:46:30 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	No video frame received during last 10 seconds.
7/11/2013 5:46:28 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	RTP packet loss detected. Prev seq.=58872 next seq.=59062
7/11/2013 5:46:19 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed
7/11/2013 5:26:51 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed
7/11/2013 4:47:46 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	RTP packet loss detected. Prev seq.=19315 next seq.=19464
7/11/2013 4:47:37 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed
7/11/2013 4:05:28 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	RTP packet loss detected. Prev seq.=57031 next seq.=57094
7/11/2013 4:05:22 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed
7/11/2013 3:26:03 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	No video frame received during last 10 seconds.
7/11/2013 3:26:02 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	RTP packet loss detected. Prev seq.=27673 next seq.=27824
7/11/2013 3:19:53 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed
7/11/2013 3:19:55 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	RTP packet loss detected. Prev seq.=21965 next seq.=21967
7/11/2013 3:10:52 AM	Network Issue	WIHNET Co., Ltd. - Cebo-PM205V2	Show notification	All users	Connection to camera was unexpectedly closed

Camera Lists

- View all cameras and servers on your network in a single convenient table
- Monitor connection status and recording status
- View camera manufacturer, IP and MAC Addresses, and current firmware

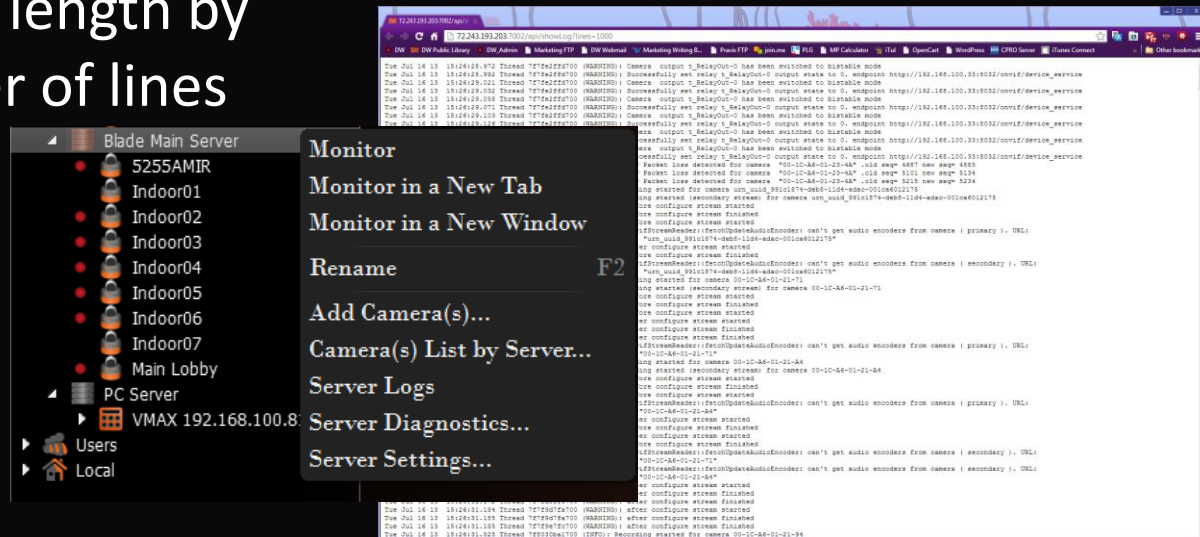
Cameras list - 28 camera(s) found

Search string: |

Recording	Name	Driver	Model	Firmware	ID/Name	ID/MAC	Server
Motion + Lo-Res	Indoor02	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.126	um_uuid_991c1874-deb8-11d4-adac-001ca6012175	Blade Main Server (72.243.193.203)
Not recording	VMAX-PDXIM Nightwolf	VMAX	DW-VFB		192.168.100.81	3C-04-BF-00-1A-D5_8	PC Server (192.168.100.200)
Continuous	Indoor06	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.11	00-1C-A6-01-21-71	Blade Main Server (72.243.193.203)
Motion only	5255AMIR	ArecontVision	5255AMIR	65209	192.168.100.226	00-1A-07-05-A6-16	Blade Main Server (72.243.193.203)
Not recording	VMAX-STARLIGHT	VMAX	DW-VFB		192.168.100.81	3C-04-BF-00-1A-D5_7	PC Server (192.168.100.200)
Continuous	Main Lobby	OnvDevice	DWC-MD421D	1.1.1.8	192.168.100.33	00-1C-A6-01-21-94	Blade Main Server (72.243.193.203)
Motion + Lo-Res	Outdoor07	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.122	00-1C-A6-01-23-3D	Blade 2 (192.168.100.124)
Motion + Lo-Res	Outdoor02	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.123	00-1C-A6-01-23-40	Blade 2 (192.168.100.124)
Not recording	VMAX-CAM 6	VMAX	DW-VFB		192.168.100.81	3C-04-BF-00-1A-D5_6	PC Server (192.168.100.200)
Motion only	Indoor01	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.34	00-1C-A6-01-21-3D	Blade Main Server (72.243.193.203)
Not recording	EV8580F-8	OnvDevice	EV8580F-8	1.1.5	192.168.100.149	um_uuid_c14f0730-9631-11df-981c-00196c605fd1	Blade 2 (192.168.100.124)
Continuous	Indoor04	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.48	00-1C-A6-01-21-44	Blade Main Server (72.243.193.203)
Motion + Lo-Res	Outdoor04	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.119	00-1C-A6-01-21-7C	Blade 2 (192.168.100.124)
Not recording	VMAX-PDXIM Seawolf	VMAX	DW-VFB		192.168.100.81	3C-04-BF-00-1A-D5_5	PC Server (192.168.100.200)
Not recording	Indoor07	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.111	00-1C-A6-01-21-6F	Blade Main Server (72.243.193.203)
Motion + Lo-Res	Outdoor03	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.125	00-1C-A6-01-21-78	Blade 2 (192.168.100.124)
Motion + Lo-Res	Indoor03	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.148	00-1C-A6-01-23-3B	Blade Main Server (72.243.193.203)
Motion + Lo-Res	3105DN	ArecontVision	3105DN	65144	192.168.100.15	00-1A-07-07-A8-1C	Blade 2 (192.168.100.124)
Not recording	VMAX-CAM 4	VMAX	DW-VFB		192.168.100.81	3C-04-BF-00-1A-D5_4	PC Server (192.168.100.200)
Motion + Lo-Res	Indoor05	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.65	00-1C-A6-01-23-4A	Blade Main Server (72.243.193.203)
Motion + Lo-Res	Outdoor05	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.121	00-1C-A6-01-22-A7	Blade 2 (192.168.100.124)
Motion + Lo-Res	outdoor06	OnvDevice	DWC-MPA20M	1.1.1.8	192.168.100.129	00-1C-A6-01-22-A8	Blade 2 (192.168.100.124)

Server Logs

- Remotely access the system's Media Server logs
- Log report opens in web browser
- Adjust the report's length by limiting the number of lines displayed



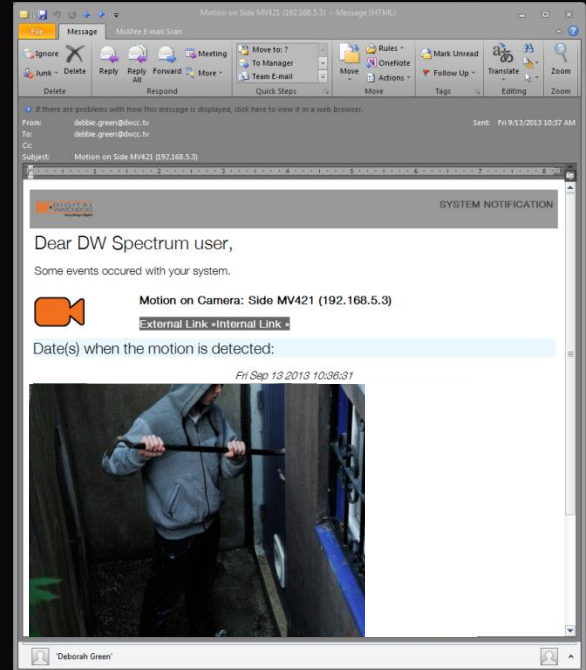
Video Adjustment

- Doesn't alter archived video
- Adjust white and black levels
- Optimal details in very bright scenes
- Optimal details in very dark scenes



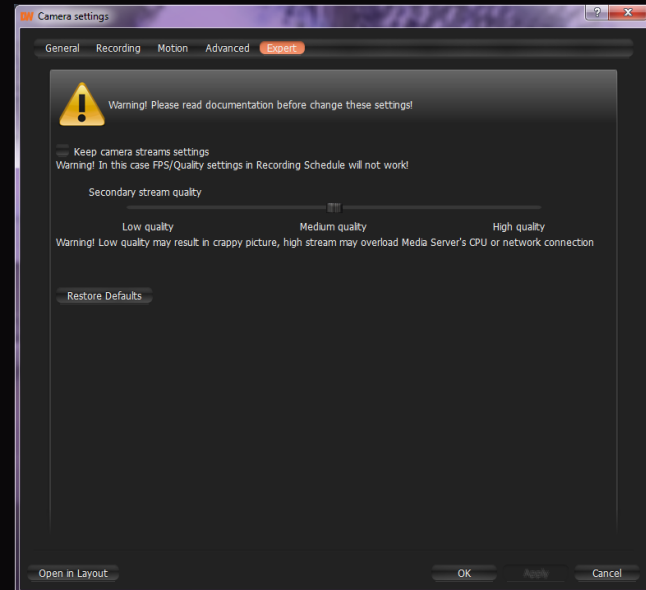
E-mail Notifications with Link

- E-mail notifications for multiple events and actions
- Image attached of the event
- Link to the event's playback video available for local or remote connection to the server



Manual Stream Control

- › Bypass system's auto stream adjustment
- › Manually setup the second stream's video quality.
- › Please read the DW Spectrum's documentation before altering the stream's settings manually

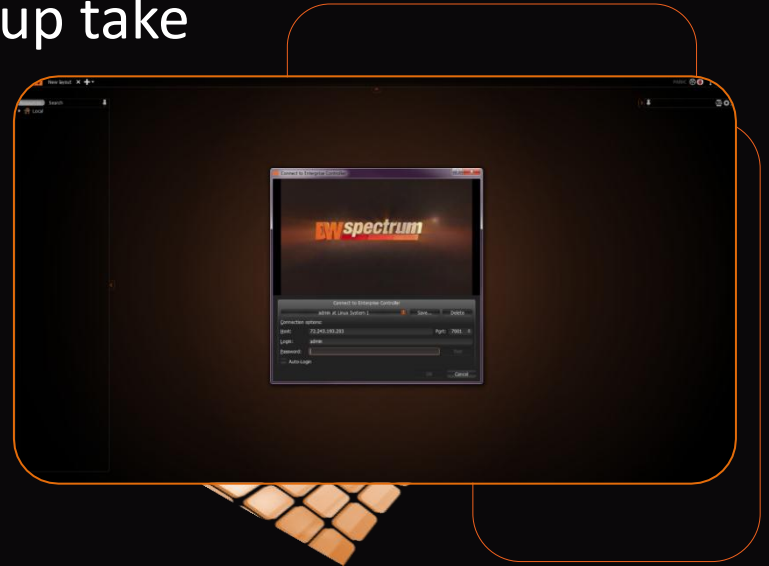




MAIN FEATURES REVIEW

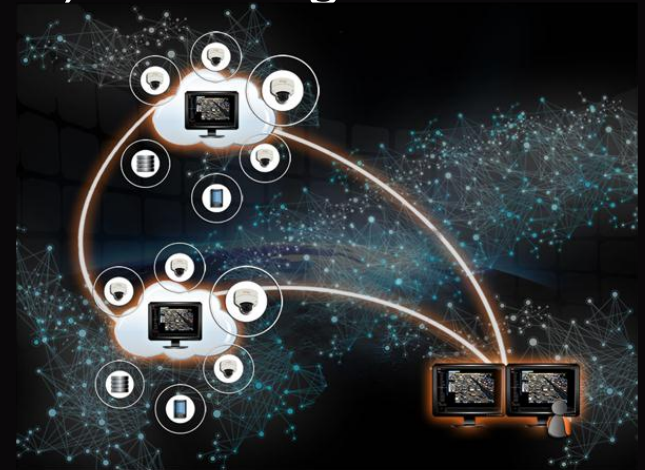
Download → Setup

- › The complete software file is smaller than 100MB, making download & installation setup take less than 2 minutes.



Truly Automatic Auto Discovery

- › When DW Spectrum is launched, the system will instantly and automatically map-out your network, detecting all supported devices available on the network.



AUTO DEVICE DISCOVERY

System Search and Management

- › Smart search capabilities with automatic and instant results display makes system search and organization easy and quick.



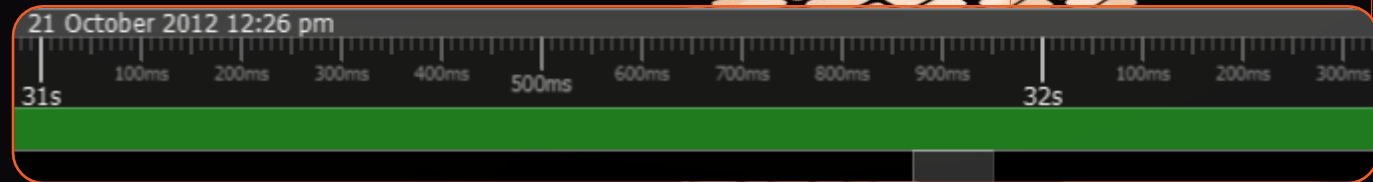
Customizable Layouts

- DW Spectrum offers complete layout freedom, with no pre-set layout or limitations.
- Customize layouts any way you want & create unlimited layouts using easy settings.



Adaptive Timeline

- › Seamless transition from live to playback video. Playback software is built into the client, eliminating the need for additional external software to playback video files.



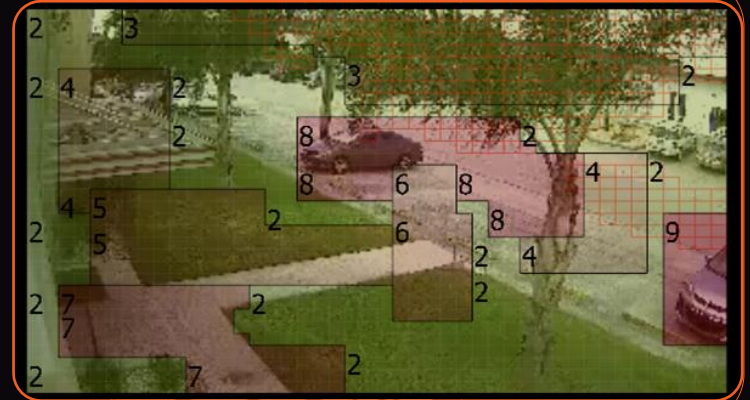
Dual Stream Recording

- › Dual stream recording
- › Motion + Low res always recording
- › Second stream is used for recording continuously at low resolution
- › When motion is detected, the first stream is recorded at high quality, high frame-rate



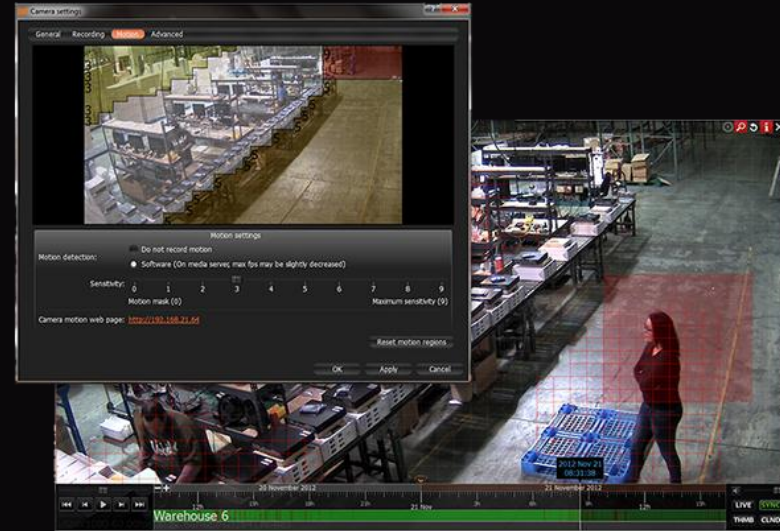
Multi-Level Motion Masking

- › Server-side advanced motion detection and motion search allows to setup multiple levels of motion sensitivity in the same field of view.



Instant Smart Motion Search

- Mark an area in the camera's FoV you want to search
- Results will be highlighted in red instantly in the time bar
- Any motion occurring within the selected area will be marked by red squares



MOTION / SMART SEARCH


Thumbnails Search

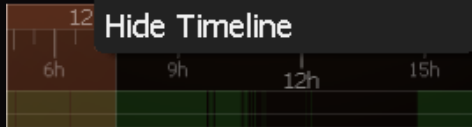
- › Thumbnail search allows you to view key frames across the time bar
- › View key changes in a scene without leaving Live display
- › Use the Thumbnails view to navigate through recorded data



Preview Search

- Review large amount video for sudden changes in smaller, convenient time frames.
- Chronologically narrow down your search

Clear Selection
Export Selected Area...
Export Multi-Video...
Preview Search... 
Show Thumbnails
Show Calendar
Hide Timeline

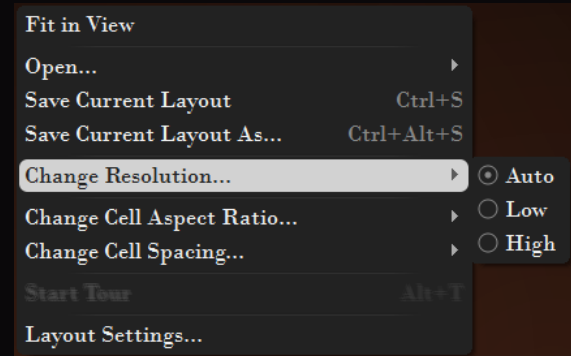


Hardware Accelerator

- › Enhance performance by using GPU.
- › Intel[®] Quick Sync technology must be supported
- › 2 video adapters recommended:
 - › Internal Intel HD Graphics, Intel[®] Core i3, i5 or i7 and Intel[®] Quick Sync
 - › External Graphic Card (ATI or NVidia).
- › Video adapters must be plugged in the monitor.

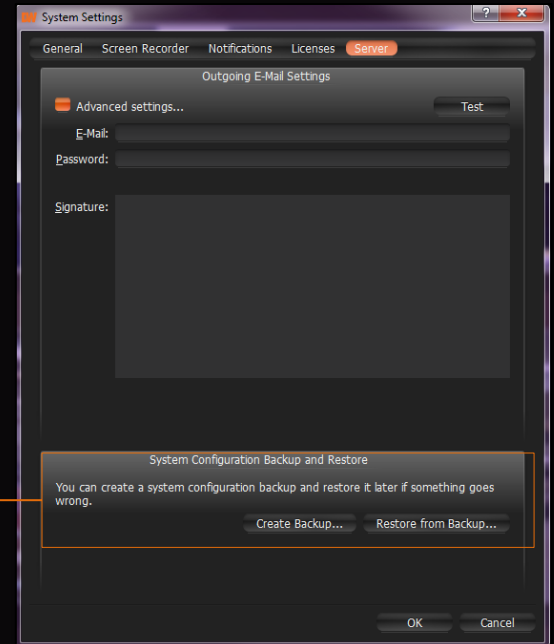
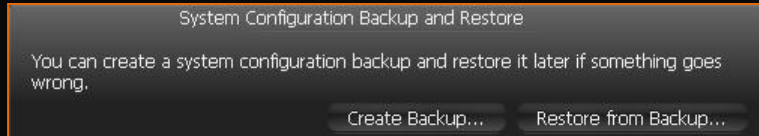
RADASS

- › Significant CPU and network bandwidth savings
- › If there is not enough bandwidth
- › Camera is automatically switched to Low Resolution mode
- › Choose resolution manually
- › Note: this feature requires support of camera dual-streaming



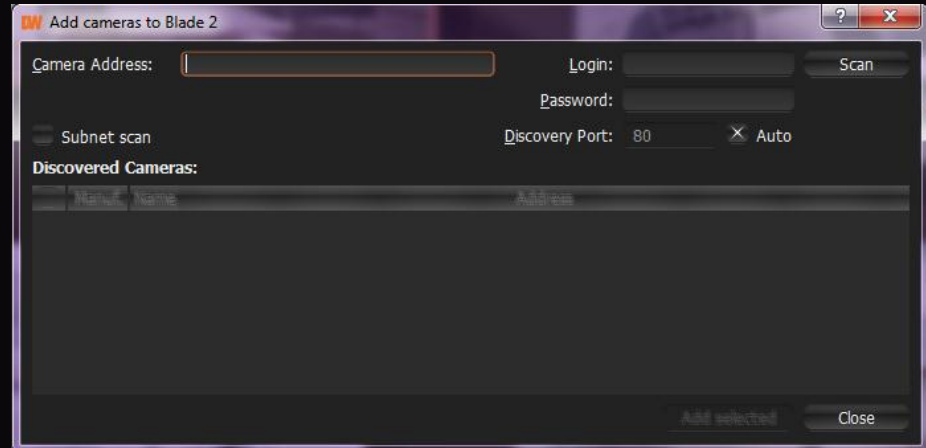
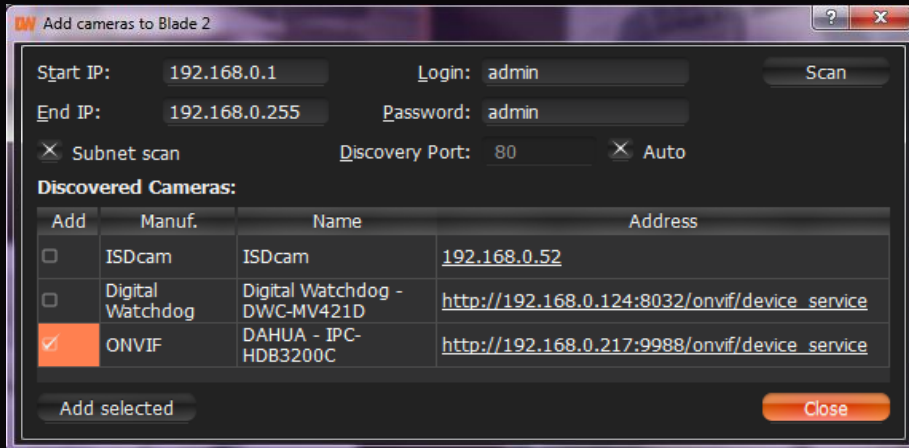
Import/Export Settings

- › Import and Export settings between multiple server for quick setup and configuration



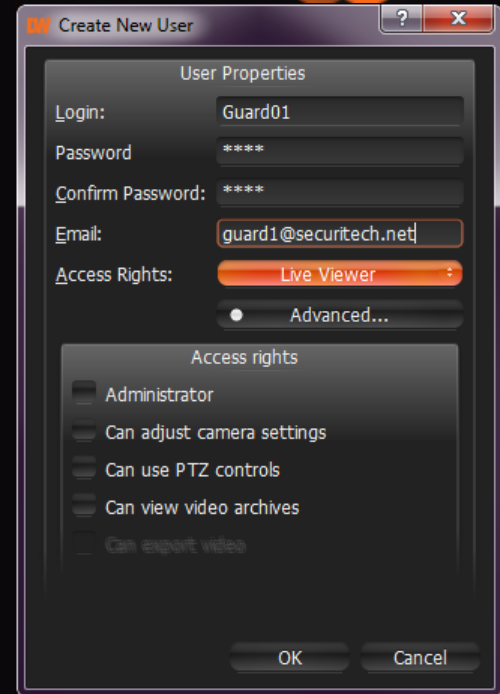
Manual Camera Registration

- › Manually add cameras to your server
- › Use IP Address, RTSP or URL
- › Scan an entire subnet



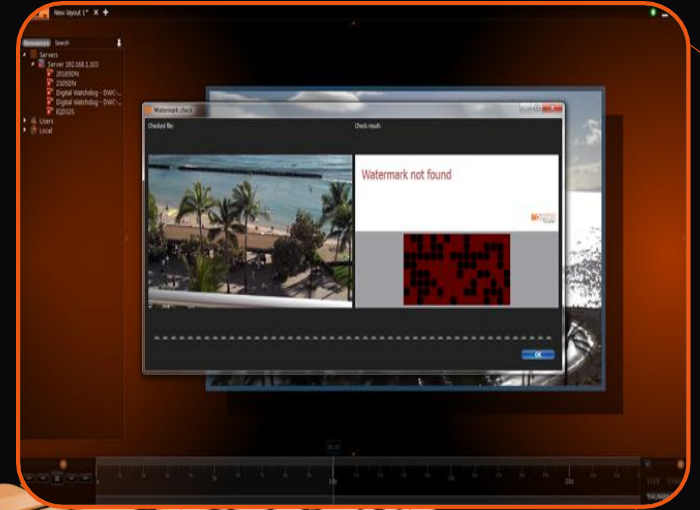
Advanced User Management

- › Advanced User Setup with multiple access levels
- › Unlimited number of users
- › Assign e-mails for notifications
- › Manage access rights from pre-defined roles
- › Manually select access rights under advanced options



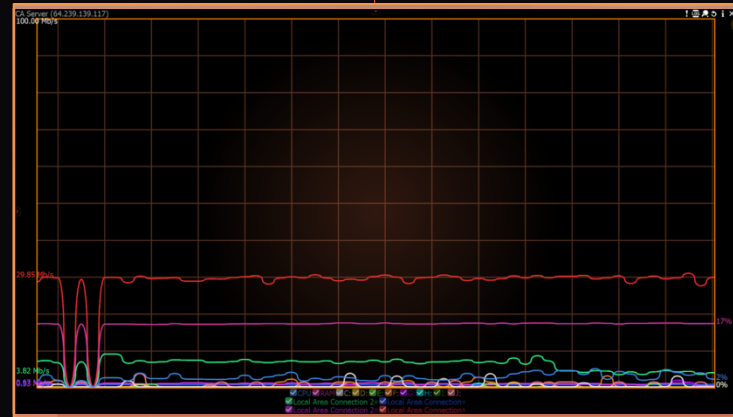
Watermark Authentication

- › Verifies the authenticity and integrity of the recorded footage
- › Detecting any manipulations, edits or cuts made to the file from the minute it was exported



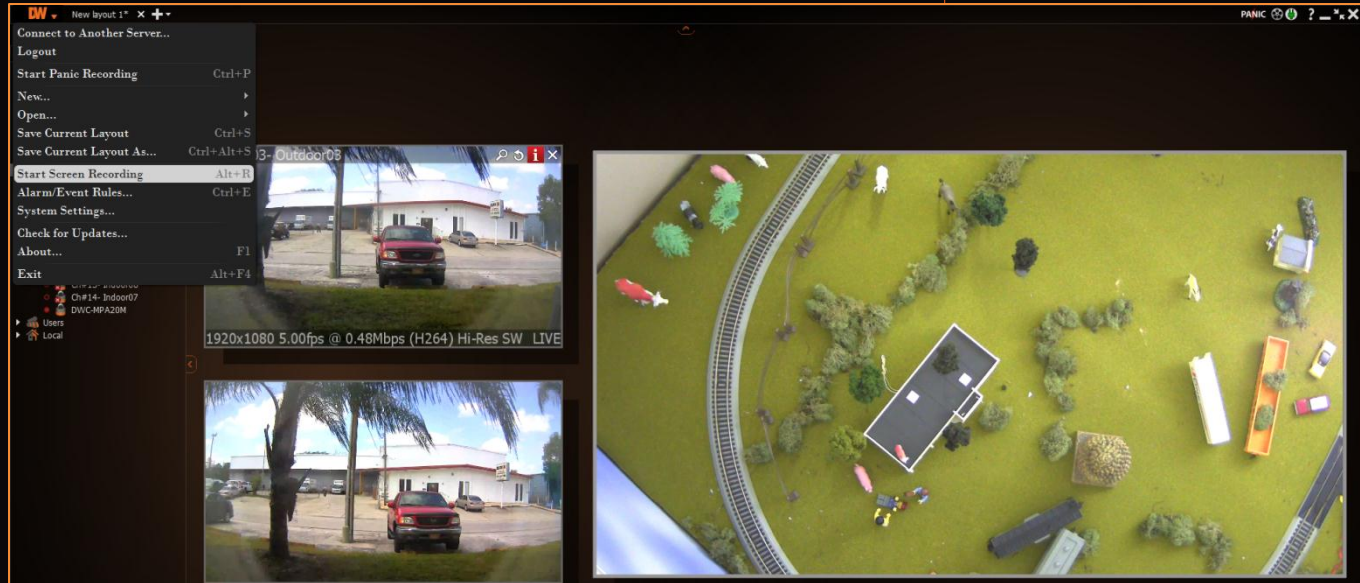
Server Health Monitoring

- › Real time visual depiction of the Blackjack's
 - › CPU
 - › RAM
 - › HDD instant data writing
 - › Network speed between Server & Cameras
 - › Network speed between Server & Client



Full Screen Recording

- › For optimal training, tech support and troubleshooting



Panic Recording

- Instantly adjust the recording on your cameras to panic mode with visual color distinction
- Camera must have an active license for panic recording



Unsynchronized Playback View

Main Features Review



View the same camera or multiple cameras in the same display, at multiple time stamps simultaneously



ANALOG DVR INTEGRATION

VMAX Analog DVR Integration

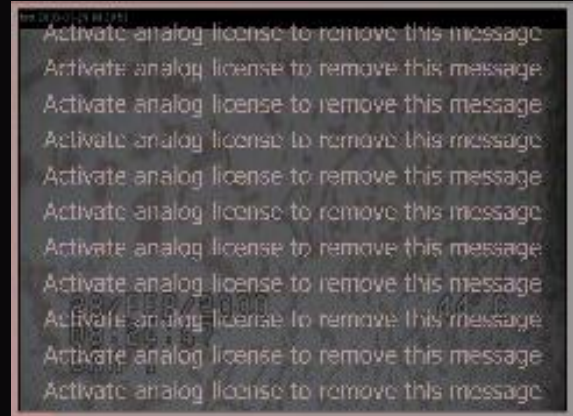
Analog
Integration

- › Blackjack Cube
- › VMAX Flex
- › VMAX480
- › VMAX960H
- › VMAX960H Flex
- › Live + Playback (as of V1.6)
- › Turning the VMAX Series to the market's most cost effective encoders with local storage

COMPLETE
INTEGRATION WITH
VMAX
LINE OF RECORDERS
(CUBE ONLY)

Analog License Activation

- Regular Licenses should be purchased and used.
- Analog Licenses view streams from analog cameras.
- Digital License will be used for analog camera only if no Analog Licenses are left



Setting up an Analog Camera

- › Open Camera Settings > General
- › Use an analog license to view this camera
- › Supported Analog Cameras:
 - › Analog Cameras plugged into an encoder (Setup recording + Motion Detection)
 - › Analog Cameras plugged into a recorder (Recorded somewhere else)

The screenshot shows a camera configuration interface. At the top, it displays the camera's name, model, and firmware. Below this, there is a 'Licensing' section with a radio button selected for 'Use an analog license to view this camera'. A 'Get More Licenses...' button is visible to the right. At the bottom, it shows the current license usage: 12 digital licenses out of 21 and 9 analog licenses out of 9.

Name: FW3471-PS-E-1
Model: FW3471-PS-E
Firmware: 4.18-B1-d4

Licensing

Use an analog license to view this camera [Get More Licenses...](#)

12 digital license(s) are used out of 21.
9 analog license(s) are used out of 9.