Video Management Anywhere, Anytime.



Complete Scalable Video Management



Apps for every operating system. Cloud-enabled.

DW Spectrum^{*} IPVMS supports all major operating systems with the ability to link any system to DW Cloud[™] for fast, reliable remote access.

Automated. Intuitive. Built for Users.

Installs in seconds configures in minutes. Instantly usable for novices, operators, integrators, or developers.

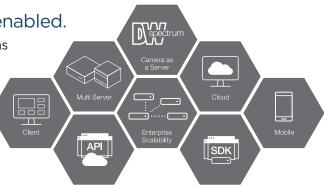
Auto-discover devices from hundreds

of manufacturers.

Discover and manage thousands of compatible video, audio and I/O devices. Set up a new system or replace any existing VMS in minutes.

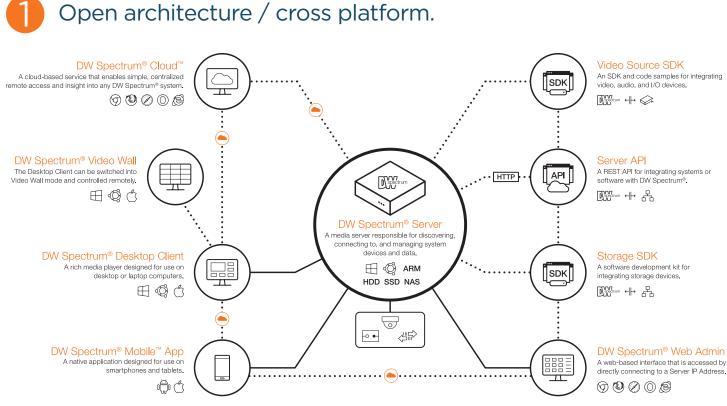
Open for developers. Integrate anything.

With an open Restful API, a suite of SDK's, and integrator-friendly tools like a built-in API generator DW Spectrum^{*} IPVMS users can quickly integrate any 3rd party device or system.





DW Spectrum[®] IPVMS is an endlessly customizable IP Video Management platform that gives users the ability to create tailored networked video solutions for any type of project, for use by anyone, on any device.



Open Architecture

- Now with DW Cloud[™], connect from anywhere to share access instantly.
- Now with even more device support.
- Support of thousands of devices including cameras, encoders and I/O modules from leading manufacturers.
- Support cameras at every resolution.
- Built-in API allowing managed video to be accessed and reviewed by any willing 3rd party device.

Interface is dramatically easier to use.



Cross-Platform

- DW Spectrum's recording engine runs on Windows[®] and Linux[®] Operating Systems.
- Client software is Windows, Linux, or Mac[®] compatible.
- Mobile apps are iOS[®] and Android[®] compatible.
- Web client is compatible with Google Chrome[®], Firefox[®], Safari[®] and Internet Explorer[®].

Highly refined GUI

Viewing Video

- Seamless transitions.
- Customizable camera layouts.
- Zoom, create regions of interest and enhance images.
- Searching Video
 - Fastest video search in the industry.
- Users can bookmark specific video segments.
- Downloading Video
- Multiple download options.

Storage backup.

System Programming

- Intelligent high definition multi-streaming video management with no user programming required.
- Server and system programming from a single interface. Advanced Features
- Interactive mapping, alarms, events/notifications, universal fisheye de-warping from a single interface.
- External alarm events can be delivered right from the IP camera or via network I/O modules.



Advance features are standard.

- Custom User Role Management: create custom roles and share groups of hardware and layouts.
- Multi-Server and Centralized Management
- Health Monitor: provides real-time insight of camera and server status.
- Video Storage Analytic: insight into storage requirements each camera is using in real-time and forecasts the impact of additional storage.
- Minimize Video Recording Loss: includes failover to protect video recordings from hardware failures and network interruptions.
- LDAP/Active Directory integration for ecosystem-wide user management is standard.
- Video Wall users can create and remotely manage remote monitors with just a few clicks.



Easy Configuration



Video Wall Control

Cloud connectivity

Use the power of DW Cloud to access, manage, and control your surveillance system from anywhere. With cloud-based flexibility, ensure secure, remote connectivity for real-time surveillance without geographical limitations.

Future-proof infrastructure

Designed to grow with your needs, DW Spectrum features a hive architecture that ensures your surveillance network is ready to expand, accommodating increasing data and device requirements seamlessly.

Al-driven solution.

Bring any camera or IoT device from a constant-growing database of 3rd party technology partners to ensure a versatile and flexible surveillance system that meets your unique needs.

You choose your devices.

Enhance your surveillance system and get more from your investment with a solution that helps you make datadriven decisions in all aspects of your business.

Server	Client	Cloud	Mobile
A media server responsible for discovering, connecting to, and managing system devices and data.	A rich media player with a flexible GRID interface designed for connection to and managing DW Spectrum systems.	A cloud-based service that enables simple, centralized remote access and insight into any DW Spectrum system.	A mobile app designed for viewing DW Spectrum system video and events while on the go.
SERVER OS SUPPORT:	DESKTOP OS SUPPORT:	SUPPORTED BROWSERS:	MOBILE OS SUPPORT:
6	📢 🥝	O chromeImage: FirefoxC tageImage: Safari	Counciliated on the App Store Google Play
		O Opera	



Cloud Connect









Discover. Manage. Control. Integrate.

The DW Spectrum IPVMS media server application is a lightweight, powerful media server responsible for discovering, connecting to, and managing DW Spectrum IPVMS system devices and data. The application is pre-loaded on all Blackjack[®] servers.





Designed and Commissioned in the U.S.A.



Pre-loaded Blackjack servers

SUPPORTED OPERATING SYSTEM:

Windows®



	DISCOVER		MANAGE		VIEW		INTEGRATE
	IP Cameras (ONVIF, Custom)		IP Cameras / NVRs / DVRs		Live Video (adaptive)	↓↓ 	HTTP Generic Events
<u>R</u>	RTSP / HTTP Streams	< ∱ >	Advanced Routing	P	Recorded Video (adaptive)	<u>^</u> ↑	HTTP Request-as-an-Action
Þ	I/O Devices	Q	Storage (HDD/NAS/DAS)		Server Health		Server API
	Samba NAS	€?	Events and Rules Engine		Log Files	(SDK)	Storage SDK
	Virtual Camera		Failover	E IQ	Audit Trail		Video Source SDK
H.265	H.265 on ONVIF Cameras	~Ç~	Transcoding		Storage Status		Any Device or System
	Webcam Support	P	Failover on Storage Failure	\sim	Dual-Stream RTSP	R	C2P Integration
	Camera Replacement	\sim	System Update		Layout-as-an-Action		Metadata SDK
			Archive Encryption		Health Monitoring Dashboard	ß	Plugins
			ZFT Support		Intel Quick Sync Video		
			Remote Log Download	<l></l>	SSL/TLS Connections		
			ONVIF Profile Selection	మే	Session-Based Authentication		





SCALABILITY

OF CLIENTS PER SERVER: THOUSANDS # OF CLIENTS PER SYSTEM: UNLIMITED # OF STREAMS PER SERVER: 128

OF SERVERS IN A SERVER SYSTEM: 10*

* 10 is recommended maximum. Depends on server configuration and network environment.

Contact support for more info.

SUPPORTED OPERATING SYSTEMS

WINDOWS



i. Windows 10 ii. Windows Server 2012

iii. Windows Server 2012 R2iv. Windows Server 2016v. Windows Server 2019vi. Windows Server 2022

LINUX

i. Ubuntu 18.04 LTS "Bionic Beaver" ii. Ubuntu 20.04 LTS: "Focal Fossa" iii. Ubuntu 22.04 LTS: "Focal Fossa"

BLACKJACK[®] SERVER WEB ADMIN



SUPPORTED MEDIA STREAMING

LIVE STREAMS (Viewed in DW Spectrum® Desktop)

VIDEO: H.265 H.264 MJPEG

AUDIO: AAC PCM (Mu-Law, A-law) g726 MP3

LIVE STREAMS (Available to pull from DW Spectrum* IPVMS media server to $3^{\rm rd}$ party)

VIDEO: H.265 H.264 MJPEG WebM

AUDIO: AAC PCM (Mu-Law, A-law) g726 MP3

PROTOCOLS: RTSP MJPEG WebM HLS

AUTOMATIC CAMERA FAILOVER: ~1 min. configurable

TRANSCODING: Supported (for web, client, mobile, API)

DATABASE: SQLITE + proprietary archive index

SINGLE SIGN-ON: LDAP/active directory

SECURITY: OPEN SSL, SALTED MD5 HASH, TLS/SSL, HTTPS

DEV TOOLS: Server API (HTTP), video source SDK, storage SDK NAS: ISCSI



Dramatically easier to use with almost immediate video load.

A rich media player with a flexible grid interface, unmatched speed and responsiveness, instant event notifications, an embedded browser, and a user experience, unlike any other video management software.



Video Wall users can create and remotely manage remote monitors with just a few clicks.

One App. Many Features.

DW Spectrum[®] IPVMS client combines performance, ease-of-use, and a 'let the user decide how best to use the software' approach into a single cross-platform lightweight app capable of running any server.

SUPPORTED OPERATING SYSTEM: Windows					Linux*	6	MacOS
	USABILITY		MEDIA		CONFIGURATION		SEARCH
o Do	Drag and Drop		IP Cameras / Encoders / DVRs		Events and Rules Engine	Ø.	Smart Motion Search
\triangle	Consolidated Notifications		RTSP / HTTP Streams	Å.	User Management		Keyword Search
Q	Flex Timeline	Ą	I/O Devices	50	IP Cameras / Encoders		Calendar Search
	Customizable Layouts	www	Web Pages		Server Management		Time-Slice Search
and a	Digital Maps		Videos	Æ	I/O Device Management	$\boxed{\bullet}$	Bookmarks
	Adaptive Scaling		Images	<u> P</u>	Storage Management	IIQ	Audit Trail
	Minimum Grid Size on Layouts	R	Secure Export	₩-\$	Add Device		
666	Resource Panel		Chromium Browser In-Client	\triangleright	Custom Watermark over Video		
R	Launch Desktop Client with CLI	000	Native Support for MEGApix® IVA and IVA+		Video Wall Failover		
	Notifications Panel		Fisheye Dewarping Precision	\gg	Independent Desktop Client Updates		
	Two-Factor Authentication		Video Preview Thumbnail	ည်	Session-Based and Multi- Factor Authentication		
	OS SSL / TLS for Internet Connections		Audio-Video Mapping		Restore Previous Session		
	Client Javascript API	go	Custom Resource Groups		ONVIF Profile Selection		
	Cloud Layouts		Web Page Proxy				
			Remote Log Download				



MAXIMUM # OF GRID ITEMS

64 BIT OS: 64 Items (e.g. 64 live streams) 32 BIT OS: 24 Items (e.g. 24 live streams)

SUPPORTED OPERATING SYSTEMS

WINDOWS

- i. Windows 10 ii. Windows Server 2012 iii. Windows Server 2012 R2 iv. Windows Server 2016 v. Windows Server 2019 vi. Windows Server 2022

LINUX



i. Ubuntu 18.04 LTS "Bionic Beaver" ii. Ubuntu 20.04 LTS: "Focal Fossa" iii. Ubuntu 22.04 LTS: "Focal Fossa"

MAC



- i. macOS 10.15 "Catalina"
- ii. macOS 11.0, 11.1, 11.2 "Big Sur"
- iii. macOS 12 "Monterey"
- iv. macOS 13 "Monterey"

HARDWARE REQUIREMENTS

CLOUD CONNECT

HARD DRIVE: HDD RAM: 2GB CPU: Quad-Core Intel 7 CPU or higher

GRAPHICS: Intel HD Graphics 3000 w/ Open GL2.1 support **NETWORKING: 1GB NIC**

PERFORMANCE SPECS

HARD DRIVE: Performance SSD RAM: 16 GB RAM CPU: Intel Core i5 **GRAPHICS: NVIDIA GeForce GTX 1050** (Open GL2.1 support is required) **NETWORKING: 1GB NIC**

DW SPECTRUM[®] CLIENT APPLICATION



SUPPORTED MEDIA PLAYBACK ON GRID

LIVE STREAMS

CODECS: H.265 H.264 MJPEG

OFFLINE MEDIA

VIDEOS: AVI MKV MP4 MOV TS M2TS MPEG MPG FLV WMV 3GP IMAGES: JPG PNG GIF BMP TIFF

CONNECTED DEVICES

I/O DEVICES: Status and triggers
SERVERS: Server health monitoring

BROWSER

WEB PAGES: Responsive websites / progressive web apps

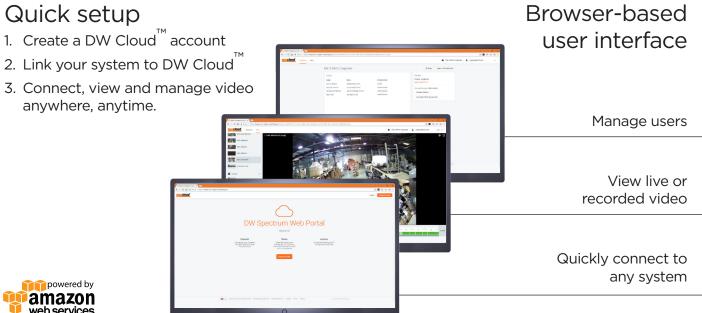
- MEDIA PLAYER: View, edit, and export offline videos and images
- CONNECTED: View, configure, and manage any DW Spectrum[®] IPVMS System
- VIDEO WALL: Put DW Spectrum[®] Desktop into Video Wall mode to control remotely
- SHOWREEL: Fully customizable timed viewing tour of any GRID media





DW Cloud[™] Simplifies Everything.

The DW Cloud[™] service makes connecting to and managing DW Spectrum[®] IPVMS system(s) simple. Set up in seconds. Connect from anywhere. Share with an unlimited number of users.





Connect. View. Manage. Scale.

DW Cloud[™] is a public cloud application hosted on Amazon AWS that enables simple remote connectivity, streaming and management of one or an unlimited number of DW Spectrum' IPVMS systems.

SUPPORTED BROWSERS:	chrome Chrome	🜔 Opera 🛛 🕘 Firefo	ox 💋 Safari
CONNECT	VIEW	MANAGE	SCALABILITY / INTEGRATION
• NAT Traversal	Live Video (adaptive)	Server Settings	Unlimited # of Systems
Data Proxy via AWS	Recorded Video (adaptive)	User Settings	Unlimited # of Users
Simple Credentials	Camera Details	Cloud Connections	Unlimited # of Devices
Encrypted Communications	Keyword Search	Email Notifications	Cloud API
Wi/LAN/WAN	Calendar Search	Cloud System Merge	
4G / LTE / Data	Flex Timeline	Health Monitoring	
		License Management	
		Camera Settings	



SCALABILITY

OF CONNECTED SYSTEMS: UNLIMITED # OF USERS: UNLIMITED

DW CLOUD[™] SERVICES

CLOUD CONNECT

?

Connect any DW Spectrum^{*} IPVMS System to DW Cloud[™] for simple remote connectivity from anywhere using NAT Traversal and Cloud Data Proxy technology.

Add an unlimited number of users to a single DW Cloud[™] system.

Share access to your DW Cloud[™] system in seconds using only email addresses.

Create custom roles to simply and quickly assign access to multiple DW Cloud[™] connected systems.

DEVELOPER TOOLS

CLOUD API: AVAILABLE UPON REQUEST

DW CLOUD[™] BROWSER & DEVICES INTERFACE



DW CLOUD[™] FEATURES

CONNECTIVITY

NAT TRAVERSAL: Connect directly to proxied Blackjack^{*} servers CLOUD DATA PROXY: Connect via AWS cloud proxy service

INTERFACE TABS

SYSTEMS: View connected system tiles

SETTINGS: View users, rename systems, disconnect systems

VIEW: USE DW Cloud™ to view live or recorded video

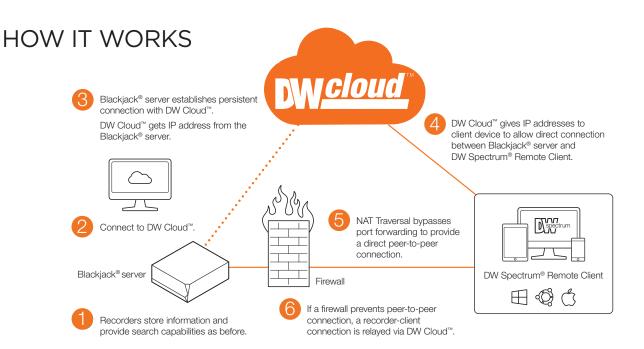
SECURITY

SECURE PASSWORD RECOVERY: Via email

HTTPS: Open SSL, encrypted server/client/cloud connections

EMAIL: (transport layer security)

PASSWORDS: Complex, multi-level hash



Smartphone or tablet. Smart video.

DW Spectrum Mobile for iOS and Android smartphones and tablets provides fast, dependable mobile access to any DW Spectrum IPVMS system.



View, playback and capture still images from a surveillance system on your smartphone and tablet.

Connect. View. Search. Control.

DW Spectrum Mobile - with a custom-developed media player - is a low-latency, user-friendly mobile application for iOS and Android devices that allows users to connect to, view, search, and control IP cameras over wifi or data networks.

SUPPORTED OPERATING SYSTEM:









COMPATIBLE DEVICES

SMARTPHONES:

64 Items (e.g. 64 live streams) iOS 24 Items (e.g. 24 live streams)

SUPPORTED OPERATING SYSTEMS

ANDROID



Android 5.0 "Lollipop" Android 6.0 "Marshmallow" Android 7.0, 7.1 "Nougat" Android 8.0, 8.1 "Oreo" Android 9.0 "Pie" Android 10.0 Android 11.0

iOS



iOS 12 iOS 13 iOS 14

iOS 10 iOS 11





DW SPECTRUM MOBILE



SUPPORTED MEDIA PLAYBACK

STREAMS

CODECS: H.265 H.264 HLS

FEATURES

REMOTE CONNECT: Login using local or DW Cloud[™] credentials LIVE THUMBNAILS: Thumbnails refresh in real-time KEYWORD SEARCH: Search for cameras or layouts by name CALENDAR SEARCH: Search by date and time ADVANCED PTZ: Point, pan, zoom, tilt controls, move to presets FISHEYE DEWARPING: Dewarp fisheye images ADAPTIVE SCALING: Hi / low resolution switching transcoding LAYOUTS: View thumbnails of system layouts

QUICK SYSTEM SWITCH: Quickly switch between multiple DW Spectrum IPVMS systems

Company Overview

DW^{*} empowers our customers as the industry-leading single source of value-driven complete solutions for all video surveillance applications.

History

- Founded 1987
- Rapid expansion in the Americas and Asia-Pacific.
- Protecting 60% of the Top 20 global brands.
- 12 consecutive years of strong revenue growth.
- Engineered in the USA and Korea.
- Manufactured in USA, Korea and Vietnam.



Contact us:



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Built for Users.

