To: DW® customers
Date: August 10, 2020
Re: DW Spectrum® IPVMS
v4.1.0.31401 software update

DW Spectrum® IPVMS v4.1.0.31401 software update

New Software Version: v4.1.0.31401
Previous Software Version: v4.0.0.29990
Release Date: 08/2020

CRITICAL COMPATIBILITY NOTICE:

- All users must update to v20.1 or higher Mobile release to be able to connect to a v4.1 System via the Mobile Client. Mobile Clients v19.6 or earlier will not be able to access Systems running v4.1 or later.

BREAKING CHANGES

- MacOSX 10.11, 10.12, 10.13 support was dropped: Desktop Client will not work on those OS.

NEW FEATURES:

- Push Notifications (requires Mobile Client v20.1 or later):
  - Rules can be created in DW Spectrum to send Push Notifications to mobile devices.
  - Users can receive push notifications from multiple systems and turn on/off notifications for specific systems.
  - To receive Push Notifications, users must be logged into the Cloud in Mobile Client.
  - Users can create custom text for notifications in the Rules Engine via Desktop Client.
- Health Monitoring - Available in the Server Web Admin interface and Cloud Portal, Health Monitoring provides administrators detailed information about a System's health, including, but not limited to:
  - Alerts - automatically detected/identified problems with a System.
  - System Info (# of servers, channels, storage located, users, and version).
  - Servers (storage detailed state, CPU usage, NICs state, hardware spec, etc.).
  - Cameras (online/offline state, resolution, fps, quality, firmware version, etc.).
  - Storage Locations (path, server, type, status, read/write rate, size, usage %).
  - Network Interfaces (name, server, state, IP address, I/O rates).
  - Desktop Clients connected to Servers.
- New Embedded Browser - Desktop Client now uses a full-featured embedded Chromium browser (v.77.0.3865) to display web pages on layouts:
  - Download Files on Web-Page - the embedded browser in Desktop Client now supports downloading and saving files.
  - Cameras Web Page in Camera Settings Dialog - camera web pages can now be opened up in the Camera Settings dialog allowing users to configure/access camera web pages inside Desktop Client even when on a different Subnet (i.e., remote connections / outside the LAN / WAN). The Server acts as an HTTP(s) proxy from cameras to Desktop Clients.

- Video Wall Failover - If a Server with Video Wall licenses fails, the video wall continues working for 7 days. After that, it will be blocked with the error message "Not enough licenses".

IMPROVEMENTS

- Best Server Selection (while connecting to a Cloud-connected Multi-Server System):
  - In prior releases, Desktop Client would connect to a random available server via Cloud. Now Cloud connections are routed through the Server with the best uplink.
  - Added the ability for users to specify the preferred Server for connections. The configured Desktop Client will attempt to connect to the preferred Server first, and if it is not reachable, it will detect and connect via the Server with the best uplink.
- 2-way Audio API - Allows third-party web clients to send audio (from client microphone) to and get audio from cameras.
- Added Time Zone option for Virtual Cameras - Time Zone can now be specified for virtual cameras. If "Time Zone" is set to "Auto", then the time zone is defined by metadata or UTC if there's no time zone specified in the file. If set to "Client", the Time Zone is defined by the desktop client.
- Server Side Motion Detection improved - False positives detection introduced to increase accuracy of detected motion events (e.g., turning on/off lights or switching camera day/night mode are now likely to be ignored).
- Additional action parameter placeholders for the "Do HTTP request" action - Placeholders can be added to the HTTP POST request body to be automatically replaced by the corresponding values from Analytics Event parameters. This feature is only applicable to Analytics and Generic Events. Placeholders syntax:
  - {event.cameraId} – replaced by the camera ID (e.g., {{{ad1d1b6c-7013-0049-6fd4-ff15450e4716}}}).
  - {event.cameraName} – replaced by the camera name (e.g., DWC-MB45WiAT).
  - {event.eventType} – replaced by the event type (e.g., stub.objectInTheArea or stub.lineCrossing).
  - {event.eventName} – replaced by the event name (e.g., Object in the area or Line crossing).
  - {event.caption} – replaced by the caption (e.g., "Line crossing - impulse event (caption)").
  - {event.description} – replaced by the description (e.g., "Line crossing - impulse event (description)").
- Improved macOS performance and introduced an experimental setting to limit frame rate and reduce CPU load (see Local Settings -> Advanced).
- Improved cloud connectivity in certain network environments.
- Added the ability to pin the Timeline in fullscreen mode:
  - When the Timeline is pinned it will remain fixed on the screen.
  - If the Timeline is pinned in fullscreen mode and the user leaves fullscreen it will be pinned for all cameras on the layout when the user returns to fullscreen mode.
- Database backups are now categorized into the following types:
  - Created after system merge.
  - Created after updates.
  - Initiated via API.
  - Scheduled.

- "Camera selection" dialog was optimized for large systems.
- Added text search in the "Event Log" dialog.
- "Global Notification Settings" button was removed from the "Show Notification" action.
- Added .mpegts files to the list of supported files in Desktop Client.
- It is now possible to disable port 80 on firewalls completely and use port 443 for the HTTPS connection.
- Added the ability to search by object types in the Notification Panel. <param>: <value> returns object where <param> has <value>. For instance, if there are analytic plugins that recognize t-shirt color, gender, and glasses, it is possible to search for analytic events by "T-Shirt: White", "Gender: Male", "Glasses: True".
- The default playback state of a camera opened from the Notification Panel has changed. Now a camera remains on Pause once opened.
- Users are now imported from LDAP with their Email addresses.
- It is now possible to open multiple instances of the Desktop Client by double-clicking on the desktop shortcut.
- Added information about remaining license deactivations on "License details" and "Confirmation" dialog.

NEW DEVICE SUPPORT
- New Devices Supported with Analog Encoder License:
  - Digital Watchdog DW-EN4K16.
- New PTZ camera support:
  - DWC-MPTZ830XW, DWC-MPTZ336XW.

RECOMMENDED UPGRADE PATH
- From 3.x: Upgrade directly to DW Spectrum 4.1.
- From 2.5 or 2.6: Upgrade to 3.0 then upgrade to 4.1.

  * Always back up the database and license key information before upgrading to newer build or version

  ** Re-index the storage after upgrading to 4.0.

IN-CLIENT UPGRADE INFORMATION
- Build Number: 31401
- Password: 1uis6p

INSTALLATION FILE DOWNLOAD
- https://digital-watchdog.com/productdetail/DW-Spectrum-IPVMS/

OS SUPPORTED – MEDIA SERVER
- TESTED OPERATING SYSTEMS:
  - Windows 7, 8, 8.1, 10 Pro/Enterprise.
  - Windows Server 2008 R2, 2012, 2012 R2, 2016 v1607 and later, 2019.
  - Ubuntu LTS: 16.04, 18.04, 20.04.

- OPERATING SYSTEM NO LONGER SUPPORTED:
    - 32 Bit operating system (both Windows and Ubuntu Linux).
    - Ubuntu 14.04 is no longer supported (Refer to the reference for upgrade).
    - Windows Server 2008 no longer supported (Only 2008 R2 is supported).

OS SUPPORTED – CLIENT

- TESTED OPERATING SYSTEMS:
    - Windows: 7 Home, 7 Standard, 7 Pro, 7 Ultimate, 8/8.1 Standard, 8/8.1 Pro, 8.1 Enterprise, 10 Home/Pro/Enterprise[1].
    - Windows Server 2008 R2, 2012, 2012 R2, 2016 v1607.
    - Ubuntu LTS: 16.04, 18.04, 20.04.
    - MAC OS X 10.14: "Mojave", 10.15 "Catalina".
        [1] For Windows 10, recommend i5/i7 processors with 16GB RAM and video card with 4GB or higher RAM.

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MOBILE APP

- DW® Mobile Plus™.
- DW Spectrum™ App 19.x.x.
- DW Site Viewer™ App for Apple TV.

SUPPORTED BLACKJACK® AND CAAS™ MODELS

- Blackjack Mini™ (FW version 1.0.0_2019.09.27 and higher).
- Blackjack Bolt™.
- Blackjack Cube™, Blackjack® Cube-DL™.
- Blackjack P-Rack™.
- Blackjack E-Rack™.
- Blackjack X-Rack™.
- MEGApix® CaaS DWC-MV84WiACx.
- MEGApix CaaS DWC-PVF5M1TIRCx.
- MEGApix CaaS DWC-MB44LPRCx.
- MEGApix CaaS DWC-MF4Wi4Cx.
- MEGApix CaaS DWC-MF4Wi6Cx .

KNOWN LIMITATIONS

- We support only camera webpages that work in Chrome.
- Health monitoring: all metrics and alerts, including aggregated alerts, are erased after the server has been restarted.
- Linux Server fails to record analytics metadata to NTFS drives.
- Push notifications: sometimes, there are no thumbnails when the associated camera is not recording.
- In rare situations on MacOS, 2-way audio doesn't work after upgrading from 4.0 and previous versions. Reinstall the Desktop client to work around this issue.
- USB camera is duplicated as an old offline camera and a new online camera after upgrading from 4.0 to 4.1.
- "Line Crossing Object Counting" doesn't work for DW TD-9541E3 (camera issue).
- Analytics DB from 4.0 is partially incompatible with the 4.1 release: a search for metadata objects in a selected area will not work for the objects that were recorded before the update to 4.1 and such objects will not be shown on the image.
- Bounding boxes for analytics objects are not shown in the Desktop Client when performing text searches by an object type.

REFERENCE

- Upgrading Ubuntu 14.04 LTS to 16.04 LTS Instruction (Open KB Article).
- Blackjack Mini Firmware (download link).