DW Spectrum™ IP VMS v2.3 Release Notes

All New Features

Video Wall.

DW Spectrum's Video Wall integration allows users to control an unlimited number of video walls / remote monitors in real-time from any client machine. Video Wall is a licensed feature, contact your Digital Watchdog sales representative for more information.

No Single Point of Failure. (aka Server Federation.)

DW Spectrum IP VMS allows all servers in your system to continuously synchronize the system's configuration settings, creating a reliable hive of servers, and a system that allows operators to connect to any server at any time and view the entire system. The new DW Spectrum 2.3 software enabled your system to adapt in real time to server failures and ensure no single point of failure.

Automatic Failover.

In case of a server failure, the cameras assigned to that server will be immediately transferred to other available servers on the system. Once a server is defined as a failover server, you can define a maximum number of camera capacity in failover mode. If a failed server becomes available, the cameras will return to their original server automatically.

Server API & SDK.

With the release of DW Spectrum IP VMS v2.3, the SDK & API for the system are now integrated directly into servers and are available without an Internet connection in the Web Administration interface. The SDK provides an easy way to integrate various devices with the DW Spectrum IP VMS and the API allows integration of the system with 3rd party platforms.

Edge.

The DW Spectrum software allows its Servers to be installed and run on virtually any ARM device - including micro computers (Raspberry Pi, Banana Pi) and edge cameras such as Digital Watchdog's the MEGApix CAAS and MEGApix CAAS Plus. Running DW Spectrum Edge on the MEGApix CAAS Cameras

offers the limitless features of the DW Spectrum IP Video Management Software in a small low-cost solution, or even without any dedicated server!

Universal Fisheye Dewarping.

DW Spectrum is built to be fully compatible with the market's leading hemispheric cameras and panamorph lenses. The software translates the camera's feed into multiple viewing methods including panoramic screens that de-warp the camera's image for a fully detailed view. Users can automatically and manually configure the dewarping function under the camera settings dialog for an absolute camera control experience..

Max/Min Recording Time per Camera.

With the recording time per camera feature, users can specify the minimum and maximum amount of recording days for each individual camera. Maximum and minimum settings can be applied to individual or multiple cameras. For example, in a single system one camera could be set to record for a maximum time of 30 days, and another for a minimum of 7 days.

One-Click System-Wide Upgrades.

DW Spectrum's system administrators can now upgrade an entire system (all servers and clients in a system, regardless of operating system or device type) to a newer software version or to a specific build from any client connected to the system. If the system does not have Internet access, users are provided with a simple way to apply the update without an internet connection.

Web Based Camera Settings.

DW Spectrum™ IP VMS allows you to view a camera's native web page inside the camera settings dialog. This feature is currently available in limited cameras but is added via direct integration. The camera's native web page is available over both LAN and WAN connections. Have a camera you'd like to add this feature for? Contact Digital Watchdog's Tech Support to submit your camera for integration.

Web Admin Redesign.

DW Spectrum IP VMS v2.3 introduces a brand new web administration client with added features including server health monitoring, restart servers, change System ID, port, login and password, join to other systems, and server storage configuration. The web monitoring client has been temporarily removed while it undergoes a full redesign for enhanced usability and will be available again in v2.4 in early 2015.

Simplified System Expansion (aka joining systems).

DW Spectrum IP VMS makes joining separate system easier than ever. In order to join / merge servers / systems into one large hive, there is no need to connect to each server separately. Servers / system can now be merged with a few clicks directly from the system's client or the web administration interface.

One Network Port for Everything.

With DW Spectrum™ version 2.3, all network traffic is now directed through a single port on each server (default 7001), making port forwarding much simpler, bringing you one step closer to monitoring your system from anywhere in the world.

New Encoder Licensing

With DW Spectrum™ version 2.3, there is a new license part number (DW-SPCP04LSC). When activated in DW Spectrum™, this license will appear as an "Analog Encoder" license type with an amount of "1" in the License Administration. This one license allows recording of all 4 analog inputs on a DW-CP04, when applied to a DW-CP04.

Improvements.

- Live video playback smoothing.
- Main Menu and Context Menu have been reorganized and simplified.
- Background animation color can now be customized or disabled.
- Preview Search has been simplified by adding a right-click drill-down feature on a time slice.
- Servers that need to be updated to match the latest version installed in the system are now shown in red in the about menu.
- Smarter mouse zoom behavior while viewing multiple videos on the grid.
- E-Mail notifications now have customizable templates.
- ESC hot-key behavior has been changed. To toggle full screen use Alt + Enter. To close dialogs or cancel actions, use ESC.
- Login username dialog now automatically populated with the last known login (previously blank) and can also be saved.
- Administrators can now delete invalid and expired licenses.
- Camera rotation can now be saved as default rotation for individual cameras.

- Media server conflicts notification now contains the specific list of cameras that are used by conflicting servers.
- Additional default event rules: "Media Server Started" event has been added with associated "Write to Log" and "E-mail Notification" actions.
- If connection to Server is lost, the appropriate message is displayed (used to be a notification in the right panel).
- Support streaming without transcoding to mobile devices (HLS). Greatly reduces server CPU load.
- Error messages when activating licenses clarified.
- Current version is now displayed in the login dialog and the "beta version" form (previously shown in "About" form).
- It is now possible to delete online cameras from resource tree. To prevent rediscovery auto-discovery should be disabled.
- If the Login dialog is active it is now possible to perform background actions.
- Layout naming conflicts now resolved. If an Administrator creates, saves, and shares a layout with user(s) the user(s) modifies the layout the user will be prompted with a "save-as" dialogue and can save the newly modified layout under a new name.
- Licensing types increased: added SWarm (for ARM devices), Analog Encoder, Video Wall licenses.
- Licensing information is now stored in a separate database to allow for clearing of the server database without loss of licenses.
- It is now possible to adjust RTSP transport per camera (used to be per server).
- "Do not archive primary stream" and "Do not archive secondary stream" options added in expert camera settings form.
- Aspect ratio for some cameras has been adjusted to display them correctly.
- Multi-video export dialog no longer prevents interaction with client during export.
- Generic RTSP/HTTP links look cleaner in system resource tree.
- Windows XP support restored.
- NAS now supported for Linux client and improved for Windows, including password-protected external storage devices (NAS).
- Server logs now contain memory and CPU usage which is recorded every 10 minutes.
- The Server archive index is now stored in the Server database (previously stored on the file system), which allows users to move hard drives with archived data to a new server without needing to rebuild the server archive index.
- Added a new event "License Issue" - which notifies users of licensing problems.
- Auto-discovery times decreased (finds new cameras faster!).
- Improved PTZ control - lowered control latency and more intuitive controls.

- Increased compatibility with existing and new supported cameras.
- Cameras with the same name are now sorted by IP Address in the Resource Tree.
- UI animation optimization (especially if using E-Map feature).

Bug Fixes

Fisheye De-warping:

- Double-clicking worked incorrectly in de-warping mode if panoramic is 360°. This issue has been fixed.
- Screenshots from de-warped cameras worked incorrectly for low-resolution streams. This issue has been fixed.
- If a fisheye camera was moved to a new server "Fish-eye" all saved positions and tours were removed. This issue has been fixed.

Alarm/Event Rules:

- Fixed notification on input signal that didn't work in some cases.
- Alarm/Event Rules for specific cameras were not propagated when cameras were moved to a new server. This has been fixed.
- Some event rules that didn't work if one of Servers was behind NAT. This has been fixed.

Manual Camera Addition:

- It was impossible to manually add several AXIS cameras if they use public IPs and the same RTSP port. This has been fixed.
- ACTI authorization error if ACTI camera was added manually (sometimes credentials were reset to default-ones). Fixed.
- Sometimes it was possible to add the camera manually even if it was already in the list. This has been fixed.
- Camera Diagnostics worked incorrectly if a camera was added manually with non-standard discovery port. This has been fixed.

HTTP/RTSP Links:

- Motion detection for http-link not previously supported. This has been fixed.
- Smart Search didn't work for generic RTSP/HTTP links on Linux after rebuilding archive index. Issue fixed.
- Camera could not be added as an http link if it had already been added and then removed from another Server. Fixed.

Motion Mask Dialogue:

- Motion Mask displayed incorrectly if there were multiple motion mask areas. Issue has been fixed.
- Default motion mask value has been changed to 5.

PTZ Controls:

- PTZ camera controls did not work for non-admin user if it was moved from another server. Fixed.
- PTZ controls displayed incorrectly after authorization credentials were entered (zoom only was available). Fixed.

Layouts:

- Deleted layouts remained in system resource tree until the Client was restarted. This issue has been fixed.
- If a stream was opened in a new window it was not possible to save a layout in the new window. Fixed.
- If layout has been created after the user has logged in then cameras were sometimes not displayed. Fixed.

Multi-Video Issues:

- Fixed the issue with saving multi-video layout after changes. The message about local files presence was displayed sometimes, even if there were no local files.
- Sometimes the save-on-close dialog was frozen when Multi-Video export was closed. Fixed
- When set to pause, video started playing after opening new camera on layout. Fixed.
- In some environments Motion mask was displayed for multi-video only when video was played backward. Fixed.

Zoom Window Fixes:

- Time wasn't refreshed on zoom item that was made from panoramic camera. Issue has been fixed.
- Info was disabled for zoomed item if zoom window was moved to another item. This issue has been fixed.
- In rare circumstances no cameras were displayed in the camera list form when opened. This issue has been fixed.
- If a camera was moved from one server to another its status was sometimes displayed incorrectly in the resource tree. Fixed.
- It was possible to rename a user login to "admin". This issue has obviously been fixed.

- Some dialogs were displayed under other dialogs instead of displaying on top (update notification, sound renaming). This could block the UI interaction. This issue has been fixed.
- Timestamp in archived screenshots was displayed incorrectly. Fixed.
- In rare cases the application could crash when performing screen recording with sound enabled on Windows 8.1. Fixed.
- Sometimes empty rows appeared in the resource tree after deleting cameras. Fixed.
- In rare cases NO DATA was displayed on LIVE cameras. Fixed.
- CPU usage on health monitoring on Windows 8 was calculated incorrectly. This has been fixed.
- Flickering during playback (Linux only). Issue fixed.