RELEASE NOTES DW SPECTRUM IPVMS V1.4

NEW FEATURES:

- **Multi-Video export:** It is now possible to export videos on layouts as a single file:
  - It is possible to play back these files as **regular layouts** including ff/rew, smart motion search, etc.
  - Files **can be changed** after export is performed. The **Read Only** option is available as well.
  - Saved as .nov (proprietary format) and can be played back within the client.
  - It is also possible to save exported video as an **executable file** (Windows only). This executable can be played back in a clean Windows installation.
- **Android Client** is introduced.
- The **64-bit** architecture version is now available for **Windows**.
- **Embedded Context Help System** is implemented. Click on the "?" icon located in the right corner of the top navigation bar, then click on any element within the application to view relevant support information (both Windows and Linux).
- **Daylight Savings Time** is now supported:
  - Supports **time changes**.
  - Supports **time zone changes** even if components are in different time zones.
  - **Timeline** can display **Local or Server time** (specified in System Settings). The Export and Thumbnail Search features will also depend on this particular setting. **Note**: the setting does not affect **Recording Schedule**. It is always based on **Media Server Time**.
- Software **checks for updates** automatically. When the system detects any updates, it will prompt the user to initiate system upgrade.
- Video can now be exported with **rendered timestamps**. This requires transcoding on client, which might cause delays, a slight decrease in quality and an overall increase in processor load up to 100% during export.
- **Tray Tool** is able to perform **search for Enterprise Controllers** that are available on the network. This is done inside the Media Server setup page.
- **Client** is able to perform **search for Enterprise Controllers** available on the network. The suggested ECs are displayed on the "Saved Connections" drop-down list when logging in.
- Ability to use **Public IP for Media Server**. If Media Server and Enterprise Controller are on different networks and Media Server should be available, it is recommended that Media Server remains hidden behind NAT. In this case the system is still operable

IMPROVEMENTS:

- **RADASS (Dual-Streaming):**
  - New smart switch algorithm: sizable items take priority over smaller items on switching to high resolution, allowing for a more efficient handling of bandwidth and processor load.
  - Seek time is significantly improved for low bandwidth connections.
  - Switching to low resolution in low bandwidth is accelerated.
  - MaxFPS for low resolution stream is 7FPS.
  - Low stream resolution quality is enhanced.

- **User Management:**
  - New permissions added: export video and PTZ Control.
  - If the "Administrator" role is selected for a user in custom access rights, all other permissions are filled automatically.
  - If admin password is changed, there is no need to reconfigure all media servers in order to use the new password.

- **Layouts Management:**
  - The "New" button on the top bar opens a drop-down menu displaying all the saved layouts available for the current user.
  - Selection is saved when switching between layouts.
  - The location of item buttons is saved when switching between layouts.

- **Items and Scene:**
  - Item panels and the position of text (NO DATA, etc.) are rotated together with the rotated window.
  - When zooming in on a video in full-screen mode, both left and right-click buttons of a mouse can be used to move an item around (previously, only the right-click button was available).
  - Hi-Res/Lo-Res are shown on item panels depending on the quality of current dual-streaming.
  - The maximum number of items on a layout is increased (64) for x64 platforms.
  - Whenever several items were selected at once, all items would close when pressing "X". Now only the selected item will close.
  - The "LIVE" icon is displayed on the item panel in the lower right corner whenever viewing a live stream from a camera.
  - Waiting circles are replaced with "LOADING… + circles".
  - The "Show/Hide info" option has been added. It is now possible to show information for several cameras simultaneously.
  - Current recording method is displayed in the top left corner of the item information panel (according to the configured schedule of the item).

- **FPS, second stream, Motion Detection settings:**
  - Default motion sensitivity slider is set to 0, making motion masking much more intuitive.
  - If MaxFPS is setup on the first stream, the second stream will still be acquired (@ 2 FPS).
  - The camera motion web page in Camera Motion Setup is displayed as plain text. It now appears as a hyperlink.
- **Login/Logout:**
  - Logout function is implemented (Main Menu item).
  - Whenever connected to EC, the main Menu displays "Connect to Another Server".
  - The list of saved connections in the Login Dialog displays the latter stored connections first.
  - If a user logs back in, all the previously configured layouts for a specific user are automatically restored.
- **Camera Settings:**
  - It is now possible to copy a pre-established recording schedule from one camera to another (see the "Copy Schedule" button in Camera Schedule Settings).
  - General and Network tabs are now combined in Camera Settings.
  - The ping button has been added to camera's Network Settings to verify connectivity.
  - Whenever a camera is discovered, the model number is automatically stored in properties. Unlike Name, Model cannot be changed.
  - If a recording schedule has been modified, a user is warned to adjust FPS and resolution to reflect the changes.
- **Time Line:**
  - The buttons are used to zoom in/out on Timeline to the cursor position are now implemented. The buttons are located in the top-left corner of the timeline.
  - Calendar Search will move Timeline to the exact date selected by users.
  - The playback buttons have been enlarged.
  - If sync is disabled, Timeline is visible. The last item with recording will remain selected and controlled by Timeline.
  - Timeline will always appear if at least one recorded video archive is on Scene. The last selected video remains selected even if a user clicks on empty space (a gray frame will appear around the video).
- **Resources Tree:**
  - The camera and server IP addresses are shown in the Tree (can be switched off in System Settings in needed).
  - If recording is enabled for a camera, yet no recording is taking place at the moment, an icon in Resource Tree will indicate that recording has been enabled.
  - The "Rename" option is now available for items in search results.

- **Manual Camera Addition:**
  - ○ Improved discovery of Digital Watchdog and Dahua cameras. Onvif port is no longer required for these manufacturers.
  - ○ Added the "Auto" check box to the "Add camera(s)" form.
- **Web-Client:**
  - ○ Internet Explorer is supported by web-client. Minimal version is required for HTML5 support is 9.x.
  - ○ Calendar is available in web-client.
  - ○ Playback in web-client is improved.
- **Installer:**
  - ○ The "Client Only" option has been added to the installer.
  - ○ Desktop shortcut is optional.
  - ○ Installer is signed and approved by Microsoft.
  - ○ Components can be selected separately during the installation (EC, Media Server and Client).
- **Interface Improvements:**
  - ○ "Tooltips" have been added to every interface element.
  - ○ The "Hide" option has been added to every panel (Tab Navigator, Resource Tree, Playback, etc.).
  - ○ The information on EC, Media Server versions, architecture, compiler are not displayed in the "About" screen.
  - ○ Many items have been renamed in the User Interface.
  - ○ The System Settings window has been re-sized for better appearance in smaller resolutions.
- **Other Improvements and Optimizations:**
  - ○ **Monitoring**: RAM usage is displayed whenever a user is monitoring the status of Media Server.
  - ○ **Screen Recording**: The screen recording icon is introduced as a movie reel in the top right corner.
  - ○ **Export**: Whenever a video reaches the end of its recorded data, the watermark window will not appear.
  - ○ **Playback** is greatly improved.
  - ○ **Licenses** can be registered by admin only.
  - ○ Stronger **disk writing optimization** has been achieved (based on load-testing results).
  - ○ It is now possible to **configure transport settings for Linux** (RTP over UDP or TCP). Previously available for Windows only.
  - ○ If owner's password ("admin" user) is changed there is **no need to reconfigure all media servers** to use the new password.

NEW CAMERAS AND RECORDERS SUPPORTED:

- **Arecont Vision** entire camera line is now supported.
- **D-Link** cameras are now capable of dual-streaming, resulting in system's support of motion detection and RADASS capabilities.
- The list of **manually added camera** models is extended to include Arecont, D-Link and ISD cameras.