

# **RELEASE 24.5.5607**

#### **B-FRAME ON H.264:**

B-Frames management has been developed in H.264 streams, this allows to decode cameras that use this type of encoding.

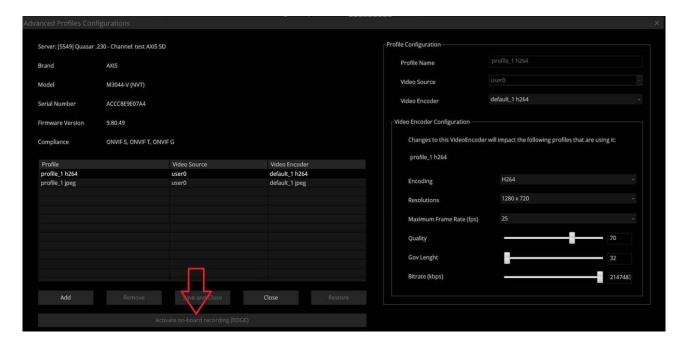
Some of the brands that use it by default, on some cameras, are AXIS and BOSCH.

## ONVIF-G (EDGE RECORDING) SUPPORT ON AXIS CAMERAS

Some cameras require a dedicated ONVIF command to activate EDGE recording on SD/MicroSD card. For example some AXIS camera models require this command.

For this reason we have added the "Activate on-board recording (EDGE)" button in the "Advanced Profiles Configurations" section to send this command. Kindly note that:

- Only one recording per camera can be activated
- If recording is activated or if the command is not necessary, the button is inactive.



- 1. Added a Serial Number check useful for uSee to identify if a server's local IP refers to the corresponding server
- 2. Improved the server startup part in case a remote storage device (eg. a NAS) is not reachable at startup
- 3. Fixed an issue where a user's credentials could be used to see events from cameras they were not allowed to access.



# **RELEASE 24.5.5592**

## **BUGFIX**

- 4. Fixed an issue about PTZ presets on Hikvision camera, the number of presets provided was higher than our limit so it was impossible to use them.
- 5. Fixed an issue regarding the generation of an Onvif Camera Event of an NVR: it happened that this event was replicated for all N cameras of the NVR and not only for the camera that generated it. The event redundancy has been resolved.
- 6. Fixed an issue about the Native Player in case of exporting video from a camera with Privacy Blur: it could happen that the username and password were requested which were then not accepted to continue the export.
- 7. Fixed an issue about License Update: it causes configuration loss especially with NVR channels.

# **RELEASE 24.3.5576**

### **BUGFIX**

- 1. Fixed an issue about video channel live stream staying active on Omnia clients, even if camera is not displayed
- 2. Fixed an issue about the thumbnails events not visible in case of NAS storage or network paths
- 3. Fixed an issue about adding only video channels from NVR licenses

# **RELEASE 24.3.5551**

## **BUGFIX**

- 1. Fixed an issue with counting remaining licenses
- 2. Fixed the issue with events visible even to accounts that are not authorized to see them.

# **RELEASE 24.3.5541**

- 4. Fixed an issue that in some cases the HLS video live does not start if the audio track is available
- 5. Fixed an issue in some cameras where the ONVIF event list appeared empty.



# **RELEASE 24.3.5527**

## QUICK LIVE FOR USEE CLIENT (MSE STREAM)

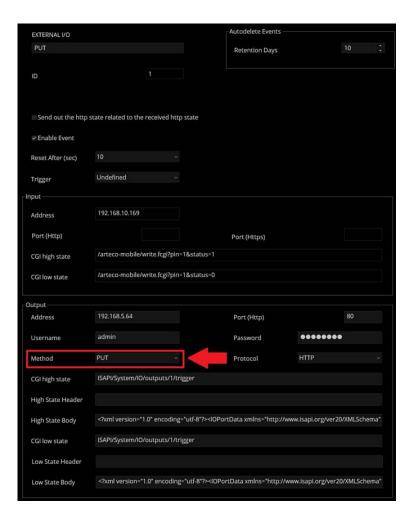
A new type of live stream delivery has been developed for uSee, this stream is only used by uSee when the WebRTC stream is requested.

The current WebRTC flow requires a variable time required for the negotiation to be sent: this time is present both locally and remotely. To solve this problem and make the live broadcast more quickly accessible, an h.264 MSE stream was developed at the lowest resolution set on the camera, in order to "cover" the time interval between the live WebRTC request and the display of the WebRTC stream;

While the WebRTC stream is loading, the MSE stream will start and will be visible until the WebRTC stream starts.

## HOW TO USE THE PERIPHERY EXTERNAL I/O

Added the "PUT" method in the peripheral "External I/O", in addition to the already present "GET" and "POST".





It has also been added the possibility of configuring the "Header" and the "Body" for the High and Low Status of the device (and also for the "POST" methods); previously there was only a "Body" and a "Header" for both states (Low/High).

So now you can distinguish "Body" and "Header" based on the status of the device.



#### TIME ASYNCHRONY BETWEEN ARTECO-SERVER AND THE DEVICE ON WHICH USEE IS USED

It is very important that the date and time of the client device with uSee and the ARTECO-SERVER are synchronized. Currently, a server is declared as desynchronized with respect to the uSee client if there is more than 5 seconds of difference.

In case of desynchronization some functions are disabled (for example everything related to the search for thumbnails).

This was best described in uSee-related communications when the relevant part arrived, however this is the version of the server that can provide the desynchronization information.

It is therefore important to use a time synchronization method via NTP Server both: for the client device using uSee and for machines running ARTECO-SERVER.

#### **USEE: AUDIO INPUT TO CAMERAS**

In this version of the suite, the possibility of providing the input of the audio stream from the camera to uSee has been developed both for live (HLS and webRTC) and for recording playback.

The highlighted limitation is that the WebRTC live streamer only supports a few audio codecs, and you need to set a specific sample rate on the camera to ensure that it works.

- 1. Supported codecs: G.711A-law and G.711Mu-law
- 2. Sample Rate: 8000Hz

To enable audio, you need to configure the video channel via Omnia/Configurator.

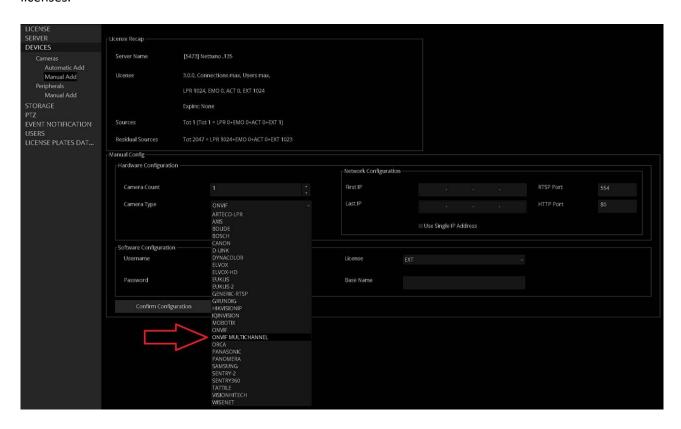


### **MULTI-CHANNEL ONVIF CAMERAS AND NVR LICENSES**

Two new types of licenses have been developed to handle cases of:

- 1. Onvif Multichannel Cameras
- 2. NVR Devices

To manage the new types of Onvif Multichannel licenses, a new "Camera Type" has been created: "ONVIF MULTICHANNEL" (see below) which can be selected in Omnia/Configurator to create one of the two new licenses.



The name "ONVIF MULTICHANNEL" already makes it clear that it is a sort of ONVIF video channel: it is not possible to have the functionality of a multichannel camera and NVR for other types of video channels (example: Generic-RTSP, AXIS, BOSCH...).

When selecting "ONVIF MULTICHANNEL" you need to define the number of video sources which can vary from 2 to 4 (default value):



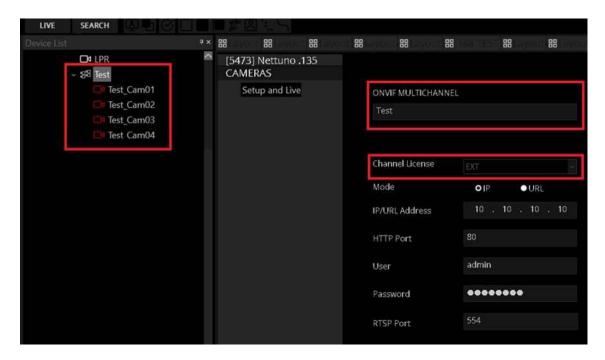


The multi-channel camera license is included in the current license types: EXT (Extreme), ACT (Active), EMO (Emotion), and PUR (Pure), but not for the LPR (License Plate Recognition) license.

Below is an example of an "EXT license" with an "ONVIF MULTICHANNEL" camera type with four video sources:



At the camera management level, in the device tree it will appear as follows:



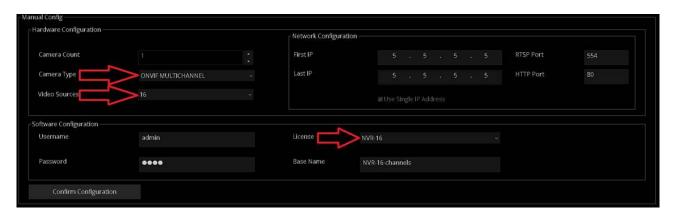


NVR device licensing is optional for "Extreme" and "uSee" server licenses only (not for ACTIVE, EMOTION, or PURE server licenses).

Four NVR licenses were created based on the number of available video channels

- NVR-16
- NVR-32
- NVR-64
- NVR-128

Below an example of adding a 16-channel NVR (NVR-16):



For these types of license channels you have defined limitations, you cannot enable the following registration modes:

- 1. Master Recording
- 2. Auxiliary Recording
- 3. HLS Registration

It will be possible to have the recording of the "Sequential Image Storage" (Thumbnails Track).

Note: In both cases, automatic device addition is also possible.





- 6. Fixed issue about the lost of Omnia configuration
- 7. Fixed issue about login on a server with a lot of cameras (+250 cameras)
- 8. Fixed crashes on the server in case of audio feature enabled
- 9. Fixed issue about the use of uSee in case of Failover Server
- 10. Fixed issues about recording autodelete in case of current folder
- 11. Solved issue about server crashes in case of adding/removing cameras
- 12. Fixed issue about the update from an old server (production version) to a new one in case of multiple cameras on the same IP/Http port/Rtsp port
- 13. Fixed a server crash issue about a ONVIF camera with audio
- 14. Fixed a problem about the addition of new Multichannels camera
- 15. Fixed a server issue related to the drawing of privacy blur area
- 16. Fixed catch-up playlist timeout on Demo-LPR SERVER
- 17. Fixed a server crash when sending RTSP stream.



# **RELEASE 24.1.0.5445**

#### **NEW EXPORT SERVICE FOR USEE**

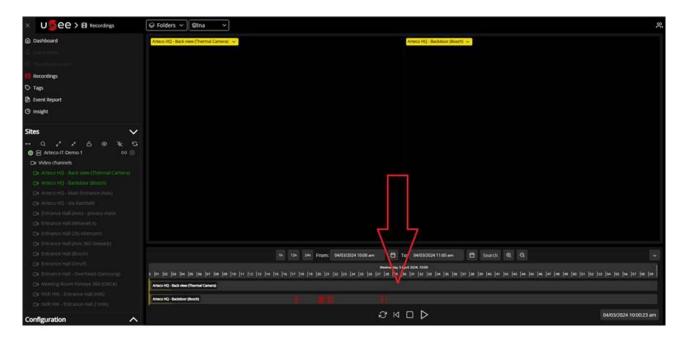
On uSee it is allowed to export recordings by adding the time stamp and the name of the camera on the exported video. The new version of uSee that uses this new export service is not yet available, more information will be given in the uSee release notes.

#### PRIVACY BLUR SAVED ON MONGODB SERVICE

The data relating to privacy blur is also saved in the Mongo DB service. Thanks to this, uSee which will allow privacy blur to be shown even in the case of cameras that record only in HLS.

#### VIEWING HLS RECORD BARS ON USEE

in this version is given the possibility to display the recorded bars for both recordings in Arteco proprietary format and in HLS format on uSee.



#### **Important Note:**

This means that from this version it is possible to carry out the following configuration:

- On-premise customers who use Omnia → Arteco proprietary registration only
- Customers using uSee only → HLS registration only

**RELEASE 24.0.5421** 



### **H.264 PARSER UPDATE**

The H.264 parser was updated and H.264 tunneling was developed, this made it possible to be compatible with AXIS cameras and more.

## **BUGFIX**

- Improvements in the process of auto-deletion of recordings and alignment in particular cases: for example if recordings are deleted manually or if the server stops instantly (eg. Power outage).
- Fixed an issue with Bosch Tasks where events were no longer arriving.

# **RELEASE 24.0.5346**

## MAIL NOTIFICATIONS FROM USEE/OMNIA WEB

It is now possible to send emails in case of Cameras, Peripherals and Servers Events, directly from Omnia Web/uSee. This version of Arteco-Backend service is capable to store the Email Notifications setup.

#### **PORTUGUESE LANGUAGE**

Portuguese language has been added to Omnia Windows desktop app version.

### IMPRO ACCESS CONTROL INTEGRATION\*

More information regarding this feature are provided on a dedicate document.

#### **KSENIA INTEGRATION\***

More information regarding this feature are provided on a dedicate document.

## \*Important Note:

The features in this version are saved in the "Arteco-MongoDB" service. It is important that during the configuration Import/Export phase you import and export the configuration saved on MongoDB, the procedure to follow is attached.

**RELEASE 23.9.5339** 



#### **RECORDINGS PATHS REWORK & THUMBNAILS TRACK**

When upgrading Arteco-Server from previous versions, the default value of the parameter that enables HLS recordings has been changed: HLS recordings is disabled by default.

This was agreed upon because while previously a defined space was allocated only for HLS registration, now the recording space is shared between the main recording and the HLS registration; if you leave both the main and the HLS recordings active, the storage space of the cameras can be halved.

Typically, there should be two typical server configurations:

- On-premise server: Primary recordings enabled and HLS logging disabled
- Hybrid cloud server: Primary recordings disabled and HLS logging enabled

This is currently difficult to maintain as on the Omnia-Web-HC side it is not yet possible to display the recorded bars in the case of HLS registration only; in practice, if you only registered in HLS then with the Omnia-Web-HC client you would not be able to see the registration bars in the registration search environment.

For this reason, we chose to disable HLS recordings when upgrading a legacy server if it was previously enabled.

#### PANOMERA FUNCTION FOR DALLMEIER CAMERAS

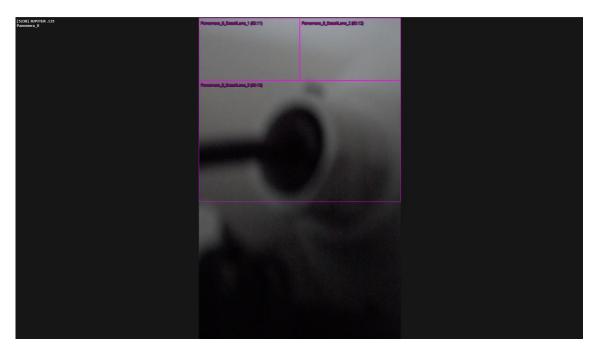
The integration of Dallmeier's Panomera cameras has been implemented. Cameras with Panomera functionality are normally cameras with multiple lenses, one of which is primary and the other are secondary.

The first optic is the main optic, normally with the widest view. The other lenses usually have a partial view within the view of the main camera

If you add the main camera to the layout on Omnia you can view the live and the views of the other lenses (in the example below there are 3 secondary lenses).

You can drag and drop the drawn areas to a free square in the layout and the optics are loaded.



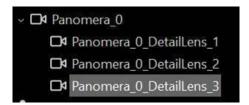


On the camera setup side, it must already be decided during the creation phase how many lenses the camera will have by means of the "video sources" parameter (from 1 to 16). Once the camera is created, you will not be able to edit it.



From a configuration point of view, each lens has its own IP address and they must be consecutive.

Here's an example of how a Panomera camera node is created:



Currently, this feature is only visible with Omnia Desktop and not with Omnia Web.



#### **ONVIF METADATA with Omnia Web**

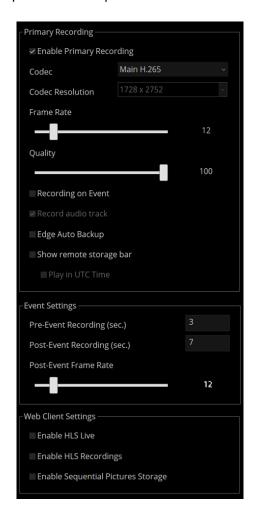
On the Front End side of Omnia Web is to display the ONVIF Metadata on the interface, this version of the server is required to have this functionality.

**Arteco Export Backend side:** now you have the possibility to generate a snapshot at the resolution of the recorded or a video, in case of opening a Thumbnails of the Thumbnails track.

**Arteco Backend Service Side:** Now Onvif metadata is also saved in MongoDB to be visible from Omnia Web as well

### PRIMARY RECORDING UNRELATED TO HLS

A change has been made where you can disable the Primary (native) recordings and have only the HLS recordings. Now the ticks are independent and separate.



The "Recording on Event" parameter has also been moved to the individual camera configuration as it is a setting of the main Storage recording only.



- 1. We have noticed an issue where the WebRTC live stream does not start on Omnia Web if the username or password on ARTECO-SERVER contains special characters. For this reason, a block has been created on the Omnia and Configurator side where some characters are not allowed.
  - IMPORTANT NOTE! For old users who have already been created, there may be this problem.
- 2. On the Arteco Backend Service side, the status changes of the cameras and servers have been improved
- 3. We have noticed a problem related to Chat on Omnia-Web that overloads communications between users and causes major slowdowns. At the moment, the user refresh has been changed once per minute
- 4. Fixed server crash when adding a particular ONVIF camera
- 5. Fixed case where HLS Cache is not deleted when converted from main logging
- 6. Arteco-Server side: Fixed problems with the ONVIF event list
- 7. Arteco-Server side: Fixed several issues related to the new auto-deletion of recordings
- 8. Fixed the issue of disabling the sub-stream of the Onvif camera: when the camera for some reason is unable to provide the sub-stream, the server would automatically disable it. This was a problem because then the video analysis or snapshots were generated on the main stream, which is usually high-resolution, thus significantly increasing CPU consumption.
- 9. Arteco-Server side: Fixed several issues related to the new resynchronization procedure
- 10. Fixed an issue with the Arteco-Backend service failing to connect to the Arteco-Server
- 11. Fixed an issue with Arteco-Server memory drift



# **RELEASE 23.5.5183**

#### **RECORDINGS PATHS REWORK & THUMBNAILS TRACK**

A re-work of the recording paths has been carried out to make the configuration of the cameras clearer and more uniform. The changes made are:

1. The Main recording path of a camera group includes also the HLS track recording path.

This means that there is no longer a dedicated path only for the HLS but now the HLS track is in the same path as the main recordings. Example: if I have 10 cameras on the server of which 5 record in d:\recording\ and 5 on e:\recording then I will have two HLS paths:

- d:\recording\HLS where there are the HLS recs of the first 5 cameras
- e:\recording\HLS will have the other 5 cameras.
- 2. The main recording path of a group of cameras now includes also the storage of the <u>Event</u>

  <u>Thumbnails</u> (images generated on event, mainly used on Omnia Web). Before this development the Thumbnails folder was unique for all cameras, now it becomes a sub-track of the main path.

If we take the previous example with the 10 cameras on two disks, also in this case the Thumbnails of the first 5 cameras will be in D:\

- d:\recording\Thumbnails\<ID\_camera\_1>\Events
- d:\recording\Thumbnails\<ID\_camera\_2>\Events
- d:\recording\Thumbnails\<ID camera 3>\Events
- d:\recording\Thumbnails\<ID\_camera\_4>\Events
- d:\recording\Thumbnails\<ID camera 5>\Events

While the next 5 cameras will be in E:\

- e:\recording\Thumbnails\<ID\_camera\_6>\Events
- e:\recording\Thumbnails\<ID camera 7>\Events
- e:\recording\Thumbnails\<ID\_camera\_8>\Events
- e:\recording\Thumbnails\<ID\_camera\_9>\Events
- e:\recording\Thumbnails\<ID camera 10>\Events
- 1. It is possible, optionally, to activate the Sequential Image Storage, to save a low-resolution image every 3 seconds on the storage path.

This track will be used mainly for future developments on Omnia Web. The image is taken from the Substream stream (if present) or, if it is not available, from the main stream.

The resolution of this image is based on the resolution of the video stream up to a <u>maximum of</u> 640x480.



If for example a camera has a substream of 352x288 then the images of that thumbnails track will all be at 352x288, vice versa if the substream resolution is 2 Megapixel, then the thumbnails will be scaled to 640x480.

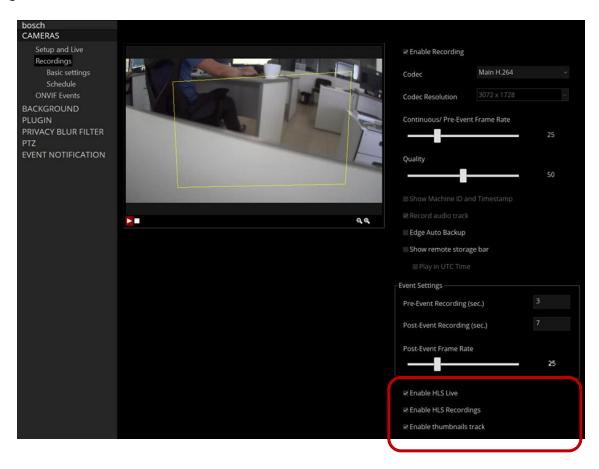
As for point 2) if we take the previous example with the 10 cameras on two disks, also in this case the thumbnails tracks of the first 5 cameras will be in D:\

- d:\recording\Thumbnails\<ID\_camera\_1>\Tracks
- d:\recording\Thumbnails\<ID\_camera\_2>\Tracks
- d:\recording\Thumbnails\<ID camera 3>\Tracks
- d:\recording\Thumbnails\<ID\_camera\_4>\Tracks
- d:\recording\Thumbnails\<ID\_camera\_5>\Tracks

While the next 5 cameras will be in E:\

- e:\recording\Thumbnails\<ID\_camera\_6>\Tracks
- e:\recording\Thumbnails\<ID\_camera\_7>\Tracks
- e:\recording\Thumbnails\<ID\_camera\_8>\Tracks
- e:\recording\Thumbnails\<ID camera 9>\Tracks
- e:\recording\Thumbnails\<ID\_camera\_10>\Tracks

In light of points 1 and 3, also change the configuration interface to Omnia Desktop/Configurator. The configuration of HLS and Thumbnails Track routes will be available for each individual channel.





#### STORAGE MANAGEMENT

With this new version, the mechanism for calculating the space occupied by a registration path has been updated. The following will therefore be considered:

- 1. Space occupied by Main Recordings
- 2. Space occupied by HLS Trace (If enabled)
- 3. Space occupied by Thumbnails for events
- 4. Space occupied by recurring thumbnails every three seconds (if enabled)

As a result, the quota management of all camera tracks is optimized.

# IMPORTANT NOTES WHEN UPGRADING FROM A PREVIOUS VERSION

If you upgrade a system that has a previous version installed, you will have the following consequences:

- 1. Events will not be deleted from the DB.
- 2. Old Event Thumbnails are deleted and will no longer be accessible.
- 3. Old HLS tracks will be deleted and will no longer be accessible.
- 4. The configuration of HLS traces will still be preserved. If the HLS tracks were active before, then they will also be active after the update.
- 5. Registrations will not change, but <u>the first boot after the version update may be very slow</u> (it may take minutes or even hours). This is because the system will have to scroll through all the recordings present and write in the DB the weight of each file.

This procedure has been implemented to ensure that the calculation of registrations is borne by the DB.

The advantage of this technique is to greatly speed up self-deletion cycles.

#### **ONVIF-G VERSION FOR OMNIA WEB**

This version of the server introduces the ability to view the EDGE video tracks of the Cameras/NVRs on Omnia Web.

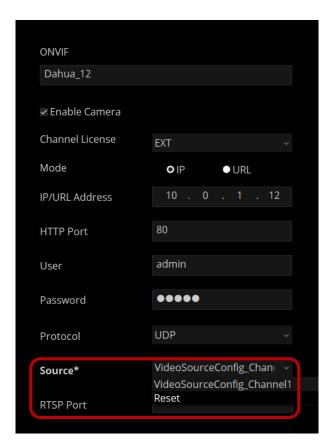


# **RELEASE 23.5.5171**

#### **EXPORT SERVICE – PRIVACY BLUR MANAGEMENT**

The Export Service now allows to enable/disable the privacy blur metadata overlay on the exported video.

- Fixed issue where server appears to be reachable but is not possible to login.
- The context menu of a server within a favorite group in Omnia has been reintroduced
- Fixed some situations which did not allow the creation of the "symbolic links" used by Omnia Web, the problem occurred in the event that there is a server configuration imported via Console. The problem consisted in the fact that the recorded HLS and the event-thumbnails were not seen on Omnia Web.
- Fixed Login failure problem in case of server with complex configuration (e.g. more than 200 cameras)
- Introduced mechanism whereby if a camera alternates between online and offline status continuously and/or with a very high frequency, then the camera is marked as offline on Omnia Web until the connection is normalised.
- Introduced a "Reset" mode of the Onvif settings of a video channel, since, in the event of a camera replacement, the channel was not able to restart.





# **RELEASE 23.4.5136**

#### **OMNIA WEB STATIC MAPS**

The ability to manage static maps with Omnia Web has been restored.

## **STORAGE AND DATABASE**

The storage path that is chosen by the user during installation has been decoupled from the server's MariaDB database, from the MongoDB database and from the Thumbnails folder.

Currently everything was linked, and this could create problems in cases where a user had set, during the Arteco Server Suite installation, to use a different path (e.g. D:\) for the Storage, instead of the one suggested by default (C:\ARTECO-STORAGE).

In case the selected disk was removed, or failed, it happened that other by removing the storage it actually also removed the other software components (MariaDB Database, MongoDB Database, Thumbnails), effectively "corrupting" the associations between the recordings stored on any other paths and the Database.

For this reason, the following routes have been established:

- 1. MONGODB will be forcibly installed in C:\ProgramData\MongoDB
- 2. MariaDB will be forcibly installed in the server installation folder, typically C:\Program Files\ARTECO-SERVER\database
- 3. The folder containing the Thumbnails is forcibly placed inside the database folder, typically C:\Program Files\ARTECO-SERVER\database\thumbnails

Note: If the Suite Server is installed on a machine where an Arteco Server installation is already installed, for example an update of a previous installation, everything remains as before: the thumbnails and database paths remain the same and are not modified.

# **IMPORTANT NOTE !!!**

In this version of the Suite the "DataMigrationTool" which was used to migrate a Firebird DB to Maria DB, has been removed. In case of updating an Arteco Server with a version prior to 8.4.0 (ARMAGEDDON), you will first have to install a intermediate version for the event DB migration otherwise they will be lost.

- Fixed a server-side problem which made it not possible to correctly display the "the new recording path...
  on" recording path change event on Omnia Web
- Fixed issue on Omnia where the Live stream from a Popup camera didn't start when added to a secondary window layout
- Fixed problem on Omnia side where the Live stream from a camera doesn't start on secondary window
- Fixed server crash caused by non-Onvif compatible camera having wrong password
- Fixed server crash caused by an Onvif camera with Onvif events enabled
- Fixed server side memory drift in case of Onvif camera, related with the camera communication
- Fixed crash in Omnia client that may occur when opening an event.



# **RELEASE 23.3.5106**

- Fixed problems related to the Open connector that prevented the Server to receive such events
- Fixed problem related to https certificate
- Fixed server-side bug that resets the GPS coordinates when changing the configuration of a camera
- Fixed server-side bug whereby from Omnia Web a limited user could always see all the cameras instead
  of only those assigned to him
- Fixed bug which in some cases did not allow to view the recordings with the native player

# **RELEASE 23.2.5021**

## **FEATURES on OMNIA WEB**

With this release, the following features become available to Omnia Web clients:

- New PTZ panel
- WebRTC video stream selection: in live WebRTC it is possible to view the H.264 streams available for each camera and to be able to choose which one to view.
- Linked Peripherals: in live WebRTC it is possible to view and manage the peripherals connected to a camera.

## **ONVIF-T/M INTEGRATION (EVENTS AND METADATA)**

This is the first release of a two steps integration for ONVIF-T/M that allows integrate the events and metadata set on the Onvif compliant camera.

The integration process was divided into two steps for receiving ONVIF events.

The current release allows for the integration of the "analysis software" events of compatible cameras, i.e. the events that are associated with the video analysis algorithms within the camera (for example motion detection, loitering...)

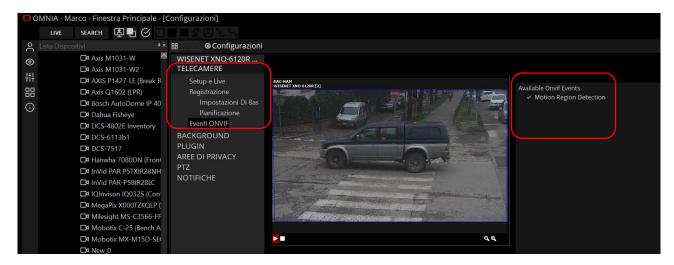
If the camera provides information about its on-board video analysis or the metadata available, then two options become user-selectable on the camera settings menu on Omnia Desktop/Configurator: "On Board Analysis" and "Enable Metadata", see example below.



This allows on the one hand to enable the reception of events on the camera and on the other to enable the reception of metadata.

On the camera settings page, we have added the "Onvif event" menu, where the administrator can select Onvif events available on the camera that will be managed by Arteco Server.





The result is the generation of a new category of events: Onvif Camera Event, see example below.



As for the metadata, these are of two different colors:

- Blue: the analysis areas that the camera has configured on board
- Orange: the bounding boxes resulting from video analysis





Above an example of metadata on the image, obviously you can view the metadata in the live and recorded and you can disable the display with the appropriate buttons:





## **IMPORTANT NOTES ABOUT ONVIF-T/M:**

- Metadata are saved in the same file as the recorded video. This aspect implies the need to
  appropriately size the storage. Based on our calculations and estimates, 3GB of storage capacity
  must be added for each day of recording for each video channel in which metadata has been
  enabled.
- It is important that the primary and secondary streams must have the same aspect ratio, otherwise the metadata could be displayed wrongly.
- If the Hanwha events do not arrive at the Arteco server, a command on the camera is probably needed to enable sending events via ONVIF, the setting string is this: <a href="http://cameralp>/stw-cgi/eventstatus.cgi?msubmenu=eventscheme&action=set&Type=ONVIF">http://cameralp>/stw-cgi/eventstatus.cgi?msubmenu=eventscheme&action=set&Type=ONVIF</a>
- There is a Hanwha bug whereby the metadata time can be different (even a month) compared to the camera time this can be a problem because the metadata are not displayed in this way



#### **FUTURE ONVIF DEVELOPMENTS**

We are currently working on the integration of "hardware" events of the compatible cameras (for example hardware tampering, PTZ pan and tilt events..). We will notify you when this version will be available.

### **MIGRATION FROM APACHE TO NGINX**

The migration from Apache to Nginx has brought significant improvements in terms of security and performance for video management. Nginx uses a much lighter thread structure than Apache, ensuring more efficient request handling and reducing the possibility of DDoS attacks.

In addition, Nginx has a modular and flexible architecture that allows you to easily customize security configurations, such as the use of SSL/TLS, permission management, web vulnerability protection and more. This has made it possible to guarantee greater video security, protecting them from possible violations and guaranteeing the privacy of user data. Furthermore, thanks to the superior performance of Nginx, video management has become more fluid, reducing loading times and improving the user experience in enjoying the content.

There has been a mutation of the authentication logic which made digest authentication obsolete, this means that the "auth-method="DIGEST"" field, inside the "MobileConfig.xml" file, is never considered even if set to DIGEST

#### **IMPORTANT NOTES !!!**

- In this version it will not yet be possible to use static maps on Omnia Web.
- In this version, the web page for using Web Access, the links to the Android and Apple APPs and the link to download Omnia have been removed.
- The Arteco APPs have been removed from the respective Android and Apple stores

## **BUGFIX**

- Fixed adding/removing users on multiple servers
- The delivery of the H.265 stream for RTSPOUT has been improved (but for Omnia Web it is not yet viewable)
- Fixed crash on Configurator
- Fixed unnecessary video output from the server to Omnia, when closing the Event Properties panel
- Fixed problem with receiving CGI for updating External I/O and Input External States

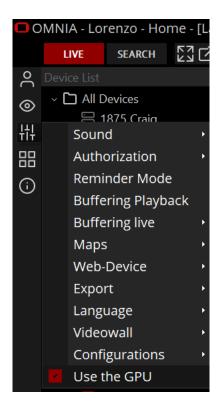
## **RELEASE 22.10.4336**

#### **GPU USAGE SELECTOR**

It has been found that, in some cases, the use of the GPU in Omnia Desktop decreases the display performance of video devices, since some poor quality video cards, instead of bringing benefits, create obstacles in the display.

For this reason, an Omnia menu item was created that allows you to use or not the GPU.





- Fixed crash in Omnia Configurator in case of Connector setup
- Fixed problem on Arteco Guardian which prevented the use of the FAILOVER SERVER
- Fixed deadlock on Omnia side in case of camera setup: addition, removal, change of recording path
- Fixed problem where there were special characters in the name of cameras and devices
- Fixed crash on layout with popups on many CHILD windows



# **RELEASE 22.10.4309**

## **BUGFIX**

 Fixed an issue affecting the Everywhere: it was not possible to trigger the outputs from either Omnia or Omnia Web

# **RELEASE 22.10.4305**

# **INSTANT EVENT (OMNIA WEB)**

Implemented functionality for which it is possible to generate events from Omnia Web

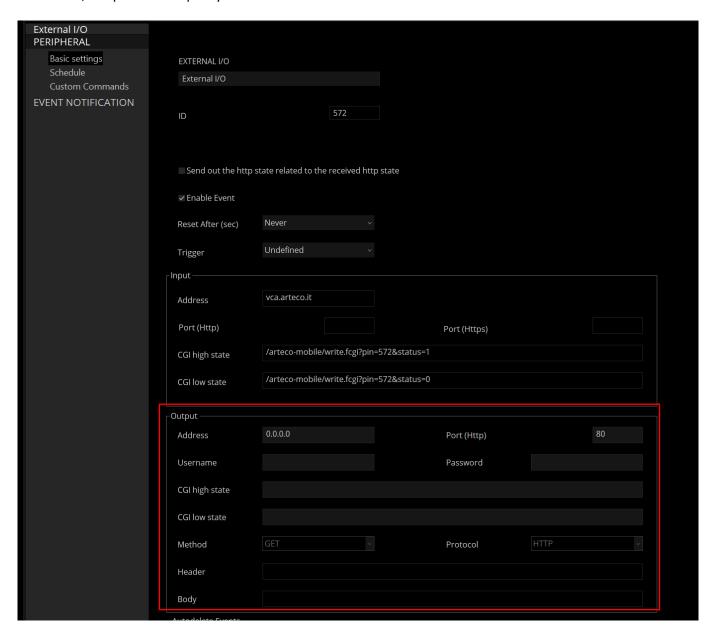
- Solved problem on the filling of the disk where the DB resides: there could be an error in the Autodeletion of the Thumbnails and for this reason the disk filled up.
- Solved problem in the auto-deletion of recordings in case of NAS: there was a problem in case of recordings deletion, now a control has been inserted that deletes only what actually needs to be deleted
- Fixed a crash in case of Omnia with multiple windows and active popup mode



# **RELEASE 22.10.4274**

## **EXTERNAL I/O - IMPROVEMENTS**

To expand the External I/O capabilities and allow the Omnia VMS to integrate with more systems and devices, we added the possibility to send **outgoing** messages in POST method or GET method. In the case of sending using the POST method it is possible to specify a HEADER and a BODY. In addition, it is possible to specify whether via HTTP or via HTTPS.



- Fixed issue that caused malfunctioning after removing a camera (from a Server) which contained special characters in the name
- Fixed issue that mainly affected "loaded" servers, and occurred when changing a configuration parameter
  of the camera, such as disabling a Violated Area, Alarming input or similar actions. After doing so, the
  Server no longer returned from the operation, OMNIA times out and no longer reconnects until the Server
  service is restarted.



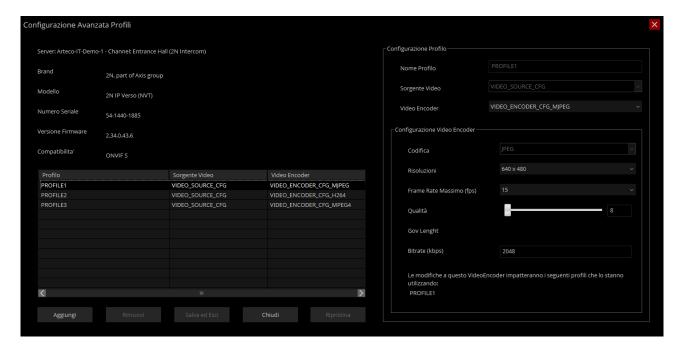
# **RELEASE 22.9.4236**

#### **ONVIF - IMPROVEMENTS**

Improved stability in the ONVIF channel for profiles S, G, introduced compatibility with the Onvif T profile video streaming, with the possibility of managing H.265 video streams for these channels.

Note: in Omnia Web it is not yet possible to view H.265 streams, at the moment only the H.264 stream remains visible.

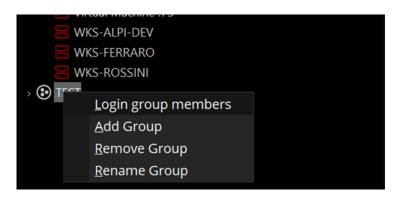
Improved the management and configuration of the Onvif channels, in the "Advanced Profile Configuration". The new panel now includes a higher number of information, the Onvif compliancy, as well as greater completeness and the possibility of modifying the channel configuration directly from the Omnia Desktop interface.



### **LOGIN TO SERVERS IN GROUP**

It is now possible from Live to Login to all servers whose items are contained in a Favorites Group.

Labels will be improved and typo corrected



## **BUGFIX**

Fixed an issue where the Mobile sometimes did not restart automatically.



# **RELEASE 22.8.4226**

- Fixed issue with recording searches: sometimes following a search for recordings, despite the recording being present the graphical "recording bars" were not shown in the clients
- Fixed drift of the Threads for Mobile and Server in case of sending many concurrent Connector events
- Fixed a latency problem in Omnia desktop GUI in case of modifications of remote layouts
- The multiple multi-server import has been added to the Native player, now it is possible to comfortably consult the video recordings "coming" from different servers by selecting channels from the device tree.



# **RELEASE 22.7.4192**

## **BUGFIX**

- Fixed problem in case of multiple video exportarion from multiple servers, subfolders were grafted so the exported recordings were not correctly visible
- Fixed video exportation problem happening in case the camera name contained special characters (e.g. /, \, | etc ...), now exports do not fail
- The generation time of the VA+ event has been aligned to the one passed by the Open connector event, in this way the recorded is aligned to the instant of the event, before instead the recorded was shown at the instant of the event's arrival connector on the server.

# **RELEASE 22.7.4180**

### BUGFIX

Fixed Omnia crash in case of login to servers in active layout patrol condition.

# **RELEASE 22.7.4169**

#### **BUGFIX**

- Fixed several crashes in case of multiple event searches and frequent "openings" of events
- Fixed crash in case of interruption of audio playback, the problem occurred in case of layout change
- A mechanism has been implemented to increase the auto-delete speed of HLS recordings.

# **RELEASE 22.7.4159**

# **BUGFIX**

- Fixed crash in case of frequent layout switch: every time a layout change was made there was a small loss of memory and this, over time, led to the application crash.
- Fixed some problems related to Event Inhibition for VA + events
- Now the event notification of the Input triggered event (alarming peripherals video channel plugin) has been disabled in the case of a video channel without video analysis or without the "Generate event image (email / web / app)" checkbox, previously the sending was disabled only if the box "Generate event image (email/web/app)" was checked.

# **RELEASE 22.7.4145**

## **EVENT INHIBITION**

The event inhibition feature (video channel – plugins – i/o) has been extended to all events including "VA +" and those provided by peripherals such as Bosch TASK and others.

# **BOLIDE OEM**

Updated the graphics for Bolide.

Added a new brand of cameras "Bolide" (it is an alias of ONVIF).

## LIVE BUFFERING DEFAULT

Introduced in Omnia the default of live buffering at 500ms



### **BUGFIX**

2 problems related to the management of the RTSP stream have been fixed:

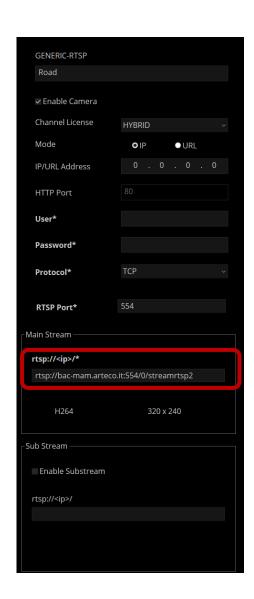
- The connection phase consists of a series of concurrent processes, but was managed without synchronisms. The RTSP protocol imposes very stringent rules on the choice of UDP ports to use, which, in the case of many video sources, caused the unsynchronized connection procedures to collapse, causing the rejection of all the ports and, consequently, the exhaustion of UDP Ports. This problem has been solved by introducing suitable synchronisms in the phase of multiple concurrent connections.
- The management of possible errors during the streaming phase (eg: connection failure, session setup failure, etc.) was structured in such a way as to cause a high number of disconnections even in the case of "slight" errors and, in some cases, a server crash. This management has been corrected to avoid the aforementioned crashes and to try to reduce forced disconnections on the server side.
- Fixed issues with the "Group" functionality (live device tree)
- Fixed problem on the "Unknown error" dialog linked to events generated before 1970.

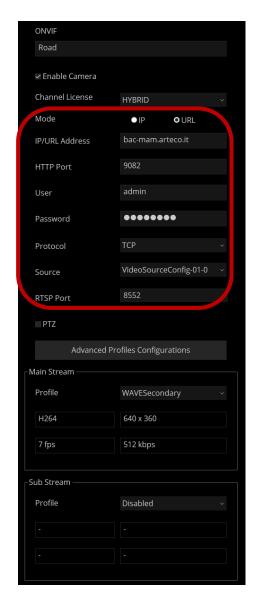


# **RELEASE 22.6.4115**

# **VIDEO CHANNELS WITH URL**

Now you can specify a URL when configuring an ONVIF or Generic RTSP camera.





For RTSP channels it is possible to insert the RTSP string directly in the relative field. Also, now the data written in the RTSP string has higher priority than those in the above configuration.



# **RELEASE 22.4.4095**

# **OPEN CONNECTOR EVENTS ON OMNIA WEB**

From now on it will be possible to see and manage Open Connector events in a complete way on the Omnia Web client.

- Fixed an issue on ONVIF PTZ protocol that did not allow to pan/tilt/zoom cameras
- UDP/TCP port management problem solved



# **RELEASE 21.3.3001**

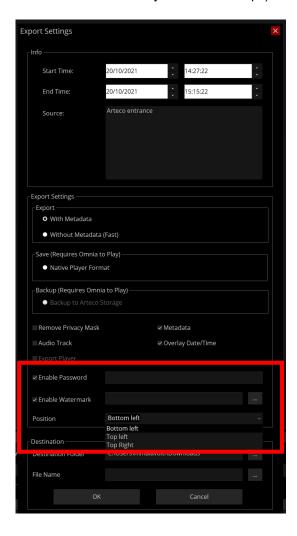
## **EXPORT WITH PASSWORD AND WATERMARK**

Now you can add a password and/or watermark (standard format image) to video exports:

- Native exports: password and logo
- Exports with Metadata: password and logo
- Exports without metadata: logo only

If the video will be exported with password, it will therefore be possible to open the exported file only after entering the set pw, from native player or media player.

As for the watermark logo, the user can choose to place an image in standard format in one of the 3 corners of the image indicated (bottom right excluded to avoid overlays with timestamps).





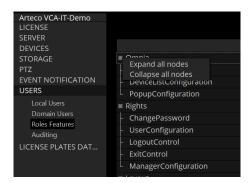
# **VERIFY RECORDINGS LABEL**

Change of button label that verifies the authenticity of the recordings.



# **ROLES FEATURES**

Introduced the right mouse button in the "Roles Features" list, the aim is to be able to expand/collapse all the elements in the list.



## **BUGFIX**

• Fixed server-side and mobile-side crashes



# **RELEASE 11.2.2656**

### **EVENT THUMBNAILS**

It has been changed the "logic" for saving images for events (and reading plates) by Arteco Server: Once everything was saved in the DB, while now the images are saved in a new "thumbnails" folder inside the Database, in the file-system.

The old images of the events will still be visible and will be retrieved from the DB, for the new ones we will refer to the "thumbnails" folder.

# **RELEASE 11.0.2568**

### **BUGIFX**

- Fixed server crash that was caused by CGI strings with particular characters.
- Fixed crash caused by an erroneous request to play an EDGE track of an AXIS camera.
- Fixed the problem related to the persistence of auditing events, an incorrect parameter was shown in the configuration
- Fixed NEXT crash on closing the "Event Properties" window.



# **RELEASE 10.11.2567**

## **BUGIFX**

• Fixed issue with scheduled notifications: now if you set a scheduled notification on a camera, it only affects the selected camera. Previously, the setting was erroneously "extended" to all cameras.

# **RELEASE 10.11.2384**

- Wisenet compatibility extended to the SPE-1610 model
- Fixed problem on Mobotix decoder that caused problems with the reverse playback
- Fixed issue on the Native player that prevented exportations in case of gaps in the recorded video aroung midnight.
- Fixed an issue that could cause a crash at the end of a recoded exportation made with the native player.
- Fixed a crash that could happen when using the reverse plaback.
- Fixed a bug that could cause the accelerated play to stop (16x/32x).



# **RELEASE 10.11.2361**

- Fixed a Next crash caused by double clicking on the awl of a camera in the connector view
- Resolved crash that could happen when searching for a recorded video
- Next deadlock fix



# **RELEASE 10.11.2353**

- Fixed some playback problems occurring on the Native Player
- Fixed deadlock on the smtp server configuration for emails
- Fixed problem that occurred when adding a domain user that caused a server crash
- Fixed problem related to the user password change
- Fixed a crash on Next Portable
- Improved refresh of the status of Bosch Task peripherals
- Improved Bosch Task license display, now it indicates correctly the system status even when peripherals are not reachable
- Fixed crash at server start related to a configured Bosch Task
- Corrected the automatic reset set for the External I/O in the event the state is "triggered" as an associated device
- Improved management of the MXPEG Mobotix decoder
- Widespread improvement of event search and recordings:
  - Results come faster and it is faster to clean up the data for a new search
  - o the progress-bar is more precise and gives the expected results even from several servers
  - o in case of an excessive number of events to show in the Event Log (> 5000), the most recent ones are selected, regardless of the origin server.
- The display of the recording "bars" related to continuous recordings in native export searches has been improved
- Fixed a problem on the playback of an event: the right event was opened but the recorded one might be referred to another previously opened event
- Fixed a deadlock on SmartSearch
- Fixed some crashes that could happen during the Arteco Server process shutdown
- Fixed problems with videowall controls to bring layouts to the front
- Fixed the bug where an export was performed by entering the file name, but the file could not be found in any folder
- Fixed some problems on the player when increasing and decreasing the playback speed
- Removed Wanco telemetry and everything related to Wanco
- Fixed the ONVIF-G request for the replay of remote tracks: tested both on NVR HIKVISION, on BOSCH with Edge-SD and on Wisenet Hanwha with Edge-SD
- Introduced a new message for the user in case of missing or partial video exportation
- Removed the Chat Audio for communication between Next and Server
- Removed SMS notification
- Fixed updating in real time of peripherals in the Event Properties panel. Note: now the status of the peripherals has changed its position on the interface, it is located above the notes section.



# **RELEASE 10.11.2311**

- Fixed: "Ghost layout" problem when logging out of a server while viewing a remote layout.
- Added the ability not to perform and view the search for remote ONVIF recordings for NVRs
- The "Play in time UTC" parameter has been added to the interface to search for remote ONVIF recordings for the NVRs. This parameter could be required for some devices.
- Removed audio support for analog cameras
- Removed support for Polish and German languages
- Fixed problem that occurred when disabling the secondary stream in ONVIF profiles while it was set as a live profile on the layout: the channel was restarted continuously
- Fixed a problem on video playback when in the transition from pause to play: the play did not restart
- Fixed the redraw of the focus frame (green border on the selected view) in the views containing maps and devices
- Fixed a problem on the digital zoom from the toolbar curtain.
- Corrected a problem related to the start of the video analysis in case of enabling of the Enabling / Disabling Input plugins, Concatenated I / O and Associated I / O.
- Fixed a problem on the Boost export starting from a native export with the Privacy area: it was not possible to perform the Boost export.
- Fixed an issue on refreshing the status of an Everywhere in case it goes offline: it is now displayed correctly



# **RELEASE 10.10.2285**

- Removed Axis A1001 peripherals from the next and from the server, they will not be managed even for old servers
- Fixed incorrect deletion of events while deleting an edge backup track
- Fixed a problem with the display of cameras having the same name in the browser
- Fixed an issue on the list of auditing events for domain users
- Fixed some bugs that could cause Server crash
- Fixed a next crash caused by a problem in the configuration framework of ONVIF profiles
- The field containing the none of the ONVIF sources connected to the profiles has been enlarged
- Fixed an issue with the management of the video export progress bar
- Fixed a problem with the design of the browser bars in the case of NVR channels



# **RELEASE 10.10.2281**

#### **NEW AUDITING FEATURES**

Added new event types that will be tracked in the Auditing section

- Enable/Disable video channel
- Enable/disable camera plugin
- Enable/disable camera plugin scheduler

# Plugins affected:

- 1. Abandoned/Removed Object
- 2. Violated Area
- 3. Privacy blur filter
- 4. Area Exclusion
- 5. Perspective

# Plugins NOT affected:

- 1. LPR
- 2. I/O Event generation
- 3. I/O Enabling control
- 4. Chained I/O

- Next: fixed issues related to buttons "skip to next event" and "skip to previous event"
- Next: fixed issue related to the SmartSearch in the Roles Features section
- Server: Fixed problem with NVR HIKVISION related to the use of "summer time" time zone
- Server: Improved the playback start time calculation when it was asked to play a remote track on the NVR
- Next: Removed the menu "Notification scheduler" for Servers with older software versions. The feature is available only with Servers having version 10.9.2268 or latest.



# **RELEASE 10.9.2268**

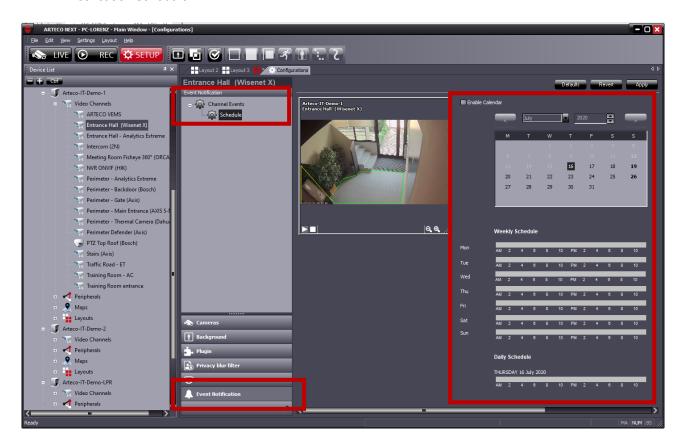
#### **EVENT NOTIFICATIONS SCHEDULER**

We added the possibility to schedule the Event notifications. This feature is based on the Schedule calendar already available for other features, and allows the administrator to decide when to view/receive notifications and when to "silence" them instead.

**IMPORTANT:** If the notifications are silenced, those will still be recorded in the database and therefore it will be possible to search for them later in the recording environment. It is therefore a muting, which in any case will allow operators and administrators to search for events that have not been notified.

#### **NOTES**

- It will not be possible to set diversified schedules, or activate / deactivate calendars for a single notification (log, app, output ...). The scheduling of the calendar will have an impact on all the notification methods provided for the device.
- 2. The Event notifications scheduler is available for devices in the video channel section and peripherals, but not for server events.
- 3. It is possible to use the Multiple selection (of devices of the same type) to configure the Event notification scheduler.





# **RELEASE 10.8.2267**

# **BUGFIX**

• Fixed a memory drift by modifying the cleaning procedure at night.



# **RELEASE 10.7.2265**

#### **NVR EDGE RECORDINGS ACCESS**

We added the possibility of accessing and exporting the tracks recorded on remote support (Edge recordings) of the NVR Onvif compliant, directly from Arteco NEXT.

The Arteco platform, already able to receive live audio / video streams from these devices, also allows you to manage the recordings on the NVR, using Onvif protocols. Thanks to this new functionality of the ARTECO VMS, it therefore becomes possible:

- 1. search for the recordings stored on the NVR
- 2. view and play the EDGE NVR track in the Arteco-NEXT browser
- 3. automatic import and consolidation of EDGE NVR tracks in Server recordings (cable disconnected automatic edge retrieval)
- 4. manually import and consolidate EDGE registrations in Arteco Server registrations
- 5. export directly to the client pc the EDGE trace present on the NVR device

A peculiarity that can be highly appreciated by those who want to manage these systems remotely, but do not have a high performance connection between the Arteco VMS and the recorder, is the possibility of doing all of this described in point 1) even in "channel" conditions. off "on the Arteco VMS, thanks to the" video inhibition "function.

We will shortly provide as comprehensive a list of compatible NVRs as possible. However, it will be a list that is continuously updated.

#### I/O CONVERTED INTO PERIPHERALS

Following the introduction of the Peripherals section, and at the same time the less and less frequent use of the I/O devices, it was decided to eliminate the I/O section from future releases.

In case of version update, some I/O devices will be automatically converted into Peripherals.

Some others, see table below, will be permanently eliminated and consequently not converted.

IO DEVICE	PERIPHERAL
Arteco Serial	Not converted
Axis I/O	Converted in AXIS I/O in the peripheral section
Virtual	Converted to External IO with any extensions  Neither the calendar nor the default state of the virtual* variable will be converted
Mobotix	Not converted
Samsung	Converted in "Samsung I/O" in the peripheral section
Arteco Ethernet Remote	Arteco Everywhere (default states will not be converted)
CIAS I/O	Not converted



Smart IP Controller	Arteco Everywhere (default states will not be converted)
Arteco Everywhere	Arteco Everywhere (default states will not be converted)

#### Note

- 1) No notification settings are converted when switching from I / O to Peripheral. In particular, associations are lost if the I / O were defined in the notifications of:
  - Peripherals
  - Cameras
  - Server
- 2) I/O Default States have not been converted
- 3) The Pushpins on the Maps have not been converted
- 4) The Output Pin for all Plugins have not been converted (violated area and abandoned / removed object)
- 5) Output calendars have not been converted
- 6) The I / O pins associated with the PTZ presets have not been converted to Peripheral

Where possible, the references that the cameras have in the Input Output Plugin section (Event generation/ Enabling control and Chained) have also been converted.

Exceptions are the old Linked I/O associated with video analysis plugins whose association has not been converted because it has been implemented as described in the next point ("Associated I / O Plugin Creation").

# **ASSOCIATED DEVICES**

The "Associated devices" plugin has been created, which allows you to associate a Peripheral (output) to a Camera and to control its status from live with the right button shortcut -> associated device.



This feature is available for ARTECO NEXT and will also be implemented soon on Web Access and App.



### LOCATE DEVICE

A new function is now available to locate on the ARTECO NEXT device tree a device starting from the visualization of the object on a map or on Open Connector.Right clicking and selecting "Locate device" the selection on the tree moves to the pointed device.

- NEXT: now the label numbers of the "External States" device are consistent
- SERVER: the search filter in the Database has been restored to obtain the events associated with the cameras only
- SERVER: a malfunction in the removal of an ONVIF camera has been corrected
- SERVER: fixed a malfunction in the stamp maker that occurred when the resolution of the substream of a camera was high
- SERVER: fixed a malfunction that could occur while writing an Auditing event
- SERVER: a problem that could occur during the search for events in the Event Log panel has been resolved (the colors were not shown correctly)
- SERVER: a defect in the lack of visualization of the representation bars of the recordings has been corrected
- SERVER: now writing events to the Database correctly reports the result of the operation
- SERVER: The periodic cleaning of the Registration Sessions (PurgeSessions) has been temporarily disabled as it could cause an overload.
- SERVER: Corrected a problem on the duplication in configuration of the "cleaning / schedule" node of the peripherals.
- SERVER: Resolved a resource allocation problem in the DB that caused event queries to fail.



# **RELEASE 10.5.2243**

#### **MOBILE DIGEST**

Introduced the DIGEST mode for encrypted login for iOS, Android and web access applications

- Fixed crash of NEXT on autologin from concurrent clients with the same user from different locations. Now if the forced logout occurs, the Next interrupts the autologin: the automatic login is disabled, for the server in question, until the next restart of the NEXT client.
- Corrected problem in case of expired Registration-code as the NEXT did not allow any operation on the server.
- Fixed problem on the dewarping with adaptive resolution set. Switching from the secondary to the primary and vice versa the view settings are now reset every time to allow proper operation of the dewarp. The correction on the dewarp has been extended to the case in which the profile is reset from the context menu.



# **RELEASE 10.3.2212**

# LPR SNAPSHOTS ON DB

We implemented a new way of storing LPR snapshots. While once a "snapshots" sub-folder was created in the path of the camera recordings, vice versa now the image is saved in the DB.

# **SNAPSHOT EVENT PREVIEW (OMNIA)**

If the live snapshots profile is active on the camera, every time a video event of a camera is created, the snapshot is saved in the DB.

This image can be recovered only with the Omnia project and not with the current Next.

#### **IMPORTANT NOTE**

The numbering of the software versions has been changed: the first number is progressive and linked to the year, the second number is linked to the introduction of new features. The information of the Quarter has been eliminated, from now it won't be available anymore.



# **RELEASE 10.0.1.2209**

- Fixed problem on native export which did not allow to export the auxiliary recording track: when doing so the main track was provided instead.
- Fixed problem on contextual menu of live profiles introduced with the TURN ON VISUAL DETAILS feature: it was not possible to change the default profile in live.
- Fixed server crash problem when closing RTSP stream channels having failures.



# **RELEASE 10.0.1.2202**

# **SHOW LICENSE EXPIRE DATE**

The SERVER INFO page from the SETUP menu of the NEXT now displays also the expiration date of the server license

# **TURN ON VISUAL DETAILS**

Added a command to the context menu of the live views to enable or disable commands for displaying all the details of the Arteco analysis.

# VIRTUAL MACHINE LICENSE UNLOCK

Removed the license constraint on hardware keys for servers installed on virtual machines. Upon authorization from the Management, production can issue licenses for virtual machines.

# ARTECO CONSOLE UPDATED

Updated the Console with new features and new shortcuts useful for support and troubleshooting

# **BUGFIX**

 fixed a problem related to the conversion of recordings from Firebird to MariaDB for network paths (eg NAS).



# **RELEASE 10.0.0.2197**

#### **EVENT DB RETENTION**

The deletion of video events from the DB is carried out on the basis of a specific and configurable retention, with a dedicated procedure, different from the cancellation of the video. In this way, the archiving of channel events has been aligned to the management of all other types of events. Once a day the cleaning operation will be performed and events older than the retention value will be deleted from the DB.

- Fixed an issue that could prevent successful database creation on startup. This version corrects any errors generated by previous versions.
- A new DB error checking procedure has been introduced: if non-repairable errors are detected, the server documents the error in the LOG file and stops to avoid data loss
- The database conversion process has been speeded up and some conversion bugs have been fixed.



# **RELEASE 9.3.3.2168**

#### **DB CONVERTER**

The video archive acquisition phases and previous events have been optimized in case of updating a server with old database: now the process takes place in significantly shorter times.

#### OC ROI ADAPTATION TO BOUNDING BOX

Any ROIs contained in an Open Connector event have been compared to the bounding boxes produced by ARTECO video analysis, and are now processed in the same way:

- have been integrated into the flow of metadata produced by video analysis and are saved in the same way as the the bounding boxes produced by standard Arteco analysis to ensure that they are reproduced by the player in the same way
- 2) a violated area event will be generated, containing information related to the Connector that produced the event in the description field. The event is "centered" on the time interval covered by the ROI flow and the event play displays all the metadata associated with the latter, similarly to what occurs during the playback of any event.

The generation of the video event and therefore the possibility of inserting it in the Smart Search searches requires the appropriate license.

- Fixed a refresh issue in the Open Connector configuration GUI
- Fixed problems related to configuration and sending of custom commands for the Open Connector.

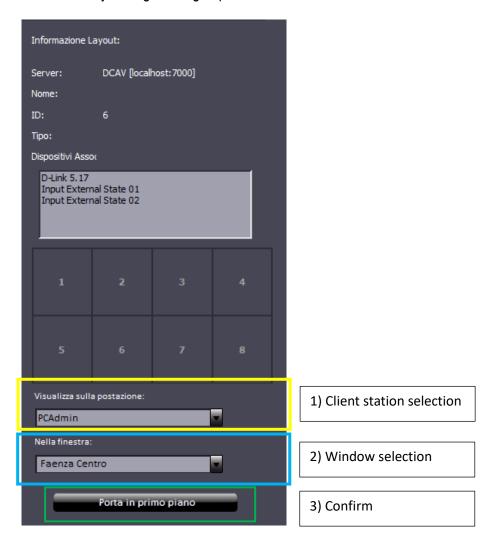


# **RELEASE 9.3.2.2132**

#### VIDEOWALL - FRONT LAYOUT CONTROL

With this feature, we allow an "A" client to control the display of layouts on a "B" client, or, more in detail, ensure that a "A" client can bring a layout to the forefront of another "B" client shared remote on one of the windows opened by client "B".

Through the "device properties" panel of a shared remote layout, we introduced a set of controls that allow to carry out the above operation on one of the current clients logged on to a given server. The client of the operator who sends the request must obviously belong to this group of clients.



The client will be selected using a combo-box containing the list of client stations logged onto the server. As a consequence, it will be possible to send the request to only one client at a time.

Then, it will be possible to populate a specific window of that client station.



#### **Notes**

- Currently, if the "Device properties" panel is not visible, it can be opened using the command View -> panels -> device properties of the main menu: in order to simplify these operations, this command will be added with a right mouse button on a device and, in the specific case, on the Shared Layout.
- Starting from now, the "Device properties" panel will be active for all hierarchical levels, so also Users will be enabled to perform drag & drop of a layout.
- An important aspect not to be underestimated concerns the sending of this command to windows
  where the active environment is SETUP or REC: the NEXT will prevent the movement of a layout on a
  window where one of these environments is active.
- A final aspect concerns the interaction of this command with the PATROL and POPUP settings: no specific limitations will be introduced even if the combination of popups or patrols with the video wall must be avoided.
- As for the license, nothing will be changed: everything will be available with the videowall license of already existing shared layouts.
- To facilitate the selection operations, clients will be offered the possibility of acquiring a more precise
  identity, or rather of a descriptive name similar to that which can be assigned to the servers, thus
  assuming the actual role of stations. If the administrator does not assign the name, the default PC and
  window names (Windows name of the host PC and "MAIN WINDOW" for the main window and
  "WINDOW 1", "WINDOW 2", ... "WINDOW N" for secondary windows)



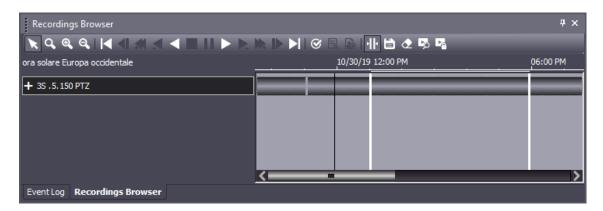
# **RELEASE 9.3.0.2126**

#### RECORDINGS PROTECTION

The Recordings Protection function allows you to protect parts of recordings from self-deletion. Then, any Protected recordings will be deletable only manually.

This feature is available by using a new button in the Recording Browser bar. This Button will appear only if a single camera is selected and if the user is enabled for the "Export Recording" rule (default for administrator and power user).

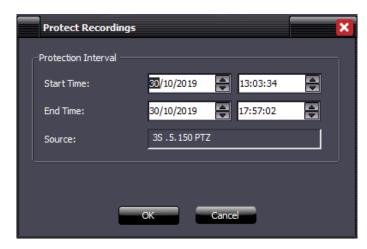
Below is an example of selecting a portion of Registration:



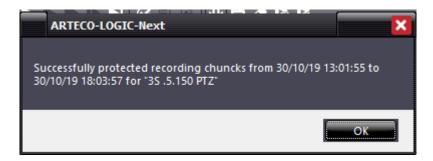
As soon as a part of the recording will be determined, through the button will be possible to protect the recorded video.







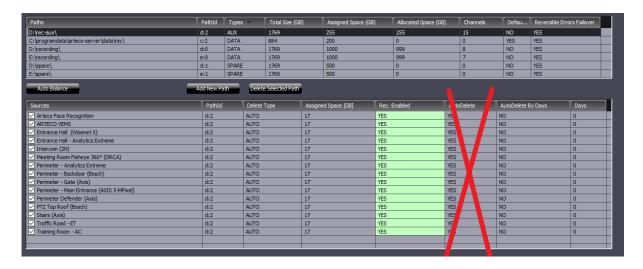
Once you have pressed "ok" the protection procedure will be started and this will result in a final message highlighting the initial and final instant of the protected recording.



The protection of a portion of the recording will be at the level of the single ".eye" file. This means that, if you select a recording portion for protection, the actual protection will be a larger section (or at most equal), since it depends on the size of the file or files that belong to the interval selected by the user.

Following the protection operation there will be no way to highlight the protected parts. To be able to eliminate the protection it will be necessary to delete the recordings using the "delete registration" button.

As a corollary of the project, the self-cancellation function is eliminated, which we believe is no longer necessary and useful.





#### BUGFIX

- It is now possible to connect to Onvif cameras configured accessible via internet and configured on different sub-networks
- Resolved issues related to excessive consumption of resources when managing IP video sources with H.265 encoder
- Fixed some incompatibility problems of Wisent PTZ (PNM-9320VQP) configured as Onvif
- Correction of the label related to the Smart Search search result
- Fixed problems installing the 32bit SDK. Remember that the SDK package is 64bit but can be installed at 32bit depending on what the customer decides.
- Added messages to the video export report dialog: these messages show the export fps deriving from the recorded flow. Below 10fps there could be export problems.
- Fixed a error handling in the SmartSearch
- Fixed a problem on using the 32bit Next installed with the 32bit server suite.
- Fixed a problem related to disconnection of a view on the layout, which was un-removable if the server was offline.
- Fixed a software conflict that could occur between the layout Patrol and the Popup mode. Now it is no longer possible to activate Patrol and Popup on the same window.

### NOTE:

Our Software Suite as well as Arteco NEXT is compatibile only with Windows 64-bit operating system

In order to grant compliancy towards analog frame-grabber cards, it is allowed to install the 32bit package "Arteco Suite X86" on native 64bit OS only as detailed in the list below

#### OS

Windows 10; Windows 8.1; Windows 8; Windows 7 Service Pack 1; Windows Server 2016; Windows Server 2012; Windows Server 2008 R2 SP1; Windows Server 2008 Service Pack 2

# **HW REQUIREMENTS**

RAM: 8GB or higherCPU: i3 or higher

• HDD: at least 10GB available, 7200 RPM and minimum throughput 80MB/s



# **RELEASE 9.2.0.2110**

#### **SMART SEARCH**

The Smart Search feature consists of being able to search for and view events that occurred in a portion of recorded video, within a defined area.

- The Smart Search is based on the Arteco video analysis (Violated Area and Removed/Abandoned Object), whose information is stored in the main recording stream, this means that you can have the Smart Search only for those channels where the "video analysis" was enabled in the selected period.
- The events that the Smart Search can identify are the same as those generated by the "Violate Area" and "Abandoned / Removed Object" plugin: the search result will show a subset of the events saved in the DB based on the area drawn.
  - It is therefore important to use the plugin filters well in order to find the most interesting events.
     This could on the one hand create a greater number of "false events" but could be useful for using the Smart Search.
- The greater the surface of the image covered by the analysis area, the greater the possibility of obtaining results with the definition of any Smart Search area.
  - o If the area covers the whole image I will get valid Smart results whatever the rectangle used.
  - Vice-versa, if the analysis area covers only half of the image I will get Smart results only if the Smart rectangle covers at least part of the analysis.

This second scenario is useful if we have to analyze only a portion of the image with the Smart Search: in this case it does not make sense to perform the analysis on the whole image, indeed it is more correct to do it only on the area of interest. Think of a fence near a motorway continuously traveled by vehicles, and you need to detect intrusions by people. In this case it is useful to define a sensitive Violated Area only on the fence because this helps to reduce the number of events generated and written in the DB.

It is also true that, in this way, if I apply the Smart Search to the motorway area I would not get any result.

#### Important note:

It may happen that expanding the sensitive area of motion can be many events generated by the plugins. To avoid this inconvenience it is advisable to disable notifications of events generated by the plugins.

#### License

The Smart Search feature is available for eMotion, Active and Extreme licenses. The license applies to the Server, this means that you can perform the Smart Search on all the cameras of a licensed server (as long as the Violated Area or Object Removed / Abandoned plug-ins are enabled on these).

Clearly, given the "limits" of the eMotion analysis filters, the Smart Search will be less efficient on this type of channel.

It is not possible to have the Smart Search for LPR channels as the Violated Area and Abandoned/Removed Object Control plugins are disabled.

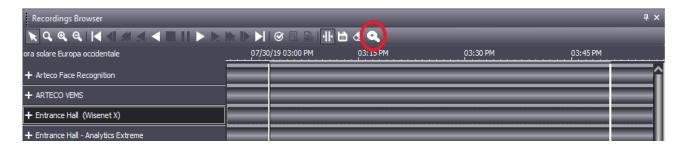


#### **USING SMART SEARCH**

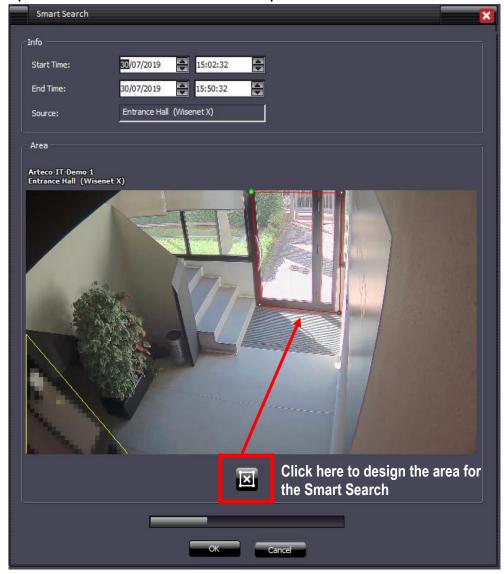
Smart Search can only be performed on one camera at a time.

It will therefore be necessary to be in the RECORDINGS environment and search for recordings based on the time frame required. After that:

- 1. Select a camera
- 2. Select the time interval (using the time bar activation button, as for the export)
- 3. Click on the highlighted button



A screen will open that will allow the user to set an area to perform the search afterwards





Click OK once the Smart Search Area has been defined. As seen in the image above, a progress-bar appears identifying the time required for the search.

- The Progress bar will only be visible when the OK button is pressed.
- The Cancel button is always visible, and allows you to cancel the start of a search or the search itself.

The results of the research will populate the "Event Log" \* panel. You will need to double click on the desired event to start the recording playback.

\*if not in the foreground (the graphic browser is shown by default), this panel should be selected to be displayed.

#### CAMERA MANAGEMENT

Now the Wisenet PNM-9320VQP is supported

#### NOTE:

Our Software Suite as well as Arteco NEXT is compatibile only with Windows 64-bit operating system

In order to grant compliancy towards analog frame-grabber cards, it is allowed to install the 32bit package "Arteco Suite X86" on native 64bit OS only as detailed in the list below

#### 0.9

Windows 10; Windows 8.1; Windows 8; Windows 7 Service Pack 1; Windows Server 2016; Windows Server 2012; Windows Server 2008 R2 SP1; Windows Server 2008 Service Pack 2

# **HW REQUIREMENTS**

- RAM: 8GB or higherCPU: i3 or higher
- HDD: at least 10GB available, 7200 RPM and minimum throughput 80MB/s



# **RELEASE 9.2.0.2110**

# NOTE:

Our Software Suite as well as Arteco NEXT is compatibile only with Windows 64-bit operating system

In order to grant compliancy towards analog frame-grabber cards, it is allowed to install the 32bit package "Arteco Suite X86" on native 64bit OS only as detailed in the list below

#### OS

Windows 10; Windows 8.1; Windows 8; Windows 7 Service Pack 1; Windows Server 2016; Windows Server 2012; Windows Server 2008 R2 SP1; Windows Server 2008 Service Pack 2

# **HW REQUIREMENTS**

RAM: 8GB or higherCPU: i3 or higher

• HDD: at least 10GB available, 7200 RPM and minimum throughput 80MB/s



# **RELEASE 9.1.1.2102**

#### **BUGFIX**

- Fixed problem with changing existing username
- Fixed Onvif problem related to old generation cameras
- Fixed problem on cancellation of auxiliary routes
- Fixed problem with connection to Bosch Task and Wisenet I/O devices
- Resolved the management of the error message in the DB conversion in first installation
- Update system information on VC runtime installation
- Fixed a deadlock on the initialization of the following devices: Wisenet I/O, Bosch I/O, Bosch Task.
- Fixed a problem displaying the timeline on gray bars in the recording browser
- Fixed problem on the ArtecoMobile smart app to connect to multiple servers with the same public IP
- Improved behavior of advanced configuration in the Onvif Panel
- Fixed problems that prevented the use of the application on devices with Android 9.0
- Resolved issues with stretched images on WebAccess
- Fixed the installation package, now the http port is correctly defined

#### NOTE:

Our Software Suite as well as Arteco NEXT is compatibile only with Windows 64-bit operating system

In order to grant compliancy towards analog frame-grabber cards, it is allowed to install the 32bit package "Arteco Suite X86" on native 64bit OS only as detailed in the list below

#### os

Windows 10; Windows 8.1; Windows 7 Service Pack 1; Windows Server 2016; Windows Server 2012; Windows Server 2008 R2 SP1; Windows Server 2008 Service Pack 2

#### **HW REQUIREMENTS**

- RAM: 8GB or higherCPU: i3 or higher
- HDD: at least 10GB available, 7200 RPM and minimum throughput 80MB/s

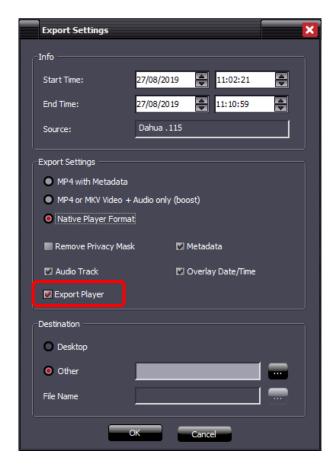


# **RELEASE 9.1.1.2080**

#### **NEXT PORTABLE**

Implementation of the client in "executable" mode, to open the exported recordings in Native format.

At the time of exportation, you can also decide to export NEXT Portable.



An "Export" folder will be created, with the registrations inside and the connection to the client.

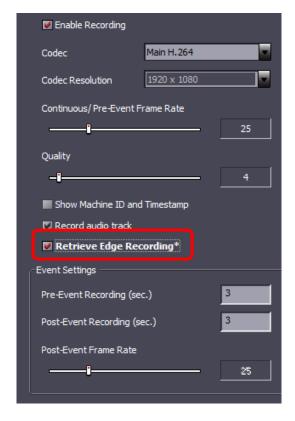
The client starts in this mode only if opened by the link in the Export folder, since it contains the "-external-player" parameter inside it. At startup, the NEXT Portable will prompt you directly on the Recordings page, find the automatically exported recordings and also search for them in the period from the beginning of the oldest recordings to the end of the most recent recording.

From now on, even exporting only the recordings, they will be encapsulated in two named folders \Export\recordings.

# **ONVIF PROFILE G**

Introduced the support for the G profile of Onvif, which introduces the possibility of managing the recordings that may be stored on the cameras (edge recordings).





# **APACHE**

Web Server Apache has been updated to the last version (2.4.39).

#### ARTECO MOBILE - ARTECO APPS

Thanks to the update, now it is allowed the identification of Servers with the same IP but on different ports.

#### RETENTION OF SERVER EVENTS

Retention for server events introduced.

#### **DOUBLE PASSWORD**

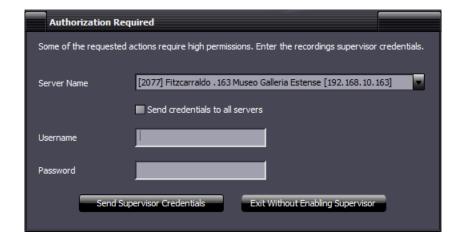
Implemented double password management with the introduction of a new management of export parameters:

- the BOOST export authorization is now linked to the permission to remove the privacy zones
- Users and Power User and user type can now export Native recordings, after entering Supervisor credentials. The Supervisor user is defined in the user configuration section.





When entering the Recordings environment, if the user is a "power user" or "user", he will be asked to enter credentials for a Supervisor user. This step is not mandatory, in case these will not be inserted users and power users will be able to do their jobs, but without the possibility to export video in Native format.



In any case, it will be necessary to enter the credentials of a different Supervisor user other than the one who is accessing (security layer required by GDPR privacy regulations).

- Modified the composition of the cookie for mobile sessions: now the cookie also contains the codename of the server.
- Database update management. Before installation, the necessary patches for the update are now installed, and the database now has a "version number" which is checked at startup.
- Fixed problems that could prevent the database from being updated on 32-bit architectures.
- Fixed the behavior of the Onvif advanced configuration panel
- Fixed some possible problems that caused the Server to crash.
- Fixed the possibility to delete portions of registration for old servers, where the function was not yet entered.
- Fixed an error displaying server events: it also incorrectly included auditing events, but these are not events.



# **RELEASE 9.0.0.2061**

- Fixed crash on Popup Cyclic mode
- Improved conversion from old to new DB
- Fixed a problem on deleting events from Event Log
- Introduced the possibility to export a video from the event log while in the Recording environment
- Fixed the insertion of metadata on a video source following the generation of Open Connector events
- Improved event search with parameter
- Fixed bug on the selection of calendar nodes in the REC environment
- Fixed bug on setting / removing privacy in the snapshots streaming
- Fixed problems with replaying recordings near a "hole"
- Fixed problem with event browsing in the record browser using the Previous Event vs Next Event buttons
- Fixed bug on self-deletion of auxiliary path recordings
- Correct fps reading for Wisenet cameras
- Correct cancellation of events on auxiliary tracks
- Fixed bug on registration "holes" in case of file change



# **RELEASE 9.0.0.1965**

#### **MARIA DB**

We switched from Firebird-DB to Maria DB. This will allow for increased possibilities and faster access to events. The conversion of old events and recordings from old versions to the newest one is automatic, upon keeping the same configuration paths. The GUI and usability of the Arteco NEXT software remains the same.

### **AUDITING**

Through Arteco NEXT, administrators are now allowed to "query" the and track the access to events made by other users.

#### MANUAL CANCELLATION OF RECORDINGS AND EVENTS

Administrators are allowed to delete portions of recordings based on specific time intervals.

As well, administrators are allowed to delete events from the Log Event panel and the DB, permanently.

#### SDK

During the installation, the wizard allows the user to choose between the 32 or 64bit architecture.

#### **CAMERA MANAGEMENT**

Added the ability to change the HTTP and RTSP ports for all camera brands that need these. Support for Lumenera brand removed.

- Fixed path of the Mobile log
- Android APP: at the app launch/startup a page will appear, informing users about the usage of data (in compliancy with the GDPR). To continue using the app you must accept the policy.